FINAL
ADDITIONAL MONITORING AND RISK EVALUATION
FORMER TRAILSIDE GENERAL STORE
HOMER, ALASKA

PROJECT # 005.0065.05003

Prepared for

Alaska Department of Environmental Conservation
Spill Prevention and Response
Contracts and Grants Unit
555 Cordova Street
Anchorage, Alaska 99501

January 2006

Prepared by

SLR Alaska
2525 Blueberry Rd., Suite 206
Anchorage, AK 99503

SLR

FINAL
ADDITIONAL MONITORING AND RISK EVALUATION
FORMER TRAILSIDE GENERAL STORE
HOMER, ALASKA

This document has been prepared by SLR International Corp. The material and data in this report were prepared under the supervision and direction of the undersigned.

Mike Rieser, PE
Senior Hydrogeologist

Robyn McGhee
Environmental Scientist

CONTENTS

Acronyms ..... **iii**

1 Introduction **1**
1.1 Objectives 1

2 Background **2**
2.1 Historical Overview 2
2.2 Regional Setting 3
2.2.1 Regional and Local Geology 3
2.3 Regulatory Criteria 4
2.3.1 Ground Water Regulatory Criteria 4
2.3.2 Air Criteria 4

3 Environmental Site Assessment and Sampling Activities **6**
3.1 Ground Water Sampling Methods 6
3.2 Ground Water Analytical Methods 7
3.3 Air Quality Sampling Methods 7
3.4 Air Quality Analytical Methods 8

4 Findings **9**
4.1 Indoor Air Quality 9
4.2 Ground Water Quality 9

5 Recommendations **11**

References **12**

CONTENTS (CONTINUED)

FIGURES

Figure 1 Site Location Map
Figure 2 Site Detail and Sample Locations

TABLES

Table 1 Ground Water Sample Analytical Results
Table 2 Air Sample Analytical Results

APPENDICES

Appendix A Well Sampling Calculation and Record Sheets
Appendix B Field Notes
Appendix C Photographic Log
Appendix D Analytical Results

ACRONYMS

AAC	Alaska Administrative Code
ADEC	Alaska Department of Environmental Conservation
BTEX	benzene, toluene, ethylbenzene, and xylenes
GRO	gasoline range organics
LIO	Legislative Information Office
$\mu g/m^3$	micrograms per cubic meter
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
MRL	method reporting limit
ND	not detected
NIOSH	National Institute for Occupational Safety and Health
QA/QC	quality assurance/quality control
REL	recommended exposure limit
SLR	SLR Alaska
USEPA	U.S. Environmental Protection Agency
USGS	U.S. Geological Survey
UST	underground storage tank
VOCs	volatile organic compounds

1 INTRODUCTION

SLR Alaska (SLR) was contracted by the Alaska Department of Environmental Conservation (ADEC) to conduct additional assessment at the former Trailside General Store site in Homer, Alaska. Site work, which included a site inspection and collecting air and ground water samples, was carried out in November 2005.

1.1 Objectives

The objectives of the additional assessment were to:

- Collect ground water samples from all remaining ground water monitoring wells at the site and collect a sample of water from the ground water interceptor and diversion system collector tank.
- Compare the analytical data from the ground water interceptor and diversion system tank sample to ADEC ground water cleanup levels, as contained in Alaska Administrative Code (AAC), Chapter 18, Section 75 (18 AAC 75), Table C, to allow ADEC to evaluate if water treatment is necessary prior to water re-injection.
- Evaluate the analytical data from the monitoring well ground water samples to determine if additional corrective action is required to prevent contaminant migration to adjacent down-gradient properties and structures.
- Inspect the Trailside General Store building for indoor sources of volatile aromatic hydrocarbons, hereafter termed volatile organic compounds (VOCs), from sources such as fuel storage tanks, heating oil tanks, or other materials at the site prior to collecting air samples.
- After potential indoor sources of VOCs are identified, remove the sources and then collect time weighted average samples of indoor and outdoor air.
- Use the results of the ground water and air analyses to prepare a qualitative evaluation of the risk to potential human and environmental receptors.
- Use the results of the sampling and qualitative risk evaluation to make recommendations regarding the need for additional soil, ground water, or air characterization or corrective action at this site.

2 BACKGROUND

The site history, regional setting, and applicable regulatory and human health risk criteria are detailed below.

2.1 Historical Overview

The Trailside site is the former location of a convenience store and retail gasoline station. The current use of the property includes a video rental shop, with offices present on the upper level of the building.

The former Trailside General Store is located adjacent to the Sterling Highway, which is the main corridor for traffic on the Kenai Peninsula. The properties surrounding the site are commercial properties adjacent to the Sterling highway, with commercial/residential properties located south of the property, away from the Sterling highway. A site map showing relevant site features is included as Figure 1.

The following description of the historical site use, site assessment, and remedial actions at the Trailside General Store is taken from Shannon and Wilson (2004).

The Trailside General Store operated a regulated underground storage tank (UST) system for approximately 15 years. The two 12,000-gallon gasoline USTs and associated dispensers were installed in 1984. In the spring of 1999, a gasoline release was observed between the UST systems and the Trailside General Store building. The two USTs and associated piping and dispensers were removed from the ground in May 1999. During the fuel system decommissioning process, approximately 125 cubic yards of petroleum hydrocarbon impacted soil were excavated and stockpiled on site. A release investigation was conducted by Alaska Lining and Retrofit to assess the extent of contamination. The release investigation included installing and sampling 14 ground water monitoring wells. Elevated petroleum hydrocarbon constituents were identified in five of the monitoring wells. Free phase product was also observed in at least two of the monitoring wells.

As a corrective action measure, approximately 5,000 cubic yards of impacted soil were excavated and removed off-site. It was estimated that 750 cubic yards of contaminated soil remained both to the north and west of the excavation, for a total of approximately 1,500 cubic yards remaining at the site. The impacted soil excavation was not backfilled by the contractor. Four of the 14 monitoring wells were decommissioned or damaged during the excavation activities. Based on ground water sampling results conducted in July 2000, up to 27 milligrams per liter (mg/L) benzene, 52.3 mg/L toluene, 3.15 mg/L ethylbenzene, 23.08 mg/L xylenes, and 227 mg/L gasoline range organics (GRO) were reported in the samples

collected from the 10 remaining on-site monitoring wells. Separate-phase product was observed in monitoring well MW-9, prior to purging.

In the fall of 2000, Shannon & Wilson was contracted by the ADEC to dewater the open excavation; remove the impacted soil left along the north and west sidewalls of original building; and backfill, compact, and grade the excavation. After the excavation pit was stabilized, approximately 1,600 cubic yards of additional gasoline contaminated soil was removed, mostly to the north and west of the stabilized pit. Analytical soil samples from the excavation sidewalls were used to characterize the soil remaining in-place. Seven of the eight project samples collected from along the north and west property boundaries contained at least one target analyte exceeding the applicable cleanup criteria. The higher contaminant concentrations were detected in soil samples collected from the north sidewall of excavation, with levels of up to 125 milligrams per kilogram (mg/kg) benzene, 607 mg/kg toluene, 104 mg/kg ethylbenzene, 544 mg/kg xylenes, and 3,970 mg/kg GRO.

In 2003, Shannon & Wilson advanced five hand borings, installed and sampled a replacement monitoring well, collected indoor air quality samples, collected a grain size sample of subsurface soil, and evaluated the soil near the building foundation for potential contamination (Shannon & Wilson, 2004). Ground water sampling results indicated that impacted ground water remained at the site. Petroleum-impacted soil, as evidenced by field screening, was encountered on the west side of the building in one of the hand auger borings (HB-5). Two of the eight indoor air quality samples contained detectable benzene concentrations, although it was unclear if the detected benzene levels were from the contents of paint and cleaning containers, or the petroleum hydrocarbon contamination documented in subsurface soil and ground water at the site. Both of the indoor air benzene concentrations were less than the National Institute for Occupational Safety and Health (NIOSH) recommended exposure limit (REL).

2.2 Regional Setting

The City of Homer is located on the Kenai Peninsula in South-central Alaska (Figure 1). The former Trailside General Store is located at the southeast corner of the intersection of the Sterling Highway and Bowers Street. The site is located in the southwest ¼ of Section 19, Township 6 South, Range 13 West, Alaska (USGS, 1987). A vicinity map showing the site location is included as Figure 1.

2.2.1 Regional and Local Geology

The subsurface materials at the site generally consist of brown to gray, sandy, silt to silty gravel (Shannon & Wilson, 2004). The surficial geology in the area consists of glaciaolacustrine deposits of proglacial lake-bottom and deltaic sediments, principally poorly sorted clay and silt with sand at the base of the deposit (Waller, Feulner, and Morris, 1968). Water yields for wells completed in these sediments ranges from 5 to 25 gallons per minute.

Shallow water at the site is encountered at approximately 3 to 6 feet below ground surface (Shannon & Wilson, 2004).

2.3 Regulatory Criteria

The applicable ground water and air regulatory criteria are discussed as follows:

2.3.1 Ground Water Regulatory Criteria

ADEC ground water cleanup levels, as specified in 18 AAC 75.345, Table C, are applicable to this site. The ground water cleanup levels for applicable compounds previously found to be present in ground water at the Trailside site are:

- Benzene, 0.005 mg/L
- Toluene, 1.0 mg/L
- Ethylbenzene, 0.7 mg/L
- Xylenes, 10.0 mg/L
- GRO, 1.3 mg/L

The screening criteria applicable to ground water at the Trailside Site for volatilization from ground water to indoor air are taken from the USEPA Vapor Intrusion Guidance (USEPA, 2002) for the volatile aromatic hydrocarbon compounds present at the Trailside General Store site:

- Benzene, 0.014 mg/L
- Toluene, 1.5 mg/L
- Ethylbenzene, 0.7 mg/L
- Xylenes, 22 mg/L (p-xylene value, lowest value of m-xylene, o-xylene, and p-xylene)

2.3.2 Air Criteria

The screening criteria applicable to indoor air at the Trailside Site are taken from the USEPA Vapor Intrusion Guidance (USEPA, 2002) for the volatile aromatic hydrocarbon compounds present at the Trailside General Store site:

- Benzene, 3.1 micrograms per cubic meter (µg/m3)
- Toluene, 400 µg/m3
- Ethylbenzene, 22 µg/m3
- Xylenes, 7,000 µg/m3

- Naphthalene, 3.0 $\mu g/m^3$

These criteria, which are based on residential land use, target the ADEC excess cancer risk of $1x10^{-5}$ and a hazard quotient of one for noncancer effects. Commercial-based criteria would be higher than these values, given their shorter exposure duration (25 years compared with 30 years for a resident) and lower exposure frequency (250 days/year compared with 350 days/year for a resident). These differences imply that occupationally-based criteria would be 68% higher than those for residential (350/250 x 30/25). These occupationally-based criteria, adjusting for occupational exposure are as follows:

- Benzene, 5.2 ug/m3
- Toluene, 670 µg/m3
- Ethylbenzene, 37 µg/m3
- Xylenes, 11,750 µg/m3
- Naphthalene, 5.0 $\mu g/m^3$

3 ENVIRONMENTAL SITE ASSESSMENT AND SAMPLING ACTIVITIES

SLR personnel conducted a brief site assessment and subsequent ground water and air quality sampling at the site on November 4 and 5, 2005. Ground water and air samples were collected as described below.

3.1 Ground Water Sampling Methods

Prior to sampling, SLR personnel measured the depth to water, checked for the presence of free-phase hydrocarbons, and purged at least three well casing volumes from each well using a new, disposable polyethylene bailer. Field measurements of temperature, pH, and total dissolved solids were recorded on the Well Sampling Calculation and Record Sheet (Appendix A) during the removal of each casing volume of purge water. All SLR personnel performing sampling were ADEC qualified persons, as defined by 18 AAC 78.995 (118).

Ground water samples were collected from five monitoring wells (MW-1, MW-3, MW-4, MW-7, and MW-12) and one ground water interceptor and diversion system collector tank (Tank). A duplicate sample was collected at MW-4, which is the monitoring well that historically had the highest hydrocarbon concentrations. Ground water samples were collected starting with the well with the lowest historical ground water hydrocarbon concentrations (MW-1, MW-3, MW-7, and MW-12) and ending with the well with the highest historical concentration (MW-4). The ground water level and interface probe were decontaminated between wells with a Liquinox® wash and a deionized water rinse. New individually–packaged polyethylene bailers and disposable nitrile® gloves were used for sampling each monitoring well. The well caps and locks on wells were replaced after sampling was complete as the existing locks were found to be too corroded to open. All investigation–derived waste was disposed of in a solid waste receptacle at the site and purge water was containerized on–site pending receipt of ground water laboratory analytical results.

The locations of the monitoring wells are shown on Figure 2. The current elevations of the tops of the well casings are not known, so it was not possible to prepare a generalized ground water flow direction for the site.

Well Sampling Calculation and Record Sheets are presented as Appendix A, field notes are included as Appendix B, and a photographic log of sampling locations is presented as Appendix C.

3.2 Ground Water Analytical Methods

Ground water samples collected from the wells were sent to an ADEC-approved laboratory and analyzed by the following methods:

- Benzene, toluene, ethylbenzene, and xylenes (BTEX) using USEPA Method 8021B
- GRO using Alaska Method 101

All method reporting limits were appropriate for ADEC ground water cleanup levels. Field duplicate samples were collected at a frequency of 10 percent of the total number of samples collected. Trip blanks for each of the ground water sampling parameters accompanied the shipment of containers to and from the site and were analyzed with the ground water samples. Laboratory analytical reports are included in Appendix D.

3.3 Air Quality Sampling Methods

The Trailside building was inspected for any indoor sources of VOCs. Most sources were not present in the building, though SLR personnel did request several containers of ordinary household cleaning supplies to be removed from the premise prior to any air sampling. The entire first floor was closely inspected to examine for cracks, separations, or construction features that would allow vapors from the soil beneath the floor to intrude into the building. Inspection by SLR personnel did not reveal any cracks, separations, or other openings in the ground level floor.

After evaluation for sources of VOCs in indoor air, air samples were collected using laboratory-prepared containers equipped with regulators to collect the samples over a 12-hour period in order to obtain time-weighted average concentrations. The samples from the building interior were placed at a height of approximately 3 feet above the floor level to evaluate the breathing zone. The building interior samples were collected from the ground floor only of the building. Field duplicate samples were collected at a frequency of ten percent (10%). The sample locations are described below:

- One sample was collected from the north room of the Legislative Information Office (LIO), with the canister placed directly in the middle of a carpeted conference room.
- One sample was collected from a currently un-rented office space, in the bathroom along the east end of the building.
- Two samples were collected (one was a duplicate sample) in the video rental space, near the business counter.
- One outdoor air sample was collected from approximately ten feet from the main door to the building, on the north side of the lot (facing the Sterling Highway).

The air sample locations are shown on Figure 3. The samples were collected during nighttime hours, between 10:00PM on Friday, November 4 and 10:00AM on Saturday, November 5.

An anomaly in sampling activities when compared with the procedures outlined in the sampling plan occurred during collection of the exterior air sample and the two air samples in the video store. All three of these air canisters had no vacuum remaining after the 12-hour collection period. Under normal operation, a residual vacuum of approximately 5 inches of mercury is expected. All three of these sample canisters had full vacuum at the time the air sampling started. SLR contacted Air Toxics Ltd., the contract laboratory for the air analyses, and asked that the calibration of the regulators for these three air samples be verified. Air Toxics Ltd. verified the three regulators were correctly calibrated, as recorded in the laboratory analytical report narrative (Appendix B). Given the proper operation of the regulators and the correct initial vacuum in the canisters, the most likely reason the vacuum in these canisters was depleted before the end of the 12-hour sampling period was the ambient temperature. The regulators are volume air flow regulators, and the low overnight ambient temperature at the exterior sample location, as well as the video store sample location which was near the doorway and adjacent to the exterior windows during night hours when the heating system was off (Figure 3 and Appendix D, Photo 10) would allow a greater mass of cool dense air to enter the canister than would be the case at normal indoor temperatures. When the air canisters were warmed later in the day, the relative pressure in the air canisters increased, reducing the vacuum with respect to atmospheric pressure.

Laboratory analytical reports are included in Appendix B, field notes are included as Appendix C, and a photographic log of sampling locations is presented as Appendix C.

3.4 Air Quality Analytical Methods

Samples were sent for laboratory analysis for the following compounds:

- BTEX plus naphthalene using a modified USEPA Method TO-15

All method reporting limits were appropriate for commercial indoor air quality. Field duplicate samples were collected at a frequency of 10 percent of the total number of samples collected. Laboratory analytical reports are included in Appendix D.

4 FINDINGS

The findings from the air and ground water sampling, as well as the potential risk posed by the concentrations found, are discussed as follows.

4.1 Indoor Air Quality

The indoor air concentrations of toluene, ethylbenzene, and xylenes found in the air samples collected from the ground floor of the Trailside building were well below both the residential and occupationally-derived health-based screening criteria for indoor air as established by USEPA (2002). Benzene concentrations were all below the occupational value of 5.2 $\mu g/m^3$; two of the five samples slightly exceeded the residential-based target of 3.1 $\mu g/m^3$. These two results (3.7 $\mu g/m^3$ and 3.8 $\mu g/m^3$) were from the primary and duplicate samples collected from the video store. The soil below the video store corresponds to the part of the building that would be anticipated to be most impacted from the historical release based on regional topography and implied ground water flow direction with respect to the historical location of the USTs (Figures 1 and 2). The average indoor air benzene concentration across all samples was 2.4 $\mu g/m^3$, which is below both screening criteria. Benzene was detected in the ambient outdoor sample at a concentration of 1.3 $\mu g/m^3$. Therefore, it can be concluded that approximately half of the benzene in indoor air is due to ambient background (e.g., car exhaust). Naphthalene was not detected in any sample, with detection limits approximately equal to the residential screening level and below the occupational screening level.

The video store has four operational ceiling fans; all of which were off during the sampling period. Therefore, ventilation was lower than normal during the sampling event, which should provide a conservative estimate of typical indoor air concentrations during the store operating hours. The current building use is commercial, and no residences are located within the structure. Subtracting the ambient benzene concentration detected in outdoor air from the indoor results, the maximum benzene concentration was 2.5 $\mu g/m^3$. This benzene result could be a result of contamination remaining in the soil beneath the building, but the concentration is below both commercial and residential screening criteria. As a result, indoor air concentrations of BTEX under current land use appear to be below levels of concern to human health.

4.2 Ground Water Quality

The results of the ground water sample analyses of the water samples collected from monitoring wells MW-1, MW-2, MW-4, MW-7, and MW-12, as well as the sample collected

from the ground water interceptor and diversion system tank, indicated that only ground water at MW-4 contained concentrations of petroleum hydrocarbon above ADEC ground water cleanup levels. Benzene was detected in the primary and duplicate sample collected from MW-4 at concentrations of 0.00847 mg/L and 0.00901 mg/L respectively, which exceed the ADEC ground water cleanup level of 0.005 mg/L. The only other ground water hydrocarbon compounds detected was xylenes, also in the samples collected from MW-4, at concentrations of 0.0031 mg/L and 0.004 mg/L in the primary and duplicate sample, respectively. Both of the xylenes detections were below the ADEC ground water cleanup level. As ground water is not used for a drinking water source in the immediate area, the benzene ground water cleanup level exceedance at MW-4 is not likely to pose a risk to human health.

The ground water hydrocarbon detections were also compared to the screening criteria for volatilization and intrusion to indoor air (USEPA, 2002). The residential screening criteria were used as the ground water may migrate to a residential receptor, and are included on Table 1. The ground water benzene and xylenes concentrations at MW-4 were below the screening criteria, although one historical benzene detection from a sample collected from MW-4 in June 2003 was above the screening criteria. The current ground water BTEX concentrations appear to be below levels of concern to human health from inhalation of hydrocarbons volatilized from ground water and migrating to indoor air.

Finally, the ground water analytical results were compared to the ADEC surface water quality standards (18 AAC 70). This comparison was done as the shallow ground water in the area may discharge to springs on the hillside. The most appropriate water quality criterion for a known gasoline discharge is total aromatic hydrocarbon (TAH). The ADEC TAH surface water quality standard is 0.010 mg/L. The TAH concentration in monitoring well MW-4 for the primary and duplicate sample, as estimated from the sum of the BTEX constituents, is 0.012 mg/L and 0.013 mg/L, respectively, slightly exceeding the surface water quality standard.

5 RECOMMENDATIONS

It is recommended that focused ground water monitoring continue at the site, particularly at monitoring well MW-4. The source of the ground water contamination at MW-4 may be contaminated soil known to remain below Bowers Street, and continued monitoring is recommended as an effort to ensure that the ground water BTEX concentrations are stable or decreasing.

It is also recommended that an elevation survey be conducted on the monitoring wells to be able to obtain ground water elevations, and from this to derive the ground water flow direction and gradient. This information could help to verify if monitoring well MW-4 is in fact in the true downgradient location from the remaining contaminated soil present below Bowers Street.

It is further recommended that a minimum of one additional ground water monitoring well be installed downgradient of MW-4 to determine if BTEX constituents in ground water are migrating to surface water or locations of potential future ground water pumping wells at concentrations above ADEC water quality standards or ground water cleanup levels. The actual location of this ground water monitoring well should be determined based on the apparent ground water flow direction derived from the elevation survey.

REFERENCES

Shannon & Wilson, 2004. *Release Investigation and Site Risk Evaluation, Trailside General Store, Homer, Alaska.* Prepared for ADEC by Shannon & Wilson, Inc., Anchorage, Alaska. January.

USEPA, 2002. *OSWER Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils (Subsurface Vapor Intrusion Guidance)* EPA 530-D-02-004. USEPA Office of Solid Waste and Emergency Response (OSWER). November.

U.S. Geological Survey (USGS), 1987. Seldovia (C-5) NE Quadrangle Map. Department of the Interior, USGS.

Waller, Feulner, and Morris, 1968. *Water resources and surficial geology of the Homer area, South-central Alaska.* Department of the Interior, USGS; by Roger M. Waller, Alvin J. Feulner, and Donald A. Morris.

Western Regional Climate Center (WRCC), 2005. Monthly Climate Summary, Homer WSO Airport, Period of Record from 9/1/1932 to 3/31/2005. WRCC, Reno, NV 89512. Downloaded on October 17, 2005 from http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?akhome.

LIMITATIONS

The services described in this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, nor the use of segregated portions of this report.

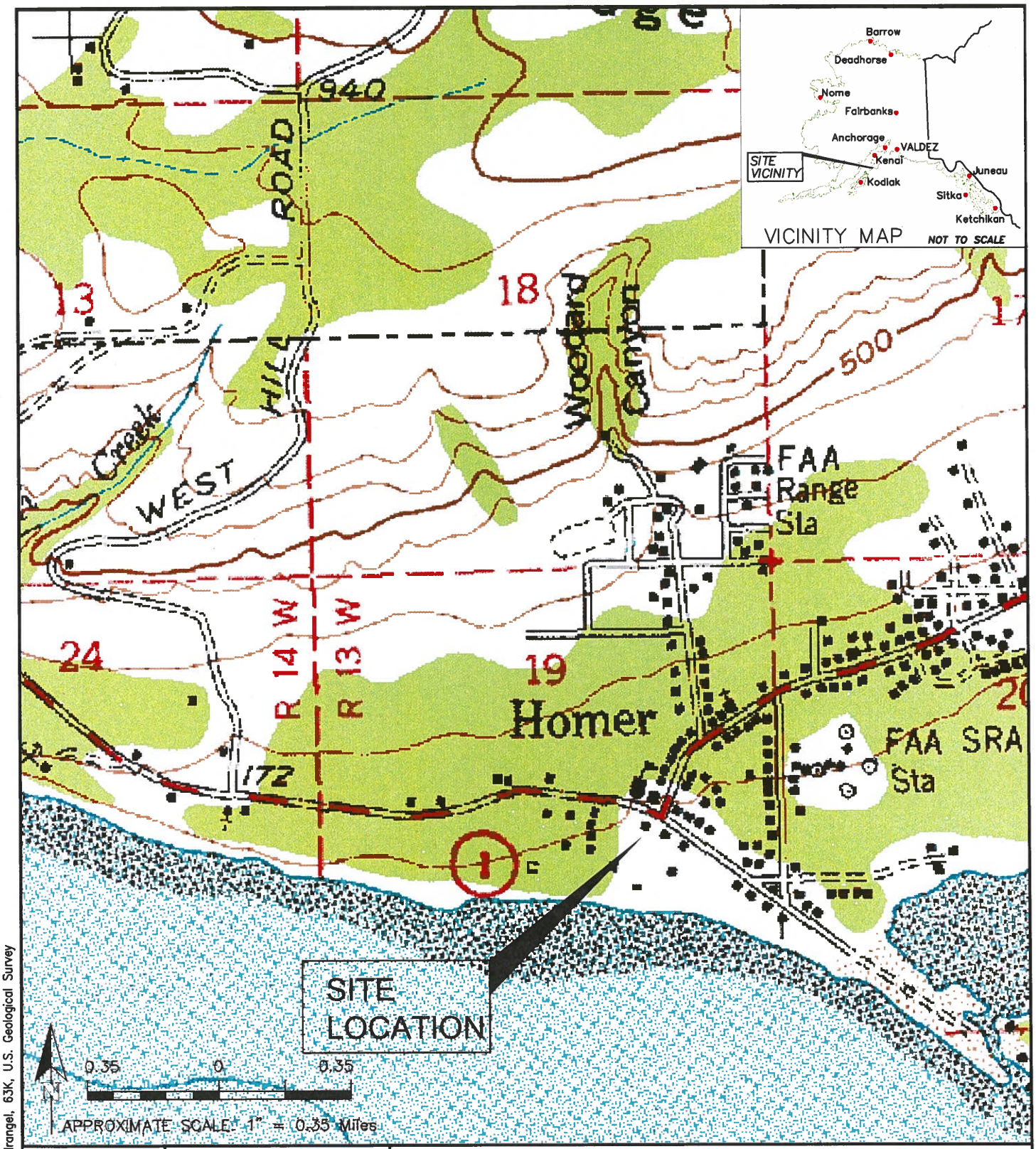
The purpose of an environmental assessment is to reasonably evaluate the potential for or actual impact of past practices on a given site area. In performing an environmental assessment, it is understood that a balance must be struck between a reasonable inquiry into the environmental issues and an exhaustive analysis of each conceivable issue of potential concern. The following paragraphs discuss the assumptions and parameters under which such an opinion is rendered.

No investigation is thorough enough to exclude the presence of hazardous materials at a given site. If hazardous conditions have not been identified during the assessment, such a finding should not therefore be construed as a guarantee of the absence of such materials on the site, but rather as the result of the services performed within the scope, limitations, and cost of the work performed.

Environmental conditions may exist at the site that cannot be identified by visual observation. Where subsurface work was performed, our professional opinions are based in part on interpretation of data from discrete sampling locations that may not represent actual conditions at unsampled locations.

Except where there is express concern of our client, or where specific environmental contaminants have been previously reported by others, naturally occurring toxic substances, potential environmental contaminants inside buildings, or contaminant concentrations that are not of current environmental concern may not be reflected in this document.

FIGURES



Reference: Seldovia (C-5) NE Quadrangel, 63K, U.S. Geological Survey

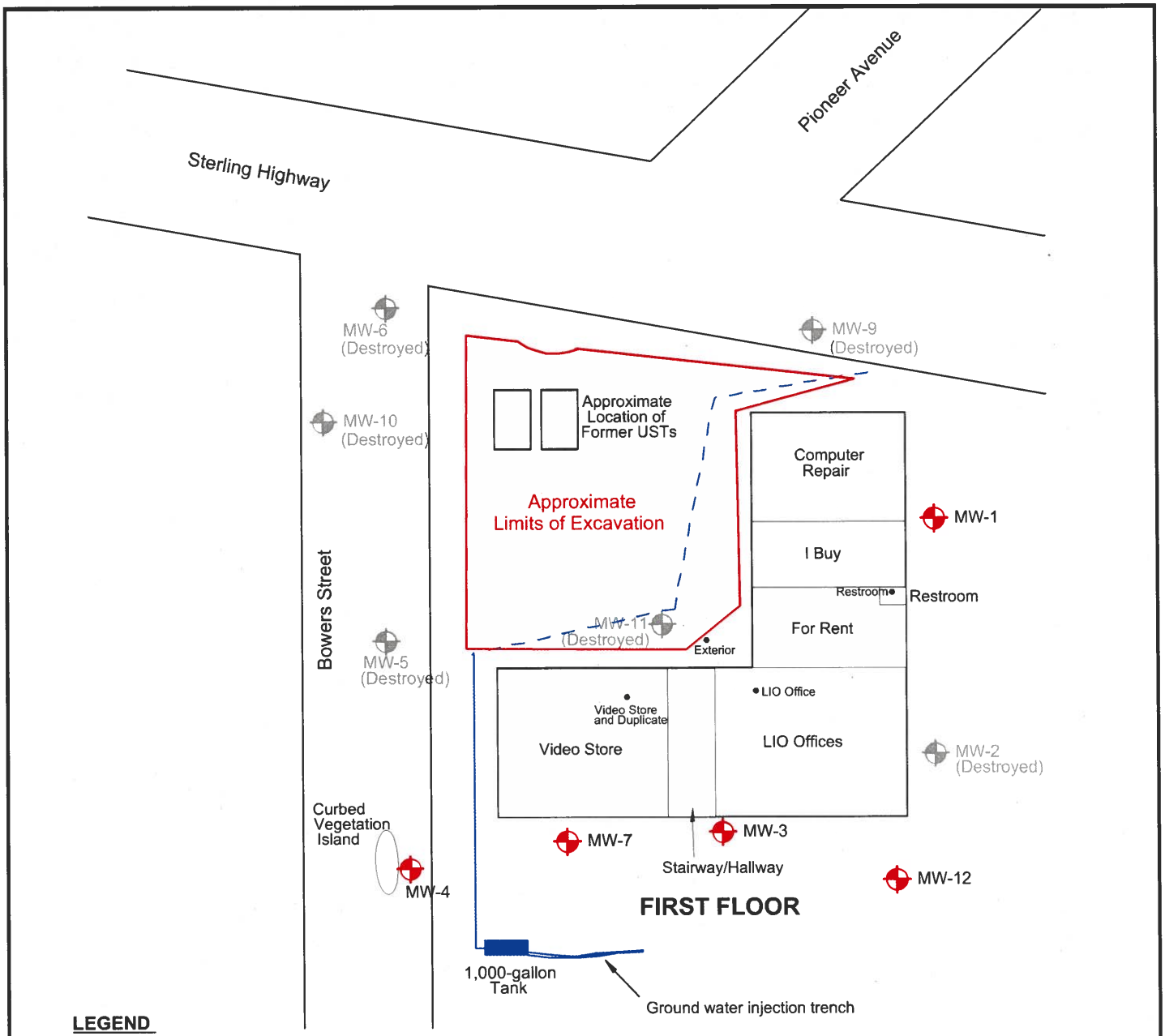
SLR Alaska
2525 Blueberry Road, Suite 206
Anchorage, AK 99503
(907)222-1112 Fax (907)222-1113
3522 International Street
Fairbanks, AK 99701
(907)455-9005 Fax (907)455-9015
SLR International Corp.

CLIENT: Alaska Department of Environmental Conservation

2005 ADDITIONAL MONITORING AND RISK EVALUATION REPORT
FORMER TRAILSIDE GENERAL STORE
HOMER, ALASKA

SITE LOCATION MAP

PROJECT MANAGER:	APPROVED:	DESIGNED:	APPROX. SCALE:	REVISION:	FIGURE:
M. RIESER	M. RIESER	M. RIESER	1" = .35 Miles	0	1
PROJECT NO.:	DRAWN:	DATE:	FILE:		
005.0065.05003	K. PAUK	DECEMBER 2005	s\proj.\adec\gen.store\fig		



LEGEND

- MW-1 — Approximate location of Monitoring Wells
- Restroom — Air Sample Locations
- — — Perforated ground water interception drain
- ——— Non-perforated conveyance piping

NOTE: Original drawing created in color. Some information may be lost if copied or printed in black and white.

SKETCH ONLY
NOT TO SCALE

0 50 100
APPROXIMATE SCALE IN FEET

N

Reference: Shannon & Wilson file no. 32-1-16710, May 2003

SLR Alaska
2525 Blueberry Road, Suite 206
Anchorage, AK 99503
(907)222-1112 Fax (907)222-1113
3522 International Street
Fairbanks, AK 99701
(907)455-9005 Fax (907)455-9015
SLR International Corp.

CLIENT: Alaska Department of Environmental Conservation

2005 ADDITIONAL MONITORING AND RISK EVALUATION REPORT
FORMER TRAILSIDE GENERAL STORE
HOMER, ALASKA

SITE LAYOUT

PROJECT MANAGER:	APPROVED:	DESIGNED:	APPROX. SCALE:	REVISION:	FIGURE:
M. RIESER	M. RIESER	M. RIESER	1" = 50'	0	2
PROJECT NO.:	DRAWN:	DATE:	FILE:		
005.0065.05003	K. PAUK	DECEMBER 2005	s\proj.\adec\gen.store\fig		

TABLES

Table 1
Ground Water Sample Analytical Results
Trailside General Store
Homer, Alaska
(all units in mg/L)

Sample Location	Sample Identification	Sample Date	GRO Alaska Method 101	USEPA Method 8021B			
				Benzene	Toluene	Ethylbenzene	Xylenes (total)
MW-1	MW-1	6/19/2003	ND (0.05)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0015)
	MW-1	11/4/2005	ND (0.05)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0015)
MW-3	MW-3	6/19/2003	ND (0.05)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0015)
	MW-3	11/4/2005	ND (0.05)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0015)
MW-4	MW-4	6/19/2003	ND (0.05)	**0.0207**	ND (0.0005)	ND (0.0005)	0.00647
	MW-4	11/4/2005	ND (0.05)	**0.00847**	ND (0.0005)	ND (0.0005)	0.0031
	MW-Dup	11/4/2005	ND (0.05)	**0.00901**	ND (0.0005)	ND (0.0005)	0.004
MW-7	MW-7	6/19/2003	ND (0.05)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0015)
	MW-7	11/4/2005	ND (0.05)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0015)
MW-12	MW-12	6/19/2003	ND (0.05)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0015)
	MW-12	11/4/2005	ND (0.05)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0015)
Tank	Tank	6/19/2003	ND (0.05)	ND (0.0005)	ND (0.0005)	ND (0.0005)	0.00202
	Tank	11/4/2005	ND (0.05)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0015)
Dup (see note 1)	Dup	6/19/2003	ND (0.05)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0015)
ADEC Ground Water Cleanup Level			1.3	0.005	1	0.7	10
USEPA Ground Water Inhalation Screening Level			NA	0.014	1.5	0.7	22*

Notes:

Bold numbers exceed ADEC ground water cleanup levels

Bold Underlined numbers exceed USEPA Ground Water Vapor Intrusion Guidance Level (residential).

GRO - gasoline range organics

mg/L - milligrams per liter

ND - not detected

(1) - Parent sample from duplicate taken on 06/19/2003 not identified.

NA - not applicable

* - p-xylene value, lowest of m-xylene, o-xylene, and p-xlyene values

Table 2
Air Sample Analytical Results
Former Trailside General Store
Homer, Alaska
(all units in ug/m^3)

Sample Location	Sample Identification	Date Sampled	Modified USEPA Method TO-15				
			Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene
Bathroom	Bathroom	11/04/05 - 11/05/05	2.0	5.3	0.80	4.1	ND (4.4)
LIO Front	LIO Front	11/04/05 - 11/05/05	1.6	3.9	1.0	4.8	ND (4.4)
Video Store	Video Store	11/04/05 - 11/05/05	**3.7**	11	10	56	ND (3.4)
Exterior	Exterior	11/04/05 - 11/05/05	1.3	2.3	ND (0.52)	0.99	ND (3.2)
Video Store	Air Dup	11/04/05 - 11/05/05	**3.8**	15	12	64	ND (3.6)
USEPA Vapor Intrusion Guidance Levels (residential)			3.1	400	22	7000	3.0
USEPA Vapor Intrusion Guidance Levels (commercial)[a]			5.2	670	37	11750	5.0

Notes:

Bold numbers are samples with detected concentrations exceeding USEPA Vapor Intrusion Guidance Level (residential).

ug/m^3 - micrograms per cubic meter

ND - not detected above method reporting limit

(0.52) - method reporting limit

[a] - Extrapolated using relative exposure frequency and duration for a worker relative to a resident.

APPENDIX A

WELL SAMPLING CALCULATION AND RECORD SHEETS

SLR Alaska
2525 Blueberry Road
Suite 206
Anchorage, Alaska 99503
phone (907) 222-1112
fax (907) 222-1113

Well Sampling Calculation and Record Sheet

Client: ADEC
Site Name: Trailside
SLR Employee: RMcGhee

Well Number: MW-1
SLR Project #: 005.0065.05003
Date: 11/4/05

COLUMN OF WATER IN WELL

Well Casing Diameter (inches):	2"	Filter Pack Diameter (if known [inches])
Sounding Depth of Well (from top of casing [feet])		12.10
Static Water Depth (from top of casing [feet])		2.75
Column of water in well (feet)		9.35
Time Waterlevels Measured:		0842

VOLUME TO BE PURGED (3 well casing volumes only, unless otherwise specified)

Gallons per foot of filter pack (on reverse)		=
Column of water in filter pack		x
Volume of water column in filter pack		=
Gallons per foot of casing (on reverse)		=
Column of water in well	x	9.35
Volume of water in casing	=	.163
Total water volume (filter pack + casing)	x	1.52
Number of volumes to be evacuated	=	3
Total volume to be evacuated	=	4.56

Purging Method: Polyethylene Bailer

FIELD PARAMETERS

Time	Volume purged (gallons)	pH	Conductivity (uS)	TDS (ppm)	Temperature (F or C)	Turbidity (NTU)	Color	Odor	ORP (mV Units)
0851	0.50	6.4	125	95.2	5.6°	Mild	yellowish	None	
0854	1.5	6.2	135	113.6	6.4°	mild	yellow	none	
0859	3.5	6.2	135	108.1	6.0°	mild	yellow	none	
0903	4.7	6.2	135	92.3	6.2°	mod-mild	yellow	none	

Total volume purged: 5.2 gallons
Sample Identification: MW-1
Duplicate Collected? yes (no)
Signed Sampler: RMcGhee
Signed Reviewer:

Withdrawal Rate:
Sample Time/Date: 11/4/05; 0905
Duplicate Identification: N/A
Date: 11/4/05
Date:

ADDITIONAL INFORMATION/COMMENTS: No hydrocarbon-like sheen or odor detected.

SLR Alaska
2525 Blueberry Road
Suite 206
Anchorage, Alaska 99503
phone (907) 222-1112
fax (907) 222-1113

Well Sampling Calculation and Record Sheet

Client: AVEC
Site Name: Trailside
SLR Employee: McGhee

Well Number: MW-3
SLR Project #: 005.0065.05003
Date: 11/4/05

COLUMN OF WATER IN WELL

Well Casing Diameter (inches):	2"	Filter Pack Diameter (if known [inches])	
Sounding Depth of Well (from top of casing [feet])			11.90
Static Water Depth (from top of casing [feet])			4.61
Column of water in well (feet)			7.29
Time Waterlevels Measured:			1027

VOLUME TO BE PURGED (3 well casing volumes only, unless otherwise specified)

Gallons per foot of filter pack (on reverse)	=	
Column of water in filter pack	x	
Volume of water column in filter pack	=	
Gallons per foot of casing (on reverse)	=	
Column of water in well	x	7.29
Volume of water in casing	=	0.163
Total water volume (filter pack + casing)	x	1.18
Number of volumes to be evacuated	=	3
Total volume to be evacuated	=	3.54

Purging Method: Polyethylene bailer

FIELD PARAMETERS

Time	Volume purged (gallons)	pH	Conductivity (µS)	TDS (ppm)	Temperature (F or C)	Turbidity (NTU)	Color	Odor	ORP (mV Units)
1032	0.50	5.7	122	86	5.2°	muddy	brown	N/A	
1035	1.25	6.2	114	84	7.0°	muddy	brown	N/A	
1037	2.00	6.2	111	91	7.9°	muddy	brown	N/A	
1040	2.50	6.3	109	86	9.0°	muddy	brown	N/A	
1043	3.00	6.3	110	86	9.0°	muddy	brown	N/A	

Total volume purged: 3.75 gallons
Sample Identification:
Duplicate Collected? yes (no)
Signed Sampler: RMcGhee
Signed Reviewer:

Withdrawal Rate:
Sample Time/Date: 1047
Duplicate Identification: N/A
Date: 11/4/05
Date:

ADDITIONAL INFORMATION/COMMENTS: Muddy water with no indication of hydrocarbon-like sheen or odor present.

SLR Alaska
2525 Blueberry Road
Suite 206
Anchorage, Alaska 99503
phone (907) 222-1112
fax (907) 222-1113

CC

Well Sampling Calculation and Record Sheet

Client: ADEC
Site Name: Trailside
SLR Employee: McGhee.
Well Number: MW-4
SLR Project #: 005.0065.05003
Date: 11/4/05

COLUMN OF WATER IN WELL

Well Casing Diameter (inches):	2"
Filter Pack Diameter (if known [inches])	
Sounding Depth of Well (from top of casing [feet])	12.00
Static Water Depth (from top of casing [feet])	4.00
Column of water in well (feet)	8.00
Time Waterlevels Measured:	1606

VOLUME TO BE PURGED (3 well casing volumes only, unless otherwise specified)

Gallons per foot of filter pack (on reverse)	=
Column of water in filter pack	x
Volume of water column in filter pack	=
Gallons per foot of casing (on reverse)	=
Column of water in well	x 8.00
Volume of water in casing	= .163
Total water volume (filter pack + casing)	x 1.30
Number of volumes to be evacuated	= 3
Total volume to be evacuated	= 3.90

Purging Method: Polyethylene bailer

FIELD PARAMETERS

Time	Volume purged (gallons)	pH	Conductivity (µS)	TDS (ppm)	Temperature (F or C)	Turbidity (NTU)	Color	Odor	ORP (mV Units)
1612	0.5	6.4	1040	796	6.6°	mod.	greyish brown	Strong hydrocarbon-like odor	
1615	1.25	6.5	1053	842	6.7°	mod.	"	"	
1617	2.00	6.5	1135/16	881	7.3°	mod.	"	"	
1620	2.75	6.5	1082	885	8.7°	mod	"	"	
1625	3.75	6.6	1194	947	5.4°	heavy	greyish black	"	
1629	4.25	6.6	1160	916	7.0°	heavy	greyish black	"	

Total volume purged: 4.5 gallons
Sample Identification: MW-4
Duplicate Collected? (yes) no
Signed Sampler: RMcGhee
Signed Reviewer:

Withdrawal Rate:
Sample Time/Date: 1632
Duplicate Identification: MW-Dup (0100)
Date: 11/4/05
Date:

ADDITIONAL INFORMATION/COMMENTS: Strong hydrocarbon-like odor observed. Turbidity & color increased as water was purged. Many sediments observed in sample jar since the VOA's were mixed. No hydrocarbon-like sheen apparent in purge tub.

SLR Alaska
2525 Blueberry Road
Suite 206
Anchorage, Alaska 99503
phone (907) 222-1112
fax (907) 222-1113

Well Sampling Calculation and Record Sheet

Client: ADEC
Site Name: Trailside
SLR Employee: McGhee

Well Number: MW-7 on 11/4/05
SLR Project # : 005.1285.0065.05003
Date: 11/4/05

COLUMN OF WATER IN WELL

Well Casing Diameter (inches):	2"	Filter Pack Diameter (if known [inches])	
Sounding Depth of Well (from top of casing [feet])		12.10	
Static Water Depth (from top of casing [feet])		4.82	
Column of water in well (feet)		7.28	
Time Waterlevels Measured:		1120	

VOLUME TO BE PURGED (3 well casing volumes only, unless otherwise specified)

Gallons per foot of filter pack (on reverse)	=	
Column of water in filter pack	x	
Volume of water column in filter pack	=	
Gallons per foot of casing (on reverse)	=	
Column of water in well	x	7.28
Volume of water in casing	=	0.163
Total water volume (filter pack + casing)	x	1.18
Number of volumes to be evacuated	=	3
Total volume to be evacuated	=	3.54

Purging Method: Polyethylene bailer

FIELD PARAMETERS

Time	Volume purged (gallons)	pH	Conductivity (µS)	TDS (ppm)	Temperature (F or C)	Turbidity (NTU)	Color	Odor	ORP (mV Units)
1127	0.75	6.5	197	155	4.9°	mild	clear	some hydro-carbon-like	
1130	1.50	6.5	179 per 216	179	6.3°	mod.	greyish	"	
1132	2.25	6.4	205	168	7.6°	moderate	grey	"	
1134	3.00	6.4	202	162	8.6°	mod.	grey	"	
1135	3.5	6.4	216	163	7.8°	mod	grey	"	

Total volume purged: 3.75 gallons
Sample Identification: MW-7
Duplicate Collected? yes
Signed Sampler: McGhee
Signed Reviewer:

Withdrawal Rate:
Sample Time/Date: 1138; 11/4/05
Duplicate Identification: N/A
Date: 11/4/05
Date:

ADDITIONAL INFORMATION/COMMENTS: Moderate hydrocarbon-like odor was obvious from purge-head.

SLR Alaska
2525 Blueberry Road
Suite 206
Anchorage, Alaska 99503
phone (907) 222-1112
fax (907) 222-1113

Well Sampling Calculation and Record Sheet

Client: ADEC
Site Name: Trailside
SLR Employee: R McGhee
Well Number: MW-12
SLR Project #: 005.0065.05003
Date: 11/4/05

COLUMN OF WATER IN WELL

Well Casing Diameter (inches): 2"
Filter Pack Diameter (if known [inches]):
Sounding Depth of Well (from top of casing [feet]): 8.80
Static Water Depth (from top of casing [feet]): 6.34
Column of water in well (feet): 2.26
Time Waterlevels Measured: 0934

VOLUME TO BE PURGED

(3 well casing volumes only, unless otherwise specified)

Gallons per foot of filter pack (on reverse)	=	
Column of water in filter pack	x	
Volume of water column in filter pack	=	
Gallons per foot of casing (on reverse)	=	
Column of water in well	x	2.26
Volume of water in casing	=	0.163
Total water volume (filter pack + casing)	x	3
Number of volumes to be evacuated	=	3
Total volume to be evacuated	=	1.10

Purging Method: Disposable bailer

FIELD PARAMETERS

Time	Volume purged (gallons)	pH	Conductivity (µS)	TDS (ppm)	Temperature (F or C)	Turbidity (NTU)	Color	Odor	ORP (mV Units)
0943	0.20	5.8	143	113	6.0°	High	brown-muddy	N/A	
0945	0.50	6.1	154	123	6.7°	High	brown-	N/A	
0949	0.75	6.2	161	126	7.0°	High	brown muddy	N/A	
0952	1.20	6.2	152	126	7.6°	High	brown muddy	N/A	

Total volume purged: 1.30 gallons
Withdrawal Rate:
Sample Identification:
Sample Time/Date: 0956 / 11/4/05
Duplicate Collected? yes no
Duplicate Identification: N/A
Signed Sampler: RMcGhee
Date: 11/4/05
Signed Reviewer:
Date:

ADDITIONAL INFORMATION/COMMENTS: Bailer appeared to have rust like smears on it. No hydrocarbon-like odor or sheen detected. Purge water was very turbid and yellow/brown colored.

SLR Alaska
2525 Blueberry Road
Suite 206
Anchorage, Alaska 99503
phone (907) 222-1212
fax (907) 222-1115

Well Sampling Calculation and Record Sheet

Client: ADEC
Site Name: Trailside
SLR Employee: McGhee
Well Number: Tank
SLR Project #: 005.0065.05003
Date: 11/4/05

COLUMN OF WATER IN WELL

Well Casing Diameter (inches): 4" Filter Pack Diameter (if known [inches]) ____
Sounding Depth of Well (from top of casing [feet]) ____
Static Water Depth (from top of casing [feet]) N/A
Column of water in well (feet) ____
Time Waterlevels Measured: ____

VOLUME TO BE PURGED (3 well casing volumes only, unless otherwise specified)

Gallons per foot of filter pack (on reverse)	=	
Column of water in filter pack	x	N/A
Volume of water column in filter pack	=	
Gallons per foot of casing (on reverse)	=	
Column of water in well	x	
Volume of water in casing	=	
Total water volume (filter pack + casing)	x	
Number of volumes to be evacuated	=	
Total volume to be evacuated	=	

Purging Method: No purging required (used a polyethylene bailer to sample)

FIELD PARAMETERS

Time	Volume purged (gallons)	pH	Conductivity (µS)	TDS (ppm)	Temperature (F or C)	Turbidity (NTU)	Color	Odor	ORP (mV Units)

Total volume purged: 0 gallons
Sample Identification: TANK
Duplicate Collected? yes (no)
Signed Sampler: R McGhee
Signed Reviewer: ____

Withdrawal Rate: ____
Sample Time/Date: 1421; 11/4/05
Duplicate Identification: N/A
Date: 11/4/05
Date: ____

ADDITIONAL INFORMATION/COMMENTS:
Sampled from pipe identified by landowner. Several other pipes exist in area. Sampled from western pipe on south side of large rock.

APPENDIX B

FIELD NOTES

"Rite in the Rain®"
ALL-WEATHER WRITING PAPER

FIELD

All-Weather Notebook
No. 351

Trailside General Store
SLR#005.0065.05003
November 2005
R. McGhee

4 5/8" x 7" - 48 Numbered Pages

If found, please return to SLR Alaska
2525 Blueberry Suite 206
Anchorage, AK 99503
(907) 222-1112

"Rite in the Rain"®
ALL-WEATHER WRITING PAPER

Name SLR Alaska

Address 2525 Blueberry Suite 206
Anchorage, AK 99503

Phone (907) 222-1112

Project Trailside General Store
005.0065.05003
Homer, Alaska

Clear Vinyl Protective Slipcovers (Item No. 30) are available for this style of notebook. Helps protect your notebook from wear & tear. Contact your dealer or the J. L. Darling Corporation.

CONTENTS

PAGE	REFERENCE
	Field Notebook for SLR Project 005.0065.05003; Trailside General Store in Homer, Alaska.
	The following pages represent field notes taken during all field activities. Notes are also supplemented by photographs and well sampling & calculation Record sheets.

2

11/4/05 Clear, windy

0750 Depart hotel to site.

0800 Arrived on site. Conducted preliminary surveillance of exterior. Located 4 of the 5 monitoring wells. Landowner not on-site. Proceed to probe for sampling MW-1 on the east side of the building, closest to the Sterling Hwy. Left message for Mr. Flynn on cell phone voicemail at 0803.

Took 2 photographs of MW-1

0836 Cut lock on well with bolt cutters per M Kieser permission. Began well sampling & purge sheet.

McGhee Trailside

11/4/05

0905 Collect 3 VOA samples at MW-1. To be analyzed for BTEX & GRO.

Note: When pulling VOA jars from cooler to sample, noticed that VOA jars did not have lab sample identification labels on them. For field activities today, sample identification will be noted on lid of each VOA as well as on the preservative table. Will table more precise before sending to lab.

0924 Begin trying to remove cap at MW-12. No lock on this well. Compression cap came off easily.

McGhee Trailside

11/4/05 Clear, Windy Approx 21°F.

0956 Collect 3 VOA samples at MW-12 for BTEX & GRO analysation.

1000 - 1020 Warm up & complete field notes in vehicle.

took 2 photographs of MW-12. Also took 1 photograph of above ground fuel tank on adjacent property to the east approximately 15ft. tank appears to have some staining from a nozzle/pipe on top side.

1027 Begin taking cover off MW-3. Compression cap had a lock on it but was able to lift up and remove without cutting lock. Start bailing well.

McGhee Trailside

11/4/05 Clear. Windy

1047 Collect 3 VOA samples at MW-3 for BTEX & GRO.

Could not get compression cap back on 2" PVC piping. Cut lock with bolt cutters, put cap back on.

1105 Begin removing MW lid on MW-7. Talked with Mr. Flynn briefly. He showed me the 1,000 gallon tank pipe, but we could not locate MW-4.

1138 Collect 3 VOA samples at MW-7 for BTEX for GRO. Took 2 pictures

1200 - 1300 Ate lunch, spoke with M. Reiser on phone

McGhee Trailside

6

11/4/05 Clear, Sunny, Windy
regrouting MW-4. Will
continue to look for
well in weed patch
at southeast corner
of property.

1305 Met with Mr. Alex Flynn
to do walk through
building.

1st Floor-
LID office, cleaning
supplies, air fresheners,
carpeting. One
bathroom - Mr. Flynn
will remove cleaning
supplies one bathroom
fan, electric heater
vent near floor. Restroom
had laminate flooring.
LID office completely
carpeted. No vent system
obvious in walls or
ceilings except in.

McGhee Trailside

7

11/4/05 Clear, Windy
the bathroom.

1st floor under stairs,
cleaning supply room
with several totes
with cleaning supplies.
Closet completely
carpeted.

1st Floor - must go outside
to get into the next office
next to LID. Carpeted.
Daughter uses for
housing restaurant ice cream
equipment popcorn freezers
makers crafts.
One tiled bathroom
with some cleaning
equipment with
bathroom fan.
984 square feet room
Sen Area is for
rent.

McGhee Trailside

11/4/05 Clear, Sunny

1st Floor - I Buy - 333 sq. ft. shares a bathroom w/ next door computer repair. Bathroom has typical cleaning supplies. Laminated floor.

1st Floor - Computer repair 3100 sq. ft. Carpeted. Uses vacuum or compressed air for cleaning. Does not use aerosols - as little as possible. No sign of vents or ventilation system.

1st Floor - Point West Video; tiled floor, 4 overhead fans. Electric heater box mounted from ceiling. Old refrigeration unit in video storage area not in use.

McGhee Trailside

11/4/05

Cooler/freezer used for storage. Bathroom is tiled as well with some cleaning supplies. Sink area is separate from bathroom. Identical bathroom (his/hers) on other side in video store.

2nd story - his/her bathroom, 4 empty offices on south side. 3 almost empty on north side. Willie's office is at top of stairs, north side.

1335 Called SLR and talked to Mike & Mark.

1 canister in the video store. Probably in front area. Duplicate

McGhee Trailside

10

11/4/05

1 in front part of LDO office,

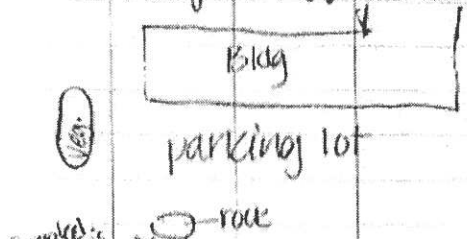
1 in bathroom of open area.

Exterior - outside by front doors. Chain to pillar.

1412 Begin gathering supplies to sample TANK.

1421 Collect 3 VOA samples from TANK for BTEX & GRO.

Diagram of tank area:



McGhee Trailside

11

11/4/05

1430 Talked to Willie about missing MW-4. Obtained copy of as-built showing MW-4 on east side, outside of vegetation area. Also discussed where the air canisters will be set up tonight and schedule for air sampling.

1445 Left site to go to hardware store and pick up chain and lock for exterior canister and also hand shovel to keep looking for MW-4.

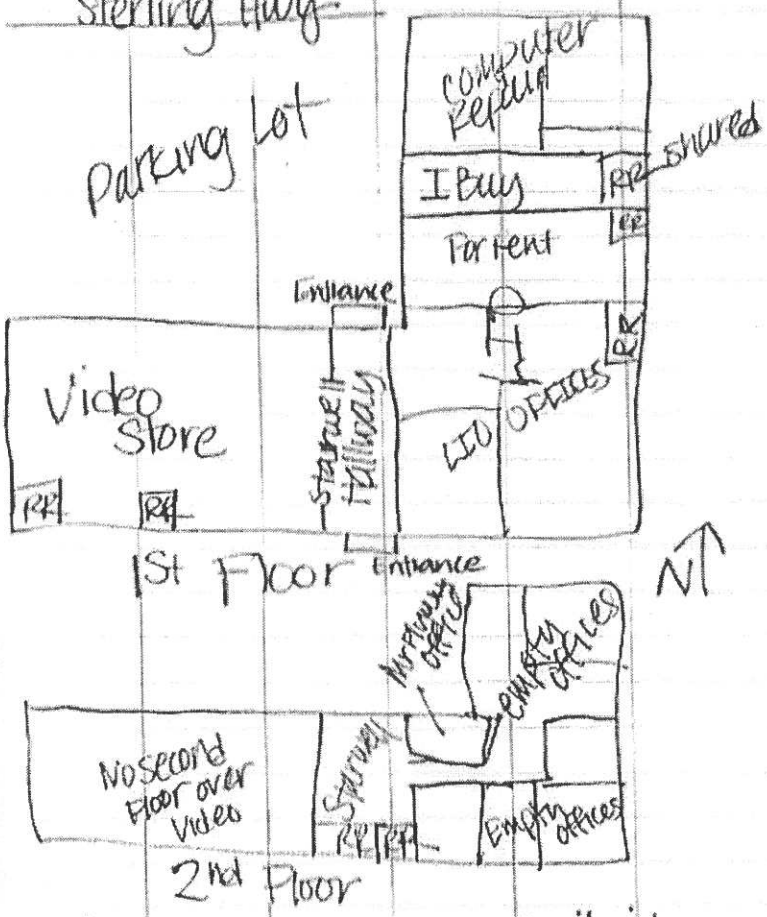
Purchased new padlocks, chain/lock and metal shovel to dig through loose vegetation and gravel on asphalt.

McGhee Trailside

12

11/4/05
looking for MW-4.

Sketch of building layout:



McGhee Trailside

11/4/05

1532 Still continuing to look for MW-4. Using As-built drawing provided by Mr. Higum. Digging through sediment/ice mixture with shovel and then screwdriver & hammer.

1600 Located MW-4 by chipping through ice & sediment approx. 2 inch thick. Begin prep for sample. Will collect duplicate sample at this well.

1632 Collect 6 VOA samples at MW-4 for BTEX & GRO. (3 for MW-Dup) 0100-time

1635 Remobe equipment and clean up. Went inside to speak with

McGhee Trailside

14

11/4/05
Willie to re-confirm air sampling plan for this evening... Also let him know where I put the 8 5-gallon buckets with purge water placed southeast edge of bldg on sidewalk.) All buckets are clearly labeled on lid the well the contents came from, SLR Alaska address and phone number, attn: Mike Reiser. Also labeled as purge water. Confirmed with Willie that I would be back on-site at 2130 to set up air canisters. He said he would be there.

0708 Left site, suspended activities until later tonight. Went to Kinder.

McGhee - Trailside

15

11/4/05 Dark, clear skies

2130 Arrive back on site and park in front lot to help facilitate loading/unloading air canisters.

2135 Prepare for canister in "For Rent" bathroom location. Canister & regulator # match - 14121.

Initial vacuum is -26 Hg at 2138 for sample - bathroom - canister #14121.

2145 - opened valve on #14121 (bathroom)

2149 Entered LIO office to read pressure. Canister #34734.

2152 Pressure on 34734 was

McGhee - Trailside

16

11/4/05 Dark, clear skies -27.5 Hg. Sample ID is LID Front. RM 11/4/05

0954

2154 Open regulator on LID Front (#34734)

2201 Set up canisters (one sample and one duplicate) in video store.

Canister #=20938 initial pressure was -28 Hg. Sample ID is Video Store

Canister #=2387 initial pressure was -28 Hg. Sample ID is Air Dup.

2212 Opend both regulators on Video Store & Air Dup.

2215 Set up canister #=34315 named Exterior

McGhee Trailside

11/4/05 Dark, clear skies

Initial pressure reading on canister #=34315 was -28 Hg

2217 Open regulator on Exterior Sample. Placed on bench outside main double doors. Put bike lock on canister and around exterior pillar.

2218 Spoke with Willie Pilgrim and reconfirmed pick up time for tomorrow. Will be back to close canisters starting at 0945. Left site. Return to hotel. End Day

RM 11/4/05

McGhee Trailside

18

11/5/05 Clear; Sunny; Approx. 18°F

0900 Leave note for site and package pickup at airport.

0919 Pickup package at airport. Includes metal detector and compression caps.

0926 Arrived on site and proceeded to "Front" canister. Regulator on canister indicates -5 Hg pressure. Waiting until 0945 to shut off regulator/canister and check pressure again with gauge.

0941 Turn off regulator on 14121 (bathroom) check pressure again.

McGhee Trailside

11/5/05 Clear; Sunny

0945 Final pressure on Bathroom (#14121) was -6 Hg.

0947 Proceeded into LIO office to close up canisters #34734 (Sample ID LIO Front).

0950 Checked pressure on LIO Front. Removed regulator (closing canister valve first) and installing gauge for pressure reading.

0953 Pressure (final) on LIO Front (#34734) was -6 Hg.

1000 Obtain access to idee store to close room canisters (#20938 & #2387).

McGhee Trailside

11/5/05 Clear, Sunny

Before taking off regulators, both regulators on canisters in Video Store are indicating 0 Hg pressure. Video Store is at comfortable room temperature, not placed near drafts. Air overhead fans were off throughout the night.

1012 Final pressure on canister (Video Pm 11/5/05) 2387 on Air Dup was 0 Hg.

Final pressure on canister (Video Store) 20938 was

1014 Proceed outside to close up exterior #34315.

McGhee Trailside

11/5/05

1015 Final pressure on #34315 was 0 Hg.

Packed all canisters up, with regulators & put in warm cab of truck.

Replaced four compression caps on MW1, MW3, MW7, MW12. Put new padlocks on as well.

Measurements for finding monitoring wells.

MW-1 - From first exterior door on east side of building (closest to hwy) - well is 5.34 ft to the east.

22

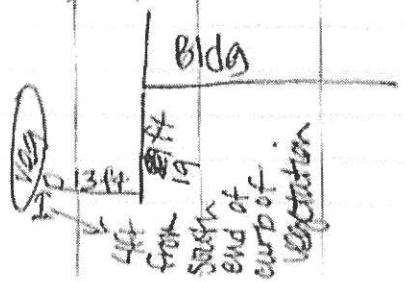
11/5/05

MW-12; From SE corner of bldg, due south approx 13' 9".

MW-3; from handicap parking sign on south side of bldg, due south 1'4". (to the right of double doors).

MW-7; from white back door on south side, put tape measure on door knob side and angle em Due West from MW-3 it is 44' 6".

MW-4; approx 1 1/2" from curb of veg. patch.



McGhee Trailside

11/5/05

MW 12 - no new cap, only new padlock. All other wells have new caps & locks.

1045 - Said goodbye & thanks to Mr Flynn. Cleaned up & packed up truck. Depart site.

- Work Suspended -

2100 - Repacked cooler completed COCs for both water and air samples.

Finished day - 11/5/05

McGhee Trailside

24

11/06/05

All day - Kept water sample cooler closed and well chilled. Air samples remained tightly closed and packaged. Both stored in secure area no access available other than McGhee.

CMN 11/6/05

McGhee Trailside

11/07/05

1100 Dropped water samples off at NCA. Temp blank was recorded. Samples were kept cool and sufficient temp.

Also DNP'ed air samples back to Air Toxics.

CMN 11/7/05

McGhee Trailside

"Outdoor writing products for outdoor writing people."

RECYCLABLE

"Rite in the Rain" - A unique All-Weather Writing paper created to shed water and enhance the written image. It is widely used throughout the world for recording critical field data in all kinds of weather.

Available in a variety of standard and custom printed case-bound field books, loose leaf, spiral and stapled notebooks, multi-copy sets and copier paper.

For best results, use a pencil or an all-weather pen.

a product of

J. L. DARLING CORPORATION
Tacoma, WA 98424-1017 USA
(253) 922-5000 • FAX (253) 922-5300
www.RiteintheRain.com

6 32281 35111 5

APPENDIX C

PHOTOGRAPHIC LOG

Photo #1: MW-1

Photo #2: MW-12

Photo #3: MW-3

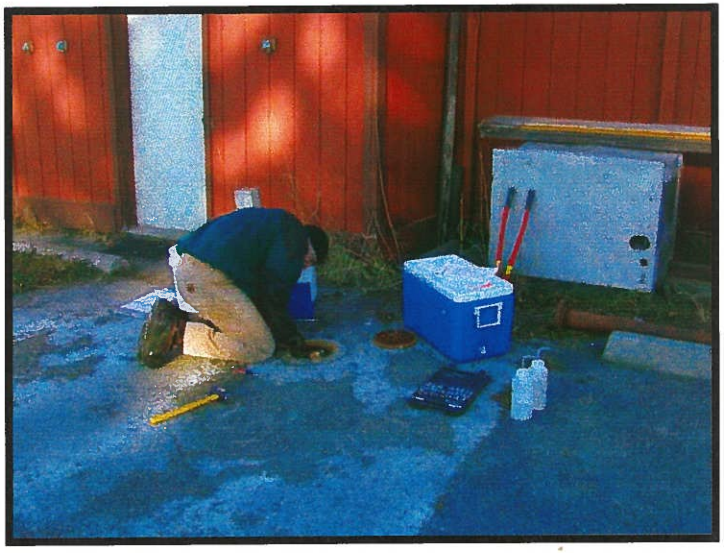


Photo #4: MW-7

Photo #5: MW-4

Photo #6: MW-4 buried underneath sand/ice mixture

Photo #7: LIO Air Sample location

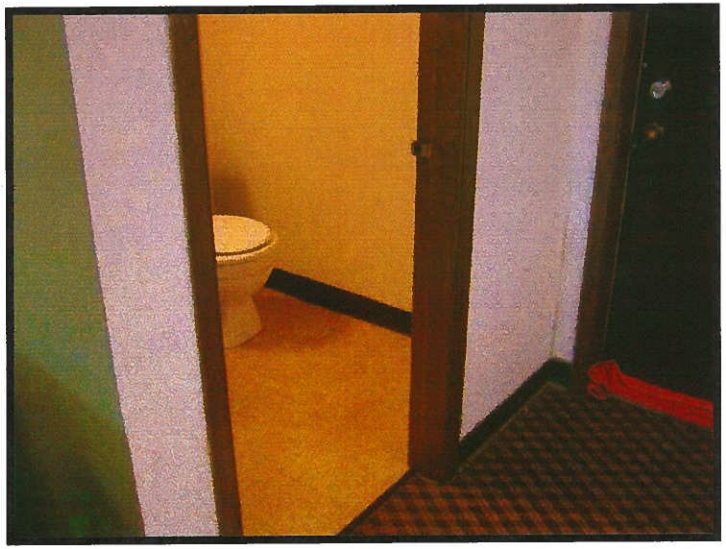


Photo #8: Bathroom Air Sample location

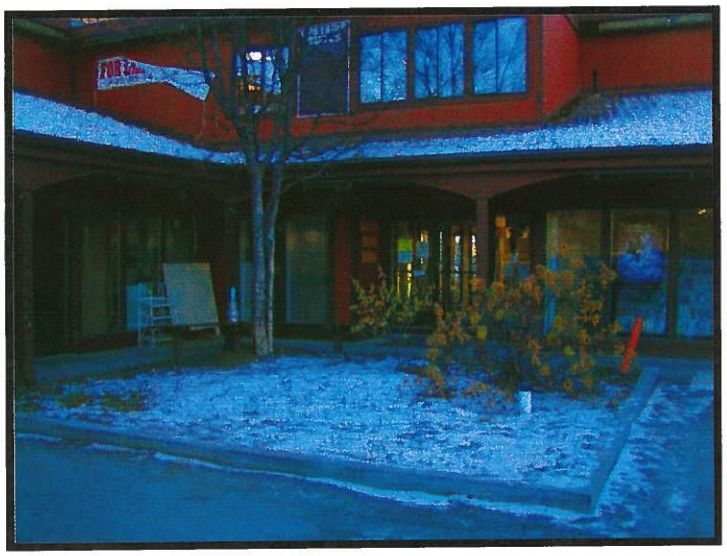


Photo #9: Exterior Air Sample location

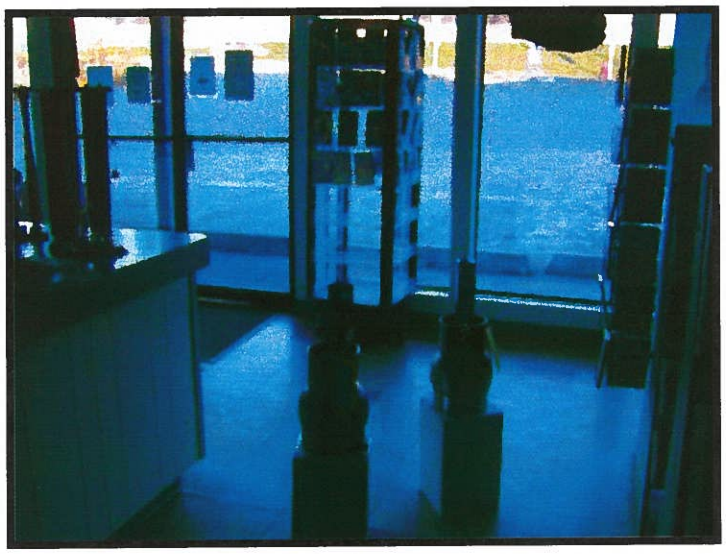


Photo #10: Video Store and Duplicate Air Sample location

APPENDIX D

ANALYTICAL RESULTS

www.ncalabs.com

Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244
425.420.9200 fax 425.420.9210
Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
509.924.9200 fax 509.924.9290
Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
503.906.9200 fax 503.906.9210
Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
541.383.9310 fax 541.382.7588
Anchorage 2000 W International Airport Road, Suite A-10, Anchorage, AK 99502-1119
907.563.9200 fax 907.563.9210

November 14, 2005

Andrew Dimitriou, R.G.
SLR Alaska
2525 Blueberry Road, Suite 206
Anchorage, ALASKA/USA 99503

RE: Trailside General Store

Enclosed are the results of analyses for samples received by the laboratory on 11/07/05 11:07.
The following list is a summary of the NCA Work Orders contained in this report.
If you have any questions concerning this report, please feel free to contact me.

Work	Project	ProjectNumber
A5K0016	Trailside General Store	[none]

Thank You,

Stephen Wilson, Laboratory Manager

www.ncalabs.com

Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244
phone: (425) 420.9200 fax: (425) 420.9210
Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
phone: (509) 924.9200 fax: (509) 924.9290
Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
phone: (503) 906.9200 fax: (503) 906.9210
Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
phone: (541) 383.9310 fax: 541.382.7588
Anchorage 2000 W International Airport Road, Suite A-10, Anchorage, AK 99502-1119
phone: (907) 563.9200 fax: (907) 563.9210

SLR Alaska	Project Name:	**Trailside General Store**	
2525 Blueberry Road, Suite 206	Project Number:	[none]	Report Created:
Anchorage, ALASKA/USA 99503	Project Manager:	Andrew Dimitriou, R.G.	11/14/05 09:24

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	A5K0016-01	Water	11/04/05 09:05	11/07/05 11:07
MW-12	A5K0016-02	Water	11/04/05 09:56	11/07/05 11:07
MW-3	A5K0016-03	Water	11/04/05 10:47	11/07/05 11:07
MW-7	A5K0016-04	Water	11/04/05 11:38	11/07/05 11:07
Tank	A5K0016-05	Water	11/04/05 14:21	11/07/05 11:07
MW-4	A5K0016-06	Water	11/04/05 16:32	11/07/05 11:07
MW-Dup	A5K0016-07	Water	11/04/05 13:00	11/07/05 11:07
Trip Blank	A5K0016-08	Water	11/04/05 00:00	11/07/05 11:07

North Creek Analytical - Alaska

Stephen Wilson, Laboratory Manager

www.ncalabs.com

Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244
phone: (425) 420.9200 fax: (425) 420.9210
Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
phone: (509) 924.9200 fax: (509) 924.9290
Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
phone: (503) 906.9200 fax: (503) 906.9210
Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
phone: (541) 383.9310 fax: 541.382.7588
Anchorage 2000 W International Airport Road, Suite A-10, Anchorage, AK 99502-1119
phone: (907) 563.9200 fax: (907) 563.9210

SLR Alaska	Project Name:	**Trailside General Store**	
2525 Blueberry Road, Suite 206	Project Number:	[none]	Report Created:
Anchorage, ALASKA/USA 99503	Project Manager:	Andrew Dimitriou, R.G.	11/14/05 09:24

Gasoline Range Organics (C6-C10) and BTEX per AK101

North Creek Analytical - Alaska

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
A5K0016-01 Water MW-1 Sampled: 11/04/05 09:05										
Gasoline Range Organics	AK101	ND	-----	50.0	ug/l	1x	5110031	11/09/05	11/09/05 16:10	
Benzene	"	ND	-----	0.500	"	"	"	"	"	
Toluene	"	ND	-----	0.500	"	"	"	"	"	
Ethylbenzene	"	ND	-----	0.500	"	"	"	"	"	
Xylenes (total)	"	ND	-----	1.50	"	"	"	"	"	
Surrogate(s): a,a,a-TFT (FID)		*Recovery: 98.8%*		*Limits: 50 - 150 %*		"			"	
a,a,a-TFT (PID)		*84.4%*		*72.5 - 131 %*		"			"	
A5K0016-02 Water MW-12 Sampled: 11/04/05 09:56										
Gasoline Range Organics	AK101	ND	-----	50.0	ug/l	1x	5110031	11/09/05	11/10/05 11:00	
Benzene	"	ND	-----	0.500	"	"	"	"	"	
Toluene	"	ND	-----	0.500	"	"	"	"	"	
Ethylbenzene	"	ND	-----	0.500	"	"	"	"	"	
Xylenes (total)	"	ND	-----	1.50	"	"	"	"	"	
Surrogate(s): a,a,a-TFT (FID)		*Recovery: 107%*		*Limits: 50 - 150 %*		"			"	
a,a,a-TFT (PID)		*95.6%*		*72.5 - 131 %*		"			"	
A5K0016-03 Water MW-3 Sampled: 11/04/05 10:47										
Gasoline Range Organics	AK101	ND	-----	50.0	ug/l	1x	5110031	11/09/05	11/09/05 17:16	
Benzene	"	ND	-----	0.500	"	"	"	"	"	
Toluene	"	ND	-----	0.500	"	"	"	"	"	
Ethylbenzene	"	ND	-----	0.500	"	"	"	"	"	
Xylenes (total)	"	ND	-----	1.50	"	"	"	"	"	
Surrogate(s): a,a,a-TFT (FID)		*Recovery: 120%*		*Limits: 50 - 150 %*		"			"	
a,a,a-TFT (PID)		*107%*		*72.5 - 131 %*		"			"	

North Creek Analytical - Alaska

Stephen Wilson, Laboratory Manager

www.ncalabs.com

Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244
phone: (425) 420.9200 fax: (425) 420.9210
Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
phone: (509) 924.9200 fax: (509) 924.9290
Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
phone: (503) 906.9200 fax: (503) 906.9210
Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
phone: (541) 383.9310 fax: 541.382.7588
Anchorage 2000 W International Airport Road, Suite A-10, Anchorage, AK 99502-1119
phone: (907) 563.9200 fax: (907) 563.9210

SLR Alaska	Project Name:	**Trailside General Store**
2525 Blueberry Road, Suite 206	Project Number:	[none]
Anchorage, ALASKA/USA 99503	Project Manager:	Andrew Dimitriou, R.G.

Report Created: 11/14/05 09:24

Gasoline Range Organics (C6-C10) and BTEX per AK101

North Creek Analytical - Alaska

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
A5K0016-04 Water MW-7 Sampled: 11/04/05 11:38										
Gasoline Range Organics	AK101	ND	-----	50.0	ug/l	1x	5110031	11/09/05	11/09/05 17:48	
Benzene	"	ND	-----	0.500	"	"	"	"	"	
Toluene	"	ND	-----	0.500	"	"	"	"	"	
Ethylbenzene	"	ND	-----	0.500	"	"	"	"	"	
Xylenes (total)	"	ND	-----	1.50	"	"	"	"	"	
Surrogate(s): a,a,a-TFT (FID)		*Recovery: 95.0%*		*Limits: 50 - 150 %*		"			"	
a,a,a-TFT (PID)		*83.2%*		*72.5 - 131 %*		"			"	
A5K0016-05 Water Tank Sampled: 11/04/05 14:21										
Gasoline Range Organics	AK101	ND	-----	50.0	ug/l	1x	5110031	11/09/05	11/09/05 18:21	
Benzene	"	ND	-----	0.500	"	"	"	"	"	
Toluene	"	ND	-----	0.500	"	"	"	"	"	
Ethylbenzene	"	ND	-----	0.500	"	"	"	"	"	
Xylenes (total)	"	ND	-----	1.50	"	"	"	"	"	
Surrogate(s): a,a,a-TFT (FID)		*Recovery: 98.1%*		*Limits: 50 - 150 %*		"			"	
a,a,a-TFT (PID)		*86.8%*		*72.5 - 131 %*		"			"	
A5K0016-06 Water MW-4 Sampled: 11/04/05 16:32										
Gasoline Range Organics	AK101	ND	-----	50.0	ug/l	1x	5110031	11/09/05	11/10/05 11:33	
Benzene	"	**8.47**	-----	0.500	"	"	"	"	"	
Toluene	"	ND	-----	0.500	"	"	"	"	"	
Ethylbenzene	"	ND	-----	0.500	"	"	"	"	"	
Xylenes (total)	"	**3.31**	-----	1.50	"	"	"	"	"	
Surrogate(s): a,a,a-TFT (FID)		*Recovery: 108%*		*Limits: 50 - 150 %*		"			"	
a,a,a-TFT (PID)		*98.8%*		*72.5 - 131 %*		"			"	

North Creek Analytical - Alaska

Stephen Wilson, Laboratory Manager

www.ncalabs.com

Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244
phone: (425) 420.9200 fax: (425) 420.9210
Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
phone: (509) 924.9200 fax: (509) 924.9290
Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
phone: (503) 906.9200 fax: (503) 906.9210
Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
phone: (541) 383.9310 fax: 541.382.7588
Anchorage 2000 W International Airport Road, Suite A-10, Anchorage, AK 99502-1119
phone: (907) 563.9200 fax: (907) 563.9210

SLR Alaska	Project Name:	**Trailside General Store**	
2525 Blueberry Road, Suite 206	Project Number:	[none]	Report Created:
Anchorage, ALASKA/USA 99503	Project Manager:	Andrew Dimitriou, R.G.	11/14/05 09:24

Gasoline Range Organics (C6-C10) and BTEX per AK101

North Creek Analytical - Alaska

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
A5K0016-07 Water	**MW-Dup**	**Sampled: 11/04/05 13:00**								
Gasoline Range Organics	AK101	ND	-----	50.0	ug/l	1x	5110031	11/09/05	11/09/05 22:43	
Benzene	"	**9.01**	-----	0.500	"	"	"	"	"	
Toluene	"	ND	-----	0.500	"	"	"	"	"	
Ethylbenzene	"	ND	-----	0.500	"	"	"	"	"	
Xylenes (total)	"	**4.04**	-----	1.50	"	"	"	"	"	
Surrogate(s): a,a,a-TFT (FID)		*Recovery: 95.2%*		*Limits: 50 - 150 %*		"			"	
a,a,a-TFT (PID)		*87.1%*		*72.5 - 131 %*		"			"	
A5K0016-08 Water	**Trip Blank**	**Sampled: 11/04/05 00:00**								
Gasoline Range Organics	AK101	ND	-----	50.0	ug/l	1x	5110031	11/09/05	11/09/05 21:05	
Benzene	"	ND	-----	0.500	"	"	"	"	"	
Toluene	"	ND	-----	0.500	"	"	"	"	"	
Ethylbenzene	"	ND	-----	0.500	"	"	"	"	"	
Xylenes (total)	"	ND	-----	1.50	"	"	"	"	"	
Surrogate(s): a,a,a-TFT (FID)		*Recovery: 97.5%*		*Limits: 50 - 150 %*		"			"	
a,a,a-TFT (PID)		*87.3%*		*72.5 - 131 %*		"			"	

North Creek Analytical - Alaska

Stephen Wilson, Laboratory Manager

www.ncalabs.com

Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244
phone: (425) 420.9200 fax: (425) 420.9210
Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
phone: (509) 924.9200 fax: (509) 924.9290
Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
phone: (503) 906.9200 fax: (503) 906.9210
Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
phone: (541) 383.9310 fax: 541.382.7588
Anchorage 2000 W International Airport Road, Suite A-10, Anchorage, AK 99502-1119
phone: (907) 563.9200 fax: (907) 563.9210

SLR Alaska
2525 Blueberry Road, Suite 206
Anchorage, ALASKA/USA 99503

Project Name: **Trailside General Store**
Project Number: [none]
Project Manager: Andrew Dimitriou, R.G.

Report Created:
11/14/05 09:24

Gasoline Range Organics (C6-C10) and BTEX per AK101 - Laboratory Quality Control Results

North Creek Analytical - Alaska

QC Batch: 5110031 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (5110031-BLK1)								Extracted: 11/09/05 09:17						
Gasoline Range Organics	AK101 GRO/BTEX	ND	---	50.0	ug/l	1x	--	--	--	--	--	--	11/10/05 03:36	
Benzene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Toluene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Ethylbenzene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Xylenes (total)	"	ND	---	1.50	"	"	--	--	--	--	--	--	"	
Surrogate(s): a,a,a-TFT (FID)		*Recovery: 93.9%*			*Limits: 50-150%*	"							*11/10/05 03:36*	
a,a,a-TFT (PID)		*83.1%*			*72.5-131%*	"							"	
LCS (5110031-BS1)								Extracted: 11/09/05 09:17						
Benzene	AK101 GRO/BTEX	18.8	---	0.500	ug/l	1x	--	20.0	94.0%	(77.3-136)	--	--	11/09/05 19:59	
Toluene	"	19.0	---	0.500	"	"	--	"	95.0%	(83.9-121)	--	--	"	
Ethylbenzene	"	18.7	---	0.500	"	"	--	"	93.5%	(77.7-125)	--	--	"	
Xylenes (total)	"	60.7	---	1.50	"	"	--	60.0	101%	(86-122)	--	--	"	
Surrogate(s): a,a,a-TFT (PID)		*Recovery: 89.1%*			*Limits: 72.5-131%*	"							*11/09/05 19:59*	
LCS (5110031-BS2)								Extracted: 11/09/05 09:17						
Gasoline Range Organics	AK101 GRO/BTEX	531	---	50.0	ug/l	1x	--	550	96.5%	(60-120)	--	--	11/09/05 20:32	
Surrogate(s): a,a,a-TFT (FID)		*Recovery: 98.9%*			*Limits: 50-150%*	"							*11/09/05 20:32*	
LCS Dup (5110031-BSD1)								Extracted: 11/09/05 09:17						
Benzene	AK101 GRO/BTEX	18.1	---	0.500	ug/l	1x	--	20.0	90.5%	(77.3-136)	3.79%	(16.9)	11/10/05 02:31	
Toluene	"	18.4	---	0.500	"	"	--	"	92.0%	(83.9-121)	3.21%	(12.5)	"	
Ethylbenzene	"	18.4	---	0.500	"	"	--	"	92.0%	(77.7-125)	1.62%	(11.8)	"	
Xylenes (total)	"	58.8	---	1.50	"	"	--	60.0	98.0%	(86-122)	3.18%	(10.6)	"	
Surrogate(s): a,a,a-TFT (PID)		*Recovery: 88.3%*			*Limits: 72.5-131%*	"							*11/10/05 02:31*	
LCS Dup (5110031-BSD2)								Extracted: 11/09/05 09:17						
Gasoline Range Organics	AK101 GRO/BTEX	492	---	50.0	ug/l	1x	--	550	89.5%	(60-120)	7.62%	(20)	11/10/05 03:04	
Surrogate(s): a,a,a-TFT (FID)		*Recovery: 97.7%*			*Limits: 50-150%*	"							*11/10/05 03:04*	
Duplicate (5110031-DUP1)							QC Source: A5K0017-26	Extracted: 11/09/05 09:17						
Gasoline Range Organics	AK101 GRO/BTEX	68.4	---	50.0	ug/l	1x	71.7	--	--	--	4.71%	(50)	11/10/05 00:21	
Surrogate(s): a,a,a-TFT (FID)		*Recovery: 96.9%*			*Limits: 50-150%*	"							*11/10/05 00:21*	

North Creek Analytical - Alaska

Stephen Wilson, Laboratory Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

North Creek Analytical, Inc.
Environmental Laboratory Network

www.ncalabs.com

Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244
phone: (425) 420.9200 fax: (425) 420.9210
Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
phone: (509) 924.9200 fax: (509) 924.9290
Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
phone: (503) 906.9200 fax: (503) 906.9210
Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
phone: (541) 383.9310 fax: 541.382.7588
Anchorage 2000 W International Airport Road, Suite A-10, Anchorage, AK 99502-1119
phone: (907) 563.9200 fax: (907) 563.9210

SLR Alaska	Project Name:	**Trailside General Store**	
2525 Blueberry Road, Suite 206	Project Number:	[none]	Report Created:
Anchorage, ALASKA/USA 99503	Project Manager:	Andrew Dimitriou, R.G.	11/14/05 09:24

Gasoline Range Organics (C6-C10) and BTEX per AK101 - Laboratory Quality Control Results

North Creek Analytical - Alaska

QC Batch: 5110031 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike (5110031-MS1)					QC Source: A5K0016-01				Extracted: 11/09/05 09:17					
Benzene	AK101 GRO/BTEX	18.1	---	0.500	ug/l	1x	ND	20.0	90.5%	(62.1-143)	--	--	11/10/05 00:53	
Toluene	"	18.6	---	0.500	"	"	ND	"	93.0%	(68.5-133)	--	--	"	
Ethylbenzene	"	18.2	---	0.500	"	"	ND	"	91.0%	(64.5-132)	--	--	"	
Xylenes (total)	"	58.9	---	1.50	"	"	0.874	60.0	96.7%	(70.2-133)	--	--	"	
Surrogate(s): a,a,a-TFT (PID)		*Recovery: 84.8%*		*Limits: 72.5-131%*		"							*11/10/05 00:53*	
Matrix Spike (5110031-MS2)					QC Source: A5K0016-05				Extracted: 11/09/05 09:17					
Benzene	AK101 GRO/BTEX	18.0	---	0.500	ug/l	1x	ND	20.0	90.0%	(62.1-143)	--	--	11/10/05 01:26	
Toluene	"	18.5	---	0.500	"	"	ND	"	92.5%	(68.5-133)	--	--	"	
Ethylbenzene	"	18.6	---	0.500	"	"	ND	"	93.0%	(64.5-132)	--	--	"	
Xylenes (total)	"	59.5	---	1.50	"	"	0.535	60.0	98.3%	(70.2-133)	--	--	"	
Surrogate(s): a,a,a-TFT (PID)		*Recovery: 87.9%*		*Limits: 72.5-131%*		"							*11/10/05 01:26*	

North Creek Analytical - Alaska

Stephen Wilson, Laboratory Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

www.ncalabs.com

Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244
phone: (425) 420.9200 fax: (425) 420.9210
Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
phone: (509) 924.9200 fax: (509) 924.9290
Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
phone: (503) 906.9200 fax: (503) 906.9210
Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
phone: (541) 383.9310 fax: 541.382.7588
Anchorage 2000 W International Airport Road, Suite A-10, Anchorage, AK 99502-1119
phone: (907) 563.9200 fax: (907) 563.9210

SLR Alaska	Project Name:	**Trailside General Store**	
2525 Blueberry Road, Suite 206	Project Number:	[none]	Report Created:
Anchorage, ALASKA/USA 99503	Project Manager:	Andrew Dimitriou, R.G.	11/14/05 09:24

Notes and Definitions

Report Specific Notes:

None

Laboratory Reporting Conventions:

DET - Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.

ND - Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).

NR / NA - Not Reported / Not Available

dry - Sample results reported on a dry weight basis. Reporting Limits are corrected for %Solids when %Solids are <50%.

wet - Sample results and reporting limits reported on a wet weight basis (as received).

RPD - Relative Percent Difference. (RPDs calculated using Results, not Percent Recoveries).

MRL - METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.

MDL* - METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated results.

Dil - Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.

Reporting limits - Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.

@ AIR TOXICS LTD.
AN ENVIRONMENTAL ANALYTICAL LABORATORY

Sample Transportation Notice
Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Page 1 of 1

CHAIN-OF-CUSTODY RECORD

Contact Person: Mike Rieser
Company: SLR Alaska Email: mrieser@slrcorp.com
Address: 2525 Blueberry Suite 206 City: Anchorage State: AK Zip: 99503
Phone: (907) 222-1112 Fax: (907) 222-1113
Collected by: (Signature) Roman McOhee

Project Info:
P.O. #: 605.0065.05003
Project #:
Project Name: Trailside

Turn Around Time:
☒ Normal
☐ Rush
specify

Lab Use Only
Pressurized by: BB
Date: 11/10/05
Pressurization Gas: N2 He

Lab I.D.	Field Sample I.D. (Location)	Date	Time	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
01A	Bathroom (canister #14121)	11-4-05 – 11-5-05	2145 – 0945	Modified, low-level TO-15	-26	-6	6.0" Hg	5.0 psi
02A	LTO Front (#34734)	11-4-05 – 11-5-05	2154 – 0953	Modified, low-level TO-15	-27.5	-6	6.0" Hg	
03A	Video Store (#20938)	11-4-05 – 11-5-05	2212 – 1012	Modified, low-level TO-15	-28	0	0.2" Hg	
04A	Exterior (#34315)	11-4-05 – 11-5-05	2217 – 1015	Modified, low-level TO-15	-28	0	1.1" Hg	
05A	Air Dup (#2387)	11-4-05 – 11-5-05	2212 – 1012	Modified, low-level TO-15	-28	0	0.5" Hg	

RMW 11/5/05

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
RMcOhee	2130; 11/5/05	[illegible]	11/8/5
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Notes: Returned qty. 5 regulators and qty. 1 gauge with canisters.

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	DHL	8804127920	–	good	Yes No (None)	0511182

Form 1290 rev.10

AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Air Toxics Ltd. Introduces the Electronic Report

Thank you for choosing Air Toxics Ltd. To better serve our customers, we are providing your report by e-mail. This document is provided in Portable Document Format which can be viewed with Acrobat Reader by Adobe.

This electronic report includes the following:

- Work order Summary;
- Laboratory Narrative;
- Results; and
- Chain of Custody (copy).

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 .FAX (916) 985-1020
Hours 8:00 A.M to 6:00 P.M. Pacific

AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0511182R1

Work Order Summary

CLIENT:	Mr. Mike Rieser SLR Alaska 2525 Blueberry Street Suite 206 Anchorage, AK 99502	**BILL TO:**	Mr. Mike Rieser SLR Alaska 2525 Blueberry Street Suite 206 Anchorage, AK 99502
PHONE:	907-222-1112	**P.O. #**	005.0065.05003
FAX:	907-222-1113	**PROJECT #**	Trailside
DATE RECEIVED:	11/08/2005	**CONTACT:**	Nicole Danbacher
DATE COMPLETED:	11/20/2005		
DATE REISSUED:	12/5/05		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.
01A	Bathroom	Modified TO-15	6.0 "Hg
02A	LIO Front	Modified TO-15	6.0 "Hg
02AA	LIO Front Duplicate	Modified TO-15	6.0 "Hg
03A	Video Store	Modified TO-15	0.2psi
04A	Exterior	Modified TO-15	1.6psi
05A	Air Dup	Modified TO-15	0.5 "Hg
06A	Lab Blank	Modified TO-15	NA
07A	CCV	Modified TO-15	NA
08A	LCS	Modified TO-15	NA

CERTIFIED BY: Linda L. Truman DATE: 12/05/05

Laboratory Director

Certfication numbers: AR DEQ - 03-084-0, CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/05, Expiration date: 06/30/06
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-15
SLR Alaska
Workorder# 0511182R1

Five 6L iter Summa Canister (100% Certified) samples were received on November 08, 2005. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 1.0 liter of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

Method modifications taken to run these samples include:

Requirement	*TO-15*	*ATL Modifications*
Blank and standards	Zero air	Nitrogen
Dilutions for initial calibration	Dynamic dilutions or static using canisters.	Syringe dilutions may also be utilized.
BFB acceptance criteria	CLP protocol	SW-846 protocol
Daily Calibration	+- 30% Difference	</= 30% Difference with four allowed out up to </=40%.; flag and narrate outliers
ICAL %RSD acceptance criteria	+- 30% RSD with 2 compounds allowed out to < 40% RSD	30% RSD with 4 compounds allowed out to < 40% RSD
Sample collection media	Summa canister	ATL recommends use of summa canisters to insure data defensibility, but will report results from Tedlar bags at client request

Receiving Notes

THE WORDING OF THE RECEVING NOTES SECTION WAS CLARIFIED IN THIS REISSUE TO READ AS THE FOLLOWING:

Samples Video Store and Exterior arrived under pressure yet flow controllers were used for sample collection. The client requested confirmation of the flow controller operation. Verification of the flow controllers by the Support Services team at Air Toxics Ltd. showed they were functioning correctly. The client was notified of the discrepancy and the analysis proceeded.

Analytical Notes

The reported CCV for each daily batch may be derived from more than one analytical file due to the client's request for non-standard compounds.

Non-standard compounds may have different acceptance criteria than the standard TO-14A/TO-15 compound list as per contract or verbal agreement.

THE WORK ORDER WAS REISSUED ON 12/5/2005 TO REPORT NAPHTHALENE WITH A REPORTING LIMIT OF 0.5 PPBV. DUE TO LABORATORY ERROR, THE REPORT WAS ORIGINALLY ISSUED WITH A REPORTING LIMIT OF 2.0 PPBV FOR NAPHTHALENE. ALL

RESULTS REMAINED NOT DETECTED FOR THIS COMPOUND.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

AIR TOXICS LTD.

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: Bathroom

Lab ID#: 0511182R1-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.17	0.64	0.54	2.0
Toluene	0.17	1.4	0.63	5.3
Ethyl Benzene	0.17	0.18	0.73	0.80
m,p-Xylene	0.17	0.72	0.73	3.1
o-Xylene	0.17	0.24	0.73	1.0

Client Sample ID: LIO Front

Lab ID#: 0511182R1-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.17	0.48	0.54	1.6
Toluene	0.17	1.0	0.63	3.9
Ethyl Benzene	0.17	0.24	0.73	1.0
m,p-Xylene	0.17	0.86	0.73	3.7
o-Xylene	0.17	0.26	0.73	1.1

Client Sample ID: LIO Front Duplicate

Lab ID#: 0511182R1-02AA

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.17	0.58	0.54	1.8
Toluene	0.17	1.0	0.63	3.9
Ethyl Benzene	0.17	0.25	0.73	1.1
m,p-Xylene	0.17	0.85	0.73	3.7
o-Xylene	0.17	0.23	0.73	1.0

Client Sample ID: Video Store

Lab ID#: 0511182R1-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.13	1.2	0.42	3.7
Toluene	0.13	3.0	0.50	11
Ethyl Benzene	0.13	2.3	0.57	10
m,p-Xylene	0.13	10	0.57	44
o-Xylene	0.13	2.7	0.57	12

Client Sample ID: Exterior

Lab ID#: 0511182R1-04A

Client Sample ID: Exterior

Lab ID#: 0511182R1-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.12	0.42	0.39	1.3
Toluene	0.12	0.61	0.46	2.3
m,p-Xylene	0.12	0.23	0.52	0.99

Client Sample ID: Air Dup

Lab ID#: 0511182R1-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.14	1.2	0.43	3.8
Toluene	0.14	4.0	0.51	15
Ethyl Benzene	0.14	2.8	0.59	12
m,p-Xylene	0.14	12	0.59	50
o-Xylene	0.14	3.2	0.59	14

AIR TOXICS LTD.

Client Sample ID: Bathroom

Lab ID#: 0511182R1-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7111512**	**Date of Collection: 11/5/05**	
Dil. Factor:	**1.68**	**Date of Analysis: 11/15/05 08:32 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.17	0.64	0.54	2.0
Toluene	0.17	1.4	0.63	5.3
Ethyl Benzene	0.17	0.18	0.73	0.80
m,p-Xylene	0.17	0.72	0.73	3.1
o-Xylene	0.17	0.24	0.73	1.0
Naphthalene	0.84	Not Detected	4.4	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	99	70-130

AIR TOXICS LTD.

Client Sample ID: LIO Front

Lab ID#: 0511182R1-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7111513**	**Date of Collection: 11/5/05**	
Dil. Factor:	**1.68**	**Date of Analysis: 11/15/05 09:34 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.17	0.48	0.54	1.6
Toluene	0.17	1.0	0.63	3.9
Ethyl Benzene	0.17	0.24	0.73	1.0
m,p-Xylene	0.17	0.86	0.73	3.7
o-Xylene	0.17	0.26	0.73	1.1
Naphthalene	0.84	Not Detected	4.4	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	96	70-130

AIR TOXICS LTD.

Client Sample ID: LIO Front Duplicate

Lab ID#: 0511182R1-02AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7111514**	**Date of Collection: 11/5/05**	
Dil. Factor:	**1.68**	**Date of Analysis: 11/15/05 10:33 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.17	0.58	0.54	1.8
Toluene	0.17	1.0	0.63	3.9
Ethyl Benzene	0.17	0.25	0.73	1.1
m,p-Xylene	0.17	0.85	0.73	3.7
o-Xylene	0.17	0.23	0.73	1.0
Naphthalene	0.84	Not Detected	4.4	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	97	70-130

AIR TOXICS LTD.

Client Sample ID: Video Store

Lab ID#: 0511182R1-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7111515**	**Date of Collection: 11/5/05**	
Dil. Factor:	**1.32**	**Date of Analysis: 11/16/05 12:46 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.13	1.2	0.42	3.7
Toluene	0.13	3.0	0.50	11
Ethyl Benzene	0.13	2.3	0.57	10
m,p-Xylene	0.13	10	0.57	44
o-Xylene	0.13	2.7	0.57	12
Naphthalene	0.66	Not Detected	3.4	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	99	70-130

AIR TOXICS LTD.

Client Sample ID: Exterior

Lab ID#: 0511182R1-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7111516**	**Date of Collection: 11/5/05**	
Dil. Factor:	**1.21**	**Date of Analysis: 11/16/05 01:34 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.12	0.42	0.39	1.3
Toluene	0.12	0.61	0.46	2.3
Ethyl Benzene	0.12	Not Detected	0.52	Not Detected
m,p-Xylene	0.12	0.23	0.52	0.99
o-Xylene	0.12	Not Detected	0.52	Not Detected
Naphthalene	0.60	Not Detected	3.2	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	96	70-130

AIR TOXICS LTD.

Client Sample ID: Air Dup

Lab ID#: 0511182R1-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7111517**	**Date of Collection: 11/5/05**	
Dil. Factor:	**1.36**	**Date of Analysis: 11/16/05 02:30 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.14	1.2	0.43	3.8
Toluene	0.14	4.0	0.51	15
Ethyl Benzene	0.14	2.8	0.59	12
m,p-Xylene	0.14	12	0.59	50
o-Xylene	0.14	3.2	0.59	14
Naphthalene	0.68	Not Detected	3.6	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	98	70-130

AIR TOXICS LTD.

Client Sample ID: Lab Blank

Lab ID#: 0511182R1-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7111507**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/15/05 03:30 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.10	Not Detected	0.32	Not Detected
Toluene	0.10	Not Detected	0.38	Not Detected
Ethyl Benzene	0.10	Not Detected	0.43	Not Detected
m,p-Xylene	0.10	Not Detected	0.43	Not Detected
o-Xylene	0.10	Not Detected	0.43	Not Detected
Naphthalene	0.50	Not Detected	2.6	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	97	70-130

AIR TOXICS LTD.

Client Sample ID: CCV

Lab ID#: 0511182R1-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7111503**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/15/05 11:46 AM**	

Compound	%Recovery
Benzene	92
Toluene	100
Ethyl Benzene	102
m,p-Xylene	103
o-Xylene	103
Naphthalene	112

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	101	70-130

AIR TOXICS LTD.

Client Sample ID: LCS

Lab ID#: 0511182R1-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**7111504**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/15/05 12:38 PM**	

Compound	%Recovery
Benzene	88
Toluene	100
Ethyl Benzene	100
m,p-Xylene	106
o-Xylene	95
Naphthalene	Not Spiked

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	102	70-130