

102,38.143
Vm

Alaska Resources and Environmental Services, LLC
284 Topside Road, Fairbanks, Alaska 99701 (907) 374-3226

RECEIVED

JUL 17 2007

CONTAMINATED
SITES
FAIRBANKS

**PHASE II ENVIRONMENTAL SITE ASSESSMENT /
RELEASE INVESTIGATION REPORT
SAHN INVESTMENTS PROPERTY
1406 KELLUM STREET, FAIRBANKS, ALASKA**

JULY, 2007

**BY
LYLE GRESEHOVER
PRINCIPAL INVESTIGATOR
ALASKA RESOURCES AND ENVIRONMENTAL SERVICES, LLC**

**FOR:
MR. JEFF ZUCKERMAN
SAHN INVESTMENTS**

Executive Summary

At the request of Mr. Jeff Zuckerman, owner of Sahn Investments, ARES was authorized to perform a Phase II Environmental Site Assessment (ESA) at the property located at 1406 Kellum Street, Fairbanks, Alaska.

The Phase II ESA was conducted in response to the removal of a 1,000-gallon diesel underground storage tank (UST) and a 300-gallon diesel UST which were removed in April, 2007 by Alaska Ground Works. The site investigation included field screening and analytical sampling of surrounding soils. A total of ten (10) soil samples were collected and laboratory analyzed for DRO and BTEX constituents as part of the Phase II ESA/Release Investigation.

As confirmed by laboratory samples, soil levels for DRO and BTEX constituents following excavation of the 1,000-gallon UST were found to be below ADEC target soil cleanup levels. Based on field screen soil samples collected during tank removal, no contaminated soils were encountered.

During excavation and removal of the 300-gallon UST, contaminated soils were encountered of which approximately 80 cubic yards (77 tons) of petroleum-contaminated soils were removed and hauled off-site for thermal remediation. The remainder of the excavated contaminated soils (approximately 216 yds³) was stockpiled on-site and landfarmed in accordance with ADEC approved Work Plan. Soil sample results for the 300-gallon UST site indicate that soils remain in place within the vadose zone (10' bgs) above ADEC cleanup levels for soil. Soil samples collected from the sidewalls and endwalls of the 300-gallon UST site were found to be below ADEC target cleanup levels.

ARES recommends the following actions:

1. Landfarmed petroleum-contaminated soils will require post sampling upon remediation per ADEC approved Corrective Action Work Plan (May 2007) to include the following:
 - Field screen samples will be collected on an annual basis and reported to ADEC until cleanup levels for soil are achieved. Final laboratory confirmation samples for DRO and BTEX will be collected from the stockpile and the from the ground surface under the stockpile to ensure cleanup objectives are met; and
 - Upon meeting cleanup objectives, a final summary will be submitted to ADEC for site closure purposes.
2. Following post treatment of landfarmed soils, collect one groundwater grab sample down-gradient from source area to verify final site conditions. Groundwater sample should be sampled for DRO and BTEX constituents.

TABLE OF CONTENTS

1.0	INTRODUCTION.....	1
1.1	Purpose.....	1
1.2	Project Organization/Personnel.....	1
1.3	Scope of Work.....	2
2.0	SITE DESCRIPTION.....	3
2.1	Location.....	3
2.2	History.....	3
2.3	Topography, Geology, and Hydrology.....	4
3.0	SOIL SAMPLING.....	5
3.1	Field Screening.....	5
3.2	Field Observations.....	5
3.3	Sampling.....	7
3.4	ADEC Target Cleanup Levels.....	8
3.5	Lab Results for Soil Samples.....	9
4.0	QUALITY ASSURANCE and QUALITY CONTROL.....	10
5.0	CONCLUSIONS and RECOMMENDATIONS.....	11
6.0	LIMITATIONS OF INVESTIGATION.....	12

TABLES

Table 3.2.1	Field Screen Measurements Summary.....	6
Table 3.2.2	Field Screen Measurements Summary.....	6
Table 3.4.1	Target Soil Cleanup Levels.....	8
Table 3.4.2	Cleanup Score.....	9
Table 3.4.3	Cleanup Levels (BTEX Compounds).....	9
Table 3.5	Summary Analytical Results	10

APPENDICES

Appendix A	Mapping
Appendix B	Photographs
Appendix C	Analytical Results
Appendix D	Qualifications

ACRONYMS AND ABBREVIATIONS

ADEC	Alaska Department of Environmental Conservation
ARES	Alaska Resources and Environmental Services, LLC
bgs	Below Ground Surface
BTEX	Benzene, Tolulene, Ethylbenzene, Xylenes
COC	Chain of Custody
GRO	Gasoline Range Organics
HS	Headspace
na	Not Analyzed
ND	Non-Detect
PID	Photoionization Detector
PQL	Practical Quantitation Limit
QA	Quality Assurance
QC	Quality Control
RPD	Relative Percent Difference
TB	Trip Blank
UST	Underground Storage Tank

UNITS OF MEASUREMENT

cy	Cubic Yards
°C	Degrees Celsius
°F	Degrees Fahrenheit
mg/kg	Milligrams per Kilogram
ppm	Parts per Million
sf	Square Feet

1.0 INTRODUCTION

This report summarizes a Phase II Environmental Site Assessment (ESA) and Release Investigation conducted by Alaska Resources and Environmental Services, LLC (ARES) for the subject property located at 1406 Kellum Street, Fairbanks, Alaska. The Phase II ESA was conducted in April-July 2007 at the request of Mr. Jeff Zuckerman, owner of Sahn Investments. This report contains a summary of on-site work and includes field observations and analytical data from sampling activities.

1.1 Purpose

The purpose of this project was to investigate the subsurface conditions following the removal of a 1,000-gallon and 300-gallon underground storage tank (UST), both of which were used for the storage of # 2 fuel oil used to heat the former buildings on the premises. Field screen samples were collected in the vicinity of the UST's and were used to guide excavation activities. Subsurface soil samples were collected from the excavation sidewalls and bottom of excavation pits to determine final site conditions.

Fieldwork described in this report was conducted in accordance with 18 AAC 75 Oil and Other Hazardous Substances Pollution Control, as amended through May 26, 2004 and 18 AAC 78 Underground Storage Tanks as amended through January 30, 2003. ADEC's UST Procedures Manual as amended through November 7, 2002, was used as a guide for standard sampling procedures. Site characterization requirements are provided by ADEC in 18 AAC 75, Articles 3 and 9 Discharge Reporting, Cleanup, and Disposal of Oil and Other Hazardous Substances and General Provisions as amended through May 26, 2004. Soil and water cleanup levels are also provided according to 18 AAC 75. Mr. Lyle Gresehover, Principle Investigator for ARES, conducted the field investigation. Mr. Gresehover is listed as a Qualified Person by the Alaska Department of Environmental Conservation (ADEC) under 18 AAC 78.

1.2 Project Organization/Personnel

Mr. Lyle Gresehover is the point of contact for this project and may be contacted at Alaska Resources & Environmental Services, LLC, P.O. Box 83050 Fairbanks, Alaska 99708. The telephone number for Mr. Gresehover is (907) 374-3226. Mr. Gresehover conducted the Phase II ESA in April-June, 2007.

Alaska Ground Works provided personnel and equipment to excavate and remove UST's in addition to providing equipment and operators to transport petroleum- contaminated soils found at the site. The mailing address for Alaska Ground Works is 1420 South Cushman Street, Fairbanks Alaska, 99701. The telephone number for Alaska Ground Works is (907) 378-4433.

Fairbanks Fuel provided personnel and equipment to pump residual fuel oil from the UST's. The mailing address for Fairbanks Fuel is 412 East Van Horn Road, Fairbanks Alaska, 99701. The telephone number for Fairbanks Fuel is (907) 452-4477.

Test America of 2000 W International Airport Road Suite A10, Anchorage, Alaska 99502-1119, performed laboratory analysis of soil samples. Test America is approved by ADEC to provide testing of soil and water for hazardous substances and petroleum related contaminants.

OIT Inc., (Moose Creek facility) performed thermal treatment of petroleum contaminated soils. The mailing address for OIT is P.O. Box 55878 North Pole, Alaska 99705. The telephone number for OIT Inc. is (907) 488-4899.

R&D Environmental provided equipment and personnel to excavate petroleum-contaminated soils. The mailing address for R&D Environmental is 600 Noble Street, Suite H, Fairbanks, Alaska 99701. The telephone number for R&D Environmental is (907) 374-9170.

The Phase II ESA/Release Investigation was completed in June 2007, by Mr. Lyle Gresehover Project Manager/ Geologist for ARES. Mr. Gresehover is listed as a Qualified Person by the Alaska Department of Environmental Conservation (ADEC) under 18 AAC 78. The mailing address for ARES is P.O. Box 83050 Fairbanks, Alaska 99708. The contact number is (907) 374-3226. Statement of Qualifications for Mr. Lyle Gresehover is included in Appendix E.

1.3 Scope of Work

In summary Alaska Ground Works, performed the following activities:

- Excavation and removal of 1,000-gallon and 300-gallon UST's located on-site. Decommissioning included removal of tank and all associated piping; and
- Excavation and transport of petroleum contaminated soils to OIT Inc. for thermal remediation.

In summary Fairbanks Fuel Inc., performed the following activities:

- Pumped residual fuel from the UST's prior to tank removal.

In summary Test America, performed the following activities:

- Conducted laboratory analysis of soil samples. All samples were analyzed for DRO/BTEX using method AK 102 and EPA 8021B. Laboratory quality control and quality assurance was also completed.

In summary OIT Inc., performed the following activities:

- Treated petroleum-contaminated soils using thermal remediation; and
- Performed post testing of treated material.

In summary ARES performed the following activities:

- Monitored removal of the 1,000-gallon and 300-gallon fuel oil UST's. ARES personnel, Lyle Gresehover was on-site throughout the project;
- Obtained field measurements to include site plan, location of tank, PID field screening measurements, and soil sample locations. Documented site activities with digital photographs;
- Prepared and submitted ADEC Corrective Action Work Plan;
- Collection of soil samples for laboratory analysis including field duplicates;
- Performed Site Characterization and Release Investigation as part of the Phase II ESA report; and
- Prepared and submitted Final Report.

These activities are intended to satisfy requirements listed in 18 AAC 75 for Site Characterization and Release Investigation.

2.0 SITE DESCRIPTION

2.1 Location

The property located at 1406 Kellum Street is a commercial lot adjacent to airport road. The lot contains a paved parking lot on an approximate 10,528 square feet lot. Three buildings were recently demolished on the subject property.

The 1,000-gallon UST was located north of the main building on this property. The 300-gallon UST was located approximately 30 feet west of the 1,000-gallon UST (Figure 3). The legal description for the site is: UMB01 Block 137. The GPS coordinates for the site are N 64° 50.25', W -147° 44.84'. The elevation of the site is 442' above mean sea level.

2.2 History

According to a report by NORTECH Environmental Engineering, the 1,000-gallon fuel oil UST was installed in 1987, replacing a previous tank that contained a suspected leak. Information on the installation of the 300-gallon UST was unavailable. As part of a Phase 1 ESA for Sahn Investments, NORTECH was contracted to evaluate the potential for ground water contamination related to the two underground heating oil tanks located on the subject property.

Temporary direct push groundwater monitoring wells were installed in the vicinity of both tanks and sampled for DRO and BTEX constituents in January 2007. The groundwater sample collected near the 1,000-gallon UST contained detectable levels of DRO (4.33 mg/L), slightly above the ADEC cleanup level of 1.5 mg/L. The sample also contained detectable levels of toluene, ethylbenzene, total-xylenes, though they were well below applicable cleanup levels. According to the NORTECH report, groundwater contamination was most likely the result from the previous 1,000-gallon UST which was

replaced in 1987. According to NORTECH, chromatographs were typical of a weathered diesel distillate.

Groundwater sample results collected near the 300-gallon tank (slightly cross-gradient from the UST), were non-detect for DRO and all BTEX constituents.

2.3 Topography, Geology and Hydrogeology

Topography

The United States Geological Survey (USGS) Fairbanks Quadrangle (D-2) SW provides topographic map coverage of the site (Figure 1). Fairbanks is located in the northern part of the Tanana Basin, which is a relatively flat floodplain of the Tanana River. The subject property is situated approximately 2.0 miles north of the Tanana River and 0.5 miles south of the Chena River. Based upon the topographic map of the Fairbanks Quadrangle, the site elevation is approximately 442 feet above the mean sea level.

Regional Soils/Geology

Soils in the area are derived from the alluvial-plain deposits and generally consist of alternating layers and lenses of unconsolidated sandy gravels and gravely sands, overlain by silt. The well-drained Salchaket soils border the principle rivers in the area and are the most extensive soils of the alluvial plains. The site is underlain by Minto silt loam. The Minto soils consist of moderately well drained soils that have developed into micaceous silty material with many areas underlain at a depth of 6 feet or more by irregular, discontinuous masses of ice. Discontinuous permafrost underlies the floodplain area and can extend to depths of 200 feet or more. The hills to the north of the site area are part of a metamorphic system that forms the Yukon – Tanana Upland. The basin uplands consist of fractured schist. Areas of discontinuous permafrost underlie north-facing slopes. Eolian silts of the Fairbanks Loess and reworked silt deposits cover the flanks of bedrock uplands in the proximity of the Tanana River. These deposits vary in thickness and grade into alluvial-fan deposits and the Chena Alluvium.

Site Soils

Soils encountered during excavation and collection of soil samples consisted primarily of silty and sandy coarse gravels with interbedded layers of finely graded sand. The depth of excavation was approximately 10 feet bgs.

Regional Hydrology

The Tanana River is the dominant influence on ground-water flow in the subject area. Two discharge peaks characterize the Tanana River: spring snowmelt runoff and late summer precipitation. The stage of nearby water bodies such as Chena Slough and Chena River typically rises and falls in response to stage changes of the Tanana River. The depth to groundwater varies in response to these controlling factors. Based on

interpretation of USGS data, regional groundwater flow direction is generally to the west. However, the direction of flow can vary depending upon the stage of the Tanana River.

Site Hydrology

No groundwater data was collected as part of this investigation. Groundwater elevation in the area is generally 10-15' bgs. Based on data provided from area monitoring wells, the groundwater flow is to the west direction.

3.0 SOIL SAMPLING

3.1 Field Screening

Ninety three headspace samples were collected and measured during the site investigation. ARES used a MiniRAE 2000 PID (Serial No. PGM7600-110-002244). The PID was used for headspace screening of samples according to ADEC field screening procedures. The PID was calibrated prior to each period of use to 0 parts per million (ppm) free air and 100 ppm isobutylene calibration gas, using a response factor of 1.0.

Headspace screening was conducted as follows: Soil samples were transferred directly into a ziplock-type bag. Each bag was filled one-third to one half full, then warmed for 15 to 20 minutes. Temperatures of the soil in the bag were warmed to at least 16°C (60 °F). Samples were agitated at the beginning and end of the warming period inside the bag to enhance volatilization. The bags were partially opened after the warming and the VOCs in the headspace above the soil were sampled by inserting the PID probe. The highest meter reading obtained was recorded.

3.2 Field Observations

Weather conditions during fieldwork conducted in April - June 2007 consisted of sunny skies to overcast with winds 0-2 miles per hour. The temperature ranged from 50 ° F – 75 ° F.

Field screen samples were collected in conjunction with excavation activities and used as an indicator to direct depth and extent of excavation (Figures 4, 5). Excavated soils that had PID readings > 25.0 ppm were considered contaminated and stockpiled on the asphalt pad. No petroleum-contaminated soils were encountered during the excavation and removal of the 1,000-gallon UST. Petroleum-contaminated soils were however encountered during the removal and excavation of the 300-gallon UST. Petroleum contaminated soils had the odor of weathered diesel. No free product or groundwater was encountered during excavation. Approximately 80 cubic yards (77 tons) were loaded into 20 yard side-dumps and transported to OIT Inc. for thermal remediation. The remainder of the contaminated material (approximately 216 cubic yards) was stockpiled

in the southeast corner of the subject property for remediation by landfarming.
 Perforated pipe and fertilizer was added to stockpiled soil to aid in remediation.

All three structures on the subject property were demolished during the time frame of this Phase II ESA. See figure 3 for a site map of previous building locations.

Table 3.2.1
Field Screen Measurements Summary
Excavation Pit for 1,000-gallon UST
(Results displayed in ppm)

1406 Kellum Street Field Screening Results						
Sample ID	Depth (feet)	PID (ppm)		Sample ID	Depth (feet)	PID (ppm)
1	0.5	0.8		7	7.5	0.4
2	0.5	0.9		8	7.3	0.5
3	1.5	4.5		9	7.5	0.4
4	2.5	16.5		10	7.5	0.5
5	5.5	0.5		11	7.5	0.6
6	6	0.6		12	7.3	0.7

Table 3.2.2
Field Screen Measurements Summary
Excavation Pit for 300-gallon UST
(Results displayed in ppm)

1406 Kellum Street Field Screening Results						
Sample ID	Depth (feet)	PID (ppm)		Sample ID	Depth (feet)	PID (ppm)
1	0.5	0.7		19	7.5	2533
2	0.5	0.3		20	8	1861
3	2	2.6		21	8	2193
4	3.3	1.5		22	8	1803
5	3.5	272		23	8	1336
6	3.5	49.5		24	8.5	1644
7	4	845		25	8.5	1300
8	4.3	1972		26	7	1008
9	4.5	1281		27	8	1582
10	7	1740		28	8	1760
11	7	1231		29	9	749
12	7.4	2119		30	9	530
13	7.5	1867		31	10	1038
14	7.83	1965		32	9	976
15	8	2027		33	9	732
16	7.2	2202		34	9	1936
17	7.5	1308		35	9	2027
18	7.5	1806		36	9	2046

Table 3.2.2 Cont.
Field Screen Measurements Summary Excavation Pit for 300-gallon UST
 (Results displayed in ppm)

1406 Kellum Street Field Screening Results						
Sample ID	Depth (feet)	PID (ppm)		Sample ID	Depth (feet)	PID (ppm)
37	12	2.8		60	8	20.5
38	13	2.7		61	11	89.3
39	16	1.7		62	10	81.5
40	5	15.3		63	10	24.7
41	5	19.8		64	10	20.3
42	7	43.7		65	10	29.6
43	5	22.5		66	9	24.2
44	5	30.2		67	8.5	18.1
45	10	837		68	6	0.0
46	6	1104		69	6	0.0
47	10	43.6		70	6	3.0
48	8	5.0		71	6	0.0
49	12	4.2		72	6	0.0
50	11	3.7		73	6	0.0
51	11	1704		74	6	0.0
52	11	32.6		75	6	0.0
53	11	556		76	6	0.2
54	11	918		77	6	0.2
55	11	16.2		78	6	0.0
56	7	227		79	6	1.2
57	5	8.7		80	12	2.3
58	8	790		81	12	190
59	8	703				

3.3 Sampling

Three (3) soil laboratory analytical samples were collected on April 17, 2007 from the excavated pit following the removal of the 1,000-gallon UST, and seven (7) soil samples on June 25, 2007 from the excavated area of the 300-gallon UST site. Samples consisted of grab samples and were analyzed for DRO/BTEX compounds by Method AK 102 and EPA 8021B. Sample ID # SI-DUP-62007 was a blind duplicate to Sample ID # SI-6-62007 for QA/QC purposes. All soil samples were collected at a depth of 7' – 10' bgs. Soil sample locations collected for laboratory analysis are shown in Figures 4 and 5.

Soil samples were placed into certified clean glass jars provided by Test America. Soil samples were handled using disposable Nitrile gloves. To comply with the UST

Procedures Manual for VOC samples, 25 milliliters of a methanol/surrogate was carefully added to the undisturbed soil in the partially filled pre-weighted sample jar so that the sample was completely submerged. A 40-milliliter sample jar of soil was also collected from each soil boring in order to determine total percent solids. Sample jars were properly labeled and placed into a pre-chilled cooler. The chilled temperature within the cooler was maintained at approximately 4°C using frozen gel packages during transportation to the laboratory. A signed Chain-of-Custody (COC) form accompanied the samples to Test America. The COC is attached to Test America's Lab Report. See Appendix C.

3.4 ADEC Target Cleanup Levels

Target cleanup levels for the subject property were determined using AAC 75 (Method One) Soil Cleanup Levels. The cleanup score using Method One is shown in Table 3.4.1

**Table 3.4.1
 Target Soil Cleanup Levels**

Method One Cleanup Matrix Score Sheet			
Category	Description	Value	Site Score
1. Depth to Groundwater	Less than 5 feet	10	8
	5 - 15 feet	8	
	16 - 25 feet	6	
	26 - 50 feet	4	
	More than 50 feet	1	
2. Mean Annual Precipitation	More than 40 inches	10	3
	26 - 40 inches	5	
	16 - 25 inches	3	
	Less than 15 inches	1	
3. Soil Type	Clean, coarse-grained soils	10	8
	Coarse-grained soils with fines	8	
	Fine-grained soils (low organic carbon)	3	
	Fine-grained soils (high organic carbon)	1	
4. Potential Receptors	Public Water system within 1000 feet, or private water system within 500 feet	15	8
	Public/private water system within 1/2 mile	12	
	Public/private water system within one mile	8	
	No water system within one mile	4	
	Nonpotable groundwater	1	
5. Volume of Contaminated Soil	More than 500 cubic yards (estimated)	10	8
	101 - 500 cubic yards	8	
	26 - 100 cubic yards	5	
	10 - 25 cubic yards	2	
	Less than 10 cubic yards	0	
Total Cleanup Matrix Score			35

**Table 3.4.2
 Cleanup Score**

Method One GRO, DRO Cleanup Levels			
Matrix Score	Category	GRO in mg/kg	DRO in mg/kg
>40	A	50	100
26-40	B	100	200
21-26	C	500	1000
<21	D	1000	2000

Based on a matrix score of 35, the applicable cleanup category for the UST site is Level B as shown in Table 3.4.2

**Table 3.4.3
 Cleanup Levels
 (BTEX Compounds)**

Table B1 Method Two			
	Under 40 Inch Zone		
	Ingestion (mg/kg)	Inhalation (mg/kg)	Migration to Groundwater (mg/kg)
Benzene	290	9	0.02
Tolulene	20,300	180	5.4
Ethylbenzene	10,000	89	5.5
Total Xylenes	203,000	81	78

3.5 Lab Results for Soil Samples

The laboratory results from soil laboratory analytical samples collected from the excavated two UST sites are summarized below in Table 3.5. Laboratory sample locations are shown in Figures 4 and 5. Test America lab results are included in Appendix C. Samples indicate no analytes above detection limits in the vicinity of the 1,000-gallon UST.

Soil sample results for the 300-gallon UST site indicate that soils remain in place (10' bgs/base of excavation) above ADEC target cleanup levels. The high seasonal groundwater level for the surrounding area is generally 8-10 feet bgs. Soil samples

collected from the sidewalls and endwalls of the 300-gallon UST site were found to be below ADEC target cleanup levels.

Table 3.5
Summary of Analytical Results
1406 Kellum Street, Fairbanks, Alaska

Sample ID	Matrix	Depth in inches bgs	EPA Method 8021B				Alaska Method AK 101	Alaska Method AK 102
			Benzene in mg/kg	Toluene in mg/kg	Ethylbenzene in mg/kg	Total xylenes in mg/kg	GRO in mg/kg	DRO in mg/kg
1-AGW-407	Soil	89	ND	ND	ND	ND	N/A	ND
2-AGW-407	Soil	89	ND	ND	ND	ND	N/A	ND
2-SS	Soil	Stock-pile	ND	1.88	6.14	69.1	N/A	19300
SI-1-62006	Soil	120	ND	ND	ND	ND	N/A	ND
SI-2-62006	Soil	120	ND	ND	ND	ND	N/A	ND
SI-3-62006	Soil	120	ND	ND	ND	ND	N/A	ND
SI-4-62006	Soil	120	ND	ND	ND	ND	N/A	ND
SI-5-62006	Soil	120	ND	ND	ND	ND	N/A	58.0
SI-6-62006	Soil	120	ND	ND	0.0897	0.678	N/A	1080
SI-DUP-62006 (Field duplicate of SI-6-62006)	Soil	120	ND	0.0314	0.121	0.853	N/A	1040
ADEC Cleanup Level ¹			0.02	5.4	5.5	78	100	200

¹ Title 18 of the Alaska Administrative Code, Chapter 75. Section 341.

ND= Not detected at the Method Reporting Limit.

N/A = Not Analyzed.

Results above ADEC Regulatory Limit in **Bold**.

4.0 QUALITY ASSURANCE AND QUALITY CONTROL

Field quality control (QC) procedures for this project included the collection and analysis of a field duplicate and trip blank for soil samples, which accompanied the samples in the field. One blind field duplicate was collected for quality control purposes. The QC samples were analyzed to assess the quality of sample collection and handling, as well as the accuracy and precision of the laboratory's analytical procedures.

Precision, expressed as the relative percent difference (RPD) between field duplicate sample results, is an indication of the consistency of sampling, sample handling, preservation, and laboratory analysis. As required by the 18AAC 78 and the UST

Procedures Manual, field quality control sampling consisted of 10% field duplicates and 5% trip blanks. Analysis of the trip blanks showed no analytes above the practical quantitation limit (PQL). Thus, there is no indication that cross-contamination among samples occurred

The RPD for Benzene and Toluene was not calculable due to non-detect values for one or both samples. The RPD was calculated for DRO, Ethel-Benzene, and Total Xylenes and is as follows:

DRO (AK102)	$(1080-1040) / [(1080 + 1040)/2] \times 100 = 07.55\%$
Ethel-Benzene	$(0.121-0.0897) / [(0.121 + 0.0897)/2] \times 100 = 29.71\%$
Total Xylenes	$(0.853-0.687) / [(0.853 + 0.687)/2] \times 100 = 21.56\%$

Laboratory quality assurance included the procedures outlined in the laboratory's ADEC-approved standard operating procedures documentation.

5.0 CONCLUSIONS AND RECOMMENDATIONS

At the request of Mr. Jeff Zuckerman, owner of Sahn Investments, ARES was authorized to perform a Phase II Environmental Site Assessment (ESA) at the property located at 1406 Kellum Street, Fairbanks, Alaska.

The Phase II ESA was conducted in response to the removal of a 1,000-gallon diesel underground storage tank (UST) and a 300-gallon diesel UST which were removed in April, 2007 by Alaska Ground Works. The site investigation included field screening and analytical sampling of surrounding soils. A total of ten (10) soil samples were collected and laboratory analyzed for DRO and BTEX constituents as part of the Phase II ESA/Release Investigation.

As confirmed by laboratory samples, soil levels for DRO and BTEX constituents following excavation of the 1,000-gallon UST were found to be below ADEC target soil cleanup levels. Based on field screen soil samples collected during tank removal, no contaminated soils were encountered.

During excavation and removal of the 300-gallon UST, contaminated soils were encountered of which approximately 80 cubic yards (77 tons) of petroleum-contaminated soils were removed and hauled off-site for thermal remediation. The remainder of the excavated contaminated soils (approximately 216 yds³) was stockpiled on-site and landfarmed in accordance with ADEC approved Work Plan. Soil sample results for the 300-gallon UST site indicate that soils remain in place within the vadose zone (10' bgs) above ADEC cleanup levels for soil. Soil samples collected from the sidewalls and endwalls of the 300-gallon UST site were found to be below ADEC target cleanup levels.

ARES recommends the following actions:

3. Landfarmed petroleum-contaminated soils will require post sampling upon remediation per ADEC approved Corrective Action Work Plan (May 2007) to include the following:
 - Field screen samples will be collected on an annual basis and reported to ADEC until cleanup levels for soil are achieved. Final laboratory confirmation samples for DRO and BTEX will be collected from the stockpile and the from the ground surface under the stockpile to ensure cleanup objectives are met; and
 - Upon meeting cleanup objectives, a final summary will be submitted to ADEC for site closure purposes.
4. Following post treatment of landfarmed soils, collect one groundwater grab sample down-gradient from source area to verify final site conditions. Groundwater sample should be sampled for DRO and BTEX constituents.

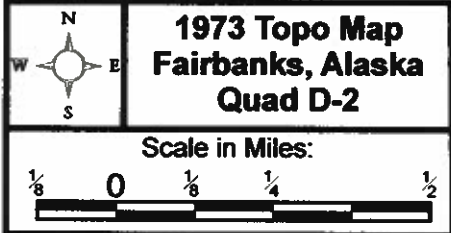
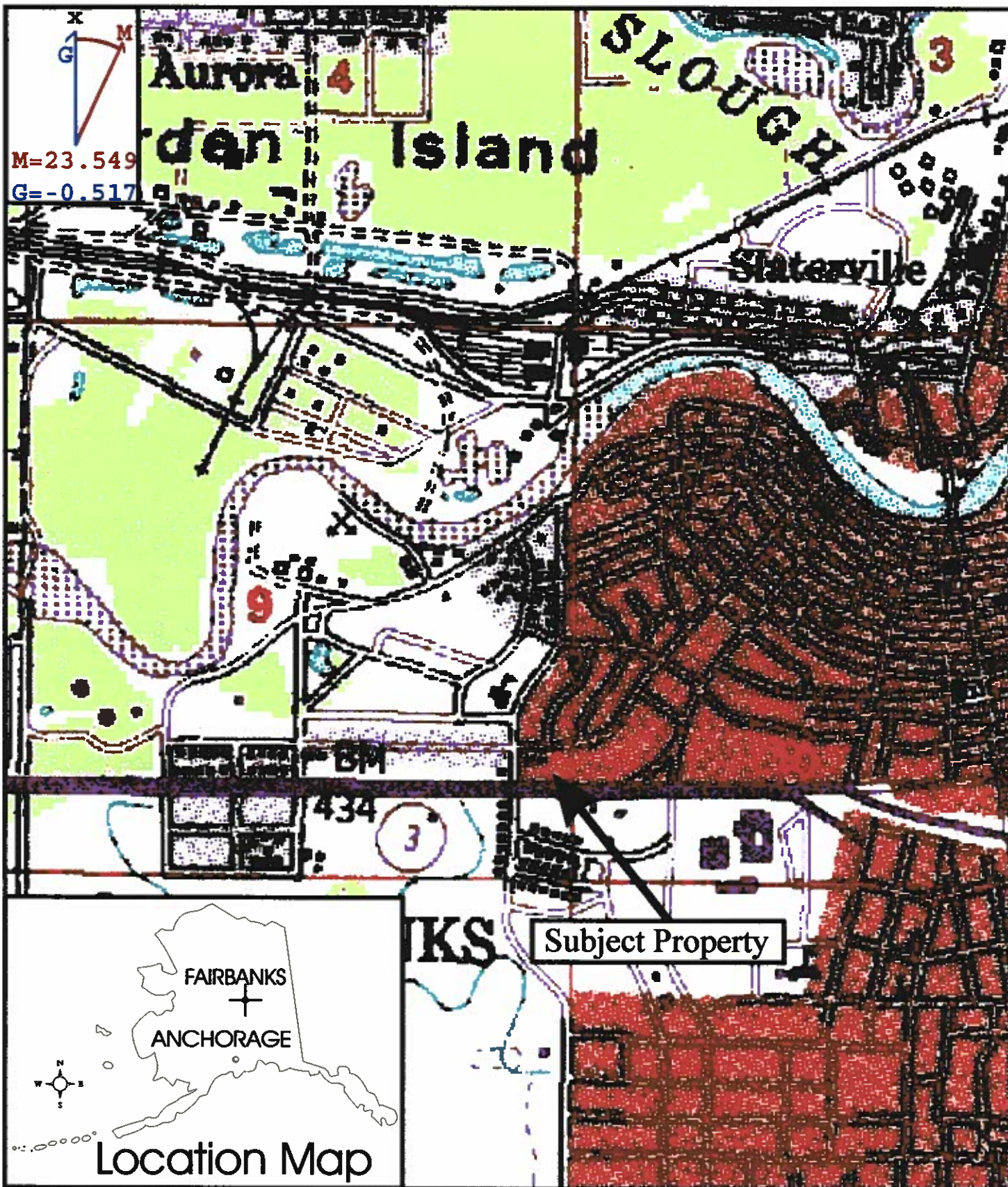
6.0 LIMITATIONS OF INVESTIGATION

This report presents the analytical results from a limited number of soil samples, and should not be construed as a comprehensive study of subsurface conditions at the site. The samples were intended to evaluate the presence or absence of contaminants at the locations selected. Detectable levels of petroleum hydrocarbons or other substances may be present at different locations. It was also not the intent of our sampling and testing to detect the presence of soil affected by contaminants other than those for which laboratory analysis were performed. No conclusions can be drawn on the presence or absence of other contaminants. This is not a geotechnical study.

The data presented in this report should be considered representative of the time of our site observations and sample collection. Changes in site conditions can occur with time because of natural forces or human activity. ARES reserves the right to modify or alter conclusions and recommendations should additional data become available.

This report was prepared for the exclusive use of Mr. Jeff Zuckerman and his representatives. If it is made available to others, it should be for information on factual data only and not as a warranty of subsurface conditions.

Appendix A

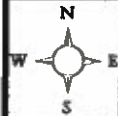
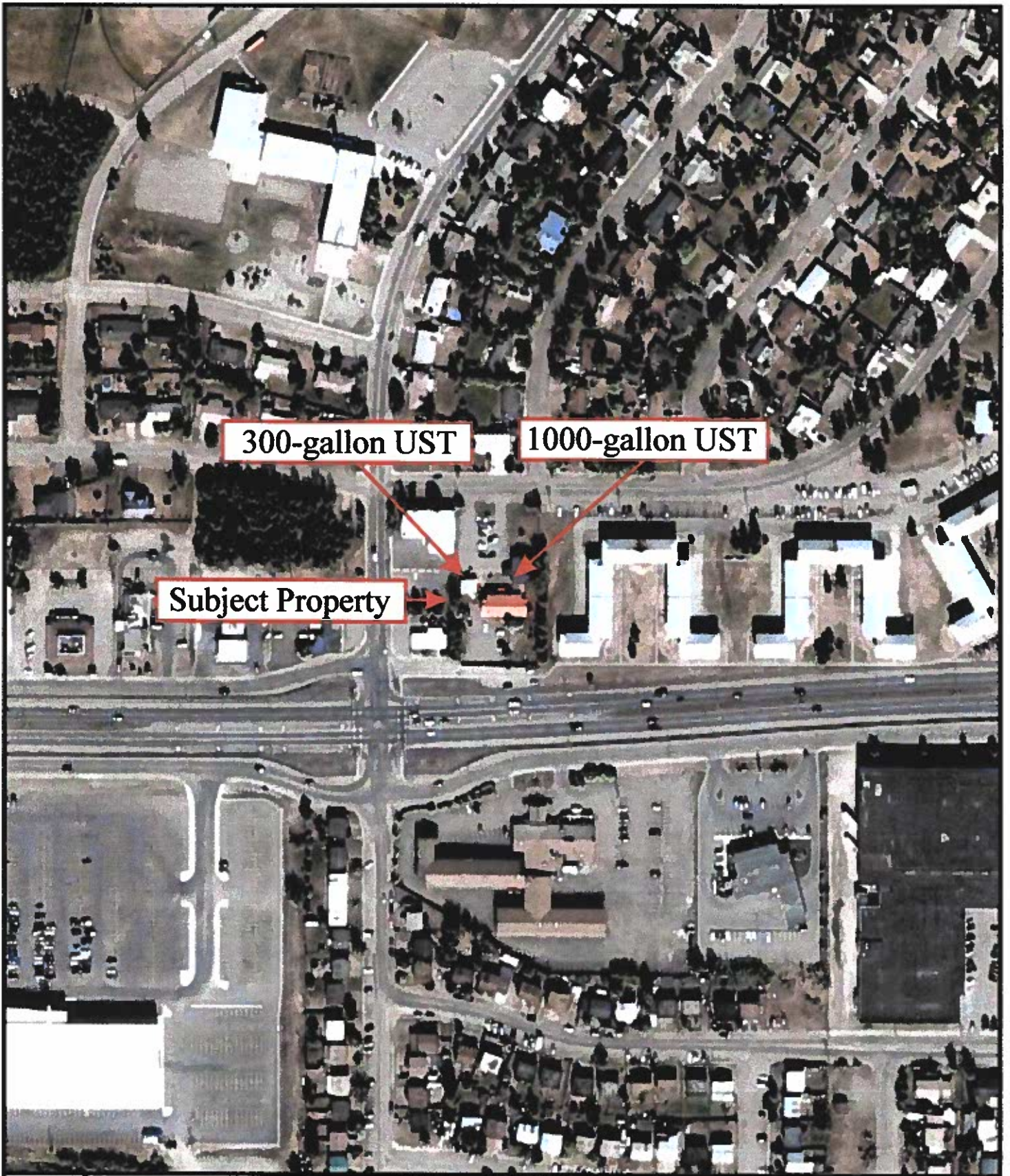


**Phase II ESA/
Release Investigation
1406 Kellum Street
Fairbanks, AK 99701**

July 2007

FIGURE 1

ARES
Alaska Resources and
Environmental Services, LLC
284 Topside
Fairbanks AK 99701



**2002/03 Aerial
Photograph
Fairbanks, Alaska**

Scale in Feet:

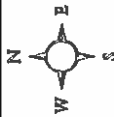
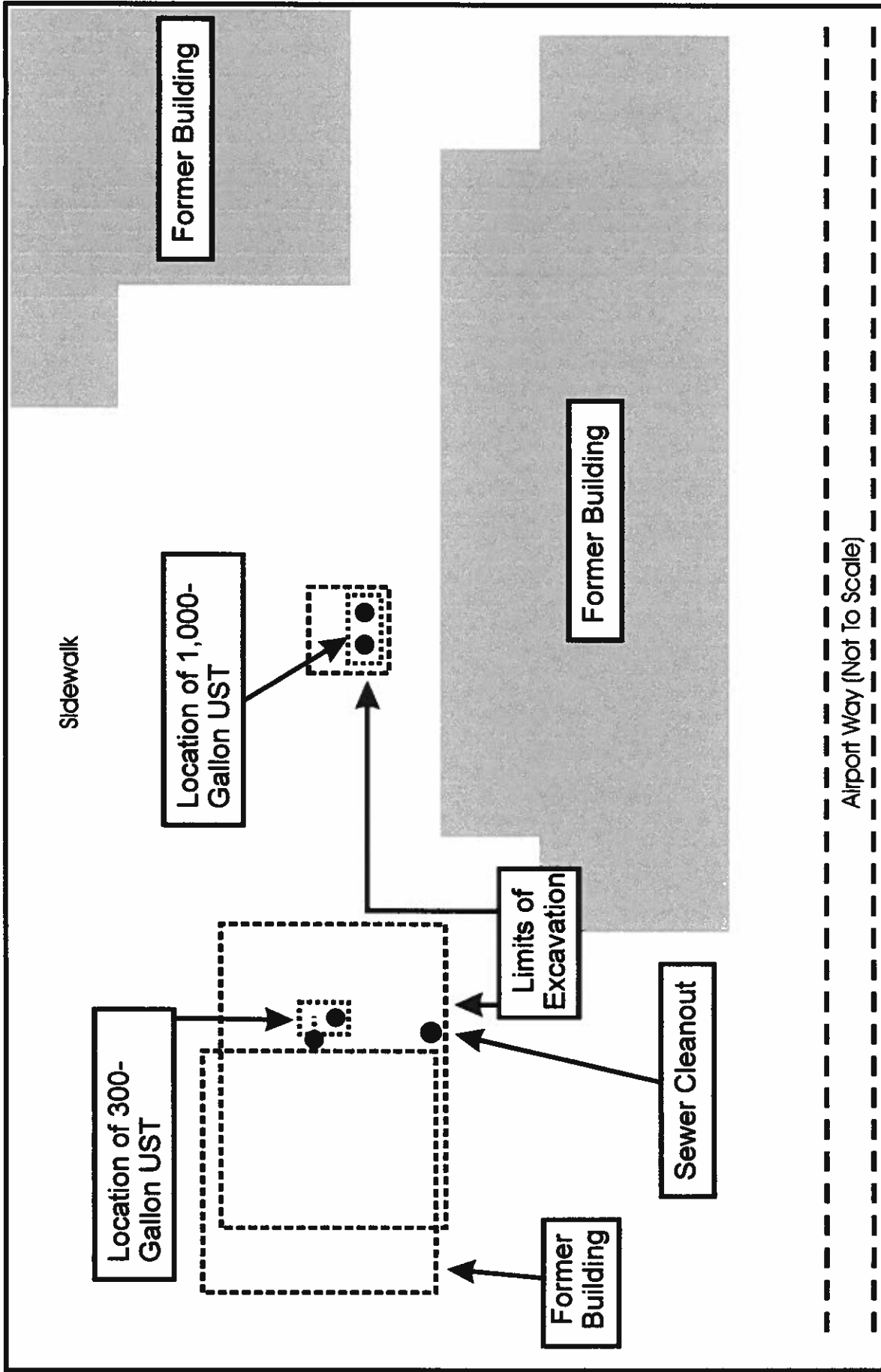
0 100 200 300 400 500

**Phase II ESA/
Release Investigation
1406 Kellum Street
Fairbanks, AK 99701**

July 2007

FIGURE 2

**ARES
Alaska Resources and
Environmental Services, LLC
284 Topside
Fairbanks AK 99701**



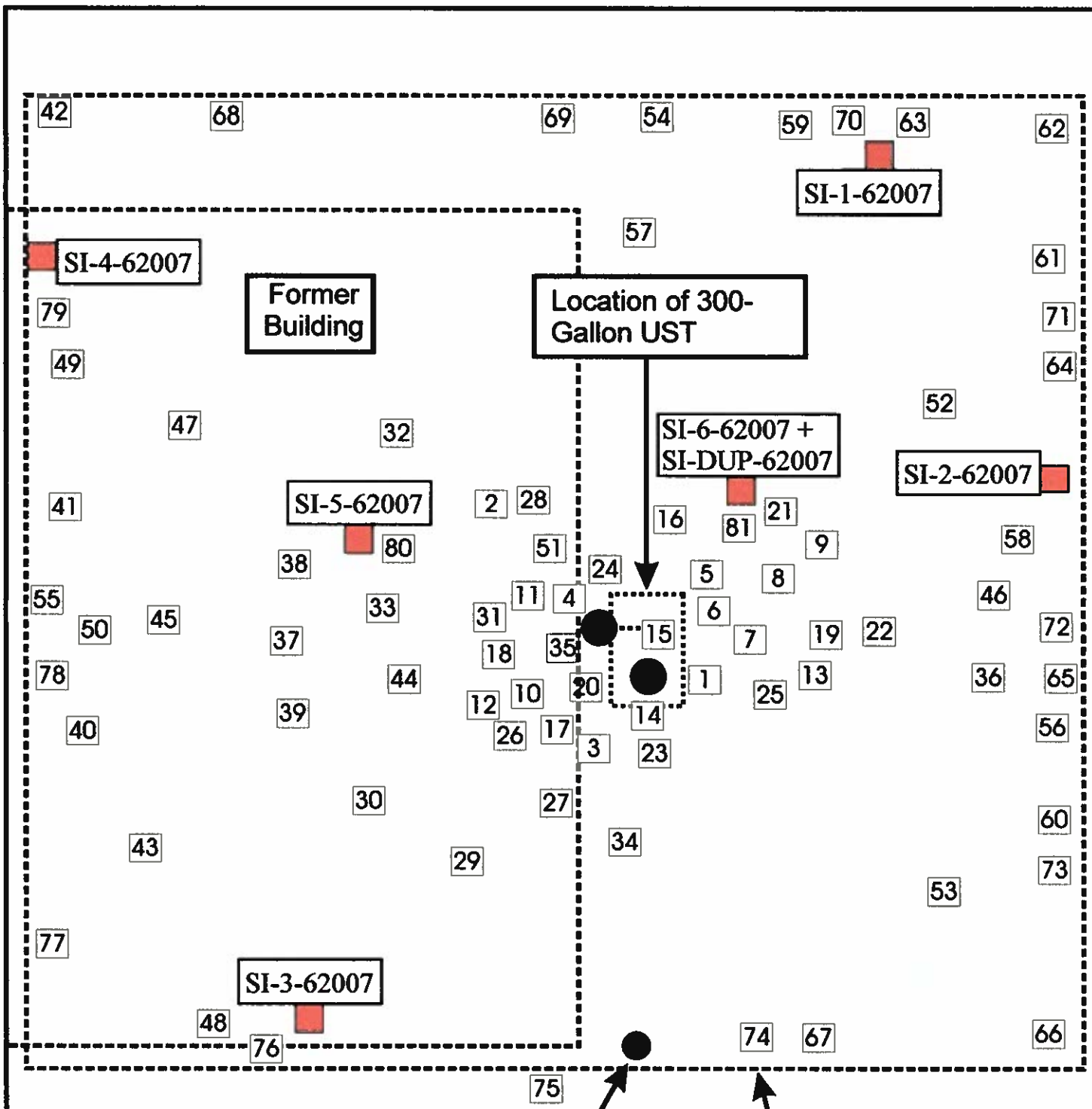
Site Map
Fairbanks, Alaska

**Phase II ESA/
Release Investigation**
1406 Kellum Street
Fairbanks, AK 99701

July 2007

FIGURE 3

ARES
Alaska Resources and
Environmental Services, LLC
284 Topside
Fairbanks AK 99701



Key

- Analytical Soil Sample
- # Field Screen Sample

Sewer Cleanout

Limit of Excavation

Sidewalk

Sample Location Map

Scale in Feet:

0 2 4 6 8

**Phase II ESA/
Release Investigation
1406 Kellum Street
Fairbanks, AK 99701**

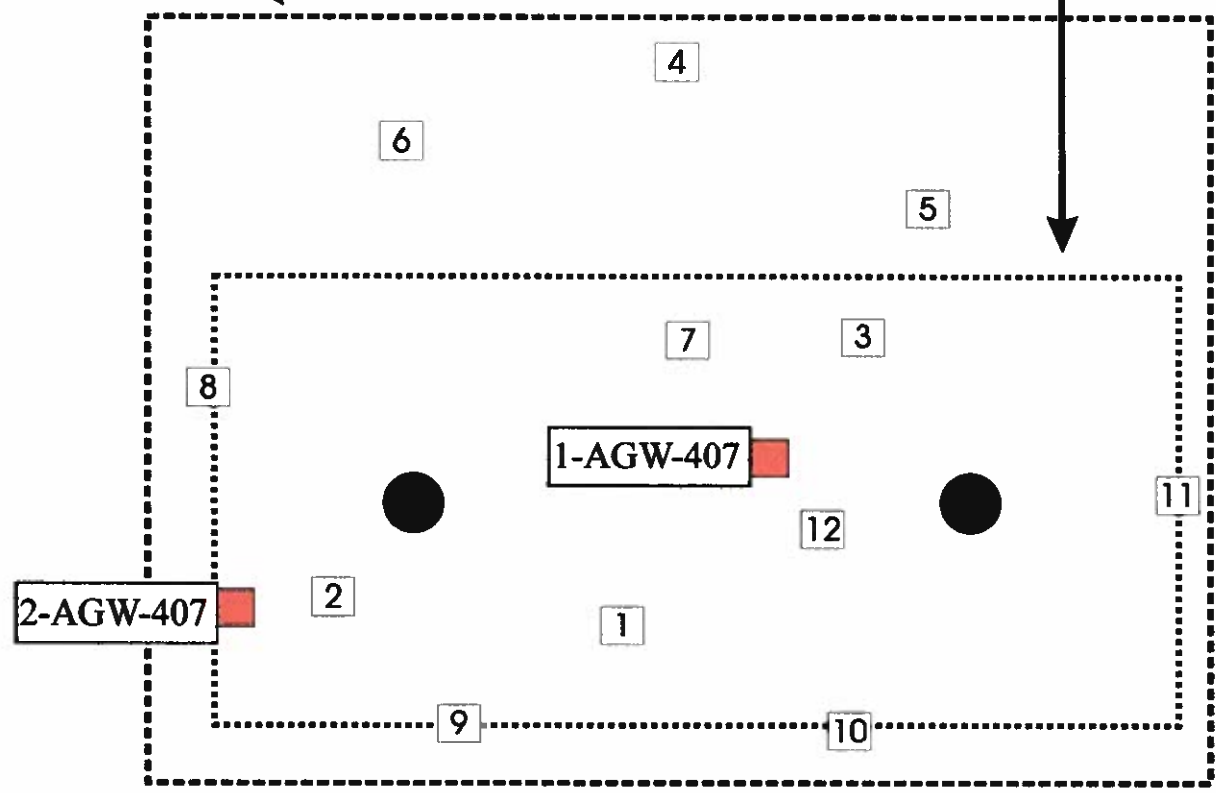
May 2007

FIGURE 4

ARES
Alaska Resources and
Environmental Services, LLC
284 Topside
Fairbanks AK 99701

Limit of Excavation

Location of 1,000-Gallon UST



Key

- Analytical Soil Sample
- Field Screen Sample

Former Building



Sample Location Map

Scale in Feet:



**Phase II ESA/
Release Investigation
1406 Kellum Street
Fairbanks, AK 99701**
May 2007

FIGURE 5

ARES
Alaska Resources and
Environmental Services, LLC
284 Topside
Fairbanks AK 99701

Phase II Environmental Site Assessment/Release Investigation
1406 Kellum Street, Fairbanks, AK

July, 2007

Appendix B



**Photograph 1
Subject Property**

**Photograph 2
Residual Fuel Removal**

**Phase II ESA/
Release Investigation
1406 Kellum Street**

May 2007

PHOTOGRAPHS

**ARES
Alaska Resources and
Environmental Services, LLC
284 Topside Road
Fairbanks AK 99701**



Photograph 3
Excavation pit for 1,000 gallon UST

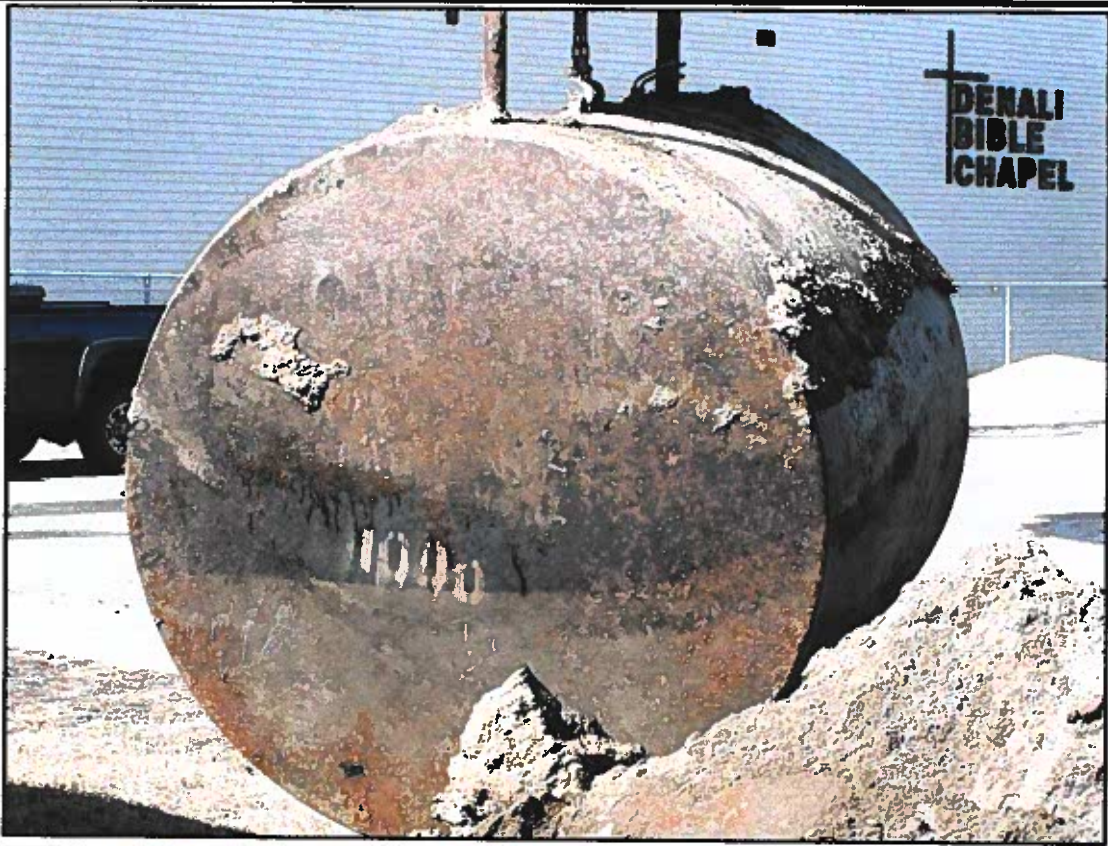
Photograph 4
Excavation pit for 300-gallon UST

**Phase II ESA/
Release Investigation
1406 Kellum Street**

May 2007

PHOTOGRAPHS

ARES
Alaska Resources and
Environmental Services, LLC
284 Topside Road
Fairbanks AK 99701



Photograph 5
Removed 1,000-gallon UST

Photograph 6
Removed 300-gallon UST

**Phase II ESA/
Release Investigation
1406 Kellum Street**

May 2007

PHOTOGRAPHS

ARES
Alaska Resources and
Environmental Services, LLC
284 Topside Road
Fairbanks AK 99701



Photograph 7
Excavation Pit for 300-gallon UST

Photograph 8
Excavation Pit for 300-gallon UST

**Phase II ESA/
Release Investigation
1406 Kellum Street**

May 2007

PHOTOGRAPHS

ARES
**Alaska Resources and
Environmental Services, LLC**
284 Topside Road
Fairbanks AK 99701



Photograph 9
Final excavation pit for 300-gallon
UST

Photograph 10
Final excavation pit for 300-gallon
UST

**Phase II ESA/
Release Investigation
1406 Kellum Street**

June 2007

PHOTOGRAPHS

ARES
Alaska Resources and
Environmental Services, LLC
284 Topside Road
Fairbanks AK 99701



Photograph 11
Final excavation pit for 300-gallon
UST

Photograph 12
Landfarm / Stockpile

**Phase II ESA/
Release Investigation
1406 Kellum Street**

June 2007

PHOTOGRAPHS

ARES
Alaska Resources and
Environmental Services, LLC
284 Topside Road
Fairbanks AK 99701

Phase II Environmental Site Assessment/Release Investigation
1406 Kellum Street, Fairbanks, AK

July, 2007

Appendix C

May 03, 2007

Lyle Gresehover
Alaska Resources & Environmental Services
P.O. Box 83050
Fairbanks, AK 99708

RE: RCPC Bldg

Enclosed are the results of analyses for samples received by the laboratory on 04/26/07 15:40.
The following list is a summary of the Work Orders contained in this report, generated on 05/03/07
15:40.

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

<u>Work Order</u>	<u>Project</u>	<u>ProjectNumber</u>
AQD0066	RCPC Bldg	[none]

TestAmerica - Anchorage, AK



Troy J. Engstrom, 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.



Alaska Resources & Environmental Services P.O. Box 83050 Fairbanks, AK 99708	Project Name: RCPC Bldg Project Number: [none] Project Manager: Lyle Gresehover	Report Created: 05/03/07 15:40
---	--	--

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
1-AGW-407	AQD0066-01	Soil	04/17/07 14:40	04/26/07 15:40
2-AGW-407	AQD0066-02	Soil	04/17/07 15:00	04/26/07 15:40
2-SS	AQD0066-03	Soil	04/17/07 16:30	04/26/07 15:40
Trip Blank	AQD0066-04	Soil	04/17/07 00:00	04/26/07 15:40

TestAmerica - Anchorage, AK



Troy J. Engstrom, 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.



Alaska Resources & Environmental Services	Project Name: RCPC Bldg	
P.O. Box 83050	Project Number: [none]	Report Created:
Fairbanks, AK 99708	Project Manager: Lyle Greschover	05/03/07 15:40

Diesel Range Organics (C10-C25) per AK102
 TestAmerica - Anchorage, AK

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
AQD0066-01 (1-AGW-407)		Soil			Sampled: 04/17/07 14:40					
Diesel Range Organics	AK 102	ND	—	20.0	mg/kg dry	1x	7040084	04/30/07 10:14	05/01/07 18:10	
Surrogate(s): 1-Chlorooctadecane			71.5%		50 - 150 %	*				*
AQD0066-02 (2-AGW-407)		Soil			Sampled: 04/17/07 15:00					
Diesel Range Organics	AK 102	ND	—	20.0	mg/kg dry	1x	7040084	04/30/07 10:14	05/01/07 19:48	
Surrogate(s): 1-Chlorooctadecane			62.9%		50 - 150 %	*				*
AQD0066-03 (2-SS)		Soil			Sampled: 04/17/07 16:30					
Diesel Range Organics	AK 102	19300	—	2000	mg/kg dry	100x	7040084	04/30/07 10:14	05/03/07 11:08	RL7
Surrogate(s): 1-Chlorooctadecane			97.7%		50 - 150 %	*				*

TestAmerica - Anchorage, AK

Troy J. Engstrom

Troy J. Engstrom, 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.



Alaska Resources & Environmental Services	Project Name: RCPC Bldg	Report Created: 05/03/07 15:40
P.O. Box 83050	Project Number: [none]	
Fairbanks, AK 99708	Project Manager: Lyle Greschover	

BTEX by EPA Method 8021B
 TestAmerica - Anchorage, AK

Analyte	Method	Result	MDL ^A	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes	
AQD0066-01 (1-AGW-407)		Soil			Sampled: 04/17/07 14:40						
Benzene	EPA 8021B	ND	---	0.0129	mg/kg dry	1x	7040085	04/30/07 11:17	05/01/07 11:38		
Toluene	"	ND	---	0.0257	"	"	"	"	"		
Ethylbenzene	"	ND	---	0.0257	"	"	"	"	"		
Xylenes (total)	"	ND	---	0.0386	"	"	"	"	"		
<i>Surrogate(s): a,a,a-TFT (PID)</i>			78.9%		50 - 150 %	"					
AQD0066-02 (2-AGW-407)		Soil			Sampled: 04/17/07 15:00						
Benzene	EPA 8021B	ND	---	0.0166	mg/kg dry	1x	7040085	04/30/07 11:17	04/30/07 20:22		
Toluene	"	ND	---	0.0333	"	"	"	"	"		
Ethylbenzene	"	ND	---	0.0333	"	"	"	"	"		
Xylenes (total)	"	ND	---	0.0500	"	"	"	"	"		
<i>Surrogate(s): a,a,a-TFT (PID)</i>			82.2%		50 - 150 %	"					
AQD0066-03 (2-SS)		Soil			Sampled: 04/17/07 16:30						RL7
Benzene	EPA 8021B	ND	---	0.250	mg/kg dry	15x	7040085	04/30/07 11:17	05/01/07 00:14		
Toluene	"	1.88	---	0.500	"	"	"	"	"		
Ethylbenzene	"	6.14	---	0.500	"	"	"	"	"	R10	
Xylenes (total)	"	69.1	---	0.750	"	"	"	"	"		
<i>Surrogate(s): a,a,a-TFT (PID)</i>			83.5%		50 - 150 %	"					
AQD0066-04 (Trip Blank)		Soil			Sampled: 04/17/07 00:00						
Benzene	EPA 8021B	ND	---	0.0166	mg/kg wet	1x	7040085	04/30/07 11:17	04/30/07 19:49		
Toluene	"	0.0934	---	0.0333	"	"	"	"	"		
Ethylbenzene	"	ND	---	0.0333	"	"	"	"	"		
Xylenes (total)	"	ND	---	0.0500	"	"	"	"	"		
<i>Surrogate(s): a,a,a-TFT (PID)</i>			95.4%		50 - 150 %	"					

TestAmerica - Anchorage, AK

Troy J Engstrom

Troy J. Engstrom, 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.



Alaska Resources & Environmental Services	Project Name: RCPC Bldg	Report Created:
P.O. Box 83050	Project Number: [none]	05/03/07 15:40
Fairbanks, AK 99708	Project Manager: Lyle Greshover	

Physical Parameters by APHA/ASTM/EPA Methods
TestAmerica - Anchorage, AK

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
AQD0066-01 (1-AGW-407)		Soil					Sampled: 04/17/07 14:40			
Dry Weight	TA-SOP	86.8	---	1.00	%	1x	7050007	05/01/07 15:45	05/02/07 07:23	
AQD0066-02 (2-AGW-407)		Soil					Sampled: 04/17/07 15:00			
Dry Weight	TA-SOP	88.4	---	1.00	%	1x	7050007	05/01/07 15:45	05/02/07 07:23	
AQD0066-03 (2-SS)		Soil					Sampled: 04/17/07 16:30			
Dry Weight	TA-SOP	94.6	---	1.00	%	1x	7050007	05/01/07 15:45	05/02/07 07:23	

TestAmerica - Anchorage, AK

Troy J Engstrom

Troy J. Engstrom, 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.



Alaska Resources & Environmental Services	Project Name: RCPC Bldg	
P.O. Box 83050	Project Number: [none]	Report Created:
Fairbanks, AK 99708	Project Manager: Lyle Gresehover	05/03/07 15:40

Diesel Range Organics (C10-C25) per AK102 - Laboratory Quality Control Results
 TestAmerica - Anchorage, AK

QC Batch: 7040084 **Soil Preparation Method:** EPA 3545

Analyte	Method	Result	MDL ^a	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes		
Blank (7040084-BLK1)													Extracted: 04/30/07 10:14			
Diesel Range Organics	AK 102	ND	—	20.0	mg/kg wet	1x	—	—	—	—	—	—	05/01/07 17:37			
<i>Surrogate(s): 1-Chlorooctadecane</i>		<i>Recovery:</i>	<i>71.3%</i>	<i>Limits: 50-150%</i>		"							05/01/07 17:37			
LCS (7040084-BS1)													Extracted: 04/30/07 10:14			
Diesel Range Organics	AK 102	120	—	20.0	mg/kg wet	1x	—	129	93.0%	(75-125)	—	—	05/01/07 18:10			
<i>Surrogate(s): 1-Chlorooctadecane</i>		<i>Recovery:</i>	<i>74.7%</i>	<i>Limits: 60-120%</i>		"							05/01/07 18:10			
LCS Dup (7040084-BSD1)													Extracted: 04/30/07 10:14			
Diesel Range Organics	AK 102	119	—	20.0	mg/kg wet	1x	—	129	92.2%	(75-125)	0.837%	(20)	05/01/07 19:16			
<i>Surrogate(s): 1-Chlorooctadecane</i>		<i>Recovery:</i>	<i>77.0%</i>	<i>Limits: 60-120%</i>		"							05/01/07 19:16			
Duplicate (7040084-DUP1)													QC Source: AQD0066-01		Extracted: 04/30/07 10:14	
Diesel Range Organics	AK 102	ND	—	20.0	mg/kg dry	1x	ND	—	—	—	25.7%	(20)	05/01/07 17:37	R4		
<i>Surrogate(s): 1-Chlorooctadecane</i>		<i>Recovery:</i>	<i>72.9%</i>	<i>Limits: 50-150%</i>		"							05/01/07 17:37			
Matrix Spike (7040084-MS1)													QC Source: AQD0066-01		Extracted: 04/30/07 10:14	
Diesel Range Organics	AK 102	150	—	20.0	mg/kg dry	1x	8.34	148	95.7%	(75-125)	—	—	05/01/07 19:16			
<i>Surrogate(s): 1-Chlorooctadecane</i>		<i>Recovery:</i>	<i>78.3%</i>	<i>Limits: 50-150%</i>		"							05/01/07 19:16			
Matrix Spike Dup (7040084-MSD1)													QC Source: AQD0066-01		Extracted: 04/30/07 10:14	
Diesel Range Organics	AK 102	152	—	20.0	mg/kg dry	1x	8.34	147	97.7%	(75-125)	1.32%	(25)	05/01/07 19:48			
<i>Surrogate(s): 1-Chlorooctadecane</i>		<i>Recovery:</i>	<i>79.7%</i>	<i>Limits: 50-150%</i>		"							05/01/07 19:48			

TestAmerica - Anchorage, AK

Troy J Engstrom

Troy J. Engstrom, 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.



Alaska Resources & Environmental Services	Project Name: RCPC Bldg	Report Created: 05/03/07 15:40
P.O. Box 83050	Project Number: [none]	
Fairbanks, AK 99708	Project Manager: Lyle Greschover	

BTEX by EPA Method 8021B - Laboratory Quality Control Results
 TestAmerica - Anchorage, AK

QC Batch: 7040085 **Soil Preparation Method:** AK101 Field Prep

Analyte	Method	Result	MDL ^a	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes		
Blank (7040085-BLK1)													Extracted: 04/30/07 11:17			
Benzene	EPA 8021B	ND	—	0.0166	mg/kg wet	1x	—	—	—	—	—	—	04/30/07 19:15			
Toluene	"	ND	—	0.0333	"	"	—	—	—	—	—	—	"			
Ethylbenzene	"	ND	—	0.0333	"	"	—	—	—	—	—	—	"			
Xylenes (total)	"	ND	—	0.0500	"	"	—	—	—	—	—	—	"			
<i>Surrogate(s): a,a,a-TFT (PID)</i>		<i>Recovery: 95.4%</i>		<i>Limits: 50-150%</i>										04/30/07 19:15		
LCS (7040085-BS1)													Extracted: 04/30/07 11:17			
Benzene	EPA 8021B	0.227	—	0.0166	mg/kg wet	1x	—	0.212	107%	(73.5-120)	—	—	04/30/07 17:35			
Toluene	"	1.58	—	0.0333	"	"	—	1.84	85.9%	(76.3-120)	—	—	"			
Ethylbenzene	"	0.336	—	0.0333	"	"	—	0.368	91.3%	(80-122)	—	—	"			
Xylenes (total)	"	2.04	—	0.0500	"	"	—	2.12	96.2%	(80-120)	—	—	"			
<i>Surrogate(s): a,a,a-TFT (PID)</i>		<i>Recovery: 103%</i>		<i>Limits: 60-120%</i>										04/30/07 17:35		
Matrix Spike (7040085-MS1)													QC Source: AQR0072-01		Extracted: 04/30/07 11:17	
Benzene	EPA 8021B	0.640	—	0.0185	mg/kg wet	2.25x	0.00782	0.765	82.6%	(80-125)	—	—	05/01/07 17:19			
Toluene	"	0.619	—	0.0371	"	"	0.0483	0.732	78.0%	(80-130)	—	—	"	M8		
Ethylbenzene	"	0.612	—	0.0371	"	"	0.0253	0.736	79.7%	(80-138)	—	—	"	M8		
Xylenes (total)	"	1.99	—	0.0556	"	"	0.109	2.21	85.1%	(80-141)	—	—	"			
<i>Surrogate(s): a,a,a-TFT (PID)</i>		<i>Recovery: 89.1%</i>		<i>Limits: 50-150%</i>										05/01/07 17:19		
Matrix Spike Dup (7040085-MSD1)													QC Source: AQR0072-01		Extracted: 04/30/07 11:17	
Benzene	EPA 8021B	0.663	—	0.0185	mg/kg wet	2.25x	0.00782	0.765	85.6%	(80-125)	3.53% (18.4)	—	05/01/07 17:53			
Toluene	"	0.651	—	0.0371	"	"	0.0483	0.732	82.3%	(80-130)	5.04% (18)	—	"			
Ethylbenzene	"	0.648	—	0.0371	"	"	0.0253	0.736	84.6%	(80-138)	5.71% (15.3)	—	"			
Xylenes (total)	"	2.12	—	0.0556	"	"	0.109	2.21	91.0%	(80-141)	6.33% (14.2)	—	"			
<i>Surrogate(s): a,a,a-TFT (PID)</i>		<i>Recovery: 88.2%</i>		<i>Limits: 50-150%</i>										05/01/07 17:53		

TestAmerica - Anchorage, AK

Troy J Engstrom

Troy J. Engstrom, 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.



Alaska Resources & Environmental Services	Project Name: RCPC Bldg	Report Created:
P.O. Box 83050	Project Number: [none]	05/03/07 15:40
Fairbanks, AK 99708	Project Manager: Lyle Greshover	

Physical Parameters by APHA/ASTM/EPA Methods - Laboratory Quality Control Results
TestAmerica - Anchorage, AK

QC Batch: 7050007 Soil Preparation Method: *** DEFAULT PREP

Analyte	Method	Result	MDL*	MRL	Units	DB	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
---------	--------	--------	------	-----	-------	----	---------------	-----------	-------	----------	-------	----------	----------	-------

Duplicate (7050007-DUP1)			QC Source: AQC0007-07				Extracted: 05/01/07 15:45							
Dry Weight	TA-SOP	86.3	—	1.00	%	1x	86.4	—	—	—	0.116% (25)		05/02/07 07:23	

TestAmerica - Anchorage, AK

Troy J. Engstrom

Troy J. Engstrom, 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.



Alaska Resources & Environmental Services

P.O. Box 83050
Fairbanks, AK 99708

Project Name: **RCPC Bldg**
Project Number: **[none]**
Project Manager: **Lyle Greschover**

Report Created:
05/03/07 15:40

Notes and Definitions

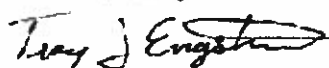
Report Specific Notes:

- M8 - The MS and/or MSD were below the acceptance limits. See Blank Spike (LCS).
- R10 - The RPD between the primary and confirmatory analysis exceeded 40%. Per method 8000B, the lower value was reported due to apparent chromatographic problems.
- R4 - Due to the low levels of analyte in the sample, the duplicate RPD calculation does not provide useful information.
- RL7 - Sample required dilution due to high concentrations of target analyte.

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. Results and Reporting Limits have been corrected for Percent Dry Weight.
- wet - Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported on a Wet Weight Basis.
- 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.
- Electronic Signature - Electronic Signature added in accordance with TestAmerica's *Electronic Reporting and Electronic Signatures Policy*. Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

TestAmerica - Anchorage, AK



Troy J. Engstrom, 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.



Test America Cooler Receipt Form

(Army Corps. Compliant)

WORK ORDER # AAD0006 CLIENT: ARESE PROJECT: RLPC Bldg.

Date Time Cooler Arrived 04 26 07 15:40 Cooler signed for by: Johanna Dreher
(Print name)

Preliminary Examination Phase:

Date cooler opened: same as date received or _____

Cooler opened by (print) Johanna Dreher (sign) Johanna Dreher

1. Delivered by ALASKA AIRLINES Fed-Ex UPS NAC LYNDEN CLIENT Other: _____

Shipment Tracking # if applicable 1409-2654 (include copy of shipping papers in file)

2. Number of Custody Seals 1 Signed by Lyle Greenhous Date 04/26/07

Were custody seals unbroken and intact on arrival? Yes No

3. Were custody papers sealed in a plastic bag? Yes No

4. Were custody papers filled out properly (ink, signed, etc.)? Yes No

5. Did you sign the custody papers in the appropriate place? Yes No

6. Was ice used? Yes No Type of ice: blue ice gel ice real ice dry ice Condition of Ice: good

Temperature by Digi-Thermo Probe 5.0 °C Thermometer # rec # 4

7. Packing in Cooler: bubble wrap styrofoam cardboard Other: _____

8. Did samples arrive in plastic bags? Yes No

9. Did all bottles arrive unbroken, and with labels in good condition? Yes No

10. Are all bottle labels complete (ID, date, time, etc.) Yes No

11. Do bottle labels and Chain of Custody agree? Yes No

12. Are the containers and preservatives correct for the tests indicated? Yes No

13. Is there adequate volume for the tests requested? Yes No

14. Were VOA vials free of bubbles? N/A Yes No

If "NO" which containers contained "head space" or bubbles? _____

Log-in Phase:

Date of sample log-in 04 26 07

Samples logged in by (print) Johanna Dreher (sign) Johanna Dreher

1. Was project identifiable from custody papers? Yes No

2. Do Turn-Around Times and Due Dates agree? Yes No

3. Was the Project Manager notified of status? Yes No

4. Was the Lab notified of status? Yes No

5. Was the COC scanned and copied? Yes No

CUSTODY SEAL

Date 4/20/07

Signature [Handwritten Signature]

TestAmerica
ANALYTICAL TESTING CORPORATION

July 09, 2007

Lyle Gresehover
Alaska Resources & Environmental Services
P.O. Box 83050
Fairbanks, AK 99708

RE: Sahn Investments

Enclosed are the results of analyses for samples received by the laboratory on 06/28/07 10:07.
The following list is a summary of the Work Orders contained in this report, generated on 07/09/07
09:40.

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

<u>Work Order</u>	<u>Project</u>	<u>ProjectNumber</u>
AQF0151	Sahn Investments	{none}



Alaska Resources & Environmental Services P.O. Box 83050 Fairbanks, AK 99708	Project Name:	Sahn Investments	Report Created: 07/09/07 09:40
	Project Number:	[none]	
	Project Manager:	Lyle Gresehover	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SI-1-62007	AQF0151-01	Soil	06/25/07 11:41	06/28/07 10:07
SI-2-62007	AQF0151-02	Soil	06/25/07 11:57	06/28/07 10:07
SI-3-62007	AQF0151-03	Soil	06/25/07 12:12	06/28/07 10:07
SI-4-62007	AQF0151-04	Soil	06/25/07 12:26	06/28/07 10:07
SI-5-62007	AQF0151-05	Soil	06/25/07 12:42	06/28/07 10:07
SI-6-62007	AQF0151-06	Soil	06/25/07 13:00	06/28/07 10:07
SI-DUP-62007	AQF0151-07	Soil	06/25/07 13:18	06/28/07 10:07
trip blank	AQF0151-08	Soil	06/25/07 00:00	06/28/07 10:07

TestAmerica - Anchorage, AK

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.

Rachel J James For Troy J. Engstrom, Manager



Alaska Resources & Environmental Services P.O. Box 83050 Fairbanks, AK 99708	Project Name: Sahn Investments Project Number: [none] Project Manager: Lyle Gresehover	Report Created: 07/09/07 09:40
---	---	--

Diesel Range Organics (C10-C25) per AK102
TestAmerica - Anchorage, AK

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
AQF0151-01 (SI-1-62007)		Soil		Sampled: 06/25/07 11:41						
Diesel Range Organics	AK 102	ND	—	20.0	mg/kg dry	1x	7070011	07/03/07 08:35	07/06/07 11:33	
Surrogate(s): 1-Chlorooctadecane			85.6%		50 - 150 %	"				
AQF0151-02 (SI-2-62007)		Soil		Sampled: 06/25/07 11:57						
Diesel Range Organics	AK 102	ND	—	20.0	mg/kg dry	1x	7070011	07/03/07 08:35	07/06/07 12:06	
Surrogate(s): 1-Chlorooctadecane			95.4%		50 - 150 %	"				
AQF0151-03 (SI-3-62007)		Soil		Sampled: 06/25/07 12:12						
Diesel Range Organics	AK 102	ND	—	20.0	mg/kg dry	1x	7070020	07/05/07 09:22	07/06/07 09:57	
Surrogate(s): 1-Chlorooctadecane			87.6%		50 - 150 %	"				
AQF0151-04 (SI-4-62007)		Soil		Sampled: 06/25/07 12:26						
Diesel Range Organics	AK 102	ND	—	20.0	mg/kg dry	1x	7070020	07/05/07 09:22	07/06/07 12:06	
Surrogate(s): 1-Chlorooctadecane			85.0%		50 - 150 %	"				
AQF0151-05 (SI-5-62007)		Soil		Sampled: 06/25/07 12:42						
Diesel Range Organics	AK 102	58.0	—	20.0	mg/kg dry	1x	7070020	07/05/07 09:22	07/06/07 12:38	
Surrogate(s): 1-Chlorooctadecane			97.2%		50 - 150 %	"				
AQF0151-06 (SI-6-62007)		Soil		Sampled: 06/25/07 13:00						
Diesel Range Organics	AK 102	1080	—	20.0	mg/kg dry	1x	7070020	07/05/07 09:22	07/06/07 12:38	
Surrogate(s): 1-Chlorooctadecane			98.6%		50 - 150 %	"				
AQF0151-07 (SI-DUP-62007)		Soil		Sampled: 06/25/07 13:18						
Diesel Range Organics	AK 102	1040	—	17.4	mg/kg dry	1x	7070020	07/05/07 09:22	07/06/07 13:11	
Surrogate(s): 1-Chlorooctadecane			106%		50 - 150 %	"				

TestAmerica - Anchorage, AK

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.

Rachel J James For Troy J. Engstrom, Manager



Alaska Resources & Environmental Services	Project Name: Sahn Investments	Report Created: 07/09/07 09:40
P.O. Box 83050	Project Number: [none]	
Fairbanks, AK 99708	Project Manager: Lyle Greshover	

BTEX by EPA Method 8021B
 TestAmerica - Anchorage, AK

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
AQF0151-01 (SI-1-62007)		Soil			Sampled: 06/25/07 11:41					
Benzene	EPA 8021B	ND	---	0.0188	mg/kg dry	1x	7070015	07/03/07 11:15	07/05/07 20:19	
Toluene	"	ND	---	0.0376	"	"	"	"	"	
Ethylbenzene	"	ND	---	0.0376	"	"	"	"	"	
Xylenes (total)	"	ND	---	0.0564	"	"	"	"	"	
<i>Surrogate(s): a,a,a-TFT (PID)</i>			85.3%		50 - 150 %	"				
AQF0151-02 (SI-2-62007)		Soil			Sampled: 06/25/07 11:57					
Benzene	EPA 8021B	ND	---	0.0125	mg/kg dry	1x	7070015	07/03/07 11:15	07/05/07 13:39	
Toluene	"	ND	---	0.0249	"	"	"	"	"	
Ethylbenzene	"	ND	---	0.0249	"	"	"	"	"	
Xylenes (total)	"	ND	---	0.0374	"	"	"	"	"	
<i>Surrogate(s): a,a,a-TFT (PID)</i>			83.3%		50 - 150 %	"				
AQF0151-03 (SI-3-62007)		Soil			Sampled: 06/25/07 12:12					
Benzene	EPA 8021B	ND	---	0.0138	mg/kg dry	1x	7070015	07/03/07 11:15	07/05/07 14:13	
Toluene	"	ND	---	0.0276	"	"	"	"	"	
Ethylbenzene	"	ND	---	0.0276	"	"	"	"	"	
Xylenes (total)	"	ND	---	0.0414	"	"	"	"	"	
<i>Surrogate(s): a,a,a-TFT (PID)</i>			81.5%		50 - 150 %	"				
AQF0151-04 (SI-4-62007)		Soil			Sampled: 06/25/07 12:26					
Benzene	EPA 8021B	ND	---	0.0166	mg/kg dry	1x	7070015	07/03/07 11:15	07/05/07 14:46	
Toluene	"	ND	---	0.0333	"	"	"	"	"	
Ethylbenzene	"	ND	---	0.0333	"	"	"	"	"	
Xylenes (total)	"	ND	---	0.0500	"	"	"	"	"	
<i>Surrogate(s): a,a,a-TFT (PID)</i>			82.2%		50 - 150 %	"				
AQF0151-05 (SI-5-62007)		Soil			Sampled: 06/25/07 12:42					
Benzene	EPA 8021B	ND	---	0.0159	mg/kg dry	1.5x	7070015	07/03/07 11:15	07/05/07 15:20	
Toluene	"	ND	---	0.0318	"	"	"	"	"	
Ethylbenzene	"	ND	---	0.0318	"	"	"	"	"	
Xylenes (total)	"	ND	---	0.0476	"	"	"	"	"	
<i>Surrogate(s): a,a,a-TFT (PID)</i>			76.0%		50 - 150 %	"				

TestAmerica - Anchorage, AK

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.

Rachel J James For Troy J. Engstrom, Manager



Alaska Resources & Environmental Services P.O. Box 83050 Fairbanks, AK 99708	Project Name: Sahn Investments Project Number: [none] Project Manager: Lyle Greschover	Report Created: 07/09/07 09:40
---	---	--

BTEX by EPA Method 8021B
TestAmerica - Anchorage, AK

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
AQF0151-06 (SI-6-62007)		Soil			Sampled: 06/25/07 13:00					
Benzene	EPA 8021B	ND	—	0.0156	mg/kg dry	1.5x	7070015	07/03/07 11:15	07/05/07 19:13	
Toluene	"	ND	—	0.0311	"	"	"	"	"	
Ethylbenzene	"	0.0897	—	0.0311	"	"	"	"	"	R10
Xylenes (total)	"	0.678	—	0.0467	"	"	"	"	"	R10
Surrogate(s): a,a,a-TFT (PID)			83.5%		50 - 150 %	"				
AQF0151-07 (SI-DUP-62007)		Soil			Sampled: 06/25/07 13:18					
Benzene	EPA 8021B	ND	—	0.0157	mg/kg dry	1.5x	7070015	07/03/07 11:15	07/05/07 19:46	
Toluene	"	0.0314	—	0.0313	"	"	"	"	"	
Ethylbenzene	"	0.121	—	0.0313	"	"	"	"	"	R10
Xylenes (total)	"	0.853	—	0.0470	"	"	"	"	"	R10
Surrogate(s): a,a,a-TFT (PID)			74.1%		50 - 150 %	"				
AQF0151-08 (trip blank)		Soil			Sampled: 06/25/07 00:00					
Benzene	EPA 8021B	ND	—	0.0166	mg/kg wet	1x	7070015	07/03/07 11:15	07/05/07 17:33	
Toluene	"	ND	—	0.0333	"	"	"	"	"	
Ethylbenzene	"	ND	—	0.0333	"	"	"	"	"	
Xylenes (total)	"	ND	—	0.0500	"	"	"	"	"	
Surrogate(s): a,a,a-TFT (PID)			92.9%		50 - 150 %	"				



Alaska Resources & Environmental Services P.O. Box 83050 Fairbanks, AK 99708	Project Name: Sahn Investments Project Number: [none] Project Manager: Lyle Gresehover	Report Created: 07/09/07 09:40
---	---	-----------------------------------

Physical Parameters by APHA/ASTM/EPA Methods
TestAmerica - Anchorage, AK

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
AQF0151-01 (SI-1-62007)		Soil			Sampled: 06/25/07 11:41					
Dry Weight	TA-SOP	96.0	—	1.00	%	1x	7070013	07/03/07 10:53	07/05/07 07:03	
AQF0151-02 (SI-2-62007)		Soil			Sampled: 06/25/07 11:57					
Dry Weight	TA-SOP	94.9	—	1.00	%	1x	7070013	07/03/07 10:53	07/05/07 07:03	
AQF0151-03 (SI-3-62007)		Soil			Sampled: 06/25/07 12:12					
Dry Weight	TA-SOP	94.6	—	1.00	%	1x	7070021	07/05/07 11:03	07/06/07 14:09	
AQF0151-04 (SI-4-62007)		Soil			Sampled: 06/25/07 12:26					
Dry Weight	TA-SOP	89.9	—	1.00	%	1x	7070021	07/05/07 11:03	07/06/07 14:09	
AQF0151-05 (SI-5-62007)		Soil			Sampled: 06/25/07 12:42					
Dry Weight	TA-SOP	92.5	—	1.00	%	1x	7070021	07/05/07 11:03	07/06/07 14:09	
AQF0151-06 (SI-6-62007)		Soil			Sampled: 06/25/07 13:00					
Dry Weight	TA-SOP	93.2	—	1.00	%	1x	7070021	07/05/07 11:03	07/06/07 14:09	
AQF0151-07 (SI-DUP-62007)		Soil			Sampled: 06/25/07 13:18					
Dry Weight	TA-SOP	93.0	—	1.00	%	1x	7070021	07/05/07 11:03	07/06/07 14:09	

TestAmerica - Anchorage, AK

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.

Rachel J James For Troy J. Engstrom, Manager



Alaska Resources & Environmental Services	Project Name: Sahn Investments	
P.O. Box 83050	Project Number: [none]	Report Created: 07/09/07 09:40
Fairbanks, AK 99708	Project Manager: Lyle Greshover	

Diesel Range Organics (C10-C25) per AK102 - Laboratory Quality Control Results
 TestAmerica - Anchorage, AK

QC Batch: 7070011 Soil Preparation Method: EPA 3545

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes		
Blank (7070011-BLK1)													Extracted: 07/03/07 08:35			
Diesel Range Organics	AK 102	ND	--	20.0	mg/kg wet	1x	--	--	--	--	--	--	07/04/07 11:53			
<i>Surrogate(s): 1-Chlorooctadecane</i>		<i>Recovery: 84.0%</i>		<i>Limits: 50-150%</i>										07/04/07 11:53		
LCS (7070011-BS1)													Extracted: 07/03/07 08:35			
Diesel Range Organics	AK 102	127	--	20.0	mg/kg wet	1x	--	126	101%	(75-125)	--	--	07/04/07 12:27			
<i>Surrogate(s): 1-Chlorooctadecane</i>		<i>Recovery: 87.4%</i>		<i>Limits: 60-120%</i>										07/04/07 12:27		
LCS Dup (7070011-BSD1)													Extracted: 07/03/07 08:35			
Diesel Range Organics	AK 102	135	--	20.0	mg/kg wet	1x	--	126	107%	(75-125)	6.16%	(20)	07/04/07 12:59			
<i>Surrogate(s): 1-Chlorooctadecane</i>		<i>Recovery: 97.0%</i>		<i>Limits: 60-120%</i>										07/04/07 12:59		
Duplicate (7070011-DUP1)													QC Source: AQP0141-07		Extracted: 07/03/07 08:35	
Diesel Range Organics	AK 102	ND	--	20.0	mg/kg dry	1x	ND	--	--	--	16.8%	(20)	07/04/07 11:53			
<i>Surrogate(s): 1-Chlorooctadecane</i>		<i>Recovery: 85.8%</i>		<i>Limits: 50-150%</i>										07/04/07 11:53		
Matrix Spike (7070011-MS1)													QC Source: AQP0141-07		Extracted: 07/03/07 08:35	
Diesel Range Organics	AK 102	128	--	17.6	mg/kg dry	1x	3.06	124	101%	(75-125)	--	--	07/04/07 12:59			
<i>Surrogate(s): 1-Chlorooctadecane</i>		<i>Recovery: 93.3%</i>		<i>Limits: 50-150%</i>										07/04/07 12:59		
Matrix Spike Dup (7070011-MSD1)													QC Source: AQP0141-07		Extracted: 07/03/07 08:35	
Diesel Range Organics	AK 102	134	--	20.0	mg/kg dry	1x	3.06	131	99.9%	(75-125)	4.01%	(25)	07/04/07 13:33			
<i>Surrogate(s): 1-Chlorooctadecane</i>		<i>Recovery: 94.7%</i>		<i>Limits: 50-150%</i>										07/04/07 13:33		

TestAmerica - Anchorage, AK

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.

Rachel J James For Troy J. Engstrom, Manager



Alaska Resources & Environmental Services P.O. Box 83050 Fairbanks, AK 99708	Project Name: Sahn Investments Project Number: [none] Project Manager: Lyle Greschover	Report Created: 07/09/07 09:40
---	---	--

Diesel Range Organics (C10-C25) per AK102 - Laboratory Quality Control Results
 TestAmerica - Anchorage, AK

QC Batch: 7070020 **Soil Preparation Method:** EPA 3545

Analyte	Method	Result	MDL ^a	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (7070020-BLK1)													Extracted: 07/05/07 09:22	
Diesel Range Organics	AK 102	ND	--	20.0	mg/kg wet	1x	--	--	--	--	--	--	07/06/07 09:25	
<i>Surrogate(s): 1-Chlorooctadecane</i>		<i>Recovery: 94.8%</i>			<i>Limits: 50-150%</i>	"							07/06/07 09:25	
LCS (7070020-BS1)													Extracted: 07/05/07 09:22	
Diesel Range Organics	AK 102	141	--	20.0	mg/kg wet	1x	--	126	112%	(75-125)	--	--	07/06/07 09:57	
<i>Surrogate(s): 1-Chlorooctadecane</i>		<i>Recovery: 97.4%</i>			<i>Limits: 60-120%</i>	"							07/06/07 09:57	
LCS Dup (7070020-BSD1)													Extracted: 07/05/07 09:22	
Diesel Range Organics	AK 102	140	--	20.0	mg/kg wet	1x	--	126	111%	(75-125)	0.824%	(20)	07/06/07 10:29	
<i>Surrogate(s): 1-Chlorooctadecane</i>		<i>Recovery: 94.4%</i>			<i>Limits: 60-120%</i>	"							07/06/07 10:29	
Duplicate (7070020-DUP1)													QC Source: AQF0151-03 Extracted: 07/05/07 09:22	
Diesel Range Organics	AK 102	ND	--	20.0	mg/kg dry	1x	ND	--	--	--	0.0293%	(20)	07/06/07 09:25	
<i>Surrogate(s): 1-Chlorooctadecane</i>		<i>Recovery: 85.2%</i>			<i>Limits: 50-150%</i>	"							07/06/07 09:25	
Matrix Spike (7070020-MS1)													QC Source: AQF0151-03 Extracted: 07/05/07 09:22	
Diesel Range Organics	AK 102	149	--	20.0	mg/kg dry	1x	17.5	132	99.9%	(75-125)	--	--	07/06/07 10:29	
<i>Surrogate(s): 1-Chlorooctadecane</i>		<i>Recovery: 88.6%</i>			<i>Limits: 50-150%</i>	"							07/06/07 10:29	
Matrix Spike Dup (7070020-MSD1)													QC Source: AQF0151-03 Extracted: 07/05/07 09:22	
Diesel Range Organics	AK 102	149	--	20.0	mg/kg dry	1x	17.5	128	103%	(75-125)	0.158%	(25)	07/06/07 11:01	
<i>Surrogate(s): 1-Chlorooctadecane</i>		<i>Recovery: 89.2%</i>			<i>Limits: 50-150%</i>	"							07/06/07 11:01	

TestAmerica - Anchorage, AK

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.

Rachel J James For Troy J. Engstrom, Manager



Alaska Resources & Environmental Services	Project Name: Sahn Investments	Report Created: 07/09/07 09:40
P.O. Box 83050	Project Number: [none]	
Fairbanks, AK 99708	Project Manager: Lyle Greshover	

BTEX by EPA Method 8021B - Laboratory Quality Control Results
 TestAmerica - Anchorage, AK

QC Batch: 7070015 **Soil Preparation Method: AK101 Field Prep**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
---------	--------	--------	------	-----	-------	-----	---------------	-----------	-------	----------	-------	----------	----------	-------

Blank (7070015-BLK1)

Extracted: 07/03/07 11:15

Benzene	EPA 8021B	ND	—	0.0166	mg/kg wet	1x	—	—	—	—	—	—	07/04/07 18:37	
Toluene	"	ND	—	0.0333	"	"	—	—	—	—	—	—	"	
Ethylbenzene	"	ND	—	0.0333	"	"	—	—	—	—	—	—	"	
Xylenes (total)	"	ND	—	0.0500	"	"	—	—	—	—	—	—	"	

Surrogate(s): a,a,a-TFT (PID) Recovery: 91.5% Limits: 50-150% 07/04/07 18:37

LCS (7070015-BS1)

Extracted: 07/03/07 11:15

Benzene	EPA 8021B	0.250	—	0.0166	mg/kg wet	1x	—	0.212	118%	(73.5-120)	—	—	07/04/07 17:30	
Toluene	"	1.78	—	0.0333	"	"	—	1.84	96.7%	(76.3-120)	—	—	"	
Ethylbenzene	"	0.384	—	0.0333	"	"	—	0.368	104%	(80-122)	—	—	"	
Xylenes (total)	"	2.06	—	0.0500	"	"	—	2.12	97.1%	(80-120)	—	—	"	

Surrogate(s): a,a,a-TFT (PID) Recovery: 101% Limits: 60-120% 07/04/07 17:30

LCS Dup (7070015-BS1)

Extracted: 07/03/07 11:15

Benzene	EPA 8021B	0.241	—	0.0166	mg/kg wet	1x	—	0.212	114%	(73.5-120)	3.77% (13)	—	07/04/07 18:04	
Toluene	"	1.74	—	0.0333	"	"	—	1.84	94.5%	(76.3-120)	2.33% (12.3)	—	"	
Ethylbenzene	"	0.351	—	0.0333	"	"	—	0.368	95.3%	(80-122)	9.06% (10.1)	—	"	
Xylenes (total)	"	2.02	—	0.0500	"	"	—	2.12	95.4%	(80-120)	1.81% (11.6)	—	"	

Surrogate(s): a,a,a-TFT (PID) Recovery: 98.6% Limits: 60-120% 07/04/07 18:04

Matrix Spike (7070015-MS1)

QC Source: AQP0151-05

Extracted: 07/03/07 11:15

Benzene	EPA 8021B	0.761	—	0.0159	mg/kg dry	1.5x	ND	0.922	82.5%	(80-125)	—	—	07/05/07 18:06	
Toluene	"	0.764	—	0.0318	"	"	0.0112	0.882	85.4%	(80-130)	—	—	"	
Ethylbenzene	"	0.807	—	0.0318	"	"	0.00539	0.886	90.4%	(80-138)	—	—	"	
Xylenes (total)	"	2.33	—	0.0476	"	"	0.00879	2.67	87.2%	(80-141)	—	—	"	

Surrogate(s): a,a,a-TFT (PID) Recovery: 79.3% Limits: 50-150% 07/05/07 18:06

Matrix Spike Dup (7070015-MSD1)

QC Source: AQP0151-05

Extracted: 07/03/07 11:15

Benzene	EPA 8021B	0.778	—	0.0159	mg/kg dry	1.5x	ND	0.922	84.4%	(80-125)	2.27% (18.4)	—	07/05/07 18:40	
Toluene	"	0.780	—	0.0318	"	"	0.0112	0.882	87.2%	(80-130)	2.07% (18)	—	"	
Ethylbenzene	"	0.843	—	0.0318	"	"	0.00539	0.886	94.5%	(80-138)	4.39% (15.3)	—	"	
Xylenes (total)	"	2.45	—	0.0476	"	"	0.00879	2.67	91.4%	(80-141)	4.74% (14.2)	—	"	

Surrogate(s): a,a,a-TFT (PID) Recovery: 81.6% Limits: 50-150% 07/05/07 18:40

TestAmerica - Anchorage, AK

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.

Rachel J James For Troy J. Engstrom, Manager



Alaska Resources & Environmental Services	Project Name: Sahn Investments	Report Created: 07/09/07 09:40
P.O. Box 83050	Project Number: [none]	
Fairbanks, AK 99708	Project Manager: Lyle Greschover	

Physical Parameters by APHA/ASTM/EPA Methods - Laboratory Quality Control Results
 TestAmerica - Anchorage, AK

QC Batch: 7070013	Soil Preparation Method: *** DEFAULT PREP
--------------------------	--

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Duplicate (7070013-DUP1)			QC Source: AQP0141-07			Extracted: 07/03/07 10:53								
Dry Weight	TA-SOP	92.1	—	1.00	%	1x	89.5	—	—	—	2.84% (25)		07/05/07 07:03	

QC Batch: 7070021	Soil Preparation Method: *** DEFAULT PREP
--------------------------	--

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Duplicate (7070021-DUP1)			QC Source: AQP0151-03			Extracted: 07/05/07 11:03								
Dry Weight	TA-SOP	94.8	—	1.00	%	1x	94.6	—	—	—	0.243% (25)		07/06/07 14:09	

TestAmerica - Anchorage, AK

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.

Rachel J James For Troy J. Engstrom, Manager



Alaska Resources & Environmental Services

P.O. Box 83050
Fairbanks, AK 99708

Project Name: **Sahn Investments**
Project Number: [none]
Project Manager: Lyle Gresehover

Report Created:
07/09/07 09:40

Notes and Definitions

Report Specific Notes:

- R10 - The RPD between the primary and confirmatory analysis exceeded 40%. Per method 8000B, the lower value was reported due to apparent chromatographic problems.

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. Results and Reporting Limits have been corrected for Percent Dry Weight.
- wet - Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported on a Wet Weight Basis.
- 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.
- Electronic Signature - Electronic Signature added in accordance with TestAmerica's *Electronic Reporting and Electronic Signatures Policy*. Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.



TestAmerica

ANALYTICAL TESTING CORPORATION

11720 North Creek Pkwy N Suite 400, Bothell, WA 98011-4244
 11922 2nd Place Ave, Spokane, WA 99206-3302
 9405 SW Nimbus Ave, Beaverton, OR 97008-7145
 2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119

415-420-9200 FAX 420-9210
 509-924-9200 FAX 924-9290
 503-906-9200 FAX 906-9210
 907-583-9200 FAX 583-9210

CHAIN OF CUSTODY REPORT

Work Order #: **AGF0151**

CLIENT: Alaska Resources and Environmental Services
 REPORT TO: email: lye@ak-res.com
 ADDRESS: Mail: P.O. Box 83050
 Fairbanks, Alaska 99708
 PHONE: (907) 374-3226 FAX: (907) 374-3219

INVOICE TO:
 Alaska Resources and Environmental Services
 P.O. Box 83050
 Fairbanks, Alaska 99708

P.O. NUMBER:

PROJECT NAME: **Sahn Investments**

PRESERVATIVE

PROJECT NUMBER:

REQUESTED ANALYSES

SAMPLED BY: **Lyle Greshover**

TURNAROUND REQUEST
 in Business Days *

Organic & Inorganic Analysis
 7 8 9 3 2 1 <1

Petroleum Hydrocarbon Analysis
 0 1 2 1 <1

OTHER: Specify:
 * Turnaround Requested for Non standard amp. Insert Request

CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	ANALYSIS	METH	PREPARED BY	ANALYST	LABORATORY	DATE	TIME	RECEIVED BY	PRINT NAME	DATE	TIME	MATRIX (% L.C.)	# OF CONT.	LOCATION / COMMENTS	TA WOTD
SI-1-62007	6/25/2007 1141	X											S	2		01
SI-2-62007	6/25/2007 1157	X											S	2		02
SI-3-62007	6/25/2007 1212	X											S	2		03
SI-4-62007	6/25/2007 1226	X											S	2		04
SI-5-62007	6/25/2007 1242	X											S	2		05
SI-6-62007	6/25/2007 1300	X											S	2		06
SI-DUP-62007	6/25/2007 1318	X											S	2		07

RELEASED BY: *Lyle Greshover*
 PRINT NAME: **Lyle Greshover**
 DATE: 06/27/07
 TIME: 1400
 FROM: **AK**
 TO: **TA**

RECEIVED BY: *Sharon Beck*
 PRINT NAME: **Sharon Beck
 DATE: 06/28/07
 TIME: 1007**

TESTS: **4.0**
 PAGES: **1 of 1**

Level II Reporting Requested

Notes: By relinquishing samples to TestAmerica, client agrees to pay for the services requested on this chain of custody form and for any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice unless otherwise contracted. Sample(s) will be disposed of after 30 days unless otherwise contracted.

Test America Cooler Receipt Form

(Army Corps. Compliant)

WORK ORDER # AQF0151 CLIENT: ARES PROJECT: Schn Investments

Date /Time Cooler Arrived 06/28/07 09:35 Cooler signed for by: David Sumnerville
(Print name)

Preliminary Examination Phase:

Date cooler opened: same as date received @ 1007 / /

Cooler opened by (print) Johann Dreher (sign) Johann Dreher

1. Delivered by ALASKA AIRLINES Fed-Ex UPS NAC LYNDEN CLIENT Other: _____

Shipment Tracking # if applicable PRO 4147460 (include copy of shipping papers in file)

2. Number of Custody Seals 1 Signed by Jean Greshover Date 06/ /

Were custody seals unbroken and intact on arrival? Yes No

3. Were custody papers sealed in a plastic bag? Yes No

4. Were custody papers filled out properly (ink, signed, etc.)? Yes No

5. Did you sign the custody papers in the appropriate place? Yes No

6. Was ice used? Yes No Type of ice: blue ice gel ice real ice dry ice Condition of Ice: soft

Temperature by Digi-Thermo Probe 4.0 °C Thermometer # rcc + 4

7. Packing in Cooler: bubble wrap styrofoam cardboard Other: _____

8. Did samples arrive in plastic bags? Yes No

9. Did all bottles arrive unbroken, and with labels in good condition? Yes No

10. Are all bottle labels complete (ID, date, time, etc.) Yes No

11. Do bottle labels and Chain of Custody agree? Yes No

12. Are the containers and preservatives correct for the tests indicated? Yes No

13. Is there adequate volume for the tests requested? Yes No

14. Were VOA vials free of bubbles? N/A Yes No

If "NO" which containers contained "head space" or bubbles? _____

Log-in Phase:

Date of sample log-in 06/28/07

Samples logged in by (print) Johann Dreher (sign) Johann Dreher

1. Was project identifiable from custody papers? Yes No

2. Do Turn Around Times and Due Dates agree? Yes No

3. Was the Project Manager notified of status? Yes No

4. Was the Lab notified of status? Yes No

5. Was the COC scanned and copied? Yes No

AQF 0151

CUSTODY SEAL

Date

6/27/97

Signature

John DeWitt

TestAmerica
ANALYTICAL TESTING CORPORATION



Phase II Environmental Site Assessment/Release Investigation
1406 Kellum Street, Fairbanks, AK

July, 2007

Appendix D

STATEMENT OF QUALIFICATIONS

Lyle Gresehover


Education Bachelor of Science – Geology
University of Alaska Fairbanks

Certifications OSHA 40-Hour HAZWOPER training
OSHA 8-Hour HAZWOPER refresher course
EPA/AHERA 40-Hour Asbestos Abatement Contractors & Supervisors
OSHA On-Site Manager/Supervisor training
Confined Space Training
Alaska Department of Environmental Conservation Certified Sanitary
Survey Inspector/Public water systems
USACE Wetlands Delineation certification
Alaska Department of Environmental Conservation Qualified Person
AK Class A Commercial Drivers License with Hazardous Materials
endorsement

Employment 1982 – Present
Wray Petroleum Company – Exploration Geologist
University of Alaska Fairbanks – Project manager/Superintendent
Alaska Department of Environmental Conservation – Environmental
Specialist III
ENSR Environmental and Engineering – Environmental Geologist
Lifewater Engineering – Environmental Geologist/Project Manager
Boreal Environmental Services and Technology – Project Manager
Alaska Resources and Environmental Services – Owner/Consultant

Technical Specialties

Project Management
Environmental Compliance



Air, water, and solid waste permitting
Multimedia sampling (Air, Groundwater, Surface Water, Soil)
NEPA Environmental Impact Studies and Documentation
Environmental Baseline Surveys
Wetlands delineations and permitting
Pollution prevention
Phase I and II Environmental Site Assessments
Sampling and Analysis Plans
Field Screening/Contaminated Sites
Site Characterizations and Release Investigations
Groundwater and natural attenuation studies
Groundwater monitoring well development
Risk Assessment
Soil Logging/Sieve Analysis
Hazardous waste identification and compliance