rec'd 2/6/14

Limited Site Characterization Summary Report

Raven Landing Apartments
1041&1101 Kellum Street
Fairbanks, Alaska

February 6, 2014

Prepared for:

Weeks Field Estates II Limited Partnership

Prepared by:

Alaska Resources and
Environmental Services, LLC.

284 Topside Drive
Fairbanks, AK 99712

Prepared by:

Lyle Gresehover
Project Manager/Geologist

ACRONYMS AND ABBREVIATIONS

AAC.....Alaska Administrative Code
ADEC.....Alaska Department of Environmental Conservation
ARES .....Alaska Resources and Environmental Services, LLC
bgs.....Below Ground Surface
BH.....Borehole
BTEX .....Benzene, Toluene, Ethylbenzene and Xylenes
COC .....Chain of Custody
FNSB.....Fairbanks North Star Borough
LCS .....Laboratory Control Sample
LCSD .....Laboratory Control Sample Duplicate
mg/kg .....Milligrams per kilogram
MS/MSD.....Matrix Spike/Matrix Spike Duplicate
ND.....Non-Detect
PID .....Photoionization Detector
ppm .....Parts Per Million
QA.....Quality Assurance
QC.....Quality Control
RPD.....Relative Percent Difference
VOC .....Volatile Organic Compound

LIMITED SITE CHARACTERIZATION SUMMARY REPORT

1.0 INTRODUCTION

This report summarizes the findings of the limited site characterization conducted by Alaska Resources and Environmental Services, LLC (ARES) for the subject property located at 1041 and 1101 Kellum Street, Fairbanks, AK (Figures 1). The property is owned by the Week Field Estates II Limited Partnership. This Limited Site Characterization Summary Report was conducted at the request of Weeks Field Estates II Limited Partnership.

Fieldwork for this limited site characterization occurred on October 10, 2013. This report contains a summary of on-site work and includes field observations and analytical data from sampling activities.

1.1 Objectives and Scope of Work

PCE
soil
stockpile

The purpose of this project was to collect soil field screen samples and soil analytical samples from previously stockpiled soil to determine if soil was above ADEC cleanup levels for Contaminants of Concern. In order to perform the limited site characterization, several activities were performed to include the following:

- Conducted a visual site inspection
- Collection of soil field screen samples and soil analytical samples from soil borings to provide a limited site characterization of a suspect soil stockpile generated during construction activities; and
- Documented site activities to include the collection of field notes and photographs.

1.2 Project Organization / Personnel

Test America Anchorage of 2000 W International Airport Road Suite A10, Anchorage, Alaska 99502-1119, compiled the analytical report. Test America is approved by ADEC to provide testing of soil for hazardous substances and petroleum related contaminants. The telephone number for Test America is (907) 563-9200.

Test America Spokane of 11922 E 1st Avenue, Spokane, Washington 99206, performed laboratory analysis of VOC's in soil. Test America is approved by ADEC to provide testing of soil for hazardous substances and petroleum related contaminants. The telephone number for Test America Spokane is (509) 924-9200.

The site characterization field activities covered in this report was conducted on October 10, 2013, by Mr. Dustin Stahl, Environmental Scientist for Alaska Resources & Environmental Services. Mr. Stahl is listed as a Qualified Person by the Alaska Department of Environmental Conservation (ADEC) under 18 AAC 78. Mr. Lyle Gresehover of ARES 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.

In summary Test America, performed the following activities:

- Conducted laboratory analysis of soil samples. Laboratory quality control and quality assurance was also completed.

In summary ARES performed the following activities:

- Performed the limited site characterization at the subject property;
- Collected soil field screen samples and soil analytical samples from soil borings;
- Obtained field measurements to include site plan, PID field screening measurements, and sample locations;
- Documented site activities; and
- Preparation of Limited Site Characterization Summary Report.

1.3 Regulatory Framework

A regulatory framework for the site assessment activity has been developed with the consideration of the following regulations and guidance:

- 18 AAC 75 *Oil and Other Hazardous Substances Pollution Control*, as amended through April 8, 2012;
- 18 AAC 78 *Underground Storage Tanks* as amended through July 25, 2012;
- ADEC *UST Procedures Manual* as amended through November 7, 2002
- 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 April 8, 2012;
- ADEC soil cleanup levels in accordance with 18 AAC 75.341 Table B1 and B2, Method Two, 'under 40" zone', migration to groundwater; and
- ADEC *Draft Field Sampling Guidance* as amended through May 2010.

2.0 SITE DESCRIPTION

2.1 Location

The subject property is located 1041 and 1101 Kellum Street, Fairbanks, AK (Figure 1). The subject property has the legal description of:

- Tract B-1 Weeks Field Community

2.2 History

G2 Construction was contracted by Weeks Field Estates II Limited Partnership to construct several multi-unit apartment buildings and associated infrastructure on several adjacent

properties owned by the Weeks Field Estates II Limited Partnership. During the foundation excavation in the north/northwest corner of building #3, workers excavated and stockpiled soils from an area of known perchloroethylene (PCE) contamination. The contamination was associated with a former shop located on site and was characterized, discovered, and reported by NORTECH Environment, Energy, Health & Safety Consultants who performed a site investigation of the area.

Approximately 370 cy of excavated soils were stockpiled in a 100'long, 50' wide, 2' deep stockpile placed directly on the ground (no liner) in an open field to the east of the apartment buildings. NORTECH estimated that up to 10 cy of potentially PCE contaminated soils were intermixed during the excavation and stockpiling of 370 cy of excavated soils.

Before any environmental investigative work could be done, this small stockpile was covered with additional fresh material (non-contaminated soils) from other excavations on the property. With ADEC approval, the additional soil was removed from the stockpile minus a safety margin to expose the original suspect soil stockpile. The original suspect soil was not disturbed to facilitate ARES's site characterization activities.

3.0 LIMITED SITE CHARACTERIZATION ACTIVITIES

3.1 Field Observations

Field activities documented in this report took place on October 10, 2013.

Site characterization work included the following activities:

- Visual Site Inspection (VSI) of entire site;
- Selection of sampling points/boreholes;
- Advancement of nine (9) boreholes from 0' to 2' bgs throughout the suspect soil stockpile to determine stockpiled soil conditions;
- Collection of field screen and analytical samples; and
- Documentation of site activities.

A total of nine (9) boreholes were advanced and soil analytical samples in addition to soil field screen samples were collected at the base of the borehole to assess subsurface soil conditions. Boreholes were advanced using a Tanaka gasoline-powered auger with a 4' flight. Soil samples were collected from the base of the bore hole using a disposable sterile plastic sampling scoop.

0 10ppm

Field screen samples and analytical samples were collected in conjunction with drilling activities. Analytical samples were to be chosen for analysis based upon PID field screen readings. Since all field screen results were 0.0ppm, the stockpile was sampled in a grid pattern. Field screen samples used for PID analysis were not used for analytical sampling.

Nine (9) field screen samples were collected during the preliminary site investigation. ARES used a MiniRAE 3000 PID (Serial No. #592-910012). 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 10.

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 10 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. Field screen results are displayed in Table 1. Borehole locations are shown in Figure 2.

Table 1: Field Screen Measurements Summary

Raven Landing Soil Stockpile		
Sample / Borehole Location	**Depth (inches)**	**PID Value (ppm)**
RL-BH1-1013	20	0.0
RL-BH2-1013	20	0.0
RL-BH3-1013	16	0.0
RL-BH4-1013	20	0.0
RL-BH5-1013	19	0.0
RL-BH6-1013	12	0.0
RL-BH7-1013	19	0.0
RL-BH8-1013	22	0.0
RL-BH9-1013	18	0.0

3.2 Analytical Soil Sampling

A total of ten (10) soil analytical samples (includes one blind field duplicate sample) were collected on October 10, 2013 on the subject property from borehole samples collected at specified depths. Soil samples consisted of grab samples and were collected directly from soil borings. PID field screen sample material was not used for analytical sample collection.

All samples were analyzed for VOC's by 8260B. Borehole / soil analytical sample locations are shown in Figure 2.

Analytical samples were placed into certified clean glass jars provided by Test America. Samples were handled using disposable Nitrile gloves. To comply with the *ADEC Draft Field Sampling Guidance 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. 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. Analytical soil results are summarized in Table 2. Complete analytical results are included in Appendix C.

3.4 ADEC Target Cleanup Levels

Target soil cleanup levels for the subject site was determined using 18 AAC 75.341 (Method Two) Soil Cleanup Levels (Table B1, B2) most stringent cleanup levels under 40 inch zone. Soil cleanup levels for detected VOC compounds are included in Table 2.

3.5 Soil Analytical Results

The analytical results are summarized in Table 2. Analytical sample locations (borehole locations) are shown in Figure 2. Complete analytical results are included in Appendix C.

Table 2: VOC Detection Summary

Sample ID	Compounds Detected Above MDL	Analytical result (mg/kg) [2]	Regulatory limits [1] (mg/kg) [2]
RL-BH1-1013	Toluene	0.00999 J	6.5
RL-BH2-1013	Toluene	0.0173 J	6.5
	trans-1,2-Dichloroethene	0.0328 J	3.7
	Xylenes (total)	0.00863 J	63
RL-BH3-1013	Toluene	0.00842 J	6.5
RL-BH4-1013	Toluene	0.00621 J	6.5
RL-BH5-1013	Toluene	0.0243 J	6.5
	Xylenes (total)	0.0331 J	63
RL-BH6-1013	Toluene	0.0243 J	6.5
	Xylenes (total)	0.0138 J	63
RL-BH7-1013	Toluene	0.00565 J	6.5
RL-BH8-1013	Toluene	0.135 J	6.5
	Xylenes (total)	0.0129 J	63
RL-BH9-1013	Toluene	0.0214 J	6.5
	Xylenes (total)	0.0137 J	63
RL-DUP-1013	Toluene	0.0206 J	6.5
	Xylenes (total)	0.0125 J	63

[1] Regulatory limits are sourced from Title 18 of the Alaska Administrative Code, Chapter 75. Section 341. Table B1, B2 Method 2. Most stringent level listed for above 40" zone (Revised as of April 8, 2012).
[2] Units mg/kg unless otherwise specified
J = Analyte was detected above the MDL but below the MRL. The given value is considered an estimation.
Results above ADEC Regulatory Limit in **Bold**.

All analytical samples were found to be below ADEC cleanup limits for all VOC compounds.

4.0 QUALITY ASSURANCE AND QUALITY CONTROL

4.1 Blind Duplicate Sample

Field quality control (QC) procedures for this project included the collection and analysis of a blind field duplicate sample. The QC sample was analyzed to assess the quality of sample collection and handling, as well as the accuracy and precision of the laboratory's analytical procedures.

RPD calculations provide a comparison of two theoretically identical samples that are submitted blind to the laboratory in order to provide an un-biased measure of precision. Due to the nature of the RPD calculation, sample data for both samples must be reported in order for the RPD calculation to provide meaningful data. RPD calculations are shown below in Table 3.

Table 3: Relative Percent Difference Calculations for Soil

Sample ID / Duplicate ID	Date	Compound	Sample Concentration (mg/kg)	Duplicate Concentration (mg/kg)	RPD (%)
RL-BH5-1013/ RL-DUP-1013	10/10/2013	Toluene	0.0352	0.0214	48.8

Given two sample concentrations (X and Y) the formula to determine RPD is the absolute value of the following:

$$[((X - Y)/(X + Y))/2] * 100 = RPD$$

RPD calculations above the ADEC limit of 50% for soil samples are given in **bold**.

The ADEC recommended limit for RPD in soil is <50%. The RPD calculation for soil analysis was within the ADEC recommended limits.

4.2 Trip Blank Sample

Field quality control (QC) procedures for this project included the analysis of a soil trip blank sample which accompanied the samples in the field. The trip blank sample was analyzed to assess the quality of sample collection and handling.

In ideal conditions the analysis of a trip blank sample should not indicate the presence of any of the tested analytes in a quantity above the method reporting limit (MRL). A result above the MRL can indicate that cross-contamination occurred between samples during sample transport or analysis, or indicate laboratory contamination.

One soil trip blank sample was included with this sample shipment. The trip blank sample was analyzed for VOC's by EPA 8260B. Toluene was detected above the MRL in the soil trip blank sample (0.151mg/kg). Toluene was also detected in the laboratory method blank (0.00350mg/kg) at levels below the MRL. It is possible that cross-contamination between samples occurred. It is also possible that laboratory contamination or calibration error occurred. Data quality is affected. Results for toluene should be viewed qualitatively rather than quantitatively, however, results are well below ADEC cleanup levels for toluene in soil.

4.3 Data Quality Review

The ADEC Environmental Laboratory Data Quality Assurance Requirements (March 2009) and United States Environmental Protection Agency (EPA) National Functional Guidelines for Superfund Organic Methods Data Review (June 2008) were followed in this site investigation. The data was reviewed to determine the data quality and to evaluate potential impact on the usability of the data. The review was performed using Level II reports that were provided by Test America, Inc. laboratory of Anchorage, AK. The analytical laboratory repots, chain-of-custody records, and ADEC lab quality checklist is included in Appendix C.

The following quality control parameters were reviewed:

- Holding times
- Sample handling and receiving
- Surrogate percent recovery
- Field duplicate sample comparability
- Matrix spike/matrix spike duplicate (MS/MSD) percent recoveries and relative percent difference (RPD)
- Laboratory control sample (LCS)/Laboratory control sample duplicate (LCSD) percent recoveries and RPD
- Method blanks
- Trip blanks
- Method Sensitivity – reporting limits and practical quantitation limits (PQL)

The quality control parameters with regard to laboratory report number AWJ0044 were found to be within accepted limits with the following exceptions:

- There are twelve analytes that have PQL's greater than the ADEC cleanup levels, but the laboratory MDL is less than cleanup levels for these twelve analytes in all samples. Two analytes 1,2-Dibromoethane and 1,2,3-Trichloropropane have MDL's and PQL's greater than ADEC cleanup levels for all samples. Vinyl chloride and methylene chloride have MDL's and PQL's greater than ADEC cleanup levels in one sample. Data quality is affected. Non-detect results with elevated detection limits could possibly be above ADEC cleanup levels for the affected samples/analytes, however none of these analytes were target/ historical analytes for the investigation.
- Toluene was detected above the MRL in the soil trip blank sample (0.151mg/kg). Toluene was also detected in the laboratory method blank (0.00350mg/kg) at levels below the MRL. It is possible that cross-contamination between samples occurred. It is also possible that laboratory contamination or a laboratory calibration error occurred. Data quality is affected. Results for toluene should be viewed qualitatively rather than quantitatively.

5.0 CONCLUSIONS AND RECOMMENDATIONS

This report summarizes the findings of the Limited Site Characterization conducted by Alaska Resources and Environmental Services, LLC (ARES) for the subject property located at 1041

and 1101 Kellum Street, Fairbanks, Alaska. ARES completed this investigation by request of Weeks Field Estates II Limited Partnership. The property is multi-unit, rent restricted apartment building and surrounding property currently owned by the Weeks Field Estates II Limited Partnership according to Fairbanks North Star Bourough records.

The site investigation took place on October 10, 2013. A total of nine (9) soil field screen samples and ten (10) soil analytical samples (including one duplicate sample) were collected from boreholes placed in a grid pattern on the suspect soil stockpile. Soil samples consisted of grab samples and all samples were analyzed for VOC's by 8260B.

ARES concludes and recommends the following:

- The suspect Contaminant of Concern, PCE, was not detected in soil analytical samples. All soil samples were non-detect for PCE in soil. In addition, all soil samples were below ADEC cleanup levels for remaining VOC compounds.
- ARES recommends that the site be granted 'Closure' by ADEC. ARES recommends that ADEC consult with USEPA prior to removing soils off-site.

6.0 LIMITATIONS OF INVESTIGATION

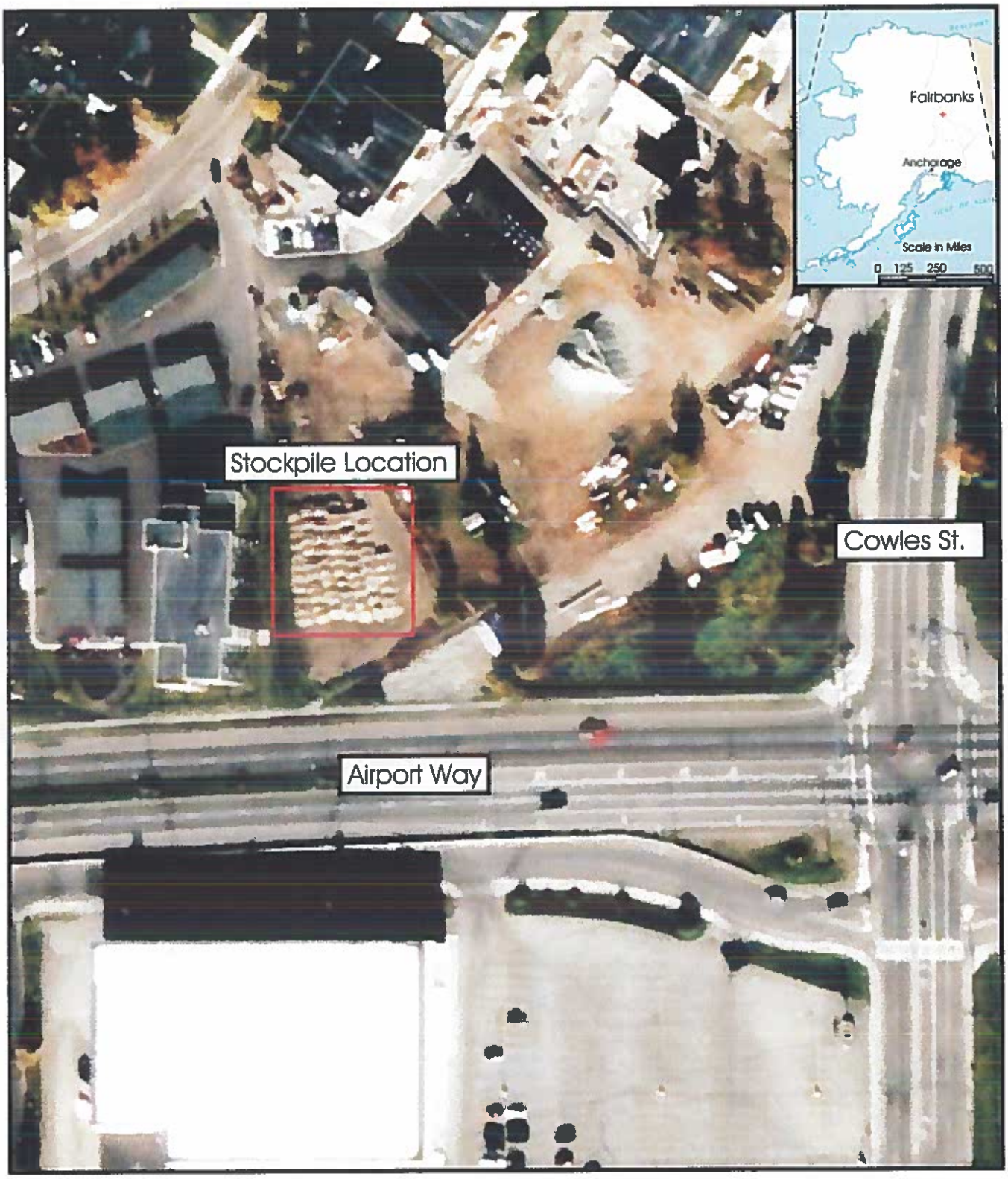
This report presents the analytical results from a limited number of soil samples and should not be construed as a comprehensive study of subsurface conditions at the site. The samples were intended to evaluate the presence or absence of contaminants at the locations selected. Detectable levels of VOC's 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 preformed. 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.

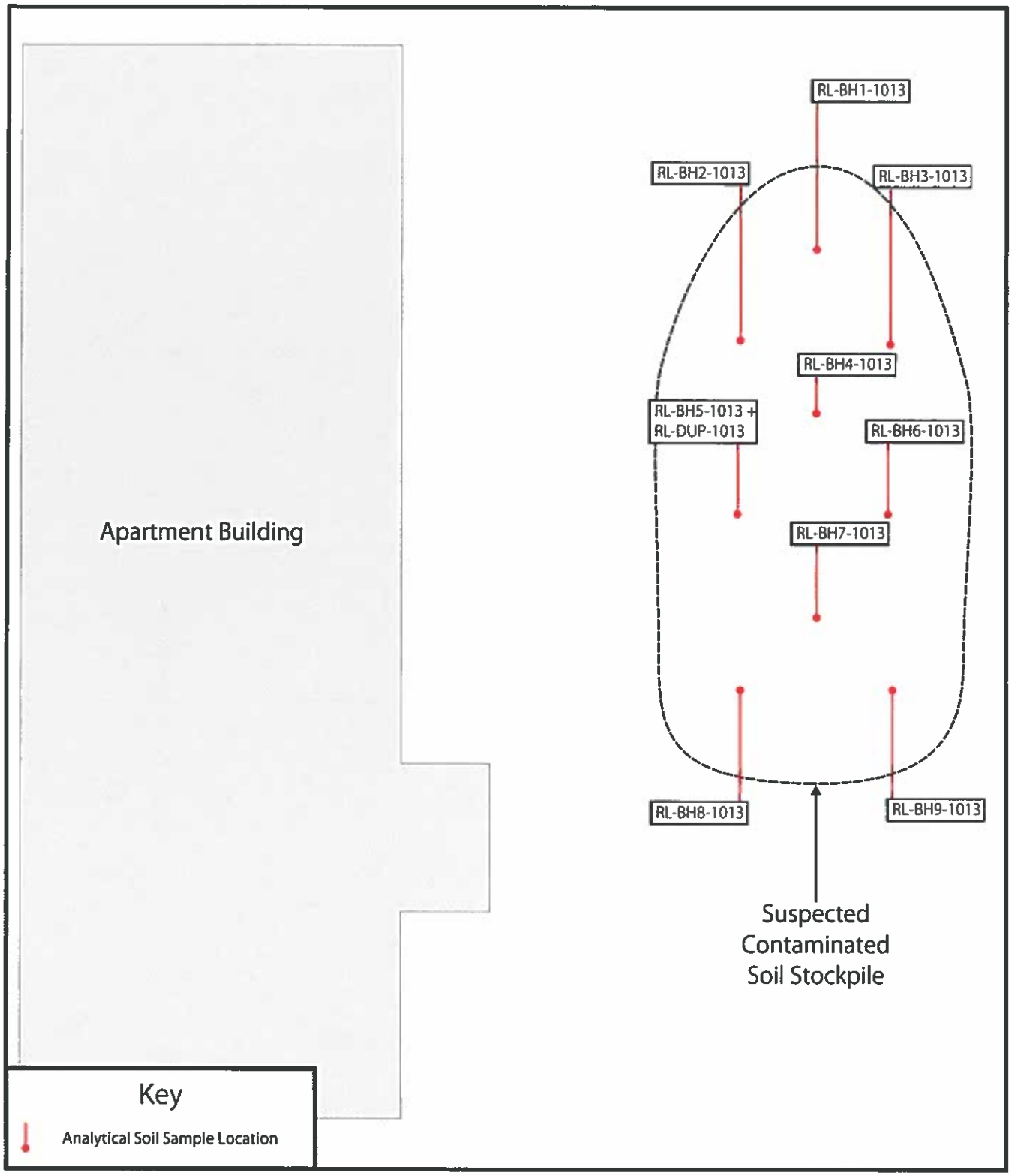
This report was prepared for the exclusive use of Week Field Estates II Limited Partnership and its representatives. If it is made available to others, it should be for information on factual data only and not as a warranty of subsurface conditions.

Appendix A:

Figures



2012 Aerial Photograph Fairbanks, AK	Date: 02/05/14 Drawn: JDG	Scale in Feet: 0 50 100 150 200	**Alaska Resources and Environmental Services, LLC** **284 Topside Fairbanks, AK 99701** **PH. (907) 374-3226** **FAX (907) 374-3219**	FIGURE 1
	Project: Weeks Field Stockpile Sampling Report	N W E S		



Sample Location Map	Date: 02/05/14 Drawn: JDG Project: Weeks Field Stockpile Sampling Report	Scale in Feet: 0 5 10 15 20 25 N W E S	**Alaska Resources and Environmental Services, LLC** 284 Topside Fairbanks, AK 99701 PH. (907) 374-3226 FAX (907) 374-3219

FIGURE 2

Appendix B:

Photographs

Photograph 1: Viewed Northwest Raven Landing suspect soil stockpile.	Photograph 2: No photograph.	**Alaska Resources and Environmental Services, LLC** **284 Topside Fairbanks, AK 99701** **PH. (907) 374-3226** **FAX (907) 374-3219**	Photographs 1-2
Project: Limited Site Characterizations Summary Report Raven Landing			

Appendix C:

Analytical Results
&
ADEC Lab Quality Checklist

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Anchorage
2000 West International Airport Road Suite A10
Anchorage, AK 99502-1119
Tel: (907) 563-9200

TestAmerica Job ID: AWJ0044
Client Project/Site: RL1013
Client Project Description: Raven Landing
Revision: 1

For:
Alaska Resources & Environmental Services
P.O. Box 83050
Fairbanks, AK 99708

Attn: Lyle Gresehover

Johanna Dreher

Authorized for release by:
12/6/2013 1:14:23 PM

Johanna L Dreher, Client Services Manager
(907) 563-9200
johanna.dreher@testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Qualifiers

GCMS Volatiles

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: AWJ0044

Laboratory: TestAmerica Anchorage

Narrative

Revised Report Issued on 12/6/13
8260 VOC method detection limit (MDL) data added as requested by the client.

Receipt
Samples were received on 10/16/2013 at 15:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice.

The temperature of the cooler at receipt was 5.4° C.

Subcontracted
This data set was subcontracted to TestAmerica Spokane from TestAmerica Anchorage.

Detection Summary

Client: Alaska Resources & Environmental Services
Project/Site: RL1013

TestAmerica Job ID: AWJ0044

Client Sample ID: RL-BH1-1013 — Lab Sample ID: AWJ0044-01

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.00999	J	0.166	0.00449	mg/kg dry	1.00	¤	EPA 8260C	Total

Client Sample ID: RL-BH2-1013 — Lab Sample ID: AWJ0044-02

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
trans-1,2-Dichloroethene	0.0328	J	0.345	0.00598	mg/kg dry	1.00	¤	EPA 8260C	Total
Toluene	0.0173	J	0.115	0.00311	mg/kg dry	1.00	¤	EPA 8260C	Total
m,p-Xylene	0.00863	J	0.460	0.00679	mg/kg dry	1.00	¤	EPA 8260C	Total

Client Sample ID: RL-BH3-1013 — Lab Sample ID: AWJ0044-03

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.00842	J	0.140	0.00379	mg/kg dry	1.00	¤	EPA 8260C	Total

Client Sample ID: RL-BH4-1013 — Lab Sample ID: AWJ0044-04

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.00621	J	0.155	0.00419	mg/kg dry	1.00	¤	EPA 8260C	Total

Client Sample ID: RL-BH5-1013 — Lab Sample ID: AWJ0044-05

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.0352	J	0.207	0.00559	mg/kg dry	1.00	¤	EPA 8260C	Total
m,p-Xylene	0.0238	J	0.828	0.0122	mg/kg dry	1.00	¤	EPA 8260C	Total
o-Xylene	0.00932	J	0.414	0.00455	mg/kg dry	1.00	¤	EPA 8260C	Total
Xylenes (total)	0.0331	J	1.24	0.0168	mg/kg dry	1.00	¤	EPA 8260C	Total

Client Sample ID: RL-BH6-1013 — Lab Sample ID: AWJ0044-06

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.0243	J	0.110	0.00298	mg/kg dry	1.00	¤	EPA 8260C	Total
m,p-Xylene	0.0138	J	0.442	0.00652	mg/kg dry	1.00	¤	EPA 8260C	Total
Xylenes (total)	0.0138	J	0.663	0.00895	mg/kg dry	1.00	¤	EPA 8260C	Total

Client Sample ID: RL-BH7-1013 — Lab Sample ID: AWJ0044-07

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.00565	J	0.0942	0.00254	mg/kg dry	1.00	¤	EPA 8260C	Total

Client Sample ID: RL-BH8-1013 — Lab Sample ID: AWJ0044-08

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.0250	J	0.135	0.00365	mg/kg dry	1.00	¤	EPA 8260C	Total
m,p-Xylene	0.0129	J	0.541	0.00799	mg/kg dry	1.00	¤	EPA 8260C	Total
Xylenes (total)	0.0129	J	0.812	0.0110	mg/kg dry	1.00	¤	EPA 8260C	Total

Client Sample ID: RL-BH9-1013 — Lab Sample ID: AWJ0044-09

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.0214	J	0.110	0.00296	mg/kg dry	1.00	¤	EPA 8260C	Total

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Alaska Resources & Environmental Services
Project/Site: RL1013

TestAmerica Job ID: AWJ0044

Client Sample ID: RL-BH9-1013 (Continued) — Lab Sample ID: AWJ0044-09

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
m,p-Xylene	0.0137	J	0.439	0.00647	mg/kg dry	1.00	¤	EPA 8260C	Total
Xylenes (total)	0.0137	J	0.658	0.00888	mg/kg dry	1.00	¤	EPA 8260C	Total

Client Sample ID: RL-DUP-1013 — Lab Sample ID: AWJ0044-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.0206	J	0.147	0.00397	mg/kg dry	1.00	¤	EPA 8260C	Total
m,p-Xylene	0.0125	J	0.588	0.00868	mg/kg dry	1.00	¤	EPA 8260C	Total
Xylenes (total)	0.0125	J	0.882	0.0119	mg/kg dry	1.00	¤	EPA 8260C	Total

Client Sample ID: TripBlank — Lab Sample ID: AWJ0044-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.0180	J	0.0200	0.00330	mg/kg wet	1.00		EPA 8260C	Total
Toluene	0.151		0.100	0.00270	mg/kg wet	1.00		EPA 8260C	Total
Ethylbenzene	0.0165	J	0.100	0.00240	mg/kg wet	1.00		EPA 8260C	Total
m,p-Xylene	0.0595	J	0.400	0.00590	mg/kg wet	1.00		EPA 8260C	Total
o-Xylene	0.0175	J	0.200	0.00220	mg/kg wet	1.00		EPA 8260C	Total
Isopropylbenzene	0.0275	J	0.100	0.00340	mg/kg wet	1.00		EPA 8260C	Total
Xylenes (total)	0.0770	J	0.600	0.00810	mg/kg wet	1.00		EPA 8260C	Total

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Alaska Resources & Environmental Services
Project/Site: RL1013

TestAmerica Job ID: AWJ0044

Client Sample ID: RL-BH1-1013

Date Collected: 10/10/13 15:00
Date Received: 10/16/13 15:40

Lab Sample ID: AWJ0044-01

Matrix: Soil
Percent Solids: 85.5

Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.166	0.0228	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
Chloromethane	ND		0.0499	0.0208	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
Vinyl chloride	ND		0.0133	0.00816	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
Bromomethane	ND		0.0999	0.0371	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
Chloroethane	ND		0.166	0.0396	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
Trichlorofluoromethane	ND		0.0499	0.0479	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
1,1-Dichloroethene	ND		0.0499	0.00932	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
Carbon disulfide	ND		0.166	0.00816	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
Methylene chloride	ND		0.333	0.0148	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
Acetone	ND		1.66	0.102	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
trans-1,2-Dichloroethene	ND		0.499	0.00866	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
Methyl tert-butyl ether	ND		0.166	0.00483	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
1,1-Dichloroethane	ND		0.166	0.00816	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
cis-1,2-Dichloroethene	ND		0.333	0.00533	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
2,2-Dichloropropane	ND		0.166	0.0107	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
Bromochloromethane	ND		0.166	0.00599	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
Chloroform	ND		0.166	0.00583	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
Carbon tetrachloride	ND		0.0499	0.0110	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
1,1,1-Trichloroethane	ND		0.166	0.00915	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
2-Butanone	ND		1.66	0.0804	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
1,1-Dichloropropene	ND		0.166	0.00666	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
Benzene	ND		0.0333	0.00549	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
1,2-Dichloroethane (EDC)	ND		0.0250	0.00682	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
Trichloroethene	ND		0.0333	0.00499	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
Dibromomethane	ND		0.166	0.00682	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
1,2-Dichloropropane	ND		0.0166	0.00766	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
Bromodichloromethane	ND		0.0499	0.00649	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
cis-1,3-Dichloropropene	ND		0.0333	0.00616	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
Toluene	**0.00999**	**J**	0.166	0.00449	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
4-Methyl-2-pentanone	ND		1.66	0.0313	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
trans-1,3-Dichloropropene	ND		0.0333	0.00566	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
Tetrachloroethene	ND		0.0333	0.0107	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
1,1,2-Trichloroethane	ND		0.0166	0.00716	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
Dibromochloromethane	ND		0.0499	0.0208	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
1,3-Dichloropropane	ND		0.0333	0.0208	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
1,2-Dibromoethane	ND		0.00832	0.00433	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
2-Hexanone	ND		1.66	0.0436	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
Ethylbenzene	ND		0.166	0.00399	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
Chlorobenzene	ND		0.166	0.00416	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
1,1,1,2-Tetrachloroethane	ND		0.166	0.00882	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
m,p-Xylene	ND		0.666	0.00982	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
o-Xylene	ND		0.333	0.00366	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
Styrene	ND		0.166	0.00449	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
Bromoform	ND		0.166	0.0208	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
Isopropylbenzene	ND		0.166	0.00566	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
n-Propylbenzene	ND		0.166	0.00632	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
1,1,2,2-Tetrachloroethane	ND		0.0166	0.00882	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
Bromobenzene	ND		0.166	0.0103	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
1,3,5-Trimethylbenzene	ND		0.166	0.00716	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00

Client Sample ID: RL-BH1-1013

Date Collected: 10/10/13 15:00
Date Received: 10/16/13 15:40

Lab Sample ID: AWJ0044-01
Matrix: Soil
Percent Solids: 85.5

Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	ND		0.166	0.00449	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
1,2,3-Trichloropropane	ND		0.0166	0.00649	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
4-Chlorotoluene	ND		0.166	0.00583	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
tert-Butylbenzene	ND		0.166	0.00982	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
1,2,4-Trimethylbenzene	ND		0.166	0.00583	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
sec-Butylbenzene	ND		0.166	0.00782	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
p-Isopropyltoluene	ND		0.166	0.00716	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
1,3-Dichlorobenzene	ND		0.166	0.00599	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
1,4-Dichlorobenzene	ND		0.166	0.00782	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
n-Butylbenzene	ND		0.166	0.00949	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
1,2-Dichlorobenzene	ND		0.166	0.00416	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
1,2-Dibromo-3-chloropropane	ND		0.832	0.0315	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
Hexachlorobutadiene	ND		0.166	0.0451	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
1,2,4-Trichlorobenzene	ND		0.166	0.00699	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
Naphthalene	ND		0.333	0.0123	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
1,2,3-Trichlorobenzene	ND		0.166	0.0141	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00
Xylenes (total)	ND		0.999	0.0135	mg/kg dry	¤	10/18/13 09:07	10/18/13 12:48	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*101*		*42.4 - 163*	*10/18/13 09:07*	*10/18/13 12:48*	*1.00*
Toluene-d8	*100*		*45.8 - 155*	*10/18/13 09:07*	*10/18/13 12:48*	*1.00*
4-bromofluorobenzene	*103*		*41.5 - 162*	*10/18/13 09:07*	*10/18/13 12:48*	*1.00*
a,a,a - Trifluorotoluene	*96.3*		*50 - 150*	*10/18/13 09:07*	*10/18/13 12:48*	*1.00*

Client Sample ID: RL-BH2-1013

Date Collected: 10/10/13 15:05
Date Received: 10/16/13 15:40

Lab Sample ID: AWJ0044-02
Matrix: Soil
Percent Solids: 88.5

Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.115	0.0158	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
Chloromethane	ND		0.0345	0.0144	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
Vinyl chloride	ND		0.00920	0.00564	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
Bromomethane	ND		0.0690	0.0257	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
Chloroethane	ND		0.115	0.0274	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
Trichlorofluoromethane	ND		0.0345	0.0331	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
1,1-Dichloroethene	ND		0.0345	0.00644	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
Carbon disulfide	ND		0.115	0.00564	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
Methylene chloride	ND		0.230	0.0102	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
Acetone	ND		1.15	0.0708	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
trans-1,2-Dichloroethene	**0.0328**	**J**	0.345	0.00598	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
Methyl tert-butyl ether	ND		0.115	0.00334	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
1,1-Dichloroethane	ND		0.115	0.00564	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
cis-1,2-Dichloroethene	ND		0.230	0.00368	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
2,2-Dichloropropane	ND		0.115	0.00736	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
Bromochloromethane	ND		0.115	0.00414	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
Chloroform	ND		0.115	0.00403	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
Carbon tetrachloride	ND		0.0345	0.00759	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
1,1,1-Trichloroethane	ND		0.115	0.00633	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
2-Butanone	ND		1.15	0.0556	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00

Client Sample ID: RL-BH2-1013

Date Collected: 10/10/13 15:05
Date Received: 10/16/13 15:40

Lab Sample ID: AWJ0044-02

Matrix: Soil
Percent Solids: 88.5

Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloropropene	ND		0.115	0.00460	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
Benzene	ND		0.0230	0.00380	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
1,2-Dichloroethane (EDC)	ND		0.0173	0.00472	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
Trichloroethene	ND		0.0230	0.00345	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
Dibromomethane	ND		0.115	0.00472	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
1,2-Dichloropropane	ND		0.0115	0.00529	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
Bromodichloromethane	ND		0.0345	0.00449	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
cis-1,3-Dichloropropene	ND		0.0230	0.00426	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
Toluene	**0.0173**	**J**	0.115	0.00311	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
4-Methyl-2-pentanone	ND		1.15	0.0216	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
trans-1,3-Dichloropropene	ND		0.0230	0.00391	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
Tetrachloroethene	ND		0.0230	0.00736	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
1,1,2-Trichloroethane	ND		0.0115	0.00495	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
Dibromochloromethane	ND		0.0345	0.0144	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
1,3-Dichloropropane	ND		0.0230	0.0144	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
1,2-Dibromoethane	ND		0.00575	0.00299	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
2-Hexanone	ND		1.15	0.0301	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
Ethylbenzene	ND		0.115	0.00278	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
Chlorobenzene	ND		0.115	0.00288	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
1,1,1,2-Tetrachloroethane	ND		0.115	0.00610	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
m,p-Xylene	**0.00863**	**J**	0.460	0.00679	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
o-Xylene	ND		0.230	0.00253	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
Styrene	ND		0.115	0.00311	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
Bromoform	ND		0.115	0.0144	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
Isopropylbenzene	ND		0.115	0.00391	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
n-Propylbenzene	ND		0.115	0.00437	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
1,1,2,2-Tetrachloroethane	ND		0.0115	0.00610	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
Bromobenzene	ND		0.115	0.00713	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
1,3,5-Trimethylbenzene	ND		0.115	0.00495	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
2-Chlorotoluene	ND		0.115	0.00311	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
1,2,3-Trichloropropane	ND		0.0115	0.00449	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
4-Chlorotoluene	ND		0.115	0.00403	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
tert-Butylbenzene	ND		0.115	0.00679	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
1,2,4-Trimethylbenzene	ND		0.115	0.00403	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
sec-Butylbenzene	ND		0.115	0.00541	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
p-Isopropyltoluene	ND		0.115	0.00495	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
1,3-Dichlorobenzene	ND		0.115	0.00414	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
1,4-Dichlorobenzene	ND		0.115	0.00541	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
n-Butylbenzene	ND		0.115	0.00656	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
1,2-Dichlorobenzene	ND		0.115	0.00288	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
1,2-Dibromo-3-chloropropane	ND		0.575	0.0217	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
Hexachlorobutadiene	ND		0.115	0.0312	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
1,2,4-Trichlorobenzene	ND		0.115	0.00483	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
Naphthalene	ND		0.230	0.00851	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
1,2,3-Trichlorobenzene	ND		0.115	0.00978	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00
Xylenes (total)	ND		0.690	0.00932	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:08	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*101*		*42.4 - 163*	*10/18/13 09:07*	*10/18/13 13:08*	*1.00*
Toluene-d8	*102*		*45.8 - 155*	*10/18/13 09:07*	*10/18/13 13:08*	*1.00*

Client Sample ID: RL-BH2-1013

Date Collected: 10/10/13 15:05
Date Received: 10/16/13 15:40

Lab Sample ID: AWJ0044-02

Matrix: Soil
Percent Solids: 88.5

Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-bromofluorobenzene	100		41.5 - 162	10/18/13 09:07	10/18/13 13:08	1.00
a,a,a - Trifluorotoluene	93.5		50 - 150	10/18/13 09:07	10/18/13 13:08	1.00

Client Sample ID: RL-BH3-1013

Date Collected: 10/10/13 15:10
Date Received: 10/16/13 15:40

Lab Sample ID: AWJ0044-03

Matrix: Soil
Percent Solids: 86.9

Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.140	0.0192	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
Chloromethane	ND		0.0421	0.0175	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
Vinyl chloride	ND		0.0112	0.00688	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
Bromomethane	ND		0.0842	0.0313	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
Chloroethane	ND		0.140	0.0334	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
Trichlorofluoromethane	ND		0.0421	0.0404	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
1,1-Dichloroethene	ND		0.0421	0.00786	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
Carbon disulfide	ND		0.140	0.00688	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
Methylene chloride	ND		0.281	0.0125	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
Acetone	ND		1.40	0.0863	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
trans-1,2-Dichloroethene	ND		0.421	0.00730	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
Methyl tert-butyl ether	ND		0.140	0.00407	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
1,1-Dichloroethane	ND		0.140	0.00688	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
cis-1,2-Dichloroethene	ND		0.281	0.00449	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
2,2-Dichloropropane	ND		0.140	0.00898	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
Bromochloromethane	ND		0.140	0.00505	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
Chloroform	ND		0.140	0.00491	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
Carbon tetrachloride	ND		0.0421	0.00926	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
1,1,1-Trichloroethane	ND		0.140	0.00772	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
2-Butanone	ND		1.40	0.0678	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
1,1-Dichloropropene	ND		0.140	0.00561	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
Benzene	ND		0.0281	0.00463	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
1,2-Dichloroethane (EDC)	ND		0.0211	0.00576	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
Trichloroethene	ND		0.0281	0.00421	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
Dibromomethane	ND		0.140	0.00576	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
1,2-Dichloropropane	ND		0.0140	0.00646	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
Bromodichloromethane	ND		0.0421	0.00547	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
cis-1,3-Dichloropropene	ND		0.0281	0.00519	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
Toluene	**0.00842**	**J**	0.140	0.00379	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
4-Methyl-2-pentanone	ND		1.40	0.0264	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
trans-1,3-Dichloropropene	ND		0.0281	0.00477	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
Tetrachloroethene	ND		0.0281	0.00898	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
1,1,2-Trichloroethane	ND		0.0140	0.00604	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
Dibromochloromethane	ND		0.0421	0.0175	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
1,3-Dichloropropane	ND		0.0281	0.0175	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
1,2-Dibromoethane	ND		0.00702	0.00365	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
2-Hexanone	ND		1.40	0.0368	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
Ethylbenzene	ND		0.140	0.00337	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
Chlorobenzene	ND		0.140	0.00351	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
1,1,1,2-Tetrachloroethane	ND		0.140	0.00744	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00

Client Sample ID: RL-BH3-1013

Lab Sample ID: AWJ0044-03

Date Collected: 10/10/13 15:10
Matrix: Soil
Date Received: 10/16/13 15:40
Percent Solids: 86.9

Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m,p-Xylene	ND		0.561	0.00828	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
o-Xylene	ND		0.281	0.00309	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
Styrene	ND		0.140	0.00379	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
Bromoform	ND		0.140	0.0175	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
Isopropylbenzene	ND		0.140	0.00477	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
n-Propylbenzene	ND		0.140	0.00533	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
1,1,2,2-Tetrachloroethane	ND		0.0140	0.00744	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
Bromobenzene	ND		0.140	0.00870	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
1,3,5-Trimethylbenzene	ND		0.140	0.00604	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
2-Chlorotoluene	ND		0.140	0.00379	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
1,2,3-Trichloropropane	ND		0.0140	0.00547	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
4-Chlorotoluene	ND		0.140	0.00491	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
tert-Butylbenzene	ND		0.140	0.00828	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
1,2,4-Trimethylbenzene	ND		0.140	0.00491	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
sec-Butylbenzene	ND		0.140	0.00660	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
p-Isopropyltoluene	ND		0.140	0.00604	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
1,3-Dichlorobenzene	ND		0.140	0.00505	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
1,4-Dichlorobenzene	ND		0.140	0.00660	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
n-Butylbenzene	ND		0.140	0.00800	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
1,2-Dichlorobenzene	ND		0.140	0.00351	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
1,2-Dibromo-3-chloropropane	ND		0.702	0.0265	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
Hexachlorobutadiene	ND		0.140	0.0380	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
1,2,4-Trichlorobenzene	ND		0.140	0.00590	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
Naphthalene	ND		0.281	0.0104	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
1,2,3-Trichlorobenzene	ND		0.140	0.0119	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00
Xylenes (total)	ND		0.842	0.0114	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:28	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*99.4*		*42.4 - 163*	*10/18/13 09:07*	*10/18/13 13:28*	*1.00*
Toluene-d8	*104*		*45.8 - 155*	*10/18/13 09:07*	*10/18/13 13:28*	*1.00*
4-bromofluorobenzene	*104*		*41.5 - 162*	*10/18/13 09:07*	*10/18/13 13:28*	*1.00*
a,a,a - Trifluorotoluene	*112*		*50 - 150*	*10/18/13 09:07*	*10/18/13 13:28*	*1.00*

Client Sample ID: RL-BH4-1013

Lab Sample ID: AWJ0044-04

Date Collected: 10/10/13 15:15
Matrix: Soil
Date Received: 10/16/13 15:40
Percent Solids: 87.5

Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.155	0.0213	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
Chloromethane	ND		0.0466	0.0194	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
Vinyl chloride	ND		0.0124	0.00761	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
Bromomethane	ND		0.0932	0.0346	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
Chloroethane	ND		0.155	0.0370	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
Trichlorofluoromethane	ND		0.0466	0.0447	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
1,1-Dichloroethene	ND		0.0466	0.00870	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
Carbon disulfide	ND		0.155	0.00761	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
Methylene chloride	ND		0.311	0.0138	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
Acetone	ND		1.55	0.0955	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
trans-1,2-Dichloroethene	ND		0.466	0.00808	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00

Client Sample Results

Client: Alaska Resources & Environmental Services
Project/Site: RL1013

TestAmerica Job ID: AWJ0044

Client Sample ID: RL-BH4-1013

Date Collected: 10/10/13 15:15
Date Received: 10/16/13 15:40

Lab Sample ID: AWJ0044-04

Matrix: Soil
Percent Solids: 87.5

Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.155	0.00450	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
1,1-Dichloroethane	ND		0.155	0.00761	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
cis-1,2-Dichloroethene	ND		0.311	0.00497	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
2,2-Dichloropropane	ND		0.155	0.00994	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
Bromochloromethane	ND		0.155	0.00559	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
Chloroform	ND		0.155	0.00544	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
Carbon tetrachloride	ND		0.0466	0.0103	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
1,1,1-Trichloroethane	ND		0.155	0.00854	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
2-Butanone	ND		1.55	0.0750	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
1,1-Dichloropropene	ND		0.155	0.00621	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
Benzene	ND		0.0311	0.00513	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
1,2-Dichloroethane (EDC)	ND		0.0233	0.00637	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
Trichloroethene	ND		0.0311	0.00466	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
Dibromomethane	ND		0.155	0.00637	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
1,2-Dichloropropane	ND		0.0155	0.00714	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
Bromodichloromethane	ND		0.0466	0.00606	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
cis-1,3-Dichloropropene	ND		0.0311	0.00575	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
Toluene	**0.00621**	**J**	0.155	0.00419	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
4-Methyl-2-pentanone	ND		1.55	0.0292	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
trans-1,3-Dichloropropene	ND		0.0311	0.00528	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
Tetrachloroethene	ND		0.0311	0.00994	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
1,1,2-Trichloroethane	ND		0.0155	0.00668	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
Dibromochloromethane	ND		0.0466	0.0194	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
1,3-Dichloropropane	ND		0.0311	0.0194	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
1,2-Dibromoethane	ND		0.00777	0.00404	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
2-Hexanone	ND		1.55	0.0407	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
Ethylbenzene	ND		0.155	0.00373	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
Chlorobenzene	ND		0.155	0.00388	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
1,1,1,2-Tetrachloroethane	ND		0.155	0.00823	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
m,p-Xylene	ND		0.621	0.00916	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
o-Xylene	ND		0.311	0.00342	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
Styrene	ND		0.155	0.00419	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
Bromoform	ND		0.155	0.0194	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
Isopropylbenzene	ND		0.155	0.00528	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
n-Propylbenzene	ND		0.155	0.00590	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
1,1,2,2-Tetrachloroethane	ND		0.0155	0.00823	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
Bromobenzene	ND		0.155	0.00963	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
1,3,5-Trimethylbenzene	ND		0.155	0.00668	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
2-Chlorotoluene	ND		0.155	0.00419	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
1,2,3-Trichloropropane	ND		0.0155	0.00606	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
4-Chlorotoluene	ND		0.155	0.00544	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
tert-Butylbenzene	ND		0.155	0.00916	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
1,2,4-Trimethylbenzene	ND		0.155	0.00544	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
sec-Butylbenzene	ND		0.155	0.00730	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
p-Isopropyltoluene	ND		0.155	0.00668	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
1,3-Dichlorobenzene	ND		0.155	0.00559	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
1,4-Dichlorobenzene	ND		0.155	0.00730	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
n-Butylbenzene	ND		0.155	0.00885	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
1,2-Dichlorobenzene	ND		0.155	0.00388	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00

Client Sample ID: RL-BH4-1013

Date Collected: 10/10/13 15:15
Date Received: 10/16/13 15:40

Lab Sample ID: AWJ0044-04

Matrix: Soil
Percent Solids: 87.5

Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-chloropropane	ND		0.777	0.0294	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
Hexachlorobutadiene	ND		0.155	0.0421	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
1,2,4-Trichlorobenzene	ND		0.155	0.00652	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
Naphthalene	ND		0.311	0.0115	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
1,2,3-Trichlorobenzene	ND		0.155	0.0132	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00
Xylenes (total)	ND		0.932	0.0126	mg/kg dry	¤	10/18/13 09:07	10/18/13 13:47	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*101*		*42.4 - 163*	*10/18/13 09:07*	*10/18/13 13:47*	*1.00*
Toluene-d8	*105*		*45.8 - 155*	*10/18/13 09:07*	*10/18/13 13:47*	*1.00*
4-bromofluorobenzene	*103*		*41.5 - 162*	*10/18/13 09:07*	*10/18/13 13:47*	*1.00*
a,a,a - Trifluorotoluene	*106*		*50 - 150*	*10/18/13 09:07*	*10/18/13 13:47*	*1.00*

Client Sample ID: RL-BH5-1013

Date Collected: 10/10/13 15:20
Date Received: 10/16/13 15:40

Lab Sample ID: AWJ0044-05

Matrix: Soil
Percent Solids: 82.8

Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.207	0.0284	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
Chloromethane	ND		0.0621	0.0259	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
Vinyl chloride	ND		0.0166	0.0101	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
Bromomethane	ND		0.124	0.0462	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
Chloroethane	ND		0.207	0.0493	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
Trichlorofluoromethane	ND		0.0621	0.0596	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
1,1-Dichloroethene	ND		0.0621	0.0116	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
Carbon disulfide	ND		0.207	0.0101	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
Methylene chloride	ND		0.414	0.0184	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
Acetone	ND		2.07	0.127	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
trans-1,2-Dichloroethene	ND		0.621	0.0108	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
Methyl tert-butyl ether	ND		0.207	0.00600	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
1,1-Dichloroethane	ND		0.207	0.0101	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
cis-1,2-Dichloroethene	ND		0.414	0.00663	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
2,2-Dichloropropane	ND		0.207	0.0133	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
Bromochloromethane	ND		0.207	0.00745	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
Chloroform	ND		0.207	0.00725	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
Carbon tetrachloride	ND		0.0621	0.0137	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
1,1,1-Trichloroethane	ND		0.207	0.0114	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
2-Butanone	ND		2.07	0.100	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
1,1-Dichloropropene	ND		0.207	0.00828	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
Benzene	ND		0.0414	0.00683	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
1,2-Dichloroethane (EDC)	ND		0.0311	0.00849	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
Trichloroethene	ND		0.0414	0.00621	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
Dibromomethane	ND		0.207	0.00849	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
1,2-Dichloropropane	ND		0.0207	0.00952	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
Bromodichloromethane	ND		0.0621	0.00807	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
cis-1,3-Dichloropropene	ND		0.0414	0.00766	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
Toluene	**0.0362**	**J**	0.207	0.00559	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
4-Methyl-2-pentanone	ND		2.07	0.0389	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
trans-1,3-Dichloropropene	ND		0.0414	0.00704	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00

Client Sample ID: RL-BH5-1013

Lab Sample ID: AWJ0044-05

Date Collected: 10/10/13 15:20
Date Received: 10/16/13 15:40

Matrix: Soil
Percent Solids: 82.8

Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.0414	0.0133	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
1,1,2-Trichloroethane	ND		0.0207	0.00890	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
Dibromochloromethane	ND		0.0621	0.0259	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
1,3-Dichloropropane	ND		0.0414	0.0259	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
1,2-Dibromoethane	ND		0.0104	0.00538	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
2-Hexanone	ND		2.07	0.0542	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
Ethylbenzene	ND		0.207	0.00497	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
Chlorobenzene	ND		0.207	0.00518	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
1,1,1,2-Tetrachloroethane	ND		0.207	0.0110	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
m,p-Xylene	**0.0238**	**J**	0.828	0.0122	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
o-Xylene	**0.00932**	**J**	0.414	0.00455	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
Styrene	ND		0.207	0.00559	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
Bromoform	ND		0.207	0.0259	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
Isopropylbenzene	ND		0.207	0.00704	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
n-Propylbenzene	ND		0.207	0.00787	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
1,1,2,2-Tetrachloroethane	ND		0.0207	0.0110	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
Bromobenzene	ND		0.207	0.0128	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
1,3,5-Trimethylbenzene	ND		0.207	0.00890	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
2-Chlorotoluene	ND		0.207	0.00559	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
1,2,3-Trichloropropane	ND		0.0207	0.00807	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
4-Chlorotoluene	ND		0.207	0.00725	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
tert-Butylbenzene	ND		0.207	0.0122	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
1,2,4-Trimethylbenzene	ND		0.207	0.00725	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
sec-Butylbenzene	ND		0.207	0.00973	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
p-Isopropyltoluene	ND		0.207	0.00890	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
1,3-Dichlorobenzene	ND		0.207	0.00745	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
1,4-Dichlorobenzene	ND		0.207	0.00973	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
n-Butylbenzene	ND		0.207	0.0118	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
1,2-Dichlorobenzene	ND		0.207	0.00518	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
1,2-Dibromo-3-chloropropane	ND		1.04	0.0391	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
Hexachlorobutadiene	ND		0.207	0.0561	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
1,2,4-Trichlorobenzene	ND		0.207	0.00870	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
Naphthalene	ND		0.414	0.0153	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
1,2,3-Trichlorobenzene	ND		0.207	0.0176	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00
Xylenes (total)	**0.0331**	**J**	1.24	0.0168	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:07	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*99.7*		*42.4 - 163*	*10/18/13 09:07*	*10/18/13 14:07*	*1.00*
Toluene-d8	*105*		*45.8 - 155*	*10/18/13 09:07*	*10/18/13 14:07*	*1.00*
4-bromofluorobenzene	*102*		*41.5 - 162*	*10/18/13 09:07*	*10/18/13 14:07*	*1.00*
a,a,a - Trifluorotoluene	*95.5*		*50 - 150*	*10/18/13 09:07*	*10/18/13 14:07*	*1.00*

Client Sample ID: RL-BH6-1013

Lab Sample ID: AWJ0044-06

Date Collected: 10/10/13 15:35
Date Received: 10/16/13 15:40

Matrix: Soil
Percent Solids: 85.7

Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.110	0.0151	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
Chloromethane	ND		0.0331	0.0138	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00

Client Sample Results

Client: Alaska Resources & Environmental Services
Project/Site: RL1013

TestAmerica Job ID: AWJ0044

Client Sample ID: RL-BH6-1013

Date Collected: 10/10/13 15:35
Date Received: 10/16/13 15:40

Lab Sample ID: AWJ0044-06

Matrix: Soil
Percent Solids: 85.7

Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.00884	0.00541	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
Bromomethane	ND		0.0663	0.0246	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
Chloroethane	ND		0.110	0.0263	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
Trichlorofluoromethane	ND		0.0331	0.0318	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
1,1-Dichloroethene	ND		0.0331	0.00619	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
Carbon disulfide	ND		0.110	0.00541	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
Methylene chloride	ND		0.221	0.00983	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
Acetone	ND		1.10	0.0679	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
trans-1,2-Dichloroethene	ND		0.331	0.00574	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
Methyl tert-butyl ether	ND		0.110	0.00320	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
1,1-Dichloroethane	ND		0.110	0.00541	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
cis-1,2-Dichloroethene	ND		0.221	0.00353	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
2,2-Dichloropropane	ND		0.110	0.00707	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
Bromochloromethane	ND		0.110	0.00398	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
Chloroform	ND		0.110	0.00387	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
Carbon tetrachloride	ND		0.0331	0.00729	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
1,1,1-Trichloroethane	ND		0.110	0.00608	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
2-Butanone	ND		1.10	0.0533	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
1,1-Dichloropropene	ND		0.110	0.00442	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
Benzene	ND		0.0221	0.00365	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
1,2-Dichloroethane (EDC)	ND		0.0166	0.00453	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
Trichloroethene	ND		0.0221	0.00331	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
Dibromomethane	ND		0.110	0.00453	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
1,2-Dichloropropane	ND		0.0110	0.00508	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
Bromodichloromethane	ND		0.0331	0.00431	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
cis-1,3-Dichloropropene	ND		0.0221	0.00409	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
Toluene	**0.0243**	**J**	0.110	0.00298	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
4-Methyl-2-pentanone	ND		1.10	0.0208	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
trans-1,3-Dichloropropene	ND		0.0221	0.00376	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
Tetrachloroethene	ND		0.0221	0.00707	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
1,1,2-Trichloroethane	ND		0.0110	0.00475	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
Dibromochloromethane	ND		0.0331	0.0138	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
1,3-Dichloropropane	ND		0.0221	0.0138	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
1,2-Dibromoethane	ND		0.00552	0.00287	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
2-Hexanone	ND		1.10	0.0289	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
Ethylbenzene	ND		0.110	0.00265	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
Chlorobenzene	ND		0.110	0.00276	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
1,1,1,2-Tetrachloroethane	ND		0.110	0.00585	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
m,p-Xylene	**0.0138**	**J**	0.442	0.00652	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
o-Xylene	ND		0.221	0.00243	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
Styrene	ND		0.110	0.00298	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
Bromoform	ND		0.110	0.0138	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
Isopropylbenzene	ND		0.110	0.00376	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
n-Propylbenzene	ND		0.110	0.00420	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
1,1,2,2-Tetrachloroethane	ND		0.0110	0.00585	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
Bromobenzene	ND		0.110	0.00685	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
1,3,5-Trimethylbenzene	ND		0.110	0.00475	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
2-Chlorotoluene	ND		0.110	0.00298	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
1,2,3-Trichloropropane	ND		0.0110	0.00431	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00

Client Sample ID: RL-BH6-1013

Lab Sample ID: AWJ0044-06

Date Collected: 10/10/13 15:35
Date Received: 10/16/13 15:40

Matrix: Soil
Percent Solids: 85.7

Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		0.110	0.00387	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
tert-Butylbenzene	ND		0.110	0.00652	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
1,2,4-Trimethylbenzene	ND		0.110	0.00387	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
sec-Butylbenzene	ND		0.110	0.00519	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
p-Isopropyltoluene	ND		0.110	0.00475	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
1,3-Dichlorobenzene	ND		0.110	0.00398	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
1,4-Dichlorobenzene	ND		0.110	0.00519	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
n-Butylbenzene	ND		0.110	0.00630	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
1,2-Dichlorobenzene	ND		0.110	0.00276	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
1,2-Dibromo-3-chloropropane	ND		0.552	0.0209	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
Hexachlorobutadiene	ND		0.110	0.0299	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
1,2,4-Trichlorobenzene	ND		0.110	0.00464	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
Naphthalene	ND		0.221	0.00817	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
1,2,3-Trichlorobenzene	ND		0.110	0.00939	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00
Xylenes (total)	**0.0138**	**J**	0.663	0.00895	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:27	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*101*		*42.4 - 163*	*10/18/13 09:07*	*10/18/13 14:27*	*1.00*
Toluene-d8	*105*		*45.8 - 155*	*10/18/13 09:07*	*10/18/13 14:27*	*1.00*
4-bromofluorobenzene	*103*		*41.5 - 162*	*10/18/13 09:07*	*10/18/13 14:27*	*1.00*
a,a,a - Trifluorotoluene	*95.9*		*50 - 150*	*10/18/13 09:07*	*10/18/13 14:27*	*1.00*

Client Sample ID: RL-BH7-1013

Lab Sample ID: AWJ0044-07

Date Collected: 10/10/13 15:45
Date Received: 10/16/13 15:40

Matrix: Soil
Percent Solids: 92.4

Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0942	0.0129	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
Chloromethane	ND		0.0283	0.0118	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
Vinyl chloride	ND		0.00753	0.00461	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
Bromomethane	ND		0.0565	0.0210	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
Chloroethane	ND		0.0942	0.0224	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
Trichlorofluoromethane	ND		0.0283	0.0271	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
1,1-Dichloroethene	ND		0.0283	0.00527	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
Carbon disulfide	ND		0.0942	0.00461	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
Methylene chloride	ND		0.188	0.00838	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
Acetone	ND		0.942	0.0579	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
trans-1,2-Dichloroethene	ND		0.283	0.00490	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
Methyl tert-butyl ether	ND		0.0942	0.00273	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
1,1-Dichloroethane	ND		0.0942	0.00461	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
cis-1,2-Dichloroethene	ND		0.188	0.00301	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
2,2-Dichloropropane	ND		0.0942	0.00603	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
Bromochloromethane	ND		0.0942	0.00339	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
Chloroform	ND		0.0942	0.00330	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
Carbon tetrachloride	ND		0.0283	0.00622	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
1,1,1-Trichloroethane	ND		0.0942	0.00518	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
2-Butanone	ND		0.942	0.0455	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
1,1-Dichloropropene	ND		0.0942	0.00377	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
Benzene	ND		0.0188	0.00311	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00

Client Sample Results

Client: Alaska Resources & Environmental Services
Project/Site: RL1013

TestAmerica Job ID: AWJ0044

Client Sample ID: RL-BH7-1013

Date Collected: 10/10/13 15:45
Date Received: 10/16/13 15:40

Lab Sample ID: AWJ0044-07

Matrix: Soil
Percent Solids: 92.4

Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane (EDC)	ND		0.0141	0.00386	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
Trichloroethene	ND		0.0188	0.00283	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
Dibromomethane	ND		0.0942	0.00386	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
1,2-Dichloropropane	ND		0.00942	0.00433	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
Bromodichloromethane	ND		0.0283	0.00367	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
cis-1,3-Dichloropropene	ND		0.0188	0.00348	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
Toluene	**0.00565**	**J**	0.0942	0.00254	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
4-Methyl-2-pentanone	ND		0.942	0.0177	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
trans-1,3-Dichloropropene	ND		0.0188	0.00320	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
Tetrachloroethene	ND		0.0188	0.00603	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
1,1,2-Trichloroethane	ND		0.00942	0.00405	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
Dibromochloromethane	ND		0.0283	0.0118	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
1,3-Dichloropropane	ND		0.0188	0.0118	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
1,2-Dibromoethane	ND		0.00471	0.00245	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
2-Hexanone	ND		0.942	0.0247	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
Ethylbenzene	ND		0.0942	0.00226	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
Chlorobenzene	ND		0.0942	0.00235	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
1,1,1,2-Tetrachloroethane	ND		0.0942	0.00499	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
m,p-Xylene	ND		0.377	0.00556	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
o-Xylene	ND		0.188	0.00207	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
Styrene	ND		0.0942	0.00254	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
Bromoform	ND		0.0942	0.0118	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
Isopropylbenzene	ND		0.0942	0.00320	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
n-Propylbenzene	ND		0.0942	0.00358	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
1,1,2,2-Tetrachloroethane	ND		0.00942	0.00499	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
Bromobenzene	ND		0.0942	0.00584	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
1,3,5-Trimethylbenzene	ND		0.0942	0.00405	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
2-Chlorotoluene	ND		0.0942	0.00254	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
1,2,3-Trichloropropane	ND		0.00942	0.00367	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
4-Chlorotoluene	ND		0.0942	0.00330	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
tert-Butylbenzene	ND		0.0942	0.00556	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
1,2,4-Trimethylbenzene	ND		0.0942	0.00330	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
sec-Butylbenzene	ND		0.0942	0.00443	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
p-Isopropyltoluene	ND		0.0942	0.00405	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
1,3-Dichlorobenzene	ND		0.0942	0.00339	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
1,4-Dichlorobenzene	ND		0.0942	0.00443	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
n-Butylbenzene	ND		0.0942	0.00537	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
1,2-Dichlorobenzene	ND		0.0942	0.00235	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
1,2-Dibromo-3-chloropropane	ND		0.471	0.0178	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
Hexachlorobutadiene	ND		0.0942	0.0255	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
1,2,4-Trichlorobenzene	ND		0.0942	0.00398	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
Naphthalene	ND		0.188	0.00897	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
1,2,3-Trichlorobenzene	ND		0.0942	0.00800	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00
Xylenes (total)	ND		0.565	0.00763	mg/kg dry	¤	10/18/13 09:07	10/18/13 14:46	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*99.6*		*42.4 - 163*	*10/18/13 09:07*	*10/18/13 14:46*	*1.00*
Toluene-d8	*104*		*45.8 - 155*	*10/18/13 09:07*	*10/18/13 14:46*	*1.00*
4-bromofluorobenzene	*102*		*41.5 - 162*	*10/18/13 09:07*	*10/18/13 14:46*	*1.00*
a,a,a - Trifluorotoluene	*110*		*50 - 150*	*10/18/13 09:07*	*10/18/13 14:46*	*1.00*

Client Sample Results

Client: Alaska Resources & Environmental Services
Project/Site: RL1013

TestAmerica Job ID: AWJ0044

Client Sample ID: RL-BH8-1013

Date Collected: 10/10/13 15:55
Date Received: 10/16/13 15:40

Lab Sample ID: AWJ0044-08

Matrix: Soil
Percent Solids: 83.9

Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.135	0.0185	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
Chloromethane	ND		0.0406	0.0169	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
Vinyl chloride	ND		0.0108	0.00663	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
Bromomethane	ND		0.0812	0.0302	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
Chloroethane	ND		0.135	0.0322	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
Trichlorofluoromethane	ND		0.0406	0.0390	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
1,1-Dichloroethene	ND		0.0406	0.00758	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
Carbon disulfide	ND		0.135	0.00663	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
Methylene chloride	ND		0.271	0.0120	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
Acetone	ND		1.35	0.0832	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
trans-1,2-Dichloroethene	ND		0.406	0.00704	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
Methyl tert-butyl ether	ND		0.135	0.00393	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
1,1-Dichloroethane	ND		0.135	0.00663	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
cis-1,2-Dichloroethene	ND		0.271	0.00433	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
2,2-Dichloropropane	ND		0.135	0.00866	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
Bromochloromethane	ND		0.135	0.00487	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
Chloroform	ND		0.135	0.00474	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
Carbon tetrachloride	ND		0.0406	0.00893	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
1,1,1-Trichloroethane	ND		0.135	0.00744	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
2-Butanone	ND		1.35	0.0654	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
1,1-Dichloropropene	ND		0.135	0.00541	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
Benzene	ND		0.0271	0.00447	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
1,2-Dichloroethane (EDC)	ND		0.0203	0.00555	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
Trichloroethene	ND		0.0271	0.00406	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
Dibromomethane	ND		0.135	0.00555	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
1,2-Dichloropropane	ND		0.0135	0.00623	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
Bromodichloromethane	ND		0.0406	0.00528	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
cis-1,3-Dichloropropene	ND		0.0271	0.00501	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
Toluene	**0.0250**	**J**	0.135	0.00365	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
4-Methyl-2-pentanone	ND		1.35	0.0254	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
trans-1,3-Dichloropropene	ND		0.0271	0.00460	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
Tetrachloroethene	ND		0.0271	0.00866	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
1,1,2-Trichloroethane	ND		0.0135	0.00582	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
Dibromochloromethane	ND		0.0406	0.0169	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
1,3-Dichloropropane	ND		0.0271	0.0169	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
1,2-Dibromoethane	ND		0.00677	0.00352	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
2-Hexanone	ND		1.35	0.0355	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
Ethylbenzene	ND		0.135	0.00325	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
Chlorobenzene	ND		0.135	0.00338	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
1,1,1,2-Tetrachloroethane	ND		0.135	0.00717	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
m,p-Xylene	**0.0129**	**J**	0.541	0.00799	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
o-Xylene	ND		0.271	0.00298	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
Styrene	ND		0.135	0.00365	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
Bromoform	ND		0.135	0.0169	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
Isopropylbenzene	ND		0.135	0.00460	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
n-Propylbenzene	ND		0.135	0.00514	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
1,1,2,2-Tetrachloroethane	ND		0.0135	0.00717	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
Bromobenzene	ND		0.135	0.00839	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
1,3,5-Trimethylbenzene	ND		0.135	0.00582	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00

Client Sample ID: RL-BH8-1013

Lab Sample ID: AWJ0044-08

Date Collected: 10/10/13 15:55
Date Received: 10/16/13 15:40

Matrix: Soil
Percent Solids: 83.9

Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	ND		0.135	0.00365	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
1,2,3-Trichloropropane	ND		0.0135	0.00528	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
4-Chlorotoluene	ND		0.135	0.00474	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
tert-Butylbenzene	ND		0.135	0.00799	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
1,2,4-Trimethylbenzene	ND		0.135	0.00474	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
sec-Butylbenzene	ND		0.135	0.00636	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
p-Isopropyltoluene	ND		0.135	0.00582	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
1,3-Dichlorobenzene	ND		0.135	0.00487	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
1,4-Dichlorobenzene	ND		0.135	0.00636	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
n-Butylbenzene	ND		0.135	0.00772	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
1,2-Dichlorobenzene	ND		0.135	0.00338	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
1,2-Dibromo-3-chloropropane	ND		0.677	0.0256	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
Hexachlorobutadiene	ND		0.135	0.0367	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
1,2,4-Trichlorobenzene	ND		0.135	0.00569	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
Naphthalene	ND		0.271	0.0100	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
1,2,3-Trichlorobenzene	ND		0.135	0.0115	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00
Xylenes (total)	**0.0129**	**J**	0.812	0.0110	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:06	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*99.1*		*42.4 - 163*	*10/18/13 09:07*	*10/18/13 15:06*	*1.00*
Toluene-d8	*106*		*45.8 - 155*	*10/18/13 09:07*	*10/18/13 15:06*	*1.00*
4-bromofluorobenzene	*101*		*41.5 - 162*	*10/18/13 09:07*	*10/18/13 15:06*	*1.00*
a,a,a - Trifluorotoluene	*106*		*50 - 150*	*10/18/13 09:07*	*10/18/13 15:06*	*1.00*

Client Sample ID: RL-BH9-1013

Lab Sample ID: AWJ0044-09

Date Collected: 10/10/13 16:05
Date Received: 10/16/13 15:40

Matrix: Soil
Percent Solids: 86.6

Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.110	0.0150	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
Chloromethane	ND		0.0329	0.0137	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
Vinyl chloride	ND		0.00877	0.00537	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
Bromomethane	ND		0.0658	0.0245	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
Chloroethane	ND		0.110	0.0261	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
Trichlorofluoromethane	ND		0.0329	0.0316	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
1,1-Dichloroethene	ND		0.0329	0.00614	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
Carbon disulfide	ND		0.110	0.00537	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
Methylene chloride	ND		0.219	0.00976	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
Acetone	ND		1.10	0.0674	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
trans-1,2-Dichloroethene	ND		0.329	0.00570	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
Methyl tert-butyl ether	ND		0.110	0.00318	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
1,1-Dichloroethane	ND		0.110	0.00537	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
cis-1,2-Dichloroethene	ND		0.219	0.00351	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
2,2-Dichloropropane	ND		0.110	0.00702	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
Bromochloromethane	ND		0.110	0.00395	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
Chloroform	ND		0.110	0.00384	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
Carbon tetrachloride	ND		0.0329	0.00724	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
1,1,1-Trichloroethane	ND		0.110	0.00603	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
2-Butanone	ND		1.10	0.0530	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00

Client Sample Results

Client: Alaska Resources & Environmental Services
Project/Site: RL1013

TestAmerica Job ID: AWJ0044

Client Sample ID: RL-BH9-1013

Date Collected: 10/10/13 16:05
Date Received: 10/16/13 15:40

Lab Sample ID: AWJ0044-09

Matrix: Soil
Percent Solids: 86.6

Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloropropene	ND		0.110	0.00439	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
Benzene	ND		0.0219	0.00362	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
1,2-Dichloroethane (EDC)	ND		0.0164	0.00450	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
Trichloroethene	ND		0.0219	0.00329	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
Dibromomethane	ND		0.110	0.00450	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
1,2-Dichloropropane	ND		0.0110	0.00504	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
Bromodichloromethane	ND		0.0329	0.00428	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
cis-1,3-Dichloropropene	ND		0.0219	0.00406	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
Toluene	**0.0214**	**J**	0.110	0.00296	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
4-Methyl-2-pentanone	ND		1.10	0.0206	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
trans-1,3-Dichloropropene	ND		0.0219	0.00373	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
Tetrachloroethene	ND		0.0219	0.00702	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
1,1,2-Trichloroethane	ND		0.0110	0.00472	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
Dibromochloromethane	ND		0.0329	0.0137	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
1,3-Dichloropropane	ND		0.0219	0.0137	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
1,2-Dibromoethane	ND		0.00548	0.00285	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
2-Hexanone	ND		1.10	0.0287	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
Ethylbenzene	ND		0.110	0.00263	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
Chlorobenzene	ND		0.110	0.00274	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
1,1,1,2-Tetrachloroethane	ND		0.110	0.00581	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
m,p-Xylene	**0.0137**	**J**	0.439	0.00647	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
o-Xylene	ND		0.219	0.00241	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
Styrene	ND		0.110	0.00296	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
Bromoform	ND		0.110	0.0137	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
Isopropylbenzene	ND		0.110	0.00373	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
n-Propylbenzene	ND		0.110	0.00417	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
1,1,2,2-Tetrachloroethane	ND		0.0110	0.00581	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
Bromobenzene	ND		0.110	0.00680	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
1,3,5-Trimethylbenzene	ND		0.110	0.00472	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
2-Chlorotoluene	ND		0.110	0.00296	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
1,2,3-Trichloropropane	ND		0.0110	0.00428	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
4-Chlorotoluene	ND		0.110	0.00384	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
tert-Butylbenzene	ND		0.110	0.00647	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
1,2,4-Trimethylbenzene	ND		0.110	0.00384	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
sec-Butylbenzene	ND		0.110	0.00515	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
p-Isopropyltoluene	ND		0.110	0.00472	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
1,3-Dichlorobenzene	ND		0.110	0.00395	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
1,4-Dichlorobenzene	ND		0.110	0.00515	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
n-Butylbenzene	ND		0.110	0.00625	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
1,2-Dichlorobenzene	ND		0.110	0.00274	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
1,2-Dibromo-3-chloropropane	ND		0.548	0.0207	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
Hexachlorobutadiene	ND		0.110	0.0297	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
1,2,4-Trichlorobenzene	ND		0.110	0.00461	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
Naphthalene	ND		0.219	0.00811	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
1,2,3-Trichlorobenzene	ND		0.110	0.00932	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00
Xylenes (total)	**0.0137**	**J**	0.658	0.00888	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:26	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*102*		*42.4 - 163*	*10/18/13 09:07*	*10/18/13 15:26*	*1.00*
Toluene-d8	*105*		*45.8 - 155*	*10/18/13 09:07*	*10/18/13 15:26*	*1.00*

Client Sample ID: RL-BH9-1013

Date Collected: 10/10/13 16:05
Date Received: 10/16/13 15:40

Lab Sample ID: AWJ0044-09

Matrix: Soil
Percent Solids: 86.6

Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-bromofluorobenzene	101		41.5 - 162	10/18/13 09:07	10/18/13 15:26	1.00
a,a,a - Trifluorotoluene	104		50 - 150	10/18/13 09:07	10/18/13 15:26	1.00

Client Sample ID: RL-DUP-1013

Date Collected: 10/10/13 16:15
Date Received: 10/16/13 15:40

Lab Sample ID: AWJ0044-10

Matrix: Soil
Percent Solids: 84.3

Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.147	0.0201	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
Chloromethane	ND		0.0441	0.0184	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
Vinyl chloride	ND		0.0118	0.00721	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
Bromomethane	ND		0.0882	0.0328	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
Chloroethane	ND		0.147	0.0350	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
Trichlorofluoromethane	ND		0.0441	0.0424	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
1,1-Dichloroethene	ND		0.0441	0.00824	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
Carbon disulfide	ND		0.147	0.00721	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
Methylene chloride	ND		0.294	0.0131	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
Acetone	ND		1.47	0.0904	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
trans-1,2-Dichloroethene	ND		0.441	0.00765	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
Methyl tert-butyl ether	ND		0.147	0.00426	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
1,1-Dichloroethane	ND		0.147	0.00721	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
cis-1,2-Dichloroethene	ND		0.294	0.00471	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
2,2-Dichloropropane	ND		0.147	0.00941	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
Bromochloromethane	ND		0.147	0.00529	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
Chloroform	ND		0.147	0.00515	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
Carbon tetrachloride	ND		0.0441	0.00971	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
1,1,1-Trichloroethane	ND		0.147	0.00809	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
2-Butanone	ND		1.47	0.0710	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
1,1-Dichloropropene	ND		0.147	0.00588	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
Benzene	ND		0.0294	0.00485	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
1,2-Dichloroethane (EDC)	ND		0.0221	0.00603	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
Trichloroethene	ND		0.0294	0.00441	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
Dibromomethane	ND		0.147	0.00603	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
1,2-Dichloropropane	ND		0.0147	0.00676	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
Bromodichloromethane	ND		0.0441	0.00574	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
cis-1,3-Dichloropropene	ND		0.0294	0.00544	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
Toluene	**0.0206**	**J**	0.147	0.00397	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
4-Methyl-2-pentanone	ND		1.47	0.0276	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
trans-1,3-Dichloropropene	ND		0.0294	0.00500	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
Tetrachloroethene	ND		0.0294	0.00941	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
1,1,2-Trichloroethane	ND		0.0147	0.00632	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
Dibromochloromethane	ND		0.0441	0.0184	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
1,3-Dichloropropane	ND		0.0294	0.0184	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
1,2-Dibromoethane	ND		0.00735	0.00382	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
2-Hexanone	ND		1.47	0.0385	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
Ethylbenzene	ND		0.147	0.00353	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
Chlorobenzene	ND		0.147	0.00368	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
1,1,1,2-Tetrachloroethane	ND		0.147	0.00779	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00

Client Sample ID: RL-DUP-1013

Lab Sample ID: AWJ0044-10

Date Collected: 10/10/13 16:15
Date Received: 10/16/13 15:40

Matrix: Soil
Percent Solids: 84.3

Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m,p-Xylene	0.0125	J	0.588	0.00868	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
o-Xylene	ND		0.294	0.00324	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
Styrene	ND		0.147	0.00397	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
Bromoform	ND		0.147	0.0184	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
Isopropylbenzene	ND		0.147	0.00500	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
n-Propylbenzene	ND		0.147	0.00559	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
1,1,2,2-Tetrachloroethane	ND		0.0147	0.00779	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
Bromobenzene	ND		0.147	0.00912	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
1,3,5-Trimethylbenzene	ND		0.147	0.00632	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
2-Chlorotoluene	ND		0.147	0.00397	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
1,2,3-Trichloropropane	ND		0.0147	0.00574	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
4-Chlorotoluene	ND		0.147	0.00515	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
tert-Butylbenzene	ND		0.147	0.00868	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
1,2,4-Trimethylbenzene	ND		0.147	0.00515	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
sec-Butylbenzene	ND		0.147	0.00691	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
p-Isopropyltoluene	ND		0.147	0.00632	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
1,3-Dichlorobenzene	ND		0.147	0.00529	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
1,4-Dichlorobenzene	ND		0.147	0.00691	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
n-Butylbenzene	ND		0.147	0.00838	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
1,2-Dichlorobenzene	ND		0.147	0.00368	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
1,2-Dibromo-3-chloropropane	ND		0.735	0.0278	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
Hexachlorobutadiene	ND		0.147	0.0399	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
1,2,4-Trichlorobenzene	ND		0.147	0.00618	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
Naphthalene	ND		0.294	0.0109	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
1,2,3-Trichlorobenzene	ND		0.147	0.0125	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00
Xylenes (total)	0.0125	J	0.882	0.0119	mg/kg dry	¤	10/18/13 09:07	10/18/13 15:46	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*100*		*42.4 - 163*	*10/18/13 09:07*	*10/18/13 15:46*	*1.00*
Toluene-d8	*104*		*45.8 - 155*	*10/18/13 09:07*	*10/18/13 15:46*	*1.00*
4-bromofluorobenzene	*100*		*41.5 - 162*	*10/18/13 09:07*	*10/18/13 15:46*	*1.00*
a,a,a - Trifluorotoluene	*106*		*50 - 150*	*10/18/13 09:07*	*10/18/13 15:46*	*1.00*

Client Sample ID: TripBlank

Lab Sample ID: AWJ0044-11

Date Collected: 10/10/13 16:15
Date Received: 10/16/13 15:40

Matrix: Soil

Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.100	0.0137	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
Chloromethane	ND		0.0300	0.0125	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
Vinyl chloride	ND		0.00800	0.00490	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
Bromomethane	ND		0.0600	0.0223	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
Chloroethane	ND		0.100	0.0238	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
Trichlorofluoromethane	ND		0.0300	0.0288	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
1,1-Dichloroethene	ND		0.0300	0.00560	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
Carbon disulfide	ND		0.100	0.00490	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
Methylene chloride	ND		0.200	0.00890	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
Acetone	ND		1.00	0.0615	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
trans-1,2-Dichloroethene	ND		0.300	0.00520	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00

Client: Alaska Resources & Environmental Services
Project/Site: RL1013

TestAmerica Job ID: AWJ0044

Client Sample ID: TripBlank

Date Collected: 10/10/13 16:15
Date Received: 10/16/13 15:40

Lab Sample ID: AWJ0044-11

Matrix: Soil

Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.100	0.00290	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
1,1-Dichloroethane	ND		0.100	0.00490	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
cis-1,2-Dichloroethene	ND		0.200	0.00320	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
2,2-Dichloropropane	ND		0.100	0.00640	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
Bromochloromethane	ND		0.100	0.00360	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
Chloroform	ND		0.100	0.00350	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
Carbon tetrachloride	ND		0.0300	0.00660	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
1,1,1-Trichloroethane	ND		0.100	0.00550	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
2-Butanone	ND		1.00	0.0483	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
1,1-Dichloropropene	ND		0.100	0.00400	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
Benzene	**0.0180**	**J**	0.0200	0.00330	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
1,2-Dichloroethane (EDC)	ND		0.0150	0.00410	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
Trichloroethene	ND		0.0200	0.00300	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
Dibromomethane	ND		0.100	0.00410	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
1,2-Dichloropropane	ND		0.0100	0.00460	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
Bromodichloromethane	ND		0.0300	0.00390	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
cis-1,3-Dichloropropene	ND		0.0200	0.00370	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
Toluene	**0.151**		0.100	0.00270	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
4-Methyl-2-pentanone	ND		1.00	0.0168	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
trans-1,3-Dichloropropene	ND		0.0200	0.00340	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
Tetrachloroethene	ND		0.0200	0.00640	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
1,1,2-Trichloroethane	ND		0.0100	0.00430	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
Dibromochloromethane	ND		0.0300	0.0125	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
1,3-Dichloropropane	ND		0.0200	0.0125	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
1,2-Dibromoethane	ND		0.00500	0.00260	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
2-Hexanone	ND		1.00	0.0262	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
Ethylbenzene	**0.0166**	**J**	0.100	0.00240	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
Chlorobenzene	ND		0.100	0.00250	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
1,1,1,2-Tetrachloroethane	ND		0.100	0.00530	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
m,p-Xylene	**0.0595**	**J**	0.400	0.00590	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
o-Xylene	**0.0175**	**J**	0.200	0.00220	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
Styrene	ND		0.100	0.00270	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
Bromoform	ND		0.100	0.0125	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
Isopropylbenzene	**0.0275**	**J**	0.100	0.00340	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
n-Propylbenzene	ND		0.100	0.00380	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
1,1,2,2-Tetrachloroethane	ND		0.0100	0.00530	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
Bromobenzene	ND		0.100	0.00620	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
1,3,5-Trimethylbenzene	ND		0.100	0.00430	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
2-Chlorotoluene	ND		0.100	0.00270	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
1,2,3-Trichloropropane	ND		0.0100	0.00390	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
4-Chlorotoluene	ND		0.100	0.00350	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
tert-Butylbenzene	ND		0.100	0.00590	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
1,2,4-Trimethylbenzene	ND		0.100	0.00350	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
sec-Butylbenzene	ND		0.100	0.00470	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
p-Isopropyltoluene	ND		0.100	0.00430	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
1,3-Dichlorobenzene	ND		0.100	0.00360	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
1,4-Dichlorobenzene	ND		0.100	0.00470	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
n-Butylbenzene	ND		0.100	0.00570	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
1,2-Dichlorobenzene	ND		0.100	0.00250	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00

Client Sample Results

Client: Alaska Resources & Environmental Services
Project/Site: RL1013

TestAmerica Job ID: AWJ0044

Client Sample ID: TripBlank

Date Collected: 10/10/13 16:15
Date Received: 10/16/13 15:40

Lab Sample ID: AWJ0044-11

Matrix: Soil

Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-chloropropane	ND		0.500	0.0189	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
Hexachlorobutadiene	ND		0.100	0.0271	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
1,2,4-Trichlorobenzene	ND		0.100	0.00420	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
Naphthalene	ND		0.200	0.00740	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
1,2,3-Trichlorobenzene	ND		0.100	0.00850	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00
Xylenes (total)	**0.0770**	**J**	0.600	0.00810	mg/kg wet		10/18/13 09:07	10/18/13 16:06	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*100*		*42.4 - 163*	*10/18/13 09:07*	*10/18/13 16:06*	*1.00*
Toluene-d8	*106*		*45.8 - 155*	*10/18/13 09:07*	*10/18/13 16:06*	*1.00*
4-bromofluorobenzene	*102*		*41.5 - 162*	*10/18/13 09:07*	*10/18/13 16:06*	*1.00*
a,a,a - Trifluorotoluene	*81.9*		*50 - 150*	*10/18/13 09:07*	*10/18/13 16:06*	*1.00*

Surrogate Summary

Client: Alaska Resources & Environmental Services
Project/Site: RL1013

TestAmerica Job ID: AWJ0044

Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C

Matrix: Soil **Prep Type: Total**

		Percent Surrogate Recovery (Acceptance Limits)			
		DBFM	Toluene-d8	BFB	Trifluorotc
Lab Sample ID	Client Sample ID	(42.4-163)	(45.8-155)	(41.5-162)	(50-150)
13J0129-BLK1	Method Blank	98.9	103	104	90.0
AWJ0044-01	RL-BH1-1013	101	100	103	96.3
AWJ0044-02	RL-BH2-1013	101	102	100	93.5
AWJ0044-03	RL-BH3-1013	99.4	104	104	112
AWJ0044-04	RL-BH4-1013	101	105	103	106
AWJ0044-05	RL-BH5-1013	99.7	105	102	95.5
AWJ0044-06	RL-BH6-1013	101	105	103	95.9
AWJ0044-07	RL-BH7-1013	99.6	104	102	110
AWJ0044-08	RL-BH8-1013	99.1	106	101	106
AWJ0044-09	RL-BH9-1013	102	105	101	104
AWJ0044-10	RL-DUP-1013	100	104	100	106
AWJ0044-11	TripBlank	100	106	102	81.9

Surrogate Legend

DBFM = Dibromofluoromethane
Toluene-d8 = Toluene-d8
BFB = 4-bromofluorobenzene
a,a,a - Trifluorotoluene = a,a,a - Trifluorotoluene

Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C

Matrix: Soil **Prep Type: Total**

		Percent Surrogate Recovery (Acceptance Limits)			
		DBFM	Toluene-d8	BFB	Trifluorotc
Lab Sample ID	Client Sample ID	(42.4-163)	(45.8-155)	(41.5-162)	(60-120)
13J0129-BS2	Lab Control Sample	104	100	101	106
13J0129-BSD2	Lab Control Sample Dup	101	103	103	107

Surrogate Legend

DBFM = Dibromofluoromethane
Toluene-d8 = Toluene-d8
BFB = 4-bromofluorobenzene
a,a,a - Trifluorotoluene = a,a,a - Trifluorotoluene

Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C

Lab Sample ID: 13J0129-BLK1
Matrix: Soil
Analysis Batch: 13J0129

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 13J0129_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.100	0.0137	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
Chloromethane	ND		0.0300	0.0125	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
Vinyl chloride	ND		0.00800	0.00490	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
Bromomethane	ND		0.0600	0.0223	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
Chloroethane	ND		0.100	0.0238	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
Trichlorofluoromethane	ND		0.0300	0.0288	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
1,1-Dichloroethene	ND		0.0300	0.00560	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
Carbon disulfide	ND		0.100	0.00490	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
Methylene chloride	ND		0.200	0.00890	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
Acetone	ND		1.00	0.0615	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
trans-1,2-Dichloroethene	ND		0.300	0.00520	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
Methyl tert-butyl ether	ND		0.100	0.00290	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
1,1-Dichloroethane	ND		0.100	0.00490	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
cis-1,2-Dichloroethene	ND		0.200	0.00320	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
2,2-Dichloropropane	ND		0.100	0.00640	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
Bromochloromethane	ND		0.100	0.00360	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
Chloroform	ND		0.100	0.00350	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
Carbon tetrachloride	ND		0.0300	0.00660	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
1,1,1-Trichloroethane	ND		0.100	0.00550	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
2-Butanone	ND		1.00	0.0483	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
1,1-Dichloropropene	ND		0.100	0.00400	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
Benzene	ND		0.0200	0.00330	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
1,2-Dichloroethane (EDC)	ND		0.0150	0.00410	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
Trichloroethene	ND		0.0200	0.00300	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
Dibromomethane	ND		0.100	0.00410	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
1,2-Dichloropropane	ND		0.0100	0.00460	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
Bromodichloromethane	ND		0.0300	0.00390	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
cis-1,3-Dichloropropene	ND		0.0200	0.00370	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
Toluene	0.00350	J	0.100	0.00270	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
4-Methyl-2-pentanone	ND		1.00	0.0188	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
trans-1,3-Dichloropropene	ND		0.0200	0.00340	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
Tetrachloroethene	ND		0.0200	0.00640	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
1,1,2-Trichloroethane	ND		0.0100	0.00430	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
Dibromochloromethane	ND		0.0300	0.0125	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
1,3-Dichloropropane	ND		0.0200	0.0125	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
1,2-Dibromoethane	ND		0.00500	0.00260	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
2-Hexanone	ND		1.00	0.0262	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
Ethylbenzene	ND		0.100	0.00240	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
Chlorobenzene	ND		0.100	0.00250	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
1,1,1,2-Tetrachloroethane	ND		0.100	0.00530	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
m,p-Xylene	ND		0.400	0.00590	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
o-Xylene	ND		0.200	0.00220	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
Styrene	ND		0.100	0.00270	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
Bromoform	ND		0.100	0.0125	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
Isopropylbenzene	ND		0.100	0.00340	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
n-Propylbenzene	ND		0.100	0.00380	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
1,1,2,2-Tetrachloroethane	ND		0.0100	0.00530	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
Bromobenzene	ND		0.100	0.00620	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00

Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C (Continued)

Lab Sample ID: 13J0129-BLK1
Matrix: Soil
Analysis Batch: 13J0129

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 13J0129_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		0.100	0.00430	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
2-Chlorotoluene	ND		0.100	0.00270	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
1,2,3-Trichloropropane	ND		0.0100	0.00390	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
4-Chlorotoluene	ND		0.100	0.00350	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
tert-Butylbenzene	ND		0.100	0.00590	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
1,2,4-Trimethylbenzene	ND		0.100	0.00350	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
sec-Butylbenzene	ND		0.100	0.00470	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
p-Isopropyltoluene	ND		0.100	0.00430	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
1,3-Dichlorobenzene	ND		0.100	0.00360	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
1,4-Dichlorobenzene	ND		0.100	0.00470	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
n-Butylbenzene	ND		0.100	0.00570	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
1,2-Dichlorobenzene	ND		0.100	0.00250	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
1,2-Dibromo-3-chloropropane	ND		0.500	0.0189	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
Hexachlorobutadiene	ND		0.100	0.0271	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
1,2,4-Trichlorobenzene	ND		0.100	0.00420	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
Naphthalene	ND		0.200	0.00740	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
1,2,3-Trichlorobenzene	ND		0.100	0.00850	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00
Xylenes (total)	ND		0.600	0.00810	mg/kg wet		10/18/13 09:07	10/18/13 10:11	1.00

Surrogate	*Blank %Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*98.9*		*42.4 - 163*	*10/18/13 09:07*	*10/18/13 10:11*	*1.00*
Toluene-d8	*103*		*45.8 - 155*	*10/18/13 09:07*	*10/18/13 10:11*	*1.00*
4-bromofluorobenzene	*104*		*41.5 - 162*	*10/18/13 09:07*	*10/18/13 10:11*	*1.00*
a,a,a - Trifluorotoluene	*90.0*		*50 - 150*	*10/18/13 09:07*	*10/18/13 10:11*	*1.00*

Lab Sample ID: 13J0129-BS2
Matrix: Soil
Analysis Batch: 13J0129

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 13J0129_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	0.500	0.562		mg/kg wet		112	60 - 140
Chloromethane	0.500	0.649		mg/kg wet		130	60 - 140
Vinyl chloride	0.500	0.660		mg/kg wet		132	60 - 140
Bromomethane	0.500	0.574		mg/kg wet		115	60 - 140
Chloroethane	0.500	0.702		mg/kg wet		140	60 - 140
Trichlorofluoromethane	0.500	0.640		mg/kg wet		128	60 - 140
1,1-Dichloroethene	0.500	0.656		mg/kg wet		131	76 - 187
Carbon disulfide	0.500	0.622		mg/kg wet		124	60 - 140
Methylene chloride	0.500	0.601		mg/kg wet		120	60 - 140
Acetone	2.50	2.46		mg/kg wet		98.2	60 - 140
trans-1,2-Dichloroethene	0.500	0.557		mg/kg wet		111	60 - 140
Methyl tert-butyl ether	0.500	0.530		mg/kg wet		106	79 - 127
1,1-Dichloroethane	0.500	0.580		mg/kg wet		116	60 - 140
cis-1,2-Dichloroethene	0.500	0.614		mg/kg wet		123	60 - 140
2,2-Dichloropropane	0.500	0.570		mg/kg wet		114	60 - 140
Bromochloromethane	0.500	0.612		mg/kg wet		122	60 - 140
Chloroform	0.500	0.582		mg/kg wet		116	60 - 140
Carbon tetrachloride	0.500	0.582		mg/kg wet		116	60 - 140

Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C (Continued)

Lab Sample ID: 13J0129-BS2
Matrix: Soil
Analysis Batch: 13J0129

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 13J0129_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.500	0.596		mg/kg wet		119	60 - 140
2-Butanone	2.50	2.40		mg/kg wet		95.9	60 - 140
1,1-Dichloropropene	0.500	0.581		mg/kg wet		116	60 - 140
Benzene	0.500	0.546		mg/kg wet		109	75.9 - 123
1,2-Dichloroethane (EDC)	0.500	0.557		mg/kg wet		111	60 - 140
Trichloroethene	0.500	0.562		mg/kg wet		112	82.7 - 120
Dibromomethane	0.500	0.550		mg/kg wet		110	60 - 140
1,2-Dichloropropane	0.500	0.526		mg/kg wet		105	60 - 140
Bromodichloromethane	0.500	0.540		mg/kg wet		108	60 - 140
cis-1,3-Dichloropropene	0.500	0.560		mg/kg wet		112	60 - 140
Toluene	0.500	0.542		mg/kg wet		108	77.3 - 126
4-Methyl-2-pentanone	2.50	2.43		mg/kg wet		97.1	60 - 140
trans-1,3-Dichloropropene	0.500	0.588		mg/kg wet		118	60 - 140
Tetrachloroethene	0.500	0.559		mg/kg wet		112	75 - 130
1,1,2-Trichloroethane	0.500	0.554		mg/kg wet		111	60 - 140
Dibromochloromethane	0.500	0.582		mg/kg wet		116	60 - 140
1,3-Dichloropropane	0.500	0.544		mg/kg wet		109	60 - 140
1,2-Dibromoethane	0.500	0.574		mg/kg wet		115	60 - 140
2-Hexanone	2.50	2.38		mg/kg wet		95.1	60 - 140
Ethylbenzene	0.500	0.540		mg/kg wet		108	80.7 - 120
Chlorobenzene	0.500	0.569		mg/kg wet		114	80 - 120
1,1,1,2-Tetrachloroethane	0.500	0.603		mg/kg wet		121	60 - 140
m,p-Xylene	0.500	0.526		mg/kg wet		105	86.1 - 120
o-Xylene	0.500	0.590		mg/kg wet		118	85.3 - 120
Styrene	0.500	0.602		mg/kg wet		120	60 - 140
Bromoform	0.500	0.598		mg/kg wet		120	60 - 140
Isopropylbenzene	0.500	0.581		mg/kg wet		116	60 - 140
n-Propylbenzene	0.500	0.590		mg/kg wet		118	60 - 140
1,1,2,2-Tetrachloroethane	0.500	0.600		mg/kg wet		120	60 - 140
Bromobenzene	0.500	0.569		mg/kg wet		114	60 - 140
1,3,5-Trimethylbenzene	0.500	0.614		mg/kg wet		123	60 - 140
2-Chlorotoluene	0.500	0.604		mg/kg wet		121	60 - 140
1,2,3-Trichloropropane	0.500	0.645		mg/kg wet		129	60 - 140
4-Chlorotoluene	0.500	0.594		mg/kg wet		119	60 - 140
tert-Butylbenzene	0.500	0.595		mg/kg wet		119	60 - 140
1,2,4-Trimethylbenzene	0.500	0.609		mg/kg wet		122	60 - 140
sec-Butylbenzene	0.500	0.596		mg/kg wet		119	60 - 140
p-Isopropyltoluene	0.500	0.614		mg/kg wet		123	60 - 140
1,3-Dichlorobenzene	0.500	0.590		mg/kg wet		118	60 - 140
1,4-Dichlorobenzene	0.500	0.585		mg/kg wet		117	60 - 140
n-Butylbenzene	0.500	0.620		mg/kg wet		124	60 - 140
1,2-Dichlorobenzene	0.500	0.599		mg/kg wet		120	60 - 140
1,2-Dibromo-3-chloropropane	0.500	0.526		mg/kg wet		105	60 - 140
Hexachlorobutadiene	0.500	0.537		mg/kg wet		107	60 - 140
1,2,4-Trichlorobenzene	0.500	0.523		mg/kg wet		105	60 - 140
Naphthalene	0.500	0.499		mg/kg wet		99.8	58.8 - 130
1,2,3-Trichlorobenzene	0.500	0.487		mg/kg wet		97.4	60 - 140

Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C (Continued)

Lab Sample ID: 13J0129-BS2
Matrix: Soil
Analysis Batch: 13J0129

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 13J0129_P

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane	104		42.4 - 163
Toluene-d8	100		45.8 - 155
4-bromofluorobenzene	101		41.5 - 162
a,a,a - Trifluorotoluene	106		60 - 120

Lab Sample ID: 13J0129-BSD2
Matrix: Soil
Analysis Batch: 13J0129

Client Sample ID: Lab Control Sample Dup
Prep Type: Total
Prep Batch: 13J0129_P

Analyte	Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dichlorodifluoromethane	0.500	0.482		mg/kg wet		96.3	60 - 140	15.3	25
Chloromethane	0.500	0.548		mg/kg wet		110	60 - 140	16.8	25
Vinyl chloride	0.500	0.568		mg/kg wet		114	60 - 140	14.9	25
Bromomethane	0.500	0.425		mg/kg wet		85.0	60 - 140	29.9	25
Chloroethane	0.500	0.530		mg/kg wet		106	60 - 140	27.9	25
Trichlorofluoromethane	0.500	0.514		mg/kg wet		103	60 - 140	21.8	25
1,1-Dichloroethene	0.500	0.571		mg/kg wet		114	76 - 167	13.9	25
Carbon disulfide	0.500	0.530		mg/kg wet		106	60 - 140	15.9	25
Methylene chloride	0.500	0.552		mg/kg wet		110	60 - 140	8.41	25
Acetone	2.50	2.59		mg/kg wet		104	60 - 140	5.43	25
trans-1,2-Dichloroethene	0.500	0.496		mg/kg wet		99.2	60 - 140	11.6	25
Methyl tert-butyl ether	0.500	0.498		mg/kg wet		99.5	79 - 127	6.33	25
1,1-Dichloroethane	0.500	0.506		mg/kg wet		101	60 - 140	13.4	25
cis-1,2-Dichloroethene	0.500	0.548		mg/kg wet		110	60 - 140	11.4	25
2,2-Dichloropropane	0.500	0.494		mg/kg wet		98.9	60 - 140	14.1	25
Bromochloromethane	0.500	0.552		mg/kg wet		110	60 - 140	10.2	25
Chloroform	0.500	0.496		mg/kg wet		99.2	60 - 140	15.9	25
Carbon tetrachloride	0.500	0.516		mg/kg wet		103	60 - 140	12.0	25
1,1,1-Trichloroethane	0.500	0.526		mg/kg wet		105	60 - 140	12.6	25
2-Butanone	2.50	2.97		mg/kg wet		119	60 - 140	21.4	25
1,1-Dichloropropene	0.500	0.514		mg/kg wet		103	60 - 140	12.1	25
Benzene	0.500	0.503		mg/kg wet		101	75.9 - 123	8.11	25
1,2-Dichloroethane (EDC)	0.500	0.505		mg/kg wet		101	60 - 140	9.79	25
Trichloroethene	0.500	0.486		mg/kg wet		97.1	82.7 - 120	14.6	25
Dibromomethane	0.500	0.513		mg/kg wet		103	60 - 140	6.96	25
1,2-Dichloropropane	0.500	0.482		mg/kg wet		96.5	60 - 140	8.72	25
Bromodichloromethane	0.500	0.488		mg/kg wet		97.6	60 - 140	10.0	25
cis-1,3-Dichloropropene	0.500	0.524		mg/kg wet		105	60 - 140	6.74	25
Toluene	0.500	0.510		mg/kg wet		102	77.3 - 126	5.99	25
4-Methyl-2-pentanone	2.50	2.41		mg/kg wet		96.2	60 - 140	0.931	25
trans-1,3-Dichloropropene	0.500	0.567		mg/kg wet		113	60 - 140	3.55	25
Tetrachloroethene	0.500	0.514		mg/kg wet		103	75 - 130	8.39	25
1,1,2-Trichloroethane	0.500	0.544		mg/kg wet		109	60 - 140	1.82	25
Dibromochloromethane	0.500	0.562		mg/kg wet		112	60 - 140	3.41	25
1,3-Dichloropropane	0.500	0.527		mg/kg wet		105	60 - 140	3.17	25
1,2-Dibromoethane	0.500	0.560		mg/kg wet		112	60 - 140	2.47	25
2-Hexanone	2.50	2.44		mg/kg wet		97.7	60 - 140	2.74	25
Ethylbenzene	0.500	0.496		mg/kg wet		99.2	80.7 - 120	8.59	25

Method: EPA 8260C - Volatile Organic Compounds by EPA Method 8260C (Continued)

Lab Sample ID: 13J0129-BSD2
Matrix: Soil
Analysis Batch: 13J0129

Client Sample ID: Lab Control Sample Dup
Prep Type: Total
Prep Batch: 13J0129_P

Analyte	Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chlorobenzene	0.500	0.514		mg/kg wet		103	80 - 120	10.1	25
1,1,1,2-Tetrachloroethane	0.500	0.548		mg/kg wet		110	60 - 140	9.65	25
m,p-Xylene	0.500	0.487		mg/kg wet		97.4	86.1 - 120	7.70	25
o-Xylene	0.500	0.531		mg/kg wet		106	85.3 - 120	10.5	25
Styrene	0.500	0.554		mg/kg wet		111	60 - 140	8.13	25
Bromoform	0.500	0.540		mg/kg wet		108	60 - 140	10.2	25
Isopropylbenzene	0.500	0.522		mg/kg wet		104	60 - 140	10.7	25
n-Propylbenzene	0.500	0.546		mg/kg wet		109	60 - 140	7.83	25
1,1,2,2-Tetrachloroethane	0.500	0.568		mg/kg wet		114	60 - 140	5.57	25
Bromobenzene	0.500	0.530		mg/kg wet		106	60 - 140	7.10	25
1,3,5-Trimethylbenzene	0.500	0.578		mg/kg wet		116	60 - 140	6.13	25
2-Chlorotoluene	0.500	0.558		mg/kg wet		112	60 - 140	7.83	25
1,2,3-Trichloropropane	0.500	0.629		mg/kg wet		126	60 - 140	2.51	25
4-Chlorotoluene	0.500	0.549		mg/kg wet		110	60 - 140	7.79	25
tert-Butylbenzene	0.500	0.550		mg/kg wet		110	60 - 140	7.86	25
1,2,4-Trimethylbenzene	0.500	0.565		mg/kg wet		113	60 - 140	7.50	25
sec-Butylbenzene	0.500	0.546		mg/kg wet		109	60 - 140	8.93	25
p-Isopropyltoluene	0.500	0.574		mg/kg wet		115	60 - 140	6.74	25
1,3-Dichlorobenzene	0.500	0.562		mg/kg wet		112	60 - 140	4.78	25
1,4-Dichlorobenzene	0.500	0.536		mg/kg wet		107	60 - 140	8.74	25
n-Butylbenzene	0.500	0.576		mg/kg wet		115	60 - 140	7.36	25
1,2-Dichlorobenzene	0.500	0.550		mg/kg wet		110	60 - 140	8.44	25
1,2-Dibromo-3-chloropropane	0.500	0.521		mg/kg wet		104	60 - 140	1.05	25
Hexachlorobutadiene	0.500	0.550		mg/kg wet		110	60 - 140	2.48	25
1,2,4-Trichlorobenzene	0.500	0.510		mg/kg wet		102	60 - 140	2.42	25
Naphthalene	0.500	0.493		mg/kg wet		98.6	58.8 - 130	1.21	25
1,2,3-Trichlorobenzene	0.500	0.464		mg/kg wet		92.7	60 - 140	4.94	25

Surrogate	*LCS Dup %Recovery*	*LCS Dup Qualifier*	*Limits*
Dibromofluoromethane	*101*		*42.4 - 163*
Toluene-d8	*103*		*45.8 - 155*
4-bromofluorobenzene	*103*		*41.5 - 162*
a,a,a - Trifluorotoluene	*107*		*60 - 120*

QC Association Summary

Client: Alaska Resources & Environmental Services
Project/Site: RL1013

TestAmerica Job ID: AWJ0044

GCMS Volatiles

Analysis Batch: 13J0129

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
13J0129-BLK1	Method Blank	Total	Soil	EPA 8260C	13J0129_P
13J0129-BS2	Lab Control Sample	Total	Soil	EPA 8260C	13J0129_P
13J0129-BSD2	Lab Control Sample Dup	Total	Soil	EPA 8260C	13J0129_P
AWJ0044-01	RL-BH1-1013	Total	Soil	EPA 8260C	13J0129_P
AWJ0044-02	RL-BH2-1013	Total	Soil	EPA 8260C	13J0129_P
AWJ0044-03	RL-BH3-1013	Total	Soil	EPA 8260C	13J0129_P
AWJ0044-04	RL-BH4-1013	Total	Soil	EPA 8260C	13J0129_P
AWJ0044-05	RL-BH5-1013	Total	Soil	EPA 8260C	13J0129_P
AWJ0044-06	RL-BH6-1013	Total	Soil	EPA 8260C	13J0129_P
AWJ0044-07	RL-BH7-1013	Total	Soil	EPA 8260C	13J0129_P
AWJ0044-08	RL-BH8-1013	Total	Soil	EPA 8260C	13J0129_P
AWJ0044-09	RL-BH9-1013	Total	Soil	EPA 8260C	13J0129_P
AWJ0044-10	RL-DUP-1013	Total	Soil	EPA 8260C	13J0129_P
AWJ0044-11	TripBlank	Total	Soil	EPA 8260C	13J0129_P

Prep Batch: 13J0129_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
13J0129-BLK1	Method Blank	Total	Soil	GC/MS Volatiles	
13J0129-BS2	Lab Control Sample	Total	Soil	GC/MS Volatiles	
13J0129-BSD2	Lab Control Sample Dup	Total	Soil	GC/MS Volatiles	
AWJ0044-01	RL-BH1-1013	Total	Soil	GC/MS Volatiles	
AWJ0044-02	RL-BH2-1013	Total	Soil	GC/MS Volatiles	
AWJ0044-03	RL-BH3-1013	Total	Soil	GC/MS Volatiles	
AWJ0044-04	RL-BH4-1013	Total	Soil	GC/MS Volatiles	
AWJ0044-05	RL-BH5-1013	Total	Soil	GC/MS Volatiles	
AWJ0044-06	RL-BH6-1013	Total	Soil	GC/MS Volatiles	
AWJ0044-07	RL-BH7-1013	Total	Soil	GC/MS Volatiles	
AWJ0044-08	RL-BH8-1013	Total	Soil	GC/MS Volatiles	
AWJ0044-09	RL-BH9-1013	Total	Soil	GC/MS Volatiles	
AWJ0044-10	RL-DUP-1013	Total	Soil	GC/MS Volatiles	
AWJ0044-11	TripBlank	Total	Soil	GC/MS Volatiles	

Wet Chem

Analysis Batch: 13K0005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
13K0005-DUP1	AWJ0044-10 (RL-Dup-1013-Soil)	Total	Soil	TA SOP	13K0005_P
AWJ0044-01	RL-BH1-1013	Total	Soil	TA SOP	13K0005_P
AWJ0044-02	RL-BH2-1013	Total	Soil	TA SOP	13K0005_P
AWJ0044-03	RL-BH3-1013	Total	Soil	TA SOP	13K0005_P
AWJ0044-04	RL-BH4-1013	Total	Soil	TA SOP	13K0005_P
AWJ0044-05	RL-BH5-1013	Total	Soil	TA SOP	13K0005_P
AWJ0044-06	RL-BH6-1013	Total	Soil	TA SOP	13K0005_P
AWJ0044-07	RL-BH7-1013	Total	Soil	TA SOP	13K0005_P
AWJ0044-08	RL-BH8-1013	Total	Soil	TA SOP	13K0005_P
AWJ0044-09	RL-BH9-1013	Total	Soil	TA SOP	13K0005_P
AWJ0044-10	RL-DUP-1013	Total	Soil	TA SOP	13K0005_P

QC Association Summary

Client: Alaska Resources & Environmental Services
Project/Site: RL1013

TestAmerica Job ID: AWJ0044

Wet Chem (Continued)

Prep Batch: 13K0005_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
13K0005-DUP1	AWJ0044-10 (RL-Dup-1013-Soil)	Total	Soil	Wet Chem	
AWJ0044-01	RL-BH1-1013	Total	Soil	Wet Chem	
AWJ0044-02	RL-BH2-1013	Total	Soil	Wet Chem	
AWJ0044-03	RL-BH3-1013	Total	Soil	Wet Chem	
AWJ0044-04	RL-BH4-1013	Total	Soil	Wet Chem	
AWJ0044-05	RL-BH5-1013	Total	Soil	Wet Chem	
AWJ0044-06	RL-BH6-1013	Total	Soil	Wet Chem	
AWJ0044-07	RL-BH7-1013	Total	Soil	Wet Chem	
AWJ0044-08	RL-BH8-1013	Total	Soil	Wet Chem	
AWJ0044-09	RL-BH9-1013	Total	Soil	Wet Chem	
AWJ0044-10	RL-DUP-1013	Total	Soil	Wet Chem	

Lab Chronicle

Client: Alaska Resources & Environmental Services
Project/Site: RL1013

TestAmerica Job ID: AWJ0044

Client Sample ID: RL-BH1-1013
Lab Sample ID: AWJ0044-01

Date Collected: 10/10/13 15:00
Matrix: Soil
Date Received: 10/16/13 15:40
Percent Solids: 85.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		1.28	13J0129_P	10/18/13 09:07	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	13J0129	10/18/13 12:48	CBW	TAL SPK
Total	Prep	Wet Chem		1.00	13K0005_P	10/31/13 15:15	MS	TAL SPK
Total	Analysis	TA SOP		1.00	13K0005	11/01/13 08:30	MS	TAL SPK

Client Sample ID: RL-BH2-1013
Lab Sample ID: AWJ0044-02

Date Collected: 10/10/13 15:05
Matrix: Soil
Date Received: 10/16/13 15:40
Percent Solids: 88.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		0.903	13J0129_P	10/18/13 09:07	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	13J0129	10/18/13 13:08	CBW	TAL SPK
Total	Prep	Wet Chem		1.00	13K0005_P	10/31/13 15:15	MS	TAL SPK
Total	Analysis	TA SOP		1.00	13K0005	11/01/13 08:30	MS	TAL SPK

Client Sample ID: RL-BH3-1013
Lab Sample ID: AWJ0044-03

Date Collected: 10/10/13 15:10
Matrix: Soil
Date Received: 10/16/13 15:40
Percent Solids: 86.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		1.09	13J0129_P	10/18/13 09:07	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	13J0129	10/18/13 13:28	CBW	TAL SPK
Total	Prep	Wet Chem		1.00	13K0005_P	10/31/13 15:15	MS	TAL SPK
Total	Analysis	TA SOP		1.00	13K0005	11/01/13 08:30	MS	TAL SPK

Client Sample ID: RL-BH4-1013
Lab Sample ID: AWJ0044-04

Date Collected: 10/10/13 15:15
Matrix: Soil
Date Received: 10/16/13 15:40
Percent Solids: 87.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		1.23	13J0129_P	10/18/13 09:07	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	13J0129	10/18/13 13:47	CBW	TAL SPK
Total	Prep	Wet Chem		1.00	13K0005_P	10/31/13 15:15	MS	TAL SPK
Total	Analysis	TA SOP		1.00	13K0005	11/01/13 08:30	MS	TAL SPK

Client Sample ID: RL-BH5-1013
Lab Sample ID: AWJ0044-05

Date Collected: 10/10/13 15:20
Matrix: Soil
Date Received: 10/16/13 15:40
Percent Solids: 82.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		1.54	13J0129_P	10/18/13 09:07	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	13J0129	10/18/13 14:07	CBW	TAL SPK
Total	Prep	Wet Chem		1.00	13K0005_P	10/31/13 15:15	MS	TAL SPK

Lab Chronicle

Client: Alaska Resources & Environmental Services
Project/Site: RL1013

TestAmerica Job ID: AWJ0044

Client Sample ID: RL-BH5-1013

Lab Sample ID: AWJ0044-05
Date Collected: 10/10/13 15:20
Matrix: Soil
Date Received: 10/16/13 15:40
Percent Solids: 82.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Analysis	TA SOP		1.00	13K0005	11/01/13 08:30	MS	TAL SPK

Client Sample ID: RL-BH6-1013

Lab Sample ID: AWJ0044-06
Date Collected: 10/10/13 15:35
Matrix: Soil
Date Received: 10/16/13 15:40
Percent Solids: 85.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		0.804	13J0129_P	10/18/13 09:07	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	13J0129	10/18/13 14:27	CBW	TAL SPK
Total	Prep	Wet Chem		1.00	13K0005_P	10/31/13 15:15	MS	TAL SPK
Total	Analysis	TA SOP		1.00	13K0005	11/01/13 08:30	MS	TAL SPK

Client Sample ID: RL-BH7-1013

Lab Sample ID: AWJ0044-07
Date Collected: 10/10/13 15:45
Matrix: Soil
Date Received: 10/16/13 15:40
Percent Solids: 92.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		0.794	13J0129_P	10/18/13 09:07	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	13J0129	10/18/13 14:46	CBW	TAL SPK
Total	Prep	Wet Chem		1.00	13K0005_P	10/31/13 15:15	MS	TAL SPK
Total	Analysis	TA SOP		1.00	13K0005	11/01/13 08:30	MS	TAL SPK

Client Sample ID: RL-BH8-1013

Lab Sample ID: AWJ0044-08
Date Collected: 10/10/13 15:55
Matrix: Soil
Date Received: 10/16/13 15:40
Percent Solids: 83.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		0.975	13J0129_P	10/18/13 09:07	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	13J0129	10/18/13 15:06	CBW	TAL SPK
Total	Prep	Wet Chem		1.00	13K0005_P	10/31/13 15:15	MS	TAL SPK
Total	Analysis	TA SOP		1.00	13K0005	11/01/13 08:30	MS	TAL SPK

Client Sample ID: RL-BH9-1013

Lab Sample ID: AWJ0044-09
Date Collected: 10/10/13 16:05
Matrix: Soil
Date Received: 10/16/13 15:40
Percent Solids: 86.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		0.818	13J0129_P	10/18/13 09:07	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	13J0129	10/18/13 15:26	CBW	TAL SPK
Total	Prep	Wet Chem		1.00	13K0005_P	10/31/13 15:15	MS	TAL SPK
Total	Analysis	TA SOP		1.00	13K0005	11/01/13 08:30	MS	TAL SPK

Lab Chronicle

Client: Alaska Resources & Environmental Services
Project/Site: RL1013

TestAmerica Job ID: AWJ0044

Client Sample ID: RL-DUP-1013

Lab Sample ID: AWJ0044-10

Date Collected: 10/10/13 16:15
Date Received: 10/16/13 15:40

Matrix: Soil
Percent Solids: 84.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		1.08	13J0129_P	10/18/13 09:07	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	13J0129	10/18/13 15:46	CBW	TAL SPK
Total	Prep	Wet Chem		1.00	13K0005_P	10/31/13 15:15	MS	TAL SPK
Total	Analysis	TA SOP		1.00	13K0005	11/01/13 08:30	MS	TAL SPK

Client Sample ID: TripBlank

Lab Sample ID: AWJ0044-11

Date Collected: 10/10/13 16:15
Date Received: 10/16/13 15:40

Matrix: Soil

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		1.00	13J0129_P	10/18/13 09:07	CBW	TAL SPK
Total	Analysis	EPA 8260C		1.00	13J0129	10/18/13 16:06	CBW	TAL SPK

Laboratory References:

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

Certification Summary

Client: Alaska Resources & Environmental Services
Project/Site: RL1013

TestAmerica Job ID: AWJ0044

Laboratory: TestAmerica Anchorage

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	AK00975	06-30-14
Alaska (UST)	State Program	10	UST-067	06-16-14

Laboratory: TestAmerica Spokane

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Washington	State Program	10	C569	01-06-14

Method Summary

Client: Alaska Resources & Environmental Services
Project/Site: RL1013

TestAmerica Job ID: AWJ0044

Method	Method Description	Protocol	Laboratory
EPA 8260C	Volatile Organic Compounds by EPA Method 8260C		TAL SPK
TA SOP	Conventional Chemistry Parameters by APHA/EPA Methods		TAL SPK

Protocol References:

Laboratory References:

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

Sample Summary

Client: Alaska Resources & Environmental Services
Project/Site: RL1013

TestAmerica Job ID: AWJ0044

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
AWJ0044-01	RL-BH1-1013	Soil	10/10/13 15:00	10/16/13 15:40
AWJ0044-02	RL-BH2-1013	Soil	10/10/13 15:05	10/16/13 15:40
AWJ0044-03	RL-BH3-1013	Soil	10/10/13 15:10	10/16/13 15:40
AWJ0044-04	RL-BH4-1013	Soil	10/10/13 15:15	10/16/13 15:40
AWJ0044-05	RL-BH5-1013	Soil	10/10/13 15:20	10/16/13 15:40
AWJ0044-06	RL-BH6-1013	Soil	10/10/13 15:35	10/16/13 15:40
AWJ0044-07	RL-BH7-1013	Soil	10/10/13 15:45	10/16/13 15:40
AWJ0044-08	RL-BH8-1013	Soil	10/10/13 15:55	10/16/13 15:40
AWJ0044-09	RL-BH9-1013	Soil	10/10/13 16:05	10/16/13 15:40
AWJ0044-10	RL-DUP-1013	Soil	10/10/13 16:15	10/16/13 15:40
AWJ0044-11	TripBlank	Soil	10/10/13 16:15	10/16/13 15:40

ALASKA RESOURCES AND ENVIRONMENTAL SERVICES

ARES
P.O. Box 83050
Fairbanks, Alaska 99708
Phone: 907.374.3226
Fax: 907.374.2319

Chain of Custody Report

AWJ0044

Client: Alaska Resources and Environmental Services

Report To: Lyle Gresehover
Address: ARES, P.O. Box 83050
Email: lyle@ak-res.com
Phone: (907) 374-3226 Fax: (907) 374-3219

Invoice To: ARES, P.O. Box 83050, Fairbanks, Alaska 99708

P.O. Number:

Laboratory Name: Test America Inc.
Address: 2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119

Project Name: Raven Landing
Project Number: RL1013
Sampled By: Dustin Stahl

Turnaround Request In Business Days

Organic & Inorganic Analyses: 10 | 7 | 5 | 4 | 3 | 2 | 1 | <1

Petroleum Hydrocarbon Analyses: 5 | 4 | 3 | 2 | 1 | <1

Specify Other:

Report Tier Levels: Tier II reporting requested (results + QC)

	Sample Identification	Sampling Date/ Time		8260B VOC's	EPA 8021B BTEX	AK 102 DRO	AK 103 RRO								Matrix (W,S,O)	# of Cont.	Location / Comments	Lab ID
	Preservative			METH	METH	N/A	N/A											
1	RL-BH1-1013	10/10/2013	1500	X											S	2		01
2	RL-BH2-1013	10/10/2013	1505	X											S	2		02
3	RL-BH3-1013	10/10/2013	1510	X											S	2		03
4	RL-BH4-1013	10/10/2013	1515	X											S	2		04
5	RL-BH5-1013	10/10/2013	1520	X											S	2		05
6	RL-BH6-1013	10/10/2013	1535	X											S	2		06
7	RL-BH7-1013	10/10/2013	1545	X											S	2		07
8	RL-BH8-1013	10/10/2013	1555	X											S	2		08
9	RL-BH9-1013	10/10/2013	1605	X											S	2		09
10	RL-DUP-1013	10/10/2013	1615	X											S	2		10
11	TripBlank	10/10/2013	1450	X			9/16								O	1		11

Released By: [signature]	Date: 07/14/2013	Received By: [signature]	Date: 10/16/13
Print Name: Dustin Stahl Firm: ARES	Time: 0800	Print Name: Andrew Pike Firm: TA-AK	Time: 15:40
Released By: [signature]	Date:	Received By:	Date:
Print Name: Firm:	Time:	Print Name: Firm:	Time:

Additional Remarks:

Temp: 5.4

Page 1 of 1

COC REV 03/2013

Test America Cooler Receipt Form

(Army Corps. Compliant)

WORK ORDER # AWJ0044 CLIENT: ARES PROJECT: Raven Landing

Date /Time Cooler Arrived 10 / 16 / 13 · 15 : 40 Cooler signed for by: Andrew Pilch (Print name)

Preliminary Examination Phase:

Date cooler opened: ☒ same as date received or ___/___/___

Cooler opened by (print) Andrew Pilch (sign) [signature]

1. Delivered by ☒ ALASKA AIRLINES ☐ Fed-Ex ☐ UPS ☐ NAC ☐ LYNDEN ☐ CLIENT ☐ Other:
   Shipment Tracking # if applicable 027 8921 4020 (include copy of shipping papers in file)

2. Number of Custody Seals 2 Signed by see back Date ___/___/___

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: semi-hard

Temperature 5.4 °C (corrected) Thermometer # Rec #5

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	sample 8 and 9 sepia labels were very smeared - AP 10/17/13
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. Conoco Phillips, Alyeska, BP H2O samples only, pH <2?	☐ Yes	☐ No	☒ N/A
14. Is there adequate volume for the tests requested?	☒ Yes	☐ No	
14. Is there dry weight volume provided?	☒ Yes	☐ No	
15. Were VOA vials free of bubbles? ☒ N/A	☐ Yes	☐ No	

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

16. Are methanol soils immersed in methanol?	☒ Yes	☐ No	☐ N/A

Log-in Phase:

Date of sample log-in 10 / 17 / 13

Samples logged in by (print) Andrew Pilch (sign) [signature]

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

AK-FORM-SPL-005 5 October 2011

CUSTODY SEAL

ENVIRONMENTAL SAMPLING SUPPLY
www.essvial.com 800-233-8425

Date: 10/14/2013

Signature:

AWJ0044

CUSTODY SEAL

ENVIRONMENTAL SAMPLING SUPPLY
www.essvial.com 800-233-8425

Date: 10/14/2013

Signature:

Laboratory Data Review Checklist

Completed by: Dustin Stahl

Title: Environmental Scientist Date: 12/17/2013

CS Report Name: Raven Landing Soil Investigation Report Date: December 2013

Consultant Firm: Alaska Resources and Environmental Services

Laboratory Name: Test America Laboratory Report Number: AWJ0044

ADEC File Number: ADEC RecKey Number:

1. Laboratory
   a. Did an ADEC CS approved laboratory receive and perform all of the submitted sample analyses?
      Yes No NA (Please explain.) Comments:

   b. If the samples were transferred to another "network" laboratory or sub-contracted to an alternate laboratory, was the laboratory performing the analyses ADEC CS approved?
      Yes No NA (Please explain.) Comments:

      The data set was subcontracted to TestAmerica Spokane from TestAmerica Anchorage.

2. Chain of Custody (COC)
   a. COC information completed, signed, and dated (including released/received by)?
      Yes No NA (Please explain.) Comments:

   b. Correct analyses requested?
      Yes No NA (Please explain.) Comments:

3. Laboratory Sample Receipt Documentation
   a. Sample/cooler temperature documented and within range at receipt (4° ± 2° C)?
      Yes No NA (Please explain.) Comments:

   b. Sample preservation acceptable – acidified waters, Methanol preserved VOC soil (GRO, BTEX, Volatile Chlorinated Solvents, etc.)?
      Yes No NA (Please explain.) Comments:

c. Sample condition documented – broken, leaking (Methanol), zero headspace (VOC vials)?
Yes No NA (Please explain.) Comments:

No adverse conditions were noted.

d. If there were any discrepancies, were they documented? For example, incorrect sample containers/preservation, sample temperature outside of acceptable range, insufficient or missing samples, etc.?
Yes No NA (Please explain.) Comments:

No adverse conditions were noted.

e. Data quality or usability affected? (Please explain.)
Comments:

N/A

4. Case Narrative
a. Present and understandable?
Yes No NA (Please explain.) Comments:

b. Discrepancies, errors or QC failures identified by the lab?
Yes No NA (Please explain.) Comments:

c. Were all corrective actions documented?
Yes No NA (Please explain.) Comments:

There were no discrepancies, errors, or QC failures identified in the case narrative.

d. What is the effect on data quality/usability according to the case narrative?
Comments:

N/A

5. Samples Results
a. Correct analyses performed/reported as requested on COC?
Yes No NA (Please explain.) Comments:

b. All applicable holding times met?
Yes No NA (Please explain.) Comments:

c. All soils reported on a dry weight basis?

Yes No NA (Please explain.) Comments:

d. Are the reported PQLs less than the Cleanup Level or the minimum required detection level for the project?

Yes No NA (Please explain.) Comments:

There are twelve analytes that have PQL's greater than the ADEC cleanup levels, but the laboratory MDL is less than cleanup levels for these twelve analytes in all samples. Two analytes 1,2-Dibromoethane and 1,2,3-Trichloropropane have MDL's and PQL's greater than ADEC cleanup levels for all samples. Vinyl chloride and methylene chloride have MDL's and PQL's greater than ADEC cleanup levels in one sample.

e. Data quality or usability affected?

Comments:

Data quality is affected. Non-detect results with elevated detection limits could possibly be above ADEC cleanup levels for the affected samples/analytes.

6. QC Samples

a. Method Blank

i. One method blank reported per matrix, analysis and 20 samples?

Yes No NA (Please explain.) Comments:

ii. All method blank results less than PQL?

Yes No NA (Please explain.) Comments:

iii. If above PQL, what samples are affected?

Comments:

N/A

iv. Do the affected sample(s) have data flags and if so, are the data flags clearly defined?

Yes No NA (Please explain.) Comments:

All results were below the PQL.

v. Data quality or usability affected? (Please explain.)

Comments:

N/A; see above.

b. Laboratory Control Sample/Duplicate (LCS/LCSD)

i. Organics – One LCS/LCSD reported per matrix, analysis and 20 samples? (LCS/LCSD required per AK methods, LCS required per SW846)
Yes No NA (Please explain.) Comments:

ii. Metals/Inorganics – one LCS and one sample duplicate reported per matrix, analysis and 20 samples?
Yes No NA (Please explain.) Comments:

No metals or inorganic samples were collected or analyzed for this sampling event.

iii. Accuracy – All percent recoveries (%R) reported and within method or laboratory limits? And project specified DQOs, if applicable. (AK Petroleum methods: AK101 60%-120%, AK102 75%-125%, AK103 60%-120%; all other analyses see the laboratory QC pages)
Yes No NA (Please explain.) Comments:

iv. Precision – All relative percent differences (RPD) reported and less than method or laboratory limits? And project specified DQOs, if applicable. RPD reported from LCS/LCSD, MS/MSD, and or sample/sample duplicate. (AK Petroleum methods 20%; all other analyses see the laboratory QC pages)
Yes No NA (Please explain.) Comments:

v. If %R or RPD is outside of acceptable limits, what samples are affected?
Comments:

N/A

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes No NA (Please explain.) Comments:

No samples were affected.

vii. Data quality or usability affected? (Use comment box to explain.)
Comments:

N/A; see above.

c. Surrogates – Organics Only

i. Are surrogate recoveries reported for organic analyses – field, QC and laboratory samples?
Yes No NA (Please explain.) Comments:

ii. Accuracy – All percent recoveries (%R) reported and within method or laboratory limits? And project specified DQOs, if applicable. (AK Petroleum methods 50-150 %R; all other analyses see the laboratory report pages)

Yes No NA (Please explain.) Comments:

iii. Do the sample results with failed surrogate recoveries have data flags? If so, are the data flags clearly defined?

Yes No NA (Please explain.) Comments:

All %R were within acceptable limits.

iv. Data quality or usability affected? (Use the comment box to explain.)

Comments:

N/A

d. Trip blank – Volatile analyses only (GRO, BTEX, Volatile Chlorinated Solvents, etc.): Water and Soil

i. One trip blank reported per matrix, analysis and for each cooler containing volatile samples? (If not, enter explanation below.)

Yes No NA (Please explain.) Comments:

ii. Is the cooler used to transport the trip blank and VOA samples clearly indicated on the COC? (If not, a comment explaining why must be entered below)

Yes No NA (Please explain.) Comments:

The samples were shipped in a single cooler. No unique identifying marks were available on the cooler. Custody seal was intact upon receipt.

iii. All results less than PQL?

Yes No NA (Please explain.) Comments:

Toluene was detected in the trip blank (0.151mg/kg)

iv. If above PQL, what samples are affected?

All the samples were shipped together in the same cooler, thus all samples could be affected by cross-contamination.

Comments:

v. Data quality or usability affected? (Please explain.)

Comments:

Data quality for toluene is affected all samples could be biased high due to possible cross-contamination. Data is usable, but sample results for toluene should be view qualitatively rather than quantitatively.

e. Field Duplicate

i. One field duplicate submitted per matrix, analysis and 10 project samples?

Yes No NA (Please explain.) Comments:

ii. Submitted blind to lab?

Yes No NA (Please explain.) Comments:

iii. Precision – All relative percent differences (RPD) less than specified DQOs? (Recommended: 30% water, 50% soil)

RPD (%) = Absolute value of: $\frac{(R_1-R_2)}{((R_1+R_2)/2)} \times 100$

Where R_1 = Sample Concentration
R_2 = Field Duplicate Concentration

Yes No NA (Please explain.) Comments:

iv. Data quality or usability affected? (Use the comment box to explain why or why not.)

Comments:

N/A

f. Decontamination or Equipment Blank (If not used explain why).

Yes No NA (Please explain.) Comments:

No equipment blank was required for this sampling event.

i. All results less than PQL?

Yes No NA (Please explain.) Comments:

ii. If above PQL, what samples are affected?

Comments:

N/A

iii. Data quality or usability affected? (Please explain.)

Comments:

N/A

7. Other Data Flags/Qualifiers (ACOE, AFCEE, Lab Specific, etc.)
   a. Defined and appropriate?

      Yes No NA (Please explain.) Comments: