

# Able Clean-up Technologies, Inc.

4117 E. Nebraska Ave, Spokane, WA 99217 Ph: 509-466-5255 Fax: 509-487-9810

**Environmental Services** 

July 1, 2013

Coleman Oil Attn: Mark Sater 335 Mill Road P.O. Box 1308 Lewiston, ID 83501

RE: Report for a gasoline spill for Coleman Oil, located at the Coleman Oil Bulk Plant, 3 Chehalis Street, Wenatchee, Washington.

Dear Mr. Sater,

On May 30, 2013 at 4:00pm a refueling tanker from Coleman Oil was refilling a four (4) compartment underground storage tank (UST) at the Coleman Oil Bulk facility when the one compartment being filled was over-filled and the fuel was released from the fill port of the UST. The UST is used to supply fuel for the retail sales dispensers located just to the south of the bulk plant. The bulk plant is located at 3 Chehalis Street, Wenatchee, Washington. According to Coleman Oil personnel, the excess fuel had run across the concrete pad in three directions; south, west & east into the surrounding soils and that no liquid was recovered. The initial estimate for gasoline released into the environment was 300 gallons. Able Cleanup Technologies Inc. (ACT) was called on May 31, 2013 at 2:30 pm by Jim Cach with Coleman Oil to respond and start cleanup actions on the spill. As required: both general and private emergency locating was called.

Able Clean-up Technicians started the cleanup of the site on May 31, 2013. Technicians responded by first trying to establish the vertical and lateral extent of the contamination. After the private locating of underground utilities it became apparent that with an active fuel tank and depth of the contamination that a vacuum truck would need to be called in. ACT checked all accessible underground pathways that the fuel could have spread to. There are monitoring wells at the Coleman Oil Site from an older spill. The closest wells both to the north and south were checked by quickly opening the top of the well and checking the head space with a PID. The result of that field test did not indicate there was any new fuel in the wells. The excavation using a vacuum truck started the next morning. The gasoline contaminated soils were removed from around the tank which had 5/8 minus for the top 4-6 inches then pea gravel to depth. The excavation was continued to a depth that was close to exposing flexible product lines. At that time the excavation was stopped temporarily in order to drain the tank of all the product and drain the fuel lines from the UST back into the tank. The product from the four compartments was removed by Coleman Oil and reused as product. Once the fuel was removed from the system, ACT continued to vacuum and remove the contaminated soils and pea gravel from around three sides of the tank. When the vacuum truck was full, the contaminated soils were placed on plastic

and covered with plastic until the material could be approved for disposal at the Wenatchee Landfill which is a permitted facility for Petroleum Contaminated Soils (PCS). Confirmation samples were collected and a rush analysis was performed. The results indicated that additional contamination was present in the excavation so the excavation was advanced to remove all the contaminated from this release.

The UST that was exposed is a Stip 3 dielectric coated steel double walled tank with four (4) compartments: three (3) for gasoline and one (1) for on-road diesel. The tank had sacrificial anodes, interstitial monitoring and spill buckets & boxes. The piping is double walled flexible and corrosion resistant. The site was in compliance with the WDOE and has a site facility number of 83844381.

The approximate area of gasoline PCS was 21 feet long and an 18 feet wide excavation that extended to a depth of 12 feet. 96.08 tons of PCS were disposed of under permit 106645WA at the Wenatchee Disposal Facility. The excavation will be backfilled by a licensed UST tank installer provided by Coleman Oil.

#### **Analytical Results**

Seven (7) initial samples were collected from the site, and six were analyzed for NWTPH-Gx and BTEX from the excavation and one was collected from the contaminated stockpile to profile the waste stream and to be analyzed for BTEX and lead. Based on the first set of samples and their results; additional excavating occurred. Three (3) additional samples were collected from the site, and were analyzed for NWTPH-Gx and BTEX from the expanded excavation and all samples were taken to Anatek Labs, Inc. a Washington State Certified Lab, for analysis. The final results of the post decontamination sampling showed that analytical was below MTCA cleanup regulations under Chapter 173-340 WAC, table 740-1 Method A Soil Cleanup Levels for Unrestricted Land Uses. All samples were collected by an ICC licensed Site Assessor and decommissioner.

### I. GENERAL INFORMATION

Client: Coleman Oil

Contact: Jim Cach & Mark Sater

335 Mill Road, P.O. Box 1308

Lewiston, ID 83501

Phone/Fax: 208-799-2106/208-799-2008

Site location of the release: Coleman Oil Bulk Refueling facility @ 3 East Chehalis Street, Wenatchee, WA.

#### II. RELEASE INFORMATION

Date/Time of release: May 30, 2013 / 4:00pm Date/Time ACT contacted: May 31, 2013 / 2:30pm

**ACT Representative:** Kipp Silver

B. Release was reported to: Washington Department of Ecology (WDOE)

Sam Ham 509-961-8868 (initial spill contact)

Krystal Rodriguez 509-575-2490 UST

Norm Peck 509-575-2490 (current remediation contact)

- C. Type/Quantity/Physical State of Release: Gasoline fuel / Initial estimates were approximately 300 gallons of gasoline. Upon further reconciling of the total fuel lost this was changed to 200 gallons. Physical state of the spill in solid form contained within the surrounding soils.
- D. The release affected the: The soils and fill around the UST to the south, east & west.
- E. Nearest surface water body to the release site: Columbia River is approximately 117 feet to the northeast.

Has the release reached the surface water identified above?: No

Could the release potentially reach the surface water body?: No

F. Depth to nearest aquifer/groundwater: 10-22.5 feet

Has the release reached the nearest aquifer/groundwater? No

G. Has the release affected the air?: No

- H. Was there a threat to public safety caused by this release?: No
- I. Is there a potential for future/continued release from this incident? No, the contaminated soils have been removed.

#### III. SITE INFORMATION

A. Adjacent land uses:

The area is industrial / commercial

B. What is the population density surrounding the site?

The population density of this area is light to medium.

- C. Soil Types: Sandy loam to gravel and boulders (the area could be all fill material)
- D. Immediate site topography (all that apply):

Flat at the release location but at the road there is a slight slope to the northwest

#### IV. SAMPLING INFORMATION

A. Were sample of soil collected? Yes

Seven (7) initial samples were collected from the site, and six were analyzed for NWTPH-Gx and BTEX from the excavation and one was collected from the contaminated stockpile to profile the waste stream and to be analyzed for BTEX and lead. Based on the first set of samples and their result; three (3) additional samples were collected from the site, and were analyzed for NWTPH-Gx and BTEX from the excavation. All samples were taken to Anatek Labs, Inc. a Washington State Certified Lab, for analysis. Results over MTCA cleanup values are in **bold** type (complete analytical is also included

in the analytical results attachment and table) along with the description of the location and rationale for taking the sample being reported after each sample number. (Refer sample location map Attachment 1). Analytical samples were reported by Anatek Labs.

ND = Non Detect **Bold** = Results over MTCA limits

1990

1

CO-SAG-1: Sample was a discrete soil sample collected from the south side of the excavation. The depth of the sample was 10.5 feet. The sample was collected to confirm that all the gasoline impacted soils were removed in a vertical direction and south of the underground tank. The sample was collected in native soils of mixed schistic cobbles with some clay and gravels. This sample was analyzed for NWTPH-Gx and BTEX with the following results: **Benzene = 246 ug/kg**, Ethylbenzene = 256 ug/kg, MTBE =ND, Total Xylene = 1990 ug/kg, Toluene = 1130 ug/kg and **Gasoline = 65.9** mg/kg. The excavation was advanced in that direction.

CO-SAG-2: Sample was a discrete soil sample collected from the south side wall of the excavation. The depth of the sample was 7 feet. The sample was collected to confirm that all the gasoline impacted soils were removed in a vertical direction and south of the underground tank. The sample was collected in native soils of mixed schistic cobbles with some clay and gravels. This sample was analyzed for NWTPH-Gx and BTEX with the following results: Benzene = ND, Ethylbenzene = ND, MTBE = ND, Total Xylene = ND, Toluene = ND and Gasoline = 3.01 mg/kg. These values are all below MTCA regulated cleanup levels.

**CO-SAG-3:** Sample was a discrete soil sample collected from the west side of the excavation. The depth of the sample was 42 inches. The sample was collected to confirm that all the gasoline impacted soils were removed in a horizontal direction and west of the underground tank. The sample was collected in native soils of mixed schistic cobbles with some clay and gravels. This sample was analyzed for NWTPH-Gx and BTEX with the following results: Benzene = ND, Ethylbenzene = 32.6 ug/kg, MTBE = ND, Total Xylene = 354 ug/kg, Toluene = 32.6 ug/kg and **Gasoline = 85.3 mg/kg**. The excavation was advanced in that direction.

CO-SAG-4: Sample was a discrete soil sample collected from the west side of the excavation. The depth of the sample was 80 inches. The sample was collected to confirm that all the gasoline impacted soils were removed in a vertical direction and west of the underground tank. The sample was collected in native soils of mixed schistic cobbles with some clay and gravels. This sample was analyzed for NWTPH-Gx and BTEX with the following results: Benzene = ND, Ethylbenzene = ND, MTBE = ND, Total Xylene = ND, Toluene = ND and Gasoline = 4.85 mg/kg. These values are all below MTCA regulated cleanup levels.

CO-SAG-5: Sample was a discrete soil sample collected from the east side of the excavation. The depth of the sample was 14 inches. The sample was collected to confirm that all the gasoline impacted soils were removed in a horizontal direction and east of the underground tank. The sample was collected in native soils of mixed schistic cobbles with some clay and gravels. This sample was analyzed for NWTPH-Gx and BTEX with the following results: **Benzene = 81.1 ug/kg**, Ethylbenzene = 31.2 ug/kg, MTBE =ND, Total Xylene = 364 ug/kg, Toluene = 179 ug/kg and Gasoline = 5.83 mg/kg. The excavation was advanced in that direction.

CO-SAG-6: Sample was a discrete soil sample collected from the east side of the excavation. The depth of the sample was 61 inches. The sample was collected to confirm that all the gasoline impacted soils were removed in a vertical direction and east of the underground tank. The sample was collected in native soils of mixed schistic cobbles with some clay and gravels. This sample was analyzed for NWTPH-Gx and BTEX with the following results: Benzene = ND, Ethylbenzene = ND, MTBE = ND, Total Xylene = 82.5 ug/kg, Toluene = ND and Gasoline = 4.62 mg/kg. These values are all below MTCA regulated cleanup levels.

CO-SP-7: Sample was a composite soil sample collected from the contaminated stockpile. The depth of the sample was 1 foot. The sample was collected to characterize the waste stream and confirm that the soils could go to the Wenatchee Landfill. This sample was analyzed for BTEX & Lead with the following results: Benzene = 238 ug/kg, Ethylbenzene = 3580 ug/kg, MTBE =ND, Total Xylene = 30200 ug/kg, Toluene = 5500 ug/kg and Total Lead = 23.3 mg/kg. The excavation was advanced in that direction.

CO-SAG-8: Sample was a discrete soil sample collected from the south side of the excavation. The depth of the sample was 12 feet. The sample was collected to confirm that all the gasoline impacted soils were removed in a vertical direction and south of the underground tank. The sample was collected in native soils of mixed schistic cobbles with some clay and gravels. This sample was analyzed for NWTPH-Gx and BTEX with the following results: Benzene = ND, Ethylbenzene = ND, MTBE = ND, Total Xylene = 37.8 ug/kg, Toluene = ND and Gasoline = ND. These values are all below MTCA regulated cleanup levels.

CO-SAG-9: Sample was a discrete soil sample collected from the east side of the excavation. The depth of the sample was 2 feet. The sample was collected to confirm that all the gasoline impacted soils were removed in a horizontal direction and east of the underground tank. The sample was collected in native soils of mixed schistic cobbles with some clay and gravels. This sample was analyzed for NWTPH-Gx and BTEX with the following results: Benzene = ND, Ethylbenzene = ND, MTBE = ND, Total Xylene = ND, Toluene = ND and Gasoline = ND. These values are all below MTCA regulated cleanup levels.

CO-SAG-10: Sample was a discrete soil sample collected from the west side of the excavation. The depth of the sample was 40 inches. The sample was collected to confirm that all the gasoline impacted soils were removed in a horizontal direction and west of the underground tank. The sample was collected in native soils of mixed schistic cobbles with some clay and gravels. This sample was analyzed for NWTPH-Gx and BTEX with the following results: Benzene = ND, Ethylbenzene = ND, MTBE = ND, Total Xylene = ND, Toluene = ND and Gasoline = ND. These values are all below MTCA regulated cleanup levels.

- B. Were samples of water collected? No
- B. Were samples collected to show if contamination exists at this site? Yes, the one sample collected from the contaminated stockpile and the analytical is included with this report.

#### V. REPORT CHECKLIST

Maps of the Site:Appendix AAnalyticalAppendix BPhotographs of Site:Appendix C

#### **Recommendation and Conclusions**

This report shows that contamination for the Coleman Oil bulk facility gasoline spill cleanup is below the lower limits for a release of a regulated substance. This is in accordance with Washington Department of Ecology and in accordance with MTCA Cleanup Regulation Chapter 173-340 WAC, Table 740-1 Method A soil Cleanup Levels for Unrestricted Land Uses and Table 745-1 Method A soil Cleanup Levels for unrestricted land uses. From the seven initial soil samples collected, three of the samples were over the limit so ACT returned and continued thee excavations out or to greater depth depending upon the initial sample. Then three additional samples were collected and those samples were below Method A soil Cleanup Levels for Unrestricted Land Uses. No water was detected in the excavation.

All contaminated soils and containment plastic was removed, transported and disposed of at the Wenatchee Landfill. The excavation will be backfilled with proper inert material by a licensed contractor (CDA Service Station). Bringing the UST back into service is not part of the cleanup report and will not be addressed in this report.

This report and sample analysis has been prepared on behalf of, and for, the exclusive use of WDOE and Coleman Oil for their environmental evaluation of the cleanup site in Wenatchee, WA. This report and the findings herein shall not, in whole or in part, be disseminated or conveyed to any other party without the prior written consent of ACT. This report has been prepared in accordance with generally accepted land use assessment practices. No other warranty, expressed or implied, is made.

If you have any questions or concerns please contact me at 509-466-5255 or Toll Free 1-866-466-5255.

Sincerely,

Kipp Silver PG

Able Clean-up Technologies, Inc.

Site Assessor / UST Decommissioning #1059338

Cc: Washington Department of Ecology

15 W. Yakima Ave., Suite 200

Yakima, WA 98902 Attn: Norm Peck

Enc.

### SAMPLING AND ANALYSIS PLAN

#### General

The sampling and analysis plan will comply with applicable State, Federal and local regulations. The sampling procedures conform to Environmental Regulation 1110-1-263 and USACE Memorandum "Sample Handling Protocol for low, medium, and high Concentration Samples of Hazardous Wastes" October 1986, and EPA requirements and guidelines.

### Field Screening Techniques

During contaminated soil investigations samples will be taken for head space analysis to determine if soil contamination is present. These samples will be analyzed in the field utilizing the following procedure:

- 1. Select a clean, wide mouth glass jar, aluminum foil and screw- on ring.
- 2. Fill the jar 1/3 full with a discrete soil sample.
- 3. Immediately place aluminum foil over the mouth of the jar to prevent volatile components from escaping. Place the screw-on ring over the jar to create a seal.
- 4. Place the soil sample container in hot water for 5 minutes. This causes the volatile components to become vapors and collect in the space above the soil. Very moist soils shall not be boiled, but allowed to sit in the sun for ten minutes.
- 5. Remove the sample container from the hot water and insert the instrument probe through the aluminum foil for vapor analysis. This must be accomplished within thirty seconds to prevent the sample from cooling and creating a vacuum in the sample container.
  - Prior to using the instrument a bump test is performed using a felt pen cap over the end of the sensor probe. This will create an artificial sensor reading.
- 6. Record the instrument response, sample number and sample location and time in which the sample was collected in the Field Log.
- 7. Allow sufficient time for the instrument to clear prior to analysis of further samples.

### Field Instrumentation

#### Photo Ionization Detector

Able Clean-up Technologies uses a MultiRAE PLUS (multi gas monitor), model #PGM-50 for field screening of petroleum products and volatile organic compounds. The MultiRAE PLUS will analyze over 100 different gases.

#### Alarm Signals

The built-in microcomputer updates the gas concentrations every second and compares them with the programmed alarm limits (TWA, STEL, and two instantaneous gas concentration alarm limit settings: Low & High). Whenever the concentration exceeds the sensor's preset limits, the loud buzzer and red flashing LED are activated immediately to warm the user of the alarm condition.

In addition, the MultiRAE PLUS will alarm if one of the following conditions occurs: battery voltage falls below a pre-set level (4.4 V), failure of the UV lamp, LEL sensor off, pump stall or when the datalog memory is full. When the low battery alarm occurs, there will be approximately 20-30 minutes of operating time remaining. When the battery voltage falls below 4.2 V, the monitor will be turned off automatically.

The MultiRAE PLUS Multi-gas Monitor is factory calibrated with standard calibration gas, and is programmed with default alarm limits as listed below.

Factory Calibration and Preset Alarm Limits:

Gas ppm	Cal Gas/ Balance	Unit	TWA	STEL	Low	High
СО	50 / Air	Ppm	35	100	35	200
H2S	25 / N2	Ppm	10	15	10	20
SO2	5 / N2	Ppm	2	5	2	10
NO	25 / N2	Ppm	25	25	25	50
NO2	5 / Air	Ppm	1	1	1	10
CL2	10 / N2	Ppm	0.5	1	0.5	5
O2	20.9 / N2	%Vol	-	-	19.5	23.5
CH4	50 / Air	%LEL	-	-	10	20
HCN	10 / N2	ppm	5	5	5	50
NH3	50 / N2	Ppm	25	35	25	50
PH3	5 / N2	Ppm	0.3	1	1	2
VOC*	100 / Air	Ppm	10.0	25.0	50.0	100

<sup>\*</sup>Note: 100 ppm isobutylene gas is used for VOC gas calibration

## **Integrated Sampling Pump**

The MultiRAE PLUS Multi-gas Monitor includes an integrated sampling pump. This is a diaphragm pump providing about 300 cc per minute flow rate at the high setting with the standard filters in place.

A low pump speed of about 200 cc per minute is the factory default setting, which will increase the battery life by about 5% and result in an increased LEL sensor lifetime.

The high pump speed setting is required for vapors that are especially reactive or absorb easily to instrument surfaces. Such vapors include Cl2, PH3, NH3, HCN, and semi-volatile organic compounds like diesel fuel and jet fuels. For such compounds it is helpful to remove the water trap filter for normal calibration and operation, which will increase the pump speed to about 350 cc/min. It is also desirable to use inert connecting and sampling tubing, such as Teflon instead of Tygon, and to make connections as short as possible.

The pump is turned on automatically when the monitor is turned on and remains on during normal operation.

If liquid or other objects are sucked into the water trap in the inlet port and cause the pump to stall, the electronics of the monitor will detect the obstruction and shut down the pump immediately. The alarm will be activated and a flashing error message APump@ will be also displayed in the LCD display.

The user needs to acknowledge the pump shut off condition by pressing the (Y/+) key to re-start the pump. Different pump shut-off thresholds are desired for the two pump settings: this value can be adjusted in the Special Diagnostic Mode.

## **Calibration of Testing Equipment**

In programming mode, the user may re-calibrate the sensors in the MultiRAE PLUS monitor. This is a two-point calibration process using Afresh air@ and the standard reference gas. First, a Afresh air@ and the standard reference gas. First, a Afresh air@ which contains 20.9% oxygen and no detectable VOC, toxic or combustible gases is used to set the zero point for each sensor. Then a standard reference gas, which contains a known concentration of a given gas, is used to set the second point of reference (also know as span gas). The two-point calibration procedure is detailed below. Table 4.3 shows the submenus for calibration operations.

The preferred calibration method for monitors with pumps is to place the calibration gas in a gas sample bag (Tedlar bag). Connect the bag to the MultiRAE PLUS gas inlet port when you are ready to perform the calibration. Users may find it more convenient to connect the MultiRAE PLUS directly to the gas bottle using a flow-on-demand type regulator. Calibration through such a regulator will produce similar results to the sample bag method with most gases, but flow-on-demand regulators are not recommended with H2S. In an emergency, the MultiRAE PLUS can also be calibrated directly from a fixed flow regulator with a flow rate between 0.5 and 1.0 liters per minute.

MulitRAE PLUS diffusion monitors must be calibrated using a fixed flow regulator with a flow rate between 0.5 and 1.0 liters per minute. Diffusion monitors are supplied with a special calibration adapter that covers the gas diffusion port.

The calibration adapter links up the inlet port of the MultiRAE PLUS Monitor to the gas sample bag.

# Soil and Water Sample Collection Methods

#### Method 5035

The procedures outlined here are summarized from Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW-846, Method 5035.

Soil Samples for Volatile Organic Compounds (VOC) Analysis

Cleanup Report Coleman Oil, Wenatchee

If samples are to be analyzed for volatile organic compounds, they should be collected in a manner that minimizes disturbance of the sample. For example, when sampling with an auger bucket, the sample for VOC analysis should be collected directly from the auger bucket (preferred) or from minimally disturbed material immediately after an auger bucket is emptied into the pan. The sample shall be containerized by filling an ~Sampler or other Method 5035 compatible container. Samples for VOC analysis are not homogenized. Preservatives may be required for some samples with certain variations of Method 5035. Consult the method or the principal analytical chemist to determine if preservatives are necessary.

### Soil Sampling (Method 5035)

The following sampling protocol is recommended for site investigators assessing the extent of volatile organic compounds (VOCs) in soils at a project site. Because of the large number of options available, careful coordination between field and laboratory personnel is needed. The specific sampling containers and sampling tools required will depend upon the detection levels and intended data use. Once this information has been established, selection of the appropriate sampling procedure and preservation method best applicable to the investigation can be made .

### Sampling Methodology - High Concentrations (>200 ug/kg)

Based upon the data quality objectives and the detection level requirements, this high level method may also be used. Specifically, the sample may be packed into a single 2-oz. glass container with a screw cap and septum seal. The sample container must be filled quickly and completely to eliminate head space. Soils\sediments containing high total VOC concentrations may also be collected as described in Section 3.2.2, Sampling Methodology - Low Concentrations, and preserved using 10 mL methanol.

### Special Techniques and Considerations for Method 5035

### **Effervescence**

If low concentration samples effervesce from contact with the acid preservative, then either a test for effervescence must be performed prior to sampling, or the investigators must be prepared to collect each sample both preserved or un-preserved, as needed, or all samples must be collected unpreserved.

To check for effervescence, collect a test sample and add to a pre-preserved vial. If preservation (acidification) of the sample results in effervescence (rapid formation of bubbles) then preservation by acidification is not acceptable, and the sample must be collected un-preserved,

If effervescence occurs and only pre-preserved sample vials are available, the preservative solution may be placed into an appropriate hazardous waste container and the vials triple rinsed with organic free water. An appropriate amount of organic free water, equal to the amount of preservative solution, should be placed into the vial. The sample may then be collected as an un-preserved sample. Note that the amount of organic free water placed into the vials will have to be

accurately measured.

## Sample Size

While this method is an improvement over earlier ones, field investigators must be aware of an inherent limitation. Because of the extremely small sample size and the lack of sample mixing, sample representativeness for VOCs may be reduced compared to samples with larger volumes collected for other constituents. The sampling design and objectives of the investigation should take this into consideration.

#### **Holding Times**

Sample holding times are specified in the Analytical Support Branch Laboratory Operations and Quality Assurance Manual (ASBLOQAM), Most Recent Version. Field investigators should note that the holding time for an un-preserved VOC soil/sediment sample on ice is 48 hours. Arrangements should be made to ship the soil/sediment VOC samples to the laboratory by overnight delivery the day they are collected so the laboratory may preserve and/or analyze the sample within 48 hours of collection.

### Percent Moisture and Preservative Compatibility (MOICA)

Samplers must ensure that the laboratory has sufficient material to determine percent moisture in the VOC soil/sediment sample to correct the analytical results to dry weight. If other analyses requiring percent moisture determination are being performed upon the sample, these results may be used. If not, a separate sample (minimum of 2 oz.) for percent moisture determination will be required. The sample collected for percent moisture may also be used by the laboratory to check for preservative compatibility.

#### <u>Safety</u>

Methanol is a toxic and flammable liquid. Therefore, methanol must be handled with all required safety precautions related to toxic and flammable liquids. Inhalation of methanol vapors must be avoided. Vials should be opened and closed quickly during the sample preservation procedure. Methanol must be handled in a ventilated area. Use protective gloves when handling the methanol vials. Store methanol away from sources of ignition such as extreme heat or open flames. The vials of methanol should be stored in a cooler with ice at all times.

# When Method 5035 is Not Viable as a Sampling Procedure

- 1. Whenever possible, samples will be gathered by the backhoe operator who will excavate material and make it available to the ACT environmental technician.
- 2. If the situation is such that a representative sample cannot be gathered by the backhoe, the ACT environmental technician will enter the pit to obtain the sample. If the entry is necessary, a ladder and second means of egress will be provided. If the excavation walls cannot conform to the angle of repose (i.e., 37 degrees from horizontal or less) then the sidewalls will be shored temporarily assuming the excavation is over five feet in depth and is not located in bedrock, solid rock, hard

shale, hard pan, cemented sand or gravel, or similar stable material in which there is no possibility of movement or cave- in.

- 3. If groundwater is present, samples will be taken of the water.
- 4. One soil sample will be taken in each area that is suspected to be contaminated, based on visual inspection and head space analysis results.
- 5. If groundwater is exposed, two water samples will be taken, one from the surface of the water and one completely below the surface.

The shipment and disposal methods for rinsate, sludge and/or contaminated water will be based on the results of the sample analyses. All material will be disposed of in accordance with all Federal, State and local requirements for the material that has been identified.

### **Sample Numbering Systems**

A 6 digit sampling numbering scheme will be used to identify the samples as follows:

Example No.: CO-SA-1

CO: Coleman Oil
SA: Site assessment
SP: Stockpile

1: Sample Number

Type of sample: Each sample will be identified according to the following chart:

Type of Sample	CODE
Head space	HS
Soil sample	CO

### 3.5.2 Sampling Equipment Handling and Decontamination

Sampling utensils which contact environmental supplies will be decontaminated, inspected and repaired as necessary after each use. The decontamination procedure will be conducted as follows:

- 1. Wash the utensil in a solution of tri-sodium phosphate (TSP) and water. The solution shall consist of 1/4 cup TSP and 4 gallons portable water.
- 2. Rinse the utensil with deionized water.
- 3. Repeat steps 1. and 2. when the utensil comes in contact with highly contaminated media.
- 4. Store the utensil in its protective case. Utensils will not be placed in the case until they have been properly decontaminated. In the event that a utensil is placed in its protective case prior to decontamination, the protective case, as well as the utensil will be decontaminated prior to use.

5. Rinsate from this procedure will be disposed of off-site in an environmentally safe manner, according to all Federal, State and local regulations.

## 3.5.3 Sample Handling and Shipment

Sample handling and shipment procedures are discussed under section 4.0 Sample Analysis Quality Control and Quality Assurance Plan

# 3.5.4 Head Space Sampling and Testing Procedure

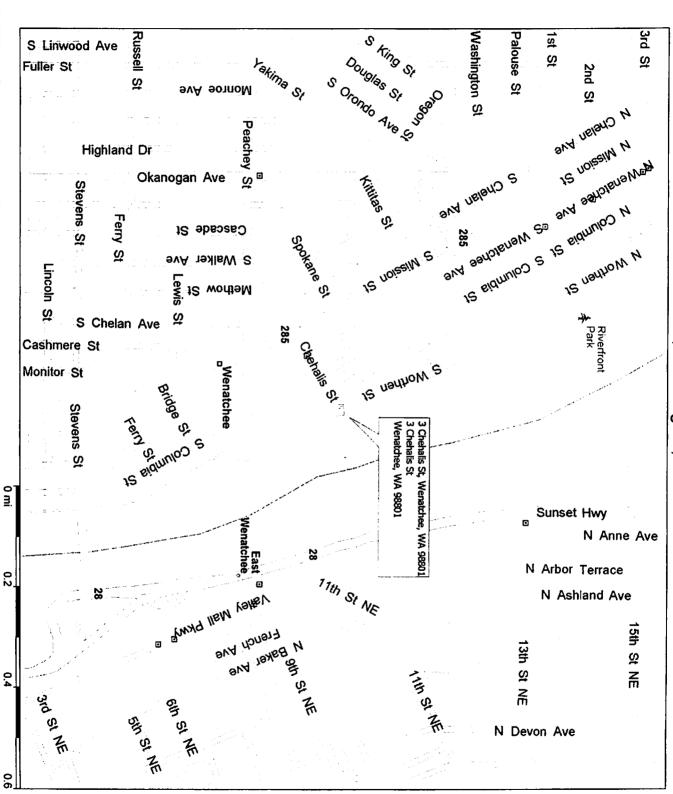
The excavation material was evaluated using field head space analysis performed with a PID. This was performed on site to estimate if the soil survey samples were impacted or not. This procedure entailed the extraction of samples from a boring at the grid intersections.

The results from the head space tests were utilized to evaluate the potential extent of contamination. When the head space analytical results indicated that the excavated soils were within acceptable limits of contamination which is less than 5ppm, no laboratory samples were collected. If the head space sample was over 5ppm than a laboratory sample was extracted and transported under Chain of Custody directly to the laboratory for analysis.

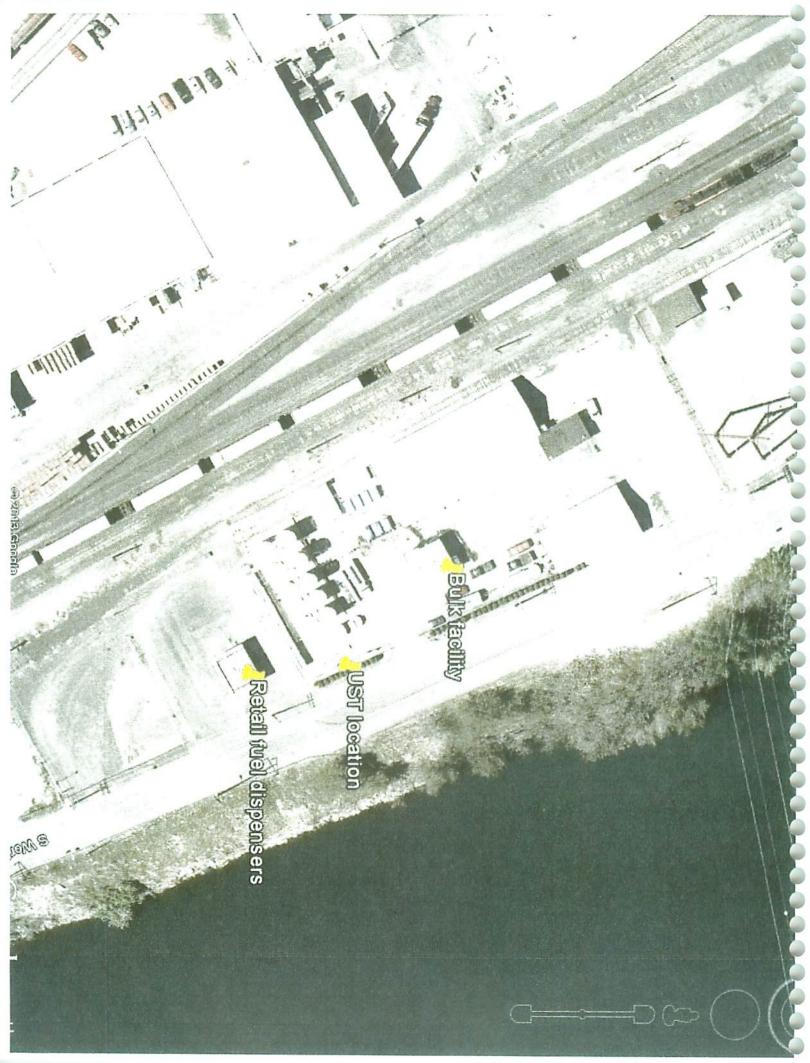
Able Cleanup Technologies Inc.

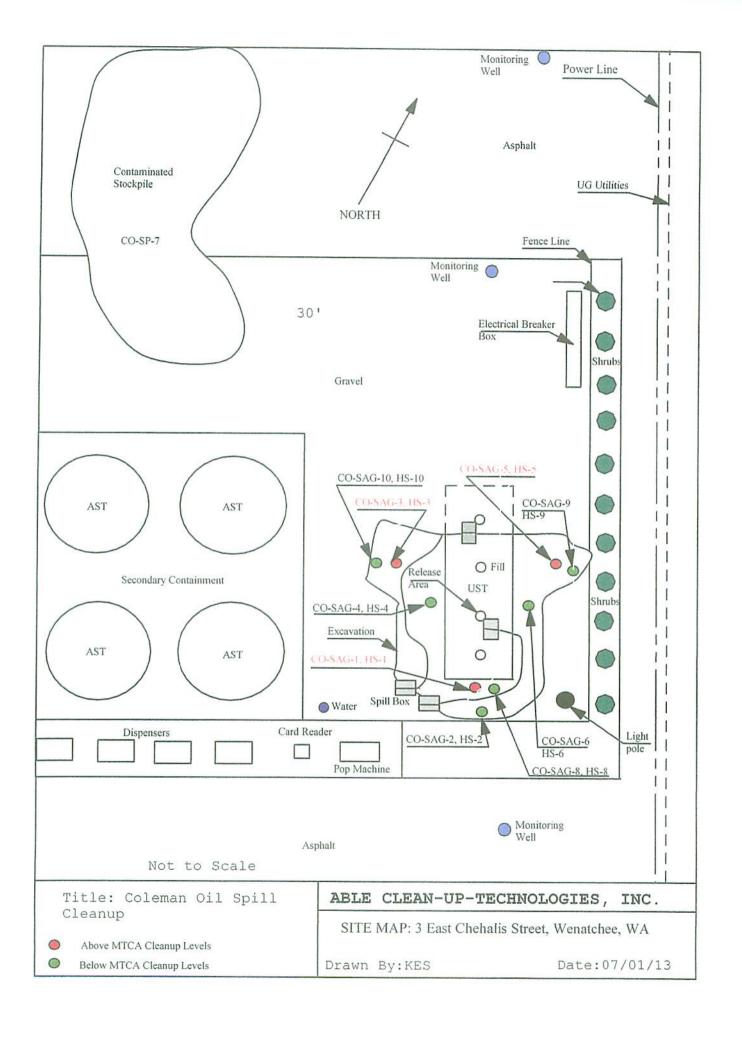
# Appendix A

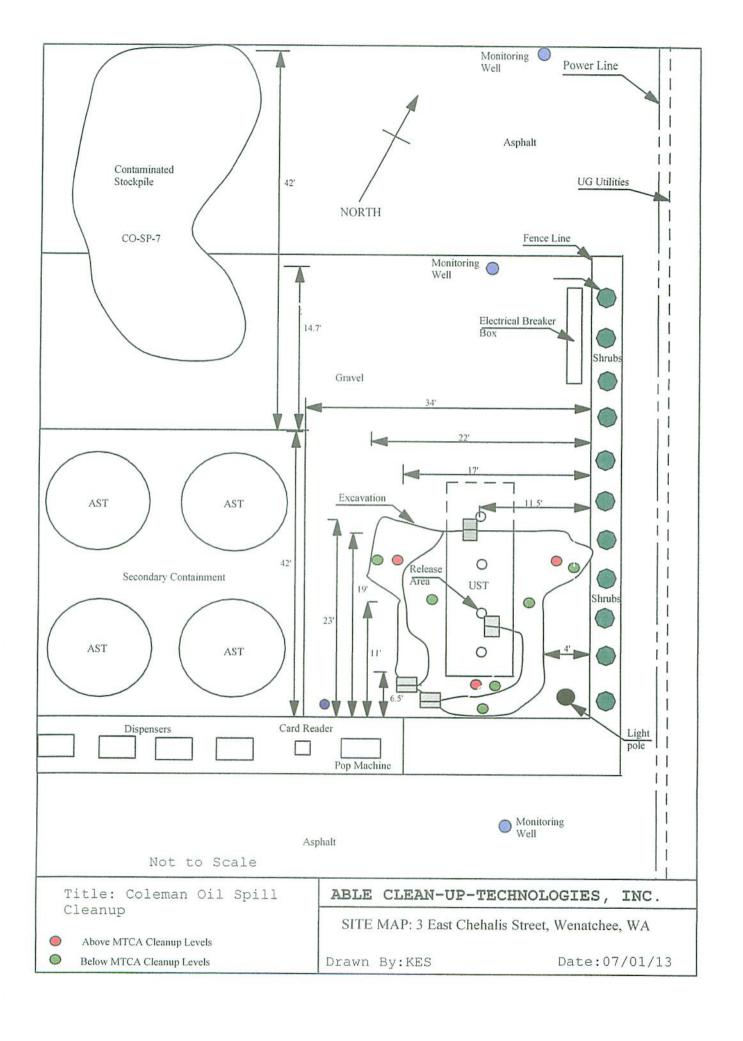
Maps of the Site



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Certain mapping and direction data © 2012 ANVTEQ. It inghts reserved. The Data to areas of Canada includes information taken with permission from Canadan authorities, including © Her Majesty the Queen in Right of Canada, © Queen's Printer for Ontaino, NAVTEQ and NAVTEQ on DARD are trademarks of NAVTEQ O 2012 felle Allas North America, inc. All rights reserved. Portions © Copyright 2012 by Woodal Publications Cop. All rights reserved.







Able Cleanup Technologies Inc.

# Appendix B

**Analytical Results** 

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com 504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client:

ABLE CLEAN-UP TECHNOLOGIES, INC.

Batch #:

130603002

Address:

4117 E. NEBRASKA AVE

**Project Name:** 

**COLEMAN OIL** 

SPOKANE, WA 99217

Attn:

KIPP SILVER

# **Analytical Results Report**

Sample Number Client Sample ID 130603002-001

Sampling Date

6/1/2013

Date/Time Received

6/3/2013

Matrix

CO-SAG 1 Soil

Sampling Time Sample Location 1:55 PM **Extraction Date**  8:50 AM

Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Benzene	246	μg/Kg	25	6/4/2013	WOZ	EPA 8021	
Ethylbenzene	256	μg/Kg	25	6/4/2013	WOZ	EPA 8021	
methyl-t-butyl ether (MTBE)	ND	μg/Kg	25	6/4/2013	WOZ	EPA 8021	
Toluene	1130	µg/Kg	25	6/4/2013	WOZ	EPA 8021	
Total Xylene	1990	μg/Kg	25	6/4/2013	WOZ	EPA 8021	
Gasoline	65.9	mg/kg	2.5	6/4/2013	WOZ	NWTPHG	
%moisture	8.9	Percent		6/4/2013	woz	%moisture	

#### **Surrogate Data**

imple Number 130603002-001			
Surrogate Standard	Method	Percent Recovery	Control Limits
4-Bromofluorobenzene	EPA 8021	110.4	70-130
4-Bromofluorobenzene	NWTPHG	115.1	70-130

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013, FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM ID00013. OR:ID200001-002; WA:C595 Certifications held by Anatek Labs WA: EPA WA00169; ID:WA00169; WA:C585; MT:Cort0095

Wednesday, June 05, 2013

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Client:

ABLE CLEAN-UP TECHNOLOGIES, INC.

130603002 Batch #:

Address:

4117 E. NEBRASKA AVE

SPOKANE, WA 99217

**Project Name:** 

**COLEMAN OIL** 

Attn:

KIPP SILVER

## **Analytical Results Report**

Sample Number Client Sample ID Matrix Comments	130603002-002 CO-SAG 2 Soil		Sampling Date Sampling Tim Sample Locat	e 1		Date/Time Re Extraction Da		8:50 AM
Parameter		Result	Units	PQL	Analysis Dat	e Analyst	Method	Qualifier
Benzene		ND	μg/Kg	25	6/4/2013	WOZ	EPA 8021	
Ethylbenzene		ND	µg/Kg	25	6/4/2013	WOZ	EPA 8021	
methyl-t-butyl e	ther (MTBE)	ND	µg/Kg	25	6/4/2013	woz	EPA 8021	
Tolucne		ND	μg/Kg	25	6/4/2013	woz	EPA 8021	
Total Xylene		ND	µg/Kg	25	6/4/2013	WOZ	EPA 8021	
Gasoline		3.01	mg/kg	2.5	6/4/2013	WOZ	NWTPHG	
%moisture		8.4	Percent		6/4/2013	WOZ	%moisture	

#### **Surrogate Data**

Sample Number	130603002-002			
Surrogate St	tandard	Method	Percent Recovery	Control Limits
4-Bromofluor	obenzene	EPA 8021	109.8	70-130
4-Bromofluor	obenzene	NWTPHG	119.1	70-130

**Authorized Signature** 

MCL

**EPA's Maximum Contaminant Level** 

ND

**Not Detected** 

POL

Practical Quantitation Limit

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The results reported relate only to the samples indicated.

Soil/solid results are reported on a dry-weight basis unless otherwise noted.

Certifications held by Analek Labs ID. EPA ID00013, AZ:0701; CO:ID00013; FL(NELAP) E87893, ID:ID00013; IN:C-ID-01; KY:90142, MT CERT0028; NM: ID00013, OR ID200001-002, WA C595 Certifications held by Analek Labs WA: EPA WA00169, ID:WA00169, WA C595, MT.Cert0095

Page 2 of 2 Wednesday, June 05, 2013

Inc. Labs, Anatek

Chain of Custody Record

O 1282 Alturas Drive, Moscow ID 83843 (208) 883-2839 FAX 882-9246 O 504 E Sprague Ste D, Spokane WA 99202 (509) 838-3999 FAX 838-4433 O

30603 002 ABLE Lest 6/10/2013 st SAMP 6/1/2013 1st RCVD

6/3/2013 OLEMAN OIL

(II)

1800

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(M)

(A)

Note Special Instructions/Comments Http://www.anateklabs.com/services/guidelines/reporting.asp Phone Email Mail Ē Please refer to our normal turn around times at: \* Changed to due 45 Inspection Checklist requests must be \*All rush order prior approved. Date & Time: 6-3-13 -abels & Chains Agree? Containers Sealed? VOC Head Space? Temperature ('Ç'): Preservative: KL Znd Day\*
Xother\* 5 42. Received Intact? hand Inspected By: Next Day\* \_\_Normal 0250 E ablectunapo arcentanao. Com 2/2/4 List Analyses Requested Date AC1 12 Court Company Sampler, Name & phone: Project Manager:

Project Manager:

Project Manager:

Email Address: Purchase Order #: of Containers Matrix Zip: 78 Soil Sgnature CLEAN-UP TECHANOLOGIES Provide Sample Description 1:350 Sampling Date/Time 1/EPPaska State: SIMOLD. 5 Printed Name 500-466535 204-481-6810 (me) 3 Sample Identification Pollard Relinquished by Relinquished by Relinquished by Received by Received by Received by Phone: / E P Ω

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Client:

ABLE CLEAN-UP TECHNOLOGIES, INC.

Batch #:

130604038

Address:

4117 E. NEBRASKA AVE

**Project Name:** 

COLEMAN OIL

Address.

SPOKANE, WA 99217

WENATCHEE

Attn:

KIPP SILVER

# **Analytical Results Report**

ample Number Ilent Sample ID atrix omments	130604038-001 CO-SAG-3 Soil		Sampling Date Sampling Tin Sample Local	ne	_	ate/Time Re xtraction Da		6/4/2013	2:35 PM
Parameter		Result	Units	PQL	Analysis Date	Analyst	Met	thod	Qualifier
Benzene		ND	µg/Kg	25	6/5/2013	woz	EPA	8021	
Ethylbenzene		32.6	μg/Kg	25	6/5/2013	WOZ	EPA	8021	
methyl-t-butyl e	ther (MTBE)	ND	µg/Kg	25	6/5/2013	WOZ	EPA	8021	
Toluene		32.6	μg/Kg	25	6/5/2013	WOZ	EPA	8021	
Total Xylene		354	μg/Kg	25	6/5/2013	woz	EPA	8021	
Gasoline		85.3	mg/kg	2.5	6/5/2013	WOZ	NWT	PHG	
%moisture		7.1	Percent		6/4/2013	woz	%moi	isture	

### **Surrogate Data**

Sample Number	130604038-001			
Surrogate :	Standard	Method	Percent Recovery	Control Limits
4-Bromofluo		EPA 8021	117.4	70-130
4-Bromofluo	probenzene	NWTPHG	122.8	70-130

Certifications held by Anatek Labs ID. EPA ID00013, AZ 0701, CO:ID00013; FL(NELAP) E87893; ID ID00013; (N.C-ID-01; KY 90142, MT CERT0028, NM. ID00013; OR:ID200001-002; WA C595 Certifications held by Anatek Labs WA EPA WA00169; ID.WA00169; WA C585, MT Cert0095

Wednesday, June 05, 2013 Page 1 of 5

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Client: Address: ABLE CLEAN-UP TECHNOLOGIES, INC.

4117 E. NEBRASKA AVE

SPOKANE, WA 99217

Attn:

KIPP SILVER

Batch #:

130604038

Project Name:

**COLEMAN OIL** 

WENATCHEE

# **Analytical Results Report**

Sample Number Client Sample ID Matrix Comments	130604038-002 CO-SAG-4 Soil		Sampling Date Sampling Time Sample Locati	8		Date/Time Re Extraction Da		2:35 PM
Parameter		Result	Units	PQL	Analysis Dat	e Analyst	Method	Qualifier
Benzene		ND	μg/Kg	25	6/5/2013	WOZ	EPA 8021	• • • •
Ethylbenzene		ND	μg/Kg	25	6/5/2013	WOZ	EPA 8021	
methyl-t-butyl e	ther (MTBE)	ND	μg/Kg	25	6/5/2013	WOZ	EPA 8021	
Toluene		ND	µg/Kg	25	6/5/2013	woz	EPA 8021	
Total Xylene		ND	μg/Kg	25	6/5/2013	woz	EPA 8021	
Gasoline		4.85	mg/kg	2.5	6/5/2013	WOZ	NWTPHG	
%moisture		4.6	Percent		6/4/2013	woz	%moisture	

### **Surrogate Data**

Sample Number	130604038-002			
Surrogate S	tandard	Method	Percent Recovery	Control Limits
4-Bromofluo	robenzene	EPA 8021	126.8	70-130
4-Bromofluo	robenzene	NWTPHG	122.4	70-130

Certifications held by Anatek Labs ID. EPA ID00013, AZ 0701. CO ID00013; FL(NELAP) E87893, ID.ID00013; IN.C-ID-01; KY-90142; MT-CERT0028, NM. ID00013; OR:ID200001-002, WA C595 Certifications held by Anatek Labs WA. EPA WA00169; ID:WA00169, WA C585; MT Cert0095

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4117 E. NEBRASKA AVE

SPOKANE, WA 99217

Attn:

KIPP SILVER

Batch #:

130604038

**Project Name:** 

**COLEMAN OIL** 

WENATCHEE

## **Analytical Results Report**

Sample Number Client Sample ID	130604038-003 CO-SAG-5		Sampling Date Sampling Time	_	_	ate/Time Re		6/4/2013	2:35 PM
Matrix	Soil		Sample Locati		_	×4404011 DE			
Comments			·						
Parameter		Result	Units	PQL	Analysis Date	Analyst	Meth	od	Qualifier
Benzene		81.1	µg/Kg	25	6/5/2013	WOZ	EPA 8	021	
Ethylbenzene		31.2	µg/Kg	25	6/5/2013	woz	EPA 8	3021	
methyl-t-butyl e	ther (MTBE)	ND	µg/Kg	25	6/5/2013	WOZ	EPA 8	021	
Toluene		179	µg/Kg	25	6/5/2013	woz	EPA 8	021	
Total Xylene		364	µg/Kg	25	6/5/2013	WOZ	EPA 8	021	
Gasoline		5.83	mg/kg	2.5	6/5/2013	WOZ	NWTF	PHG	
%moisture		6.2	Percent		6/4/2013	woz	%mois	ture	

### **Surrogate Data**

Sample Number 130604	038-003		
Surrogate Standard	Method	Percent Recovery	Control Limits
4-Bromofluorobenzene	EPA 8021	117.1	70-130
4-Bromofluorobenzene	NWTPHG	128.2	70-130

Certifications held by Anatek Labs ID: EPA ID00013; AZ 0701; CO ID00013; FL(NELAP) E87893, ID ID00013, IN C-ID-01; KY,90142; MT CERT0028; NM: ID00013, OR ID200001-002, WA C595 Certifications held by Anatek Labs WA: EPA WA00169, ID:WA00169, WA C585; MT Cert0095

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4117 E. NEBRASKA AVE

SPOKANE, WA 99217

Attn: KIPP SILVER

Batch #:

130604038

**Project Name:** 

**COLEMAN OIL** 

WENATCHEE

# **Analytical Results Report**

Sample Number Client Sample ID Matrix Comments	130604038-004 CO-SAG-6 Soil		Sampling Dat Sampling Tim Sample Local	e		ate/Time Re xtraction Da		2:35 PM
Parameter		Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Benzene		ND	µg/Kg	25	6/5/2013	WOZ	EPA 8021	
Ethylbenzene		ND	μg/Kg	25	6/5/2013	WOZ	EPA 8021	
methyl-t-butyl e	ther (MTBE)	ND	μg/Kg	25	6/5/2013	WOZ	EPA 8021	
Toluene		ND	µg/Kg	25	6/5/2013	WOZ	EPA 8021	
Total Xylene		82.5	μg/Kg	25	6/5/2013	WOZ	EPA 8021	
Gasoline		4.62	mg/kg	2.5	6/5/2013	WOZ	NWTPHG	
%moisture		6.3	Percent		6/4/2013	woz	%moisture	

#### **Surrogate Data**

Sample Number 130604038-004			
Surrogate Standard	Method	Percent Recovery	Control Limits
4-Bromofluorobenzene	EPA 8021	117.1	70-130
4-Bromofluorobenzene	NWTPHG	129.7	70-130

Certifications hold by Anatek Labs ID EPA ID00013; AZ 0701, CO ID00013; FL(NELAP).E87893, ID ID00013. IN C-ID-01; KY 90142, MT CERT0028, NM: ID00013; OR ID200001-002, WA C595 Certifications held by Anatek Labs WA. EPA WA00169, ID.WA00169, WA:C585, MT Cert0095

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Client:

ABLE CLEAN-UP TECHNOLOGIES, INC.

130604038

Address:

**Project Name:** 

**COLEMAN OIL** 

4117 E. NEBRASKA AVE

SPOKANE, WA 99217

**WENATCHEE** 

Attn:

KIPP SILVER

**Analytical Results Report** 

ample Number Client Sample ID Natrix Comments	130604038-005 CO-SP-7 Soil		Sampling Dat Sampling Tim Sample Locat	ė		ate/Time Re xtraction Da		2:35 PM
Parameter		Result	Units	PQL	Analysis Date	Analyst	Method	Qualifie
Benzene		234	µg/Kg	25	6/5/2013	WOZ	EPA 8021	•
Ethylbenzene		3580	μg/Kg	25	6/5/2013	WOZ	EPA 8021	
methyl-t-butyl e	ther (MTBE)	ND	µg/Kg	25	6/5/2013	WOZ	EPA 8021	
Toluene	,	5500	µg/Kg	25	6/5/2013	WOZ	EPA 8021	
Total Xylene		30200	µg/Kg	238	6/5/2013	WOZ	EPA 8021	
Lead		23.3	mg/Kg	0.516	6/5/2013	KEA	EPA 6020A	
%moisture		6.9	Percent		6/4/2013	WOZ	%moisture	

### **Surrogate Data**

Sample Number	130604038-005				
Surrogate St	andard	Method	Percent Recovery	Control Limits	
4-Bromofluoro	<del></del>	EPA 8021	109.9	70-130	

**Authorized Signature** 

Kathlun a.

Kathy Sattler, Lab Manager

MCL

**EPA's Maximum Contaminant Level** 

ND PQL

**Practical Quantitation Limit** 

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Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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Wednesday, June 05, 2013

Page 5 of 5

# Chain of Custody Record

130604 038 ABLE Last 6/5/2013

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Company Name	Project Manager:	
Address: Able Cicomy Tech	Project Name & #: Pipe Silver	riease refer to our normal turn around times at:
Address: Webraska Aug.  City: State: Zip:	Project Name & #:  Coleman Oil. Westerby.  Email Address:	http://www.anateklabs.com/services/guidelines/reporting.asp
City: State: Zip: State: WA 49217	Email Address :	Normal *All-rush orderPhone
ribite.*	Purchase Order #:	XNext Day* requests must beMail
509-466-5255	13147	2nd Day* prior approved:Fax Cther*
509-487-9810	Sampler Name & phone:	
Provide Sample Description	List Analyses Requested	Note Special Instructions/Comments
	Preservative	
	# of Containers Sample Volume W.T.P.WG.X. B.T.E.X. ToTal Ph	
	Containers  PH-GX  M/ Ph	
Lab	# of Containe Sample Volun  W. T. P. H G  B. T. E. X. To To I P. P.	
ID Sample Identification Sampling Date/Time Matrix		
CO-SAG-3 6/3/13 Soil	1 452 1	
CE - SAG - 7	1 402 / /	
Co-SAG-5 (	14021	
CC-SAG-6	140.	
(0-SR-7 1 1	1 40 //	Storapile
890 12		
	<del>┣═╬═╫╒╫╒╫╒╫╒╫╒╫╒</del> ╫╒╫	Inspection Checklist
	<del></del>	Received Intact? A N
100 miles		Labels & Chains Agree? 🕢 N
		Containers Sealed? 🔗 N
		VOC Head Space?
Printed Name Signature	Company Date Time	hand/c
Relinquished by Kipp Silver There		[14] 이 첫 발전 10 - 10 전 변화 보기 보고 있는데 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10
		Temperature (°C ): 18.0
	16/2 antit 4/13 1430	Preservative: W.L.
Relinquished by		
Received by		Date & Time: 6-4-13 1435
Relinquished by		Inspected By: MCZ
Received by		

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Client:

ABLE CLEAN-UP TECHNOLOGIES, INC.

Batch #:

130611032

Address:

4117 E. NEBRASKA AVE

**Project Name:** 

**COLEMAN OIL 13147** 

Audress

Attn:

SPOKANE, WA 99217 KIPP SILVER

# **Analytical Results Report**

Sample Number Client Sample ID	130611032-001 CO SAG8 Soil		Sampling Date Sampling Time	2		Date/Time Red Extraction Da		6/11/2013	12:10 PM
Matrix Comments	3011		Sample Location	eπ					
Parameter		Result	Units	PQL	Analysis Dat	e Analyst	Me	thod	Qualifier
Benzene		ND	μg/Kg	25	6/12/2013	WOZ	EPA	8021	
Ethylbenzene		ND	μg/Kg	25	6/12/2013	woz	EPA	8021	
methyl-t-butyl e	ether (MTBE)	ND	μg/Kg	25	6/12/2013	woz	EPA	8021	
Toluene		ND	μg/Kg	25	6/12/2013	woz	EPA	8021	
Total Xylene		37.8	μg/Kg	25	6/12/2013	woz	EPA	8021	
Gasoline		ND	mg/kg	2.5	6/12/2013	WOZ	NW	TPHG	
%moisture		5.4	Percent		6/12/2013	woz	%ma	pisture	

#### **Surrogate Data**

Sample Number 130611032-001			
Surrogate Standard	Method	Percent Recovery	<b>Control Limits</b>
4-Bromofluorobenzene	EPA 8021	107.7	70-130
4-Bromofluorobenzene	NWTPHG	119.1	70-130

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP) E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM ID00013; OR:ID200001-002; WA:C595 Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

Thursday, June 13, 2013

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Client:

ABLE CLEAN-UP TECHNOLOGIES, INC.

SPOKANE, WA 99217

Project Name:

Batch #:

130611032

Address:

4117 E. NEBRASKA AVE

**COLEMAN OIL 13147** 

Attn:

KIPP SILVER

### **Analytical Results Report**

Sample Number Client Sample ID Matrix Comments	130611032-002 CO SAG9 Soil		Sampling Date Sampling Tim Sample Locat	e 2		Pate/Time Resixtraction Da		6/11/2013	12:10 PM
Parameter		Result	Units	PQL	Analysis Dat	Analyst	Meti	nod	Qualifier
Benzene		ND	μg/Kg	25	6/12/2013	WOZ	EPA 8	8021	
Ethylbenzene		ND	μg/Kg	25	6/12/2013	WOZ	EPA 8	8021	
methyl-t-butyl e	ether (MTBE)	ND	μg/Kg	25	6/12/2013	woz	EPA 8	8021	
Toluene		ND	μg/Kg	25	6/12/2013	WOZ	EPA (	B021	
Total Xylene		ND	μg/Kg	25	6/12/2013	woz	EPA 8	B021	
Gasoline		ND	mg/kg	2.5	6/12/2013	WOZ	NWT	PHG	
%moisture		5.6	Percent		6/12/2013	WOZ	%moi	sture	

#### **Surrogate Data**

Sample Number 13	30611032-002			
Surrogate Stand	ard	Method	Percent Recovery	Control Limits
4-Bromofluoroben	nzene	EPA 8021	110.0	70-130
4-Bromofluoroben	nzene	NWTPHG	121.4	70-130

Certifications held by Anatek Labs ID: EPA:D00013; AZ:0701, CO:ID00013; FL(NELAP) E87893; ID:ID00013; IN:C-ID-01, KY:90142; MT CERT0028; NM: ID00013; OR:ID200001-002; WA:C595 Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

Thursday, June 13, 2013 Page 2 of 3

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Client:

ABLE CLEAN-UP TECHNOLOGIES, INC.

Batch #:

130611032

Address:

4117 E. NEBRASKA AVE

Project Name:

6/12/2013

6/12/2013

WOZ

WOZ

**COLEMAN OIL 13147** 

**NWTPHG** 

%moisture

Audies

SPOKANE, WA 99217

Attn:

KIPP SILVER

# **Analytical Results Report**

Sample Number Client Sample ID	130611032-003 CO SAG10		Sampling Date Sampling Time			Date/Time Red Extraction Dat		6/11/2013	12:10 PM
Matrix	Soil		Sample Location	חס					
Comments									
Parameter		Result	Units	PQL	Analysis Dat	e Analyst	Me	thod	Qualifier
Benzene		ND	μg/Kg	25	6/12/2013	WOZ	EPA	8021	
Ethylbenzene		ИD	µg/Kg	25	6/12/2013	woz	EPA	8021	
methyl-t-butyl	ether (MTBE)	ND	μg/Kg	25	6/12/2013	WOZ	EPA	8021	
Toluene		ND	μg/Kg	25	6/12/2013	woz	EPA	8021	
Total Xylene		ND	μg/Kg	25	6/12/2013	WOZ	EPA	8021	

#### **Surrogate Data**

ma/ka

Percent

Sample Number 13	0611032-003			
Surrogate Stand	ard	Method	Percent Recovery	<b>Control Limits</b>
4-Bromofluorober	nzene	EPA 8021	111.3	70-130
4-Bromofluorober	nzene	NWTPHG	121.7	70-130

Authorized Signature

Gasoline

%moisture

Kathleen a. Sattles

ND

14.9

Kathy Sattler, Lab Manager

MCL

EPA's Maximum Contaminant Level Not Detected

ND PQL

Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory. The results reported relate only to the samples indicated. Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com 504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

# **Login Report**

Customer Name: ABLE CLEAN-UP TECHNOLOGIES, INC.

Order ID:

130611032

4117 E. NEBRASKA AVE

**Order Date:** 

6/11/2013

**SPOKANE** 

WA 99217

**Contact Name: KIPP SILVER** 

Project Name: COLEMAN OIL 13147

Comment:

1

1

1990 797

M

1990

iample #:	1306110	32-001 Custo	mer Sample #: Co	D SAG8		
Recv'd:	<b>✓</b>	Collector:	KIPP SILVER	Date Collected:	6/10/2013	
Quantity:	1	Matrix:	Soil	Date Received:	6/11/2013 12:10:00	PM
Comment:						
Test			Lab	Method	Due Date	Priority
%Moisture			s	%moisture	6/13/2013	2 Days
BTEX 8021			s	EPA 8021	6/13/2013	2 Days
TPHG-NW-	SPO		s	NWTPHG	6/13/2013	2 Days
Sample #:	1306110	32-002 Custo	mer Sample #: CO	SAG9		
Recv'd:	<b>~</b>	Collector:	KIPP SILVER	Date Collected:	6/10/2013	
Quantity:	1	Matrix:	Soil	Date Received:	6/11/2013 12:10:00	PM
Comment:						
Test			Lab	Method	Due Date	Priority
%Moisture			s	%moisture	6/13/2013	2 Days
BTEX 8021			s	EPA 8021	6/13/2013	2 Days
TPHG-NW-	SPO		s	NWTPHG	6/13/2013	2 Days
iample #:	1306110	32-003 Custo	mer Sample #: C0	SAG10	<del>, , , , ' '</del>	
Recv'd:	<b>✓</b>	Collector:	KIPP SILVER	Date Collected:	6/10/2013	
	1	Matrix:	Soil	Date Received:	6/11/2013 12:10:00	) PM
Quantity:						
Quantity: Comment:						
•			Lab	Method	Due Date	Priority
Comment:			Lab S	Method %moisture	Due Date 6/13/2013	Priority 2 Days
Comment:						

Customer Name: ABLE CLEAN-UP TECHNOLOGIES, INC.

Order ID:

Order Date:

130611032

4117 E. NEBRASKA AVE

6/11/2013

SPOKANE

WA

99217

Contact Name: KIPP SILVER

Project Name: COLEMAN OIL 13147

Comment:

### SAMPLE CONDITION RECORD

Samples received in a cooler?	Yes	
Samples received intact?	Yes	
What is the temperature inside the cooler?	11.7	
Samples received with a COC?	Yes	
Samples received within holding time?	Yes	
Are all sample bottles properly preserved?	ICE	
Are VOC samples free of headspace?	N/A	
Is there a trip blank to accompany VOC samples?	N/A	
Labels and chain agree?	Yes	

Anatek
Labs,
Inc.

# Chain of Custody Record

30611 032 ABLE Lest 6/13/2013 st SAMP 6/10/2013 1st RCVD 6/11/2013

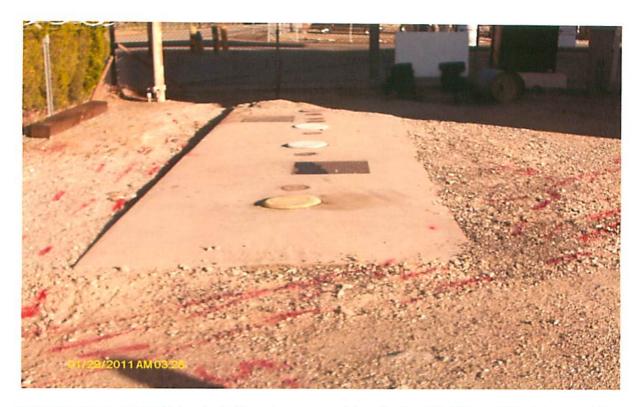
1282 Alturas Drive, Moscow ID 83843 (208) 883-2839 FAX 882-9246 504 E Sprague Ste D, Spokane WA 99202 (509) 838-3999 FAX 838-4433

OLEMAN OIL 13147

ABLECHLAN-UPTECHNINOGES INC Please refer to our normal turn around times at http://www.anateklabs.com/services/guidefines/reporting asp NEDROSKA 13147 Zip: 99217 Email Address \_\_Phone Normal \*All rush order ablerizable \_\_Mail Next Day\* requests must be Purchase Order # \_\_Fax ¥2nd Day\* prior approved. 13137 309-466-5255 \_\_Email Other\* Sampler Name & phone: 509-466 6255 509-480-9810 List Analyses Requested Note Special Instructions/Comments Provide Sample Description Sample Volume Matrix Sample Identification Sampling Date/Time Soil (D) 5168 CO 5A69 Soil 2300 CD SAGIO 6-10-13 SOIL 2:204 Inspection Checklist Received Intact? Labels & Chains Agree? Containers Sealed? VOC Head Space? Ceoles / Acadel Signaturo: The State of the Sta Time Company Printed Name Relinquished by 1210 Preservative: 100 Received by Relinguished by Date & Time: 6 11-13 Received by Inspected By: Relinquished by Received by

# Appendix C

Photographs of Site



This is the site when ACT first arrived. The release occurred from the far white fill cap. This picture was taken looking in a southeasterly direction.



This is the site when ACT first arrived. Note the red lines denoting underground utilities. This picture was taken looking in a southeasterly direction.



This picture shows the vacuuming process and the product lines. This picture was taken looking in a southwesterly direction.



This picture shows the continued vacuuming process and the product lines. This picture was taken looking in an easterly direction.



This picture shows the continued vacuuming process and the UST. This picture was taken looking in a westerly direction.



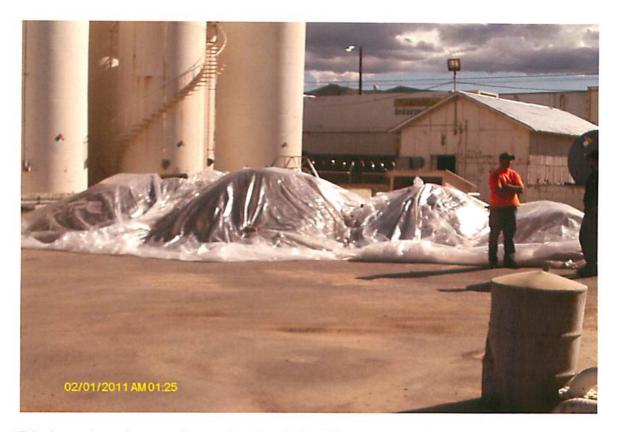
This picture shows the continued vacuuming process and the UST. This picture was taken looking in an easterly direction.



This picture shows the contaminated stockpile. This picture was taken looking in a westerly direction.



This picture shows the excavation process and the exposed UST. This picture was taken looking in a southerly direction.



This picture shows the covered contaminated stockpile. This picture was taken looking in a southwesterly direction.



This picture shows the continued vacuuming process and the UST. This picture was taken looking in a northerly direction.



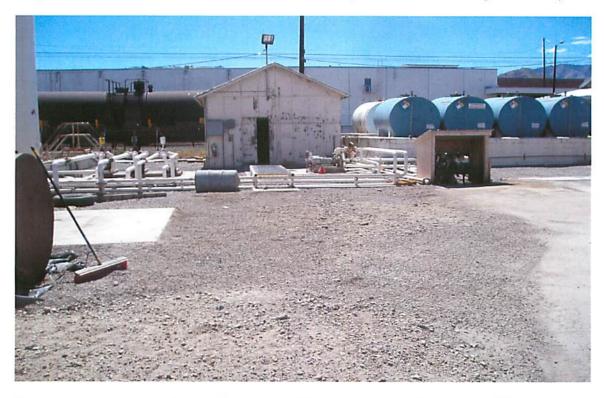
This picture shows the excavation and the UST. This picture was taken looking in a northwesterly direction.



This picture shows the additional excavating process and the UST. This picture was taken looking in a southeasterly direction.



This picture shows the finished excavation and the UST. This picture was taken looking in an easterly direction.



This picture shows the stockpile area after removal of the contaminated soils and plastic. This picture was taken looking in a southwesterly direction.



This picture shows the stockpile area after removal of the contaminated soils and plastic. This picture was taken looking in a southeasterly direction.