



A proud member  
of WSP

LT Environmental, Inc.

820 Megan Avenue, Unit B  
Rifle, Colorado 81650  
970.285.9985

March 4, 2020

Mr. Mike Bratcher  
New Mexico Oil Conservation Division  
811 South First Street  
Artesia, New Mexico 88210

**RE: Assessment Report and Proposed Remediation Work Plan  
WPX Energy Permian, LLC.  
Ape Fee #001  
Incident ID NVV2003029246  
Eddy County, New Mexico**

Dear Mr. Bratcher:

LT Environmental, Inc. (LTE), on behalf of WPX Energy Permian, LLC. (WPX), presents the following Assessment Report and Proposed Remediation Work Plan detailing soil sampling and planned remedial actions at the Ape Fee #001 (Site) in Units H and L, Sections 4 and 5, Township 23 South, Range 27 East, in Eddy County, New Mexico (Figure 1). The purpose of this report is to summarize the scope of work discussed between WPX and the New Mexico Oil Conservation Division (NMOCD) via phone call on February 25, 2020.

## BACKGROUND

On January 21, 2020 at approx. 2:30 A.M., a split approximately 0.5 inches in diameter developed in the flowline connected to the Ape Fee #001 wellhead, causing a release of natural gas, produced water, and crude oil. The fluids misted onto the adjacent property. The volume of fluids released are estimated to be below 25 barrels (bbls) and 500 thousand cubic feet (MCF). Approximately 0.5 bbls of free liquids were observed at the point of the damaged flowline; however, no additional free liquids were observed. WPX responded by stopping the source by shutting in the Ape Fee #001 well and containing released materials. Remediation was initiated by collecting free liquids, applying absorbent materials to the adjacent roadway, and excavating visually impacted soil. Approximately 25 cubic yards of impacted soil were excavated and transferred to the R360 landfill located in Hobbs, New Mexico. A light misting from the release was observed affecting a portion of the ground surface, structures, and livestock on the neighboring property. With the landowner's permission, WPX handwashed the livestock with water and soap and power washed a storage trailer to remove any potential production fluids.

WPX contacted the NMOCD via a phone call to the District II office and followed up with an email to District II personnel to provide courtesy notification of the incident. WPX also reported the release to the NMOCD on an initial Release Notification and Corrective Action Form C-141 (Form

C-141) on January 26, 2020, and was assigned Incident ID NVV2003029246. Following further investigation, WPX revised the Form C-141 with more detail (Attachment 1).

WPX mapped the release extent, then applied MicroBlaze and excavated visibly impacted soil identified on the adjacent affected property. Eight boreholes (BH01 through BH08) were advanced on the private property located west of South Thomason Road as shown on Figure 1. Boreholes were advanced using a hand auger to investigate the presence or absence of impacted soil in the subsurface. The results of that investigation were presented in an *Assessment Report and Proposed Remediation Work Plan* dated February 3, 2020. The remediation work plan proposed continued soil sampling activities and excavation of identified impacted soil with appropriate confirmation sampling. The subsequent sections of this report discuss results of the additional soil sampling.

### **CLOSURE CRITERIA**

As presented in the February 3, 2020 *Assessment Report and Proposed Remediation Work Plan*, the following NMOCD Table 1 closure criteria apply: 10 milligrams per kilogram (mg/kg) benzene; 50 mg/kg total benzene, toluene, ethylbenzene, and total xylenes (BTEX); 100 mg/kg total petroleum hydrocarbons (TPH); and 600 mg/kg chloride.

### **CONTINUED SOIL SAMPLING**

On February 14 and 18, 2020, additional soil samples were collected from the release area (BH09 through BH19) and excavation areas (FS01 through FS24) as described in the *Assessment Report and Proposed Remediation Work Plan* dated February 3, 2020. The NMOCD was on site during all sampling activities and directed additional soil sample locations. At the direction of the NMOCD, discreet soil samples were collected from the excavation area south of the landowner's property in order to ensure samples were collected below the road base that had been spread in the area. All soil samples were field screened for volatile aromatic hydrocarbons using a photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were shipped at or below 4 degrees Celsius (°C) under strict chain-of-custody (COC) procedures to Xenco Laboratories (Xenco) in Midland, Texas, for analysis of BTEX following United States Environmental Protection Agency (USEPA) Method 8021B; TPH-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-oil range organics (ORO) following USEPA Method 8015M/D; and chloride following USEPA Method 300.0. Soil sample locations are depicted on the attached Figure 2 and Figure 3.

### **ANALYTICAL RESULTS**

Laboratory analytical results of soil samples indicate concentrations of TPH and chloride within the release area exceeding the Closure Criteria. One discrete sample (SS11) exceeded the Closure

Criteria for chloride, containing 697 milligrams per kilogram (mg/kg) compared to the standard of 600 mg/kg. One discrete sample (SS09) exceeded the Closure Criteria for TPH with 183 mg/kg compared to the standard of 100 mg/kg. Six of the 24 excavation samples exceeded the Closure Criteria for TPH, ranging from 251 mg/kg in FS01 to 5,760 mg/kg in FS03. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Attachment 2.

### **PROPOSED CONTINUED ASSESSMENT AND REMEDIATION WORK PLAN**

Based on results of the additional soil sampling and instructions from the NMOCD, LTE is proposing additional soil sample collection around the home on the landowner's property to further investigate the chloride concentration in soil sample SS11. Soil samples will be collected from approximately 0.5 feet bgs. All soil samples will be collected, handled, and analyzed as previously described. Proposed soil sample locations are depicted on Figure 2.

Laboratory analytical results of soil sample SS09 indicate TPH impacts to soil in the pasture. All other analytes were either below the laboratory detection limit or compliant with Closure Criteria. Therefore, LTE proposes to treat the area with MicroBlaze rather than excavation due to the small size of the affected area. Following the application to the affected area, soil confirmation samples will be collected to confirm remediation. All soil samples will be collected, handled, and analyzed as previously described.

Additionally, LTE is proposing additional excavation of residual impacts identified in the southern portion of the excavation east of South Thomason Road. Excavation activities will be directed by field screening soil samples for volatile aromatic hydrocarbons using a PID and chloride using Hach® chloride QuanTab® test strips. Following completion of excavation activities, new 5-point composite confirmation soil samples will be collected from the floor and sidewalls of the excavation area. Each soil sample will represent at most 200 square feet. All soil samples will be collected, handled, and analyzed as previously described. Proposed excavation areas are depicted on Figure 3.

These activities will be scheduled and conducted immediately following approval of this remediation work plan, and a summary report requesting closure will be submitted the NMOCD following receipt of analytical results.

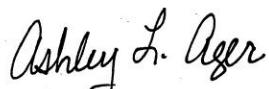
If you have any questions or comments, please do not hesitate to contact Mr. Chris McKisson at (970) 285-9985 or [cmckisson@ltenv.com](mailto:cmckisson@ltenv.com).

Sincerely,

LT ENVIRONMENTAL, INC.



Chris McKisson  
Project Environmental Scientist



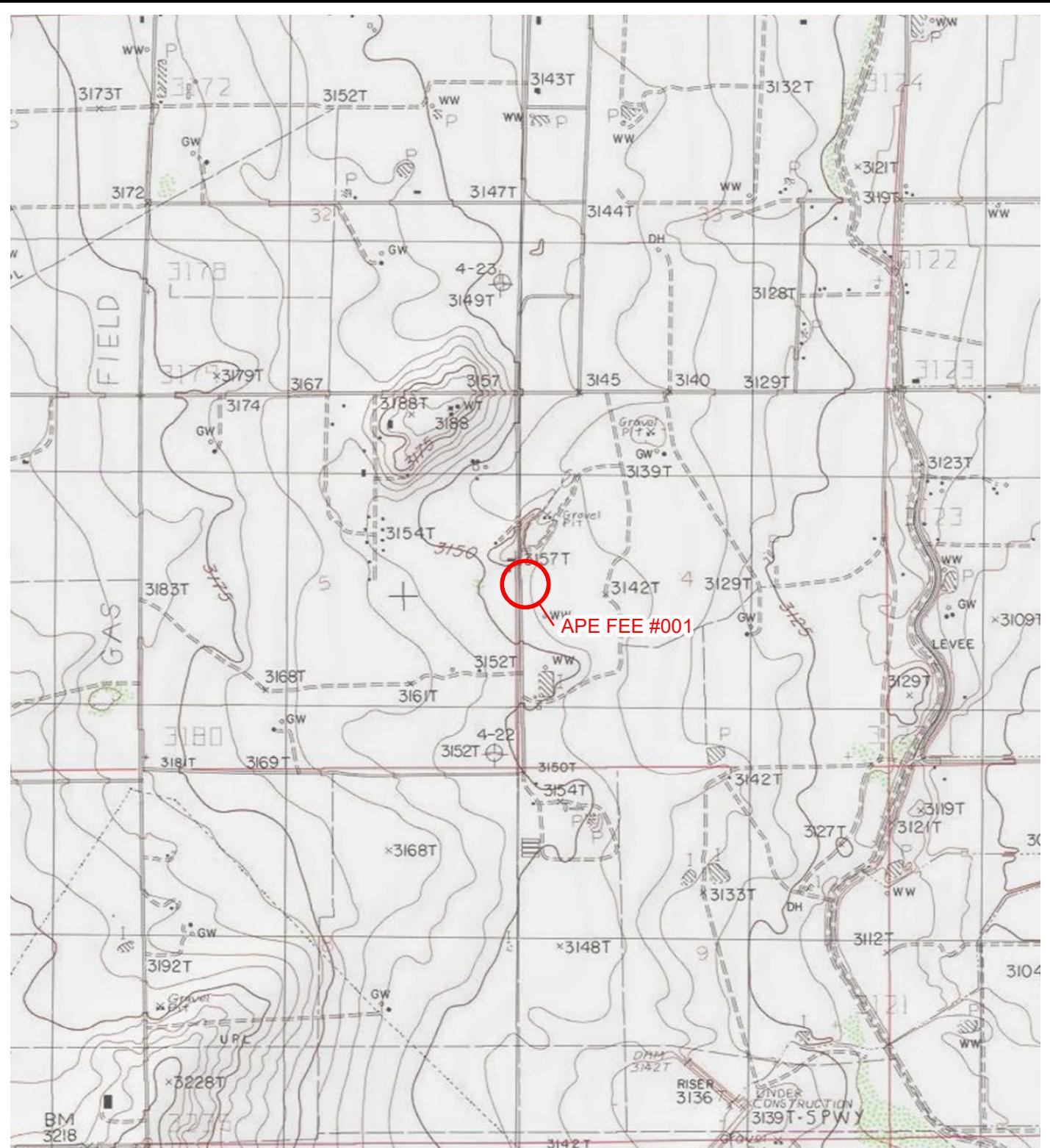
Ashley L. Ager, M.S., P.G.  
Senior Geologist

cc: Jim Raley, WPX  
Robert Hamlet, NMOCD  
Victoria Venegas, NMOCD  
Jim Amos, BLM

Attachments:

Figure 1 Site Location Map  
Figure 2 Delineation Soil Sample Locations  
Table 1 Soil Analytical Results  
Attachment 1 Form C-141  
Attachment 2 Laboratory Analytical Reports

## FIGURES



## LEGEND

## SITE LOCATION

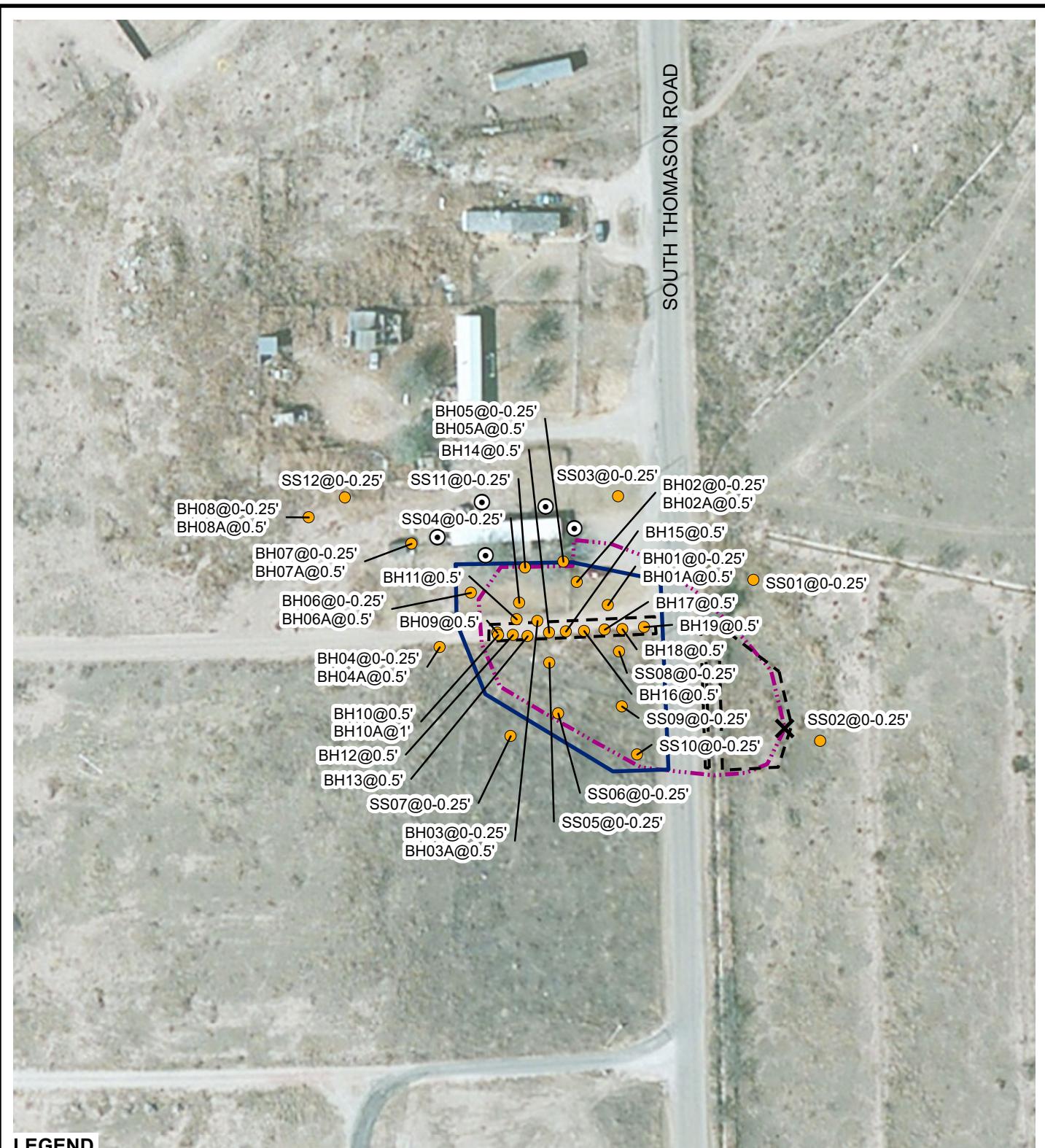
A horizontal number line representing distance in feet. The line starts at 0 and ends at 4,000. There are tick marks at 0, 2,000, and 4,000. A thick black bar is drawn from the 0 mark to the 2,000 mark.



**FIGURE 1  
SITE LOCATION MAP  
APE FEE #001**

**UNIT H & L SEC 4 & 5 T23S R27E  
EDDY COUNTY, NEW MEXICO  
WPX ENERGY PERMIAN, LLC.**





#### LEGEND

- RELEASE LOCATION
- DELINEATION SOIL SAMPLE
- PROPOSED SOIL SAMPLE LOCATION
- EXCAVATION EXTENT
- RELEASE EXTENT (24,465 SQUARE FEET)
- MICRO-BLAZE EMERGENCY LIQUID SPILL CONTROL

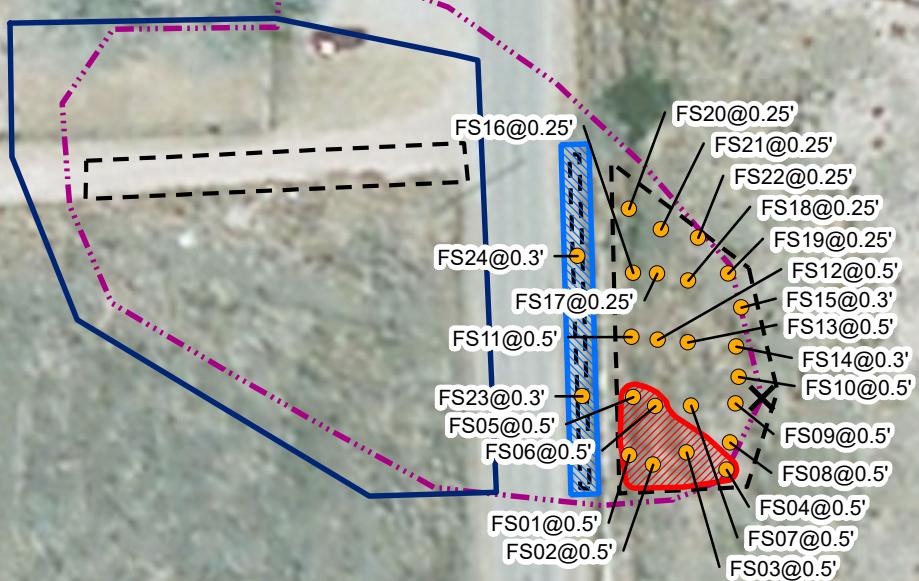
IMAGE COURTESY OF ESRI

0 100 200  
Feet



**FIGURE 2**  
**DELINeATION SOIL SAMPLE LOCATIONS**  
**APE FEE #001**  
**UNIT H & L SEC 4 & 5 T23S R27E**  
**EDDY COUNTY, NEW MEXICO**  
**WPX ENERGY PERMIAN, LLC.**





#### LEGEND

- RELEASE LOCATION
- EXCAVATION SOIL SAMPLE
- EXCAVATION EXTENT
- PROPOSED EXCAVATION AREA  
(AREA NEEDS TO BE SCRAPED)
- PROPOSED EXCAVATION AREA  
(UP TO 1 FOOT BGS)
- RELEASE EXTENT (24,465 SQUARE FEET)
- MICRO-BLAZE EMERGENCY LIQUID SPILL CONTROL
- BGS: BELOW GROUND SURFACE

IMAGE COURTESY OF ESRI

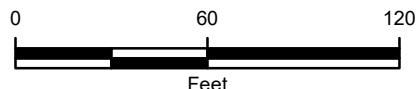


FIGURE 3  
EXCAVATION SOIL SAMPLE LOCATIONS  
APE FEE #001  
UNIT H & L SEC 4 & 5 T23S R27E  
EDDY COUNTY, NEW MEXICO  
WPX ENERGY PERMIAN, LLC.



## TABLES

**TABLE 1**  
**SOIL ANALYTICAL RESULTS**

**APE FEE #001H**  
**EDDY COUNTY, NEW MEXICO**  
**WPX ENERGY PERMIAN, LLC.**

Sample Name	Sample Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	MRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)	
SS01	0 - 0.25	02/14/2020	<0.000483	<0.000525	<0.000404	<0.000401	<0.000401	<13.9	<11.5	<11.5	<11.5	18.5	
SS02	0 - 0.25	02/14/2020	<0.000484	<0.000526	<0.000405	<0.000401	<0.000401	<13.9	14.6 J	<11.4	14.6 J	5.73 J	
SS03	0 - 0.25	02/18/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	10.2	
SS04	0 - 0.25	02/18/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.3	<50.3	<50.3	<50.3	65.7	
SS05	0 - 0.25	02/18/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	16.6	
SS06	0 - 0.25	02/18/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	79.4	
SS07	0 - 0.25	02/18/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	14.3	
SS08	0 - 0.25	02/18/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.3	<50.3	<50.3	<50.3	359	
SS09	0 - 0.25	02/18/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.3	183	<50.3	<b>183</b>	148	
SS10	0 - 0.25	02/18/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.3	<50.3	<50.3	<50.3	65.7	
SS11	0 - 0.25	02/18/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.3	<50.3	<50.3	<50.3	<b>697</b>	
SS12	0 - 0.25	02/18/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.1	<50.1	<50.1	<50.1	27.2	
BH01	0 - 0.25	1/23/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<49.8	<49.8	<49.8	<49.8	16.7	
BH01A	0.5	1/23/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	19.6	
BH02	0 - 0.25	1/23/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<49.9	63.5	<49.9	63.5	179	
BH02A	0.5	1/23/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.2	<50.2	<50.2	<50.2	49.3	
BH03	0 - 0.25	1/23/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.3	<50.3	<50.3	<50.3	21.6	
BH03A	0.5	1/23/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	11.5	
BH04	0 - 0.25	1/23/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	41.8	
BH04A	0.5	1/23/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.1	<50.1	<50.1	<50.1	<10.1	
BH05	0 - 0.25	1/23/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.2	<50.2	<50.2	<50.2	238	
BH05A	0.5	1/23/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.2	<50.2	<50.2	<50.2	52.9	
BH06	0 - 0.25	1/23/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<49.9	<49.9	<49.9	<49.9	381	
BH06A	0.5	1/23/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.1	<50.1	<50.1	<50.1	81.7	
BH07	0 - 0.25	1/23/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.2	<50.2	<50.2	<50.2	<9.94	
BH07A	0.5	1/23/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.3	<50.3	<50.3	<50.3	26.4	
BH08	0 - 0.25	1/23/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	13.0	
BH08A	0.5	1/23/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	157	
BH09	0.5	02/18/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	87.6
BH10	0.5	02/18/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.3	<50.3	<50.3	<50.3	28.1
BH10A	1	02/18/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.3	<50.3	<50.3	<50.3	20.9	
BH11	0.5	02/18/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.3	<50.3	<50.3	<50.3	12.0	
BH12	0.5	02/18/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	142	
BH13	0.5	02/18/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.3	<50.3	<50.3	<50.3	50.5	
BH14	0.5	02/18/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	26.3	
BH15	0.5	02/18/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	204	
BH16	0.5	02/18/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<49.4	
BH17	0.5	02/18/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	32.0	
BH18	0.5	02/18/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	42.3	
BH19	0.5	02/18/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.2	<50.2	<50.2	<50.2	126	
FS01	0.5	02/14/2020	<0.000487	<0.000530	<0.000408	<0.000405	<0.000405	25.0 J	215	16.6 J	<b>257</b>	248	
FS02	0.5	02/14/2020	<0.000489	<0.000532	<0.000409	<0.000406	<0.000406	15.9 J	817	52.1	<b>885</b>	72.7	
FS03	0.5	02/14/2020	<0.000486	0.0108	0.0112	0.155	0.177	401	4970	386	<b>5,760</b>	232	
FS04	0.5	02/14/2020	<0.000486	<0.000528	<0.000406	<0.000403	<0.000403	<13.9	837	74.2	<b>911</b>	44.7	
FS05	0.5	02/14/2020	<0.000483	<0.000525	<0.000404	0.000934 J	0.0						

**ATTACHMENT 1: FORM C-141**



District I  
 1625 N. French Dr., Hobbs, NM 88240  
 District II  
 811 S. First St., Artesia, NM 88210  
 District III  
 1000 Rio Brazos Road, Aztec, NM 87410  
 District IV  
 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
 Energy Minerals and Natural  
 Resources Department

Oil Conservation Division  
 1220 South St. Francis Dr.  
 Santa Fe, NM 87505

Form C-141  
 Revised August 24, 2018  
 Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

## Release Notification

### Responsible Party

Responsible Party: WPX Energy Permian, LLC.	OGRID: 246289
Contact Name: Robert Raup	Contact Telephone: 701-310-5194
Contact email: Bob.Raup@wpxenergy.com	Incident # (assigned by OCD): Not Yet Assigned
Contact mailing address: One Williams Center – MD 25-31, Tulsa, OK 74172	

### Location of Release Source

Latitude 32.333864 \_\_\_\_\_ Longitude -104.203312 \_\_\_\_\_  
*(NAD 83 in decimal degrees to 5 decimal places)*

Site Name: Ape Fee #001	Site Type: Well Pad Facility Flowline
Date Release Discovered: January 21, 2020	API# 30-015-42101

Unit Letter	Section	Township	Range	County
4	23S	27E	Eddy	

Surface Owner:  State  Federal  Tribal  Private (Names: James Barrett Kenney et. al., Carl A & Vira George, Charles & Peggy Augustus, Riley J & Joey J Neeb, Reynaldo H. Lopez)

### Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls): 0.5 – 1.5 BBL's	Volume Recovered (bbls): To Be Determined
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls): 1 – 4.5 BBL's	Volume Recovered (bbls): To Be Determined
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Natural Gas	Volume Released (Mcf): 75	Volume Recovered (Mcf): 0
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release:

At approximately 2:30 a.m. on 1/21/2020, a split approximately 0.5 inches in diameter developed in the flowline connected to the Ape Fee No. 1 well (API 30-015-42101), causing a misting of natural gas, produced water, and crude oil to occur.

**State of New Mexico  
Oil Conservation Division**

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC?  <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?
<p>If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?</p> <p>YES, immediate notice was provided by WPX Energy Permian, LLC to NMOCD via phone call and email to the District 2 Field Office. A phone message was left for Mr. Mike Bratcher on January 21<sup>st</sup> at approximately 10:15 a.m. A follow up email was sent to Mike Bratcher, Victoria Venegas, and Robert Hamlet at 10:19 a.m. on January 21<sup>st</sup>.</p>	

### Initial Response

*The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury*

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.
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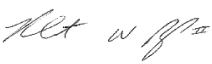
If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Robert W. Raup II

Title: HSE Supervisor

Signature: 

Date: March 3, 2020

email: [Bob.Raup@wpxenergy.com](mailto:Bob.Raup@wpxenergy.com)

Telephone: 701-310-5194

#### **OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

**ATTACHMENT 2: LABORATORY ANALYTICAL REPORTS**



# **Analytical Report 652836**

**for  
LT Environmental, Inc.**

**Project Manager: Chris McKisson**

**Ape Fee 001**

**034820008**

**19-FEB-20**

Collected By: Client



**1089 N Canal Street  
Carlsbad, NM 88220**

Xenco-Houston (EPA Lab Code: TX00122):  
Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)  
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

Xenco-Dallas (EPA Lab Code: TX01468):  
Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)  
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)  
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)  
Xenco-Carlsbad (LELAP): Louisiana (05092)  
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)  
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)  
Xenco-Tampa: Florida (E87429), North Carolina (483)



19-FEB-20

Project Manager: **Chris McKisson**

**LT Environmental, Inc.**

4600 W. 60th Avenue

Arvada, CO 80003

Reference: XENCO Report No(s): **652836**

**Ape Fee 001**

Project Address: Eddy

**Chris McKisson:**

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 652836. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 652836 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

---

**Jessica Kramer**

Project Assistant

*Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.*

*Certified and approved by numerous States and Agencies.*

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## Sample Cross Reference 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH09	S	02-18-20 10:35	0.5 ft	652836-001
BH10	S	02-18-20 10:45	0.5 ft	652836-002
BH10A	S	02-18-20 10:50	1 ft	652836-003
BH11	S	02-18-20 10:59	0.5 ft	652836-004
BH12	S	02-18-20 11:06	0.5 ft	652836-005
BH13	S	02-18-20 11:14	0.5 ft	652836-006
BH14	S	02-18-20 11:24	0.5 ft	652836-007
BH15	S	02-18-20 11:31	0.5 ft	652836-008
BH16	S	02-18-20 11:38	0.5 ft	652836-009
BH17	S	02-18-20 11:52	0.5 ft	652836-010
BH18	S	02-18-20 12:02	0.5 ft	652836-011
BH19	S	02-18-20 12:13	0.5 ft	652836-012
SS03	S	02-18-20 13:14	0 - 0.25 ft	652836-013
SS04	S	02-18-20 12:33	0 - 0.25 ft	652836-014
SS05	S	02-18-20 13:18	0 - 0.25 ft	652836-015
SS06	S	02-18-20 13:23	0 - 0.25 ft	652836-016
SS07	S	02-18-20 13:29	0 - 0.25 ft	652836-017
SS08	S	02-18-20 13:34	0 - 0.25 ft	652836-018
S09	S	02-18-20 13:39	0 - 0.25 ft	652836-019
SS10	S	02-18-20 13:44	0 - 0.25 ft	652836-020
SS11	S	02-18-20 12:27	0 - 0.25 ft	652836-021
SS12	S	02-18-20 12:40	0 - 0.25 ft	652836-022



## CASE NARRATIVE

**Client Name:** LT Environmental, Inc.

**Project Name:** Ape Fee 001

Project ID: 034820008  
Work Order Number(s): 652836

Report Date: 19-FEB-20  
Date Received: 02/18/2020

---

### **Sample receipt non conformances and comments:**

#### **Sample receipt non conformances and comments per sample:**

None

#### **Analytical non conformances and comments:**

Batch: LBA-3116910 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3116911 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.



# Certificate of Analysis Summary 652836

LT Environmental, Inc., Arvada, CO

Project Name: Ape Fee 001

Project Id: 034820008  
 Contact: Chris McKisson  
 Project Location: Eddy

Date Received in Lab: Tue Feb-18-20 03:53 pm  
 Report Date: 19-FEB-20  
 Project Manager: Jessica Kramer

Analysis Requested		Lab Id:	652836-001	652836-002	652836-003	652836-004	652836-005	652836-006					
		Field Id:	BH09	BH10	BH10A	BH11	BH12	BH13					
		Depth:	0.5- ft	0.5- ft	1- ft	0.5- ft	0.5- ft	0.5- ft					
		Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL					
		Sampled:	Feb-18-20 10:35	Feb-18-20 10:45	Feb-18-20 10:50	Feb-18-20 10:59	Feb-18-20 11:06	Feb-18-20 11:14					
<b>BTEX by EPA 8021B</b>		Extracted:	Feb-18-20 17:00										
		Analyzed:	Feb-18-20 21:39	Feb-18-20 22:00	Feb-18-20 22:20	Feb-18-20 23:21	Feb-18-20 23:41	Feb-19-20 00:02					
		Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL					
Benzene		<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199		
Toluene		<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199		
Ethylbenzene		<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199		
m,p-Xylenes		<0.00398	0.00398	<0.00397	0.00397	<0.00399	0.00399	<0.00399	0.00399	<0.00398	0.00398		
o-Xylene		<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199		
Xylenes, Total		<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199		
Total BTEX		<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199		
<b>Chloride by EPA 300</b>		Extracted:	Feb-18-20 16:00										
		Analyzed:	Feb-18-20 18:18	Feb-18-20 18:35	Feb-18-20 18:40	Feb-18-20 18:57	Feb-18-20 19:03	Feb-18-20 19:08					
		Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL			
Chloride		87.6	9.92	28.1	10.0	20.9	10.1	12.0	9.98	142	49.6	50.5	49.8
<b>TPH by SW8015 Mod</b>		Extracted:	Feb-18-20 17:00										
		Analyzed:	Feb-18-20 22:48	Feb-18-20 22:48	Feb-18-20 23:08	Feb-18-20 23:08	Feb-18-20 23:28	Feb-18-20 23:48					
		Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL			
Gasoline Range Hydrocarbons (GRO)		<49.9	49.9	<50.3	50.3	<50.3	50.3	<50.3	50.3	<50.3	50.3		
Diesel Range Organics (DRO)		<49.9	49.9	<50.3	50.3	<50.3	50.3	<50.0	50.0	<50.3	50.3		
Motor Oil Range Hydrocarbons (MRO)		<49.9	49.9	<50.3	50.3	<50.3	50.3	<50.0	50.0	<50.3	50.3		
Total TPH		<49.9	49.9	<50.3	50.3	<50.3	50.3	<50.0	50.0	<50.3	50.3		

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Jessica Kramer  
 Project Assistant



# Certificate of Analysis Summary 652836

LT Environmental, Inc., Arvada, CO

Project Name: Ape Fee 001

Project Id: 034820008  
 Contact: Chris McKisson  
 Project Location: Eddy

Date Received in Lab: Tue Feb-18-20 03:53 pm  
 Report Date: 19-FEB-20  
 Project Manager: Jessica Kramer

Analysis Requested		Lab Id:	652836-007	652836-008	652836-009	652836-010	652836-011	652836-012	
		Field Id:	BH14	BH15	BH16	BH17	BH18	BH19	
		Depth:	0.5- ft						
		Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
		Sampled:	Feb-18-20 11:24	Feb-18-20 11:31	Feb-18-20 11:38	Feb-18-20 11:52	Feb-18-20 12:02	Feb-18-20 12:13	
<b>BTEX by EPA 8021B</b>		Extracted:	Feb-18-20 17:00						
		Analyzed:	Feb-19-20 00:22	Feb-19-20 00:43	Feb-19-20 01:03	Feb-19-20 01:23	Feb-19-20 01:44	Feb-19-20 02:04	
		Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	
Benzene		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199
Toluene		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199
Ethylbenzene		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199
m,p-Xylenes		<0.00401	0.00401	<0.00398	0.00398	<0.00399	0.00399	<0.00401	0.00401
o-Xylene		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199
Xylenes, Total		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199
Total BTEX		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199
<b>Chloride by EPA 300</b>		Extracted:	Feb-18-20 16:00	Feb-18-20 16:00	Feb-18-20 16:00	Feb-18-20 16:00	Feb-18-20 17:30	Feb-18-20 17:30	
		Analyzed:	Feb-18-20 19:14	Feb-18-20 19:20	Feb-18-20 19:25	Feb-18-20 19:31	Feb-18-20 20:04	Feb-18-20 20:21	
		Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	
Chloride		26.3	9.98	204	50.4	<49.4	49.4	32.0	9.98
						32.0	9.98	42.3	9.92
<b>TPH by SW8015 Mod</b>		Extracted:	Feb-18-20 17:00						
		Analyzed:	Feb-18-20 23:48	Feb-19-20 00:08	Feb-19-20 00:08	Feb-19-20 00:28	Feb-19-20 00:28	Feb-19-20 01:07	
		Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	
Gasoline Range Hydrocarbons (GRO)		<49.8	49.8	<50.0	50.0	<50.0	50.0	<49.9	49.9
Diesel Range Organics (DRO)		<49.8	49.8	<50.0	50.0	<50.0	50.0	<49.9	49.9
Motor Oil Range Hydrocarbons (MRO)		<49.8	49.8	<50.0	50.0	<50.0	50.0	<49.9	49.9
Total TPH		<49.8	49.8	<50.0	50.0	<50.0	50.0	<49.9	49.9
						<50.2	50.2	<50.2	50.2

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Jessica Kramer  
 Project Assistant



# Certificate of Analysis Summary 652836

LT Environmental, Inc., Arvada, CO

Project Name: Ape Fee 001

Project Id: 034820008  
 Contact: Chris McKisson  
 Project Location: Eddy

Date Received in Lab: Tue Feb-18-20 03:53 pm  
 Report Date: 19-FEB-20  
 Project Manager: Jessica Kramer

Analysis Requested		<i>Lab Id:</i>	652836-013	652836-014	652836-015	652836-016	652836-017	652836-018
		<i>Field Id:</i>	SS03	SS04	SS05	SS06	SS07	SS08
		<i>Depth:</i>	0-0.25 ft					
		<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		<i>Sampled:</i>	Feb-18-20 13:14	Feb-18-20 12:33	Feb-18-20 13:18	Feb-18-20 13:23	Feb-18-20 13:29	Feb-18-20 13:34
<b>BTEX by EPA 8021B</b>		<i>Extracted:</i>	Feb-18-20 17:00	Feb-18-20 16:00	Feb-18-20 17:00	Feb-18-20 17:00	Feb-18-20 17:00	Feb-18-20 17:00
		<i>Analyzed:</i>	Feb-19-20 02:25	Feb-18-20 20:52	Feb-18-20 21:12	Feb-18-20 21:32	Feb-18-20 21:53	Feb-18-20 22:13
		<i>Units/RL:</i>	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200 0.00200
Toluene		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200 0.00200
Ethylbenzene		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200 0.00200
m,p-Xylenes		<0.00401	0.00401	<0.00403	0.00403	<0.00401	0.00401	<0.00398 0.00398
o-Xylene		<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00199 0.00199
Xylenes, Total		<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00199 0.00199
Total BTEX		<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00199 0.00199
<b>Chloride by EPA 300</b>		<i>Extracted:</i>	Feb-18-20 17:30					
		<i>Analyzed:</i>	Feb-18-20 20:26	Feb-18-20 20:32	Feb-18-20 20:38	Feb-18-20 20:54	Feb-18-20 21:00	Feb-18-20 21:05
		<i>Units/RL:</i>	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		10.2	9.98	65.7	9.92	16.6	9.88	79.4 9.98
<b>TPH by SW8015 Mod</b>		<i>Extracted:</i>	Feb-18-20 17:00	Feb-18-20 17:00	Feb-18-20 17:00	Feb-18-20 17:15	Feb-18-20 17:15	Feb-18-20 17:15
		<i>Analyzed:</i>	Feb-19-20 00:47	Feb-19-20 00:47	Feb-19-20 01:07	Feb-19-20 02:46	Feb-19-20 03:06	Feb-19-20 03:26
		<i>Units/RL:</i>	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.1	50.1	<50.3	50.3	<49.8	49.8	<50.2 50.2
Diesel Range Organics (DRO)		<50.1	50.1	<50.3	50.3	<49.8	49.8	<50.2 50.2
Motor Oil Range Hydrocarbons (MRO)		<50.1	50.1	<50.3	50.3	<49.8	49.8	<50.2 50.2
Total TPH		<50.1	50.1	<50.3	50.3	<49.8	49.8	<50.2 50.2
						<49.9	49.9	<50.3 50.3
								<50.3 50.3

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Jessica Kramer  
 Project Assistant



# Certificate of Analysis Summary 652836

LT Environmental, Inc., Arvada, CO

Project Name: Ape Fee 001

Project Id: 034820008  
 Contact: Chris McKisson  
 Project Location: Eddy

Date Received in Lab: Tue Feb-18-20 03:53 pm  
 Report Date: 19-FEB-20  
 Project Manager: Jessica Kramer

Analysis Requested		Lab Id:	652836-019	652836-020	652836-021	652836-022		
		Field Id:	S09	SS10	SS11	SS12		
		Depth:	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft		
		Matrix:	SOIL	SOIL	SOIL	SOIL		
		Sampled:	Feb-18-20 13:39	Feb-18-20 13:44	Feb-18-20 12:27	Feb-18-20 12:40		
<b>BTEX by EPA 8021B</b>		Extracted:	Feb-18-20 17:00	Feb-18-20 17:00	Feb-18-20 17:00	Feb-18-20 17:00		
		Analyzed:	Feb-18-20 23:14	Feb-18-20 23:35	Feb-18-20 23:55	Feb-19-20 00:16		
		Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene			<0.00202	0.00202	<0.00202	0.00200	<0.00199	0.00199
Toluene			<0.00202	0.00202	<0.00202	0.00200	<0.00199	0.00199
Ethylbenzene			<0.00202	0.00202	<0.00202	0.00202	<0.00199	0.00199
m,p-Xylenes			<0.00403	0.00403	<0.00403	0.00403	<0.00398	0.00398
o-Xylene			<0.00202	0.00202	<0.00202	0.00202	<0.00199	0.00199
Xylenes, Total			<0.00202	0.00202	<0.00202	0.00202	<0.00199	0.00199
Total BTEX			<0.00202	0.00202	<0.00202	0.00202	<0.00199	0.00199
<b>Chloride by EPA 300</b>		Extracted:	Feb-18-20 17:30	Feb-18-20 17:30	Feb-18-20 17:30	Feb-18-20 17:30		
		Analyzed:	Feb-18-20 21:11	Feb-18-20 21:17	Feb-18-20 21:23	Feb-18-20 21:41		
		Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride			148	9.82	65.7	9.96	697	49.8
							27.2	9.98
<b>TPH by SW8015 Mod</b>		Extracted:	Feb-18-20 17:15	Feb-18-20 17:15	Feb-18-20 17:15	Feb-18-20 17:15		
		Analyzed:	Feb-19-20 03:26	Feb-19-20 03:46	Feb-19-20 03:46	Feb-19-20 04:06		
		Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)			<50.3	50.3	<50.3	50.3	<50.1	50.1
Diesel Range Organics (DRO)			183	50.3	<50.3	50.3	<50.1	50.1
Motor Oil Range Hydrocarbons (MRO)			<50.3	50.3	<50.3	50.3	<50.1	50.1
Total TPH			183	50.3	<50.3	50.3	<50.1	50.1

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Jessica Kramer  
 Project Assistant



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: **BH09**

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-001

Date Collected: 02.18.20 10.35

Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 16.00

Basis: Wet Weight

Seq Number: 3116915

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<b>87.6</b>	9.92	mg/kg	02.18.20 18.18		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116932

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.18.20 22.48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.18.20 22.48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.18.20 22.48	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.18.20 22.48	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane		111-85-3	93	%	70-135	02.18.20 22.48	
o-Terphenyl		84-15-1	107	%	70-135	02.18.20 22.48	



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: **BH09**

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-001

Date Collected: 02.18.20 10.35

Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116910

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.18.20 21.39	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.18.20 21.39	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.18.20 21.39	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.18.20 21.39	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.18.20 21.39	U	1
Xylenes, Total	1330-20-7	<0.00199	0.00199	mg/kg	02.18.20 21.39	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.18.20 21.39	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	105	%	70-130	02.18.20 21.39		
4-Bromofluorobenzene	460-00-4	101	%	70-130	02.18.20 21.39		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: **BH10** Matrix: Soil Date Received:02.18.20 15.53  
Lab Sample Id: 652836-002 Date Collected: 02.18.20 10.45 Sample Depth: 0.5 ft  
Analytical Method: Chloride by EPA 300 Prep Method: E300P  
Tech: MAB % Moisture:  
Analyst: MAB Date Prep: 02.18.20 16.00 Basis: Wet Weight  
Seq Number: 3116915

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<b>28.1</b>	10.0	mg/kg	02.18.20 18.35		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
Tech: DTH % Moisture:  
Analyst: DTH Date Prep: 02.18.20 17.00 Basis: Wet Weight  
Seq Number: 3116932

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	02.18.20 22.48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	02.18.20 22.48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	02.18.20 22.48	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	02.18.20 22.48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	02.18.20 22.48	
o-Terphenyl	84-15-1	107	%	70-135	02.18.20 22.48	



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: **BH10**

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-002

Date Collected: 02.18.20 10.45

Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116910

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	02.18.20 22.00	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	02.18.20 22.00	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	02.18.20 22.00	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	02.18.20 22.00	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	02.18.20 22.00	U	1
Xylenes, Total	1330-20-7	<0.00198	0.00198	mg/kg	02.18.20 22.00	U	1
Total BTEX		<0.00198	0.00198	mg/kg	02.18.20 22.00	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	106	%	70-130	02.18.20 22.00		
4-Bromofluorobenzene	460-00-4	99	%	70-130	02.18.20 22.00		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: **BH10A**

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-003

Date Collected: 02.18.20 10.50

Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 16.00

Basis: Wet Weight

Seq Number: 3116915

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	20.9	10.1	mg/kg	02.18.20 18.40		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116932

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	02.18.20 23.08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	02.18.20 23.08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	02.18.20 23.08	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	02.18.20 23.08	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane		111-85-3	102	%	70-135	02.18.20 23.08	
o-Terphenyl		84-15-1	116	%	70-135	02.18.20 23.08	



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: **BH10A**

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-003

Date Collected: 02.18.20 10.50

Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116910

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.18.20 22.20	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.18.20 22.20	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.18.20 22.20	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.18.20 22.20	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.18.20 22.20	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	02.18.20 22.20	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.18.20 22.20	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	105	%	70-130	02.18.20 22.20		
4-Bromofluorobenzene	460-00-4	97	%	70-130	02.18.20 22.20		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: **BH11**  
Lab Sample Id: 652836-004

Matrix: Soil  
Date Collected: 02.18.20 10.59

Date Received: 02.18.20 15.53  
Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB  
Analyst: MAB  
Seq Number: 3116915

% Moisture:  
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<b>12.0</b>	9.98	mg/kg	02.18.20 18.57		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH  
Analyst: DTH  
Seq Number: 3116932

% Moisture:  
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	02.18.20 23.08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	02.18.20 23.08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	02.18.20 23.08	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	02.18.20 23.08	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	104	%	70-135	02.18.20 23.08		
o-Terphenyl	84-15-1	110	%	70-135	02.18.20 23.08		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: **BH11**  
Lab Sample Id: 652836-004

Matrix: Soil  
Date Collected: 02.18.20 10.59

Date Received: 02.18.20 15.53  
Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB  
Analyst: MAB  
Seq Number: 3116910

% Moisture:  
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.18.20 23.21	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.18.20 23.21	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.18.20 23.21	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.18.20 23.21	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.18.20 23.21	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	02.18.20 23.21	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.18.20 23.21	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	02.18.20 23.21		
1,4-Difluorobenzene	540-36-3	106	%	70-130	02.18.20 23.21		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: **BH12**

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-005

Date Collected: 02.18.20 11.06

Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 16.00

Basis: Wet Weight

Seq Number: 3116915

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	142	49.6	mg/kg	02.18.20 19.03		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116932

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.18.20 23.28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.18.20 23.28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.18.20 23.28	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.18.20 23.28	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane		111-85-3	106	%	70-135	02.18.20 23.28	
o-Terphenyl		84-15-1	113	%	70-135	02.18.20 23.28	



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: **BH12**

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-005

Date Collected: 02.18.20 11.06

Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116910

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.18.20 23.41	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.18.20 23.41	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.18.20 23.41	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.18.20 23.41	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.18.20 23.41	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	02.18.20 23.41	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.18.20 23.41	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	105	%	70-130	02.18.20 23.41		
4-Bromofluorobenzene	460-00-4	98	%	70-130	02.18.20 23.41		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: **BH13**

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-006

Date Collected: 02.18.20 11.14

Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 16.00

Basis: Wet Weight

Seq Number: 3116915

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<b>50.5</b>	49.8	mg/kg	02.18.20 19.08		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116932

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	02.18.20 23.48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	02.18.20 23.48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	02.18.20 23.48	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	02.18.20 23.48	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane		111-85-3	100	%	70-135	02.18.20 23.48	
o-Terphenyl		84-15-1	108	%	70-135	02.18.20 23.48	



# Certificate of Analytical Results 652836

**LT Environmental, Inc., Arvada, CO**

Ape Fee 001

Sample Id: **BH13**

Matrix: **Soil**

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-006

Date Collected: 02.18.20 11.14

Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: **MAB**

% Moisture:

Analyst: **MAB**

Date Prep: 02.18.20 17.00

Basis: **Wet Weight**

Seq Number: 3116910

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.19.20 00.02	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.19.20 00.02	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.19.20 00.02	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.19.20 00.02	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.19.20 00.02	U	1
Xylenes, Total	1330-20-7	<0.00199	0.00199	mg/kg	02.19.20 00.02	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.19.20 00.02	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	02.19.20 00.02		
1,4-Difluorobenzene	540-36-3	105	%	70-130	02.19.20 00.02		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: **BH14**

Lab Sample Id: 652836-007

Matrix: Soil

Date Received: 02.18.20 15.53

Date Collected: 02.18.20 11.24

Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 16.00

Basis: Wet Weight

Seq Number: 3116915

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	26.3	9.98	mg/kg	02.18.20 19.14		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116932

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.18.20 23.48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	02.18.20 23.48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.18.20 23.48	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.18.20 23.48	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane		111-85-3	106	%	70-135	02.18.20 23.48	
o-Terphenyl		84-15-1	107	%	70-135	02.18.20 23.48	



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: **BH14**

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-007

Date Collected: 02.18.20 11.24

Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116910

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.19.20 00.22	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.19.20 00.22	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.19.20 00.22	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	02.19.20 00.22	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.19.20 00.22	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	02.19.20 00.22	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.19.20 00.22	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	96	%	70-130	02.19.20 00.22		
1,4-Difluorobenzene	540-36-3	105	%	70-130	02.19.20 00.22		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: **BH15**

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-008

Date Collected: 02.18.20 11.31

Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 16.00

Basis: Wet Weight

Seq Number: 3116915

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	204	50.4	mg/kg	02.18.20 19.20		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116932

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.19.20 00.08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.19.20 00.08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.19.20 00.08	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.19.20 00.08	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane		111-85-3	98	%	70-135	02.19.20 00.08	
o-Terphenyl		84-15-1	105	%	70-135	02.19.20 00.08	



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: **BH15**

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-008

Date Collected: 02.18.20 11.31

Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116910

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.19.20 00.43	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.19.20 00.43	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.19.20 00.43	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.19.20 00.43	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.19.20 00.43	U	1
Xylenes, Total	1330-20-7	<0.00199	0.00199	mg/kg	02.19.20 00.43	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.19.20 00.43	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	106	%	70-130	02.19.20 00.43		
4-Bromofluorobenzene	460-00-4	97	%	70-130	02.19.20 00.43		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: **BH16**

Lab Sample Id: 652836-009

Matrix: Soil

Date Received: 02.18.20 15.53

Date Collected: 02.18.20 11.38

Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 16.00

Basis: Wet Weight

Seq Number: 3116915

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<49.4	49.4	mg/kg	02.18.20 19.25	U	5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116932

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.19.20 00.08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.19.20 00.08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.19.20 00.08	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.19.20 00.08	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane		111-85-3	103	%	70-135	02.19.20 00.08	
o-Terphenyl		84-15-1	107	%	70-135	02.19.20 00.08	



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: **BH16**

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-009

Date Collected: 02.18.20 11.38

Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116910

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.19.20 01.03	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.19.20 01.03	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.19.20 01.03	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.19.20 01.03	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.19.20 01.03	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	02.19.20 01.03	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.19.20 01.03	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	104	%	70-130	02.19.20 01.03		
4-Bromofluorobenzene	460-00-4	100	%	70-130	02.19.20 01.03		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: **BH17**

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-010

Date Collected: 02.18.20 11.52

Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 16.00

Basis: Wet Weight

Seq Number: 3116915

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	32.0	9.98	mg/kg	02.18.20 19.31		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116932

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	02.19.20 00.28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	02.19.20 00.28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	02.19.20 00.28	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	02.19.20 00.28	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane		111-85-3	98	%	70-135	02.19.20 00.28	
o-Terphenyl		84-15-1	104	%	70-135	02.19.20 00.28	



# Certificate of Analytical Results 652836

**LT Environmental, Inc., Arvada, CO**

Ape Fee 001

Sample Id: **BH17**

Matrix: **Soil**

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-010

Date Collected: 02.18.20 11.52

Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: **MAB**

% Moisture:

Analyst: **MAB**

Date Prep: 02.18.20 17.00

Basis: **Wet Weight**

Seq Number: 3116910

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.19.20 01.23	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.19.20 01.23	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.19.20 01.23	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	02.19.20 01.23	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.19.20 01.23	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	02.19.20 01.23	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.19.20 01.23	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	02.19.20 01.23		
1,4-Difluorobenzene	540-36-3	105	%	70-130	02.19.20 01.23		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: **BH18**  
Lab Sample Id: 652836-011

Matrix: Soil  
Date Collected: 02.18.20 12.02

Date Received: 02.18.20 15.53  
Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300  
Tech: MAB  
Analyst: MAB  
Seq Number: 3116918

Prep Method: E300P  
% Moisture:  
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	42.3	9.92	mg/kg	02.18.20 20.04		1

Analytical Method: TPH by SW8015 Mod  
Tech: DTH  
Analyst: DTH  
Seq Number: 3116932

Prep Method: SW8015P  
% Moisture:  
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.19.20 00.28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.19.20 00.28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.19.20 00.28	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.19.20 00.28	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	105	%	70-135	02.19.20 00.28		
o-Terphenyl	84-15-1	107	%	70-135	02.19.20 00.28		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: **BH18**

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-011

Date Collected: 02.18.20 12.02

Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116910

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.19.20 01.44	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.19.20 01.44	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.19.20 01.44	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	02.19.20 01.44	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.19.20 01.44	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	02.19.20 01.44	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.19.20 01.44	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	103	%	70-130	02.19.20 01.44		
4-Bromofluorobenzene	460-00-4	98	%	70-130	02.19.20 01.44		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: **BH19** Matrix: Soil Date Received:02.18.20 15.53  
Lab Sample Id: 652836-012 Date Collected: 02.18.20 12.13 Sample Depth: 0.5 ft  
Analytical Method: Chloride by EPA 300 Prep Method: E300P  
Tech: MAB % Moisture:  
Analyst: MAB Date Prep: 02.18.20 17.30 Basis: Wet Weight  
Seq Number: 3116918

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	126	49.8	mg/kg	02.18.20 20.21		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
Tech: DTH % Moisture:  
Analyst: DTH Date Prep: 02.18.20 17.00 Basis: Wet Weight  
Seq Number: 3116932

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	02.19.20 01.07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	02.19.20 01.07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	02.19.20 01.07	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	02.19.20 01.07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	02.19.20 01.07	
o-Terphenyl	84-15-1	105	%	70-135	02.19.20 01.07	



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: **BH19**  
Lab Sample Id: 652836-012

Matrix: Soil  
Date Collected: 02.18.20 12.13

Date Received: 02.18.20 15.53  
Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB  
Analyst: MAB  
Seq Number: 3116910

% Moisture:  
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.19.20 02.04	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.19.20 02.04	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.19.20 02.04	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.19.20 02.04	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.19.20 02.04	U	1
Xylenes, Total	1330-20-7	<0.00199	0.00199	mg/kg	02.19.20 02.04	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.19.20 02.04	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	105	%	70-130	02.19.20 02.04		
4-Bromofluorobenzene	460-00-4	97	%	70-130	02.19.20 02.04		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: SS03

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-013

Date Collected: 02.18.20 13.14

Sample Depth: 0 - 0.25 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.30

Basis: Wet Weight

Seq Number: 3116918

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.2	9.98	mg/kg	02.18.20 20.26		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116932

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	02.19.20 00.47	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	02.19.20 00.47	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	02.19.20 00.47	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	02.19.20 00.47	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	102	%	70-135	02.19.20 00.47		
o-Terphenyl	84-15-1	107	%	70-135	02.19.20 00.47		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: SS03

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-013

Date Collected: 02.18.20 13.14

Sample Depth: 0 - 0.25 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116910

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.19.20 02.25	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.19.20 02.25	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.19.20 02.25	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	02.19.20 02.25	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.19.20 02.25	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	02.19.20 02.25	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.19.20 02.25	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	02.19.20 02.25		
1,4-Difluorobenzene	540-36-3	105	%	70-130	02.19.20 02.25		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: SS04

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-014

Date Collected: 02.18.20 12.33

Sample Depth: 0 - 0.25 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.30

Basis: Wet Weight

Seq Number: 3116918

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	65.7	9.92	mg/kg	02.18.20 20.32		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116932

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	02.19.20 00.47	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	02.19.20 00.47	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	02.19.20 00.47	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	02.19.20 00.47	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	105	%	70-135	02.19.20 00.47		
o-Terphenyl	84-15-1	109	%	70-135	02.19.20 00.47		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: SS04

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-014

Date Collected: 02.18.20 12.33

Sample Depth: 0 - 0.25 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 16.00

Basis: Wet Weight

Seq Number: 3116911

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	02.18.20 20.52	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	02.18.20 20.52	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	02.18.20 20.52	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	02.18.20 20.52	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	02.18.20 20.52	U	1
Xylenes, Total	1330-20-7	<0.00202	0.00202	mg/kg	02.18.20 20.52	U	1
Total BTEX		<0.00202	0.00202	mg/kg	02.18.20 20.52	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	96	%	70-130	02.18.20 20.52		
1,4-Difluorobenzene	540-36-3	113	%	70-130	02.18.20 20.52		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: SS05

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-015

Date Collected: 02.18.20 13.18

Sample Depth: 0 - 0.25 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.30

Basis: Wet Weight

Seq Number: 3116918

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	16.6	9.88	mg/kg	02.18.20 20.38		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116932

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.19.20 01.07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	02.19.20 01.07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.19.20 01.07	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.19.20 01.07	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane		111-85-3	103	%	70-135	02.19.20 01.07	
o-Terphenyl		84-15-1	111	%	70-135	02.19.20 01.07	



# Certificate of Analytical Results 652836

**LT Environmental, Inc., Arvada, CO**

Ape Fee 001

Sample Id: **SS05**

Matrix: **Soil**

Date Received: 02.18.20 15.53

Lab Sample Id: **652836-015**

Date Collected: 02.18.20 13.18

Sample Depth: 0 - 0.25 ft

Analytical Method: **BTEX by EPA 8021B**

Prep Method: **SW5030B**

Tech: **MAB**

% Moisture:

Analyst: **MAB**

Date Prep: **02.18.20 17.00**

Basis: **Wet Weight**

Seq Number: **3116911**

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.18.20 21.12	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.18.20 21.12	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.18.20 21.12	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	02.18.20 21.12	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.18.20 21.12	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	02.18.20 21.12	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.18.20 21.12	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	96	%	70-130	02.18.20 21.12		
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.18.20 21.12		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: SS06

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-016

Date Collected: 02.18.20 13.23

Sample Depth: 0 - 0.25 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.30

Basis: Wet Weight

Seq Number: 3116918

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	79.4	9.98	mg/kg	02.18.20 20.54		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 02.18.20 17.15

Basis: Wet Weight

Seq Number: 3116983

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	02.19.20 02.46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	02.19.20 02.46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	02.19.20 02.46	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	02.19.20 02.46	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane		111-85-3	103	%	70-135	02.19.20 02.46	
o-Terphenyl		84-15-1	109	%	70-135	02.19.20 02.46	



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: SS06

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-016

Date Collected: 02.18.20 13.23

Sample Depth: 0 - 0.25 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116911

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.18.20 21.32	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.18.20 21.32	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.18.20 21.32	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	02.18.20 21.32	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.18.20 21.32	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	02.18.20 21.32	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.18.20 21.32	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	94	%	70-130	02.18.20 21.32		
1,4-Difluorobenzene	540-36-3	109	%	70-130	02.18.20 21.32		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: SS07

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-017

Date Collected: 02.18.20 13.29

Sample Depth: 0 - 0.25 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.30

Basis: Wet Weight

Seq Number: 3116918

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	14.3	9.96	mg/kg	02.18.20 21.00		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 02.18.20 17.15

Basis: Wet Weight

Seq Number: 3116983

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.19.20 03.06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.19.20 03.06	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.19.20 03.06	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.19.20 03.06	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane		111-85-3	111	%	70-135	02.19.20 03.06	
o-Terphenyl		84-15-1	113	%	70-135	02.19.20 03.06	



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: SS07

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-017

Date Collected: 02.18.20 13.29

Sample Depth: 0 - 0.25 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116911

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.18.20 21.53	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.18.20 21.53	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.18.20 21.53	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.18.20 21.53	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.18.20 21.53	U	1
Xylenes, Total	1330-20-7	<0.00199	0.00199	mg/kg	02.18.20 21.53	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.18.20 21.53	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	111	%	70-130	02.18.20 21.53		
4-Bromofluorobenzene	460-00-4	95	%	70-130	02.18.20 21.53		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: SS08

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-018

Date Collected: 02.18.20 13.34

Sample Depth: 0 - 0.25 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.30

Basis: Wet Weight

Seq Number: 3116918

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	359	9.88	mg/kg	02.18.20 21.05		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 02.18.20 17.15

Basis: Wet Weight

Seq Number: 3116983

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	02.19.20 03.26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	02.19.20 03.26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	02.19.20 03.26	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	02.19.20 03.26	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	102	%	70-135	02.19.20 03.26		
o-Terphenyl	84-15-1	114	%	70-135	02.19.20 03.26		



# Certificate of Analytical Results 652836

**LT Environmental, Inc., Arvada, CO**

Ape Fee 001

Sample Id: **SS08**

Matrix: **Soil**

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-018

Date Collected: 02.18.20 13.34

Sample Depth: 0 - 0.25 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: **MAB**

% Moisture:

Analyst: **MAB**

Date Prep: 02.18.20 17.00

Basis: **Wet Weight**

Seq Number: 3116911

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.18.20 22.13	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.18.20 22.13	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.18.20 22.13	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	02.18.20 22.13	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.18.20 22.13	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	02.18.20 22.13	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.18.20 22.13	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	88	%	70-130	02.18.20 22.13		
1,4-Difluorobenzene	540-36-3	108	%	70-130	02.18.20 22.13		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: **S09**  
Lab Sample Id: 652836-019

Matrix: Soil  
Date Collected: 02.18.20 13.39

Date Received: 02.18.20 15.53  
Sample Depth: 0 - 0.25 ft

Analytical Method: Chloride by EPA 300  
Tech: MAB  
Analyst: MAB  
Seq Number: 3116918

Prep Method: E300P  
% Moisture:  
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	148	9.82	mg/kg	02.18.20 21.11		1

Analytical Method: TPH by SW8015 Mod  
Tech: DTH  
Analyst: DTH  
Seq Number: 3116983

Prep Method: SW8015P  
% Moisture:  
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	02.19.20 03.26	U	1
<b>Diesel Range Organics (DRO)</b>	C10C28DRO	183	50.3	mg/kg	02.19.20 03.26		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	02.19.20 03.26	U	1
<b>Total TPH</b>	PHC635	183	50.3	mg/kg	02.19.20 03.26		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	109	%	70-135	02.19.20 03.26		
o-Terphenyl	84-15-1	114	%	70-135	02.19.20 03.26		



# Certificate of Analytical Results 652836

**LT Environmental, Inc., Arvada, CO**

Ape Fee 001

Sample Id: **S09**  
Lab Sample Id: 652836-019

Matrix: **Soil**  
Date Collected: 02.18.20 13.39

Date Received: 02.18.20 15.53  
Sample Depth: 0 - 0.25 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: **MAB**  
Analyst: **MAB**  
Seq Number: 3116911

% Moisture:  
Basis: **Wet Weight**

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	02.18.20 23.14	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	02.18.20 23.14	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	02.18.20 23.14	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	02.18.20 23.14	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	02.18.20 23.14	U	1
Xylenes, Total	1330-20-7	<0.00202	0.00202	mg/kg	02.18.20 23.14	U	1
Total BTEX		<0.00202	0.00202	mg/kg	02.18.20 23.14	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	89	%	70-130	02.18.20 23.14		
1,4-Difluorobenzene	540-36-3	104	%	70-130	02.18.20 23.14		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: SS10

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-020

Date Collected: 02.18.20 13.44

Sample Depth: 0 - 0.25 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.30

Basis: Wet Weight

Seq Number: 3116918

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	65.7	9.96	mg/kg	02.18.20 21.17		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 02.18.20 17.15

Basis: Wet Weight

Seq Number: 3116983

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	02.19.20 03.46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	02.19.20 03.46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	02.19.20 03.46	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	02.19.20 03.46	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	108	%	70-135	02.19.20 03.46		
o-Terphenyl	84-15-1	117	%	70-135	02.19.20 03.46		



# Certificate of Analytical Results 652836

**LT Environmental, Inc., Arvada, CO**

Ape Fee 001

Sample Id: **SS10**

Matrix: **Soil**

Date Received: 02.18.20 15.53

Lab Sample Id: **652836-020**

Date Collected: **02.18.20 13.44**

Sample Depth: **0 - 0.25 ft**

Analytical Method: **BTEX by EPA 8021B**

Prep Method: **SW5030B**

Tech: **MAB**

% Moisture:

Analyst: **MAB**

Date Prep: **02.18.20 17.00**

Basis: **Wet Weight**

Seq Number: **3116911**

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	02.18.20 23.35	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	02.18.20 23.35	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	02.18.20 23.35	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	02.18.20 23.35	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	02.18.20 23.35	U	1
Xylenes, Total	1330-20-7	<0.00202	0.00202	mg/kg	02.18.20 23.35	U	1
Total BTEX		<0.00202	0.00202	mg/kg	02.18.20 23.35	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	86	%	70-130	02.18.20 23.35		
1,4-Difluorobenzene	540-36-3	92	%	70-130	02.18.20 23.35		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: SS11 Matrix: Soil Date Received: 02.18.20 15.53  
Lab Sample Id: 652836-021 Date Collected: 02.18.20 12.27 Sample Depth: 0 - 0.25 ft  
Analytical Method: Chloride by EPA 300 Prep Method: E300P  
Tech: MAB % Moisture:  
Analyst: MAB Date Prep: 02.18.20 17.30 Basis: Wet Weight  
Seq Number: 3116918

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	697	49.8	mg/kg	02.18.20 21.23		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
Tech: DTH % Moisture:  
Analyst: DTH Date Prep: 02.18.20 17.15 Basis: Wet Weight  
Seq Number: 3116983

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	02.19.20 03.46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	02.19.20 03.46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	02.19.20 03.46	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	02.19.20 03.46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	02.19.20 03.46	
o-Terphenyl	84-15-1	110	%	70-135	02.19.20 03.46	



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: SS11

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-021

Date Collected: 02.18.20 12.27

Sample Depth: 0 - 0.25 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116911

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.18.20 23.55	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.18.20 23.55	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.18.20 23.55	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.18.20 23.55	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.18.20 23.55	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	02.18.20 23.55	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.18.20 23.55	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.18.20 23.55		
4-Bromofluorobenzene	460-00-4	93	%	70-130	02.18.20 23.55		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: SS12

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-022

Date Collected: 02.18.20 12.40

Sample Depth: 0 - 0.25 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.30

Basis: Wet Weight

Seq Number: 3116918

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	27.2	9.98	mg/kg	02.18.20 21.41		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 02.18.20 17.15

Basis: Wet Weight

Seq Number: 3116983

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	02.19.20 04.06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	02.19.20 04.06	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	02.19.20 04.06	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	02.19.20 04.06	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane		111-85-3	106	%	70-135	02.19.20 04.06	
o-Terphenyl		84-15-1	117	%	70-135	02.19.20 04.06	



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: SS12

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-022

Date Collected: 02.18.20 12.40

Sample Depth: 0 - 0.25 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116911

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.19.20 00.16	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.19.20 00.16	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.19.20 00.16	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.19.20 00.16	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.19.20 00.16	U	1
Xylenes, Total	1330-20-7	<0.00199	0.00199	mg/kg	02.19.20 00.16	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.19.20 00.16	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	98	%	70-130	02.19.20 00.16		
4-Bromofluorobenzene	460-00-4	91	%	70-130	02.19.20 00.16		

## Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

\*\* Surrogate recovered outside laboratory control limit.

**BRL** Below Reporting Limit.

**RL** Reporting Limit

**MDL** Method Detection Limit      **SDL** Sample Detection Limit      **LOD** Limit of Detection

**PQL** Practical Quantitation Limit      **MQL** Method Quantitation Limit      **LOQ** Limit of Quantitation

**DL** Method Detection Limit

**NC** Non-Calculable

**SMP** Client Sample      **BLK**      Method Blank

**BKS/LCS** Blank Spike/Laboratory Control Sample      **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

**MD/SD** Method Duplicate/Sample Duplicate      **MS**      Matrix Spike      **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

\* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation



# QC Summary 652836

## LT Environmental, Inc.

Ape Fee 001

**Analytical Method: Chloride by EPA 300**

Seq Number:	3116915		Matrix:	Solid				Prep Method:	E300P
MB Sample Id:	7696884-1-BLK		LCS Sample Id:	7696884-1-BKS				Date Prep:	02.18.20
<b>Parameter</b>	<b>MB Result</b>	<b>Spike Amount</b>	<b>LCS Result</b>	<b>LCS %Rec</b>	<b>LCSD Result</b>	<b>LCSD %Rec</b>	<b>Limits</b>	<b>%RPD</b>	<b>RPD Limit</b>
Chloride	<10.0	250	255	102	249	100	90-110	2	20
								Units	mg/kg
								Analysis Date	02.18.20 16:49
								Flag	

**Analytical Method: Chloride by EPA 300**

Seq Number:	3116918		Matrix:	Solid				Prep Method:	E300P
MB Sample Id:	7696934-1-BLK		LCS Sample Id:	7696934-1-BKS				Date Prep:	02.18.20
<b>Parameter</b>	<b>MB Result</b>	<b>Spike Amount</b>	<b>LCS Result</b>	<b>LCS %Rec</b>	<b>LCSD Result</b>	<b>LCSD %Rec</b>	<b>Limits</b>	<b>%RPD</b>	<b>RPD Limit</b>
Chloride	<10.0	250	264	106	263	105	90-110	0	20
								Units	mg/kg
								Analysis Date	02.18.20 19:53
								Flag	

**Analytical Method: Chloride by EPA 300**

Seq Number:	3116915		Matrix:	Soil				Prep Method:	E300P
Parent Sample Id:	652817-001		MS Sample Id:	652817-001 S				Date Prep:	02.18.20
<b>Parameter</b>	<b>Parent Result</b>	<b>Spike Amount</b>	<b>MS Result</b>	<b>MS %Rec</b>	<b>MSD Result</b>	<b>MSD %Rec</b>	<b>Limits</b>	<b>%RPD</b>	<b>RPD Limit</b>
Chloride	240	200	449	105	453	107	90-110	1	20
								Units	mg/kg
								Analysis Date	02.18.20 17:06
								Flag	

**Analytical Method: Chloride by EPA 300**

Seq Number:	3116915		Matrix:	Soil				Prep Method:	E300P
Parent Sample Id:	652836-001		MS Sample Id:	652836-001 S				Date Prep:	02.18.20
<b>Parameter</b>	<b>Parent Result</b>	<b>Spike Amount</b>	<b>MS Result</b>	<b>MS %Rec</b>	<b>MSD Result</b>	<b>MSD %Rec</b>	<b>Limits</b>	<b>%RPD</b>	<b>RPD Limit</b>
Chloride	87.6	200	271	92	267	90	90-110	1	20
								Units	mg/kg
								Analysis Date	02.18.20 18:24
								Flag	

**Analytical Method: Chloride by EPA 300**

Seq Number:	3116918		Matrix:	Soil				Prep Method:	E300P
Parent Sample Id:	652836-011		MS Sample Id:	652836-011 S				Date Prep:	02.18.20
<b>Parameter</b>	<b>Parent Result</b>	<b>Spike Amount</b>	<b>MS Result</b>	<b>MS %Rec</b>	<b>MSD Result</b>	<b>MSD %Rec</b>	<b>Limits</b>	<b>%RPD</b>	<b>RPD Limit</b>
Chloride	42.3	201	236	96	238	97	90-110	1	20
								Units	mg/kg
								Analysis Date	02.18.20 20:10
								Flag	

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery  
Log Difference

[D] = 100\*(C-A) / B  
RPD = 200\* | (C-E) / (C+E) |  
[D] = 100 \* (C) / [B]  
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample  
A = Parent Result  
C = MS/LCS Result  
E = MSD/LCSD Result

MS = Matrix Spike  
B = Spike Added  
D = MSD/LCSD % Rec



# QC Summary 652836

## LT Environmental, Inc.

Ape Fee 001

**Analytical Method: Chloride by EPA 300**

Seq Number:	3116918	Matrix:	Soil			Prep Method:	E300P
Parent Sample Id:	652836-021	MS Sample Id:	652836-021 S			Date Prep:	02.18.20
<b>Parameter</b>	<b>Parent Result</b>	<b>Spike Amount</b>	<b>MS Result</b>	<b>MS %Rec</b>	<b>MSD Result</b>	<b>MSD %Rec</b>	<b>Limits</b>
Chloride	697	201	879	91	882	93	90-110
							%RPD RPD Limit Units Analysis Date Flag
							0 20 mg/kg 02.18.20 21:29

**Analytical Method: TPH by SW8015 Mod**

Seq Number:	3116932	Matrix:	Solid			Prep Method:	SW8015P
MB Sample Id:	7696924-1-BLK	LCS Sample Id:	7696924-1-BKS			Date Prep:	02.18.20
<b>Parameter</b>	<b>MB Result</b>	<b>Spike Amount</b>	<b>LCS Result</b>	<b>LCS %Rec</b>	<b>LCSD Result</b>	<b>LCSD %Rec</b>	<b>Limits</b>
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	956	96	819	82	70-135
Diesel Range Organics (DRO)	<50.0	1000	1040	104	918	92	70-135
<b>Surrogate</b>	<b>MB %Rec</b>	<b>MB Flag</b>	<b>LCS %Rec</b>	<b>LCS Flag</b>	<b>LCSD %Rec</b>	<b>LCSD Flag</b>	<b>Limits</b>
1-Chlorooctane	83		120		113		70-135
o-Terphenyl	92		113		109		70-135
							Units Analysis Date Flag
							% 02.18.20 21:07
							% 02.18.20 21:07

**Analytical Method: TPH by SW8015 Mod**

Seq Number:	3116983	Matrix:	Solid			Prep Method:	SW8015P
MB Sample Id:	7696957-1-BLK	LCS Sample Id:	7696957-1-BKS			Date Prep:	02.18.20
<b>Parameter</b>	<b>MB Result</b>	<b>Spike Amount</b>	<b>LCS Result</b>	<b>LCS %Rec</b>	<b>LCSD Result</b>	<b>LCSD %Rec</b>	<b>Limits</b>
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	824	82	934	93	70-135
Diesel Range Organics (DRO)	<50.0	1000	895	90	999	100	70-135
<b>Surrogate</b>	<b>MB %Rec</b>	<b>MB Flag</b>	<b>LCS %Rec</b>	<b>LCS Flag</b>	<b>LCSD %Rec</b>	<b>LCSD Flag</b>	<b>Limits</b>
1-Chlorooctane	96		114		117		70-135
o-Terphenyl	100		104		109		70-135
							Units Analysis Date Flag
							% 02.19.20 02:27
							% 02.19.20 02:27

**Analytical Method: TPH by SW8015 Mod**

Seq Number:	3116932	Matrix:	Solid			Prep Method:	SW8015P
MB Sample Id:	7696924-1-BLK	LCS Sample Id:	7696924-1-BKS			Date Prep:	02.18.20
<b>Parameter</b>	<b>MB Result</b>					<b>Units</b>	<b>Analysis Date</b>
Motor Oil Range Hydrocarbons (MRO)	<50.0					mg/kg	02.18.20 21:07

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery  
Log Difference

[D] = 100\*(C-A) / B  
RPD = 200\* | (C-E) / (C+E) |  
[D] = 100 \* (C) / [B]  
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample  
A = Parent Result  
C = MS/LCS Result  
E = MSD/LCSD Result

MS = Matrix Spike  
B = Spike Added  
D = MSD/LCSD % Rec



# QC Summary 652836

**LT Environmental, Inc.**

Ape Fee 001

**Analytical Method:** TPH by SW8015 Mod

Seq Number: 3116983

Matrix: Solid

Prep Method: SW8015P

Date Prep: 02.18.20

MB Sample Id: 7696957-1-BLK

**Parameter**

Motor Oil Range Hydrocarbons (MRO)

MB  
Result

<50.0

Units

Analysis  
Date

Flag

mg/kg 02.19.20 02:07

**Analytical Method:** TPH by SW8015 Mod

Seq Number: 3116932

Matrix: Soil

Prep Method: SW8015P

Date Prep: 02.18.20

Parent Sample Id: 652818-014

MS Sample Id: 652818-014 S

MSD Sample Id: 652818-014 SD

**Parameter**

Gasoline Range Hydrocarbons (GRO)  
Diesel Range Organics (DRO)

Parent Result Spike

Amount

MS Result

%Rec

MSD Result

%Rec

Limits

%RPD

RPD

Limit

Units

Analysis

Date

Flag

Gasoline Range Hydrocarbons (GRO)  
Diesel Range Organics (DRO)

<49.8

995

984

99

971

97

70-135

1

35

mg/kg

02.18.20 21:48

Gasoline Range Hydrocarbons (GRO)  
Diesel Range Organics (DRO)

<49.8

995

1070

108

1040

104

70-135

3

35

mg/kg

02.18.20 21:48

**Surrogate**

1-Chlorooctane  
o-Terphenyl

MS %Rec

MS Flag

MSD %Rec

MSD Flag

Limits

Units

Analysis Date

**Analytical Method:** TPH by SW8015 Mod

Seq Number: 3116983

Matrix: Soil

Prep Method: SW8015P

Date Prep: 02.18.20

Parent Sample Id: 652836-016

MS Sample Id: 652836-016 S

MSD Sample Id: 652836-016 SD

**Parameter**

Gasoline Range Hydrocarbons (GRO)  
Diesel Range Organics (DRO)

Parent Result

Spike

MS Result

%Rec

MSD Result

%Rec

Limits

%RPD

RPD

Limit

Units

Analysis

Date

Flag

Gasoline Range Hydrocarbons (GRO)  
Diesel Range Organics (DRO)

<50.1

1000

912

91

897

90

70-135

2

35

mg/kg

02.19.20 02:46

Gasoline Range Hydrocarbons (GRO)  
Diesel Range Organics (DRO)

<50.1

1000

1020

102

958

96

70-135

6

35

mg/kg

02.19.20 02:46

**Surrogate**

1-Chlorooctane  
o-Terphenyl

MS %Rec

MS Flag

MSD %Rec

MSD Flag

Limits

Units

Analysis Date

1-Chlorooctane  
o-Terphenyl

118

123

70-135

%

02.19.20 02:46

1-Chlorooctane  
o-Terphenyl

123

109

70-135

%

02.19.20 02:46

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery  
Log Difference

[D] = 100\*(C-A) / B  
RPD = 200\* | (C-E) / (C+E) |  
[D] = 100 \* (C) / [B]  
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample  
A = Parent Result  
C = MS/LCS Result  
E = MSD/LCSD Result

MS = Matrix Spike  
B = Spike Added  
D = MSD/LCSD % Rec



# QC Summary 652836

## LT Environmental, Inc.

Ape Fee 001

**Analytical Method: BTEX by EPA 8021B**

Seq Number:	3116910	Matrix: Solid				Prep Method: SW5030B			
MB Sample Id:	7696952-1-BLK	LCS Sample Id: 7696952-1-BKS				Date Prep: 02.18.20			
<b>Parameter</b>	<b>MB Result</b>	<b>Spike Amount</b>	<b>LCS Result</b>	<b>LCS %Rec</b>	<b>LCSD Result</b>	<b>LCSD %Rec</b>	<b>Limits</b>	<b>%RPD</b>	<b>RPD Limit</b>
Benzene	<0.00200	0.100	0.107	107	0.106	106	70-130	1	35
Toluene	<0.00200	0.100	0.104	104	0.102	102	70-130	2	35
Ethylbenzene	<0.00200	0.100	0.101	101	0.0987	99	71-129	2	35
m,p-Xylenes	<0.00400	0.200	0.207	104	0.203	102	70-135	2	35
o-Xylene	<0.00200	0.100	0.104	104	0.102	102	71-133	2	35
<b>Surrogate</b>	<b>MB %Rec</b>	<b>MB Flag</b>	<b>LCS %Rec</b>	<b>LCS Flag</b>	<b>LCSD %Rec</b>	<b>LCSD Flag</b>	<b>Limits</b>	<b>Units</b>	<b>Analysis Date</b>
1,4-Difluorobenzene	104		104		105		70-130	%	02.18.20 17:14
4-Bromofluorobenzene	93		95		92		70-130	%	02.18.20 17:14

**Analytical Method: BTEX by EPA 8021B**

Seq Number:	3116911	Matrix: Solid				Prep Method: SW5030B			
MB Sample Id:	7696953-1-BLK	LCS Sample Id: 7696953-1-BKS				Date Prep: 02.18.20			
<b>Parameter</b>	<b>MB Result</b>	<b>Spike Amount</b>	<b>LCS Result</b>	<b>LCS %Rec</b>	<b>LCSD Result</b>	<b>LCSD %Rec</b>	<b>Limits</b>	<b>%RPD</b>	<b>RPD Limit</b>
Benzene	<0.00200	0.100	0.124	124	0.122	122	70-130	2	35
Toluene	<0.00200	0.100	0.115	115	0.113	113	70-130	2	35
Ethylbenzene	<0.00200	0.100	0.110	110	0.109	109	71-129	1	35
m,p-Xylenes	<0.00400	0.200	0.214	107	0.212	106	70-135	1	35
o-Xylene	<0.00200	0.100	0.108	108	0.107	107	71-133	1	35
<b>Surrogate</b>	<b>MB %Rec</b>	<b>MB Flag</b>	<b>LCS %Rec</b>	<b>LCS Flag</b>	<b>LCSD %Rec</b>	<b>LCSD Flag</b>	<b>Limits</b>	<b>Units</b>	<b>Analysis Date</b>
1,4-Difluorobenzene	113		110		111		70-130	%	02.18.20 17:28
4-Bromofluorobenzene	94		89		92		70-130	%	02.18.20 17:28

**Analytical Method: BTEX by EPA 8021B**

Seq Number:	3116910	Matrix: Soil				Prep Method: SW5030B			
Parent Sample Id:	652817-001	MS Sample Id: 652817-001 S				Date Prep: 02.18.20			
<b>Parameter</b>	<b>Parent Result</b>	<b>Spike Amount</b>	<b>MS Result</b>	<b>MS %Rec</b>	<b>MSD Result</b>	<b>MSD %Rec</b>	<b>Limits</b>	<b>%RPD</b>	<b>RPD Limit</b>
Benzene	<0.00200	0.100	0.108	108	0.115	115	70-130	6	35
Toluene	<0.00200	0.100	0.103	103	0.107	107	70-130	4	35
Ethylbenzene	<0.00200	0.100	0.0994	99	0.105	105	71-129	5	35
m,p-Xylenes	<0.00400	0.200	0.205	103	0.217	109	70-135	6	35
o-Xylene	<0.00200	0.100	0.102	102	0.109	109	71-133	7	35
<b>Surrogate</b>			<b>MS %Rec</b>	<b>MS Flag</b>	<b>MSD %Rec</b>	<b>MSD Flag</b>	<b>Limits</b>	<b>Units</b>	<b>Analysis Date</b>
1,4-Difluorobenzene			105		103		70-130	%	02.18.20 17:55
4-Bromofluorobenzene			96		90		70-130	%	02.18.20 17:55

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery  
Log Difference

[D] = 100\*(C-A) / B  
RPD = 200\* | (C-E) / (C+E) |  
[D] = 100 \* (C) / [B]  
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample  
A = Parent Result  
C = MS/LCS Result  
E = MSD/LCSD Result

MS = Matrix Spike  
B = Spike Added  
D = MSD/LCSD % Rec



# QC Summary 652836

## LT Environmental, Inc.

Ape Fee 001

Analytical Method: BTEX by EPA 8021B

Seq Number: 3116911

Matrix: Soil

Prep Method: SW5030B

Parent Sample Id: 652818-014

MS Sample Id: 652818-014 S

Date Prep: 02.18.20

MSD Sample Id: 652818-014 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.123	123	0.117	116	70-130	5	35	mg/kg	02.18.20 18:09	
Toluene	<0.00200	0.100	0.123	123	0.107	106	70-130	14	35	mg/kg	02.18.20 18:09	
Ethylbenzene	<0.00200	0.100	0.116	116	0.0984	97	71-129	16	35	mg/kg	02.18.20 18:09	
m,p-Xylenes	<0.00400	0.200	0.226	113	0.190	94	70-135	17	35	mg/kg	02.18.20 18:09	
o-Xylene	<0.00200	0.100	0.114	114	0.0958	95	71-133	17	35	mg/kg	02.18.20 18:09	
Surrogate			MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits			Units	Analysis Date	
1,4-Difluorobenzene			111		109		70-130			%	02.18.20 18:09	
4-Bromofluorobenzene			93		91		70-130			%	02.18.20 18:09	

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery  
Log Difference

[D] = 100\*(C-A) / B  
RPD = 200\* | (C-E) / (C+E) |  
[D] = 100 \* (C) / [B]  
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample  
A = Parent Result  
C = MS/LCS Result  
E = MSD/LCSD Result

MS = Matrix Spike  
B = Spike Added  
D = MSD/LCSD % Rec



## Chain of Custody

Work Order No: W52830

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334

Midland, TX (432-704-5440) El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296

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Project Manager:	Chris McKisson	Billed to: (if different)
Company Name:	LT Environmental	Company Name:
Address:	820 Megan Ave, Unit B	Address:
City, State ZIP:	Rifle, CO 81650	City, State ZIP:
Phone:	970-285-9985	Email: <a href="mailto:wmatther@ltenv.com">wmatther@ltenv.com</a> , <a href="mailto:cmckisson@ltenv.com">cmckisson@ltenv.com</a>

Work Order Comments				
Program: UST/PST	<input type="checkbox"/> RP			
State of Project:	<input type="checkbox"/> Brownfields			
Reporting Level:	<input type="checkbox"/> Level II	<input type="checkbox"/> Level III	<input type="checkbox"/> P-TRUST	
Deliverables:	<input type="checkbox"/> EDD	<input type="checkbox"/> DRAFT	<input type="checkbox"/> ADAPT	<input type="checkbox"/> Other:

ANALYSIS REQUEST						Work Order Notes
SAMPLE RECEIPT	Temp Blank: <input checked="" type="radio"/> Yes <input type="radio"/> No	Turn Around	Time	Depth	Matrix	
Temperature (°C): <input checked="" type="radio"/> 2.0 <input type="radio"/> -0.5 <input type="radio"/> 24.8	<input checked="" type="radio"/> Yes <input type="radio"/> No	Routine	1			Number of Containers
Received Intact: <input checked="" type="radio"/> Yes <input type="radio"/> No		Rush: <input checked="" type="radio"/> 24hr				TPH (EPA 8015)
Cooler Custody Seals: Yes <input checked="" type="radio"/> No <input type="radio"/> N/A		Correction Factor: <input checked="" type="radio"/> -0.2				BTEX (EPA 0=8021)
Sample Custody Seals: Yes <input checked="" type="radio"/> No <input type="radio"/> N/A		Total Containers: <input checked="" type="radio"/> 7 <input type="radio"/> 2				Chloride (EPA 300.0)
						TAT starts the day received by the lab, if received by 4:30pm
Sample Identification	Date Sampled	Time Sampled	Depth	Matrix	Date Sampled	Sample Comments
BH09	5	2/18/20	.5'	1	X	<input checked="" type="radio"/> Discrete
BH10		10:36	.5'	1	X	
BH10A		10:45	.5'	1	X	
BH11		10:50	1'	1	X	
BH12		10:59	.5'	1	X	
BH13		11:06	1'	1	X	
BH14		11:14	1'	1	X	
BH15		11:24	1'	1	X	
BH16		11:31	1'	1	X	
BH17		11:38	1'	1	X	
		11:52	1'	1	X	
						✓

**Total 200.7 / 6010 200.8 / 6020:**

*Circle Method(s) and Metal(s) to be analyzed*

8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO<sub>2</sub> Na Sr Ti Sn U V Zn

TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U

1631 / 245.1 / 7470 / 7471 : Hg

**Notice:** Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

1 *J. Mather*

2/18/20 15:53

3

4

5

6





## Chain of Custody

Work Order No: 1952836

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334  
Midland, TX (432) 704-5440 El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296  
Hobbs, NM (575) 392-7550 Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-8800 Tampa, FL (813) 620-2000

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Project Manager:	Chris McKisson	<input type="checkbox"/> Bill to: (if different)	
Company Name:	LT Environmental	<input type="checkbox"/> Company Name:	
Address:	820 Megan Ave, Unit B	<input type="checkbox"/> Address:	
City, State ZIP:	Rifle, CO 81650	<input type="checkbox"/> City, State ZIP:	
Phone:	970-285-9985	<input type="checkbox"/> Email: <u>wmather@ltenv.com, cmckisson@ltenv.com</u>	

Work Order Comments	
Program: UST/PST	<input type="checkbox"/> RP
State of Project:	<input type="checkbox"/> Brownfields
Reporting Level:	<input type="checkbox"/> Level II <input type="checkbox"/> Level III <input type="checkbox"/> TRUST <input type="checkbox"/> RP <input type="checkbox"/> Level IV
Deliverables:	<input type="checkbox"/> EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:

Project Name:

Ape Fee 001

Turn Around

ANALYSIS REQUEST

Work Order Notes

Project Number:

034820008

Routine

Rush: 24hr

Sample's Name: William Mather

Due Date:

SAMPLE RECEIPT	Temp Blank:	Yes	No	Wet Ice:	Yes	No
Temperature (°C):	<u>3.0</u>			Thermometer ID	<u>Seal PT</u>	
Received Intact:	Yes	No		Correction Factor:		
Cooler Custody Seals:	Yes	No	N/A	Total Containers:		

Number of Containers	
TPH (EPA 8015)	
BTEX (EPA 0=8021)	
Chloride (EPA 300.0)	

TAT starts the day received by the lab, if received by 4:30pm
<u>Composite</u> <u>Composite</u>

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010 - 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U**

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature) J. Mather Received by: (Signature) C. Mather Date/Time 2/18/2015:53 Relinquished by: (Signature) Received by: (Signature) Date/Time

Received by: (Signature) J. Mather Date/Time 2/18/2015:53 Relinquished by: (Signature) Received by: (Signature) Date/Time

Received by: (Signature) J. Mather Date/Time 2/18/2015:53 Relinquished by: (Signature) Received by: (Signature) Date/Time

Received by: (Signature) J. Mather Date/Time 2/18/2015:53 Relinquished by: (Signature) Received by: (Signature) Date/Time

Received by: (Signature) J. Mather Date/Time 2/18/2015:53 Relinquished by: (Signature) Received by: (Signature) Date/Time

Received by: (Signature) J. Mather Date/Time 2/18/2015:53 Relinquished by: (Signature) Received by: (Signature) Date/Time

**XENCO Laboratories**  
**Prelogin/Nonconformance Report- Sample Log-In**

**Client:** LT Environmental, Inc.

**Date/ Time Received:** 02.18.2020 03.53.00 PM

**Work Order #:** 652836

Acceptable Temperature Range: 0 - 6 degC  
Air and Metal samples Acceptable Range: Ambient  
Temperature Measuring device used : T-NM-007

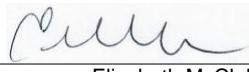
Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	2
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 Custody Seals intact on sample bottles?	Yes
#6* Custody Seals Signed and dated?	Yes
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	No
#18 Water VOC samples have zero headspace?	N/A

\* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

Analyst:

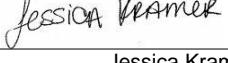
PH Device/Lot#:

**Checklist completed by:**

  
Elizabeth McClellan

Date: 02.18.2020

**Checklist reviewed by:**

  
Jessica Kramer

Date: 02.19.2020

# **Analytical Report 652836**

**for  
LT Environmental, Inc.**

**Project Manager: Chris McKisson**

**Ape Fee 001**

**034820008**

**25-FEB-20**

Collected By: Client



**1089 N Canal Street  
Carlsbad, NM 88220**

Xenco-Houston (EPA Lab Code: TX00122):  
Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)  
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

Xenco-Dallas (EPA Lab Code: TX01468):  
Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)  
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)  
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)  
Xenco-Carlsbad (LELAP): Louisiana (05092)  
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)  
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)  
Xenco-Tampa: Florida (E87429), North Carolina (483)



25-FEB-20

Project Manager: **Chris McKisson**

**LT Environmental, Inc.**

4600 W. 60th Avenue

Arvada, CO 80003

Reference: XENCO Report No(s): **652836**

**Ape Fee 001**

Project Address: Eddy

**Chris McKisson:**

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 652836. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 652836 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

---

**Jessica Kramer**

Project Assistant

*Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.*

*Certified and approved by numerous States and Agencies.*

*A Small Business and Minority Status Company that delivers SERVICE and QUALITY*

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America



## Sample Cross Reference 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH09	S	02-18-20 10:35	0.5 ft	652836-001
BH10	S	02-18-20 10:45	0.5 ft	652836-002
BH10A	S	02-18-20 10:50	1 ft	652836-003
BH11	S	02-18-20 10:59	0.5 ft	652836-004
BH12	S	02-18-20 11:06	0.5 ft	652836-005
BH13	S	02-18-20 11:14	0.5 ft	652836-006
BH14	S	02-18-20 11:24	0.5 ft	652836-007
BH15	S	02-18-20 11:31	0.5 ft	652836-008
BH16	S	02-18-20 11:38	0.5 ft	652836-009
BH17	S	02-18-20 11:52	0.5 ft	652836-010
BH18	S	02-18-20 12:02	0.5 ft	652836-011
BH19	S	02-18-20 12:13	0.5 ft	652836-012
SS03	S	02-18-20 13:14	0 - 0.25 ft	652836-013
SS04	S	02-18-20 12:33	0 - 0.25 ft	652836-014
SS05	S	02-18-20 13:18	0 - 0.25 ft	652836-015
SS06	S	02-18-20 13:23	0 - 0.25 ft	652836-016
SS07	S	02-18-20 13:29	0 - 0.25 ft	652836-017
SS08	S	02-18-20 13:34	0 - 0.25 ft	652836-018
SS09	S	02-18-20 13:39	0 - 0.25 ft	652836-019
SS10	S	02-18-20 13:44	0 - 0.25 ft	652836-020
SS11	S	02-18-20 12:27	0 - 0.25 ft	652836-021
SS12	S	02-18-20 12:40	0 - 0.25 ft	652836-022



## CASE NARRATIVE

**Client Name:** LT Environmental, Inc.

**Project Name:** Ape Fee 001

Project ID: 034820008  
Work Order Number(s): 652836

Report Date: 25-FEB-20  
Date Received: 02/18/2020

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**Sample receipt non conformances and comments:**

V1.001 - Revision Corrected sample name from S09 to SS09. JK 02/25/20

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**Sample receipt non conformances and comments per sample:**

None

**Analytical non conformances and comments:**

Batch: LBA-3116910 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3116911 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.



## Certificate of Analysis Summary 652836

## **LT Environmental, Inc., Arvada, CO**

**Project Name:** Ape Fee 001

**Project Id:** 034820008  
**Contact:** Chris McKisson  
**Project Location:** Eddy

**Date Received in Lab:** Tue Feb-18-20 03:53 pm  
**Report Date:** 25-FEB-20  
**Project Manager:** Jessica Kramer

<b><i>Analysis Requested</i></b>	<b><i>Lab Id:</i></b>	652836-001		652836-002		652836-003		652836-004		652836-005		652836-006		
	<b><i>Field Id:</i></b>	BH09		BH10		BH10A		BH11		BH12		BH13		
	<b><i>Depth:</i></b>	0.5- ft		0.5- ft		1- ft		0.5- ft		0.5- ft		0.5- ft		
	<b><i>Matrix:</i></b>	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		
	<b><i>Sampled:</i></b>	Feb-18-20 10:35		Feb-18-20 10:45		Feb-18-20 10:50		Feb-18-20 10:59		Feb-18-20 11:06		Feb-18-20 11:14		
<b>BTEX by EPA 8021B</b>		<b><i>Extracted:</i></b>	Feb-18-20 17:00		Feb-18-20 17:00									
		<b><i>Analyzed:</i></b>	Feb-18-20 21:39		Feb-18-20 22:00		Feb-18-20 22:20		Feb-18-20 23:21		Feb-18-20 23:41		Feb-19-20 00:02	
		<b><i>Units/RL:</i></b>	mg/kg	RL	mg/kg	RL								
Benzene			<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199
Toluene			<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199
Ethylbenzene			<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199
m,p-Xylenes			<0.00398	0.00398	<0.00397	0.00397	<0.00399	0.00399	<0.00399	0.00399	<0.00399	0.00399	<0.00398	0.00398
o-Xylene			<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199
Xylenes, Total			<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199
Total BTEX			<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199
<b>Chloride by EPA 300</b>		<b><i>Extracted:</i></b>	Feb-18-20 16:00		Feb-18-20 16:00									
		<b><i>Analyzed:</i></b>	Feb-18-20 18:18		Feb-18-20 18:35		Feb-18-20 18:40		Feb-18-20 18:57		Feb-18-20 19:03		Feb-18-20 19:08	
		<b><i>Units/RL:</i></b>	mg/kg	RL	mg/kg	RL								
Chloride			87.6	9.92	28.1	10.0	20.9	10.1	12.0	9.98	142	49.6	50.5	49.8
<b>TPH by SW8015 Mod</b>		<b><i>Extracted:</i></b>	Feb-18-20 17:00		Feb-18-20 17:00									
		<b><i>Analyzed:</i></b>	Feb-18-20 22:48		Feb-18-20 22:48		Feb-18-20 23:08		Feb-18-20 23:08		Feb-18-20 23:28		Feb-18-20 23:48	
		<b><i>Units/RL:</i></b>	mg/kg	RL	mg/kg	RL								
Gasoline Range Hydrocarbons (GRO)			<49.9	49.9	<50.3	50.3	<50.3	50.3	<50.3	50.3	<50.0	50.0	<50.3	50.3
Diesel Range Organics (DRO)			<49.9	49.9	<50.3	50.3	<50.3	50.3	<50.3	50.3	<50.0	50.0	<50.3	50.3
Motor Oil Range Hydrocarbons (MRO)			<49.9	49.9	<50.3	50.3	<50.3	50.3	<50.3	50.3	<50.0	50.0	<50.3	50.3
Total TPH			<49.9	49.9	<50.3	50.3	<50.3	50.3	<50.3	50.3	<50.0	50.0	<50.3	50.3

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso

Version: 1.%

Jessica Kramer

Jessica Kramer  
Project Assistant



# Certificate of Analysis Summary 652836

LT Environmental, Inc., Arvada, CO

Project Name: Ape Fee 001

Project Id: 034820008  
 Contact: Chris McKisson  
 Project Location: Eddy

Date Received in Lab: Tue Feb-18-20 03:53 pm  
 Report Date: 25-FEB-20  
 Project Manager: Jessica Kramer

Analysis Requested		Lab Id:	652836-007	652836-008	652836-009	652836-010	652836-011	652836-012	
		Field Id:	BH14	BH15	BH16	BH17	BH18	BH19	
		Depth:	0.5- ft						
		Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
		Sampled:	Feb-18-20 11:24	Feb-18-20 11:31	Feb-18-20 11:38	Feb-18-20 11:52	Feb-18-20 12:02	Feb-18-20 12:13	
<b>BTEX by EPA 8021B</b>		Extracted:	Feb-18-20 17:00						
		Analyzed:	Feb-19-20 00:22	Feb-19-20 00:43	Feb-19-20 01:03	Feb-19-20 01:23	Feb-19-20 01:44	Feb-19-20 02:04	
		Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	
Benzene		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199
Toluene		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199
Ethylbenzene		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199
m,p-Xylenes		<0.00401	0.00401	<0.00398	0.00398	<0.00399	0.00399	<0.00401	0.00401
o-Xylene		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199
Xylenes, Total		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199
Total BTEX		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199
<b>Chloride by EPA 300</b>		Extracted:	Feb-18-20 16:00	Feb-18-20 16:00	Feb-18-20 16:00	Feb-18-20 16:00	Feb-18-20 17:30	Feb-18-20 17:30	
		Analyzed:	Feb-18-20 19:14	Feb-18-20 19:20	Feb-18-20 19:25	Feb-18-20 19:31	Feb-18-20 20:04	Feb-18-20 20:21	
		Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	
Chloride		26.3	9.98	204	50.4	<49.4	49.4	32.0	9.98
						32.0	9.98	42.3	9.92
<b>TPH by SW8015 Mod</b>		Extracted:	Feb-18-20 17:00						
		Analyzed:	Feb-18-20 23:48	Feb-19-20 00:08	Feb-19-20 00:08	Feb-19-20 00:28	Feb-19-20 00:28	Feb-19-20 01:07	
		Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	
Gasoline Range Hydrocarbons (GRO)		<49.8	49.8	<50.0	50.0	<50.0	50.0	<49.9	49.9
Diesel Range Organics (DRO)		<49.8	49.8	<50.0	50.0	<50.0	50.0	<49.9	49.9
Motor Oil Range Hydrocarbons (MRO)		<49.8	49.8	<50.0	50.0	<50.0	50.0	<49.9	49.9
Total TPH		<49.8	49.8	<50.0	50.0	<50.0	50.0	<49.9	49.9
						<50.2	50.2	<50.2	50.2

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use.  
 The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories.  
 XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented.

Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Version: 1.%

Jessica Kramer  
 Project Assistant



# Certificate of Analysis Summary 652836

LT Environmental, Inc., Arvada, CO

Project Name: Ape Fee 001

Project Id: 034820008  
 Contact: Chris McKisson  
 Project Location: Eddy

Date Received in Lab: Tue Feb-18-20 03:53 pm  
 Report Date: 25-FEB-20  
 Project Manager: Jessica Kramer

Analysis Requested		Lab Id:	652836-013	Field Id:	652836-014	Depth:	0-0.25 ft	Matrix:	SOIL	Sampled:	Feb-18-20 13:14	Lab Id:	652836-015	Field Id:	SS03	Depth:	0-0.25 ft	Matrix:	SOIL	Sampled:	Feb-18-20 12:33	Lab Id:	652836-016	Field Id:	SS04	Depth:	0-0.25 ft	Matrix:	SOIL	Sampled:	Feb-18-20 13:18	Lab Id:	652836-017	Field Id:	SS05	Depth:	0-0.25 ft	Matrix:	SOIL	Sampled:	Feb-18-20 13:23	Lab Id:	652836-018	Field Id:	SS06	Depth:	0-0.25 ft	Matrix:	SOIL	Sampled:	Feb-18-20 13:29	Lab Id:	SS07	Field Id:	SS08	Depth:	0-0.25 ft	Matrix:	SOIL	Sampled:	Feb-18-20 13:34
BTEX by EPA 8021B		Extracted:	Feb-18-20 17:00	Analyzed:	Feb-18-20 16:00	Units/RL:	mg/kg	Extracted:	Feb-18-20 17:00	Analyzed:	Feb-18-20 21:12	Units/RL:	mg/kg	Extracted:	Feb-18-20 17:00	Analyzed:	Feb-18-20 21:32	Units/RL:	mg/kg	Extracted:	Feb-18-20 17:00	Analyzed:	Feb-18-20 21:53	Units/RL:	mg/kg	Extracted:	Feb-18-20 17:00	Analyzed:	Feb-18-20 22:13	Units/RL:	mg/kg																														
Benzene		<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200																																
Toluene		<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200																																		
Ethylbenzene		<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200																																		
m,p-Xylenes		<0.00401	0.00401	<0.00403	0.00403	<0.00401	0.00401	<0.00400	0.00400	<0.00400	0.00400	<0.00398	0.00398	<0.00401	0.00401	<0.00400	0.00400	<0.00398	0.00398	<0.00401	0.00401	<0.00398	0.00398	<0.00401	0.00401	<0.00398	0.00398																																		
o-Xylene		<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200																																		
Xylenes, Total		<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200																																		
Total BTEX		<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200																																		
Chloride by EPA 300		Extracted:	Feb-18-20 17:30	Analyzed:	Feb-18-20 17:30	Units/RL:	mg/kg	Extracted:	Feb-18-20 17:30	Analyzed:	Feb-18-20 20:38	Units/RL:	mg/kg	Extracted:	Feb-18-20 17:30	Analyzed:	Feb-18-20 20:54	Units/RL:	mg/kg	Extracted:	Feb-18-20 17:30	Analyzed:	Feb-18-20 21:00	Units/RL:	mg/kg																																				
Chloride		10.2	9.98	65.7	9.92	16.6	9.88	79.4	9.98	14.3	9.96	359	9.88	79.4	9.98	14.3	9.96	359	9.88	79.4	9.98	14.3	9.96	359	9.88	79.4	9.98	14.3	9.96																																
TPH by SW8015 Mod		Extracted:	Feb-18-20 17:00	Analyzed:	Feb-18-20 17:00	Units/RL:	mg/kg	Extracted:	Feb-18-20 17:15	Analyzed:	Feb-18-20 02:46	Units/RL:	mg/kg	Extracted:	Feb-18-20 17:15	Analyzed:	Feb-19-20 03:06	Units/RL:	mg/kg	Extracted:	Feb-18-20 17:15	Analyzed:	Feb-19-20 03:26	Units/RL:	mg/kg																																				
Gasoline Range Hydrocarbons (GRO)		<50.1	50.1	<50.3	50.3	<49.8	49.8	<50.2	50.2	<49.9	49.9	<50.3	50.3	<50.1	50.1	<50.3	50.3	<50.1	50.1	<50.3	50.3	<50.1	50.1	<50.3	50.3	<50.1	50.1	<50.3	50.3																																
Diesel Range Organics (DRO)		<50.1	50.1	<50.3	50.3	<49.8	49.8	<50.2	50.2	<49.9	49.9	<50.3	50.3	<50.1	50.1	<50.3	50.3	<50.1	50.1	<50.3	50.3	<50.1	50.1	<50.3	50.3	<50.1	50.1	<50.3	50.3																																
Motor Oil Range Hydrocarbons (MRO)		<50.1	50.1	<50.3	50.3	<49.8	49.8	<50.2	50.2	<49.9	49.9	<50.3	50.3	<50.1	50.1	<50.3	50.3	<50.1	50.1	<50.3	50.3	<50.1	50.1	<50.3	50.3	<50.1	50.1	<50.3	50.3																																
Total TPH		<50.1	50.1	<50.3	50.3	<49.8	49.8	<50.2	50.2	<49.9	49.9	<50.3	50.3	<50.1	50.1	<50.3	50.3	<50.1	50.1	<50.3	50.3	<50.1	50.1	<50.3	50.3	<50.1	50.1	<50.3	50.3																																

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Version: 1.%

Jessica Kramer  
 Project Assistant



# Certificate of Analysis Summary 652836

LT Environmental, Inc., Arvada, CO

Project Name: Ape Fee 001

Project Id: 034820008  
 Contact: Chris McKisson  
 Project Location: Eddy

Date Received in Lab: Tue Feb-18-20 03:53 pm  
 Report Date: 25-FEB-20  
 Project Manager: Jessica Kramer

Analysis Requested		Lab Id:	652836-019	652836-020	652836-021	652836-022		
		Field Id:	SS09	SS10	SS11	SS12		
		Depth:	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft		
		Matrix:	SOIL	SOIL	SOIL	SOIL		
		Sampled:	Feb-18-20 13:39	Feb-18-20 13:44	Feb-18-20 12:27	Feb-18-20 12:40		
<b>BTEX by EPA 8021B</b>		Extracted:	Feb-18-20 17:00	Feb-18-20 17:00	Feb-18-20 17:00	Feb-18-20 17:00		
		Analyzed:	Feb-18-20 23:14	Feb-18-20 23:35	Feb-18-20 23:55	Feb-19-20 00:16		
		Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene			<0.00202	0.00202	<0.00202	0.00200	<0.00199	0.00199
Toluene			<0.00202	0.00202	<0.00202	0.00200	<0.00199	0.00199
Ethylbenzene			<0.00202	0.00202	<0.00202	0.00202	<0.00199	0.00199
m,p-Xylenes			<0.00403	0.00403	<0.00403	0.00403	<0.00398	0.00398
o-Xylene			<0.00202	0.00202	<0.00202	0.00202	<0.00199	0.00199
Xylenes, Total			<0.00202	0.00202	<0.00202	0.00202	<0.00199	0.00199
Total BTEX			<0.00202	0.00202	<0.00202	0.00202	<0.00199	0.00199
<b>Chloride by EPA 300</b>		Extracted:	Feb-18-20 17:30	Feb-18-20 17:30	Feb-18-20 17:30	Feb-18-20 17:30		
		Analyzed:	Feb-18-20 21:11	Feb-18-20 21:17	Feb-18-20 21:23	Feb-18-20 21:41		
		Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride			148	9.82	65.7	9.96	697	49.8
							27.2	9.98
<b>TPH by SW8015 Mod</b>		Extracted:	Feb-18-20 17:15	Feb-18-20 17:15	Feb-18-20 17:15	Feb-18-20 17:15		
		Analyzed:	Feb-19-20 03:26	Feb-19-20 03:46	Feb-19-20 03:46	Feb-19-20 04:06		
		Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)			<50.3	50.3	<50.3	50.3	<50.1	50.1
Diesel Range Organics (DRO)			183	50.3	<50.3	50.3	<50.1	50.1
Motor Oil Range Hydrocarbons (MRO)			<50.3	50.3	<50.3	50.3	<50.1	50.1
Total TPH			183	50.3	<50.3	50.3	<50.1	50.1

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use.  
 The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories.  
 XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented.  
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Version: 1.%

Jessica Kramer  
 Project Assistant



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: **BH09**

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-001

Date Collected: 02.18.20 10.35

Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 16.00

Basis: Wet Weight

Seq Number: 3116915

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<b>87.6</b>	9.92	mg/kg	02.18.20 18.18		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116932

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.18.20 22.48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.18.20 22.48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.18.20 22.48	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.18.20 22.48	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane		111-85-3	93	%	70-135	02.18.20 22.48	
o-Terphenyl		84-15-1	107	%	70-135	02.18.20 22.48	



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: **BH09**

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-001

Date Collected: 02.18.20 10.35

Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116910

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.18.20 21.39	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.18.20 21.39	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.18.20 21.39	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.18.20 21.39	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.18.20 21.39	U	1
Xylenes, Total	1330-20-7	<0.00199	0.00199	mg/kg	02.18.20 21.39	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.18.20 21.39	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	105	%	70-130	02.18.20 21.39		
4-Bromofluorobenzene	460-00-4	101	%	70-130	02.18.20 21.39		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: **BH10**

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-002

Date Collected: 02.18.20 10.45

Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 16.00

Basis: Wet Weight

Seq Number: 3116915

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	28.1	10.0	mg/kg	02.18.20 18.35		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116932

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	02.18.20 22.48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	02.18.20 22.48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	02.18.20 22.48	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	02.18.20 22.48	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane		111-85-3	100	%	70-135	02.18.20 22.48	
o-Terphenyl		84-15-1	107	%	70-135	02.18.20 22.48	



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: **BH10**

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-002

Date Collected: 02.18.20 10.45

Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116910

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	02.18.20 22.00	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	02.18.20 22.00	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	02.18.20 22.00	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	02.18.20 22.00	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	02.18.20 22.00	U	1
Xylenes, Total	1330-20-7	<0.00198	0.00198	mg/kg	02.18.20 22.00	U	1
Total BTEX		<0.00198	0.00198	mg/kg	02.18.20 22.00	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	106	%	70-130	02.18.20 22.00		
4-Bromofluorobenzene	460-00-4	99	%	70-130	02.18.20 22.00		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: **BH10A**

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-003

Date Collected: 02.18.20 10.50

Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 16.00

Basis: Wet Weight

Seq Number: 3116915

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	20.9	10.1	mg/kg	02.18.20 18.40		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116932

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	02.18.20 23.08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	02.18.20 23.08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	02.18.20 23.08	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	02.18.20 23.08	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane		111-85-3	102	%	70-135	02.18.20 23.08	
o-Terphenyl		84-15-1	116	%	70-135	02.18.20 23.08	



# Certificate of Analytical Results 652836

**LT Environmental, Inc., Arvada, CO**

Ape Fee 001

Sample Id: **BH10A**

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-003

Date Collected: 02.18.20 10.50

Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116910

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.18.20 22.20	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.18.20 22.20	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.18.20 22.20	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.18.20 22.20	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.18.20 22.20	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	02.18.20 22.20	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.18.20 22.20	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	105	%	70-130	02.18.20 22.20		
4-Bromofluorobenzene	460-00-4	97	%	70-130	02.18.20 22.20		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: **BH11**  
Lab Sample Id: 652836-004

Matrix: Soil  
Date Collected: 02.18.20 10.59

Date Received: 02.18.20 15.53  
Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB  
Analyst: MAB  
Seq Number: 3116915

% Moisture:  
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<b>12.0</b>	9.98	mg/kg	02.18.20 18.57		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH  
Analyst: DTH  
Seq Number: 3116932

% Moisture:  
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	02.18.20 23.08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	02.18.20 23.08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	02.18.20 23.08	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	02.18.20 23.08	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	104	%	70-135	02.18.20 23.08		
o-Terphenyl	84-15-1	110	%	70-135	02.18.20 23.08		



# Certificate of Analytical Results 652836

**LT Environmental, Inc., Arvada, CO**

Ape Fee 001

Sample Id: **BH11**  
Lab Sample Id: 652836-004

Matrix: Soil  
Date Collected: 02.18.20 10.59

Date Received: 02.18.20 15.53  
Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116910

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.18.20 23.21	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.18.20 23.21	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.18.20 23.21	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.18.20 23.21	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.18.20 23.21	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	02.18.20 23.21	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.18.20 23.21	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	02.18.20 23.21		
1,4-Difluorobenzene	540-36-3	106	%	70-130	02.18.20 23.21		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: **BH12**

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-005

Date Collected: 02.18.20 11.06

Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 16.00

Basis: Wet Weight

Seq Number: 3116915

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	142	49.6	mg/kg	02.18.20 19.03		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116932

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.18.20 23.28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.18.20 23.28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.18.20 23.28	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.18.20 23.28	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane		111-85-3	106	%	70-135	02.18.20 23.28	
o-Terphenyl		84-15-1	113	%	70-135	02.18.20 23.28	



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: **BH12**

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-005

Date Collected: 02.18.20 11.06

Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116910

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.18.20 23.41	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.18.20 23.41	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.18.20 23.41	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.18.20 23.41	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.18.20 23.41	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	02.18.20 23.41	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.18.20 23.41	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	105	%	70-130	02.18.20 23.41		
4-Bromofluorobenzene	460-00-4	98	%	70-130	02.18.20 23.41		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: **BH13**

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-006

Date Collected: 02.18.20 11.14

Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 16.00

Basis: Wet Weight

Seq Number: 3116915

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<b>50.5</b>	49.8	mg/kg	02.18.20 19.08		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116932

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	02.18.20 23.48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	02.18.20 23.48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	02.18.20 23.48	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	02.18.20 23.48	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane		111-85-3	100	%	70-135	02.18.20 23.48	
o-Terphenyl		84-15-1	108	%	70-135	02.18.20 23.48	



# Certificate of Analytical Results 652836

**LT Environmental, Inc., Arvada, CO**

Ape Fee 001

Sample Id: **BH13**

Matrix: **Soil**

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-006

Date Collected: 02.18.20 11.14

Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: **MAB**

% Moisture:

Analyst: **MAB**

Date Prep: 02.18.20 17.00

Basis: **Wet Weight**

Seq Number: 3116910

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.19.20 00.02	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.19.20 00.02	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.19.20 00.02	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.19.20 00.02	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.19.20 00.02	U	1
Xylenes, Total	1330-20-7	<0.00199	0.00199	mg/kg	02.19.20 00.02	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.19.20 00.02	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	02.19.20 00.02		
1,4-Difluorobenzene	540-36-3	105	%	70-130	02.19.20 00.02		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: **BH14**

Lab Sample Id: 652836-007

Matrix: Soil

Date Received: 02.18.20 15.53

Date Collected: 02.18.20 11.24

Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 16.00

Basis: Wet Weight

Seq Number: 3116915

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	26.3	9.98	mg/kg	02.18.20 19.14		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116932

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.18.20 23.48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	02.18.20 23.48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.18.20 23.48	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.18.20 23.48	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane		111-85-3	106	%	70-135	02.18.20 23.48	
o-Terphenyl		84-15-1	107	%	70-135	02.18.20 23.48	



# Certificate of Analytical Results 652836

**LT Environmental, Inc., Arvada, CO**

Ape Fee 001

Sample Id: **BH14**

Matrix: **Soil**

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-007

Date Collected: 02.18.20 11.24

Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: **MAB**

% Moisture:

Analyst: **MAB**

Date Prep: 02.18.20 17.00

Basis: **Wet Weight**

Seq Number: 3116910

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.19.20 00.22	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.19.20 00.22	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.19.20 00.22	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	02.19.20 00.22	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.19.20 00.22	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	02.19.20 00.22	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.19.20 00.22	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	96	%	70-130	02.19.20 00.22		
1,4-Difluorobenzene	540-36-3	105	%	70-130	02.19.20 00.22		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: **BH15**

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-008

Date Collected: 02.18.20 11.31

Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 16.00

Basis: Wet Weight

Seq Number: 3116915

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	204	50.4	mg/kg	02.18.20 19.20		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116932

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.19.20 00.08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.19.20 00.08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.19.20 00.08	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.19.20 00.08	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane		111-85-3	98	%	70-135	02.19.20 00.08	
o-Terphenyl		84-15-1	105	%	70-135	02.19.20 00.08	



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: **BH15**

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-008

Date Collected: 02.18.20 11.31

Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116910

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.19.20 00.43	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.19.20 00.43	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.19.20 00.43	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.19.20 00.43	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.19.20 00.43	U	1
Xylenes, Total	1330-20-7	<0.00199	0.00199	mg/kg	02.19.20 00.43	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.19.20 00.43	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	106	%	70-130	02.19.20 00.43		
4-Bromofluorobenzene	460-00-4	97	%	70-130	02.19.20 00.43		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: **BH16**

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-009

Date Collected: 02.18.20 11.38

Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 16.00

Basis: Wet Weight

Seq Number: 3116915

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<49.4	49.4	mg/kg	02.18.20 19.25	U	5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116932

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.19.20 00.08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.19.20 00.08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.19.20 00.08	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.19.20 00.08	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane		111-85-3	103	%	70-135	02.19.20 00.08	
o-Terphenyl		84-15-1	107	%	70-135	02.19.20 00.08	



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: **BH16**

Lab Sample Id: 652836-009

Matrix: Soil

Date Received: 02.18.20 15.53

Date Collected: 02.18.20 11.38

Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116910

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.19.20 01.03	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.19.20 01.03	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.19.20 01.03	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.19.20 01.03	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.19.20 01.03	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	02.19.20 01.03	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.19.20 01.03	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	104	%	70-130	02.19.20 01.03		
4-Bromofluorobenzene	460-00-4	100	%	70-130	02.19.20 01.03		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: **BH17**  
Lab Sample Id: 652836-010

Matrix: Soil  
Date Collected: 02.18.20 11.52

Date Received: 02.18.20 15.53  
Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300  
Tech: MAB  
Analyst: MAB  
Seq Number: 3116915

Prep Method: E300P  
% Moisture:  
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	32.0	9.98	mg/kg	02.18.20 19.31		1

Analytical Method: TPH by SW8015 Mod  
Tech: DTH  
Analyst: DTH  
Seq Number: 3116932

Prep Method: SW8015P  
% Moisture:  
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	02.19.20 00.28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	02.19.20 00.28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	02.19.20 00.28	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	02.19.20 00.28	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	98	%	70-135	02.19.20 00.28		
o-Terphenyl	84-15-1	104	%	70-135	02.19.20 00.28		



# Certificate of Analytical Results 652836

**LT Environmental, Inc., Arvada, CO**

Ape Fee 001

Sample Id: **BH17**

Matrix: **Soil**

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-010

Date Collected: 02.18.20 11.52

Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: **MAB**

% Moisture:

Analyst: **MAB**

Date Prep: 02.18.20 17.00

Basis: **Wet Weight**

Seq Number: 3116910

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.19.20 01.23	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.19.20 01.23	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.19.20 01.23	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	02.19.20 01.23	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.19.20 01.23	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	02.19.20 01.23	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.19.20 01.23	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	02.19.20 01.23		
1,4-Difluorobenzene	540-36-3	105	%	70-130	02.19.20 01.23		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: **BH18**

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-011

Date Collected: 02.18.20 12.02

Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.30

Basis: Wet Weight

Seq Number: 3116918

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	42.3	9.92	mg/kg	02.18.20 20.04		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116932

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.19.20 00.28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.19.20 00.28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.19.20 00.28	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.19.20 00.28	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane		111-85-3	105	%	70-135	02.19.20 00.28	
o-Terphenyl		84-15-1	107	%	70-135	02.19.20 00.28	



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: **BH18**

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-011

Date Collected: 02.18.20 12.02

Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116910

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.19.20 01.44	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.19.20 01.44	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.19.20 01.44	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	02.19.20 01.44	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.19.20 01.44	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	02.19.20 01.44	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.19.20 01.44	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	103	%	70-130	02.19.20 01.44		
4-Bromofluorobenzene	460-00-4	98	%	70-130	02.19.20 01.44		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: **BH19** Matrix: Soil Date Received:02.18.20 15.53  
Lab Sample Id: 652836-012 Date Collected: 02.18.20 12.13 Sample Depth: 0.5 ft  
Analytical Method: Chloride by EPA 300 Prep Method: E300P  
Tech: MAB % Moisture:  
Analyst: MAB Date Prep: 02.18.20 17.30 Basis: Wet Weight  
Seq Number: 3116918

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	126	49.8	mg/kg	02.18.20 20.21		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
Tech: DTH % Moisture:  
Analyst: DTH Date Prep: 02.18.20 17.00 Basis: Wet Weight  
Seq Number: 3116932

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	02.19.20 01.07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	02.19.20 01.07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	02.19.20 01.07	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	02.19.20 01.07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	02.19.20 01.07	
o-Terphenyl	84-15-1	105	%	70-135	02.19.20 01.07	



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: **BH19**  
Lab Sample Id: 652836-012

Matrix: Soil  
Date Collected: 02.18.20 12.13

Date Received: 02.18.20 15.53  
Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB  
Analyst: MAB  
Seq Number: 3116910

% Moisture:  
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.19.20 02.04	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.19.20 02.04	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.19.20 02.04	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.19.20 02.04	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.19.20 02.04	U	1
Xylenes, Total	1330-20-7	<0.00199	0.00199	mg/kg	02.19.20 02.04	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.19.20 02.04	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	105	%	70-130	02.19.20 02.04		
4-Bromofluorobenzene	460-00-4	97	%	70-130	02.19.20 02.04		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: SS03

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-013

Date Collected: 02.18.20 13.14

Sample Depth: 0 - 0.25 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.30

Basis: Wet Weight

Seq Number: 3116918

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.2	9.98	mg/kg	02.18.20 20.26		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116932

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	02.19.20 00.47	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	02.19.20 00.47	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	02.19.20 00.47	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	02.19.20 00.47	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	102	%	70-135	02.19.20 00.47		
o-Terphenyl	84-15-1	107	%	70-135	02.19.20 00.47		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: SS03

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-013

Date Collected: 02.18.20 13.14

Sample Depth: 0 - 0.25 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116910

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.19.20 02.25	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.19.20 02.25	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.19.20 02.25	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	02.19.20 02.25	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.19.20 02.25	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	02.19.20 02.25	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.19.20 02.25	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	02.19.20 02.25		
1,4-Difluorobenzene	540-36-3	105	%	70-130	02.19.20 02.25		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: SS04

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-014

Date Collected: 02.18.20 12.33

Sample Depth: 0 - 0.25 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.30

Basis: Wet Weight

Seq Number: 3116918

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	65.7	9.92	mg/kg	02.18.20 20.32		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116932

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	02.19.20 00.47	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	02.19.20 00.47	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	02.19.20 00.47	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	02.19.20 00.47	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	105	%	70-135	02.19.20 00.47		
o-Terphenyl	84-15-1	109	%	70-135	02.19.20 00.47		



# Certificate of Analytical Results 652836

**LT Environmental, Inc., Arvada, CO**

Ape Fee 001

Sample Id: **SS04**

Matrix: **Soil**

Date Received: 02.18.20 15.53

Lab Sample Id: **652836-014**

Date Collected: 02.18.20 12.33

Sample Depth: 0 - 0.25 ft

Analytical Method: **BTEX by EPA 8021B**

Prep Method: **SW5030B**

Tech: **MAB**

% Moisture:

Analyst: **MAB**

Date Prep: **02.18.20 16.00**

Basis: **Wet Weight**

Seq Number: **3116911**

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	02.18.20 20.52	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	02.18.20 20.52	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	02.18.20 20.52	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	02.18.20 20.52	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	02.18.20 20.52	U	1
Xylenes, Total	1330-20-7	<0.00202	0.00202	mg/kg	02.18.20 20.52	U	1
Total BTEX		<0.00202	0.00202	mg/kg	02.18.20 20.52	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	96	%	70-130	02.18.20 20.52		
1,4-Difluorobenzene	540-36-3	113	%	70-130	02.18.20 20.52		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: SS05

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-015

Date Collected: 02.18.20 13.18

Sample Depth: 0 - 0.25 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.30

Basis: Wet Weight

Seq Number: 3116918

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	16.6	9.88	mg/kg	02.18.20 20.38		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116932

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.19.20 01.07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	02.19.20 01.07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.19.20 01.07	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.19.20 01.07	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane		111-85-3	103	%	70-135	02.19.20 01.07	
o-Terphenyl		84-15-1	111	%	70-135	02.19.20 01.07	



# Certificate of Analytical Results 652836

**LT Environmental, Inc., Arvada, CO**

Ape Fee 001

Sample Id: **SS05**

Matrix: **Soil**

Date Received: 02.18.20 15.53

Lab Sample Id: **652836-015**

Date Collected: 02.18.20 13.18

Sample Depth: 0 - 0.25 ft

Analytical Method: **BTEX by EPA 8021B**

Prep Method: **SW5030B**

Tech: **MAB**

% Moisture:

Analyst: **MAB**

Date Prep: **02.18.20 17.00**

Basis: **Wet Weight**

Seq Number: **3116911**

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.18.20 21.12	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.18.20 21.12	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.18.20 21.12	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	02.18.20 21.12	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.18.20 21.12	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	02.18.20 21.12	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.18.20 21.12	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	96	%	70-130	02.18.20 21.12		
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.18.20 21.12		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: SS06

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-016

Date Collected: 02.18.20 13.23

Sample Depth: 0 - 0.25 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.30

Basis: Wet Weight

Seq Number: 3116918

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	79.4	9.98	mg/kg	02.18.20 20.54		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 02.18.20 17.15

Basis: Wet Weight

Seq Number: 3116983

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	02.19.20 02.46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	02.19.20 02.46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	02.19.20 02.46	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	02.19.20 02.46	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane		111-85-3	103	%	70-135	02.19.20 02.46	
o-Terphenyl		84-15-1	109	%	70-135	02.19.20 02.46	



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: SS06

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-016

Date Collected: 02.18.20 13.23

Sample Depth: 0 - 0.25 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116911

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.18.20 21.32	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.18.20 21.32	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.18.20 21.32	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	02.18.20 21.32	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.18.20 21.32	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	02.18.20 21.32	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.18.20 21.32	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	94	%	70-130	02.18.20 21.32		
1,4-Difluorobenzene	540-36-3	109	%	70-130	02.18.20 21.32		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: SS07

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-017

Date Collected: 02.18.20 13.29

Sample Depth: 0 - 0.25 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.30

Basis: Wet Weight

Seq Number: 3116918

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	14.3	9.96	mg/kg	02.18.20 21.00		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 02.18.20 17.15

Basis: Wet Weight

Seq Number: 3116983

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.19.20 03.06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.19.20 03.06	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.19.20 03.06	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.19.20 03.06	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane		111-85-3	111	%	70-135	02.19.20 03.06	
o-Terphenyl		84-15-1	113	%	70-135	02.19.20 03.06	



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: SS07

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-017

Date Collected: 02.18.20 13.29

Sample Depth: 0 - 0.25 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116911

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.18.20 21.53	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.18.20 21.53	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.18.20 21.53	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.18.20 21.53	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.18.20 21.53	U	1
Xylenes, Total	1330-20-7	<0.00199	0.00199	mg/kg	02.18.20 21.53	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.18.20 21.53	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	111	%	70-130	02.18.20 21.53		
4-Bromofluorobenzene	460-00-4	95	%	70-130	02.18.20 21.53		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: SS08

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-018

Date Collected: 02.18.20 13.34

Sample Depth: 0 - 0.25 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.30

Basis: Wet Weight

Seq Number: 3116918

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	359	9.88	mg/kg	02.18.20 21.05		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 02.18.20 17.15

Basis: Wet Weight

Seq Number: 3116983

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	02.19.20 03.26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	02.19.20 03.26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	02.19.20 03.26	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	02.19.20 03.26	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	102	%	70-135	02.19.20 03.26		
o-Terphenyl	84-15-1	114	%	70-135	02.19.20 03.26		



# Certificate of Analytical Results 652836

**LT Environmental, Inc., Arvada, CO**

Ape Fee 001

Sample Id: **SS08**

Matrix: **Soil**

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-018

Date Collected: 02.18.20 13.34

Sample Depth: 0 - 0.25 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: **MAB**

% Moisture:

Analyst: **MAB**

Date Prep: 02.18.20 17.00

Basis: **Wet Weight**

Seq Number: 3116911

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.18.20 22.13	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.18.20 22.13	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.18.20 22.13	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	02.18.20 22.13	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.18.20 22.13	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	02.18.20 22.13	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.18.20 22.13	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	88	%	70-130	02.18.20 22.13		
1,4-Difluorobenzene	540-36-3	108	%	70-130	02.18.20 22.13		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: SS09

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-019

Date Collected: 02.18.20 13.39

Sample Depth: 0 - 0.25 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.30

Basis: Wet Weight

Seq Number: 3116918

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	148	9.82	mg/kg	02.18.20 21.11		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 02.18.20 17.15

Basis: Wet Weight

Seq Number: 3116983

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	02.19.20 03.26	U	1
<b>Diesel Range Organics (DRO)</b>	C10C28DRO	183	50.3	mg/kg	02.19.20 03.26		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	02.19.20 03.26	U	1
<b>Total TPH</b>	PHC635	183	50.3	mg/kg	02.19.20 03.26		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	109	%	70-135	02.19.20 03.26		
o-Terphenyl	84-15-1	114	%	70-135	02.19.20 03.26		



# Certificate of Analytical Results 652836

**LT Environmental, Inc., Arvada, CO**

Ape Fee 001

Sample Id: **SS09**

Matrix: **Soil**

Date Received: 02.18.20 15.53

Lab Sample Id: **652836-019**

Date Collected: 02.18.20 13.39

Sample Depth: 0 - 0.25 ft

Analytical Method: **BTEX by EPA 8021B**

Prep Method: **SW5030B**

Tech: **MAB**

% Moisture:

Analyst: **MAB**

Date Prep: **02.18.20 17.00**

Basis: **Wet Weight**

Seq Number: **3116911**

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	02.18.20 23.14	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	02.18.20 23.14	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	02.18.20 23.14	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	02.18.20 23.14	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	02.18.20 23.14	U	1
Xylenes, Total	1330-20-7	<0.00202	0.00202	mg/kg	02.18.20 23.14	U	1
Total BTEX		<0.00202	0.00202	mg/kg	02.18.20 23.14	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	89	%	70-130	02.18.20 23.14		
1,4-Difluorobenzene	540-36-3	104	%	70-130	02.18.20 23.14		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: SS10  
Lab Sample Id: 652836-020

Matrix: Soil  
Date Collected: 02.18.20 13.44

Date Received: 02.18.20 15.53  
Sample Depth: 0 - 0.25 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.30

Basis: Wet Weight

Seq Number: 3116918

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	65.7	9.96	mg/kg	02.18.20 21.17		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 02.18.20 17.15

Basis: Wet Weight

Seq Number: 3116983

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	02.19.20 03.46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	02.19.20 03.46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	02.19.20 03.46	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	02.19.20 03.46	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	108	%	70-135	02.19.20 03.46		
o-Terphenyl	84-15-1	117	%	70-135	02.19.20 03.46		



# Certificate of Analytical Results 652836

**LT Environmental, Inc., Arvada, CO**

Ape Fee 001

Sample Id: **SS10**

Matrix: **Soil**

Date Received: 02.18.20 15.53

Lab Sample Id: **652836-020**

Date Collected: **02.18.20 13.44**

Sample Depth: **0 - 0.25 ft**

Analytical Method: **BTEX by EPA 8021B**

Prep Method: **SW5030B**

Tech: **MAB**

% Moisture:

Analyst: **MAB**

Date Prep: **02.18.20 17.00**

Basis: **Wet Weight**

Seq Number: **3116911**

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	02.18.20 23.35	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	02.18.20 23.35	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	02.18.20 23.35	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	02.18.20 23.35	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	02.18.20 23.35	U	1
Xylenes, Total	1330-20-7	<0.00202	0.00202	mg/kg	02.18.20 23.35	U	1
Total BTEX		<0.00202	0.00202	mg/kg	02.18.20 23.35	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	86	%	70-130	02.18.20 23.35		
1,4-Difluorobenzene	540-36-3	92	%	70-130	02.18.20 23.35		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: SS11  
Lab Sample Id: 652836-021

Matrix: Soil  
Date Collected: 02.18.20 12.27

Date Received: 02.18.20 15.53  
Sample Depth: 0 - 0.25 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB  
Analyst: MAB  
Seq Number: 3116918

% Moisture:  
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	697	49.8	mg/kg	02.18.20 21.23		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH  
Analyst: DTH  
Seq Number: 3116983

% Moisture:  
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	02.19.20 03.46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	02.19.20 03.46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	02.19.20 03.46	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	02.19.20 03.46	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	107	%	70-135	02.19.20 03.46		
o-Terphenyl	84-15-1	110	%	70-135	02.19.20 03.46		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: SS11

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-021

Date Collected: 02.18.20 12.27

Sample Depth: 0 - 0.25 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116911

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.18.20 23.55	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.18.20 23.55	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.18.20 23.55	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.18.20 23.55	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.18.20 23.55	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	02.18.20 23.55	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.18.20 23.55	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.18.20 23.55		
4-Bromofluorobenzene	460-00-4	93	%	70-130	02.18.20 23.55		



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: SS12

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-022

Date Collected: 02.18.20 12.40

Sample Depth: 0 - 0.25 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.30

Basis: Wet Weight

Seq Number: 3116918

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	27.2	9.98	mg/kg	02.18.20 21.41		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 02.18.20 17.15

Basis: Wet Weight

Seq Number: 3116983

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	02.19.20 04.06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	02.19.20 04.06	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	02.19.20 04.06	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	02.19.20 04.06	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane		111-85-3	106	%	70-135	02.19.20 04.06	
o-Terphenyl		84-15-1	117	%	70-135	02.19.20 04.06	



# Certificate of Analytical Results 652836

LT Environmental, Inc., Arvada, CO

Ape Fee 001

Sample Id: SS12

Matrix: Soil

Date Received: 02.18.20 15.53

Lab Sample Id: 652836-022

Date Collected: 02.18.20 12.40

Sample Depth: 0 - 0.25 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 02.18.20 17.00

Basis: Wet Weight

Seq Number: 3116911

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.19.20 00.16	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.19.20 00.16	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.19.20 00.16	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.19.20 00.16	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.19.20 00.16	U	1
Xylenes, Total	1330-20-7	<0.00199	0.00199	mg/kg	02.19.20 00.16	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.19.20 00.16	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	98	%	70-130	02.19.20 00.16		
4-Bromofluorobenzene	460-00-4	91	%	70-130	02.19.20 00.16		

## Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

\*\* Surrogate recovered outside laboratory control limit.

**BRL** Below Reporting Limit.

**RL** Reporting Limit

**MDL** Method Detection Limit      **SDL** Sample Detection Limit      **LOD** Limit of Detection

**PQL** Practical Quantitation Limit      **MQL** Method Quantitation Limit      **LOQ** Limit of Quantitation

**DL** Method Detection Limit

**NC** Non-Calculable

**SMP** Client Sample      **BLK**      Method Blank

**BKS/LCS** Blank Spike/Laboratory Control Sample      **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

**MD/SD** Method Duplicate/Sample Duplicate      **MS**      Matrix Spike      **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

\* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation



# QC Summary 652836

## LT Environmental, Inc.

Ape Fee 001

**Analytical Method: Chloride by EPA 300**

Seq Number:	3116915	Matrix:	Solid			Prep Method:	E300P	
MB Sample Id:	7696884-1-BLK	LCS Sample Id:	7696884-1-BKS			Date Prep:	02.18.20	
<b>Parameter</b>	<b>MB Result</b>	<b>Spike Amount</b>	<b>LCS Result</b>	<b>LCS %Rec</b>	<b>LCSD Result</b>	<b>LCSD %Rec</b>	<b>Limits</b>	<b>%RPD RPD Limit Units Analysis Date Flag</b>
Chloride	<10.0	250	255	102	249	100	90-110	2 20 mg/kg 02.18.20 16:49

**Analytical Method: Chloride by EPA 300**

Seq Number:	3116918	Matrix:	Solid			Prep Method:	E300P	
MB Sample Id:	7696934-1-BLK	LCS Sample Id:	7696934-1-BKS			Date Prep:	02.18.20	
<b>Parameter</b>	<b>MB Result</b>	<b>Spike Amount</b>	<b>LCS Result</b>	<b>LCS %Rec</b>	<b>LCSD Result</b>	<b>LCSD %Rec</b>	<b>Limits</b>	<b>%RPD RPD Limit Units Analysis Date Flag</b>
Chloride	<10.0	250	264	106	263	105	90-110	0 20 mg/kg 02.18.20 19:53

**Analytical Method: Chloride by EPA 300**

Seq Number:	3116915	Matrix:	Soil			Prep Method:	E300P	
Parent Sample Id:	652817-001	MS Sample Id:	652817-001 S			Date Prep:	02.18.20	
<b>Parameter</b>	<b>Parent Result</b>	<b>Spike Amount</b>	<b>MS Result</b>	<b>MS %Rec</b>	<b>MSD Result</b>	<b>MSD %Rec</b>	<b>Limits</b>	<b>%RPD RPD Limit Units Analysis Date Flag</b>
Chloride	240	200	449	105	453	107	90-110	1 20 mg/kg 02.18.20 17:06

**Analytical Method: Chloride by EPA 300**

Seq Number:	3116915	Matrix:	Soil			Prep Method:	E300P	
Parent Sample Id:	652836-001	MS Sample Id:	652836-001 S			Date Prep:	02.18.20	
<b>Parameter</b>	<b>Parent Result</b>	<b>Spike Amount</b>	<b>MS Result</b>	<b>MS %Rec</b>	<b>MSD Result</b>	<b>MSD %Rec</b>	<b>Limits</b>	<b>%RPD RPD Limit Units Analysis Date Flag</b>
Chloride	87.6	200	271	92	267	90	90-110	1 20 mg/kg 02.18.20 18:24

**Analytical Method: Chloride by EPA 300**

Seq Number:	3116918	Matrix:	Soil			Prep Method:	E300P	
Parent Sample Id:	652836-011	MS Sample Id:	652836-011 S			Date Prep:	02.18.20	
<b>Parameter</b>	<b>Parent Result</b>	<b>Spike Amount</b>	<b>MS Result</b>	<b>MS %Rec</b>	<b>MSD Result</b>	<b>MSD %Rec</b>	<b>Limits</b>	<b>%RPD RPD Limit Units Analysis Date Flag</b>
Chloride	42.3	201	236	96	238	97	90-110	1 20 mg/kg 02.18.20 20:10

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery  
Log Difference

[D] = 100\*(C-A) / B  
RPD = 200\* | (C-E) / (C+E) |  
[D] = 100 \* (C) / [B]  
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample  
A = Parent Result  
C = MS/LCS Result  
E = MSD/LCSD Result

MS = Matrix Spike  
B = Spike Added  
D = MSD/LCSD % Rec



# QC Summary 652836

## LT Environmental, Inc.

Ape Fee 001

**Analytical Method: Chloride by EPA 300**

Seq Number:	3116918	Matrix:	Soil			Prep Method:	E300P
Parent Sample Id:	652836-021	MS Sample Id:	652836-021 S			Date Prep:	02.18.20
<b>Parameter</b>	<b>Parent Result</b>	<b>Spike Amount</b>	<b>MS Result</b>	<b>MS %Rec</b>	<b>MSD Result</b>	<b>MSD %Rec</b>	<b>Limits</b>
Chloride	697	201	879	91	882	93	90-110
						0	20
						mg/kg	02.18.20 21:29

**Analytical Method: TPH by SW8015 Mod**

Seq Number:	3116932	Matrix:	Solid			Prep Method:	SW8015P
MB Sample Id:	7696924-1-BLK	LCS Sample Id:	7696924-1-BKS			Date Prep:	02.18.20
<b>Parameter</b>	<b>MB Result</b>	<b>Spike Amount</b>	<b>LCS Result</b>	<b>LCS %Rec</b>	<b>LCSD Result</b>	<b>LCSD %Rec</b>	<b>Limits</b>
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	956	96	819	82	70-135
Diesel Range Organics (DRO)	<50.0	1000	1040	104	918	92	70-135
<b>Surrogate</b>	<b>MB %Rec</b>	<b>MB Flag</b>	<b>LCS %Rec</b>	<b>LCS Flag</b>	<b>LCSD %Rec</b>	<b>LCSD Flag</b>	<b>Limits</b>
1-Chlorooctane	83		120		113		70-135
o-Terphenyl	92		113		109		70-135
							%
							02.18.20 21:07

**Analytical Method: TPH by SW8015 Mod**

Seq Number:	3116983	Matrix:	Solid			Prep Method:	SW8015P
MB Sample Id:	7696957-1-BLK	LCS Sample Id:	7696957-1-BKS			Date Prep:	02.18.20
<b>Parameter</b>	<b>MB Result</b>	<b>Spike Amount</b>	<b>LCS Result</b>	<b>LCS %Rec</b>	<b>LCSD Result</b>	<b>LCSD %Rec</b>	<b>Limits</b>
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	824	82	934	93	70-135
Diesel Range Organics (DRO)	<50.0	1000	895	90	999	100	70-135
<b>Surrogate</b>	<b>MB %Rec</b>	<b>MB Flag</b>	<b>LCS %Rec</b>	<b>LCS Flag</b>	<b>LCSD %Rec</b>	<b>LCSD Flag</b>	<b>Limits</b>
1-Chlorooctane	96		114		117		70-135
o-Terphenyl	100		104		109		70-135
							%
							02.19.20 02:27

**Analytical Method: TPH by SW8015 Mod**

Seq Number:	3116932	Matrix:	Solid			Prep Method:	SW8015P
MB Sample Id:	7696924-1-BLK	LCS Sample Id:	7696924-1-BKS			Date Prep:	02.18.20
<b>Parameter</b>	<b>MB Result</b>					<b>Units</b>	<b>Analysis Date</b>
Motor Oil Range Hydrocarbons (MRO)	<50.0					mg/kg	02.18.20 21:07

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery  
Log Difference

[D] = 100\*(C-A) / B  
RPD = 200\* | (C-E) / (C+E) |  
[D] = 100 \* (C) / [B]  
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample  
A = Parent Result  
C = MS/LCS Result  
E = MSD/LCSD Result

MS = Matrix Spike  
B = Spike Added  
D = MSD/LCSD % Rec



# QC Summary 652836

**LT Environmental, Inc.**

Ape Fee 001

**Analytical Method:** TPH by SW8015 Mod

Seq Number: 3116983

Matrix: Solid

Prep Method: SW8015P

Date Prep: 02.18.20

MB Sample Id: 7696957-1-BLK

**Parameter**

Motor Oil Range Hydrocarbons (MRO)

MB  
Result

<50.0

Units

Analysis  
Date

Flag

mg/kg 02.19.20 02:07

**Analytical Method:** TPH by SW8015 Mod

Seq Number: 3116932

Matrix: Soil

Prep Method: SW8015P

Date Prep: 02.18.20

Parent Sample Id: 652818-014

MS Sample Id: 652818-014 S

MSD Sample Id: 652818-014 SD

**Parameter**

Gasoline Range Hydrocarbons (GRO)

Parent Result Spike

Amount

MS

Result

MS

%Rec

MSD

Result

MSD

%Rec

Limits

%RPD

RPD

Limit

Units

Analysis

Date

Flag

Diesel Range Organics (DRO)

<49.8

995

984

99

971

97

70-135

1

35

mg/kg

02.18.20 21:48

Gasoline Range Hydrocarbons (GRO)

<49.8

995

1070

108

1040

104

70-135

3

35

mg/kg

02.18.20 21:48

**Surrogate**

1-Chlorooctane

MS

%Rec

MS

Flag

MSD

%Rec

MSD

Flag

Limits

Units

Analysis

Date

o-Terphenyl

118

123

70-135

%

02.18.20 21:48

o-Terphenyl

127

117

70-135

%

02.18.20 21:48

**Analytical Method:** TPH by SW8015 Mod

Seq Number: 3116983

Matrix: Soil

Prep Method: SW8015P

Date Prep: 02.18.20

Parent Sample Id: 652836-016

MS Sample Id: 652836-016 S

MSD Sample Id: 652836-016 SD

**Parameter**

Gasoline Range Hydrocarbons (GRO)

Parent Result Spike

Amount

MS

Result

MS

%Rec

MSD

Result

MSD

%Rec

Limits

%RPD

RPD

Limit

Units

Analysis

Date

Flag

Diesel Range Organics (DRO)

<50.1

1000

912

91

897

90

70-135

2

35

mg/kg

02.19.20 02:46

Gasoline Range Hydrocarbons (GRO)

<50.1

1000

1020

102

958

96

70-135

6

35

mg/kg

02.19.20 02:46

**Surrogate**

1-Chlorooctane

MS

%Rec

MS

Flag

MSD

%Rec

MSD

Flag

Limits

Units

Analysis

Date

o-Terphenyl

118

123

70-135

%

02.19.20 02:46

o-Terphenyl

123

109

70-135

%

02.19.20 02:46

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery  
Log Difference

[D] = 100\*(C-A) / B  
RPD = 200\* | (C-E) / (C+E) |  
[D] = 100 \* (C) / [B]  
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample  
A = Parent Result  
C = MS/LCS Result  
E = MSD/LCSD Result

MS = Matrix Spike  
B = Spike Added  
D = MSD/LCSD % Rec



# QC Summary 652836

## LT Environmental, Inc.

Ape Fee 001

**Analytical Method: BTEX by EPA 8021B**

Seq Number:	3116910	Matrix: Solid				Prep Method: SW5030B			
MB Sample Id:	7696952-1-BLK	LCS Sample Id: 7696952-1-BKS				Date Prep: 02.18.20			
<b>Parameter</b>	<b>MB Result</b>	<b>Spike Amount</b>	<b>LCS Result</b>	<b>LCS %Rec</b>	<b>LCSD Result</b>	<b>LCSD %Rec</b>	<b>Limits</b>	<b>%RPD</b>	<b>RPD Limit</b>
Benzene	<0.00200	0.100	0.107	107	0.106	106	70-130	1	35
Toluene	<0.00200	0.100	0.104	104	0.102	102	70-130	2	35
Ethylbenzene	<0.00200	0.100	0.101	101	0.0987	99	71-129	2	35
m,p-Xylenes	<0.00400	0.200	0.207	104	0.203	102	70-135	2	35
o-Xylene	<0.00200	0.100	0.104	104	0.102	102	71-133	2	35
<b>Surrogate</b>	<b>MB %Rec</b>	<b>MB Flag</b>	<b>LCS %Rec</b>	<b>LCS Flag</b>	<b>LCSD %Rec</b>	<b>LCSD Flag</b>	<b>Limits</b>	<b>Units</b>	<b>Analysis Date</b>
1,4-Difluorobenzene	104		104		105		70-130	%	02.18.20 17:14
4-Bromofluorobenzene	93		95		92		70-130	%	02.18.20 17:14

**Analytical Method: BTEX by EPA 8021B**

Seq Number:	3116911	Matrix: Solid				Prep Method: SW5030B			
MB Sample Id:	7696953-1-BLK	LCS Sample Id: 7696953-1-BKS				Date Prep: 02.18.20			
<b>Parameter</b>	<b>MB Result</b>	<b>Spike Amount</b>	<b>LCS Result</b>	<b>LCS %Rec</b>	<b>LCSD Result</b>	<b>LCSD %Rec</b>	<b>Limits</b>	<b>%RPD</b>	<b>RPD Limit</b>
Benzene	<0.00200	0.100	0.124	124	0.122	122	70-130	2	35
Toluene	<0.00200	0.100	0.115	115	0.113	113	70-130	2	35
Ethylbenzene	<0.00200	0.100	0.110	110	0.109	109	71-129	1	35
m,p-Xylenes	<0.00400	0.200	0.214	107	0.212	106	70-135	1	35
o-Xylene	<0.00200	0.100	0.108	108	0.107	107	71-133	1	35
<b>Surrogate</b>	<b>MB %Rec</b>	<b>MB Flag</b>	<b>LCS %Rec</b>	<b>LCS Flag</b>	<b>LCSD %Rec</b>	<b>LCSD Flag</b>	<b>Limits</b>	<b>Units</b>	<b>Analysis Date</b>
1,4-Difluorobenzene	113		110		111		70-130	%	02.18.20 17:28
4-Bromofluorobenzene	94		89		92		70-130	%	02.18.20 17:28

**Analytical Method: BTEX by EPA 8021B**

Seq Number:	3116910	Matrix: Soil				Prep Method: SW5030B			
Parent Sample Id:	652817-001	MS Sample Id: 652817-001 S				Date Prep: 02.18.20			
<b>Parameter</b>	<b>Parent Result</b>	<b>Spike Amount</b>	<b>MS Result</b>	<b>MS %Rec</b>	<b>MSD Result</b>	<b>MSD %Rec</b>	<b>Limits</b>	<b>%RPD</b>	<b>RPD Limit</b>
Benzene	<0.00200	0.100	0.108	108	0.115	115	70-130	6	35
Toluene	<0.00200	0.100	0.103	103	0.107	107	70-130	4	35
Ethylbenzene	<0.00200	0.100	0.0994	99	0.105	105	71-129	5	35
m,p-Xylenes	<0.00400	0.200	0.205	103	0.217	109	70-135	6	35
o-Xylene	<0.00200	0.100	0.102	102	0.109	109	71-133	7	35
<b>Surrogate</b>			<b>MS %Rec</b>	<b>MS Flag</b>	<b>MSD %Rec</b>	<b>MSD Flag</b>	<b>Limits</b>	<b>Units</b>	<b>Analysis Date</b>
1,4-Difluorobenzene			105		103		70-130	%	02.18.20 17:55
4-Bromofluorobenzene			96		90		70-130	%	02.18.20 17:55

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery  
Log Difference

[D] = 100\*(C-A) / B  
RPD = 200\* | (C-E) / (C+E) |  
[D] = 100 \* (C) / [B]  
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample  
A = Parent Result  
C = MS/LCS Result  
E = MSD/LCSD Result

MS = Matrix Spike  
B = Spike Added  
D = MSD/LCSD % Rec



# QC Summary 652836

## LT Environmental, Inc.

Ape Fee 001

Analytical Method: BTEX by EPA 8021B

Seq Number: 3116911

Matrix: Soil

Prep Method: SW5030B

Parent Sample Id: 652818-014

MS Sample Id: 652818-014 S

Date Prep: 02.18.20

MSD Sample Id: 652818-014 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.123	123	0.117	116	70-130	5	35	mg/kg	02.18.20 18:09	
Toluene	<0.00200	0.100	0.123	123	0.107	106	70-130	14	35	mg/kg	02.18.20 18:09	
Ethylbenzene	<0.00200	0.100	0.116	116	0.0984	97	71-129	16	35	mg/kg	02.18.20 18:09	
m,p-Xylenes	<0.00400	0.200	0.226	113	0.190	94	70-135	17	35	mg/kg	02.18.20 18:09	
o-Xylene	<0.00200	0.100	0.114	114	0.0958	95	71-133	17	35	mg/kg	02.18.20 18:09	
Surrogate			MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits			Units	Analysis Date	
1,4-Difluorobenzene			111		109		70-130			%	02.18.20 18:09	
4-Bromofluorobenzene			93		91		70-130			%	02.18.20 18:09	

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery  
Log Difference

[D] = 100\*(C-A) / B  
RPD = 200\* | (C-E) / (C+E) |  
[D] = 100 \* (C) / [B]  
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample  
A = Parent Result  
C = MS/LCS Result  
E = MSD/LCSD Result

MS = Matrix Spike  
B = Spike Added  
D = MSD/LCSD % Rec



## Chain of Custody

Work Order No: W52830

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334

Midland, TX (432-704-5440) El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296

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Project Manager:	Chris McKisson	Billed to: (if different)
Company Name:	LT Environmental	Company Name:
Address:	820 Megan Ave, Unit B	Address:
City, State ZIP:	Rifle, CO 81650	City, State ZIP:
Phone:	970-285-9985	Email: <a href="mailto:wmatther@ltenv.com">wmatther@ltenv.com</a> , <a href="mailto:cmckisson@ltenv.com">cmckisson@ltenv.com</a>

Work Order Comments			
Program: UST/PST	<input type="checkbox"/> RP		
State of Project:	<input type="checkbox"/> Brownfields		
Reporting Level:	<input type="checkbox"/> Level II	<input type="checkbox"/> RC	<input type="checkbox"/> Superfund
Deliverables:	<input type="checkbox"/> EDD	<input type="checkbox"/> Level III	<input type="checkbox"/> TRUST
	<input type="checkbox"/>	<input type="checkbox"/> RP	<input type="checkbox"/> Level IV
	<input type="checkbox"/>	<input type="checkbox"/> ADAPT	<input type="checkbox"/> Other:

ANALYSIS REQUEST						Work Order Notes
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	
BH09	S	2/18/20	10:36	.5'	1	TPH (EPA 8015)
BH10			10:45	.5'	1	BTEX (EPA 0=8021)
BH10A			10:50	1'	1	Chloride (EPA 300.0)
BH11			10:59	.5'	1	
BH12			11:06	1'	1	
BH13			11:14	1'	1	
BH14			11:24	1'	1	
BH15			11:31	1'	1	
BH16			11:38	1'	1	
BH17			11:52	1'	1	
						TAT starts the day received by the lab, if received by 4:30pm
						<i>Discrete</i>
						<i>✓</i>

Total 200.7 / 6010 200.8 / 6020:

8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn  
Circle Method(s) and Metal(s) to be analyzed    **TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U**

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Relinquished by: (Signature)

Received by: (Signature)

Date/Time

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

*J. Mather*

*W. Mather*

2/18/20

15:53

*J. Mather*

2/18/20

15:53



## Chain of Custody

Work Order No: 1052830

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334  
Midland, TX (432-704-5440) El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296

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Page 2 of 3

Project Manager:	Chris McKisson	Bill to (if different):	<input checked="" type="checkbox"/>
Company Name:	LT Environmental	Company Name:	<input checked="" type="checkbox"/>
Address:	820 Megan Ave, Unit B	Address:	<input checked="" type="checkbox"/>
City, State ZIP:	Rifle, CO 81650	City, State ZIP:	<input checked="" type="checkbox"/>
Phone:	970-285-9985	Email:	wmather@ltenv.com, cmckisson@ltenv.com

Project Name: Ape Fee 001 Turn Around 84820008 Work Order Notes

Project Number: 84820008 Work Order Comments

P.O. Number: Eddy Program: UST/PST  RP  Brownfields  RC  Superfund

Sampler's Name: William Mather State of Project: Reporting: Level II  Level III  ST/UST  RP  Level IV

Sampler's Name: William Mather Due Date: Deliverables: EDD  ADAPT  Other:

SAMPLE RECEIPT						ANALYSIS REQUEST					
Temperature (°C):	Temp Blank:	Yes	No	Wet Ice:	Yes	No	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	TAT starts the day received by the lab, if received by 4:30pm
Received Intact:	Yes	No	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>					
Cooler/Custody Seals:	Yes	No	N/A		Correction Factor:						
Sample Custody Seals:	Yes	No	N/A		Total Containers:						

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	Sample Comments
BH18	S	2/18/20	12:02	.5'	1	X	X		<u>Discrete</u>
BH19	S	2/18/20	12:13	.5'	1	X	X		<u>Discrete</u>
SS03	S	13:14	0-0.25'	1	X	X			<u>Composite</u>
SS04	S	12:33		1	X	X			
SS05	S	13:18		1	X	X			
SS06	S	13:23		1	X	X			
SS07	S	13:29		1	X	X			
SS08	S	13:34		1	X	X			
SS09	S	13:39		1	X	X			
SS10	S	13:44		1	X	X			

**Total 200.7 / 6010 200.8 / 6020:**

8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn

TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U

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Relinquished by: (Signature)

Received by: (Signature)

Date/Time

L. Mather William Mather

2/18/2015:53<sup>2</sup>

Date/Time

1

3

5



## Chain of Custody

Work Order No: 1952836

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334  
Midland, TX (432) 704-5440 El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296  
Hobbs, NM (575) 392-7550 Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-8800 Tampa, FL (813) 620-2000

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Page 5 of 3

Project Manager:	Chris McKisson	<input type="checkbox"/> Bill to: (if different)	
Company Name:	LT Environmental	<input type="checkbox"/> Company Name:	
Address:	820 Megan Ave, Unit B	<input type="checkbox"/> Address:	
City, State ZIP:	Rifle, CO 81650	<input type="checkbox"/> City, State ZIP:	
Phone:	970-285-9985	<input type="checkbox"/> Email: <u>wmather@ltenv.com, cmckisson@ltenv.com</u>	

<input type="checkbox"/> Work Order Comments	
Program: <input checked="" type="checkbox"/> UST/PST <input type="checkbox"/> RRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RC <input type="checkbox"/> Superfund	<input type="checkbox"/>
State of Project:	<input type="checkbox"/>
Reporting Level: <input type="checkbox"/> Level II <input type="checkbox"/> Level III <input type="checkbox"/> <del>TRUST</del> <input type="checkbox"/> RRP <input type="checkbox"/> <del>Level IV</del>	<input type="checkbox"/>
Deliverables: <input checked="" type="checkbox"/> EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:	<input type="checkbox"/>

Project Name:

Ape Fee 001

Turn Around

ANALYSIS REQUEST

Work Order Notes

Project Number:

034820008

Routine

Due Date:

P.O. Number:

Eddy

Rush: 24hr

Sampler's Name:

William Mather

Sample Custody Seals:  Yes  No  N/A Total Containers:

### SAMPLE RECEIPT

Temperature (°C): 30 Thermometer ID Seal PT

Received Intact:  Yes  No

Cooler Custody Seals:  Yes  No  N/A

Correction Factor:

Number of Containers

TPH (EPA 8015)

BTEX (EPA 0=8021)

Chloride (EPA 300.0)

TAT starts the day received by the lab, if received by 4:30pm

### Sample Comments

Composite  
Composite

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 - 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U

1631 / 245.1 / 7470 / 7471 : Hg

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Relinquished by: (Signature)

Received by: (Signature)

Date/Time

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

1 John Mather

2 John Mather

3 John Mather

4 John Mather

5 John Mather

**XENCO Laboratories**  
**Prelogin/Nonconformance Report- Sample Log-In**

**Client:** LT Environmental, Inc.

**Date/ Time Received:** 02.18.2020 03.53.00 PM

**Work Order #:** 652836

Acceptable Temperature Range: 0 - 6 degC  
Air and Metal samples Acceptable Range: Ambient  
Temperature Measuring device used : T-NM-007

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	2
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 Custody Seals intact on sample bottles?	Yes
#6*Custody Seals Signed and dated?	Yes
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	No
#18 Water VOC samples have zero headspace?	N/A

\* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

Analyst:

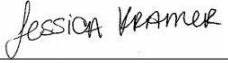
PH Device/Lot#:

**Checklist completed by:**

  
Elizabeth McClellan

Date: 02.18.2020

**Checklist reviewed by:**

  
Jessica Kramer

Date: 02.19.2020