LT Environmental, Inc.
3300 North A Street, Building 1, #103
Midland, Texas 79705
432.704.5178

August 6, 2018

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

RE: Closure Request
Big Eddy Unit #039
Remediation Permit Number 2RP-3957
Eddy County, New Mexico

Dear Mr. Bratcher:

LT Environmental, Inc. (LTE), on behalf of XTO Energy, Inc. (XTO), is pleased to present the following letter report detailing the soil sampling activities at the Big Eddy Unit (BEU) #039 (Site) in Section 29, Township 21 South, Range 28 East, in Eddy County, New Mexico (Figure 1). The purpose of the excavation activities was to assess soil impacts after a historical release from the wellhead. Fluids were released from the wellhead due to the tubing valve being closed. The wellhead stuffing box was repaired. The release of approximately 32 barrels (bbls) of produced water was discovered on October 4, 2016. The release affected approximately 845 square feet of the caliche pad surrounding the wellhead. Emergency response activities included removing approximately 30 bbls of produced water, which were recovered with a vacuum truck.

The former operator reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form C-141 on October 21, 2016, and was assigned Remediation Permit Number (RP) 2RP-3957 (Attachment 1). Although the release occurred while the facility was operated by the previous operator, XTO is the current operator and is committed to addressing any releases that remain unresolved. The sampling was conducted to assess the current site conditions. Based on the results of the confirmation sampling event conducted after impacted soil was removed, XTO is requesting site closure status and no further action for this release event.

BACKGROUND

Depth to groundwater at the Site is estimated to be between 50 feet and 100 feet below ground surface (bgs) based on the nearest water well data and known aquifer properties. The nearest permitted water well with depth to groundwater data is CP 00569, located approximately 1.45 miles east of the Site, with a depth to groundwater of 50 feet bgs and a total depth of 71 feet bgs. The closest surface water to the Site is an unnamed lake located approximately 0.46 mile west of the Site. The Site is greater than greater than 1,000 feet from a water source and greater than 1,000 feet from a private domestic water source. Based on these criteria, the NMOCD site

ranking for remediation action levels is 10, and the following remediation action levels apply: 10 milligrams per kilogram (mg/kg) benzene; 50 mg/kg benzene, toluene, ethylbenzene, and total xylenes (BTEX); and 1,000 mg/kg total petroleum hydrocarbons (TPH). Based on standard practice in this region, LTE proposes a site-specific chloride action level of 600 mg/kg or within 10 percent (%) of the background concentrations.

SOIL SAMPLING

On February 28, 2018, an LTE scientist collected five soil samples (SS1 through SS5) from a depth of 1.0-foot bgs to determine the lateral extent of soil impact. All samples were screened for volatile aromatic hydrocarbons using a photo-ionization detector (PID) equipped with a 10.6 electron volt lamp in accordance with the NMOCD *Guidelines for Remediation of Leaks, Spills and Releases*, August 13, 1993. No visual or olfactory evidence of the release was observed. The soil samples were placed directly into pre-cleaned glass jars, labeled with location, date, time, sampler, method of analysis, and immediately placed on ice. The samples were delivered at 4 degrees Celsius (°C) under strict chain-of-custody procedures to Xenco Laboratories (Xenco) in Midland, Texas, for laboratory analysis of BTEX by United States Environmental Protection Agency (EPA) Method 8021B, total petroleum hydrocarbons (TPH)-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-oil range organics (ORO) by EPA Method SW8015 Modified, and chloride by EPA Method 300.

Laboratory analytical results indicated three soil samples (SS1, SS2, and SS3) exceeded the site-specific remediation action level for chloride. Analytical results are depicted on Figure 2 and summarized in Table 1, and the laboratory analytical reports are attached.

EXCAVATION ACTIVITIES

Based on results of the initial sampling, XTO excavated in the areas around surface samples SS1, SS2, and SS3 on April 30, 2018, to an approximate depth of 3 feet to 4 feet bgs (Figure 3). An LTE scientist field-screened soil using a PID and chloride test strips to direct the excavations and delineate impacted soil laterally and vertically in the excavation. LTE collected soil samples (FS1 through FS3 and WS1 through WS12) from the excavation. The soil samples were collected and handled as previously described and submitted to Xenco in Midland, Texas, for laboratory analysis of BTEX, TPH, and chloride.

Based on results of excavation samples collected on April 30, 2018, XTO excavated additional soil from the three excavation areas between May 25 and June 4, 2018. The final excavations were combined to a total of approximately 3,150 square feet in area and ranged in depth from approximately 3.5 feet in the western excavation to 7 feet bgs in the northern and eastern excavations. Approximately 500 cubic yards of impacted soil were removed by heavy equipment or hand digging from the three excavations. All impacted soil was transported and properly disposed of at R360Environmental Solutions, LLC, Halfway Landfarm in Hobbs, New Mexico.

Although soil samples were collected for laboratory analysis to monitor excavation progress, LTE ultimately presented 15 final sidewall soil samples (WS4, SW5A @ 3.5', SW8A, SW6A, SW13, SW14, SW11A @ 4', SW10A @ 4', SW3A @ 6', SW9A, SW15, SW16, SW2A, SW17, and SW1A) and four floor soil samples (FS4, FS1A @ 7', FS2A @ 7', and FS5) for confirmation that impacted soil was removed from the excavations. The soil samples were collected from locations identified to represent the exposed sidewalls and floor. As such, depth of the samples varied along the sidewalls depending on field observations. Samples were collected and handled as previously described and submitted to Xenco in Midland, Texas, for analysis of BTEX, TPH, and chloride. The excavation footprint and confirmation soil samples are indicated on Figure 2 and laboratory analytical results are provided on Table 1.

ANALYTICAL RESULTS

Laboratory analytical results indicated benzene, total BTEX, and TPH concentrations were compliant with the NMOCD remediation action levels in all 38 samples collected.

As detailed in Table 1, laboratory analytical results indicated initial soil samples SS01, SS02, and SS03 exceeded the site-specific remediation action levels for chloride. The excavations were extended laterally and vertically in those areas until subsequent laboratory analytical results indicated concentrations were compliant with the site-specific remediation action levels. Chloride concentrations ranged from 125 mg/kg in soil sample SW13 to 529 mg/kg in soil sample FS2A @ 7'. Laboratory analytical results are presented on Figure 2 and in Table 1, and the complete laboratory analytical report is included as Attachment 2.

CONCLUSIONS

Laboratory analytical results for the 19 final confirmation soil samples collected from the sidewalls and the bottom of the excavations indicate that concentrations of BTEX, TPH, and chloride are compliant with NMOCD site-specific remediation action levels. XTO has successfully removed 500 cubic yards of impacted soil at the Site and XTO requests no further action for this release. Upon approval of this request, XTO will backfill the excavation with caliche well pad material and recontour the Site. An updated NMOCD Form C-141 is included with Attachment 1.

If you have any questions or comments, please do not hesitate to contact Adrian Baker at (432) 887-1255 or abaker@ltenv.com.

Sincerely,

LT ENVIRONMENTAL, INC.

Adrian Baker
Project Geologist

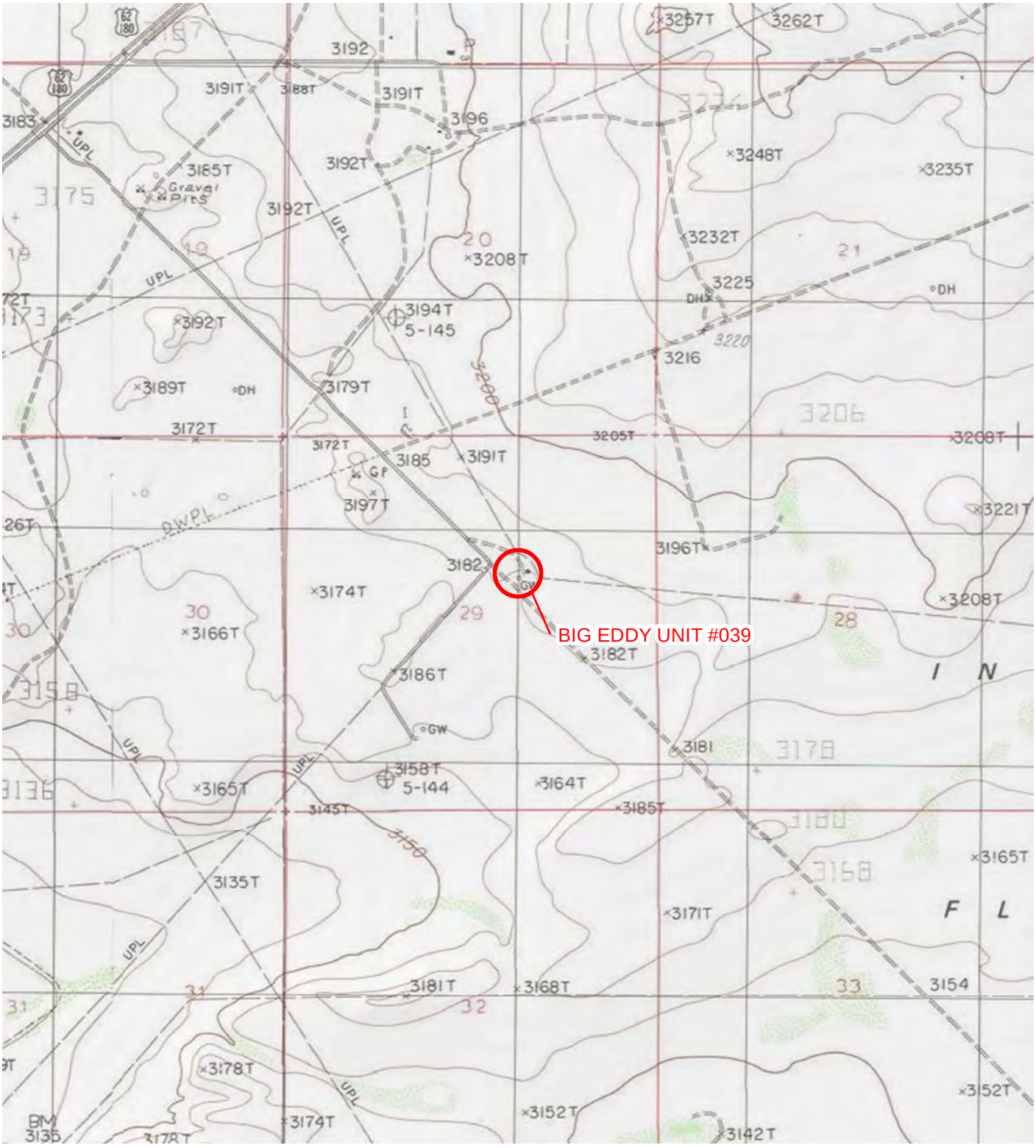
Ashley L. Ager, P.G.
Senior Geologist

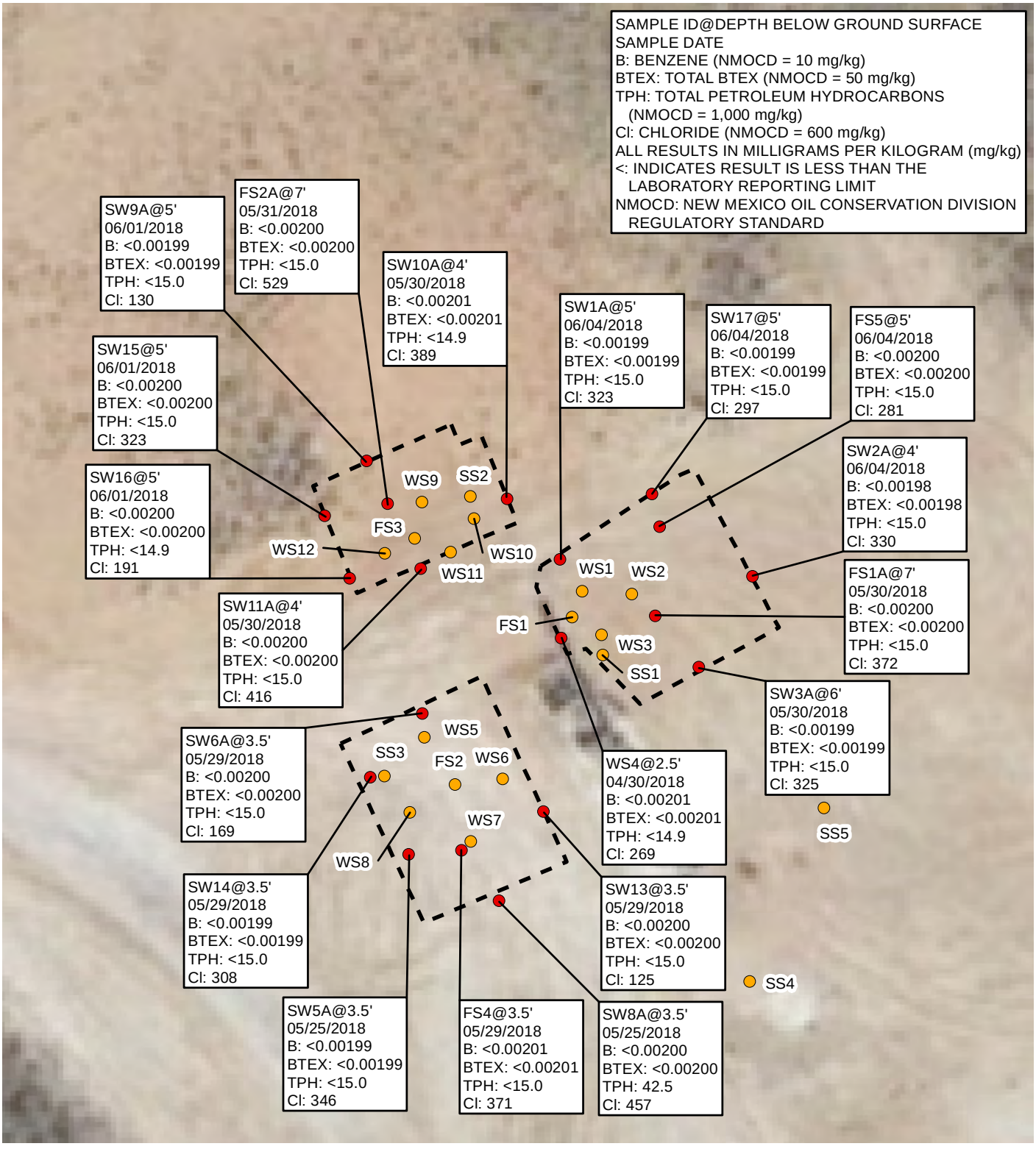
cc: Kyle Littrell, XTO
Jim Amos, BLM
Shelly Tucker, BLM
Maria Pruett, NMOCD

Attachments:

Figure 1	Site Location Map
Figure 2	Soil Sample Locations
Figure 3	Excavation Locations
Table 1	Soil Analytical Results
Attachment 1	Initial/Final NMOCD Form C-141
Attachment 2	Laboratory Analytical Reports

FIGURES


BIG EDDY UNIT #039
3192
3191T
3188T
3196
3185T
3192T
3208T
3194T
5-145
3189T
3179T
3172T
3185
3191T
3197T
3182
3174T
3166T
3186T
3182T
3196T
3208T
3221T
3181
3158T
5-144
3165T
3164T
3185T
3135T
3171T
3168T
3178T
3174T
3152T
3142T
3257T
3262T
3248T
3235T
3232T
3225
3216
3205T
3154
IMAGE COURTESY OF ESRI/USGS
LEGEND
SITE LOCATION
0
2,000
4,000
Feet
N
NEW MEXICO
NOTE: REMEDIATION PERMIT
NUMBER 2RP-3957
FIGURE 1
SITE LOCATION MAP
BIG EDDY UNIT #039
SWNE SEC 29 T21S R28E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.
P:\XTO Energy\GIS\MXD\012918069_BEU-039\012918069_FIG01_SL_2018.mxd



NOTE: REMEDIATION PERMIT NUMBER 2RP-3957

FIGURE 2
SOIL SAMPLE LOCATIONS
BIG EDDY UNIT #039
SWNE SEC 29 T21S R28E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012918069_BEU-039\012918069_FIG02_SITE_2018_180711.mxd

LEGEND

EXCAVATION EXTENT JUNE 2018

IMAGE COURTESY OF GOOGLE EARTH 2017

0 50 100

Feet

N

FIGURE 3
SITE MAP
BIG EDDY UNIT #039
SWNE SEC 29 T21S R28E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

NOTE: REMEDIATION PERMIT NUMBER 2RP-3957

P:\XTO Energy\GIS\MXD\012918069_BEU-039\012918069_FIG03_SITE_2018_180711.mxd

TABLE

TABLE 1
SOIL ANALYTICAL RESULTS
BIG EDDY UNIT #039
REMEDIATION PERMIT NUMBER 2RP-3957
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

Sample Name	Sample Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	C6-C10 Gasoline Range Organics (mg/kg)	C10-C28 Diesel Range Organics (mg/kg)	C28-40 Motor Oil Range Organics (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
Initial Sampling												
SS1	1	02/28/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	897	40.8	938	**5,100**
SS2	1	02/28/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	**4,080**
SS3	1	02/28/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	**5,010**
SS4	1	02/28/2018	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<15.0	32.0	<15.0	32.0	497
SS5	1	02/28/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<14.9	<14.9	<14.9	<14.9	86.3
Initial Excavation												
FS1	3	04/30/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	**705**
WS1	2.5	04/30/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	**747**
WS2	2.5	04/30/2018	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<15.0	<15.0	<15.0	<15.0	**1,190**
WS3	2.5	04/30/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	**1,100**
WS4	2.5	04/30/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<14.9	<14.9	<14.9	<14.9	269
FS2	3	04/30/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<14.9	<14.9	<14.9	<14.9	454
WS5	2.5	04/30/2018	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<15.0	<15.0	<15.0	<15.0	**871**
WS6	2.5	04/30/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	**723**
WS7	2.5	04/30/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	**859**
WS8	2.5	04/30/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	**951**
FS3	4	04/30/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	**758**
WS9	3	04/30/2018	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<15.0	<15.0	<15.0	<15.0	**2,310**
WS10	3	04/30/2018	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<14.9	<14.9	<14.9	<14.9	**679**
WS11	3	04/30/2018	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<15.0	<15.0	<15.0	<15.0	**684**
WS12	3	04/30/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	**639**
Final Excavation												
SW5A @ 3.5'	3.5	05/25/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	346
SW8A	3.5	05/25/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	24.8	17.7	42.5	457
SW6A	3.5	05/29/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	169
SW13	3.5	05/29/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	125
FS4	3.5	05/29/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	371
SW14	3.5	05/29/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	308
SW11A @ 4'	4	05/30/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	416
SW10A @ 4'	4	05/30/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<14.9	<14.9	<14.9	<14.9	389
FS1A @ 7'	7	05/30/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	372
SW3A @ 6'	6	05/30/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	325
FS2A @ 7'	7	05/31/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	529
SW9A	5	06/01/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	130
SW15	5	06/01/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	323
SW16	5	06/01/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<14.9	<14.9	<14.9	<14.9	191
SW2A	4	06/04/2018	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<15.0	<15.0	<15.0	<15.0	330
SW17	5	06/04/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	297
SW1A	5	06/04/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	323
FS5	5	06/04/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	281
NMOCD Remediation Action Levels			10	NE	NE	NE	50	NE	NE	NE	1,000	600

Notes:
bgs - below ground surface
BTEX - benzene, toluene, ethylbenzene, and total xylenes
mg/kg - milligrams per kilogram
NE - not established
NMOCD - New Mexico Oil Conservation Division
TPH - total petroleum hydrocarbons
< - indicates result is less than the stated laboratory method detection limit
Bold indicates result exceeds the applicable regulatory standard.

ATTACHMENT 1: INITIAL/FINAL NMOCD FORM C-141

NM OIL CONSERVATION
ARTESIA DISTRICT
OCT 21 2016
RECEIVED

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

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

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

nAB1629854823 2RP-3957

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: BOPCO, L.P. 260737	Contact: Amy Ruth
Address: 522 W. Mermod, Suite 704 Carlsbad, N.M. 88220	Telephone No. 575-887-7329
Facility Name: Big Eddy Unit #039	Facility Type: Exploration and Production

Surface Owner: Federal	Mineral Owner: Federal	API No. 30-015-20945

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
G	29	21S	28E	1980	North	1980	East	Eddy

Latitude 32.453064° **Longitude** -104.106857°

NATURE OF RELEASE

Type of Release: Produced Water	Volume of Release: 32 bbls	Volume Recovered: 30 bbls
Source of Release: Well head	Date and Hour of Occurrence: 10/4/2016 time unknown	Date and Hour of Discovery: 10/4/2016 approx. 7 am
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Mike Bratcher and Heather Patterson	
By Whom? Amy Ruth	Date and Hour: 10/5/2016 12:59 pm	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.*
N/A

Describe Cause of Problem and Remedial Action Taken.*
Fluids released from wellhead due to tubing valve having been closed. Leaked wellhead stuffing box was repaired.

Describe Area Affected and Cleanup Action Taken.*
The leak affected approximately 845 square feet of caliche pad surrounding wellhead. Free standing fluids were recovered via vacuum truck.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature:

Printed Name: Amy C. Ruth

Title: EHS Remediation Specialist

E-mail Address: ACRuth@basspet.com

Date: 10/21/2016 Phone: 432-661-0571

OIL CONSERVATION DIVISION

Approved by Environmental Specialist:

Approval Date: 10/24/16 Expiration Date: N/A

Conditions of Approval: Attached ☐
Remediation per O.C.D. Rules & Guidelines
SUBMIT REMEDIATION PROPOSAL NO
LATER THAN: 11/24/16

2RP-3957

* Attach Additional Sheets If Necessary

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

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

Form C-141
Revised April 3, 2017

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company XTO Energy	Contact: Kyle Littrell
Address 3104 E Greene Street, Carlsbad, NM 88220	Telephone No: 432-221-7331
Facility Name: Big Eddy Unit #039	Facility Type: Exploration and Production

Surface Owner Federal	Mineral Owner: Federal	API No. 30-015-20945

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
G	29	21S	28E	1980	North	1980	East	Eddy

Latitude 32.453064° **Longitude** -104.106857° NAD83

NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 32 bbls	Volume Recovered 30 bbls
Source of Release: Well head	Date and Hour of Occurrence 10/4/2016 time unknown	Date and Hour of Discovery 10/4/2016 approx. 7am
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Mike Bratcher and Heather Patterson	
By Whom? Amy Ruth	Date and Hour: 10/5/2016 12:59 pm	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse: N/A	

If a Watercourse was Impacted, Describe Fully.*
N/A

Describe Cause of Problem and Remedial Action Taken.*
Fluids released from wellhead due to tubing valve having been closed. Leaked wellhead stuffing box was repaired.

Describe Area Affected and Cleanup Action Taken.* The leak affected approximately 845 square feet of caliche pad surrounding wellhead. Free standing fluids were recovered vis vacuum truck.
Between February 28, 2018 and June 4, 2018, XTO collected soil samples and conducted excavation activities at the Site. Approximately 500 cubic yards of impacted soil were removed by heavy equipment or hand digging from the three excavations. Although soil samples were collected for laboratory analysis to monitor excavation progress, LTE ultimately presents 19 confirmation soil samples. Laboratory analytical results for the 19 soil samples indicated BTEX, TPH, and chloride concentrations did not exceed the NMOCD remediation action levels for the Site, based on the confirmation sampling results and the volume of soil removed, XTO requests no further action for this release. Once this request is granted, XTO will back fill and recontour the well pad.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature:	OIL CONSERVATION DIVISION	
Printed Name: Kyle Littrell	Approved by Environmental Specialist: Brittany Hall	
Title: SH&E Coordinator	Approval Date: 3/16/2023	Expiration Date: N/A
E-mail Address: Kyle_Littrell@xtoenergy.com	Conditions of Approval: N/A	Attached ☐
Date: 8/01/2018 Phone: 432-221-7331		

* Attach Additional Sheets If Necessary

ATTACHMENT 2: LABORATORY ANALYTICAL REPORTS

Analytical Report 577918

for

LT Environmental, Inc.

Project Manager: Adrian Baker

BEU-39 / 2RP-3957

09-MAR-18

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-18-24), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab code: TX01468):
Texas (T104704295-17-16), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab code: TX00127): Texas (T104704221-17-12)
Xenco-Lubbock (EPA Lab code: TX00139): Texas (T104704219-17-16)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-18-14)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-17-3)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco-Atlanta (LELAP Lab ID #04176)

09-MAR-18

Project Manager: **Adrian Baker**
LT Environmental, Inc.
4600 W. 60th Avenue
Arvada, CO 80003

Reference: XENCO Report No(s): **577918**
BEU-39 / 2RP-3957
Project Address: NM

Adrian Baker:

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) 577918. 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. 577918 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,

Jessica Kramer

Jessica Kramer
Project Assistant

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

Sample Cross Reference 577918

LT Environmental, Inc., Arvada, CO

BEU-39 / 2RP-3957

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS1	S	02-28-18 12:17	12 In	577918-001
SS2	S	02-28-18 12:25	12 In	577918-002
SS3	S	02-28-18 12:35	12 In	577918-003
SS4	S	02-28-18 12:45	12 In	577918-004
SS5	S	02-28-18 12:55	12 In	577918-005

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: BEU-39 / 2RP-3957

Project ID:
Work Order Number(s): *577918*

Report Date: *09-MAR-18*
Date Received: *03/01/2018*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3042980 BTEX by EPA 8021B

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

Lab Sample ID 577918-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 577918-001, -002, -003, -004, -005.

The Laboratory Control Sample for Toluene, Benzene, m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.

Certificate of Analysis Summary 577918

LT Environmental, Inc., Arvada, CO

Project Name: BEU-39 / 2RP-3957

Project Id:
Contact: Adrian Baker
Project Location: NM

Date Received in Lab: Thu Mar-01-18 01:10 pm
Report Date: 09-MAR-18
Project Manager: Jessica Kramer

Analysis Requested											
	Lab Id:	577918-001		577918-002		577918-003		577918-004		577918-005	
	Field Id:	SS1		SS2		SS3		SS4		SS5	
	Depth:	12- In		12- In		12- In		12- In		12- In	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-28-18 12:17		Feb-28-18 12:25		Feb-28-18 12:35		Feb-28-18 12:45		Feb-28-18 12:55	
BTEX by EPA 8021B	***Extracted:***	Mar-06-18 08:30		Mar-06-18 08:30		Mar-06-18 08:30		Mar-06-18 08:30		Mar-06-18 08:30	
	Analyzed:	Mar-07-18 14:37		Mar-07-18 14:37		Mar-07-18 14:37		Mar-07-18 14:37		Mar-07-18 14:37	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200	<0.00202	0.00202	<0.00199	0.00199
Toluene		<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200	<0.00202	0.00202	<0.00199	0.00199
Ethylbenzene		<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200	<0.00202	0.00202	<0.00199	0.00199
m,p-Xylenes		<0.00402	0.00402	<0.00398	0.00398	<0.00399	0.00399	<0.00403	0.00403	<0.00398	0.00398
o-Xylene		<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200	<0.00202	0.00202	<0.00199	0.00199
Total Xylenes		<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200	<0.00202	0.00202	<0.00199	0.00199
Total BTEX		<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200	<0.00202	0.00202	<0.00199	0.00199
Inorganic Anions by EPA 300	***Extracted:***	Mar-07-18 18:30		Mar-07-18 18:30		Mar-07-18 18:30		Mar-07-18 18:30		Mar-07-18 18:30	
	Analyzed:	Mar-08-18 17:40		Mar-08-18 17:56		Mar-08-18 18:06		Mar-08-18 18:29		Mar-08-18 18:01	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		5100	49.5	4080	99.8	5010	49.8	497	24.8	86.3	24.9
TPH by SW8015 Mod	***Extracted:***	Mar-07-18 10:00		Mar-07-18 10:00		Mar-07-18 10:00		Mar-07-18 10:00		Mar-07-18 10:00	
	Analyzed:	Mar-07-18 19:04		Mar-07-18 19:30		Mar-07-18 19:57		Mar-07-18 20:22		Mar-07-18 21:41	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9
Diesel Range Organics (DRO)		897	15.0	<15.0	15.0	<15.0	15.0	32.0	15.0	<14.9	14.9
Oil Range Hydrocarbons (ORO)		40.8	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9
Total TPH		938	15.0	<15.0	15.0	<15.0	15.0	32.0	15.0	<14.9	14.9

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Jessica Kramer
Project Assistant

Certificate of Analytical Results 577918

LT Environmental, Inc., Arvada, CO

BEU-39 / 2RP-3957

Sample Id:	**SS1**	Matrix:	Soil	Date Received:	03.01.18 13.10
Lab Sample Id:	577918-001	Date Collected:	02.28.18 12.17	Sample Depth:	12 In

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	03.07.18 18.30	Basis:	Wet Weight
Seq Number:	3043154				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**5100**	49.5	mg/kg	03.08.18 17.40		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	03.07.18 10.00	Basis:	Wet Weight
Seq Number:	3043121				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	03.07.18 19.04	U	1
Diesel Range Organics (DRO)	C10C28DRO	**897**	15.0	mg/kg	03.07.18 19.04		1
Oil Range Hydrocarbons (ORO)	PHCG2835	**40.8**	15.0	mg/kg	03.07.18 19.04		1
Total TPH	PHC635	**938**	15.0	mg/kg	03.07.18 19.04		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	03.07.18 19.04	
o-Terphenyl	84-15-1	102	%	70-135	03.07.18 19.04	

Certificate of Analytical Results 577918

LT Environmental, Inc., Arvada, CO

BEU-39 / 2RP-3957

Sample Id:	**SS1**	Matrix:	Soil	Date Received:	03.01.18 13.10
Lab Sample Id:	577918-001	Date Collected:	02.28.18 12.17	Sample Depth:	12 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	03.06.18 08.30	Basis:	Wet Weight
Seq Number:	3042980				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	03.07.18 14.37	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	03.07.18 14.37	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	03.07.18 14.37	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	03.07.18 14.37	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	03.07.18 14.37	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	03.07.18 14.37	U	1
Total BTEX		<0.00201	0.00201	mg/kg	03.07.18 14.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	112	%	70-130	03.07.18 14.37	
1,4-Difluorobenzene	540-36-3	76	%	70-130	03.07.18 14.37	

Certificate of Analytical Results 577918

LT Environmental, Inc., Arvada, CO

BEU-39 / 2RP-3957

Sample Id:	**SS2**	Matrix:	Soil	Date Received:	03.01.18 13.10
Lab Sample Id:	577918-002	Date Collected:	02.28.18 12.25	Sample Depth:	12 In

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	03.07.18 18.30	Basis:	Wet Weight
Seq Number:	3043154				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4080**	99.8	mg/kg	03.08.18 17.56		20

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	03.07.18 10.00	Basis:	Wet Weight
Seq Number:	3043121				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	03.07.18 19.30	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	03.07.18 19.30	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	03.07.18 19.30	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	03.07.18 19.30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	03.07.18 19.30	
o-Terphenyl	84-15-1	102	%	70-135	03.07.18 19.30	

Certificate of Analytical Results 577918

LT Environmental, Inc., Arvada, CO

BEU-39 / 2RP-3957

Sample Id:	**SS2**	Matrix:	Soil	Date Received:	03.01.18 13.10
Lab Sample Id:	577918-002	Date Collected:	02.28.18 12.25	Sample Depth:	12 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	03.06.18 08.30	Basis:	Wet Weight
Seq Number:	3042980				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.07.18 14.37	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.07.18 14.37	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	03.07.18 14.37	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	03.07.18 14.37	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	03.07.18 14.37	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	03.07.18 14.37	U	1
Total BTEX		<0.00199	0.00199	mg/kg	03.07.18 14.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	124	%	70-130	03.07.18 14.37	
1,4-Difluorobenzene	540-36-3	74	%	70-130	03.07.18 14.37	

Certificate of Analytical Results 577918

LT Environmental, Inc., Arvada, CO

BEU-39 / 2RP-3957

Sample Id:	**SS3**	Matrix:	Soil	Date Received:	03.01.18 13.10
Lab Sample Id:	577918-003	Date Collected:	02.28.18 12.35	Sample Depth:	12 In

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	03.07.18 18.30	Basis:	Wet Weight
Seq Number:	3043154				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**5010**	49.8	mg/kg	03.08.18 18.06		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	03.07.18 10.00	Basis:	Wet Weight
Seq Number:	3043121				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	03.07.18 19.57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	03.07.18 19.57	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	03.07.18 19.57	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	03.07.18 19.57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	03.07.18 19.57	
o-Terphenyl	84-15-1	103	%	70-135	03.07.18 19.57	

Certificate of Analytical Results 577918

LT Environmental, Inc., Arvada, CO

BEU-39 / 2RP-3957

Sample Id:	**SS3**	Matrix:	Soil	Date Received:	03.01.18 13.10
Lab Sample Id:	577918-003	Date Collected:	02.28.18 12.35	Sample Depth:	12 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	03.06.18 08.30	Basis:	Wet Weight
Seq Number:	3042980				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.07.18 14.37	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.07.18 14.37	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.07.18 14.37	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.07.18 14.37	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.07.18 14.37	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.07.18 14.37	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.07.18 14.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	111	%	70-130	03.07.18 14.37	
1,4-Difluorobenzene	540-36-3	72	%	70-130	03.07.18 14.37	

Certificate of Analytical Results 577918

LT Environmental, Inc., Arvada, CO

BEU-39 / 2RP-3957

Sample Id:	**SS4**	Matrix:	Soil	Date Received:	03.01.18 13.10
Lab Sample Id:	577918-004	Date Collected:	02.28.18 12.45	Sample Depth:	12 In

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	03.07.18 18.30	Basis:	Wet Weight
Seq Number:	3043154				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**497**	24.8	mg/kg	03.08.18 18.29		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	03.07.18 10.00	Basis:	Wet Weight
Seq Number:	3043121				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	03.07.18 20.22	U	1
Diesel Range Organics (DRO)	C10C28DRO	**32.0**	15.0	mg/kg	03.07.18 20.22		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	03.07.18 20.22	U	1
Total TPH	PHC635	**32.0**	15.0	mg/kg	03.07.18 20.22		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	03.07.18 20.22	
o-Terphenyl	84-15-1	98	%	70-135	03.07.18 20.22	

Certificate of Analytical Results 577918

LT Environmental, Inc., Arvada, CO

BEU-39 / 2RP-3957

Sample Id:	**SS4**	Matrix:	Soil	Date Received:	03.01.18 13.10
Lab Sample Id:	577918-004	Date Collected:	02.28.18 12.45	Sample Depth:	12 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	03.06.18 08.30	Basis:	Wet Weight
Seq Number:	3042980				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	03.07.18 14.37	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	03.07.18 14.37	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	03.07.18 14.37	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	03.07.18 14.37	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	03.07.18 14.37	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	03.07.18 14.37	U	1
Total BTEX		<0.00202	0.00202	mg/kg	03.07.18 14.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	112	%	70-130	03.07.18 14.37	
1,4-Difluorobenzene	540-36-3	79	%	70-130	03.07.18 14.37	

Certificate of Analytical Results 577918

LT Environmental, Inc., Arvada, CO

BEU-39 / 2RP-3957

Sample Id:	**SS5**	Matrix:	Soil	Date Received:	03.01.18 13.10
Lab Sample Id:	577918-005	Date Collected:	02.28.18 12.55	Sample Depth:	12 In

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	03.07.18 18.30	Basis:	Wet Weight
Seq Number:	3043154				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**86.3**	24.9	mg/kg	03.08.18 18.01		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	03.07.18 10.00	Basis:	Wet Weight
Seq Number:	3043121				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	03.07.18 21.41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	03.07.18 21.41	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<14.9	14.9	mg/kg	03.07.18 21.41	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	03.07.18 21.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	03.07.18 21.41	
o-Terphenyl	84-15-1	92	%	70-135	03.07.18 21.41	

Certificate of Analytical Results 577918

LT Environmental, Inc., Arvada, CO

BEU-39 / 2RP-3957

Sample Id:	**SS5**	Matrix:	Soil	Date Received:	03.01.18 13.10
Lab Sample Id:	577918-005	Date Collected:	02.28.18 12.55	Sample Depth:	12 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	03.06.18 08.30	Basis:	Wet Weight
Seq Number:	3042980				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.07.18 14.37	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.07.18 14.37	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	03.07.18 14.37	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	03.07.18 14.37	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	03.07.18 14.37	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	03.07.18 14.37	U	1
Total BTEX		<0.00199	0.00199	mg/kg	03.07.18 14.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	72	%	70-130	03.07.18 14.37	
4-Bromofluorobenzene	460-00-4	114	%	70-130	03.07.18 14.37	

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 577918

LT Environmental, Inc.

BEU-39 / 2RP-3957

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3043154 Matrix: Solid Date Prep: 03.07.18
MB Sample Id: 7640435-1-BLK LCS Sample Id: 7640435-1-BKS LCSD Sample Id: 7640435-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	247	99	242	97	90-110	2	20	mg/kg	03.08.18 12:07	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3043154 Matrix: Soil Date Prep: 03.07.18
Parent Sample Id: 577917-001 MS Sample Id: 577917-001 S MSD Sample Id: 577917-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	12.6	250	285	109	286	109	90-110	0	20	mg/kg	03.08.18 12:23	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3043154 Matrix: Soil Date Prep: 03.07.18
Parent Sample Id: 577917-003 MS Sample Id: 577917-003 S MSD Sample Id: 577917-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1230	250	1420	76	1430	80	90-110	1	20	mg/kg	03.08.18 13:38	X

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3043121 Matrix: Solid Date Prep: 03.07.18
MB Sample Id: 7640357-1-BLK LCS Sample Id: 7640357-1-BKS LCSD Sample Id: 7640357-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	1040	104	1010	101	70-135	3	35	mg/kg	03.07.18 14:33	
Diesel Range Organics (DRO)	<15.0	1000	1090	109	1030	103	70-135	6	35	mg/kg	03.07.18 14:33	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	104		115		114		70-135	%	03.07.18 14:33
o-Terphenyl	107		113		109		70-135	%	03.07.18 14:33

MS/MSD Percent Recovery [D] = 100*(C-A) / B LCS = Laboratory Control Sample MS = Matrix Spike
Relative Percent Difference RPD = 200* | (C-E) / (C+E) | A = Parent Result B = Spike Added
LCS/LCSD Recovery [D] = 100 * (C) / [B] C = MS/LCS Result D = MSD/LCSD % Rec
E = MSD/LCSD Result

QC Summary 577918

LT Environmental, Inc.

BEU-39 / 2RP-3957

Analytical Method: TPH by SW8015 Mod | Prep Method: TX1005P
Seq Number: 3043121 | Matrix: Soil | Date Prep: 03.07.18
Parent Sample Id: 577916-005 | MS Sample Id: 577916-005 S | MSD Sample Id: 577916-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	999	1050	105	1050	105	70-135	0	35	mg/kg	03.07.18 15:52	
Diesel Range Organics (DRO)	103	999	1160	106	1170	107	70-135	1	35	mg/kg	03.07.18 15:52	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	118		120		70-135	%	03.07.18 15:52
o-Terphenyl	112		113		70-135	%	03.07.18 15:52

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3042980 | Matrix: Solid | Date Prep: 03.06.18
MB Sample Id: 7640283-1-BLK | LCS Sample Id: 7640283-1-BKS | LCSD Sample Id: 7640283-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.100	100	0.100	100	70-130	0	35	mg/kg	03.07.18 14:37	
Toluene	<0.00200	0.0998	0.0933	93	0.0938	94	70-130	1	35	mg/kg	03.07.18 14:37	
Ethylbenzene	<0.00200	0.0998	0.0970	97	0.0975	98	70-130	1	35	mg/kg	03.07.18 14:37	
m,p-Xylenes	<0.00399	0.200	0.190	95	0.191	96	70-130	1	35	mg/kg	03.07.18 14:37	
o-Xylene	<0.00200	0.0998	0.0957	96	0.0964	96	70-130	1	35	mg/kg	03.07.18 14:37	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	83		71		72		70-130	%	03.07.18 14:37
4-Bromofluorobenzene	109		125		125		70-130	%	03.07.18 14:37

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3042980 | Matrix: Soil | Date Prep: 03.06.18
Parent Sample Id: 577918-001 | MS Sample Id: 577918-001 S | MSD Sample Id: 577918-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.0592	59	0.0551	55	70-130	7	35	mg/kg	03.07.18 14:37	X
Toluene	<0.00202	0.101	0.0540	53	0.0428	43	70-130	23	35	mg/kg	03.07.18 14:37	X
Ethylbenzene	<0.00202	0.101	0.0499	49	0.0410	41	70-130	20	35	mg/kg	03.07.18 14:37	X
m,p-Xylenes	<0.00403	0.202	0.0960	48	0.0685	34	70-130	33	35	mg/kg	03.07.18 14:37	X
o-Xylene	<0.00202	0.101	0.0491	49	0.0425	43	70-130	14	35	mg/kg	03.07.18 14:37	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	71		91		70-130	%	03.07.18 14:37
4-Bromofluorobenzene	91		121		70-130	%	03.07.18 14:37

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

[D] = 100*(C-A) / B
RPD = 200* | (C-E) / (C+E) |
[D] = 100 * (C) / [B]

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

Final 1.000

CHAIN OF CUSTODY

Page 1 Of 1

Revision 2016.1

XENCO LABORATORIES

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San Antonio, TX (210) 509-3334
Phoenix, AZ (480) 355-0900
Service Center - Baton Rouge, LA (832) 712-8143
Service Center- Amarillo, TX (806)678-4514
Service Center- Hobbs, NM (575) 392-7550
www.xenco.com

Xenco Quote #

Xenco Job # 577918

Client / Reporting Information

Company Name / Branch: LE/permian
Company Address: 3300 N. A Street Bld 1 #103
Email: abaker@tetr.com
Phone No:
Project Contact: Adrian Baker
Samplers's Name: AC

Project Information

Project Name/Number: BEU-39 / 2RP-3957
Project Location:
Invoice To:
PO Number: 30-015-20945

Analytical Information

Matrix Codes

W = Water
S = Soil/Sed/Solid
GW = Ground Water
DW = Drinking Water
P = Product
SW = Surface Water
SL - Sludge
OW = Ocean/Sea Water
WI = Wipe
O = Oil
WW = Waste Water
A = Air

No.	Field ID / Point of Collection	Collection: Sample Depth	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	BTEX 8021	TPH 8015	Chloride 300.1	Field Comments
1	SS1	1'4	2/28	1217	S	1								X	X	X	X	
2	SS2			1225														
3	SS3			1235														
4	SS4			1245														
5	SS5			1255														
6																		
7																		
8																		
9																		
10																		

Turnaround Time (Business days)

- [ ] Same Day TAT
- [ ] 5 Day TAT
- [ ] Next Day EMERGENCY
- [ ] 7 Day TAT
- [ ] 2 Day EMERGENCY
- [ ] Contract TAT
- [ ] 3 Day EMERGENCY
- [X] Standard

TAT Starts Day received by Lab, if received by 5:00 pm

Data Deliverable Information

- [ ] Level II Std QC
- [ ] Level IV (Full Data Pkg /raw data)
- [ ] Level III Std QC+ Forms
- [ ] TRRP Level IV
- [ ] Level 3 (CLP Forms)
- [ ] UST / RG -411
- [ ] Level II Report with TRRP checklist

Notes:

Temp: 3.4 IR ID:R-8
CF:(0-6: -0.2°C)
(6-23: +0.2°C)
Corrected Temp: 3.2

FED-EX / UPS: Tracking #

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by Sampler / Relinquished by	Date Time	Received By	Relinquished By	Date Time	Received By
1	AC	2/28 1530	1	2	2/28 750	2
3		3/1 1310	3	4		4
5			5	Custody Seal #	Preserved where applicable	On Ice / Cooler Temp. / Thermo. Corr. Factor

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 03/01/2018 01:10:00 PM

Work Order #: 577918

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	3.2	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**	
#5 Custody Seals intact on sample bottles?	**N/A**	
#6*Custody Seals Signed and dated?	**N/A**	
#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?	**No**	TPH received in bulk jars
#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: Connie Hernandez Date: 03/01/2018

Checklist reviewed by: Jessica Kramer Date: 03/01/2018

Jessica Kramer

Analytical Report 584936

for

LT Environmental, Inc.

Project Manager: Adrian Baker

BEU 39

2RP-3957

18-JUN-18

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-18-26), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-17-16), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-17-12)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-17-16)
Xenco-Odessa (EPA Lab Code: TX00158): Texas (T104704400-18-15)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-17-3)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Phoenix Mobile (EPA Lab Code: AZ00901): Arizona (AZM757)
Xenco-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429)
Xenco-Lakeland: Florida (E84098)

18-JUN-18

Project Manager: **Adrian Baker**
LT Environmental, Inc.
4600 W. 60th Avenue
Arvada, CO 80003

Reference: XENCO Report No(s): **584936**
BEU 39
Project Address: New Mexico

Adrian Baker:

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) 584936. 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. 584936 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,

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

Sample Cross Reference 584936

LT Environmental, Inc., Arvada, CO

BEU 39

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS 1	S	04-30-18 14:20	3 ft	584936-001
WS1	S	04-30-18 14:28	2.5 ft	584936-002
WS2	S	04-30-18 14:32	2.5 ft	584936-003
WS3	S	04-30-18 14:38	2.5 ft	584936-004
WS4	S	04-30-18 14:47	2.5 ft	584936-005
FS2	S	04-30-18 14:42	3 ft	584936-006
WS5	S	04-30-18 14:51	2.5 ft	584936-007
WS6	S	04-30-18 14:55	2.5 ft	584936-008
WS7	S	04-30-18 15:03	2.5 ft	584936-009
WS8	S	04-30-18 15:07	2.5 ft	584936-010
FS3	S	04-30-18 15:11	4 ft	584936-011
WS9	S	04-30-18 15:15	3 ft	584936-012
WS10	S	04-30-18 15:20	3 ft	584936-013
WS11	S	04-30-18 15:25	3 ft	584936-014
WS12	S	04-30-18 15:30	3 ft	584936-015

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: BEU 39

Project ID: *2RP-3957*
Work Order Number(s): *584936*

Report Date: *18-JUN-18*
Date Received: *05/04/2018*

Sample receipt non conformances and comments:

Per client email request change sample 012 name from WSP to WS9 JKR 06/18/18

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3049433 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3049669 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analysis Summary 584936

LT Environmental, Inc., Arvada, CO

Project Name: BEU 39

Project Id: 2RP-3957
Contact: Adrian Baker
Project Location: New Mexico

Date Received in Lab: Fri May-04-18 10:10 am
Report Date: 18-JUN-18
Project Manager: Jessica Kramer

Analysis Requested	*Lab Id:*	584936-001		584936-002		584936-003		584936-004		584936-005		584936-006	
	Field Id:	FS 1		WS1		WS2		WS3		WS4		FS2	
	Depth:	3- ft		2.5- ft		2.5- ft		2.5- ft		2.5- ft		3- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Apr-30-18 14:20		Apr-30-18 14:28		Apr-30-18 14:32		Apr-30-18 14:38		Apr-30-18 14:47		Apr-30-18 14:42	
BTEX by EPA 8021B	*Extracted:*	May-08-18 17:00		May-08-18 17:00		May-08-18 17:00		May-08-18 17:00		May-08-18 17:00		May-09-18 08:00	
	Analyzed:	May-09-18 03:55		May-09-18 04:17		May-09-18 04:38		May-09-18 05:00		May-09-18 05:43		May-09-18 14:55	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00199	0.00199	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00201	0.00201	<0.00201	0.00201
Toluene		<0.00199	0.00199	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00201	0.00201	<0.00201	0.00201
Ethylbenzene		<0.00199	0.00199	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00201	0.00201	<0.00201	0.00201
m,p-Xylenes		<0.00398	0.00398	<0.00399	0.00399	<0.00403	0.00403	<0.00401	0.00401	<0.00402	0.00402	<0.00402	0.00402
o-Xylene		<0.00199	0.00199	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00201	0.00201	<0.00201	0.00201
Total Xylenes		<0.00199	0.00199	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00201	0.00201	<0.00201	0.00201
Total BTEX		<0.00199	0.00199	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00201	0.00201	<0.00201	0.00201
Inorganic Anions by EPA 300	*Extracted:*	May-08-18 12:00		May-08-18 12:00		May-08-18 12:00		May-08-18 12:00		May-08-18 12:00		May-08-18 12:00	
	Analyzed:	May-10-18 18:39		May-10-18 18:45		May-10-18 18:51		May-10-18 19:09		May-10-18 19:14		May-10-18 19:20	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		705	5.00	747	4.99	1190	24.8	1100	5.00	269	4.99	454	5.00
TPH by SW8015 Mod	*Extracted:*	May-05-18 10:00		May-05-18 10:00		May-05-18 10:00		May-05-18 10:00		May-05-18 10:00		May-05-18 10:00	
	Analyzed:	May-06-18 02:54		May-06-18 04:15		May-06-18 04:44		May-06-18 05:11		May-06-18 05:38		May-06-18 06:03	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9	<14.9	14.9
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9	<14.9	14.9
Oil Range Hydrocarbons (ORO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9	<14.9	14.9
Total TPH		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9	<14.9	14.9

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 584936

LT Environmental, Inc., Arvada, CO

Project Name: BEU 39

Project Id: 2RP-3957
Contact: Adrian Baker
Project Location: New Mexico

Date Received in Lab: Fri May-04-18 10:10 am
Report Date: 18-JUN-18
Project Manager: Jessica Kramer

Analysis Requested	*Lab Id:*	584936-007		584936-008		584936-009		584936-010		584936-011		584936-012	
	Field Id:	WS5		WS6		WS7		WS8		FS3		WS9	
	Depth:	2.5- ft		2.5- ft		2.5- ft		2.5- ft		4- ft		3- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Apr-30-18 14:51		Apr-30-18 14:55		Apr-30-18 15:03		Apr-30-18 15:07		Apr-30-18 15:11		Apr-30-18 15:15	
BTEX by EPA 8021B	*Extracted:*	May-09-18 08:00		May-09-18 08:00		May-09-18 08:00		May-09-18 08:00		May-09-18 08:00		May-09-18 08:00	
	Analyzed:	May-09-18 15:16		May-09-18 15:38		May-09-18 15:59		May-09-18 16:21		May-09-18 16:46		May-09-18 17:08	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00202	0.00202	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00198	0.00198
Toluene		<0.00202	0.00202	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00198	0.00198
Ethylbenzene		<0.00202	0.00202	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00198	0.00198
m,p-Xylenes		<0.00404	0.00404	<0.00398	0.00398	<0.00399	0.00399	<0.00401	0.00401	<0.00402	0.00402	<0.00397	0.00397
o-Xylene		<0.00202	0.00202	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00198	0.00198
Total Xylenes		<0.00202	0.00202	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00198	0.00198
Total BTEX		<0.00202	0.00202	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00198	0.00198
Inorganic Anions by EPA 300	*Extracted:*	May-08-18 12:00		May-08-18 12:00		May-08-18 12:00		May-08-18 12:00		May-08-18 12:00		May-08-18 12:00	
	Analyzed:	May-10-18 19:26		May-10-18 19:32		May-10-18 19:56		May-10-18 20:02		May-10-18 20:20		May-10-18 20:26	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		871	4.95	723	5.00	859	4.95	951	5.00	758	25.0	2310	24.9
TPH by SW8015 Mod	*Extracted:*	May-05-18 10:00		May-05-18 10:00		May-05-18 10:00		May-05-18 10:00		May-05-18 10:00		May-05-18 10:00	
	Analyzed:	May-06-18 06:29		May-06-18 06:58		May-06-18 07:24		May-06-18 07:50		May-06-18 09:10		May-06-18 09:36	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Oil Range Hydrocarbons (ORO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Total TPH		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0

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Jessica Kramer
Project Assistant

Final 1.001

Certificate of Analysis Summary 584936

LT Environmental, Inc., Arvada, CO

Project Name: BEU 39

Project Id: 2RP-3957
Contact: Adrian Baker
Project Location: New Mexico

Date Received in Lab: Fri May-04-18 10:10 am
Report Date: 18-JUN-18
Project Manager: Jessica Kramer

Analysis Requested									
	Lab Id:	584936-013		584936-014		584936-015			
	Field Id:	WS10		WS11		WS12			
	Depth:	3- ft		3- ft		3- ft			
	Matrix:	SOIL		SOIL		SOIL			
	Sampled:	Apr-30-18 15:20		Apr-30-18 15:25		Apr-30-18 15:30			
BTEX by EPA 8021B	***Extracted:***	May-09-18 08:00		May-08-18 17:00		May-09-18 08:00			
	Analyzed:	May-09-18 17:29		May-09-18 05:21		May-09-18 17:51			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Benzene		<0.00202	0.00202	<0.00198	0.00198	<0.00199	0.00199		
Toluene		<0.00202	0.00202	<0.00198	0.00198	<0.00199	0.00199		
Ethylbenzene		<0.00202	0.00202	<0.00198	0.00198	<0.00199	0.00199		
m,p-Xylenes		<0.00403	0.00403	<0.00397	0.00397	<0.00398	0.00398		
o-Xylene		<0.00202	0.00202	<0.00198	0.00198	<0.00199	0.00199		
Total Xylenes		<0.00202	0.00202	<0.00198	0.00198	<0.00199	0.00199		
Total BTEX		<0.00202	0.00202	<0.00198	0.00198	<0.00199	0.00199		
Inorganic Anions by EPA 300	***Extracted:***	May-08-18 12:00		May-08-18 12:00		May-08-18 12:00			
	Analyzed:	May-10-18 20:32		May-10-18 20:38		May-10-18 20:44			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Chloride		679	4.95	684	25.0	639	24.9		
TPH by SW8015 Mod	***Extracted:***	May-05-18 10:00		May-05-18 10:00		May-05-18 10:00			
	Analyzed:	May-06-18 10:03		May-06-18 10:29		May-06-18 10:56			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Gasoline Range Hydrocarbons (GRO)		<14.9	14.9	<15.0	15.0	<15.0	15.0		
Diesel Range Organics (DRO)		<14.9	14.9	<15.0	15.0	<15.0	15.0		
Oil Range Hydrocarbons (ORO)		<14.9	14.9	<15.0	15.0	<15.0	15.0		
Total TPH		<14.9	14.9	<15.0	15.0	<15.0	15.0		

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Jessica Kramer
Project Assistant

Final 1.001

Certificate of Analytical Results 584936

LT Environmental, Inc., Arvada, CO

BEU 39

Sample Id:	**FS 1**	Matrix:	Soil	Date Received:	05.04.18 10.10
Lab Sample Id:	584936-001	Date Collected:	04.30.18 14.20	Sample Depth:	3 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.08.18 12.00	Basis:	Wet Weight
Seq Number:	3049732				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**705**	5.00	mg/kg	05.10.18 18.39		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.05.18 10.00	Basis:	Wet Weight
Seq Number:	3049201				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.06.18 02.54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.06.18 02.54	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	05.06.18 02.54	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.06.18 02.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	05.06.18 02.54	
o-Terphenyl	84-15-1	103	%	70-135	05.06.18 02.54	

Certificate of Analytical Results 584936

LT Environmental, Inc., Arvada, CO

BEU 39

Sample Id:	**FS 1**	Matrix:	Soil	Date Received:	05.04.18 10.10
Lab Sample Id:	584936-001	Date Collected:	04.30.18 14.20	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	05.08.18 17.00	Basis:	Wet Weight
Seq Number:	3049433				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	05.09.18 03.55	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	05.09.18 03.55	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	05.09.18 03.55	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	05.09.18 03.55	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	05.09.18 03.55	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	05.09.18 03.55	U	1
Total BTEX		<0.00199	0.00199	mg/kg	05.09.18 03.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	88	%	70-130	05.09.18 03.55	
1,4-Difluorobenzene	540-36-3	89	%	70-130	05.09.18 03.55	

Certificate of Analytical Results 584936

LT Environmental, Inc., Arvada, CO

BEU 39

Sample Id:	**WS1**	Matrix:	Soil	Date Received:	05.04.18 10.10
Lab Sample Id:	584936-002	Date Collected:	04.30.18 14.28	Sample Depth:	2.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.08.18 12.00	Basis:	Wet Weight
Seq Number:	3049732				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**747**	4.99	mg/kg	05.10.18 18.45		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.05.18 10.00	Basis:	Wet Weight
Seq Number:	3049201				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.06.18 04.15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.06.18 04.15	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	05.06.18 04.15	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.06.18 04.15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	05.06.18 04.15	
o-Terphenyl	84-15-1	90	%	70-135	05.06.18 04.15	

Certificate of Analytical Results 584936

LT Environmental, Inc., Arvada, CO

BEU 39

Sample Id:	**WS1**	Matrix:	Soil	Date Received:	05.04.18 10.10
Lab Sample Id:	584936-002	Date Collected:	04.30.18 14.28	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	05.08.18 17.00	Basis:	Wet Weight
Seq Number:	3049433				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.09.18 04.17	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.09.18 04.17	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.09.18 04.17	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	05.09.18 04.17	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.09.18 04.17	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.09.18 04.17	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.09.18 04.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	05.09.18 04.17	
1,4-Difluorobenzene	540-36-3	99	%	70-130	05.09.18 04.17	

Certificate of Analytical Results 584936

LT Environmental, Inc., Arvada, CO

BEU 39

Sample Id:	**WS2**	Matrix:	Soil	Date Received:	05.04.18 10.10
Lab Sample Id:	584936-003	Date Collected:	04.30.18 14.32	Sample Depth:	2.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.08.18 12.00	Basis:	Wet Weight
Seq Number:	3049732				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1190**	24.8	mg/kg	05.10.18 18.51		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.05.18 10.00	Basis:	Wet Weight
Seq Number:	3049201				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.06.18 04.44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.06.18 04.44	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	05.06.18 04.44	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.06.18 04.44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	05.06.18 04.44	
o-Terphenyl	84-15-1	87	%	70-135	05.06.18 04.44	

Certificate of Analytical Results 584936

LT Environmental, Inc., Arvada, CO

BEU 39

Sample Id:	**WS2**	Matrix:	Soil	Date Received:	05.04.18 10.10
Lab Sample Id:	584936-003	Date Collected:	04.30.18 14.32	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	05.08.18 17.00	Basis:	Wet Weight
Seq Number:	3049433				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	05.09.18 04.38	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	05.09.18 04.38	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	05.09.18 04.38	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	05.09.18 04.38	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	05.09.18 04.38	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	05.09.18 04.38	U	1
Total BTEX		<0.00202	0.00202	mg/kg	05.09.18 04.38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	05.09.18 04.38	
4-Bromofluorobenzene	460-00-4	108	%	70-130	05.09.18 04.38	

Certificate of Analytical Results 584936

LT Environmental, Inc., Arvada, CO

BEU 39

Sample Id:	**WS3**	Matrix:	Soil	Date Received:	05.04.18 10.10
Lab Sample Id:	584936-004	Date Collected:	04.30.18 14.38	Sample Depth:	2.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.08.18 12.00	Basis:	Wet Weight
Seq Number:	3049732				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1100**	5.00	mg/kg	05.10.18 19.09		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.05.18 10.00	Basis:	Wet Weight
Seq Number:	3049201				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.06.18 05.11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.06.18 05.11	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	05.06.18 05.11	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.06.18 05.11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	05.06.18 05.11	
o-Terphenyl	84-15-1	93	%	70-135	05.06.18 05.11	

Certificate of Analytical Results 584936

LT Environmental, Inc., Arvada, CO

BEU 39

Sample Id:	**WS3**	Matrix:	Soil	Date Received:	05.04.18 10.10
Lab Sample Id:	584936-004	Date Collected:	04.30.18 14.38	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	05.08.18 17.00	Basis:	Wet Weight
Seq Number:	3049433				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.09.18 05.00	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.09.18 05.00	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.09.18 05.00	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	05.09.18 05.00	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.09.18 05.00	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.09.18 05.00	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.09.18 05.00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	109	%	70-130	05.09.18 05.00	
1,4-Difluorobenzene	540-36-3	98	%	70-130	05.09.18 05.00	

Certificate of Analytical Results 584936

LT Environmental, Inc., Arvada, CO

BEU 39

Sample Id:	**WS4**	Matrix:	Soil	Date Received:	05.04.18 10.10
Lab Sample Id:	584936-005	Date Collected:	04.30.18 14.47	Sample Depth:	2.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.08.18 12.00	Basis:	Wet Weight
Seq Number:	3049732				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**269**	4.99	mg/kg	05.10.18 19.14		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.05.18 10.00	Basis:	Wet Weight
Seq Number:	3049201				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	05.06.18 05.38	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	05.06.18 05.38	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<14.9	14.9	mg/kg	05.06.18 05.38	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	05.06.18 05.38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	05.06.18 05.38	
o-Terphenyl	84-15-1	100	%	70-135	05.06.18 05.38	

Certificate of Analytical Results 584936

LT Environmental, Inc., Arvada, CO

BEU 39

Sample Id:	**WS4**	Matrix:	Soil	Date Received:	05.04.18 10.10
Lab Sample Id:	584936-005	Date Collected:	04.30.18 14.47	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	05.08.18 17.00	Basis:	Wet Weight
Seq Number:	3049433				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	05.09.18 05.43	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	05.09.18 05.43	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	05.09.18 05.43	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	05.09.18 05.43	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	05.09.18 05.43	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	05.09.18 05.43	U	1
Total BTEX		<0.00201	0.00201	mg/kg	05.09.18 05.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	85	%	70-130	05.09.18 05.43	
4-Bromofluorobenzene	460-00-4	96	%	70-130	05.09.18 05.43	

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LT Environmental, Inc., Arvada, CO

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Sample Id:	**FS2**	Matrix:	Soil	Date Received:	05.04.18 10.10
Lab Sample Id:	584936-006	Date Collected:	04.30.18 14.42	Sample Depth:	3 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.08.18 12.00	Basis:	Wet Weight
Seq Number:	3049732				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**454**	5.00	mg/kg	05.10.18 19.20		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.05.18 10.00	Basis:	Wet Weight
Seq Number:	3049201				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	05.06.18 06.03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	05.06.18 06.03	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<14.9	14.9	mg/kg	05.06.18 06.03	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	05.06.18 06.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	05.06.18 06.03	
o-Terphenyl	84-15-1	91	%	70-135	05.06.18 06.03	

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Sample Id:	**FS2**	Matrix:	Soil	Date Received:	05.04.18 10.10
Lab Sample Id:	584936-006	Date Collected:	04.30.18 14.42	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	05.09.18 08.00	Basis:	Wet Weight
Seq Number:	3049669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	05.09.18 14.55	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	05.09.18 14.55	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	05.09.18 14.55	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	05.09.18 14.55	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	05.09.18 14.55	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	05.09.18 14.55	U	1
Total BTEX		<0.00201	0.00201	mg/kg	05.09.18 14.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	88	%	70-130	05.09.18 14.55	
4-Bromofluorobenzene	460-00-4	105	%	70-130	05.09.18 14.55	

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Sample Id:	**WS5**	Matrix:	Soil	Date Received:	05.04.18 10.10
Lab Sample Id:	584936-007	Date Collected:	04.30.18 14.51	Sample Depth:	2.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.08.18 12.00	Basis:	Wet Weight
Seq Number:	3049732				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**871**	4.95	mg/kg	05.10.18 19.26		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.05.18 10.00	Basis:	Wet Weight
Seq Number:	3049201				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.06.18 06.29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.06.18 06.29	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	05.06.18 06.29	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.06.18 06.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	05.06.18 06.29	
o-Terphenyl	84-15-1	100	%	70-135	05.06.18 06.29	

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Sample Id:	**WS5**	Matrix:	Soil	Date Received:	05.04.18 10.10
Lab Sample Id:	584936-007	Date Collected:	04.30.18 14.51	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	05.09.18 08.00	Basis:	Wet Weight
Seq Number:	3049669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	05.09.18 15.16	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	05.09.18 15.16	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	05.09.18 15.16	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	05.09.18 15.16	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	05.09.18 15.16	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	05.09.18 15.16	U	1
Total BTEX		<0.00202	0.00202	mg/kg	05.09.18 15.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	107	%	70-130	05.09.18 15.16	
1,4-Difluorobenzene	540-36-3	97	%	70-130	05.09.18 15.16	

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Sample Id:	**WS6**	Matrix:	Soil	Date Received:	05.04.18 10.10
Lab Sample Id:	584936-008	Date Collected:	04.30.18 14.55	Sample Depth:	2.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.08.18 12.00	Basis:	Wet Weight
Seq Number:	3049732				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**723**	5.00	mg/kg	05.10.18 19.32		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.05.18 10.00	Basis:	Wet Weight
Seq Number:	3049201				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.06.18 06.58	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.06.18 06.58	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	05.06.18 06.58	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.06.18 06.58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-135	05.06.18 06.58	
o-Terphenyl	84-15-1	87	%	70-135	05.06.18 06.58	

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Sample Id:	**WS6**	Matrix:	Soil	Date Received:	05.04.18 10.10
Lab Sample Id:	584936-008	Date Collected:	04.30.18 14.55	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	05.09.18 08.00	Basis:	Wet Weight
Seq Number:	3049669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	05.09.18 15.38	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	05.09.18 15.38	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	05.09.18 15.38	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	05.09.18 15.38	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	05.09.18 15.38	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	05.09.18 15.38	U	1
Total BTEX		<0.00199	0.00199	mg/kg	05.09.18 15.38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	111	%	70-130	05.09.18 15.38	
1,4-Difluorobenzene	540-36-3	106	%	70-130	05.09.18 15.38	

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Sample Id:	**WS7**	Matrix:	Soil	Date Received:	05.04.18 10.10
Lab Sample Id:	584936-009	Date Collected:	04.30.18 15.03	Sample Depth:	2.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.08.18 12.00	Basis:	Wet Weight
Seq Number:	3049732				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**859**	4.95	mg/kg	05.10.18 19.56		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.05.18 10.00	Basis:	Wet Weight
Seq Number:	3049201				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.06.18 07.24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.06.18 07.24	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	05.06.18 07.24	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.06.18 07.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	05.06.18 07.24	
o-Terphenyl	84-15-1	96	%	70-135	05.06.18 07.24	

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Sample Id:	**WS7**	Matrix:	Soil	Date Received:	05.04.18 10.10
Lab Sample Id:	584936-009	Date Collected:	04.30.18 15.03	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	05.09.18 08.00	Basis:	Wet Weight
Seq Number:	3049669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.09.18 15.59	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.09.18 15.59	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.09.18 15.59	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	05.09.18 15.59	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.09.18 15.59	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.09.18 15.59	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.09.18 15.59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	05.09.18 15.59	
4-Bromofluorobenzene	460-00-4	108	%	70-130	05.09.18 15.59	

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Sample Id:	**WS8**	Matrix:	Soil	Date Received:	05.04.18 10.10
Lab Sample Id:	584936-010	Date Collected:	04.30.18 15.07	Sample Depth:	2.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.08.18 12.00	Basis:	Wet Weight
Seq Number:	3049732				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**951**	5.00	mg/kg	05.10.18 20.02		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.05.18 10.00	Basis:	Wet Weight
Seq Number:	3049201				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.06.18 07.50	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.06.18 07.50	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	05.06.18 07.50	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.06.18 07.50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	05.06.18 07.50	
o-Terphenyl	84-15-1	90	%	70-135	05.06.18 07.50	

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Sample Id:	**WS8**	Matrix:	Soil	Date Received:	05.04.18 10.10
Lab Sample Id:	584936-010	Date Collected:	04.30.18 15.07	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	05.09.18 08.00	Basis:	Wet Weight
Seq Number:	3049669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.09.18 16.21	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.09.18 16.21	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.09.18 16.21	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	05.09.18 16.21	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.09.18 16.21	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.09.18 16.21	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.09.18 16.21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	112	%	70-130	05.09.18 16.21	
1,4-Difluorobenzene	540-36-3	103	%	70-130	05.09.18 16.21	

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Sample Id:	**FS3**	Matrix:	Soil	Date Received:	05.04.18 10.10
Lab Sample Id:	584936-011	Date Collected:	04.30.18 15.11	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.08.18 12.00	Basis:	Wet Weight
Seq Number:	3049732				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**758**	25.0	mg/kg	05.10.18 20.20		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.05.18 10.00	Basis:	Wet Weight
Seq Number:	3049201				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.06.18 09.10	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.06.18 09.10	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	05.06.18 09.10	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.06.18 09.10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-135	05.06.18 09.10	
o-Terphenyl	84-15-1	86	%	70-135	05.06.18 09.10	

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Sample Id:	**FS3**	Matrix:	Soil	Date Received:	05.04.18 10.10
Lab Sample Id:	584936-011	Date Collected:	04.30.18 15.11	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	05.09.18 08.00	Basis:	Wet Weight
Seq Number:	3049669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	05.09.18 16.46	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	05.09.18 16.46	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	05.09.18 16.46	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	05.09.18 16.46	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	05.09.18 16.46	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	05.09.18 16.46	U	1
Total BTEX		<0.00201	0.00201	mg/kg	05.09.18 16.46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	99	%	70-130	05.09.18 16.46	
1,4-Difluorobenzene	540-36-3	100	%	70-130	05.09.18 16.46	

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Sample Id:	**WS9**	Matrix:	Soil	Date Received:	05.04.18 10.10
Lab Sample Id:	584936-012	Date Collected:	04.30.18 15.15	Sample Depth:	3 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.08.18 12.00	Basis:	Wet Weight
Seq Number:	3049732				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2310**	24.9	mg/kg	05.10.18 20.26		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.05.18 10.00	Basis:	Wet Weight
Seq Number:	3049201				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.06.18 09.36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.06.18 09.36	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	05.06.18 09.36	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.06.18 09.36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	05.06.18 09.36	
o-Terphenyl	84-15-1	101	%	70-135	05.06.18 09.36	

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Sample Id:	**WS9**	Matrix:	Soil	Date Received:	05.04.18 10.10
Lab Sample Id:	584936-012	Date Collected:	04.30.18 15.15	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	05.09.18 08.00	Basis:	Wet Weight
Seq Number:	3049669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	05.09.18 17.08	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	05.09.18 17.08	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	05.09.18 17.08	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	05.09.18 17.08	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	05.09.18 17.08	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	05.09.18 17.08	U	1
Total BTEX		<0.00198	0.00198	mg/kg	05.09.18 17.08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	70-130	05.09.18 17.08	
1,4-Difluorobenzene	540-36-3	108	%	70-130	05.09.18 17.08	

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BEU 39

Sample Id:	**WS10**	Matrix:	Soil	Date Received:	05.04.18 10.10
Lab Sample Id:	584936-013	Date Collected:	04.30.18 15.20	Sample Depth:	3 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.08.18 12.00	Basis:	Wet Weight
Seq Number:	3049732				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**679**	4.95	mg/kg	05.10.18 20.32		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.05.18 10.00	Basis:	Wet Weight
Seq Number:	3049201				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	05.06.18 10.03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	05.06.18 10.03	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<14.9	14.9	mg/kg	05.06.18 10.03	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	05.06.18 10.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	05.06.18 10.03	
o-Terphenyl	84-15-1	98	%	70-135	05.06.18 10.03	

Certificate of Analytical Results 584936

LT Environmental, Inc., Arvada, CO

BEU 39

Sample Id:	**WS10**	Matrix:	Soil	Date Received:	05.04.18 10.10
Lab Sample Id:	584936-013	Date Collected:	04.30.18 15.20	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	05.09.18 08.00	Basis:	Wet Weight
Seq Number:	3049669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	05.09.18 17.29	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	05.09.18 17.29	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	05.09.18 17.29	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	05.09.18 17.29	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	05.09.18 17.29	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	05.09.18 17.29	U	1
Total BTEX		<0.00202	0.00202	mg/kg	05.09.18 17.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	99	%	70-130	05.09.18 17.29	
1,4-Difluorobenzene	540-36-3	101	%	70-130	05.09.18 17.29	

Certificate of Analytical Results 584936

LT Environmental, Inc., Arvada, CO

BEU 39

Sample Id:	**WS11**	Matrix:	Soil	Date Received:	05.04.18 10.10
Lab Sample Id:	584936-014	Date Collected:	04.30.18 15.25	Sample Depth:	3 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.08.18 12.00	Basis:	Wet Weight
Seq Number:	3049732				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**684**	25.0	mg/kg	05.10.18 20.38		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.05.18 10.00	Basis:	Wet Weight
Seq Number:	3049201				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.06.18 10.29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.06.18 10.29	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	05.06.18 10.29	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.06.18 10.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	05.06.18 10.29	
o-Terphenyl	84-15-1	96	%	70-135	05.06.18 10.29	

Certificate of Analytical Results 584936

LT Environmental, Inc., Arvada, CO

BEU 39

Sample Id:	**WS11**	Matrix:	Soil	Date Received:	05.04.18 10.10
Lab Sample Id:	584936-014	Date Collected:	04.30.18 15.25	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	05.08.18 17.00	Basis:	Wet Weight
Seq Number:	3049433				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	05.09.18 05.21	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	05.09.18 05.21	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	05.09.18 05.21	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	05.09.18 05.21	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	05.09.18 05.21	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	05.09.18 05.21	U	1
Total BTEX		<0.00198	0.00198	mg/kg	05.09.18 05.21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	05.09.18 05.21	
4-Bromofluorobenzene	460-00-4	108	%	70-130	05.09.18 05.21	

Certificate of Analytical Results 584936

LT Environmental, Inc., Arvada, CO

BEU 39

Sample Id:	**WS12**	Matrix:	Soil	Date Received:	05.04.18 10.10
Lab Sample Id:	584936-015	Date Collected:	04.30.18 15.30	Sample Depth:	3 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.08.18 12.00	Basis:	Wet Weight
Seq Number:	3049732				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**639**	24.9	mg/kg	05.10.18 20.44		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.05.18 10.00	Basis:	Wet Weight
Seq Number:	3049201				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.06.18 10.56	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.06.18 10.56	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	05.06.18 10.56	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.06.18 10.56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	05.06.18 10.56	
o-Terphenyl	84-15-1	89	%	70-135	05.06.18 10.56	

Certificate of Analytical Results 584936

LT Environmental, Inc., Arvada, CO

BEU 39

Sample Id:	**WS12**	Matrix:	Soil	Date Received:	05.04.18 10.10
Lab Sample Id:	584936-015	Date Collected:	04.30.18 15.30	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	05.09.18 08.00	Basis:	Wet Weight
Seq Number:	3049669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	05.09.18 17.51	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	05.09.18 17.51	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	05.09.18 17.51	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	05.09.18 17.51	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	05.09.18 17.51	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	05.09.18 17.51	U	1
Total BTEX		<0.00199	0.00199	mg/kg	05.09.18 17.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	109	%	70-130	05.09.18 17.51	
4-Bromofluorobenzene	460-00-4	102	%	70-130	05.09.18 17.51	

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 584936

LT Environmental, Inc.

BEU 39

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3049732 Matrix: Solid Date Prep: 05.08.18
MB Sample Id: 7644291-1-BLK LCS Sample Id: 7644291-1-BKS LCSD Sample Id: 7644291-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	271	108	275	110	90-110	1	20	mg/kg	05.10.18 18:03	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3049732 Matrix: Soil Date Prep: 05.08.18
Parent Sample Id: 584937-001 MS Sample Id: 584937-001 S MSD Sample Id: 584937-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	307	250	659	141	631	130	90-110	4	20	mg/kg	05.10.18 18:21	X

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3049732 Matrix: Soil Date Prep: 05.08.18
Parent Sample Id: 584937-002 MS Sample Id: 584937-002 S MSD Sample Id: 584937-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	380	249	731	141	709	132	90-110	3	20	mg/kg	05.10.18 19:44	X

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3049201 Matrix: Solid Date Prep: 05.05.18
MB Sample Id: 7644170-1-BLK LCS Sample Id: 7644170-1-BKS LCSD Sample Id: 7644170-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	922	92	900	90	70-135	2	20	mg/kg	05.06.18 02:01	
Diesel Range Organics (DRO)	<15.0	1000	977	98	958	96	70-135	2	20	mg/kg	05.06.18 02:01	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	86		119		118		70-135	%	05.06.18 02:01
o-Terphenyl	89		95		92		70-135	%	05.06.18 02:01

MS/MSD Percent Recovery [D] = 100*(C-A) / B LCS = Laboratory Control Sample MS = Matrix Spike
Relative Percent Difference RPD = 200* | (C-E) / (C+E) | A = Parent Result B = Spike Added
LCS/LCSD Recovery [D] = 100 * (C) / [B] C = MS/LCS Result D = MSD/LCSD % Rec
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample) E = MSD/LCSD Result

QC Summary 584936

LT Environmental, Inc.

BEU 39

Analytical Method: TPH by SW8015 Mod | Prep Method: TX1005P
Seq Number: 3049201 | Matrix: Soil | Date Prep: 05.05.18
Parent Sample Id: 584936-001 | MS Sample Id: 584936-001 S | MSD Sample Id: 584936-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	997	986	99	1040	104	70-135	5	20	mg/kg	05.06.18 03:23	
Diesel Range Organics (DRO)	<15.0	997	1080	108	1130	113	70-135	5	20	mg/kg	05.06.18 03:23	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	104		110		70-135	%	05.06.18 03:23
o-Terphenyl	106		112		70-135	%	05.06.18 03:23

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3049433 | Matrix: Solid | Date Prep: 05.08.18
MB Sample Id: 7644356-1-BLK | LCS Sample Id: 7644356-1-BKS | LCSD Sample Id: 7644356-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.101	0.112	111	0.0985	99	70-130	13	35	mg/kg	05.09.18 00:43	
Toluene	<0.00201	0.101	0.109	108	0.0958	96	70-130	13	35	mg/kg	05.09.18 00:43	
Ethylbenzene	<0.00201	0.101	0.114	113	0.0997	100	70-130	13	35	mg/kg	05.09.18 00:43	
m,p-Xylenes	<0.00402	0.201	0.236	117	0.206	103	70-130	14	35	mg/kg	05.09.18 00:43	
o-Xylene	<0.00201	0.101	0.117	116	0.105	105	70-130	11	35	mg/kg	05.09.18 00:43	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		99		95		70-130	%	05.09.18 00:43
4-Bromofluorobenzene	109		100		91		70-130	%	05.09.18 00:43

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3049669 | Matrix: Solid | Date Prep: 05.09.18
MB Sample Id: 7644468-1-BLK | LCS Sample Id: 7644468-1-BKS | LCSD Sample Id: 7644468-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.110	110	0.106	106	70-130	4	35	mg/kg	05.09.18 12:23	
Toluene	<0.00199	0.0996	0.110	110	0.105	105	70-130	5	35	mg/kg	05.09.18 12:23	
Ethylbenzene	<0.00199	0.0996	0.114	114	0.112	112	70-130	2	35	mg/kg	05.09.18 12:23	
m,p-Xylenes	<0.00398	0.199	0.241	121	0.233	117	70-130	3	35	mg/kg	05.09.18 12:23	
o-Xylene	<0.00199	0.0996	0.122	122	0.117	117	70-130	4	35	mg/kg	05.09.18 12:23	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		106		101		70-130	%	05.09.18 12:23
4-Bromofluorobenzene	94		110		99		70-130	%	05.09.18 12:23

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 584936

LT Environmental, Inc.

BEU 39

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3049433 Matrix: Soil Date Prep: 05.08.18
Parent Sample Id: 585200-003 MS Sample Id: 585200-003 S MSD Sample Id: 585200-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.0963	97	0.0965	97	70-130	0	35	mg/kg	05.09.18 01:25	
Toluene	<0.00199	0.0996	0.0923	93	0.0903	90	70-130	2	35	mg/kg	05.09.18 01:25	
Ethylbenzene	<0.00199	0.0996	0.0934	94	0.0886	89	70-130	5	35	mg/kg	05.09.18 01:25	
m,p-Xylenes	<0.00398	0.199	0.193	97	0.181	91	70-130	6	35	mg/kg	05.09.18 01:25	
o-Xylene	<0.00199	0.0996	0.0974	98	0.0917	92	70-130	6	35	mg/kg	05.09.18 01:25	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		104		70-130	%	05.09.18 01:25
4-Bromofluorobenzene	102		100		70-130	%	05.09.18 01:25

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3049669 Matrix: Soil Date Prep: 05.09.18
Parent Sample Id: 584937-001 MS Sample Id: 584937-001 S MSD Sample Id: 584937-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0994	0.0986	99	0.0899	90	70-130	9	35	mg/kg	05.09.18 13:08	
Toluene	<0.00199	0.0994	0.0943	95	0.0882	88	70-130	7	35	mg/kg	05.09.18 13:08	
Ethylbenzene	<0.00199	0.0994	0.0999	101	0.0922	92	70-130	8	35	mg/kg	05.09.18 13:08	
m,p-Xylenes	<0.00398	0.199	0.207	104	0.193	97	70-130	7	35	mg/kg	05.09.18 13:08	
o-Xylene	<0.00199	0.0994	0.105	106	0.0991	99	70-130	6	35	mg/kg	05.09.18 13:08	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	106		107		70-130	%	05.09.18 13:08
4-Bromofluorobenzene	116		106		70-130	%	05.09.18 13:08

MS/MSD Percent Recovery	[D] = 100*(C-A) / B	LCS = Laboratory Control Sample	MS = Matrix Spike
Relative Percent Difference	RPD = 200* | (C-E) / (C+E) |	A = Parent Result	B = Spike Added
LCS/LCSD Recovery	[D] = 100 * (C) / [B]	C = MS/LCS Result	D = MSD/LCSD % Rec
Log Difference	Log Diff. = Log(Sample Duplicate) - Log(Original Sample)	E = MSD/LCSD Result	

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Xenco Quote #
Xenco Job # 580-4936

Client / Reporting Information

Company Name / Branch: LTE Midland
Company Address: 3300 North A ST Building 1, Unit #103 Midland TX
Email: ABaker@LTENV.com
Phone No: 439 894-5641
Project Contact: Adrian Baker
Samplers's Name: Glenn Thompson

Project Information

Project Name/Number: BEU 39
Project Location: New Mexico
Invoice To: Kyle Littrell
PO Number: 30-015-20945 2RP-3957

Analytical Information

Matrix Codes

W = Water
S = Soil/Sed/Solid
GW =Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
OW =Ocean/Sea Water
WI = Wipe
O = Oil
WW= Waste Water
A = Air

No.	Field ID / Point of Collection	Collection: Sample Depth	Date	Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	BTEX EPA Method 8021	TPH EPA Method 8015	Chloride EPA method 300.1	Field Comments
1	FS1	3'	4/30/18	1420	S	1								1	X	X	X	
2	WS1	2.5'		1428	S	1								1	X	X	X	
3	WS2	2.5'		1432	S	1								1	X	X	X	
4	WS3	2.5		1438	S	1								1	X	X	X	
5	WS4	2.5		1447	S	1								1	X	X	X	
6	FS2	3'		1442	S	1								1	X	X	X	
7	WS5	2.5'		1451	S	1								1	X	X	X	
8	WS6	2.5'		1455	S	1								1	X	X	X	
9	WS7	2.5'		1503	S	1								1	X	X	X	
10	WS8	2.5'		1507	S	1								1	X	X	X	

Turnaround Time (Business days)

- [ ] Same Day TAT
- [ ] Next Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 3 Day EMERGENCY
- [X] 5 Day TAT
- [ ] 7 Day TAT
- [ ] Contract TAT

TAT Starts Day received by Lab, if received by 5:00 pm

Data Deliverable Information

- [ ] Level II Std QC
- [ ] Level III Std QC+ Forms
- [ ] Level 3 (CLP Forms)
- [ ] TRRP Checklist
- [ ] Level IV (Full Data Pkg /raw data)
- [ ] TRRP Level IV
- [ ] UST / RG -411

Notes:

Temp: 1.4 IR ID:R-8
CF:(0-6: -0.2°C)
(6-23: +0.2°C)
Corrected Temp: 1.2

FED-EX / UPS: Tracking #

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		5/2/18 1720		2	5/3/18 2:14	
2	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
3			3	4		4
5	Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable	On Ice: X
			5			Cooler Temp. 4.0

Thermo. Corr. Factor

Notice: 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 loses are due to circumstances beyond the control of Xenco. A minimum charge of $75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xenco but not analyzed will be invoiced at $5 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract.

XENCO LABORATORIES

Setting the Standard since 1990

Stafford,Texas (281-240-4200)

Dallas Texas (214-902-0300)

San Antonio, Texas (210-509-3334)

Midland, Texas (432-704-5251)

Phoenix, Arizona (480-355-0900)

www.xenco.com

CHAIN OF CUSTODY

Page 2 Of 2

Xenco Quote #

Xenco Job # 580-49360

Client / Reporting Information

Company Name / Branch: LTE Midland

Company Address: 3300 North A St, Building 1, Unit #103 Midland, TX

Email: ABaker@LTENV.com

Phone No: 432 894 5641

Project Contact: Adrian Baker

Samplers's Name Glenn Thompson

Project Information

Project Name/Number: BEU 39

Project Location: New Mexico

Invoice To: Kyle Littrell

PO Number: 30-015-20945 2RP-3957

Analytical Information

Matrix Codes

W = Water
S = Soil/Sed/Solid
GW =Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
OW =Ocean/Sea Water
WI = Wipe
O = Oil
WW= Waste Water
A = Air

No.	Field ID / Point of Collection	Collection: Sample Depth	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	BTEX EPA Method 8021	TPH EPA Method 8015	Chloride EPA Method 300.1	Field Comments
1	FS3	4'	4/3/18	1511	S	1								1	X	X	X	
2	WS9	3'		1515	S	1								1	X	X	X	
3	WS10	3'		1520	S	1								1	X	X	X	
4	WS11	3'		1525	S	1								1	X	X	X	
5	WS12	3'		1530	S	1								1	X	X	X	
6																		
7																		
8																		
9																		
10																		

Turnaround Time (Business days)

- [ ] Same Day TAT
- [X] 5 Day TAT
- [ ] Next Day EMERGENCY
- [ ] 7 Day TAT
- [ ] 2 Day EMERGENCY
- [ ] Contract TAT
- [ ] 3 Day EMERGENCY

TAT Starts Day received by Lab, if received by 5:00 pm

Data Deliverable Information

- [ ] Level II Std QC
- [ ] Level IV (Full Data Pkg /raw data)
- [ ] Level III Std QC+ Forms
- [ ] TRRP Level IV
- [ ] Level 3 (CLP Forms)
- [ ] UST / RG -411
- [ ] TRRP Checklist

Temp: 1.4 IR ID:R-8

CF:(0-6: -0.2°C)

(6-23: +0.2°C)

Corrected Temp: 1.2

FED-EX / UPS: Tracking #

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		5/2/18 1720	1	2	5/3/18 2:44	2 CRAMER 5.4.18 10
3	Relinquished by:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable	On Ice: X Cooler Temp. 4.0° Thermo. Corr. Factor

Notice: 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 loses are due to circumstances beyond the control of Xenco. A minimum charge of $75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xenco but not analyzed will be invoiced at $5 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract.

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 05/04/2018 10:10:00 AM

Work Order #: 584936

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	1.2
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**
#5 Custody Seals intact on sample bottles?	**N/A**
#6*Custody Seals Signed and dated?	**N/A**
#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)?	**N/A**
#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: Katie Lowe Date: 05/04/2018

Checklist reviewed by: Jessica Kramer Date: 05/04/2018

Analytical Report 587962

for

LT Environmental, Inc.

Project Manager: Adrian Baker

BEU-039

21-JUN-18

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-18-26), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-17-16), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-17-12)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-17-16)
Xenco-Odessa (EPA Lab Code: TX00158): Texas (T104704400-18-15)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-17-3)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Phoenix Mobile (EPA Lab Code: AZ00901): Arizona (AZM757)
Xenco-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429)
Xenco-Lakeland: Florida (E84098)

21-JUN-18

Project Manager: **Adrian Baker**
LT Environmental, Inc.
4600 W. 60th Avenue
Arvada, CO 80003

Reference: XENCO Report No(s): **587962**
BEU-039
Project Address: NM 2RP-3957

Adrian Baker:

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) 587962. 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. 587962 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,

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 587962

LT Environmental, Inc., Arvada, CO

BEU-039

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SW 5A @ 3.5'	S	05-25-18 15:30	3 - 5 ft	587962-001
SW 8A	S	05-25-18 15:50	3 - 5 ft	587962-002
SW 6A	S	05-29-18 10:00	3 - 5 ft	587962-003
SW 13	S	05-29-18 12:25	3 - 5 ft	587962-004
FS 4	S	05-29-18 12:30	3 - 5 ft	587962-005
SW 14	S	05-29-18 13:00	3 - 5 ft	587962-006
SW 11A @ 4'	S	05-30-18 09:15	4 ft	587962-007
SW10A @ 4'	S	05-30-18 09:25	4 ft	587962-008
FS1 A @ 7'	S	05-30-18 11:40	7 ft	587962-009
SW3A @6'	S	05-30-18 12:30	6 ft	587962-010
FS2A @ 7'	S	05-31-18 12:35	7 ft	587962-011

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: BEU-039

Project ID:
Work Order Number(s): *587962*

Report Date: *21-JUN-18*
Date Received: *06/02/2018*

Sample receipt non conformances and comments:

Sent revision 06/21/18 - changed sample 011 from FS24 to FS2A per client JKR

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3052795 BTEX by EPA 8021B
Lab Sample ID 587962-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 587962-001, -002.
The Laboratory Control Sample for Toluene, Benzene, m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3052812 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3052863 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analysis Summary 587962

LT Environmental, Inc., Arvada, CO

Project Name: BEU-039

Project Id:
Contact: Adrian Baker
Project Location: NM 2RP-3957

Date Received in Lab: Sat Jun-02-18 03:00 pm
Report Date: 21-JUN-18
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	587962-001		587962-002		587962-003		587962-004		587962-005		587962-006	
	Field Id:	SW 5A @ 3.5'		SW 8A		SW 6A		SW 13		FS 4		SW 14	
	Depth:	3-5 ft		3-5 ft		3-5 ft		3-5 ft		3-5 ft		3-5 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	May-25-18 15:30		May-25-18 15:50		May-29-18 10:00		May-29-18 12:25		May-29-18 12:30		May-29-18 13:00	
BTEX by EPA 8021B	***Extracted:***	Jun-07-18 12:00		Jun-07-18 12:00		Jun-07-18 16:00		Jun-07-18 16:00		Jun-07-18 16:00		Jun-07-18 16:00	
	Analyzed:	Jun-07-18 19:53		Jun-07-18 23:29		Jun-08-18 10:21		Jun-08-18 10:39		Jun-08-18 10:58		Jun-08-18 11:16	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199
Toluene		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199
Ethylbenzene		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199
m,p-Xylenes		<0.00398	0.00398	<0.00400	0.00400	<0.00399	0.00399	<0.00400	0.00400	<0.00402	0.00402	<0.00398	0.00398
o-Xylene		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199
Total Xylenes		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199
Total BTEX		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199
Inorganic Anions by EPA 300	***Extracted:***	Jun-05-18 15:00		Jun-05-18 15:00		Jun-06-18 08:30		Jun-06-18 08:30		Jun-06-18 08:30		Jun-06-18 08:30	
	Analyzed:	Jun-05-18 18:55		Jun-05-18 19:01		Jun-06-18 09:57		Jun-06-18 10:02		Jun-06-18 10:08		Jun-06-18 09:35	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		346	4.93	457	4.96	169	4.95	125	4.98	371	4.99	308	4.93
TPH by SW8015 Mod	***Extracted:***	Jun-04-18 16:00		Jun-04-18 16:00		Jun-04-18 16:00		Jun-04-18 16:00		Jun-04-18 16:00		Jun-04-18 16:00	
	Analyzed:	Jun-04-18 19:03		Jun-04-18 20:05		Jun-04-18 20:25		Jun-04-18 20:46		Jun-04-18 21:06		Jun-04-18 21:27	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		<15.0	15.0	24.8	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Oil Range Hydrocarbons (ORO)		<15.0	15.0	17.7	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Total TPH		<15.0	15.0	42.5	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0

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Jessica Kramer
Project Assistant

Certificate of Analysis Summary 587962

LT Environmental, Inc., Arvada, CO

Project Name: BEU-039

Project Id:

Contact: Adrian Baker

Project Location: NM 2RP-3957

Date Received in Lab: Sat Jun-02-18 03:00 pm

Report Date: 21-JUN-18

Project Manager: Jessica Kramer

Analysis Requested											
	Lab Id:	587962-007		587962-008		587962-009		587962-010		587962-011	
	Field Id:	SW 11A @ 4'		SW10A @ 4'		FS1 A @ 7'		SW3A @6'		FS2A @ 7'	
	Depth:	4- ft		4- ft		7- ft		6- ft		7- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	May-30-18 09:15		May-30-18 09:25		May-30-18 11:40		May-30-18 12:30		May-31-18 12:35	
BTEX by EPA 8021B	***Extracted:***	Jun-07-18 16:00		Jun-08-18 16:30		Jun-08-18 16:30		Jun-08-18 16:30		Jun-08-18 16:30	
	Analyzed:	Jun-08-18 16:11		Jun-08-18 21:58		Jun-08-18 22:16		Jun-08-18 22:34		Jun-08-18 20:12	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200
Toluene		<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200
Ethylbenzene		<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200
m,p-Xylenes		<0.00401	0.00401	<0.00402	0.00402	<0.00401	0.00401	<0.00398	0.00398	<0.00399	0.00399
o-Xylene		<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200
Total Xylenes		<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200
Total BTEX		<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200
Inorganic Anions by EPA 300	***Extracted:***	Jun-06-18 08:30		Jun-06-18 08:30		Jun-06-18 08:30		Jun-06-18 08:30		Jun-06-18 08:30	
	Analyzed:	Jun-06-18 10:24		Jun-06-18 10:29		Jun-06-18 10:35		Jun-06-18 10:40		Jun-06-18 10:45	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		416	24.9	389	4.99	372	24.6	325	24.7	529	24.8
TPH by SW8015 Mod	***Extracted:***	Jun-04-18 16:00		Jun-04-18 16:00		Jun-04-18 16:00		Jun-04-18 16:00		Jun-04-18 16:00	
	Analyzed:	Jun-04-18 21:47		Jun-04-18 22:08		Jun-04-18 22:28		Jun-04-18 22:49		Jun-04-18 23:50	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0
Oil Range Hydrocarbons (ORO)		<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0
Total TPH		<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0

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Jessica Kramer
Project Assistant

Certificate of Analytical Results 587962

LT Environmental, Inc., Arvada, CO

BEU-039

Sample Id:	**SW 5A @ 3.5'**	Matrix:	Soil	Date Received:	06.02.18 15.00
Lab Sample Id:	587962-001	Date Collected:	05.25.18 15.30	Sample Depth:	3 - 5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	06.05.18 15.00	Basis:	Wet Weight
Seq Number:	3052395				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**346**	4.93	mg/kg	06.05.18 18.55		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.04.18 16.00	Basis:	Wet Weight
Seq Number:	3052253				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.04.18 19.03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.04.18 19.03	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	06.04.18 19.03	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.04.18 19.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	06.04.18 19.03	
o-Terphenyl	84-15-1	97	%	70-135	06.04.18 19.03	

Certificate of Analytical Results 587962

LT Environmental, Inc., Arvada, CO

BEU-039

Sample Id:	**SW 5A @ 3.5'**	Matrix:	Soil	Date Received:	06.02.18 15.00
Lab Sample Id:	587962-001	Date Collected:	05.25.18 15.30	Sample Depth:	3 - 5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	06.07.18 12.00	Basis:	Wet Weight
Seq Number:	3052795				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.07.18 19.53	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.07.18 19.53	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.07.18 19.53	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.07.18 19.53	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.07.18 19.53	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.07.18 19.53	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.07.18 19.53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	96	%	70-130	06.07.18 19.53	
4-Bromofluorobenzene	460-00-4	99	%	70-130	06.07.18 19.53	

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LT Environmental, Inc., Arvada, CO

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Sample Id:	**SW 8A**	Matrix:	Soil	Date Received:	06.02.18 15.00
Lab Sample Id:	587962-002	Date Collected:	05.25.18 15.50	Sample Depth:	3 - 5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	06.05.18 15.00	Basis:	Wet Weight
Seq Number:	3052395				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**457**	4.96	mg/kg	06.05.18 19.01		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.04.18 16.00	Basis:	Wet Weight
Seq Number:	3052253				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.04.18 20.05	U	1
Diesel Range Organics (DRO)	C10C28DRO	**24.8**	15.0	mg/kg	06.04.18 20.05		1
Oil Range Hydrocarbons (ORO)	PHCG2835	**17.7**	15.0	mg/kg	06.04.18 20.05		1
Total TPH	PHC635	**42.5**	15.0	mg/kg	06.04.18 20.05		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	06.04.18 20.05	
o-Terphenyl	84-15-1	92	%	70-135	06.04.18 20.05	

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LT Environmental, Inc., Arvada, CO

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Sample Id:	**SW 8A**	Matrix:	Soil	Date Received:	06.02.18 15.00
Lab Sample Id:	587962-002	Date Collected:	05.25.18 15.50	Sample Depth:	3 - 5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	06.07.18 12.00	Basis:	Wet Weight
Seq Number:	3052795				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.07.18 23.29	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.07.18 23.29	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.07.18 23.29	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	06.07.18 23.29	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.07.18 23.29	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.07.18 23.29	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.07.18 23.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	90	%	70-130	06.07.18 23.29	
1,4-Difluorobenzene	540-36-3	93	%	70-130	06.07.18 23.29	

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Sample Id:	**SW 6A**	Matrix:	Soil	Date Received:	06.02.18 15.00
Lab Sample Id:	587962-003	Date Collected:	05.29.18 10.00	Sample Depth:	3 - 5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	06.06.18 08.30	Basis:	Wet Weight
Seq Number:	3052444				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**169**	4.95	mg/kg	06.06.18 09.57		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.04.18 16.00	Basis:	Wet Weight
Seq Number:	3052253				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.04.18 20.25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.04.18 20.25	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	06.04.18 20.25	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.04.18 20.25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-135	06.04.18 20.25	
o-Terphenyl	84-15-1	85	%	70-135	06.04.18 20.25	

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Sample Id:	**SW 6A**	Matrix:	Soil	Date Received:	06.02.18 15.00
Lab Sample Id:	587962-003	Date Collected:	05.29.18 10.00	Sample Depth:	3 - 5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	06.07.18 16.00	Basis:	Wet Weight
Seq Number:	3052812				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.08.18 10.21	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.08.18 10.21	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.08.18 10.21	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	06.08.18 10.21	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.08.18 10.21	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.08.18 10.21	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.08.18 10.21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	06.08.18 10.21	
1,4-Difluorobenzene	540-36-3	104	%	70-130	06.08.18 10.21	

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Sample Id:	**SW 13**	Matrix:	Soil	Date Received:	06.02.18 15.00
Lab Sample Id:	587962-004	Date Collected:	05.29.18 12.25	Sample Depth:	3 - 5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	06.06.18 08.30	Basis:	Wet Weight
Seq Number:	3052444				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**125**	4.98	mg/kg	06.06.18 10.02		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.04.18 16.00	Basis:	Wet Weight
Seq Number:	3052253				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.04.18 20.46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.04.18 20.46	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	06.04.18 20.46	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.04.18 20.46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	06.04.18 20.46	
o-Terphenyl	84-15-1	87	%	70-135	06.04.18 20.46	

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LT Environmental, Inc., Arvada, CO

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Sample Id:	**SW 13**	Matrix:	Soil	Date Received:	06.02.18 15.00
Lab Sample Id:	587962-004	Date Collected:	05.29.18 12.25	Sample Depth:	3 - 5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	06.07.18 16.00	Basis:	Wet Weight
Seq Number:	3052812				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.08.18 10.39	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.08.18 10.39	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.08.18 10.39	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	06.08.18 10.39	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.08.18 10.39	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.08.18 10.39	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.08.18 10.39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	122	%	70-130	06.08.18 10.39	
1,4-Difluorobenzene	540-36-3	104	%	70-130	06.08.18 10.39	

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Sample Id: **FS 4** Matrix: Soil Date Received:06.02.18 15.00

Lab Sample Id: 587962-005 Date Collected: 05.29.18 12.30 Sample Depth: 3 - 5 ft

Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P

Tech: SCM % Moisture:

Analyst: SCM Date Prep: 06.06.18 08.30 Basis: Wet Weight

Seq Number: 3052444

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**371**	4.99	mg/kg	06.06.18 10.08		1

Analytical Method: TPH by SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture:

Analyst: ARM Date Prep: 06.04.18 16.00 Basis: Wet Weight

Seq Number: 3052253

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.04.18 21.06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.04.18 21.06	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	06.04.18 21.06	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.04.18 21.06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	06.04.18 21.06	
o-Terphenyl	84-15-1	86	%	70-135	06.04.18 21.06	

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Sample Id:	**FS 4**	Matrix:	Soil	Date Received:	06.02.18 15.00
Lab Sample Id:	587962-005	Date Collected:	05.29.18 12.30	Sample Depth:	3 - 5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	06.07.18 16.00	Basis:	Wet Weight
Seq Number:	3052812				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.08.18 10.58	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	06.08.18 10.58	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.08.18 10.58	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.08.18 10.58	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.08.18 10.58	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.08.18 10.58	U	1
Total BTEX		<0.00201	0.00201	mg/kg	06.08.18 10.58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	105	%	70-130	06.08.18 10.58	
4-Bromofluorobenzene	460-00-4	126	%	70-130	06.08.18 10.58	

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Sample Id:	**SW 14**	Matrix:	Soil	Date Received:	06.02.18 15.00
Lab Sample Id:	587962-006	Date Collected:	05.29.18 13.00	Sample Depth:	3 - 5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	06.06.18 08.30	Basis:	Wet Weight
Seq Number:	3052444				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**308**	4.93	mg/kg	06.06.18 09.35		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.04.18 16.00	Basis:	Wet Weight
Seq Number:	3052253				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.04.18 21.27	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.04.18 21.27	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	06.04.18 21.27	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.04.18 21.27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	06.04.18 21.27	
o-Terphenyl	84-15-1	87	%	70-135	06.04.18 21.27	

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LT Environmental, Inc., Arvada, CO

BEU-039

Sample Id:	**SW 14**	Matrix:	Soil	Date Received:	06.02.18 15.00
Lab Sample Id:	587962-006	Date Collected:	05.29.18 13.00	Sample Depth:	3 - 5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	06.07.18 16.00	Basis:	Wet Weight
Seq Number:	3052812				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.08.18 11.16	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.08.18 11.16	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.08.18 11.16	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.08.18 11.16	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.08.18 11.16	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.08.18 11.16	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.08.18 11.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	124	%	70-130	06.08.18 11.16	
1,4-Difluorobenzene	540-36-3	96	%	70-130	06.08.18 11.16	

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Sample Id:	**SW 11A @ 4'**	Matrix:	Soil	Date Received:	06.02.18 15.00
Lab Sample Id:	587962-007	Date Collected:	05.30.18 09.15	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	06.06.18 08.30	Basis:	Wet Weight
Seq Number:	3052444				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**416**	24.9	mg/kg	06.06.18 10.24		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.04.18 16.00	Basis:	Wet Weight
Seq Number:	3052253				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.04.18 21.47	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.04.18 21.47	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	06.04.18 21.47	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.04.18 21.47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	06.04.18 21.47	
o-Terphenyl	84-15-1	88	%	70-135	06.04.18 21.47	

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Sample Id:	**SW 11A @ 4'**	Matrix:	Soil	Date Received:	06.02.18 15.00
Lab Sample Id:	587962-007	Date Collected:	05.30.18 09.15	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	06.07.18 16.00	Basis:	Wet Weight
Seq Number:	3052812				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.08.18 16.11	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.08.18 16.11	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.08.18 16.11	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	06.08.18 16.11	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.08.18 16.11	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.08.18 16.11	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.08.18 16.11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	123	%	70-130	06.08.18 16.11	
1,4-Difluorobenzene	540-36-3	100	%	70-130	06.08.18 16.11	

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Sample Id:	**SW10A @ 4'**	Matrix:	Soil	Date Received:	06.02.18 15.00
Lab Sample Id:	587962-008	Date Collected:	05.30.18 09.25	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	06.06.18 08.30	Basis:	Wet Weight
Seq Number:	3052444				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**389**	4.99	mg/kg	06.06.18 10.29		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.04.18 16.00	Basis:	Wet Weight
Seq Number:	3052253				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	06.04.18 22.08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	06.04.18 22.08	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<14.9	14.9	mg/kg	06.04.18 22.08	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	06.04.18 22.08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-135	06.04.18 22.08	
o-Terphenyl	84-15-1	85	%	70-135	06.04.18 22.08	

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Sample Id:	**SW10A @ 4'**	Matrix:	Soil	Date Received:	06.02.18 15.00
Lab Sample Id:	587962-008	Date Collected:	05.30.18 09.25	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	06.08.18 16.30	Basis:	Wet Weight
Seq Number:	3052863				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.08.18 21.58	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	06.08.18 21.58	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.08.18 21.58	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.08.18 21.58	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.08.18 21.58	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.08.18 21.58	U	1
Total BTEX		<0.00201	0.00201	mg/kg	06.08.18 21.58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	98	%	70-130	06.08.18 21.58	
4-Bromofluorobenzene	460-00-4	104	%	70-130	06.08.18 21.58	

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BEU-039

Sample Id:	**FS1 A @ 7'**	Matrix:	Soil	Date Received:	06.02.18 15.00
Lab Sample Id:	587962-009	Date Collected:	05.30.18 11.40	Sample Depth:	7 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	06.06.18 08.30	Basis:	Wet Weight
Seq Number:	3052444				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**372**	24.6	mg/kg	06.06.18 10.35		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.04.18 16.00	Basis:	Wet Weight
Seq Number:	3052253				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.04.18 22.28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.04.18 22.28	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	06.04.18 22.28	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.04.18 22.28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	06.04.18 22.28	
o-Terphenyl	84-15-1	90	%	70-135	06.04.18 22.28	

Certificate of Analytical Results 587962

LT Environmental, Inc., Arvada, CO

BEU-039

Sample Id:	**FS1 A @ 7'**	Matrix:	Soil	Date Received:	06.02.18 15.00
Lab Sample Id:	587962-009	Date Collected:	05.30.18 11.40	Sample Depth:	7 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	06.08.18 16.30	Basis:	Wet Weight
Seq Number:	3052863				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.08.18 22.16	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.08.18 22.16	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.08.18 22.16	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	06.08.18 22.16	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.08.18 22.16	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.08.18 22.16	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.08.18 22.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	110	%	70-130	06.08.18 22.16	
1,4-Difluorobenzene	540-36-3	102	%	70-130	06.08.18 22.16	

Certificate of Analytical Results 587962

LT Environmental, Inc., Arvada, CO

BEU-039

Sample Id:	**SW3A @6'**	Matrix:	Soil	Date Received:	06.02.18 15.00
Lab Sample Id:	587962-010	Date Collected:	05.30.18 12.30	Sample Depth:	6 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	06.06.18 08.30	Basis:	Wet Weight
Seq Number:	3052444				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**325**	24.7	mg/kg	06.06.18 10.40		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.04.18 16.00	Basis:	Wet Weight
Seq Number:	3052253				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.04.18 22.49	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.04.18 22.49	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	06.04.18 22.49	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.04.18 22.49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	06.04.18 22.49	
o-Terphenyl	84-15-1	85	%	70-135	06.04.18 22.49	

Certificate of Analytical Results 587962

LT Environmental, Inc., Arvada, CO

BEU-039

Sample Id:	**SW3A @6'**	Matrix:	Soil	Date Received:	06.02.18 15.00
Lab Sample Id:	587962-010	Date Collected:	05.30.18 12.30	Sample Depth:	6 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	06.08.18 16.30	Basis:	Wet Weight
Seq Number:	3052863				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.08.18 22.34	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.08.18 22.34	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.08.18 22.34	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.08.18 22.34	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.08.18 22.34	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.08.18 22.34	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.08.18 22.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	06.08.18 22.34	
4-Bromofluorobenzene	460-00-4	110	%	70-130	06.08.18 22.34	

Certificate of Analytical Results 587962

LT Environmental, Inc., Arvada, CO

BEU-039

Sample Id:	**FS2A @ 7'**	Matrix:	Soil	Date Received:	06.02.18 15.00
Lab Sample Id:	587962-011	Date Collected:	05.31.18 12.35	Sample Depth:	7 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	06.06.18 08.30	Basis:	Wet Weight
Seq Number:	3052444				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**529**	24.8	mg/kg	06.06.18 10.45		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.04.18 16.00	Basis:	Wet Weight
Seq Number:	3052253				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.04.18 23.50	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.04.18 23.50	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	06.04.18 23.50	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.04.18 23.50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	06.04.18 23.50	
o-Terphenyl	84-15-1	90	%	70-135	06.04.18 23.50	

Certificate of Analytical Results 587962

LT Environmental, Inc., Arvada, CO

BEU-039

Sample Id:	**FS2A @ 7'**	Matrix:	Soil	Date Received:	06.02.18 15.00
Lab Sample Id:	587962-011	Date Collected:	05.31.18 12.35	Sample Depth:	7 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	06.08.18 16.30	Basis:	Wet Weight
Seq Number:	3052863				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.08.18 20.12	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.08.18 20.12	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.08.18 20.12	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	06.08.18 20.12	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.08.18 20.12	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.08.18 20.12	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.08.18 20.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	93	%	70-130	06.08.18 20.12	
4-Bromofluorobenzene	460-00-4	96	%	70-130	06.08.18 20.12	

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 587962

LT Environmental, Inc.

BEU-039

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3052395 — Matrix: Solid — Date Prep: 06.05.18
MB Sample Id: 7656041-1-BLK — LCS Sample Id: 7656041-1-BKS — LCSD Sample Id: 7656041-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	263	105	256	102	90-110	3	20	mg/kg	06.05.18 16:24	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3052444 — Matrix: Solid — Date Prep: 06.06.18
MB Sample Id: 7656086-1-BLK — LCS Sample Id: 7656086-1-BKS — LCSD Sample Id: 7656086-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	273	109	273	109	90-110	0	20	mg/kg	06.06.18 09:24	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3052395 — Matrix: Soil — Date Prep: 06.05.18
Parent Sample Id: 587837-010 — MS Sample Id: 587837-010 S — MSD Sample Id: 587837-010 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<4.95	248	266	107	260	105	90-110	2	20	mg/kg	06.05.18 16:40	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3052395 — Matrix: Soil — Date Prep: 06.05.18
Parent Sample Id: 587927-003 — MS Sample Id: 587927-003 S — MSD Sample Id: 587927-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	914	249	1160	99	1120	83	90-110	4	20	mg/kg	06.05.18 17:56	X

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3052444 — Matrix: Soil — Date Prep: 06.06.18
Parent Sample Id: 587962-006 — MS Sample Id: 587962-006 S — MSD Sample Id: 587962-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	308	247	544	96	545	96	90-110	0	20	mg/kg	06.06.18 09:41	

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

QC Summary 587962

LT Environmental, Inc.

BEU-039

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3052444 Matrix: Soil Date Prep: 06.06.18
Parent Sample Id: 587963-001 MS Sample Id: 587963-001 S MSD Sample Id: 587963-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	164	249	414	100	411	99	90-110	1	20	mg/kg	06.06.18 10:56	

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3052253 Matrix: Solid Date Prep: 06.04.18
MB Sample Id: 7655985-1-BLK LCS Sample Id: 7655985-1-BKS LCSD Sample Id: 7655985-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	866	87	913	91	70-135	5	20	mg/kg	06.04.18 18:22	
Diesel Range Organics (DRO)	<15.0	1000	911	91	955	96	70-135	5	20	mg/kg	06.04.18 18:22	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	90		117		119		70-135	%	06.04.18 18:22
o-Terphenyl	94		110		111		70-135	%	06.04.18 18:22

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3052253 Matrix: Soil Date Prep: 06.04.18
Parent Sample Id: 587962-001 MS Sample Id: 587962-001 S MSD Sample Id: 587962-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	999	842	84	916	92	70-135	8	20	mg/kg	06.04.18 19:24	
Diesel Range Organics (DRO)	<15.0	999	878	88	960	96	70-135	9	20	mg/kg	06.04.18 19:24	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	106		115		70-135	%	06.04.18 19:24
o-Terphenyl	95		102		70-135	%	06.04.18 19:24

MS/MSD Percent Recovery [D] = 100*(C-A) / B LCS = Laboratory Control Sample MS = Matrix Spike
Relative Percent Difference RPD = 200* | (C-E) / (C+E) | A = Parent Result B = Spike Added
LCS/LCSD Recovery [D] = 100 * (C) / [B] C = MS/LCS Result D = MSD/LCSD % Rec
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample) E = MSD/LCSD Result

QC Summary 587962

LT Environmental, Inc.

BEU-039

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3052795 — Matrix: Solid — Date Prep: 06.07.18
MB Sample Id: 7656286-1-BLK — LCS Sample Id: 7656286-1-BKS — LCSD Sample Id: 7656286-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0915	92	0.0903	91	70-130	1	35	mg/kg	06.07.18 18:04	
Toluene	<0.00200	0.100	0.0987	99	0.0948	95	70-130	4	35	mg/kg	06.07.18 18:04	
Ethylbenzene	<0.00200	0.100	0.0962	96	0.0946	95	70-130	2	35	mg/kg	06.07.18 18:04	
m,p-Xylenes	<0.00401	0.200	0.201	101	0.197	99	70-130	2	35	mg/kg	06.07.18 18:04	
o-Xylene	<0.00200	0.100	0.0943	94	0.0907	91	70-130	4	35	mg/kg	06.07.18 18:04	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	97		97		103		70-130	%	06.07.18 18:04
4-Bromofluorobenzene	97		100		102		70-130	%	06.07.18 18:04

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3052812 — Matrix: Solid — Date Prep: 06.07.18
MB Sample Id: 7656308-1-BLK — LCS Sample Id: 7656308-1-BKS — LCSD Sample Id: 7656308-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0782	78	0.0826	83	70-130	5	35	mg/kg	06.08.18 02:47	
Toluene	<0.00200	0.100	0.0810	81	0.0878	88	70-130	8	35	mg/kg	06.08.18 02:47	
Ethylbenzene	<0.00200	0.100	0.0813	81	0.0859	86	70-130	6	35	mg/kg	06.08.18 02:47	
m,p-Xylenes	<0.00401	0.200	0.168	84	0.179	90	70-130	6	35	mg/kg	06.08.18 02:47	
o-Xylene	<0.00200	0.100	0.0805	81	0.0861	86	70-130	7	35	mg/kg	06.08.18 02:47	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	95		103		93		70-130	%	06.08.18 02:47
4-Bromofluorobenzene	98		84		87		70-130	%	06.08.18 02:47

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3052863 — Matrix: Solid — Date Prep: 06.08.18
MB Sample Id: 7656325-1-BLK — LCS Sample Id: 7656325-1-BKS — LCSD Sample Id: 7656325-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.0941	93	0.0936	94	70-130	1	35	mg/kg	06.08.18 18:07	
Toluene	<0.00202	0.101	0.0986	98	0.0970	97	70-130	2	35	mg/kg	06.08.18 18:07	
Ethylbenzene	<0.00202	0.101	0.0962	95	0.0990	99	70-130	3	35	mg/kg	06.08.18 18:07	
m,p-Xylenes	<0.00403	0.202	0.201	100	0.206	102	70-130	2	35	mg/kg	06.08.18 18:07	
o-Xylene	<0.00202	0.101	0.100	99	0.0989	99	70-130	1	35	mg/kg	06.08.18 18:07	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	94		94		104		70-130	%	06.08.18 18:07
4-Bromofluorobenzene	95		91		102		70-130	%	06.08.18 18:07

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

QC Summary 587962

LT Environmental, Inc.

BEU-039

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3052795 — Matrix: Soil — Date Prep: 06.07.18
Parent Sample Id: 587962-001 — MS Sample Id: 587962-001 S — MSD Sample Id: 587962-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.100	0.0530	53	0.0655	66	70-130	21	35	mg/kg	06.07.18 18:40	X
Toluene	<0.00201	0.100	0.0530	53	0.0685	69	70-130	26	35	mg/kg	06.07.18 18:40	X
Ethylbenzene	<0.00201	0.100	0.0516	52	0.0662	66	70-130	25	35	mg/kg	06.07.18 18:40	X
m,p-Xylenes	<0.00402	0.201	0.107	53	0.138	69	70-130	25	35	mg/kg	06.07.18 18:40	X
o-Xylene	<0.00201	0.100	0.0512	51	0.0662	66	70-130	26	35	mg/kg	06.07.18 18:40	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		95		70-130	%	06.07.18 18:40
4-Bromofluorobenzene	105		100		70-130	%	06.07.18 18:40

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3052812 — Matrix: Soil — Date Prep: 06.07.18
Parent Sample Id: 587900-012 — MS Sample Id: 587900-012 S — MSD Sample Id: 587900-012 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	0.0998	0.0497	50	0.0459	45	70-130	8	35	mg/kg	06.08.18 08:25	X
Toluene	<0.00200	0.0998	0.0468	47	0.0374	37	70-130	22	35	mg/kg	06.08.18 08:25	X
Ethylbenzene	<0.00200	0.0998	0.0386	39	0.0243	24	70-130	45	35	mg/kg	06.08.18 08:25	XF
m,p-Xylenes	<0.00399	0.200	0.0787	39	0.0476	24	70-130	49	35	mg/kg	06.08.18 08:25	XF
o-Xylene	<0.00200	0.0998	0.0412	41	0.0245	24	70-130	51	35	mg/kg	06.08.18 08:25	XF

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	93		97		70-130	%	06.08.18 08:25
4-Bromofluorobenzene	95		104		70-130	%	06.08.18 08:25

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3052863 — Matrix: Soil — Date Prep: 06.08.18
Parent Sample Id: 588647-001 — MS Sample Id: 588647-001 S — MSD Sample Id: 588647-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.0710	71	0.0672	67	70-130	5	35	mg/kg	06.08.18 18:43	X
Toluene	<0.00199	0.0996	0.0749	75	0.0721	71	70-130	4	35	mg/kg	06.08.18 18:43	
Ethylbenzene	<0.00199	0.0996	0.0736	74	0.0700	69	70-130	5	35	mg/kg	06.08.18 18:43	X
m,p-Xylenes	<0.00398	0.199	0.154	77	0.146	73	70-130	5	35	mg/kg	06.08.18 18:43	
o-Xylene	<0.00199	0.0996	0.0815	82	0.0704	70	70-130	15	35	mg/kg	06.08.18 18:43	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		105		70-130	%	06.08.18 18:43
4-Bromofluorobenzene	103		108		70-130	%	06.08.18 18:43

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

CHAIN OF CUSTODY

Page 1 Of 2

XENCO LABORATORIES
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San Antonio, Texas (210-509-3334)
Midland, Texas (432-704-5251)
Phoenix, Arizona (480-355-0900)
www.xenco.com

Xenco Quote #

Xenco Job # 587962

Client / Reporting Information

Company Name / Branch: LT Environmental Inc. Permian Office
Company Address: 3300 North "A" St. Building 1, Unit 103, Midland Tx 79705
Email: abaker@ltenv.com Phone No: (432)704-5178
Project Contact: Adrian Baker
Samplers's Name

Project Information

Project Name/Number: BEU-039
Project Location: NM 2RP-3957
Invoice To: XTO Energy - Kyle Littrell
PO Number:

Analytical Information

Matrix Codes

W = Water
S = Soil/Sed/Solid
GW =Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
OW =Ocean/Sea Water
WI = Wipe
O = Oil
WW= Waste Water
A = Air

No.	Field ID / Point of Collection	Collection: Sample Depth	Date	Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	BTEX 8021 (only BTEX)	TPH (MRO, GRO, DRO) 8015	Chloride (300.0	Field Comments
1	SW5A @3.5'	3.5'	05/25/18	15:30	S	1								X	X	X	X	W wall
2	SW8A	3.5'	↓	15:50	S	1								X	X	X	X	S-wall
3	SW6A	↓	05/29/18	10:00	S	1								X	X	X	X	N-wall
4	SW13		↓	12:25	S	1								X	X	X	X	E wall
5	FS4			12:30	S	1								X	X	X	X	floor
6	SW14	↓	↓	13:00	S	1								X	X	X	X	W wall #2
7	SW11A @ 4'	4'	05/30/18	9:15	S	1								X	X	X	X	SWest PS
8	SW10A @ 4'	4'	05/30/18	9:25	S	1								X	X	X	X	E
9	FS1A @ 7'	7'	05/30/18	11:40	S	1								X	X	X	X	
10	SW3A @ 6'	6'	05/30/18	12:30	S	1								X	X	X	X	S wall

Turnaround Time (Business days)

- [ ] Same Day TAT
- [ ] Next Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 3 Day EMERGENCY
- [x] 5 Day TAT
- [ ] 7 Day TAT
- [ ] Contract TAT

TAT Starts Day received by Lab, if received by 5:00 pm

Data Deliverable Information

- [ ] Level II Std QC
- [ ] Level III Std QC+ Forms
- [ ] Level 3 (CLP Forms)
- [ ] TRRP Checklist
- [ ] Level IV (Full Data Pkg /raw data)
- [ ] TRRP Level IV
- [ ] UST / RG -411

Notes:

FED-EX / UPS: Tracking #

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	[signature]	5/31/18 16:50	1 [signature]	2 [signature]	6/1/18 15:30	2 [signature] 6.2.18 15:00
3	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
5	Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable	On Ice: X

Cooler Temp. 3.0 Thermo. Corr. Factor 0.0

Notice: 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 loses are due to circumstances beyond the control of Xenco. A minimum charge of $75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xenco but not analyzed will be invoiced at $5 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract.

CHAIN OF CUSTODY

Page 2 Of 2

XENCO LABORATORIES

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Dallas Texas (214-902-0300)
San Antonio, Texas (210-509-3334)
Midland, Texas (432-704-5251)
Phoenix, Arizona (480-355-0900)
www.xenco.com

Xenco Quote #
Xenco Job # 579762

Client / Reporting Information

Company Name / Branch: LT Environmental, Inc. Permian Office
Company Address: 3300 North "A" St. Building 1, unit #103 Midland Tx 79705
Email: abaker@ltenv.com
Phone No: (432)704-5178
Project Contact: Adrian Baker
Samplers's Name

Project Information

Project Name/Number: BEU-039
Project Location: NM 2RP-3957
Invoice To: XTO Energy - Kyle Littrell
PO Number:

Analytical Information

BTEX 8021 (only BTEX)
TPH (MRO, GRO, DRO) 8015
Chloride (300.0)

Matrix Codes

W = Water
S = Soil/Sed/Solid
GW =Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
OW =Ocean/Sea Water
WI = Wipe
O = Oil
WW= Waste Water
A = Air

No.	Field ID / Point of Collection	Collection: Sample Depth	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	BTEX 8021	TPH (MRO, GRO, DRO) 8015	Chloride (300.0)	Field Comments
1	FS2A @ 7'	7'	05/31/18	12:25	S	1								X	X	X	X	
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

Turnaround Time (Business days)

- [ ] Same Day TAT
- [X] 5 Day TAT
- [ ] Next Day EMERGENCY
- [ ] 7 Day TAT
- [ ] 2 Day EMERGENCY
- [ ] Contract TAT
- [ ] 3 Day EMERGENCY

TAT Starts Day received by Lab, if received by 5:00 pm

Data Deliverable Information

- [ ] Level II Std QC
- [ ] Level IV (Full Data Pkg /raw data)
- [ ] Level III Std QC+ Forms
- [ ] TRRP Level IV
- [ ] Level 3 (CLP Forms)
- [ ] UST / RG -411
- [ ] TRRP Checklist

Notes:

FED-EX / UPS: Tracking #

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	Joseph Hoskins	05/31/18 16:50	1 Jamie Wilson	2 Jamie Wilson	6/1/18 15:30	2 Julian Martinez 6-1-18 15:30
3	Relinquished by:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable	On Ice: X Cooler Temp. 3.0 Thermo. Corr. Factor NR 0.0

Notice: 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 loses are due to circumstances beyond the control of Xenco. A minimum charge of $75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xenco but not analyzed will be invoiced at $5 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract.

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 06/02/2018 03:00:00 PM

Work Order #: 587962

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	3
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**
#5 Custody Seals intact on sample bottles?	**N/A**
#6*Custody Seals Signed and dated?	**N/A**
#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)?	**N/A**
#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: Brianna Teel Date: 06/04/2018
Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 06/05/2018
Jessica Kramer

Analytical Report 588290

for

LT Environmental, Inc.

Project Manager: Adrian Baker

2RP-3957

BEU-039

12-JUN-18

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-18-26), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-17-16), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-17-12)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-17-16)
Xenco-Odessa (EPA Lab Code: TX00158): Texas (T104704400-18-15)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-17-3)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Phoenix Mobile (EPA Lab Code: AZ00901): Arizona (AZM757)
Xenco-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429)
Xenco-Lakeland: Florida (E84098)

12-JUN-18

Project Manager: **Adrian Baker**
LT Environmental, Inc.
4600 W. 60th Avenue
Arvada, CO 80003

Reference: XENCO Report No(s): **588290**
2RP-3957
Project Address: NM

Adrian Baker:

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) 588290. 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. 588290 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,

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 588290

LT Environmental, Inc., Arvada, CO

2RP-3957

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SW9A	S	06-01-18 10:15	5 ft	588290-001
SW15	S	06-01-18 12:00	5 ft	588290-002
SW16	S	06-01-18 12:45	5 ft	588290-003
SW2A	S	06-04-18 09:30	4 ft	588290-004
SW17	S	06-04-18 10:35	5 ft	588290-005
SW1A	S	06-04-18 12:45	5 ft	588290-006
FS5	S	06-04-18 13:30	5 ft	588290-008
SW18	S	06-04-18 13:15	3 ft	Not Analyzed

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: 2RP-3957

Project ID: *BEU-039*
Work Order Number(s): *588290*

Report Date: *12-JUN-18*
Date Received: *06/06/2018*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3053169 BTEX by EPA 8021B

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

Certificate of Analysis Summary 588290

LT Environmental, Inc., Arvada, CO

Project Name: 2RP-3957

Project Id: BEU-039
Contact: Adrian Baker
Project Location: NM

Date Received in Lab: Wed Jun-06-18 10:45 am
Report Date: 12-JUN-18
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	588290-001		588290-002		588290-003		588290-004		588290-005		588290-006	
	Field Id:	SW9A		SW15		SW16		SW2A		SW17		SW1A	
	Depth:	5- ft		5- ft		5- ft		4- ft		5- ft		5- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jun-01-18 10:15		Jun-01-18 12:00		Jun-01-18 12:45		Jun-04-18 09:30		Jun-04-18 10:35		Jun-04-18 12:45	
BTEX by EPA 8021B SUB: T104704534-17-3	***Extracted:***	Jun-08-18 10:20		Jun-07-18 19:20		Jun-07-18 20:30		Jun-07-18 20:50		Jun-07-18 21:00		Jun-07-18 21:20	
	Analyzed:	Jun-08-18 10:29		Jun-07-18 19:20		Jun-07-18 20:33		Jun-07-18 20:51		Jun-07-18 21:09		Jun-07-18 21:28	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00199	0.00199	<0.00199	0.00199
Toluene		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00199	0.00199	<0.00199	0.00199
Ethylbenzene		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00199	0.00199	<0.00199	0.00199
m,p-Xylenes		<0.00398	0.00398	<0.00400	0.00400	<0.00399	0.00399	<0.00395	0.00395	<0.00398	0.00398	<0.00398	0.00398
o-Xylene		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00199	0.00199	<0.00199	0.00199
Total Xylenes		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00199	0.00199	<0.00199	0.00199
Total BTEX		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00199	0.00199	<0.00199	0.00199
Inorganic Anions by EPA 300	***Extracted:***	Jun-08-18 12:15		Jun-08-18 12:15		Jun-08-18 12:15		Jun-08-18 12:15		Jun-08-18 12:15		Jun-08-18 12:15	
	Analyzed:	Jun-08-18 22:49		Jun-08-18 22:54		Jun-08-18 23:11		Jun-08-18 23:16		Jun-08-18 23:21		Jun-08-18 23:27	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		130	24.8	323	25.0	191	25.0	330	25.0	297	25.0	323	25.0
TPH by SW8015 Mod	***Extracted:***	Jun-06-18 16:00		Jun-06-18 16:00		Jun-06-18 16:00		Jun-06-18 16:00		Jun-06-18 16:00		Jun-06-18 16:00	
	Analyzed:	Jun-06-18 18:57		Jun-06-18 19:59		Jun-06-18 20:19		Jun-06-18 20:40		Jun-06-18 21:00		Jun-06-18 21:21	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0
Oil Range Hydrocarbons (ORO)		<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0
Total TPH		<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Jessica Kramer
Project Assistant

Final 1.000

Certificate of Analysis Summary 588290

LT Environmental, Inc., Arvada, CO

Project Name: 2RP-3957

Project Id: BEU-039
Contact: Adrian Baker
Project Location: NM

Date Received in Lab: Wed Jun-06-18 10:45 am
Report Date: 12-JUN-18
Project Manager: Jessica Kramer

Analysis Requested							
	Lab Id:	588290-008					
	Field Id:	FS5					
	Depth:	5- ft					
	Matrix:	SOIL					
	Sampled:	Jun-04-18 13:30					
BTEX by EPA 8021B SUB: T104704534-17-3	***Extracted:***	Jun-08-18 10:40					
	Analyzed:	Jun-08-18 10:48					
	Units/RL:	mg/kg	RL				
Benzene		<0.00200	0.00200				
Toluene		<0.00200	0.00200				
Ethylbenzene		<0.00200	0.00200				
m,p-Xylenes		<0.00399	0.00399				
o-Xylene		<0.00200	0.00200				
Total Xylenes		<0.00200	0.00200				
Total BTEX		<0.00200	0.00200				
Inorganic Anions by EPA 300	***Extracted:***	Jun-08-18 12:15					
	Analyzed:	Jun-08-18 23:32					
	Units/RL:	mg/kg	RL				
Chloride		281	25.0				
TPH by SW8015 Mod	***Extracted:***	Jun-06-18 16:00					
	Analyzed:	Jun-06-18 21:41					
	Units/RL:	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0				
Diesel Range Organics (DRO)		<15.0	15.0				
Oil Range Hydrocarbons (ORO)		<15.0	15.0				
Total TPH		<15.0	15.0				

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Jessica Kramer
Project Assistant

Final 1.000

Certificate of Analytical Results 588290

LT Environmental, Inc., Arvada, CO

2RP-3957

Sample Id:	**SW9A**	Matrix:	Soil	Date Received:	06.06.18 10.45
Lab Sample Id:	588290-001	Date Collected:	06.01.18 10.15	Sample Depth:	5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	06.08.18 12.15	Basis:	Wet Weight
Seq Number:	3052931				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**130**	24.8	mg/kg	06.08.18 22.49		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.06.18 16.00	Basis:	Wet Weight
Seq Number:	3052528				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.06.18 18.57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.06.18 18.57	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	06.06.18 18.57	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.06.18 18.57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	06.06.18 18.57	
o-Terphenyl	84-15-1	90	%	70-135	06.06.18 18.57	

Certificate of Analytical Results 588290

LT Environmental, Inc., Arvada, CO

2RP-3957

Sample Id:	**SW9A**	Matrix:	Soil	Date Received:	06.06.18 10.45
Lab Sample Id:	588290-001	Date Collected:	06.01.18 10.15	Sample Depth:	5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	FOV			% Moisture:	
Analyst:	FOV	Date Prep:	06.08.18 10.20	Basis:	Wet Weight
Seq Number:	3053169			SUB:	T104704534-17-3

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.08.18 10.29	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.08.18 10.29	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.08.18 10.29	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.08.18 10.29	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.08.18 10.29	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.08.18 10.29	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.08.18 10.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	80	%	80-120	06.08.18 10.29	
1,4-Difluorobenzene	540-36-3	87	%	80-120	06.08.18 10.29	

Certificate of Analytical Results 588290

LT Environmental, Inc., Arvada, CO

2RP-3957

Sample Id:	**SW15**	Matrix:	Soil	Date Received:	06.06.18 10.45
Lab Sample Id:	588290-002	Date Collected:	06.01.18 12.00	Sample Depth:	5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	06.08.18 12.15	Basis:	Wet Weight
Seq Number:	3052931				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**323**	25.0	mg/kg	06.08.18 22.54		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.06.18 16.00	Basis:	Wet Weight
Seq Number:	3052528				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.06.18 19.59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.06.18 19.59	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	06.06.18 19.59	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.06.18 19.59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	06.06.18 19.59	
o-Terphenyl	84-15-1	95	%	70-135	06.06.18 19.59	

Certificate of Analytical Results 588290

LT Environmental, Inc., Arvada, CO

2RP-3957

Sample Id:	**SW15**	Matrix:	Soil	Date Received:	06.06.18 10.45
Lab Sample Id:	588290-002	Date Collected:	06.01.18 12.00	Sample Depth:	5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	FOV			% Moisture:	
Analyst:	FOV	Date Prep:	06.07.18 19.20	Basis:	Wet Weight
Seq Number:	3053169			SUB:	T104704534-17-3

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.07.18 19.20	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.07.18 19.20	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.07.18 19.20	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	06.07.18 19.20	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.07.18 19.20	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.07.18 19.20	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.07.18 19.20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	85	%	80-120	06.07.18 19.20	
1,4-Difluorobenzene	540-36-3	88	%	80-120	06.07.18 19.20	

Certificate of Analytical Results 588290

LT Environmental, Inc., Arvada, CO

2RP-3957

Sample Id:	**SW16**	Matrix:	Soil	Date Received:	06.06.18 10.45
Lab Sample Id:	588290-003	Date Collected:	06.01.18 12.45	Sample Depth:	5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	06.08.18 12.15	Basis:	Wet Weight
Seq Number:	3052931				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**191**	25.0	mg/kg	06.08.18 23.11		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.06.18 16.00	Basis:	Wet Weight
Seq Number:	3052528				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	06.06.18 20.19	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	06.06.18 20.19	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<14.9	14.9	mg/kg	06.06.18 20.19	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	06.06.18 20.19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	06.06.18 20.19	
o-Terphenyl	84-15-1	96	%	70-135	06.06.18 20.19	

Certificate of Analytical Results 588290

LT Environmental, Inc., Arvada, CO

2RP-3957

Sample Id:	**SW16**	Matrix:	Soil	Date Received:	06.06.18 10.45
Lab Sample Id:	588290-003	Date Collected:	06.01.18 12.45	Sample Depth:	5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	FOV			% Moisture:	
Analyst:	FOV	Date Prep:	06.07.18 20.30	Basis:	Wet Weight
Seq Number:	3053169			SUB:	T104704534-17-3

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.07.18 20.33	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.07.18 20.33	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.07.18 20.33	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	06.07.18 20.33	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.07.18 20.33	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.07.18 20.33	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.07.18 20.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	84	%	80-120	06.07.18 20.33	
1,4-Difluorobenzene	540-36-3	81	%	80-120	06.07.18 20.33	

Certificate of Analytical Results 588290

LT Environmental, Inc., Arvada, CO

2RP-3957

Sample Id:	**SW2A**	Matrix:	Soil	Date Received:	06.06.18 10.45
Lab Sample Id:	588290-004	Date Collected:	06.04.18 09.30	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	06.08.18 12.15	Basis:	Wet Weight
Seq Number:	3052931				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**330**	25.0	mg/kg	06.08.18 23.16		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.06.18 16.00	Basis:	Wet Weight
Seq Number:	3052528				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.06.18 20.40	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.06.18 20.40	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	06.06.18 20.40	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.06.18 20.40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-135	06.06.18 20.40	
o-Terphenyl	84-15-1	87	%	70-135	06.06.18 20.40	

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LT Environmental, Inc., Arvada, CO

2RP-3957

Sample Id:	**SW2A**	Matrix:	Soil	Date Received:	06.06.18 10.45
Lab Sample Id:	588290-004	Date Collected:	06.04.18 09.30	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	FOV			% Moisture:	
Analyst:	FOV	Date Prep:	06.07.18 20.50	Basis:	Wet Weight
Seq Number:	3053169			SUB:	T104704534-17-3

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	06.07.18 20.51	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	06.07.18 20.51	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	06.07.18 20.51	U	1
m,p-Xylenes	179601-23-1	<0.00395	0.00395	mg/kg	06.07.18 20.51	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	06.07.18 20.51	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	06.07.18 20.51	U	1
Total BTEX		<0.00198	0.00198	mg/kg	06.07.18 20.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	88	%	80-120	06.07.18 20.51	
1,4-Difluorobenzene	540-36-3	81	%	80-120	06.07.18 20.51	

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LT Environmental, Inc., Arvada, CO

2RP-3957

Sample Id:	**SW17**	Matrix:	Soil	Date Received:	06.06.18 10.45
Lab Sample Id:	588290-005	Date Collected:	06.04.18 10.35	Sample Depth:	5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	06.08.18 12.15	Basis:	Wet Weight
Seq Number:	3052931				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**297**	25.0	mg/kg	06.08.18 23.21		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.06.18 16.00	Basis:	Wet Weight
Seq Number:	3052528				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.06.18 21.00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.06.18 21.00	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	06.06.18 21.00	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.06.18 21.00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	06.06.18 21.00	
o-Terphenyl	84-15-1	92	%	70-135	06.06.18 21.00	

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LT Environmental, Inc., Arvada, CO

2RP-3957

Sample Id:	**SW17**	Matrix:	Soil	Date Received:	06.06.18 10.45
Lab Sample Id:	588290-005	Date Collected:	06.04.18 10.35	Sample Depth:	5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	FOV			% Moisture:	
Analyst:	FOV	Date Prep:	06.07.18 21.00	Basis:	Wet Weight
Seq Number:	3053169			SUB:	T104704534-17-3

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.07.18 21.09	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.07.18 21.09	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.07.18 21.09	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.07.18 21.09	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.07.18 21.09	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.07.18 21.09	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.07.18 21.09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	95	%	80-120	06.07.18 21.09	
1,4-Difluorobenzene	540-36-3	85	%	80-120	06.07.18 21.09	

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LT Environmental, Inc., Arvada, CO

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Sample Id:	**SW1A**	Matrix:	Soil	Date Received:	06.06.18 10.45
Lab Sample Id:	588290-006	Date Collected:	06.04.18 12.45	Sample Depth:	5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	06.08.18 12.15	Basis:	Wet Weight
Seq Number:	3052931				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**323**	25.0	mg/kg	06.08.18 23.27		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.06.18 16.00	Basis:	Wet Weight
Seq Number:	3052528				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.06.18 21.21	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.06.18 21.21	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	06.06.18 21.21	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.06.18 21.21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	84	%	70-135	06.06.18 21.21	
o-Terphenyl	84-15-1	87	%	70-135	06.06.18 21.21	

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LT Environmental, Inc., Arvada, CO

2RP-3957

Sample Id:	**SW1A**	Matrix:	Soil	Date Received:	06.06.18 10.45
Lab Sample Id:	588290-006	Date Collected:	06.04.18 12.45	Sample Depth:	5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	FOV			% Moisture:	
Analyst:	FOV	Date Prep:	06.07.18 21.20	Basis:	Wet Weight
Seq Number:	3053169			SUB:	T104704534-17-3

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.07.18 21.28	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.07.18 21.28	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.07.18 21.28	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.07.18 21.28	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.07.18 21.28	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.07.18 21.28	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.07.18 21.28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	84	%	80-120	06.07.18 21.28	
1,4-Difluorobenzene	540-36-3	82	%	80-120	06.07.18 21.28	

Certificate of Analytical Results 588290

LT Environmental, Inc., Arvada, CO

2RP-3957

Sample Id:	**FS5**	Matrix:	Soil	Date Received:	06.06.18 10.45
Lab Sample Id:	588290-008	Date Collected:	06.04.18 13.30	Sample Depth:	5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	06.08.18 12.15	Basis:	Wet Weight
Seq Number:	3052931				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**281**	25.0	mg/kg	06.08.18 23.32		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.06.18 16.00	Basis:	Wet Weight
Seq Number:	3052528				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.06.18 21.41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.06.18 21.41	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	06.06.18 21.41	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.06.18 21.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	06.06.18 21.41	
o-Terphenyl	84-15-1	89	%	70-135	06.06.18 21.41	

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LT Environmental, Inc., Arvada, CO

2RP-3957

Sample Id:	**FS5**	Matrix:	Soil	Date Received:	06.06.18 10.45
Lab Sample Id:	588290-008	Date Collected:	06.04.18 13.30	Sample Depth:	5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	FOV			% Moisture:	
Analyst:	FOV	Date Prep:	06.08.18 10.40	Basis:	Wet Weight
Seq Number:	3053169			SUB:	T104704534-17-3

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.08.18 10.48	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.08.18 10.48	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.08.18 10.48	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	06.08.18 10.48	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.08.18 10.48	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.08.18 10.48	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.08.18 10.48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	84	%	80-120	06.08.18 10.48	
4-Bromofluorobenzene	460-00-4	81	%	80-120	06.08.18 10.48	

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 588290

LT Environmental, Inc.

2RP-3957

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3052931 Matrix: Solid Date Prep: 06.08.18
MB Sample Id: 7656290-1-BLK LCS Sample Id: 7656290-1-BKS LCSD Sample Id: 7656290-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	265	106	265	106	90-110	0	20	mg/kg	06.08.18 21:06	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3052931 Matrix: Soil Date Prep: 06.08.18
Parent Sample Id: 588263-060 MS Sample Id: 588263-060 S MSD Sample Id: 588263-060 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	440	248	675	95	679	96	90-110	1	20	mg/kg	06.08.18 21:23	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3052931 Matrix: Soil Date Prep: 06.08.18
Parent Sample Id: 588263-069 MS Sample Id: 588263-069 S MSD Sample Id: 588263-069 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	12.5	249	282	108	281	108	90-110	0	20	mg/kg	06.08.18 22:38	

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3052528 Matrix: Solid Date Prep: 06.06.18
MB Sample Id: 7656149-1-BLK LCS Sample Id: 7656149-1-BKS LCSD Sample Id: 7656149-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	934	93	1090	109	70-135	15	20	mg/kg	06.06.18 18:16	
Diesel Range Organics (DRO)	<15.0	1000	994	99	1120	112	70-135	12	20	mg/kg	06.06.18 18:16	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	102		122		127		70-135	%	06.06.18 18:16
o-Terphenyl	108		116		129		70-135	%	06.06.18 18:16

MS/MSD Percent Recovery [D] = 100*(C-A) / B LCS = Laboratory Control Sample MS = Matrix Spike
Relative Percent Difference RPD = 200* | (C-E) / (C+E) | A = Parent Result B = Spike Added
LCS/LCSD Recovery [D] = 100 * (C) / [B] C = MS/LCS Result D = MSD/LCSD % Rec
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample) E = MSD/LCSD Result

QC Summary 588290

LT Environmental, Inc.

2RP-3957

Analytical Method: TPH by SW8015 Mod | Prep Method: TX1005P
Seq Number: 3052528 | Matrix: Soil | Date Prep: 06.06.18
Parent Sample Id: 588290-001 | MS Sample Id: 588290-001 S | MSD Sample Id: 588290-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	880	88	876	88	70-135	0	20	mg/kg	06.06.18 19:18	
Diesel Range Organics (DRO)	<15.0	1000	943	94	933	93	70-135	1	20	mg/kg	06.06.18 19:18	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	104		105		70-135	%	06.06.18 19:18
o-Terphenyl	94		93		70-135	%	06.06.18 19:18

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3053169 | Matrix: Solid | Date Prep: 06.07.18
MB Sample Id: 7656514-1-BLK | LCS Sample Id: 7656514-1-BKS | LCSD Sample Id: 7656514-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0994	0.0867	87	0.0910	91	70-130	5	35	mg/kg	06.07.18 14:04	
Toluene	<0.00199	0.0994	0.0925	93	0.0969	97	70-130	5	35	mg/kg	06.07.18 14:04	
Ethylbenzene	<0.00199	0.0994	0.0929	93	0.0989	99	71-129	6	35	mg/kg	06.07.18 14:04	
m,p-Xylenes	<0.00398	0.199	0.199	100	0.216	108	70-135	8	35	mg/kg	06.07.18 14:04	
o-Xylene	<0.00199	0.0994	0.0946	95	0.108	108	71-133	13	35	mg/kg	06.07.18 14:04	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	80		100		103		80-120	%	06.07.18 14:04
4-Bromofluorobenzene	84		80		91		80-120	%	06.07.18 14:04

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3053169 | Matrix: Soil | Date Prep: 06.07.18
Parent Sample Id: 588293-001 | MS Sample Id: 588293-001 S | MSD Sample Id: 588293-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.0855	86	0.0881	89	70-130	3	35	mg/kg	06.07.18 16:09	
Toluene	<0.00199	0.0996	0.0922	93	0.0952	96	70-130	3	35	mg/kg	06.07.18 16:09	
Ethylbenzene	<0.00199	0.0996	0.0970	97	0.0994	100	71-129	2	35	mg/kg	06.07.18 16:09	
m,p-Xylenes	<0.00398	0.199	0.211	106	0.215	109	70-135	2	35	mg/kg	06.07.18 16:09	
o-Xylene	<0.00199	0.0996	0.106	106	0.112	113	71-133	6	35	mg/kg	06.07.18 16:09	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		103		80-120	%	06.07.18 16:09
4-Bromofluorobenzene	104		116		80-120	%	06.07.18 16:09

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

Final 1.000

CHAIN OF CUSTODY

Page ___ Of ___

XENCO LABORATORIES

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Phoenix, Arizona (480-355-0900)
www.xenco.com

Xenco Quote #
Xenco Job # 588290

Client / Reporting Information

Company Name / Branch: LT Environmental, Inc. Permian Office
Company Address: 3300 North "A" St. Building 1, unit #103, Midland Tx 79705
Email: abaker@ltenv.com Phone No: (432)704-5178
Project Contact: Adrian Baker
Samplers's Name: Lynda Cantwell

Project Information

Project Name/Number: BEU-039
Project Location: NM 2RP-3957
Invoice To: XTO Energy - Kyle Littrell
PO Number:

Analytical Information

BTEX 8021 (only BTEX)
TPH (MRO, GRO, DRO) 8015
Chloride (300.0)

Matrix Codes

W = Water
S = Soil/Sed/Solid
GW = Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
OW = Ocean/Sea Water
WI = Wipe
O = Oil
WW = Waste Water
A = Air

No.	Field ID / Point of Collection	Collection: Sample Depth	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	BTEX 8021 (only BTEX)	TPH (MRO, GRO, DRO) 8015	Chloride (300.0)	Field Comments
1	SW9A @5'	5'	06/1/18	10:15	S	1								X	X	X	X	None (exc. 2)
2	SW15	5'	"	12:00	S	1								X	X	X	X	
3	SW16	5'	"	12:45	S	1								X	X	X	X	
4	SW2A	4'	06/04/18	9:30	S	1								X	X	X	X	
5	SW17	5'	"	10:35	S	1								X	X	X	X	
6	SW1A	5'	"	11:45	S	1								X	X	X	X	
7	SW18	3'	"	13:15	S	1								X	X	X	X	
8	FS5	5'	"	13:30	S	1								X	X	X	X	
9																		
10																		

Turnaround Time (Business days)

- [ ] Same Day TAT
- [x] 5 Day TAT
- [ ] Next Day EMERGENCY
- [ ] 7 Day TAT
- [ ] 2 Day EMERGENCY
- [ ] Contract TAT
- [ ] 3 Day EMERGENCY

TAT Starts Day received by Lab, if received by 5:00 pm

Data Deliverable Information

- [ ] Level II Std QC
- [ ] Level IV (Full Data Pkg /raw data)
- [ ] Level III Std QC+ Forms
- [ ] TRRP Level IV
- [ ] Level 3 (CLP Forms)
- [ ] UST / RG -411
- [ ] TRRP Checklist

Notes:

FED-EX / UPS: Tracking #

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by Sampler / Relinquished by:	Date Time:	Received By:	Date Time:	Received By:
1	Lynda Cantwell	06/04/18 17:30	Pamela L Wells	6/5/18 15:30	
2	Pamela L Wells				06/06/18 10:40
3	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time: / Received By:
4					
5	Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable

On Ice: X
Cooler Temp.: 4.1 R
Thermo. Corr. Factor: 0.0

Notice: 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 loses are due to circumstances beyond the control of Xenco. A minimum charge of $75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xenco but not analyzed will be invoiced at $5 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract.

Inter-Office Shipment

IOS Number **108390**

Date/Time: 06/06/18 12:17
Lab# From: **Midland**
Lab# To: **San Antonio**

Created by: Shawnee Smith
Delivery Priority:
Air Bill No.:

Please send report to: Jessica Kramer
Address: 1211 W. Florida Ave, Midland TX 79701
Phone:
E-Mail: jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
588290-001	S	SW9A	06/01/18 10:15	SW8021B	BTEX by EPA 8021B	06/12/18	06/15/18	JKR	BR4FBZ BZ BZME EBZ X	
588290-002	S	SW15	06/01/18 12:00	SW8021B	BTEX by EPA 8021B	06/12/18	06/15/18	JKR	BR4FBZ BZ BZME EBZ X	
588290-003	S	SW16	06/01/18 12:45	SW8021B	BTEX by EPA 8021B	06/12/18	06/15/18	JKR	BR4FBZ BZ BZME EBZ X	
588290-004	S	SW2A	06/04/18 09:30	SW8021B	BTEX by EPA 8021B	06/12/18	06/18/18	JKR	BR4FBZ BZ BZME EBZ X	
588290-005	S	SW17	06/04/18 10:35	SW8021B	BTEX by EPA 8021B	06/12/18	06/18/18	JKR	BR4FBZ BZ BZME EBZ X	
588290-006	S	SW1A	06/04/18 12:45	SW8021B	BTEX by EPA 8021B	06/12/18	06/18/18	JKR	BR4FBZ BZ BZME EBZ X	
588290-007	S	SW18	06/04/18 13:15	SW8021B	BTEX by EPA 8021B	HOLD	06/18/18	JKR	BR4FBZ BZ BZME EBZ X	
588290-008	S	FS5	06/04/18 13:30	SW8021B	BTEX by EPA 8021B	06/12/18	06/18/18	JKR	BR4FBZ BZ BZME EBZ X	

Inter Office Shipment or Sample Comments:

Relinquished By 
Shawnee Smith

Date Relinquished: 06/06/2018

Received By: 
Felipe Ovalle

Date Received: 06/07/2018 09:48

Cooler Temperature: 1.9

XENCO Laboratories

Inter Office Report- Sample Receipt Checklist

Sent To: San Antonio

IOS #: 108390

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient
Temperature Measuring device used : SAT4 CF:-0.1

Sent By: Shawnee Smith **Date Sent:** 06/06/2018 12:17 PM

Received By: Felipe Ovalle **Date Received:** 06/07/2018 09:48 AM

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	1.9	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received with appropriate temperature?	**Yes**	Initial Temp: 2.0 CF:-0.1 Final Temp: 1.9
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 *Custody Seals Signed and dated for Containers/coolers	**Yes**	
#6 *IOS present?	**Yes**	
#7 Any missing/extra samples?	**No**	
#8 IOS agrees with sample label(s)/matrix?	**Yes**	
#9 Sample matrix/ properties agree with IOS?	**Yes**	
#10 Samples in proper container/ bottle?	**Yes**	
#11 Samples properly preserved?	**Yes**	
#12 Sample container(s) intact?	**Yes**	
#13 Sufficient sample amount for indicated test(s)?	**Yes**	
#14 All samples received within hold time?	**Yes**	

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ **Contacted by :** _____ **Date:** _____

Checklist reviewed by: _____ Date: 06/07/2018

Felipe Ovalle

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 06/06/2018 10:45:00 AM

Work Order #: 588290

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	5.8	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**	
#5 Custody Seals intact on sample bottles?	**N/A**	
#6*Custody Seals Signed and dated?	**N/A**	
#7 *Chain of Custody present?	**Yes**	
#8 Any missing/extra samples?	**Yes**	Missing sample 007 (SW18)
#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)?	**Yes**	San Antonio
#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: Shawnee Smith Date: 06/06/2018

Shawnee Smith

Checklist reviewed by: Jessica Kramer Date: 06/06/2018

Jessica Kramer

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 197775

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 197775
	Action Type: [IM-SD] Incident File Support Doc (ENV) (IM-BNF)

CONDITIONS

Created By	Condition	Condition Date
bhall	None	3/16/2023