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

October 22, 2018

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

RE: Closure Request
Big Eddy Unit #158
Remediation Permit Number 2RP-2631 and 2RP-2662
Eddy County, New Mexico

Dear Mr. Bratcher:

LT Environmental, Inc. (LTE), on behalf of XTO Energy, Inc. (XTO), presents the following letter report detailing the excavation of impacted soil and confirmation soil sampling activities at the Big Eddy Unit (BEU) #158 (Site) in Unit J, Section 4, Township 22 South, Range 28 East, in Eddy County, New Mexico (Figure 1). The purpose of the excavation activities was to address impacts to soil after two separate events caused releases of crude oil and produced water in the tank battery containment area.

On November 24, 2014, a water dump valve failed, sending produced water to the oil tank and causing an overflow of approximately 5 barrels (bbls) of crude oil and 37 bbls of produced water. The release impacted approximately 1,500 square feet of caliche and pea gravel within the tank battery earthen containment. Free-standing liquid was removed with a vacuum truck; approximately 3 bbls of crude oil and 12 bbls of produced water were recovered. The former operator reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form C-141 (NMOCD Form C-141) on November 25, 2014, and was assigned Remediation Permit (RP) Number 2RP-2631 (Attachment 1).

On December 1, 2014, the water dump valve failed again causing another release from the oil tank of approximately 20 bbls of crude oil and 115 bbls of produced water. The release impacted approximately 1,500 square feet of the tank battery. Free-standing liquid was removed with a vacuum truck; approximately 20 bbls of crude oil and 80 bbls of produced water were recovered. The former operator reported the release to the NMOCD on a separate Form C-141 on December 15, 2014, and was assigned RP number 2RP-2662 (Attachment 1). After the release on December 1, 2014, the water dump valve was replaced, and the tank battery was relocated to allow for remediation activities at the former tank battery location.

Although the releases 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. Since

both releases occurred within the process equipment containment berm, the sampling and excavation activities were completed to address and close both releases simultaneously. Based on the results of the confirmation soil sampling events conducted after impacted soil was removed, XTO is requesting no further action for these two release events.

BACKGROUND

Because the releases occurred prior to August 14, 2018, LTE applied criteria for the NMOCD 1993 *Guidelines for Leaks, Spills, and Releases* for determining remediation action levels. Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest water well data and known aquifer properties. The nearest permitted water well is C 03534, located approximately 1.07 miles southeast of the Site, and approximately 28 feet lower in elevation. Depth to groundwater in the water well is 106 feet bgs and it has a total depth of 150 feet bgs. The Site is greater than 1,000 feet from a water source and greater than 200 feet from a private domestic water source. The closest surface water to the Site is an unnamed arroyo located approximately 0.91 miles south of the Site. Based on these criteria, the NMOCD site ranking for remediation action levels is 0, and the following remediation action levels apply: 10 milligrams per kilogram (mg/kg) benzene; 50 mg/kg total benzene, toluene, ethylbenzene, and total xylenes (BTEX); and 5,000 mg/kg total petroleum hydrocarbons (TPH). Based on standard practice in this region, LTE applied a site-specific chloride action level of 600 mg/kg.

EXCAVATION ACTIVITIES

During September 2018, LTE personnel were at the Site to oversee excavation of impacted soil as indicated by visual staining, field screening, and descriptions on the NMOCD Form C-141s. To delineate hydrocarbon and chloride impacts to soil and direct excavation activities, LTE screened soil using a photo-ionization detector and Hach® chloride QuanTab® test strips. Excavation activities commenced on September 5, 2018, and concluded on September 25, 2018. Impacted soil was mechanically excavated from the release area to depths ranging from 3 feet to 12 feet bgs.

Because both releases were in the same location, one excavation was completed for the two releases. Upon completion of excavation activities, LTE collected discrete confirmation soil samples from the side walls (SW01 through SW11) and floor of the excavation (FS01 through FS10). The soil samples were collected and placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler, method of analysis, and immediately placed on ice. The soil samples were shipped at 4 degrees Celsius (°C) under strict chain-of-custody procedures to Xenco Laboratories in Midland, Texas, for analysis of BTEX by United States Environmental Protection Agency (USEPA) Method 8021B, TPH-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH- oil range organics (ORO) by USEPA Method 8015M/D, and chloride by USEPA Method 300.

The excavation measured approximately 5,269 square feet around the former tank battery with depths ranging from 3 feet bgs in the southeast portion of the excavation up to 12 feet bgs in the northeast corner of the excavation. Approximately 1,585 cubic yards of impacted soil were removed from the excavation. The impacted soil was transported and properly disposed of at the R360 Landfarm, in Hobbs, New Mexico. A photographic log of the excavation is included as Attachment 3.

ANALYTICAL RESULTS

Laboratory analytical results confirmed that all soil samples collected from the final excavation extents were compliant with the NMOCD site-specific remediation action levels for BTEX, TPH, and chloride. Laboratory analytical results are presented on Figure 2 and summarized in Table 1, and the complete laboratory analytical reports are included as Attachment 2.

CONCLUSIONS

The impacted soil was excavated and laboratory analytical results for the confirmation soil samples collected from the final excavation extents indicate that BTEX, TPH, and chloride concentrations are compliant with NMOCD site-specific remediation action levels. XTO has successfully removed the impacted soil at the Site and requests no further action for these two releases. Upon approval of this request, XTO will backfill the excavation with caliche well pad material. An updated NMOCD Form C-141 is included with Attachment 1.

If you have any questions or comments, please do not hesitate to contact Ms. 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
Maria Pruett, NMOCD
Jim Amos, BLM
Shelly Tucker, BLM

Attachments:

Figure 1	Site Location Map
Figure 2	Soil Sample Locations
Table 1	Soil Analytical Results
Attachment 1	Initial/Final NMOCD Form C-141 (2RP-2631 and 2RP-2662)
Attachment 2	Laboratory Analytical Reports
Attachment 3	Photographic Log

FIGURES

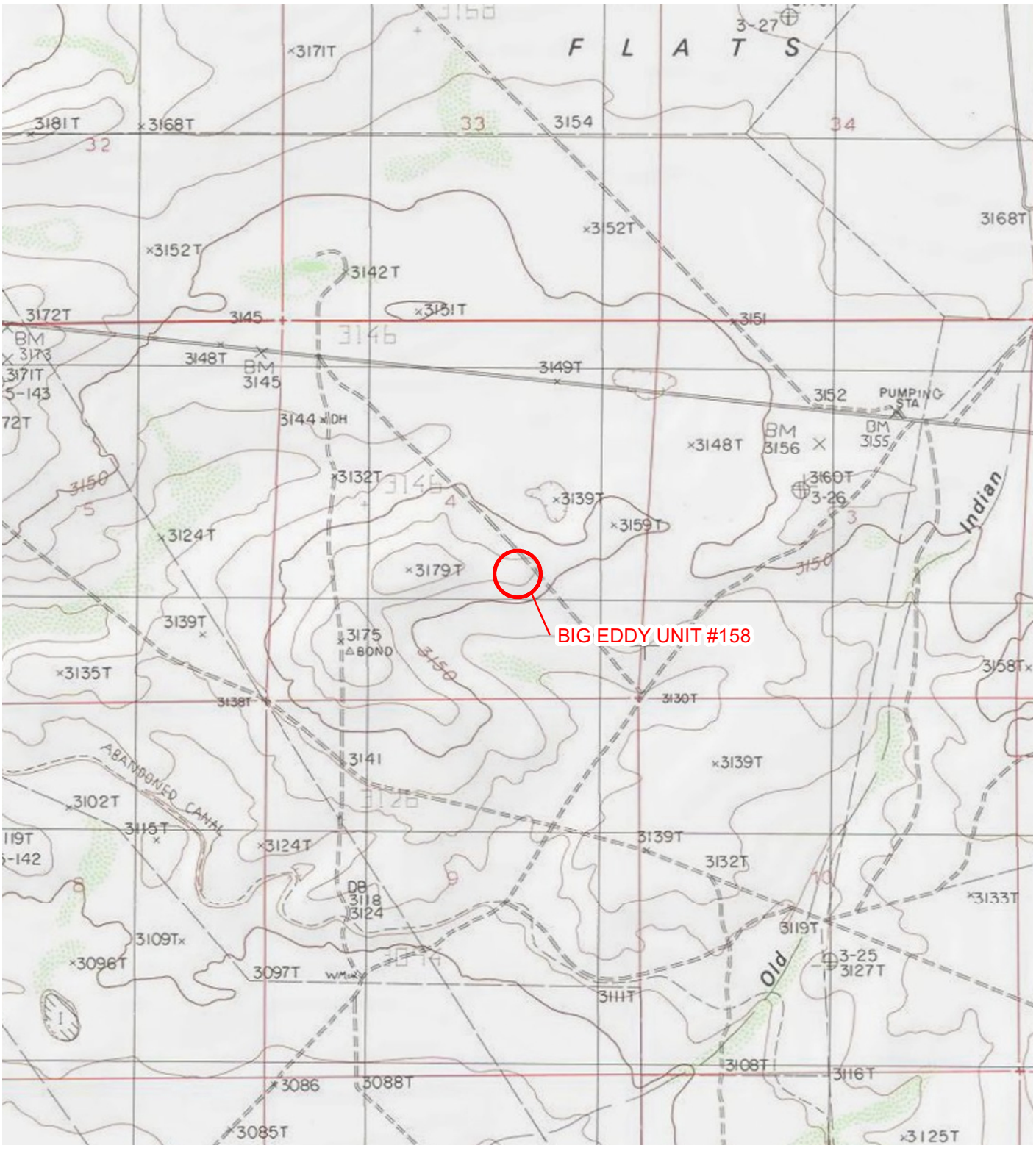


IMAGE COURTESY OF ESRI/USGS

LEGEND

SITE LOCATION

0 2,000 4,000

Feet

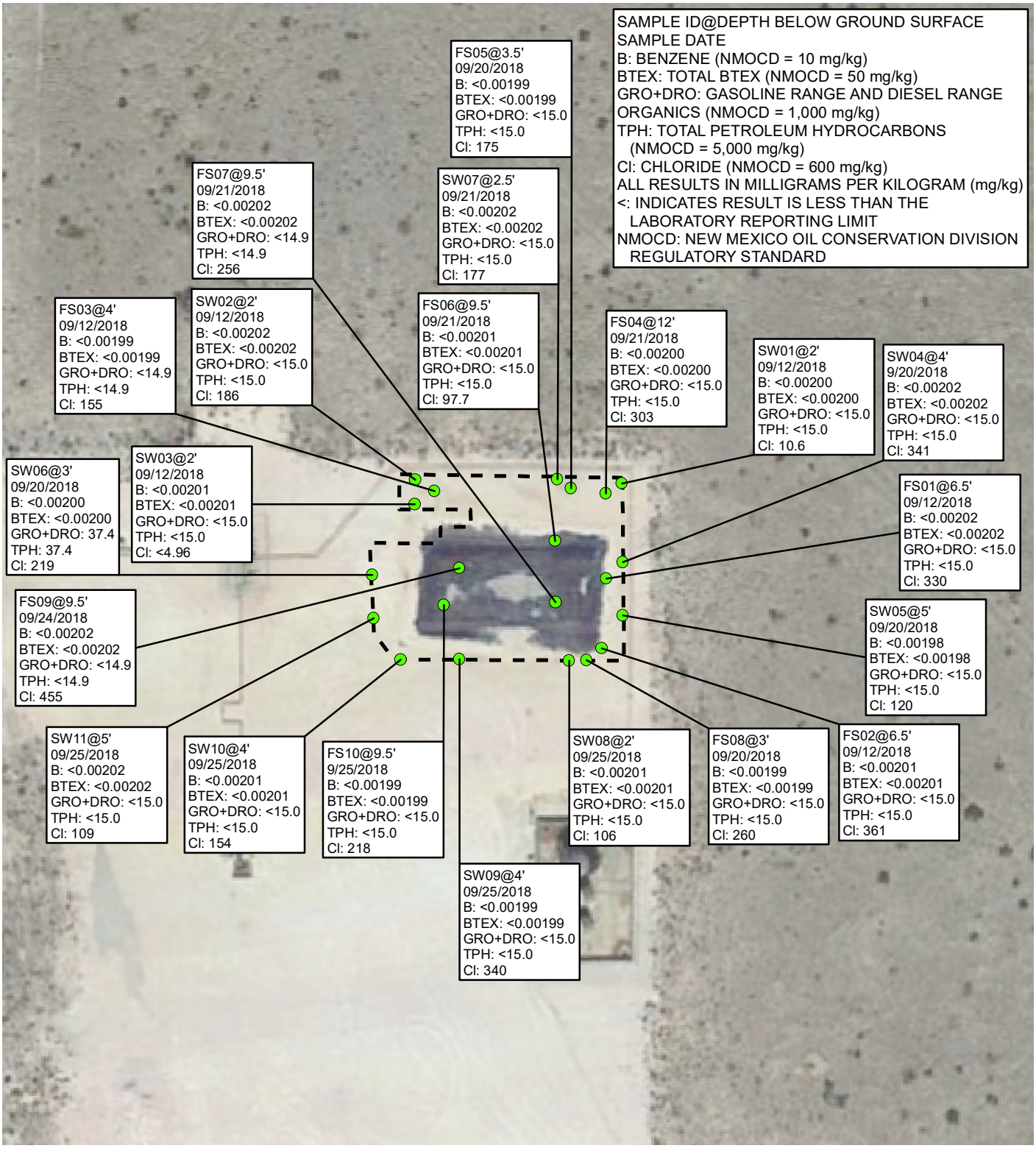
N

NEW MEXICO

NOTE: REMEDIATION PERMIT
NUMBERS 2RP-2631 & 2RP-2662

FIGURE 1
SITE LOCATION MAP
BIG EDDY UNIT #158
UNIT J SEC 4 T22S R28E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012918066_BEU-158_TANK BATTERY\012918066_FIG01_SL_2018.mxd



LEGEND

FINAL CONFIRMATION SOIL SAMPLE

EXCAVATION EXTENT

IMAGE COURTESY OF GOOGLE EARTH 2017

0 60 120

Feet

N

FIGURE 2
SOIL SAMPLE LOCATIONS
BIG EDDY UNIT #158
UNIT J SEC 4 T22S R28E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

NOTE: REMEDIATION PERMIT NUMBERS 2RP-2631 & 2RP-2662

P:\XTO Energy\GIS\MXD\012918066_BEU-158_TANK BATTERY\012918066_FIG02_SITE_2018.mxd

TABLES

TABLE 1
SOIL ANALYTICAL RESULTS
BIG EDDY UNIT #158
REMEDIATION PERMIT NUMBERS 2RP-2631 and 2RP-2662
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 GRO (mg/kg)	C10-C28 DRO (mg/kg)	C28-C40 ORO (mg/kg)	GRO and DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
Backfill Sample	0.5	09/10/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	<4.95
FS01	6.5	09/12/2018	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<15.0	<15.0	<15.0	<15.0	<15.0	330
FS02	6.5	09/12/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	<15.0	361
FS03	4	09/12/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<14.9	<14.9	<14.9	<14.9	<14.9	155
SW01	2	09/12/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	10.6
SW02	2	09/12/2018	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<15.0	<15.0	<15.0	<15.0	<15.0	186
SW03	2	09/12/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	<15.0	<4.96
FS05	3.5	09/20/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	<15.0	175
FS08	3	09/20/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	<15.0	260
SW04	4	09/20/2018	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<15.0	<15.0	<15.0	<15.0	<15.0	341
SW05	5	09/20/2018	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<15.0	<15.0	<15.0	<15.0	<15.0	120
SW06	3	09/20/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	37.4	<15.0	37.4	37.4	219
FS04	12	09/21/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	303
FS06	9.5	09/21/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	<15.0	97.7
FS07	9.5	09/21/2018	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<14.9	<14.9	<14.9	<14.9	<14.9	256
SW07	2.5	09/21/2018	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<15.0	<15.0	<15.0	<15.0	<15.0	177
FS09	9.5	09/24/2018	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<14.9	<14.9	<14.9	<14.9	<14.9	455
FS10	9.5	09/25/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	<15.0	218
SW08	2	09/25/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	<15.0	106
SW09	4	09/25/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	<15.0	340
SW10	4	09/25/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	<15.0	154
SW11	5	09/25/2018	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<15.0	<15.0	<15.0	<15.0	<15.0	109
NMOCD Remediation Action Levels			10	NE	NE	NE	50	NE	NE	NE	NE	5,000	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
DRO - diesel range organics
GRO - gasoline range organics
ORO - oil range organics
TPH - total petroleum hydrocarbons
< - indicates result is below laboratory reporting limits

ATTACHMENT 1: INITIAL/FINAL NMOCD FORM C-141 (2RP-2631 and 2RP-2662)

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

NM OIL CONSERVATION
ARTESIA DISTRICT
NOV 26 2014
RECEIVED

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

nAB1433051541 2100737

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: BOPCO, L.P.	Contact: Tony Savoie
Address: 522 W. Mermod, Suite 704 Carlsbad, N.M. 88220	Telephone No. 575-887-7329
Facility Name: Big Eddy Unit #158	Facility Type: Exploration and Production

Surface Owner: Federal	Mineral Owner: Federal	API No. 30-015-35345

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
J	4	22S	28E	1830	South	1980	East	Eddy

Latitude N 32.420070 **Longitude** W 104.089737

NATURE OF RELEASE

Type of Release: Crude oil and produced water	Volume of Release: 5 bbls crude oil and 37 bbls produced water.	Volume Recovered: 3 bbls crude oil and 12 bbls produced water
Source of Release: Oil production Tank	Date and Hour of Occurrence: 11/24/14 time unknown	Date and Hour of Discovery: 11/24/14 at approximately 6:50 a.m.
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Heather Patterson NMOCD	
By Whom? Amy Ruth	Date and Hour: 11/24/14 at 1:07 p.m.	
Was a Watercourse Reached? ☐ Yes ☐ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
A water dump valve failed sending all of the water to the oil tank causing it to overflow. The dump valve was replaced.

Describe Area Affected and Cleanup Action Taken.*
The spill impacted the entire surface of the dirt containment area of approximately 1500 sq. ft. the containment area is constructed with compacted caliche covered with pea gravel. All of the free standing fluid was recovered, due to the very hard coarse soil conditions the soil inside the containment, the impacted area is heavily saturated with produced water. Basin Environmental placed a one-call for the purpose of determining the vertical extent of contamination inside the bermed area. A summary report and remediation plan will be submitted after the sampling event scheduled for 12/1/14.

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: Tony Savoie

Printed Name: Tony Savoie

Title: Waste Management and Remediation Specialist

E-mail Address: tasavoie@basspet.com

Date: 11/25/14 Phone: 432-556-8730

OIL CONSERVATION DIVISION

Approved by Environmental Specialist: Signed By Mike Bratcher

Approval Date: 11/26/14 Expiration Date:

Conditions of Approval: Attached ☐

Remediation per O.C.D. Rules & Guidelines
SUBMIT REMEDIATION PROPOSAL NO LATER THAN: 12/26/14

2RP-2031

* Attach Additional Sheets If Necessary

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1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	
District RP	2RP-2631
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: XTO Energy, Inc	OGRID: 5380
Contact Name: Kyle Littrell	Contact Telephone: (432)-221-7331
Contact email: Kyle_Littrell@xtoenergy.com	Incident #: 2RP-2631
Contact mailing address 522 W. Mermod, Suite 704 Carlsbad, NM 88220	

Location of Release Source

Latitude 32.420070 Longitude 104.089737
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Big Eddy Unit #158	Site Type Exploration and Production
Date Release Discovered 11/24/2018	API# *(if applicable)* 30-015-35345

Unit Letter	Section	Township	Range	County
J	4	22S	28E	Eddy

Surface Owner: ☐ State ☒ Federal ☐ Tribal ☐ Private (*Name:* _____)

Nature and Volume of Release

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

☒ Crude Oil	Volume Released (bbls) 5	Volume Recovered (bbls) 3
☒ Produced Water	Volume Released (bbls) 37	Volume Recovered (bbls) 12
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release
A water dump valve failed sending all of the water to the oil tank causing it to overflow. The dump valve was replaced.

Incident ID	
District RP	2RP-2631
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? This is a major release because it is greater than 25 bbls
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Immediate notice was given to Heather Patterson (NMOCD) by Amy Ruth on 11/24/14 at 1:07 p.m.	

Initial Response

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

☒ The source of the release has been stopped.
☒ The impacted area has been secured to protect human health and the environment.
☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

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

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

Printed Name: Kyle Littrell Title: SH&E Coordinator

Signature: Date: 10/23/2018

email: Kyle_Littrell@xtoenergy.com Telephone: 432-221-7331

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	2RP-2631
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: ***Each of the following items must be included in the closure report.***

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Kyle Littrell Title: SH&E Coordinator

Signature: Date: 10/23/2018

email: Kyle_Littrell@xtoenergy.com Telephone: 432-221-7331

OCD Only

Received by: Date:

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: Date:

Printed Name: Title:

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1000 Rio Brazos Road, Aztec, NM 87410
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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

nAB1435036014 2600737

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: BOPCO, L.P.	Contact: Tony Savoie
Address: 522 W. Mermod, Suite 704 Carlsbad, N.M. 88220	Telephone No. 575-887-7329
Facility Name: Big Eddy Unit #158	Facility Type: Exploration and Production

Surface Owner: Federal	Mineral Owner: Federal	API No. 30-015-35345

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
J	4	22S	28E	1830	South	1980	East	Eddy

Latitude N 32.420070 **Longitude** W 104.089737

NATURE OF RELEASE

Type of Release: Crude oil and produced water	Volume of Release: 20 bbls crude oil and 115 bbls produced water.	Volume Recovered: 20 bbls crude oil and 80 bbls produced water
Source of Release: Oil production Tank	Date and Hour of Occurrence: 12/1/14 at approximately 8:00 am	Date and Hour of Discovery: 12/1/14 at approximately 12:56 p.m.
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Mike Bratcher NMOCD	
By Whom? Bradley Blevins	Date and Hour: 12/1/14 at 2:56 p.m.	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

NM OIL CONSERVATION
ARTESIA DISTRICT
DEC 15 2014
RECEIVED

Describe Cause of Problem and Remedial Action Taken.*
A water dump valve failed sending all of the water to the oil tank causing it to overflow. The dump valve was replaced.

Describe Area Affected and Cleanup Action Taken.*
The spill impacted the entire surface of the dirt containment area of approximately 1500 sq. ft. the containment area is constructed with compacted caliche covered with pea gravel. All of the free standing fluid was recovered. On 12/2/14 Basin Env. used a backhoe to determine the vertical extent inside the containment area. The soil conditions were too hard to penetrate at 2.5 ft. below the surface. Plans are being made to re-locate the tank battery and continued with the excavation around the tanks. The spill area will be cleaned up in accordance to the NMOCD and BLM remediation guidelines.

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: Tony Savoie	OIL CONSERVATION DIVISION
Printed Name: Tony Savoie	Approved by Environmental Specialist: Signed By Mike Bratcher
Title: Waste Management and Remediation Specialist	Approval Date: 12/16/14 Expiration Date: N/A
E-mail Address: tasavoie@basspet.com	Conditions of Approval: Remediation per O.C.D. Rules & Guidelines SUBMIT REMEDIATION PROPOSAL NO LATER THAN: 1/16/15 Attached ☐
Date: 12/15/14 Phone: 432-556-8730	

* Attach Additional Sheets If Necessary

2RP-2662

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	
District RP	2RP-2662
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: XTO Energy, Inc	OGRID: 5380
Contact Name: Kyle Littrell	Contact Telephone: (432)-221-7331
Contact email: Kyle_Littrell@xtoenergy.com	Incident #: 2RP-2662
Contact mailing address 522 W. Mermod, Suite 704 Carlsbad, NM 88220	

Location of Release Source

Latitude 32.420070 Longitude 104.089737
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Big Eddy Unit #158	Site Type Exploration and Production
Date Release Discovered 12/1/2014	API# *(if applicable)* 30-015-35345

Unit Letter	Section	Township	Range	County
J	4	22S	28E	Eddy

Surface Owner: ☐ State ☒ Federal ☐ Tribal ☐ Private (*Name:* _____)

Nature and Volume of Release

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

☒ Crude Oil	Volume Released (bbls) 20	Volume Recovered (bbls) 20
☒ Produced Water	Volume Released (bbls) 115	Volume Recovered (bbls) 80
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release
A water dump valve failed sending all of the water to the oil tank causing it to overflow. The dump valve was replaced.

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	2RP-2662
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? This is a major release because it is greater than 25 bbls.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Immediate notice was given to Mike Bratcher (NMOCD) by Bradley Blevins on 12/1/14 at 12:56 p.m.	

Initial Response

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

☒ The source of the release has been stopped.

☒ The impacted area has been secured to protect human health and the environment.

☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

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

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

Printed Name: Kyle Littrell Title: SH&E Coordinator

Signature: Date: 10/23/2018

email: Kyle_Littrell@xtoenergy.com Telephone: 432-221-7331

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	2RP-2662
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: ***Each of the following items must be included in the closure report.***

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Kyle Littrell Title: SH&E Coordinator

Signature: Date: 10/23/2018

email: Kyle_Littrell@xtoenergy.com Telephone: 432-221-7331

OCD Only

Received by: Date:

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: Date:

Printed Name: Title:

ATTACHMENT 2: LABORATORY ANALYTICAL REPORTS

Analytical Report 598604

for

LT Environmental, Inc.

Project Manager: Adrian Baker

BEU-158

012918066

12-SEP-18

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-18-27), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-18-17), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-13)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-17)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-16)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)
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-SEP-18

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

Reference: XENCO Report No(s): **598604**
BEU-158
Project Address: Delaware Basin

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) 598604. 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. 598604 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 598604

LT Environmental, Inc., Arvada, CO

BEU-158

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Backfill Sample	S	09-10-18 10:00	6 In	598604-001

Version: 1.%

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: BEU-158

Project ID: *012918066*
Work Order Number(s): *598604*

Report Date: *12-SEP-18*
Date Received: *09/11/2018*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3062939 BTEX by EPA 8021B

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

Certificate of Analysis Summary 598604

LT Environmental, Inc., Arvada, CO

Project Name: BEU-158

Project Id: 012918066
Contact: Adrian Baker
Project Location: Delaware Basin

Date Received in Lab: Tue Sep-11-18 11:56 am
Report Date: 12-SEP-18
Project Manager: Jessica Kramer

Analysis Requested							
	Lab Id:	598604-001					
	Field Id:	Backfill Sample					
	Depth:	6- In					
	Matrix:	SOIL					
	Sampled:	Sep-10-18 10:00					
BTEX by EPA 8021B	***Extracted:***	** ** ** **					
	Analyzed:	Sep-11-18 15:40					
	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:***	Sep-11-18 16:15					
	Analyzed:	Sep-11-18 22:47					
	Units/RL:	mg/kg	RL				
Chloride		<4.95	4.95				
TPH by SW8015 Mod	***Extracted:***	Sep-11-18 12:00					
	Analyzed:	Sep-11-18 17:45					
	Units/RL:	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0				
Diesel Range Organics (DRO)		<15.0	15.0				
Motor Oil Range Hydrocarbons (MRO)		<15.0	15.0				
Total TPH		<15.0	15.0				

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

Version: 1.%

Jessica Kramer
Project Assistant

Final 1.000

Certificate of Analytical Results 598604

LT Environmental, Inc., Arvada, CO

BEU-158

Sample Id:	**Backfill Sample**	Matrix:	Soil	Date Received:	09.11.18 11.56
Lab Sample Id:	598604-001	Date Collected:	09.10.18 10.00	Sample Depth:	6 In

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	09.11.18 16.15	Basis:	Wet Weight
Seq Number:	3062840				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.95	4.95	mg/kg	09.11.18 22.47	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	09.11.18 12.00	Basis:	Wet Weight
Seq Number:	3062894				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	09.11.18 17.45	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	09.11.18 17.45	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	09.11.18 17.45	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	09.11.18 17.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	09.11.18 17.45	
o-Terphenyl	84-15-1	100	%	70-135	09.11.18 17.45	

Certificate of Analytical Results 598604

LT Environmental, Inc., Arvada, CO

BEU-158

Sample Id:	**Backfill Sample**	Matrix:	Soil	Date Received:	09.11.18 11.56
Lab Sample Id:	598604-001	Date Collected:	09.10.18 10.00	Sample Depth:	6 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	09.11.18 08.30	Basis:	Wet Weight
Seq Number:	3062939				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.11.18 15.40	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.11.18 15.40	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.11.18 15.40	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	09.11.18 15.40	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.11.18 15.40	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.11.18 15.40	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.11.18 15.40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	92	%	70-130	09.11.18 15.40	
1,4-Difluorobenzene	540-36-3	97	%	70-130	09.11.18 15.40	

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 598604

LT Environmental, Inc.

BEU-158

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3062840 — Matrix: Solid — Date Prep: 09.11.18
MB Sample Id: 7662052-1-BLK — LCS Sample Id: 7662052-1-BKS — LCSD Sample Id: 7662052-1-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	261	104	259	104	90-110	1	20	mg/kg	09.11.18 20:06	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3062840 — Matrix: Soil — Date Prep: 09.11.18
Parent Sample Id: 598439-016 — MS Sample Id: 598439-016 S — MSD Sample Id: 598439-016 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<1.48	432	434	100	437	101	90-110	1	20	mg/kg	09.11.18 20:25	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3062840 — Matrix: Soil — Date Prep: 09.11.18
Parent Sample Id: 598439-026 — MS Sample Id: 598439-026 S — MSD Sample Id: 598439-026 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<1.04	302	305	101	308	102	90-110	1	20	mg/kg	09.11.18 21:52	

Analytical Method: TPH by SW8015 Mod — Prep Method: TX1005P
Seq Number: 3062894 — Matrix: Solid — Date Prep: 09.11.18
MB Sample Id: 7662103-1-BLK — LCS Sample Id: 7662103-1-BKS — LCSD Sample Id: 7662103-1-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)	<8.00	1000	1040	104	1050	105	70-135	1	20	mg/kg	09.11.18 13:05	
Diesel Range Organics (DRO)	<8.13	1000	1070	107	1140	114	70-135	6	20	mg/kg	09.11.18 13:05	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	92		123		126		70-135	%	09.11.18 13:05
o-Terphenyl	97		114		114		70-135	%	09.11.18 13:05

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

Final 1.000

QC Summary 598604

LT Environmental, Inc.

BEU-158

Analytical Method: TPH by SW8015 Mod | Prep Method: TX1005P
Seq Number: 3062894 | Matrix: Soil | Date Prep: 09.11.18
Parent Sample Id: 598400-001 | MS Sample Id: 598400-001 S | MSD Sample Id: 598400-001 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)	9.10	1040	993	95	1010	96	70-135	2	20	mg/kg	09.11.18 14:01	
Diesel Range Organics (DRO)	8.72	1040	1060	101	1080	103	70-135	2	20	mg/kg	09.11.18 14:01	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	113		113		70-135	%	09.11.18 14:01
o-Terphenyl	96		96		70-135	%	09.11.18 14:01

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3062939 | Matrix: Solid | Date Prep: 09.11.18
MB Sample Id: 7662122-1-BLK | LCS Sample Id: 7662122-1-BKS | LCSD Sample Id: 7662122-1-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	0.108	109	0.0966	97	70-130	11	35	mg/kg	09.11.18 11:23	
Toluene	<0.00199	0.0994	0.109	110	0.0969	97	70-130	12	35	mg/kg	09.11.18 11:23	
Ethylbenzene	<0.00199	0.0994	0.114	115	0.100	100	70-130	13	35	mg/kg	09.11.18 11:23	
m,p-Xylenes	<0.00398	0.199	0.230	116	0.198	99	70-130	15	35	mg/kg	09.11.18 11:23	
o-Xylene	<0.00199	0.0994	0.111	112	0.0955	96	70-130	15	35	mg/kg	09.11.18 11:23	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	94		99		96		70-130	%	09.11.18 11:23
4-Bromofluorobenzene	93		90		91		70-130	%	09.11.18 11:23

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3062939 | Matrix: Soil | Date Prep: 09.11.18
Parent Sample Id: 598443-010 | MS Sample Id: 598443-010 S | MSD Sample Id: 598443-010 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00198	0.0992	0.0730	74	0.0693	69	70-130	5	35	mg/kg	09.11.18 12:04	X
Toluene	<0.00198	0.0992	0.0722	73	0.0693	69	70-130	4	35	mg/kg	09.11.18 12:04	X
Ethylbenzene	<0.00198	0.0992	0.0706	71	0.0685	69	70-130	3	35	mg/kg	09.11.18 12:04	X
m,p-Xylenes	<0.00397	0.198	0.139	70	0.134	67	70-130	4	35	mg/kg	09.11.18 12:04	X
o-Xylene	<0.00198	0.0992	0.0667	67	0.0647	65	70-130	3	35	mg/kg	09.11.18 12:04	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	91		91		70-130	%	09.11.18 12:04
4-Bromofluorobenzene	91		90		70-130	%	09.11.18 12:04

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

XENCO LABORATORIES

Chain of Custody

Work Order No: 598604

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

www.xenco.com Page 1 of 1

Project Manager:	Adrian Baker	Bill to: (if different)	Kyle Littrell
Company Name:	LT Environmental	Company Name:	XTO
Address:	3300 "A" Street Building 1, #103	Address:	
City, State ZIP:	Midland Tx 79705	City, State ZIP:	
Phone:	(432) 704-5178	Email:	ABaker@LTEnv.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	BEU-158	Turn Around	
Project Number:	012918066	Routine ☐	
P.O. Number:	ZRP-2662	Rush: 09/12/18	
Sampler's Name:	Fabian Uribarri	Due Date: 09/12/18	

SAMPLE RECEIPT				
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No	
Temperature (°C):	0.5	Thermometer ID	T8	
Received Intact:	(Yes) No			
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	0.0	
Sample Custody Seals:	Yes (No) N/A	Total Containers:	1	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	BTEX (only BTEX)	TPH (DRO) (GRO) (MRO)	Chloride (300.0)	Work Order Notes
Backfill Sample	S	9/10/18	1000	6"	1	X	X	X	Backfill pile

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

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	Timothy R. Elliott	9/10/18 - 3:30	2		9/11 1156
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

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XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 09/11/2018 11:56:00 AM

Work Order #: 598604

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
#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: 09/11/2018

Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 09/12/2018

Jessica Kramer

Analytical Report 599231

for

LT Environmental, Inc.

Project Manager: Adrian Baker

BEU-158

012918066

21-SEP-18

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-18-27), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-18-17), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-13)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-17)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-16)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)
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-SEP-18

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

Reference: XENCO Report No(s): **599231**
BEU-158
Project Address: Delaware Basin

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) 599231. 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. 599231 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 599231

LT Environmental, Inc., Arvada, CO

BEU-158

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS01	S	09-12-18 09:15	6.5 ft	599231-001
FS02	S	09-12-18 09:35	6.5 ft	599231-002
FS03	S	09-12-18 10:50	4 ft	599231-003
SW01	S	09-12-18 11:25	2 ft	599231-004
SW02	S	09-12-18 11:10	2 ft	599231-005
SW03	S	09-12-18 11:20	2 ft	599231-006

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: BEU-158

Project ID: *012918066*
Work Order Number(s): *599231*

Report Date: *21-SEP-18*
Date Received: *09/15/2018*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3063658 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3064038 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analysis Summary 599231

LT Environmental, Inc., Arvada, CO

Project Name: BEU-158

Project Id: 012918066
Contact: Adrian Baker
Project Location: Delaware Basin

Date Received in Lab: Sat Sep-15-18 09:00 am
Report Date: 21-SEP-18
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	599231-001		599231-002		599231-003		599231-004		599231-005		599231-006	
	Field Id:	FS01		FS02		FS03		SW01		SW02		SW03	
	Depth:	6.5- ft		6.5- ft		4- ft		2- ft		2- ft		2- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Sep-12-18 09:15		Sep-12-18 09:35		Sep-12-18 10:50		Sep-12-18 11:25		Sep-12-18 11:10		Sep-12-18 11:20	
BTEX by EPA 8021B	*Extracted:*	Sep-19-18 10:00		Sep-19-18 10:00		Sep-18-18 09:00		Sep-18-18 09:00		Sep-18-18 09:00		Sep-18-18 09:00	
	Analyzed:	Sep-19-18 15:17		Sep-19-18 15:39		Sep-18-18 13:45		Sep-18-18 15:03		Sep-18-18 15:24		Sep-18-18 15:44	
	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	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200	<0.00202	0.00202	<0.00201	0.00201
Toluene		<0.00202	0.00202	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200	<0.00202	0.00202	<0.00201	0.00201
Ethylbenzene		<0.00202	0.00202	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200	<0.00202	0.00202	<0.00201	0.00201
m,p-Xylenes		<0.00403	0.00403	<0.00402	0.00402	<0.00398	0.00398	<0.00399	0.00399	<0.00403	0.00403	<0.00402	0.00402
o-Xylene		<0.00202	0.00202	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200	<0.00202	0.00202	<0.00201	0.00201
Total Xylenes		<0.00202	0.00202	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200	<0.00202	0.00202	<0.00201	0.00201
Total BTEX		<0.00202	0.00202	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200	<0.00202	0.00202	<0.00201	0.00201
Inorganic Anions by EPA 300	*Extracted:*	Sep-19-18 16:40		Sep-19-18 16:40		Sep-19-18 16:40		Sep-19-18 16:40		Sep-19-18 16:40		Sep-19-18 16:40	
	Analyzed:	Sep-20-18 00:06		Sep-20-18 00:57		Sep-20-18 01:03		Sep-20-18 01:09		Sep-20-18 01:14		Sep-20-18 01:20	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		330	5.00	361	5.01	155	4.97	10.6	4.96	186	4.96	<4.96	4.96
TPH by SW8015 Mod	*Extracted:*	Sep-17-18 13:00		Sep-17-18 13:00		Sep-17-18 13:00		Sep-17-18 13:00		Sep-17-18 13:00		Sep-17-18 13:00	
	Analyzed:	Sep-17-18 19:54		Sep-17-18 20:50		Sep-17-18 21:08		Sep-17-18 21:27		Sep-17-18 21:45		Sep-17-18 22:04	
	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
Motor Oil Range Hydrocarbons (MRO)		<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

Jessica Kramer
Project Assistant

Final 1.000

Certificate of Analytical Results 599231

LT Environmental, Inc., Arvada, CO

BEU-158

Sample Id:	**FS01**	Matrix:	Soil	Date Received:	09.15.18 09.00
Lab Sample Id:	599231-001	Date Collected:	09.12.18 09.15	Sample Depth:	6.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	SCM	Date Prep:	09.19.18 16.40	Basis:	Wet Weight
Seq Number:	3063841				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**330**	5.00	mg/kg	09.20.18 00.06		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	09.17.18 13.00	Basis:	Wet Weight
Seq Number:	3063513				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	09.17.18 19.54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	09.17.18 19.54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	09.17.18 19.54	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	09.17.18 19.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	09.17.18 19.54	
o-Terphenyl	84-15-1	102	%	70-135	09.17.18 19.54	

Certificate of Analytical Results 599231

LT Environmental, Inc., Arvada, CO

BEU-158

Sample Id:	**FS01**	Matrix:	Soil	Date Received:	09.15.18 09.00
Lab Sample Id:	599231-001	Date Collected:	09.12.18 09.15	Sample Depth:	6.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	09.19.18 10.00	Basis:	Wet Weight
Seq Number:	3064038				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	09.19.18 15.17	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	09.19.18 15.17	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	09.19.18 15.17	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	09.19.18 15.17	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	09.19.18 15.17	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	09.19.18 15.17	U	1
Total BTEX		<0.00202	0.00202	mg/kg	09.19.18 15.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	108	%	70-130	09.19.18 15.17	
4-Bromofluorobenzene	460-00-4	105	%	70-130	09.19.18 15.17	

Certificate of Analytical Results 599231

LT Environmental, Inc., Arvada, CO

BEU-158

Sample Id:	**FS02**	Matrix:	Soil	Date Received:	09.15.18 09.00
Lab Sample Id:	599231-002	Date Collected:	09.12.18 09.35	Sample Depth:	6.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	SCM	Date Prep:	09.19.18 16.40	Basis:	Wet Weight
Seq Number:	3063841				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**361**	5.01	mg/kg	09.20.18 00.57		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	09.17.18 13.00	Basis:	Wet Weight
Seq Number:	3063513				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	09.17.18 20.50	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	09.17.18 20.50	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	09.17.18 20.50	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	09.17.18 20.50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	09.17.18 20.50	
o-Terphenyl	84-15-1	102	%	70-135	09.17.18 20.50	

Certificate of Analytical Results 599231

LT Environmental, Inc., Arvada, CO

BEU-158

Sample Id:	**FS02**	Matrix:	Soil	Date Received:	09.15.18 09.00
Lab Sample Id:	599231-002	Date Collected:	09.12.18 09.35	Sample Depth:	6.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	09.19.18 10.00	Basis:	Wet Weight
Seq Number:	3064038				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.19.18 15.39	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.19.18 15.39	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.19.18 15.39	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.19.18 15.39	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.19.18 15.39	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.19.18 15.39	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.19.18 15.39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	111	%	70-130	09.19.18 15.39	
4-Bromofluorobenzene	460-00-4	103	%	70-130	09.19.18 15.39	

Certificate of Analytical Results 599231

LT Environmental, Inc., Arvada, CO

BEU-158

Sample Id:	**FS03**	Matrix:	Soil	Date Received:	09.15.18 09.00
Lab Sample Id:	599231-003	Date Collected:	09.12.18 10.50	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	SCM	Date Prep:	09.19.18 16.40	Basis:	Wet Weight
Seq Number:	3063841				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**155**	4.97	mg/kg	09.20.18 01.03		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	09.17.18 13.00	Basis:	Wet Weight
Seq Number:	3063513				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	09.17.18 21.08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	09.17.18 21.08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	14.9	mg/kg	09.17.18 21.08	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	09.17.18 21.08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	09.17.18 21.08	
o-Terphenyl	84-15-1	99	%	70-135	09.17.18 21.08	

Certificate of Analytical Results 599231

LT Environmental, Inc., Arvada, CO

BEU-158

Sample Id:	**FS03**	Matrix:	Soil	Date Received:	09.15.18 09.00
Lab Sample Id:	599231-003	Date Collected:	09.12.18 10.50	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	09.18.18 09.00	Basis:	Wet Weight
Seq Number:	3063658				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.18.18 13.45	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.18.18 13.45	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.18.18 13.45	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.18.18 13.45	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.18.18 13.45	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.18.18 13.45	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.18.18 13.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	114	%	70-130	09.18.18 13.45	
1,4-Difluorobenzene	540-36-3	99	%	70-130	09.18.18 13.45	

Certificate of Analytical Results 599231

LT Environmental, Inc., Arvada, CO

BEU-158

Sample Id:	**SW01**	Matrix:	Soil	Date Received:	09.15.18 09.00
Lab Sample Id:	599231-004	Date Collected:	09.12.18 11.25	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	SCM	Date Prep:	09.19.18 16.40	Basis:	Wet Weight
Seq Number:	3063841				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**10.6**	4.96	mg/kg	09.20.18 01.09		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	09.17.18 13.00	Basis:	Wet Weight
Seq Number:	3063513				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	09.17.18 21.27	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	09.17.18 21.27	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	09.17.18 21.27	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	09.17.18 21.27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	09.17.18 21.27	
o-Terphenyl	84-15-1	99	%	70-135	09.17.18 21.27	

Certificate of Analytical Results 599231

LT Environmental, Inc., Arvada, CO

BEU-158

Sample Id:	**SW01**	Matrix:	Soil	Date Received:	09.15.18 09.00
Lab Sample Id:	599231-004	Date Collected:	09.12.18 11.25	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	09.18.18 09.00	Basis:	Wet Weight
Seq Number:	3063658				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.18.18 15.03	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.18.18 15.03	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.18.18 15.03	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	09.18.18 15.03	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.18.18 15.03	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.18.18 15.03	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.18.18 15.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	97	%	70-130	09.18.18 15.03	
4-Bromofluorobenzene	460-00-4	111	%	70-130	09.18.18 15.03	

Certificate of Analytical Results 599231

LT Environmental, Inc., Arvada, CO

BEU-158

Sample Id:	**SW02**	Matrix:	Soil	Date Received:	09.15.18 09.00
Lab Sample Id:	599231-005	Date Collected:	09.12.18 11.10	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	SCM	Date Prep:	09.19.18 16.40	Basis:	Wet Weight
Seq Number:	3063841				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**186**	4.96	mg/kg	09.20.18 01.14		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	09.17.18 13.00	Basis:	Wet Weight
Seq Number:	3063513				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	09.17.18 21.45	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	09.17.18 21.45	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	09.17.18 21.45	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	09.17.18 21.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	09.17.18 21.45	
o-Terphenyl	84-15-1	99	%	70-135	09.17.18 21.45	

Certificate of Analytical Results 599231

LT Environmental, Inc., Arvada, CO

BEU-158

Sample Id:	**SW02**	Matrix:	Soil	Date Received:	09.15.18 09.00
Lab Sample Id:	599231-005	Date Collected:	09.12.18 11.10	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	09.18.18 09.00	Basis:	Wet Weight
Seq Number:	3063658				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	09.18.18 15.24	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	09.18.18 15.24	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	09.18.18 15.24	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	09.18.18 15.24	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	09.18.18 15.24	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	09.18.18 15.24	U	1
Total BTEX		<0.00202	0.00202	mg/kg	09.18.18 15.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	110	%	70-130	09.18.18 15.24	
1,4-Difluorobenzene	540-36-3	95	%	70-130	09.18.18 15.24	

Certificate of Analytical Results 599231

LT Environmental, Inc., Arvada, CO

BEU-158

Sample Id:	**SW03**	Matrix:	Soil	Date Received:	09.15.18 09.00
Lab Sample Id:	599231-006	Date Collected:	09.12.18 11.20	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	SCM	Date Prep:	09.19.18 16.40	Basis:	Wet Weight
Seq Number:	3063841				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.96	4.96	mg/kg	09.20.18 01.20	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	09.17.18 13.00	Basis:	Wet Weight
Seq Number:	3063513				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	09.17.18 22.04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	09.17.18 22.04	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	09.17.18 22.04	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	09.17.18 22.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	09.17.18 22.04	
o-Terphenyl	84-15-1	98	%	70-135	09.17.18 22.04	

Certificate of Analytical Results 599231

LT Environmental, Inc., Arvada, CO

BEU-158

Sample Id:	**SW03**	Matrix:	Soil	Date Received:	09.15.18 09.00
Lab Sample Id:	599231-006	Date Collected:	09.12.18 11.20	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	09.18.18 09.00	Basis:	Wet Weight
Seq Number:	3063658				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.18.18 15.44	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.18.18 15.44	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.18.18 15.44	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.18.18 15.44	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.18.18 15.44	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.18.18 15.44	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.18.18 15.44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	118	%	70-130	09.18.18 15.44	
1,4-Difluorobenzene	540-36-3	100	%	70-130	09.18.18 15.44	

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 599231

LT Environmental, Inc.

BEU-158

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3063841 — Matrix: Solid — Date Prep: 09.19.18
MB Sample Id: 7662657-1-BLK — LCS Sample Id: 7662657-1-BKS — LCSD Sample Id: 7662657-1-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	254	102	254	102	90-110	0	20	mg/kg	09.19.18 22:35	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3063841 — Matrix: Soil — Date Prep: 09.19.18
Parent Sample Id: 599227-013 — MS Sample Id: 599227-013 S — MSD Sample Id: 599227-013 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.855	249	266	107	265	106	90-110	0	20	mg/kg	09.19.18 22:52	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3063841 — Matrix: Soil — Date Prep: 09.19.18
Parent Sample Id: 599231-001 — MS Sample Id: 599231-001 S — MSD Sample Id: 599231-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	330	250	586	102	585	102	90-110	0	20	mg/kg	09.20.18 00:12	

Analytical Method: TPH by SW8015 Mod — Prep Method: TX1005P
Seq Number: 3063513 — Matrix: Solid — Date Prep: 09.17.18
MB Sample Id: 7662480-1-BLK — LCS Sample Id: 7662480-1-BKS — LCSD Sample Id: 7662480-1-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)	<8.00	1000	1010	101	1020	102	70-135	1	20	mg/kg	09.17.18 14:33	
Diesel Range Organics (DRO)	<8.13	1000	1020	102	1050	105	70-135	3	20	mg/kg	09.17.18 14:33	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	111		125		124		70-135	%	09.17.18 14:33
o-Terphenyl	114		123		112		70-135	%	09.17.18 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
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

QC Summary 599231

LT Environmental, Inc.

BEU-158

Analytical Method: TPH by SW8015 Mod | Prep Method: TX1005P
Seq Number: 3063513 | Matrix: Soil | Date Prep: 09.17.18
Parent Sample Id: 599230-001 | MS Sample Id: 599230-001 S | MSD Sample Id: 599230-001 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)	<7.99	999	962	96	966	97	70-135	0	20	mg/kg	09.17.18 16:47	
Diesel Range Organics (DRO)	13.4	999	1040	103	1050	104	70-135	1	20	mg/kg	09.17.18 16:47	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	129		129		70-135	%	09.17.18 16:47
o-Terphenyl	120		120		70-135	%	09.17.18 16:47

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3063658 | Matrix: Solid | Date Prep: 09.18.18
MB Sample Id: 7662573-1-BLK | LCS Sample Id: 7662573-1-BKS | LCSD Sample Id: 7662573-1-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	0.0962	95	0.0877	87	70-130	9	35	mg/kg	09.18.18 08:41	
Toluene	<0.00201	0.101	0.0946	94	0.0938	93	70-130	1	35	mg/kg	09.18.18 08:41	
Ethylbenzene	<0.00201	0.101	0.100	99	0.0997	99	70-130	0	35	mg/kg	09.18.18 08:41	
m,p-Xylenes	<0.00402	0.201	0.194	97	0.193	96	70-130	1	35	mg/kg	09.18.18 08:41	
o-Xylene	<0.00201	0.101	0.0932	92	0.0931	92	70-130	0	35	mg/kg	09.18.18 08:41	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	87		95		89		70-130	%	09.18.18 08:41
4-Bromofluorobenzene	86		110		115		70-130	%	09.18.18 08:41

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3064038 | Matrix: Solid | Date Prep: 09.19.18
MB Sample Id: 7662687-1-BLK | LCS Sample Id: 7662687-1-BKS | LCSD Sample Id: 7662687-1-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	0.0973	97	0.0898	89	70-130	8	35	mg/kg	09.19.18 07:46	
Toluene	<0.00200	0.100	0.0994	99	0.0900	89	70-130	10	35	mg/kg	09.19.18 07:46	
Ethylbenzene	<0.00200	0.100	0.113	113	0.0989	98	70-130	13	35	mg/kg	09.19.18 07:46	
m,p-Xylenes	<0.00401	0.200	0.220	110	0.190	95	70-130	15	35	mg/kg	09.19.18 07:46	
o-Xylene	<0.00200	0.100	0.111	111	0.0980	97	70-130	12	35	mg/kg	09.19.18 07:46	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	92		88		96		70-130	%	09.19.18 07:46
4-Bromofluorobenzene	71		89		97		70-130	%	09.19.18 07:46

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

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

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

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

Final 1.000

QC Summary 599231

LT Environmental, Inc.

BEU-158

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3063658 | Matrix: Soil | Date Prep: 09.18.18
Parent Sample Id: 599230-003 | MS Sample Id: 599230-003 S | MSD Sample Id: 599230-003 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	0.0564	57	0.0426	43	70-130	28	35	mg/kg	09.19.18 07:37	X
Toluene	<0.00199	0.0996	0.0435	44	0.0321	32	70-130	30	35	mg/kg	09.19.18 07:37	X
Ethylbenzene	<0.00199	0.0996	0.0349	35	0.0266	27	70-130	27	35	mg/kg	09.19.18 07:37	X
m,p-Xylenes	<0.00398	0.199	0.0672	34	0.0522	26	70-130	25	35	mg/kg	09.19.18 07:37	X
o-Xylene	<0.00199	0.0996	0.0330	33	0.0256	26	70-130	25	35	mg/kg	09.19.18 07:37	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	91		97		70-130	%	09.19.18 07:37
4-Bromofluorobenzene	111		123		70-130	%	09.19.18 07:37

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3064038 | Matrix: Soil | Date Prep: 09.19.18
Parent Sample Id: 599386-008 | MS Sample Id: 599386-008 S | MSD Sample Id: 599386-008 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	0.0583	58	0.0605	61	70-130	4	35	mg/kg	09.19.18 08:28	X
Toluene	<0.00202	0.101	0.0617	61	0.0600	60	70-130	3	35	mg/kg	09.19.18 08:28	X
Ethylbenzene	<0.00202	0.101	0.0691	68	0.0666	67	70-130	4	35	mg/kg	09.19.18 08:28	X
m,p-Xylenes	<0.00404	0.202	0.121	60	0.115	57	70-130	5	35	mg/kg	09.19.18 08:28	X
o-Xylene	<0.00202	0.101	0.0687	68	0.0669	67	70-130	3	35	mg/kg	09.19.18 08:28	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	89		120		70-130	%	09.19.18 08:28
4-Bromofluorobenzene	99		95		70-130	%	09.19.18 08:28

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

XENCO LABORATORIES

Chain of Custody

Work Order No: 599231

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

www.xenco.com Page 1 of 1

Project Manager:	Adrian Baker	Bill to: (if different)	Kyle Littrell
Company Name:	LT Environmental	Company Name:	XTO
Address:	3300 'A' street Building 1, #103	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	(432) 704-5178	Email:	ABaker@LTEnv.Com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	BEU-158	Turn Around	
Project Number:	012918066	Routine	☑
P.O. Number:	ZRP-2662	Rush:	
Sampler's Name:	Fabian Uribarri	Due Date:	

SAMPLE RECEIPT

Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	0.2	Thermometer ID	R8
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	0.0
Sample Custody Seals:	Yes (No) N/A	Total Containers:	

ANALYSIS REQUEST

Work Order Notes

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	BTEX (only BTEX)	TPH (DRO)(GRO)(MRO)	Chloride (300.00)	Sample Comments
FS01	S	09/12/18	0915	6.5'	1	X	X	X	
FS02	S	09/12/18	0935	6.5'	1	X	X	X	
FS03	S	09/12/18	1050	4'	1	X	X	X	
SW01	S	09/10/18	1125	2'	1	X	X	X	
SW02	S	09/12/18	1110	2'	1	X	X	X	
SW03	S	09/12/18	1120	2'	1	X	X	X	

FU 09/12/18

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010:** 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 [signature]	[signature]	9/12 17:18	2 [signature]	[signature]	9/16/18 0900
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 09/15/2018 09:00:00 AM

Work Order #: 599231

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)?	.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: Brianna Teel Date: 09/17/2018

Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 09/17/2018

Jessica Kramer

Analytical Report 599987

for

LT Environmental, Inc.

Project Manager: Adrian Baker

BEU-158 Tank Battery

012918066

01-OCT-18

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-18-27), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-18-17), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-13)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-17)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-16)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)
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)

01-OCT-18

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

Reference: XENCO Report No(s): **599987**
BEU-158 Tank Battery
Project Address: Delaware Basin

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) 599987. 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. 599987 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 599987

LT Environmental, Inc., Arvada, CO

BEU-158 Tank Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS04	S	09-21-18 09:50	12 ft	599987-001
FS05	S	09-20-18 15:10	3.5 ft	599987-002
FS06	S	09-21-18 11:20	9.5 ft	599987-003
FS07	S	09-21-18 11:30	9.5 ft	599987-004
FS08	S	09-20-18 13:25	3 ft	599987-005
SW04	S	09-20-18 15:00	4 ft	599987-006
SW05	S	09-20-18 14:45	5 ft	599987-007
SW06	S	09-20-18 12:40	3 ft	599987-008
SW07	S	09-21-18 09:10	2.5 ft	599987-009

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: BEU-158 Tank Battery

Project ID: *012918066*
Work Order Number(s): *599987*

Report Date: *01-OCT-18*
Date Received: *09/22/2018*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3064869 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3064877 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analysis Summary 599987

LT Environmental, Inc., Arvada, CO

Project Name: BEU-158 Tank Battery

Project Id: 012918066
Contact: Adrian Baker
Project Location: Delaware Basin

Date Received in Lab: Sat Sep-22-18 09:00 am
Report Date: 01-OCT-18
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	599987-001		599987-002		599987-003		599987-004		599987-005		599987-006	
	Field Id:	FS04		FS05		FS06		FS07		FS08		SW04	
	Depth:	12- ft		3.5- ft		9.5- ft		9.5- ft		3- ft		4- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Sep-21-18 09:50		Sep-20-18 15:10		Sep-21-18 11:20		Sep-21-18 11:30		Sep-20-18 13:25		Sep-20-18 15:00	
BTEX by EPA 8021B	*Extracted:*	Sep-28-18 15:00		Sep-28-18 15:00		Sep-28-18 15:00		Sep-28-18 15:00		Sep-28-18 15:00		Sep-28-18 16:15	
	Analyzed:	Sep-29-18 04:04		Sep-29-18 05:29		Sep-29-18 05:07		Sep-29-18 04:46		Sep-29-18 04:25		Sep-29-18 10:33	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00200	0.00200	<0.00199	0.00199	<0.00201	0.00201	<0.00202	0.00202	<0.00199	0.00199	<0.00202	0.00202
Toluene		<0.00200	0.00200	<0.00199	0.00199	<0.00201	0.00201	<0.00202	0.00202	<0.00199	0.00199	<0.00202	0.00202
Ethylbenzene		<0.00200	0.00200	<0.00199	0.00199	<0.00201	0.00201	<0.00202	0.00202	<0.00199	0.00199	<0.00202	0.00202
m,p-Xylenes		<0.00401	0.00401	<0.00398	0.00398	<0.00402	0.00402	<0.00404	0.00404	<0.00398	0.00398	<0.00404	0.00404
o-Xylene		<0.00200	0.00200	<0.00199	0.00199	<0.00201	0.00201	<0.00202	0.00202	<0.00199	0.00199	<0.00202	0.00202
Total Xylenes		<0.00200	0.00200	<0.00199	0.00199	<0.00201	0.00201	<0.00202	0.00202	<0.00199	0.00199	<0.00202	0.00202
Total BTEX		<0.00200	0.00200	<0.00199	0.00199	<0.00201	0.00201	<0.00202	0.00202	<0.00199	0.00199	<0.00202	0.00202
Inorganic Anions by EPA 300	*Extracted:*	Sep-25-18 13:00		Sep-25-18 13:00		Sep-25-18 13:00		Sep-25-18 13:00		Sep-25-18 13:00		Sep-25-18 13:00	
	Analyzed:	Sep-25-18 18:46		Sep-25-18 19:03		Sep-25-18 19:09		Sep-25-18 19:14		Sep-25-18 19:20		Sep-25-18 19:26	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		303	4.99	175	4.95	97.7	4.99	256	49.8	260	4.98	341	24.8
TPH by SW8015 Mod	*Extracted:*	Sep-25-18 14:00		Sep-25-18 14:00		Sep-25-18 14:00		Sep-25-18 14:00		Sep-25-18 14:00		Sep-25-18 14:00	
	Analyzed:	Sep-26-18 02:57		Sep-26-18 03:53		Sep-26-18 04:11		Sep-26-18 04:30		Sep-26-18 04:49		Sep-26-18 05:07	
	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	<14.9	14.9	<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0
Motor Oil Range Hydrocarbons (MRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0
Total TPH		<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9	<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 599987

LT Environmental, Inc., Arvada, CO

Project Name: BEU-158 Tank Battery

Project Id: 012918066
Contact: Adrian Baker
Project Location: Delaware Basin

Date Received in Lab: Sat Sep-22-18 09:00 am
Report Date: 01-OCT-18
Project Manager: Jessica Kramer

Analysis Requested											
	Lab Id:	599987-007		599987-008		599987-009					
	Field Id:	SW05		SW06		SW07					
	Depth:	5- ft		3- ft		2.5- ft					
	Matrix:	SOIL		SOIL		SOIL					
	Sampled:	Sep-20-18 14:45		Sep-20-18 12:40		Sep-21-18 09:10					
BTEX by EPA 8021B	***Extracted:***	Sep-28-18 16:15		Sep-28-18 16:15		Sep-28-18 16:15					
	Analyzed:	Sep-29-18 10:55		Sep-29-18 11:17		Sep-29-18 11:37					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		<0.00198	0.00198	<0.00200	0.00200	<0.00202	0.00202				
Toluene		<0.00198	0.00198	<0.00200	0.00200	<0.00202	0.00202				
Ethylbenzene		<0.00198	0.00198	<0.00200	0.00200	<0.00202	0.00202				
m,p-Xylenes		<0.00397	0.00397	<0.00399	0.00399	<0.00403	0.00403				
o-Xylene		<0.00198	0.00198	<0.00200	0.00200	<0.00202	0.00202				
Total Xylenes		<0.00198	0.00198	<0.00200	0.00200	<0.00202	0.00202				
Total BTEX		<0.00198	0.00198	<0.00200	0.00200	<0.00202	0.00202				
Inorganic Anions by EPA 300	***Extracted:***	Sep-25-18 13:00		Sep-25-18 13:00		Sep-25-18 16:00					
	Analyzed:	Sep-25-18 19:31		Sep-25-18 19:37		Sep-25-18 20:28					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		120	4.95	219	4.98	177	4.99				
TPH by SW8015 Mod	***Extracted:***	Sep-25-18 14:00		Sep-25-18 14:00		Sep-25-18 14:00					
	Analyzed:	Sep-26-18 05:26		Sep-26-18 05:45		Sep-26-18 06:03					
	Units/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				
Diesel Range Organics (DRO)		<15.0	15.0	37.4	15.0	<15.0	15.0				
Motor Oil Range Hydrocarbons (MRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0				
Total TPH		<15.0	15.0	37.4	15.0	<15.0	15.0				

Jessica Kramer
Project Assistant

Final 1.000

Certificate of Analytical Results 599987

LT Environmental, Inc., Arvada, CO

BEU-158 Tank Battery

Sample Id:	**FS04**	Matrix:	Soil	Date Received:	09.22.18 09.00
Lab Sample Id:	599987-001	Date Collected:	09.21.18 09.50	Sample Depth:	12 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	09.25.18 13.00	Basis:	Wet Weight
Seq Number:	3064431				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**303**	4.99	mg/kg	09.25.18 18.46		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	09.25.18 14.00	Basis:	Wet Weight
Seq Number:	3064467				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	09.26.18 02.57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	09.26.18 02.57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	09.26.18 02.57	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	09.26.18 02.57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	09.26.18 02.57	
o-Terphenyl	84-15-1	101	%	70-135	09.26.18 02.57	

Certificate of Analytical Results 599987

LT Environmental, Inc., Arvada, CO

BEU-158 Tank Battery

Sample Id:	**FS04**	Matrix:	Soil	Date Received:	09.22.18 09.00
Lab Sample Id:	599987-001	Date Collected:	09.21.18 09.50	Sample Depth:	12 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	09.28.18 15.00	Basis:	Wet Weight
Seq Number:	3064869				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.29.18 04.04	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.29.18 04.04	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.29.18 04.04	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	09.29.18 04.04	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.29.18 04.04	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.29.18 04.04	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.29.18 04.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	106	%	70-130	09.29.18 04.04	
4-Bromofluorobenzene	460-00-4	93	%	70-130	09.29.18 04.04	

Certificate of Analytical Results 599987

LT Environmental, Inc., Arvada, CO

BEU-158 Tank Battery

Sample Id:	**FS05**	Matrix:	Soil	Date Received:	09.22.18 09.00
Lab Sample Id:	599987-002	Date Collected:	09.20.18 15.10	Sample Depth:	3.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	09.25.18 13.00	Basis:	Wet Weight
Seq Number:	3064431				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**175**	4.95	mg/kg	09.25.18 19.03		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	09.25.18 14.00	Basis:	Wet Weight
Seq Number:	3064467				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	09.26.18 03.53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	09.26.18 03.53	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	09.26.18 03.53	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	09.26.18 03.53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	09.26.18 03.53	
o-Terphenyl	84-15-1	98	%	70-135	09.26.18 03.53	

Certificate of Analytical Results 599987

LT Environmental, Inc., Arvada, CO

BEU-158 Tank Battery

Sample Id:	**FS05**	Matrix:	Soil	Date Received:	09.22.18 09.00
Lab Sample Id:	599987-002	Date Collected:	09.20.18 15.10	Sample Depth:	3.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	09.28.18 15.00	Basis:	Wet Weight
Seq Number:	3064869				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.29.18 05.29	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.29.18 05.29	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.29.18 05.29	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.29.18 05.29	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.29.18 05.29	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.29.18 05.29	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.29.18 05.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	100	%	70-130	09.29.18 05.29	
1,4-Difluorobenzene	540-36-3	103	%	70-130	09.29.18 05.29	

Certificate of Analytical Results 599987

LT Environmental, Inc., Arvada, CO

BEU-158 Tank Battery

Sample Id:	**FS06**	Matrix:	Soil	Date Received:	09.22.18 09.00
Lab Sample Id:	599987-003	Date Collected:	09.21.18 11.20	Sample Depth:	9.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	09.25.18 13.00	Basis:	Wet Weight
Seq Number:	3064431				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**97.7**	4.99	mg/kg	09.25.18 19.09		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	09.25.18 14.00	Basis:	Wet Weight
Seq Number:	3064467				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	09.26.18 04.11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	09.26.18 04.11	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	09.26.18 04.11	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	09.26.18 04.11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	09.26.18 04.11	
o-Terphenyl	84-15-1	90	%	70-135	09.26.18 04.11	

Certificate of Analytical Results 599987

LT Environmental, Inc., Arvada, CO

BEU-158 Tank Battery

Sample Id:	**FS06**	Matrix:	Soil	Date Received:	09.22.18 09.00
Lab Sample Id:	599987-003	Date Collected:	09.21.18 11.20	Sample Depth:	9.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	09.28.18 15.00	Basis:	Wet Weight
Seq Number:	3064869				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.29.18 05.07	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.29.18 05.07	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.29.18 05.07	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.29.18 05.07	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.29.18 05.07	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.29.18 05.07	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.29.18 05.07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	70-130	09.29.18 05.07	
1,4-Difluorobenzene	540-36-3	105	%	70-130	09.29.18 05.07	

Certificate of Analytical Results 599987

LT Environmental, Inc., Arvada, CO

BEU-158 Tank Battery

Sample Id:	**FS07**	Matrix:	Soil	Date Received:	09.22.18 09.00
Lab Sample Id:	599987-004	Date Collected:	09.21.18 11.30	Sample Depth:	9.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	09.25.18 13.00	Basis:	Wet Weight
Seq Number:	3064431				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**256**	49.8	mg/kg	09.25.18 19.14		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	09.25.18 14.00	Basis:	Wet Weight
Seq Number:	3064467				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	09.26.18 04.30	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	09.26.18 04.30	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	14.9	mg/kg	09.26.18 04.30	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	09.26.18 04.30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	09.26.18 04.30	
o-Terphenyl	84-15-1	100	%	70-135	09.26.18 04.30	

Certificate of Analytical Results 599987

LT Environmental, Inc., Arvada, CO

BEU-158 Tank Battery

Sample Id:	**FS07**	Matrix:	Soil	Date Received:	09.22.18 09.00
Lab Sample Id:	599987-004	Date Collected:	09.21.18 11.30	Sample Depth:	9.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	09.28.18 15.00	Basis:	Wet Weight
Seq Number:	3064869				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	09.29.18 04.46	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	09.29.18 04.46	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	09.29.18 04.46	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	09.29.18 04.46	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	09.29.18 04.46	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	09.29.18 04.46	U	1
Total BTEX		<0.00202	0.00202	mg/kg	09.29.18 04.46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	09.29.18 04.46	
1,4-Difluorobenzene	540-36-3	109	%	70-130	09.29.18 04.46	

Certificate of Analytical Results 599987

LT Environmental, Inc., Arvada, CO

BEU-158 Tank Battery

Sample Id:	**FS08**	Matrix:	Soil	Date Received:	09.22.18 09.00
Lab Sample Id:	599987-005	Date Collected:	09.20.18 13.25	Sample Depth:	3 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	09.25.18 13.00	Basis:	Wet Weight
Seq Number:	3064431				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**260**	4.98	mg/kg	09.25.18 19.20		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	09.25.18 14.00	Basis:	Wet Weight
Seq Number:	3064467				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	09.26.18 04.49	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	09.26.18 04.49	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	09.26.18 04.49	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	09.26.18 04.49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	09.26.18 04.49	
o-Terphenyl	84-15-1	98	%	70-135	09.26.18 04.49	

Certificate of Analytical Results 599987

LT Environmental, Inc., Arvada, CO

BEU-158 Tank Battery

Sample Id:	**FS08**	Matrix:	Soil	Date Received:	09.22.18 09.00
Lab Sample Id:	599987-005	Date Collected:	09.20.18 13.25	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	09.28.18 15.00	Basis:	Wet Weight
Seq Number:	3064869				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.29.18 04.25	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.29.18 04.25	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.29.18 04.25	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.29.18 04.25	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.29.18 04.25	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.29.18 04.25	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.29.18 04.25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	102	%	70-130	09.29.18 04.25	
1,4-Difluorobenzene	540-36-3	107	%	70-130	09.29.18 04.25	

Certificate of Analytical Results 599987

LT Environmental, Inc., Arvada, CO

BEU-158 Tank Battery

Sample Id:	**SW04**	Matrix:	Soil	Date Received:	09.22.18 09.00
Lab Sample Id:	599987-006	Date Collected:	09.20.18 15.00	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	09.25.18 13.00	Basis:	Wet Weight
Seq Number:	3064431				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**341**	24.8	mg/kg	09.25.18 19.26		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	09.25.18 14.00	Basis:	Wet Weight
Seq Number:	3064467				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	09.26.18 05.07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	09.26.18 05.07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	09.26.18 05.07	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	09.26.18 05.07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	09.26.18 05.07	
o-Terphenyl	84-15-1	97	%	70-135	09.26.18 05.07	

Certificate of Analytical Results 599987

LT Environmental, Inc., Arvada, CO

BEU-158 Tank Battery

Sample Id:	**SW04**	Matrix:	Soil	Date Received:	09.22.18 09.00
Lab Sample Id:	599987-006	Date Collected:	09.20.18 15.00	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	09.28.18 16.15	Basis:	Wet Weight
Seq Number:	3064877				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	09.29.18 10.33	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	09.29.18 10.33	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	09.29.18 10.33	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	09.29.18 10.33	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	09.29.18 10.33	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	09.29.18 10.33	U	1
Total BTEX		<0.00202	0.00202	mg/kg	09.29.18 10.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	93	%	70-130	09.29.18 10.33	
1,4-Difluorobenzene	540-36-3	98	%	70-130	09.29.18 10.33	

Certificate of Analytical Results 599987

LT Environmental, Inc., Arvada, CO

BEU-158 Tank Battery

Sample Id:	**SW05**	Matrix:	Soil	Date Received:	09.22.18 09.00
Lab Sample Id:	599987-007	Date Collected:	09.20.18 14.45	Sample Depth:	5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	09.25.18 13.00	Basis:	Wet Weight
Seq Number:	3064431				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**120**	4.95	mg/kg	09.25.18 19.31		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	09.25.18 14.00	Basis:	Wet Weight
Seq Number:	3064467				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	09.26.18 05.26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	09.26.18 05.26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	09.26.18 05.26	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	09.26.18 05.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	09.26.18 05.26	
o-Terphenyl	84-15-1	95	%	70-135	09.26.18 05.26	

Certificate of Analytical Results 599987

LT Environmental, Inc., Arvada, CO

BEU-158 Tank Battery

Sample Id:	**SW05**	Matrix:	Soil	Date Received:	09.22.18 09.00
Lab Sample Id:	599987-007	Date Collected:	09.20.18 14.45	Sample Depth:	5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	09.28.18 16.15	Basis:	Wet Weight
Seq Number:	3064877				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	09.29.18 10.55	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	09.29.18 10.55	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	09.29.18 10.55	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	09.29.18 10.55	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	09.29.18 10.55	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	09.29.18 10.55	U	1
Total BTEX		<0.00198	0.00198	mg/kg	09.29.18 10.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	98	%	70-130	09.29.18 10.55	
1,4-Difluorobenzene	540-36-3	115	%	70-130	09.29.18 10.55	

Certificate of Analytical Results 599987

LT Environmental, Inc., Arvada, CO

BEU-158 Tank Battery

Sample Id:	**SW06**	Matrix:	Soil	Date Received:	09.22.18 09.00
Lab Sample Id:	599987-008	Date Collected:	09.20.18 12.40	Sample Depth:	3 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	09.25.18 13.00	Basis:	Wet Weight
Seq Number:	3064431				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**219**	4.98	mg/kg	09.25.18 19.37		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	09.25.18 14.00	Basis:	Wet Weight
Seq Number:	3064467				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	09.26.18 05.45	U	1
Diesel Range Organics (DRO)	C10C28DRO	**37.4**	15.0	mg/kg	09.26.18 05.45		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	09.26.18 05.45	U	1
Total TPH	PHC635	**37.4**	15.0	mg/kg	09.26.18 05.45		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	09.26.18 05.45	
o-Terphenyl	84-15-1	103	%	70-135	09.26.18 05.45	

Certificate of Analytical Results 599987

LT Environmental, Inc., Arvada, CO

BEU-158 Tank Battery

Sample Id:	**SW06**	Matrix:	Soil	Date Received:	09.22.18 09.00
Lab Sample Id:	599987-008	Date Collected:	09.20.18 12.40	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	09.28.18 16.15	Basis:	Wet Weight
Seq Number:	3064877				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.29.18 11.17	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.29.18 11.17	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.29.18 11.17	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	09.29.18 11.17	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.29.18 11.17	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.29.18 11.17	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.29.18 11.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	104	%	70-130	09.29.18 11.17	
4-Bromofluorobenzene	460-00-4	100	%	70-130	09.29.18 11.17	

Certificate of Analytical Results 599987

LT Environmental, Inc., Arvada, CO

BEU-158 Tank Battery

Sample Id:	**SW07**	Matrix:	Soil	Date Received:	09.22.18 09.00
Lab Sample Id:	599987-009	Date Collected:	09.21.18 09.10	Sample Depth:	2.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	09.25.18 16.00	Basis:	Wet Weight
Seq Number:	3064441				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**177**	4.99	mg/kg	09.25.18 20.28		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	09.25.18 14.00	Basis:	Wet Weight
Seq Number:	3064467				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	09.26.18 06.03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	09.26.18 06.03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	09.26.18 06.03	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	09.26.18 06.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	09.26.18 06.03	
o-Terphenyl	84-15-1	100	%	70-135	09.26.18 06.03	

Certificate of Analytical Results 599987

LT Environmental, Inc., Arvada, CO

BEU-158 Tank Battery

Sample Id:	**SW07**	Matrix:	Soil	Date Received:	09.22.18 09.00
Lab Sample Id:	599987-009	Date Collected:	09.21.18 09.10	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	09.28.18 16.15	Basis:	Wet Weight
Seq Number:	3064877				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	09.29.18 11.37	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	09.29.18 11.37	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	09.29.18 11.37	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	09.29.18 11.37	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	09.29.18 11.37	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	09.29.18 11.37	U	1
Total BTEX		<0.00202	0.00202	mg/kg	09.29.18 11.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	113	%	70-130	09.29.18 11.37	
4-Bromofluorobenzene	460-00-4	100	%	70-130	09.29.18 11.37	

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 599987

LT Environmental, Inc.

BEU-158 Tank Battery

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3064431 — Matrix: Solid — Date Prep: 09.25.18
MB Sample Id: 7662963-1-BLK — LCS Sample Id: 7662963-1-BKS — LCSD Sample Id: 7662963-1-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	255	102	255	102	90-110	0	20	mg/kg	09.25.18 16:32	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3064441 — Matrix: Solid — Date Prep: 09.25.18
MB Sample Id: 7662975-1-BLK — LCS Sample Id: 7662975-1-BKS — LCSD Sample Id: 7662975-1-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	258	103	258	103	90-110	0	20	mg/kg	09.25.18 20:00	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3064431 — Matrix: Soil — Date Prep: 09.25.18
Parent Sample Id: 599986-001 — MS Sample Id: 599986-001 S — MSD Sample Id: 599986-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	229	250	474	98	476	99	90-110	0	20	mg/kg	09.25.18 16:49	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3064431 — Matrix: Soil — Date Prep: 09.25.18
Parent Sample Id: 599986-012 — MS Sample Id: 599986-012 S — MSD Sample Id: 599986-012 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	287	250	524	95	534	99	90-110	2	20	mg/kg	09.25.18 18:29	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3064441 — Matrix: Soil — Date Prep: 09.25.18
Parent Sample Id: 599898-003 — MS Sample Id: 599898-003 S — MSD Sample Id: 599898-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	236	249	487	101	493	103	90-110	1	20	mg/kg	09.25.18 21:36	

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 599987

LT Environmental, Inc.

BEU-158 Tank Battery

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3064441 Matrix: Soil Date Prep: 09.25.18
Parent Sample Id: 599986-002 MS Sample Id: 599986-002 S MSD Sample Id: 599986-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	26.8	250	288	104	289	105	90-110	0	20	mg/kg	09.25.18 20:17	

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3064467 Matrix: Solid Date Prep: 09.25.18
MB Sample Id: 7662999-1-BLK LCS Sample Id: 7662999-1-BKS LCSD Sample Id: 7662999-1-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)	<8.00	1000	988	99	1040	104	70-135	5	20	mg/kg	09.26.18 02:19	
Diesel Range Organics (DRO)	<8.13	1000	1010	101	1060	106	70-135	5	20	mg/kg	09.26.18 02:19	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	99		122		125		70-135	%	09.26.18 02:19
o-Terphenyl	104		120		124		70-135	%	09.26.18 02:19

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3064467 Matrix: Soil Date Prep: 09.25.18
Parent Sample Id: 599987-001 MS Sample Id: 599987-001 S MSD Sample Id: 599987-001 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)	8.14	998	898	89	916	91	70-135	2	20	mg/kg	09.26.18 03:15	
Diesel Range Organics (DRO)	<8.11	998	915	92	936	94	70-135	2	20	mg/kg	09.26.18 03:15	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	110		118		70-135	%	09.26.18 03:15
o-Terphenyl	101		106		70-135	%	09.26.18 03:15

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 599987

LT Environmental, Inc.

BEU-158 Tank Battery

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3064869 | Matrix: Solid | Date Prep: 09.28.18
MB Sample Id: 7663271-1-BLK | LCS Sample Id: 7663271-1-BKS | LCSD Sample Id: 7663271-1-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	0.0759	76	0.0772	77	70-130	2	35	mg/kg	09.28.18 19:54	
Toluene	<0.00199	0.0996	0.0727	73	0.0718	72	70-130	1	35	mg/kg	09.28.18 19:54	
Ethylbenzene	<0.00199	0.0996	0.0840	84	0.0857	86	70-130	2	35	mg/kg	09.28.18 19:54	
m,p-Xylenes	<0.00398	0.199	0.164	82	0.169	85	70-130	3	35	mg/kg	09.28.18 19:54	
o-Xylene	<0.00199	0.0996	0.0850	85	0.0874	87	70-130	3	35	mg/kg	09.28.18 19:54	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	111		115		123		70-130	%	09.28.18 19:54
4-Bromofluorobenzene	98		116		118		70-130	%	09.28.18 19:54

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3064877 | Matrix: Solid | Date Prep: 09.28.18
MB Sample Id: 7663273-1-BLK | LCS Sample Id: 7663273-1-BKS | LCSD Sample Id: 7663273-1-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	0.0905	90	0.0908	91	70-130	0	35	mg/kg	09.29.18 06:11	
Toluene	<0.00202	0.101	0.0848	84	0.0836	84	70-130	1	35	mg/kg	09.29.18 06:11	
Ethylbenzene	<0.00202	0.101	0.0966	96	0.0972	97	70-130	1	35	mg/kg	09.29.18 06:11	
m,p-Xylenes	<0.00404	0.202	0.186	92	0.185	92	70-130	1	35	mg/kg	09.29.18 06:11	
o-Xylene	<0.00202	0.101	0.0968	96	0.0971	97	70-130	0	35	mg/kg	09.29.18 06:11	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		110		110		70-130	%	09.29.18 06:11
4-Bromofluorobenzene	91		103		108		70-130	%	09.29.18 06:11

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3064869 | Matrix: Soil | Date Prep: 09.28.18
Parent Sample Id: 599985-019 | MS Sample Id: 599985-019 S | MSD Sample Id: 599985-019 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	0.0591	59	0.0702	70	70-130	17	35	mg/kg	09.28.18 20:37	X
Toluene	<0.00200	0.0998	0.0568	57	0.0678	68	70-130	18	35	mg/kg	09.28.18 20:37	X
Ethylbenzene	<0.00200	0.0998	0.0662	66	0.0786	79	70-130	17	35	mg/kg	09.28.18 20:37	X
m,p-Xylenes	<0.00399	0.200	0.128	64	0.153	77	70-130	18	35	mg/kg	09.28.18 20:37	X
o-Xylene	<0.00200	0.0998	0.0660	66	0.0790	79	70-130	18	35	mg/kg	09.28.18 20:37	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	113		111		70-130	%	09.28.18 20:37
4-Bromofluorobenzene	111		113		70-130	%	09.28.18 20:37

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 599987

LT Environmental, Inc.

BEU-158 Tank Battery

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B

Seq Number: 3064877 Matrix: Soil Date Prep: 09.28.18

Parent Sample Id: 599988-001 MS Sample Id: 599988-001 S MSD Sample Id: 599988-001 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	0.0860	86	0.0831	83	70-130	3	35	mg/kg	09.29.18 06:53	
Toluene	<0.00199	0.0996	0.0793	80	0.0788	79	70-130	1	35	mg/kg	09.29.18 06:53	
Ethylbenzene	<0.00199	0.0996	0.0886	89	0.0886	89	70-130	0	35	mg/kg	09.29.18 06:53	
m,p-Xylenes	<0.00398	0.199	0.167	84	0.169	85	70-130	1	35	mg/kg	09.29.18 06:53	
o-Xylene	<0.00199	0.0996	0.0866	87	0.0877	88	70-130	1	35	mg/kg	09.29.18 06:53	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	114		117		70-130	%	09.29.18 06:53
4-Bromofluorobenzene	109		110		70-130	%	09.29.18 06:53

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

Work Order No: 599987

XENCO LABORATORIES

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

www.xenco.com Page 1 of 1

Project Manager:	Adrian Bakes	Bill to: (if different)	Kyle Littrell
Company Name:	LT Environmental	Company Name:	XTO
Address:	3300 'A' Street, Building 1, #103	Address:	
City, State ZIP:	Midland Tx 79705	City, State ZIP:	
Phone:	(432)704-5178	Email:	ABakes@LTEnv.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	BEU - 158 Tank Battery	Turn Around	
Project Number:	012918066	Routine	☑
P.O. Number:	2RP-2662	Rush:	
Sampler's Name:	Fabian Uribarri	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	0-2	Thermometer ID	IR8
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	0.0
Sample Custody Seals:	Yes (No) N/A	Total Containers:	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	BTEX (only BTEX)	TPH (DRO)(GRO)(MRO)	Chloride (300.00)	Work Order Notes
FS04	S	9/21/18	0950	12'	1	X	X	X	
FS05	S	9/20/18	1510	3.5'	1	X	X	X	
FS06	S	9/21/18	1120	9.5'	1	X	X	X	TAT starts the day recevied by the lab, if received by 4:30pm
FS07	S	9/21/18	1130	9.5'	1	X	X	X	
FS08	S	9/20/18	1325	3'	1	X	X	X	Sample Comments
SW04	S	9/20/18	1500	4'	1	X	X	X	
SW05	S	9/20/18	1445	5'	1	X	X	X	
SW06	S	9/20/18	1240	3'	1	X	X	X	
SW07	S	9/21/18	0910	2.5'	1	X	X	X	FU 09/21/18

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		15:17 /9/21/18	2	9/21/18 15:30	9/22/18 0000
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

After printing this label:
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3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

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XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 09/22/2018 09:00:00 AM

Work Order #: 599987

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)?	.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: Brianna Teel Date: 09/24/2018
Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 09/24/2018
Jessica Kramer

Analytical Report 600490

for

LT Environmental, Inc.

Project Manager: Adrian Baker

BEU-158 Tank Battery

012918066

04-OCT-18

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-18-27), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-18-17), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-13)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-17)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)
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)

04-OCT-18

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

Reference: XENCO Report No(s): **600490**
BEU-158 Tank Battery
Project Address: Delaware Basin

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) 600490. 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. 600490 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 600490

LT Environmental, Inc., Arvada, CO

BEU-158 Tank Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS09	S	09-24-18 13:45	9.5 ft	600490-001
FS10	S	09-25-18 13:55	9.5 ft	600490-002
SW08	S	09-25-18 10:45	2 ft	600490-003
SW09	S	09-25-18 11:20	4 ft	600490-004
SW10	S	09-25-18 13:35	4 ft	600490-005
SW11	S	09-25-18 13:45	5 ft	600490-006

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: BEU-158 Tank Battery

Project ID: *012918066*
Work Order Number(s): *600490*

Report Date: *04-OCT-18*
Date Received: *09/27/2018*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3065219 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3065297 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analysis Summary 600490

LT Environmental, Inc., Arvada, CO

Project Name: BEU-158 Tank Battery

Project Id: 012918066
Contact: Adrian Baker
Project Location: Delaware Basin

Date Received in Lab: Thu Sep-27-18 10:34 am
Report Date: 04-OCT-18
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	600490-001		600490-002		600490-003		600490-004		600490-005		600490-006	
	Field Id:	FS09		FS10		SW08		SW09		SW10		SW11	
	Depth:	9.5- ft		9.5- ft		2- ft		4- ft		4- ft		5- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Sep-24-18 13:45		Sep-25-18 13:55		Sep-25-18 10:45		Sep-25-18 11:20		Sep-25-18 13:35		Sep-25-18 13:45	
BTEX by EPA 8021B	***Extracted:***	Oct-03-18 08:00		Oct-03-18 08:00		Oct-03-18 08:00		Oct-03-18 13:30		Oct-03-18 13:30		Oct-03-18 13:30	
	Analyzed:	Oct-03-18 17:59		Oct-03-18 18:20		Oct-03-18 18:42		Oct-04-18 08:33		Oct-04-18 08:55		Oct-04-18 09:16	
	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	<0.00201	0.00201	<0.00199	0.00199	<0.00201	0.00201	<0.00202	0.00202
Toluene		<0.00202	0.00202	<0.00199	0.00199	<0.00201	0.00201	<0.00199	0.00199	<0.00201	0.00201	<0.00202	0.00202
Ethylbenzene		<0.00202	0.00202	<0.00199	0.00199	<0.00201	0.00201	<0.00199	0.00199	<0.00201	0.00201	<0.00202	0.00202
m,p-Xylenes		<0.00403	0.00403	<0.00398	0.00398	<0.00402	0.00402	<0.00398	0.00398	<0.00402	0.00402	<0.00404	0.00404
o-Xylene		<0.00202	0.00202	<0.00199	0.00199	<0.00201	0.00201	<0.00199	0.00199	<0.00201	0.00201	<0.00202	0.00202
Total Xylenes		<0.00202	0.00202	<0.00199	0.00199	<0.00201	0.00201	<0.00199	0.00199	<0.00201	0.00201	<0.00202	0.00202
Total BTEX		<0.00202	0.00202	<0.00199	0.00199	<0.00201	0.00201	<0.00199	0.00199	<0.00201	0.00201	<0.00202	0.00202
Inorganic Anions by EPA 300	***Extracted:***	Sep-27-18 16:30		Sep-27-18 16:30		Sep-27-18 16:30		Sep-27-18 16:30		Sep-27-18 16:30		Sep-27-18 16:30	
	Analyzed:	Sep-28-18 10:55		Sep-28-18 11:17		Sep-28-18 11:34		Sep-28-18 11:40		Sep-28-18 11:46		Sep-28-18 11:51	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		455	5.05	218	49.5	106	4.95	340	5.05	154	4.95	109	5.00
TPH by SW8015 Mod	***Extracted:***	Sep-28-18 17:00		Sep-28-18 17:00		Sep-28-18 17:00		Sep-28-18 17:00		Sep-28-18 17:00		Sep-28-18 17:00	
	Analyzed:	Sep-29-18 10:52		Sep-29-18 11:11		Sep-29-18 11:30		Sep-29-18 11:49		Sep-29-18 12:08		Sep-29-18 12:27	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Motor Oil Range Hydrocarbons (MRO)		<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Total TPH		<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0

Jessica Kramer
Project Assistant

Final 1.000

Certificate of Analytical Results 600490

LT Environmental, Inc., Arvada, CO

BEU-158 Tank Battery

Sample Id:	**FS09**	Matrix:	Soil	Date Received:	09.27.18 10.34
Lab Sample Id:	600490-001	Date Collected:	09.24.18 13.45	Sample Depth:	9.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	CHE	Date Prep:	09.27.18 16.30	Basis:	Wet Weight
Seq Number:	3064713				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**455**	5.05	mg/kg	09.28.18 10.55		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	09.28.18 17.00	Basis:	Wet Weight
Seq Number:	3064919				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	09.29.18 10.52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	09.29.18 10.52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	14.9	mg/kg	09.29.18 10.52	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	09.29.18 10.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	09.29.18 10.52	
o-Terphenyl	84-15-1	94	%	70-135	09.29.18 10.52	

Certificate of Analytical Results 600490

LT Environmental, Inc., Arvada, CO

BEU-158 Tank Battery

Sample Id:	**FS09**	Matrix:	Soil	Date Received:	09.27.18 10.34
Lab Sample Id:	600490-001	Date Collected:	09.24.18 13.45	Sample Depth:	9.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	10.03.18 08.00	Basis:	Wet Weight
Seq Number:	3065219				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	10.03.18 17.59	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	10.03.18 17.59	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	10.03.18 17.59	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	10.03.18 17.59	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	10.03.18 17.59	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	10.03.18 17.59	U	1
Total BTEX		<0.00202	0.00202	mg/kg	10.03.18 17.59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	90	%	70-130	10.03.18 17.59	
4-Bromofluorobenzene	460-00-4	93	%	70-130	10.03.18 17.59	

Certificate of Analytical Results 600490

LT Environmental, Inc., Arvada, CO

BEU-158 Tank Battery

Sample Id:	**FS10**	Matrix:	Soil	Date Received:	09.27.18 10.34
Lab Sample Id:	600490-002	Date Collected:	09.25.18 13.55	Sample Depth:	9.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	CHE	Date Prep:	09.27.18 16.30	Basis:	Wet Weight
Seq Number:	3064713				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**218**	49.5	mg/kg	09.28.18 11.17		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	09.28.18 17.00	Basis:	Wet Weight
Seq Number:	3064919				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	09.29.18 11.11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	09.29.18 11.11	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	09.29.18 11.11	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	09.29.18 11.11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	09.29.18 11.11	
o-Terphenyl	84-15-1	90	%	70-135	09.29.18 11.11	

Certificate of Analytical Results 600490

LT Environmental, Inc., Arvada, CO

BEU-158 Tank Battery

Sample Id:	**FS10**	Matrix:	Soil	Date Received:	09.27.18 10.34
Lab Sample Id:	600490-002	Date Collected:	09.25.18 13.55	Sample Depth:	9.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	10.03.18 08.00	Basis:	Wet Weight
Seq Number:	3065219				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.03.18 18.20	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.03.18 18.20	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.03.18 18.20	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.03.18 18.20	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.03.18 18.20	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.03.18 18.20	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.03.18 18.20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	92	%	70-130	10.03.18 18.20	
4-Bromofluorobenzene	460-00-4	99	%	70-130	10.03.18 18.20	

Certificate of Analytical Results 600490

LT Environmental, Inc., Arvada, CO

BEU-158 Tank Battery

Sample Id:	**SW08**	Matrix:	Soil	Date Received:	09.27.18 10.34
Lab Sample Id:	600490-003	Date Collected:	09.25.18 10.45	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	CHE	Date Prep:	09.27.18 16.30	Basis:	Wet Weight
Seq Number:	3064713				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**106**	4.95	mg/kg	09.28.18 11.34		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	09.28.18 17.00	Basis:	Wet Weight
Seq Number:	3064919				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	09.29.18 11.30	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	09.29.18 11.30	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	09.29.18 11.30	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	09.29.18 11.30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	09.29.18 11.30	
o-Terphenyl	84-15-1	91	%	70-135	09.29.18 11.30	

Certificate of Analytical Results 600490

LT Environmental, Inc., Arvada, CO

BEU-158 Tank Battery

Sample Id:	**SW08**	Matrix:	Soil	Date Received:	09.27.18 10.34
Lab Sample Id:	600490-003	Date Collected:	09.25.18 10.45	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	10.03.18 08.00	Basis:	Wet Weight
Seq Number:	3065219				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	10.03.18 18.42	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	10.03.18 18.42	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	10.03.18 18.42	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	10.03.18 18.42	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	10.03.18 18.42	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	10.03.18 18.42	U	1
Total BTEX		<0.00201	0.00201	mg/kg	10.03.18 18.42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	96	%	70-130	10.03.18 18.42	
1,4-Difluorobenzene	540-36-3	99	%	70-130	10.03.18 18.42	

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LT Environmental, Inc., Arvada, CO

BEU-158 Tank Battery

Sample Id:	**SW09**	Matrix:	Soil	Date Received:	09.27.18 10.34
Lab Sample Id:	600490-004	Date Collected:	09.25.18 11.20	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	CHE	Date Prep:	09.27.18 16.30	Basis:	Wet Weight
Seq Number:	3064713				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**340**	5.05	mg/kg	09.28.18 11.40		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	09.28.18 17.00	Basis:	Wet Weight
Seq Number:	3064919				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	09.29.18 11.49	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	09.29.18 11.49	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	09.29.18 11.49	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	09.29.18 11.49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	09.29.18 11.49	
o-Terphenyl	84-15-1	91	%	70-135	09.29.18 11.49	

Certificate of Analytical Results 600490

LT Environmental, Inc., Arvada, CO

BEU-158 Tank Battery

Sample Id:	**SW09**	Matrix:	Soil	Date Received:	09.27.18 10.34
Lab Sample Id:	600490-004	Date Collected:	09.25.18 11.20	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	10.03.18 13.30	Basis:	Wet Weight
Seq Number:	3065297				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.04.18 08.33	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.04.18 08.33	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.04.18 08.33	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.04.18 08.33	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.04.18 08.33	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.04.18 08.33	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.04.18 08.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	91	%	70-130	10.04.18 08.33	
1,4-Difluorobenzene	540-36-3	94	%	70-130	10.04.18 08.33	

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LT Environmental, Inc., Arvada, CO

BEU-158 Tank Battery

Sample Id:	**SW10**	Matrix:	Soil	Date Received:	09.27.18 10.34
Lab Sample Id:	600490-005	Date Collected:	09.25.18 13.35	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	CHE	Date Prep:	09.27.18 16.30	Basis:	Wet Weight
Seq Number:	3064713				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**154**	4.95	mg/kg	09.28.18 11.46		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	09.28.18 17.00	Basis:	Wet Weight
Seq Number:	3064919				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	09.29.18 12.08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	09.29.18 12.08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	09.29.18 12.08	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	09.29.18 12.08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	09.29.18 12.08	
o-Terphenyl	84-15-1	90	%	70-135	09.29.18 12.08	

Certificate of Analytical Results 600490

LT Environmental, Inc., Arvada, CO

BEU-158 Tank Battery

Sample Id:	**SW10**	Matrix:	Soil	Date Received:	09.27.18 10.34
Lab Sample Id:	600490-005	Date Collected:	09.25.18 13.35	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	10.03.18 13.30	Basis:	Wet Weight
Seq Number:	3065297				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	10.04.18 08.55	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	10.04.18 08.55	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	10.04.18 08.55	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	10.04.18 08.55	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	10.04.18 08.55	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	10.04.18 08.55	U	1
Total BTEX		<0.00201	0.00201	mg/kg	10.04.18 08.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	100	%	70-130	10.04.18 08.55	
1,4-Difluorobenzene	540-36-3	93	%	70-130	10.04.18 08.55	

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LT Environmental, Inc., Arvada, CO

BEU-158 Tank Battery

Sample Id:	**SW11**	Matrix:	Soil	Date Received:	09.27.18 10.34
Lab Sample Id:	600490-006	Date Collected:	09.25.18 13.45	Sample Depth:	5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	CHE	Date Prep:	09.27.18 16.30	Basis:	Wet Weight
Seq Number:	3064713				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**109**	5.00	mg/kg	09.28.18 11.51		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	09.28.18 17.00	Basis:	Wet Weight
Seq Number:	3064919				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	09.29.18 12.27	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	09.29.18 12.27	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	09.29.18 12.27	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	09.29.18 12.27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	09.29.18 12.27	
o-Terphenyl	84-15-1	94	%	70-135	09.29.18 12.27	

Certificate of Analytical Results 600490

LT Environmental, Inc., Arvada, CO

BEU-158 Tank Battery

Sample Id:	**SW11**	Matrix:	Soil	Date Received:	09.27.18 10.34
Lab Sample Id:	600490-006	Date Collected:	09.25.18 13.45	Sample Depth:	5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	10.03.18 13.30	Basis:	Wet Weight
Seq Number:	3065297				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	10.04.18 09.16	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	10.04.18 09.16	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	10.04.18 09.16	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	10.04.18 09.16	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	10.04.18 09.16	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	10.04.18 09.16	U	1
Total BTEX		<0.00202	0.00202	mg/kg	10.04.18 09.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	96	%	70-130	10.04.18 09.16	
4-Bromofluorobenzene	460-00-4	103	%	70-130	10.04.18 09.16	

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

QC Summary 600490

LT Environmental, Inc.

BEU-158 Tank Battery

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3064713 Matrix: Solid Date Prep: 09.27.18
MB Sample Id: 7663129-1-BLK LCS Sample Id: 7663129-1-BKS LCSD Sample Id: 7663129-1-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	255	102	256	102	90-110	0	20	mg/kg	09.28.18 09:24	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3064713 Matrix: Soil Date Prep: 09.27.18
Parent Sample Id: 600460-001 MS Sample Id: 600460-001 S MSD Sample Id: 600460-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.850	248	262	106	261	105	90-110	0	20	mg/kg	09.28.18 09:41	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3064713 Matrix: Soil Date Prep: 09.27.18
Parent Sample Id: 600490-001 MS Sample Id: 600490-001 S MSD Sample Id: 600490-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	455	253	704	98	704	98	90-110	0	20	mg/kg	09.28.18 11:00	

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3064919 Matrix: Solid Date Prep: 09.28.18
MB Sample Id: 7663251-1-BLK LCS Sample Id: 7663251-1-BKS LCSD Sample Id: 7663251-1-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)	<8.00	1000	1020	102	930	93	70-135	9	20	mg/kg	09.29.18 08:58	
Diesel Range Organics (DRO)	<8.13	1000	1040	104	941	94	70-135	10	20	mg/kg	09.29.18 08:58	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	109		117		111		70-135	%	09.29.18 08:58
o-Terphenyl	112		113		98		70-135	%	09.29.18 08:58

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 600490

LT Environmental, Inc.

BEU-158 Tank Battery

Analytical Method: TPH by SW8015 Mod | Prep Method: TX1005P
Seq Number: 3064919 | Matrix: Soil | Date Prep: 09.28.18
Parent Sample Id: 600489-006 | MS Sample Id: 600489-006 S | MSD Sample Id: 600489-006 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)	8.67	999	987	98	974	97	70-135	1	20	mg/kg	09.29.18 09:55	
Diesel Range Organics (DRO)	<8.12	999	1010	101	1000	100	70-135	1	20	mg/kg	09.29.18 09:55	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	118		115		70-135	%	09.29.18 09:55
o-Terphenyl	100		96		70-135	%	09.29.18 09:55

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3065219 | Matrix: Solid | Date Prep: 10.03.18
MB Sample Id: 7663470-1-BLK | LCS Sample Id: 7663470-1-BKS | LCSD Sample Id: 7663470-1-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	0.100	0.105	105	0.101	100	70-130	4	35	mg/kg	10.03.18 08:13	
Toluene	<0.00201	0.100	0.0967	97	0.0954	94	70-130	1	35	mg/kg	10.03.18 08:13	
Ethylbenzene	<0.00201	0.100	0.110	110	0.106	105	70-130	4	35	mg/kg	10.03.18 08:13	
m,p-Xylenes	<0.00402	0.201	0.219	109	0.211	104	70-130	4	35	mg/kg	10.03.18 08:13	
o-Xylene	<0.00201	0.100	0.109	109	0.106	105	70-130	3	35	mg/kg	10.03.18 08:13	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	91		114		96		70-130	%	10.03.18 08:13
4-Bromofluorobenzene	76		100		97		70-130	%	10.03.18 08:13

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3065297 | Matrix: Solid | Date Prep: 10.03.18
MB Sample Id: 7663516-1-BLK | LCS Sample Id: 7663516-1-BKS | LCSD Sample Id: 7663516-1-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	0.0969	97	0.0896	90	70-130	8	35	mg/kg	10.03.18 19:24	
Toluene	<0.00200	0.100	0.0895	90	0.0820	82	70-130	9	35	mg/kg	10.03.18 19:24	
Ethylbenzene	<0.00200	0.100	0.103	103	0.0941	94	70-130	9	35	mg/kg	10.03.18 19:24	
m,p-Xylenes	<0.00401	0.200	0.207	104	0.189	95	70-130	9	35	mg/kg	10.03.18 19:24	
o-Xylene	<0.00200	0.100	0.104	104	0.0958	96	70-130	8	35	mg/kg	10.03.18 19:24	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	86		97		94		70-130	%	10.03.18 19:24
4-Bromofluorobenzene	87		100		91		70-130	%	10.03.18 19:24

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

QC Summary 600490

LT Environmental, Inc.

BEU-158 Tank Battery

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3065219 Matrix: Soil Date Prep: 10.03.18
Parent Sample Id: 600489-004 MS Sample Id: 600489-004 S MSD Sample Id: 600489-004 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	0.101	0.0742	73	0.0242	24	70-130	102	35	mg/kg	10.03.18 14:13	XF
Toluene	<0.00201	0.101	0.0664	66	0.0220	22	70-130	100	35	mg/kg	10.03.18 14:13	XF
Ethylbenzene	<0.00201	0.101	0.0744	74	0.0218	22	70-130	109	35	mg/kg	10.03.18 14:13	XF
m,p-Xylenes	<0.00102	0.201	0.148	74	0.0412	21	70-130	113	35	mg/kg	10.03.18 14:13	XF
o-Xylene	<0.00201	0.101	0.0750	74	0.0211	21	70-130	112	35	mg/kg	10.03.18 14:13	XF

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	84		94		70-130	%	10.03.18 14:13
4-Bromofluorobenzene	107		82		70-130	%	10.03.18 14:13

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3065297 Matrix: Soil Date Prep: 10.03.18
Parent Sample Id: 600595-007 MS Sample Id: 600595-007 S MSD Sample Id: 600595-007 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	0.0479	48	0.0459	46	70-130	4	35	mg/kg	10.03.18 20:07	X
Toluene	<0.00199	0.0996	0.0341	34	0.0405	41	70-130	17	35	mg/kg	10.03.18 20:07	X
Ethylbenzene	<0.00199	0.0996	0.0337	34	0.0371	37	70-130	10	35	mg/kg	10.03.18 20:07	X
m,p-Xylenes	<0.00398	0.199	0.0678	34	0.0702	35	70-130	3	35	mg/kg	10.03.18 20:07	X
o-Xylene	<0.00199	0.0996	0.0395	40	0.0404	40	70-130	2	35	mg/kg	10.03.18 20:07	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	130		98		70-130	%	10.03.18 20:07
4-Bromofluorobenzene	87		86		70-130	%	10.03.18 20:07

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

XENCO LABORATORIES

Chain of Custody

Work Order No: 600490

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

www.xenco.com Page 1 of 1

Project Manager:	Adrian Baker	Bill to: (if different)	Kyle Littrell
Company Name:	CT Environmental	Company Name:	XTO
Address:	3300 'A' Street, Building 1, #103	Address:	
City, State ZIP:	Midland, Tx 79705	City, State ZIP:	
Phone:	(432) 704-5178	Email:	ABaker@CTENV.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	BEU-158 Tank Battery	Turn Around	
Project Number:	012918066	Routine	☑
P.O. Number:	2RP-2662	Rush:	
Sampler's Name:	Fabian Urbarri	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	2.3	Thermometer ID:	IR 5
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	0.0
Sample Custody Seals:	Yes (No) N/A	Total Containers:	

ANALYSIS REQUEST

Work Order Notes

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	BTEX (only BTEX)	TPH (DRO/GRO) (MED)	Chloride (300.00)	Sample Comments
FS09	S	09/24/18	1345	9.5'	1	X	X	X	
FS10	S	09/25/18	1355	9.5'	1	X	X	X	
SW08	S	09/25/18	1045	2'	1	X	X	X	
SW09	S	09/25/18	1120	4'	1	X	X	X	
SW10	S	09/25/18	1335	4'	1	X	X	X	
SW11	S	09/25/18	1345	5'	1	X	X	X	

FH 09/25/2018

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

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		9/25/18 16:27	2		9/26/18 15:30
3		9-27-18 10:24	4		
5			6		

Revised Date 051418 Rev. 2018.1

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 09/27/2018 10:34:00 AM

Work Order #: 600490

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: 09/27/2018
Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 09/28/2018
Jessica Kramer

ATTACHMENT 3: PHOTOGRAPHIC LOG

PHOTOGRAPHIC LOG

Photograph 1: View east of excavation.

Photograph 2: View southeast of excavation and new tank battery.

Big Eddy Unit #158
2RP-2631 & 2RP-2662
Photographs Taken: September 25, 2018

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

COMMENTS

Action 199122

COMMENTS

Operator: BOPCO, L.P. 6401 Holiday Hill Rd Midland, TX 79707	OGRID: 260737
	Action Number: 199122
	Action Type: [IM-SD] Incident File Support Doc (ENV) (IM-BNF)

COMMENTS

Created By	Comment	Comment Date
amaxwell	Historical document upload	3/21/2023

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
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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 199122

CONDITIONS

Operator: BOPCO, L.P. 6401 Holiday Hill Rd Midland, TX 79707	OGRID: 260737
	Action Number: 199122
	Action Type: [IM-SD] Incident File Support Doc (ENV) (IM-BNF)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	None	3/21/2023