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

October 4, 2019

Mr. Bradford Billings
New Mexico Oil Conservation Division
1220 South St. Francis Drive, #3
Santa Fe, New Mexico 87505

RE: Closure Request
Big Eddy Unit #74 Tank Battery
Remediation Permit Numbers 2RP-2664 and 2RP-3213
Eddy County, New Mexico

Dear Mr. Billings:

LT Environmental, Inc. (LTE), on behalf of XTO Energy, Inc. (XTO), presents the following Closure Request report detailing soil sampling and excavation activities at the Big Eddy Unit #74 Tank Battery (Site) in Unit B, Section 25, Township 21 South, Range 28 East, in Eddy County, New Mexico (Figure 1). The purpose of the soil sampling and excavation activities was to address impacts to soil following two separate events that caused the release of produced water and crude oil at the Site. Based on the excavation activities and results of the soil sampling events, XTO is submitting this Closure Request, describing remediation that has occurred and requesting no further action for the release events.

The releases are included in the Compliance Agreement for Remediation for Historical Releases (Compliance Agreement) between XTO and the New Mexico Oil Conservation Division (NMOCD) effective November 13, 2018. The purpose of the Compliance Agreement is to ensure reportable releases that occurred prior to August 14, 2018, where XTO is responsible for the corrective action, comply with Title 19, Chapter 15, Part 29 (19.15.29) of the New Mexico Administrative Code (NMAC) as amended on August 14, 2018. The releases are categorized as Tier IV sites in the Compliance Agreement, meaning the releases occurred prior to August 14, 2018, the effective date of 19.15.29 NMAC; however, remediation was ongoing.

RELEASE BACKGROUND

On December 4, 2014, a valve on the production tank coming from the water dump line was closed and the float valve on the scrubber failed causing approximately 1 barrel (bbl) of crude oil and 4 bbls of produced water to release from the flare stack. The release misted approximately 500 square feet of pasture and pooled in an area of approximately 648 square feet within the earthen containment surrounding the flare stack. Micro-Blaze® was applied to the affected pasture area. Approximately 1 bbl of released fluid was recovered. The closed valve was opened, and the float valve was repaired. The former operator reported the release to the NMOCD on a

Release Notification and Corrective Action Form C-141 (Form C-141) on December 15, 2014, and was assigned Remediation Permit (RP) Number 2RP-2664 (Attachment 1).

On August 13, 2015, a second release occurred at the Site (south of previous release 2RP-2664). A heater began leaking from a corroded bottom and released approximately 12 bbls of crude oil. Approximately 545 square feet of caliche well pad were affected by the release. A vacuum truck recovered approximately 10 bbls of crude oil. The heater was drained, cleaned, and removed from service so that it could be replaced by an operational heater. The former operator reported the release to NMOCD on a Form C-141 on August 17, 2015, and was assigned RP Number 2RP-3213 (Attachment 1).

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 on the same well pad, excavation and sampling activities were completed to address and close both releases simultaneously. Based on the excavation activities and results of the confirmation soil sampling events, XTO is requesting no further action for these two release events.

SITE CHARACTERIZATION

LTE characterized the Site according to Table 1, *Closure Criteria for Soils Impacted by a Release*, of 19.15.29.12 of the NMAC. 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. The nearest permitted water well with depth to water data is United States Geological Survey (USGS) Well 322632104023001 21A.28E.36.12321, located approximately 4,527 feet south-southwest of the Site. The water well has a depth to groundwater of 141 feet bgs and a total depth of 161 feet bgs. Ground surface elevation at the water well location is approximately 3,200 feet above mean sea level (AMSL), which is approximately 35 feet lower in elevation than the Site. The closest continuously flowing water or significant watercourse to the Site is an unnamed dry wash located approximately 540 feet southeast of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not located in a medium or high-potential karst area.

CLOSURE CRITERIA

Based on the results of the Site Characterization, the following NMOCD Table 1 Closure Criteria (Closure Criteria) apply:

- Benzene: 10 milligrams per kilogram (mg/kg);
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg;

- TPH-gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg;
- Total petroleum hydrocarbons (TPH): 2,500 mg/kg; and
- Chloride: 20,000 mg/kg.

SITE ASSESSMENT, EXCAVATION, AND DELINEATION SOIL SAMPLING ACTIVITIES

On June 14, 2019, LTE personnel inspected the Site to evaluate the release extents based on information provided on the Form C141s and visual observations. Surficial staining was observed in the release areas on the well pad. The release extents were mapped utilizing a handheld Global Positing System (GPS) unit and are depicted on Figure 2.

On June 17, 2019, LTE personnel returned to the Site to oversee excavation of soil as indicated by visual observations and field screening results. The excavation associated with the flare stack release was completed in the northeast corner of the pad. The excavation associated with the heater release was completed adjacent to the heater-treaters. To direct excavation activities, LTE screened soil for volatile aromatic hydrocarbons and chloride utilizing a PID and Hach® chloride QuanTab® test strips, respectively. Following removal of impacted soil, LTE collected 5-point composite soil samples every 200 square feet from the sidewalls and floor of the excavations. The 5-point composite samples were collected by depositing five aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing.

Composite soil samples SW01 and SW02 were collected from the sidewalls of the flare release excavation at depths ranging from ground surface to 1.5 feet bgs. Composite soil samples FS01 and FS02 were collected from the floor of the flare release excavation at a depth of 1.5 feet bgs.

Composite soil samples SW03 and SW04 were collected from the sidewalls of the heater release excavation at depths ranging from ground surface to 1 foot bgs. Composite soil samples FS03 through FS05 were collected from the floor of the heater release excavation at a depth of 1 foot bgs. The excavation extents and soil sample locations are depicted on Figure 2.

On June 17 and June 18, 2019, LTE personnel advanced boreholes via hand auger at six locations within and around the release extents. Boreholes BH01 and BH02 were advanced in the pasture area north of the well pad to a depth of 1 foot bgs or 1.5 feet bgs to assess for additional potential soil impacts associated with the flare release. Boreholes BH03 through BH05 were advanced around the heater treaters to a depth of 3 feet or 4 feet bgs to assess for additional potential soil impacts associated with the heater release. Two delineation soil samples were collected from each borehole at depths ranging from 0.5 feet to 4 feet bgs. Soil from the boreholes was field screened for volatile aromatic hydrocarbons and chloride utilizing a PID and Hach© chloride QuanTab© test strips, respectively. Field screening results and observations for each borehole were logged on lithologic/soil sampling logs, which are included in Attachment 2. The borehole and delineation soil sample locations are depicted on Figure 3.

The excavation and delineation soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were shipped at or below 4 degrees Celsius (°C) under strict chain-of-custody (COC) procedures to Xenco Laboratories (Xenco) in Midland, Texas, for analysis of BTEX following United States Environmental Protection Agency (USEPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following USEPA Method 8015M/D; and chloride following USEPA Method 300.0. Photographic documentation was conducted during the Site visit. Photographs are included in Attachment 3.

The combined excavation extents measured approximately 1,700 square feet in area. A total of approximately 100 cubic yards of impacted soil were removed from the excavations. The impacted soil was transported and properly disposed of at the Lea Land landfill facility located in Hobbs, New Mexico.

ANALYTICAL RESULTS

Laboratory analytical results indicated that BTEX, GRO/DRO, TPH, and chloride concentrations were compliant with the Closure Criteria in the excavation soil samples collected from the final excavation extents and in all delineation soil samples collected from boreholes BH01 through BH06. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Attachment 4.

CLOSURE REQUEST

Impacted soil was excavated from the release areas. Laboratory analytical results for the excavation soil samples collected from the final excavation extents indicated that BTEX, GRO/DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Delineation soil sampling was completed in and around the release extents to confirm that all impacted soil was removed. Laboratory analytical results for the delineation soil samples indicated that benzene, BTEX, GRO/DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Based on the laboratory analytical results, and no further remediation was required.

Initial response efforts and excavation of impacted soil have mitigated impacts at this Site. XTO requests no further action for RP Numbers 2RP-2664 and 2RP-3213. XTO will backfill the excavations with material purchased locally and recontour the Site to match pre-existing site conditions. An updated NMOCD Form C-141 for each release is included in Attachment 1.

If you have any questions or comments, please do not hesitate to contact Ms. Ashley Ager at (970) 385-1096.

Sincerely,

LT ENVIRONMENTAL, INC.

Bryan Paraspolo
Project Environmental Scientist

Ashley L. Ager, P.G.
Senior Geologist

cc: Kyle Littrell, XTO
Bureau of Land Management
Mike Bratcher, NMOCD

Attachments:

Figure 1	Site Location Map
Figure 2	Excavation Soil Sample Locations
Figure 3	Delineation Soil Sample Locations
Table 1	Soil Analytical Results
Attachment 1	Initial/Final NMOCD Form C-141 (2RP-2664 and 2RP-3213)
Attachment 2	Lithologic / Soil Sample Logs
Attachment 3	Photographic Log
Attachment 4	Laboratory Analytical Reports

FIGURES

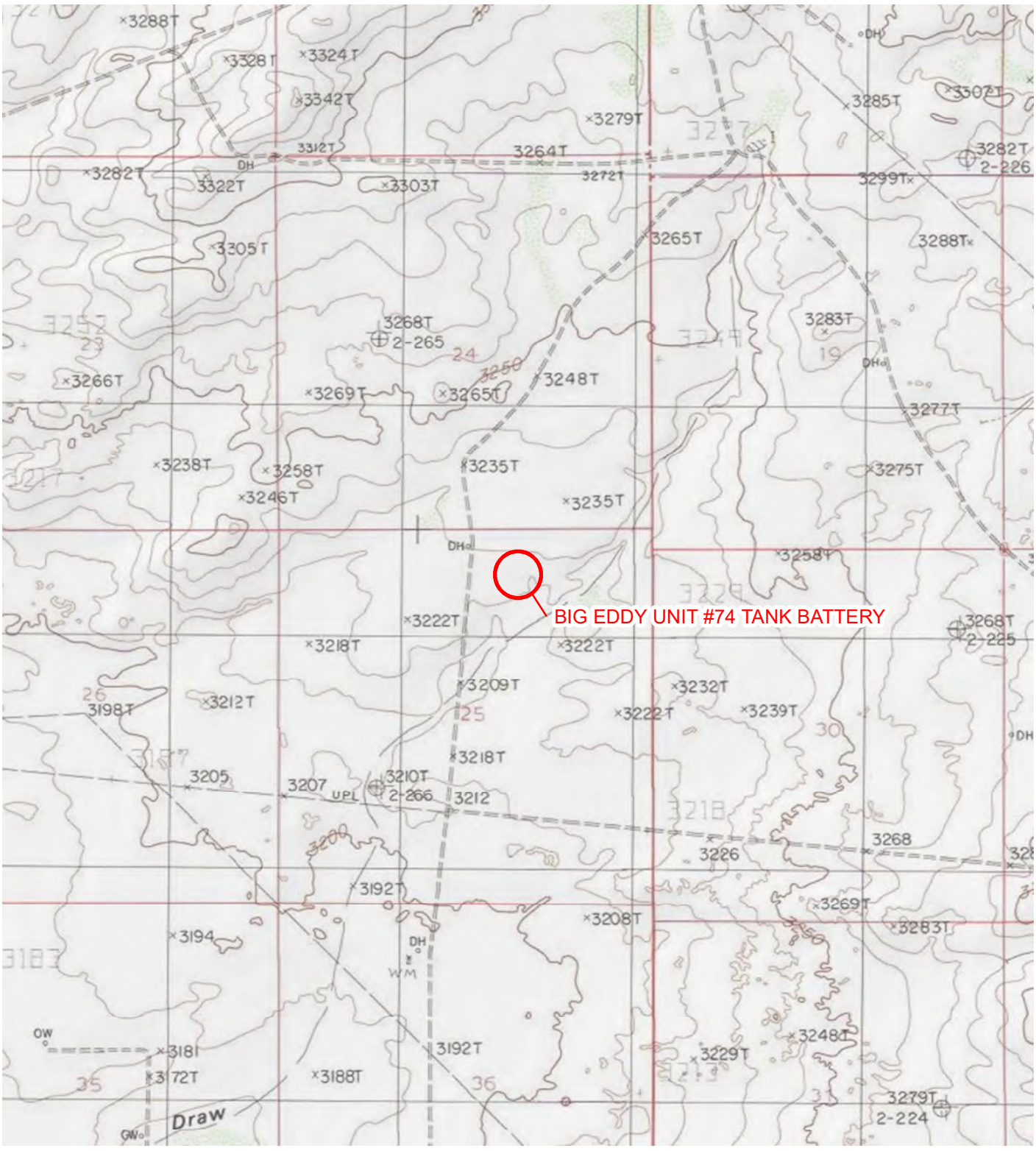

IMAGE COURTESY OF ESRI/USGS

LEGEND

SITE LOCATION

0 2,000 4,000

Feet

N

NEW MEXICO

NOTE: REMEDIATION PERMIT NUMBERS 2RP-2664 AND 2RP-3213

FIGURE 1
SITE LOCATION MAP
BIG EDDY UNIT #74 TANK BATTERY
UNIT B SEC 25 T21S R28E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

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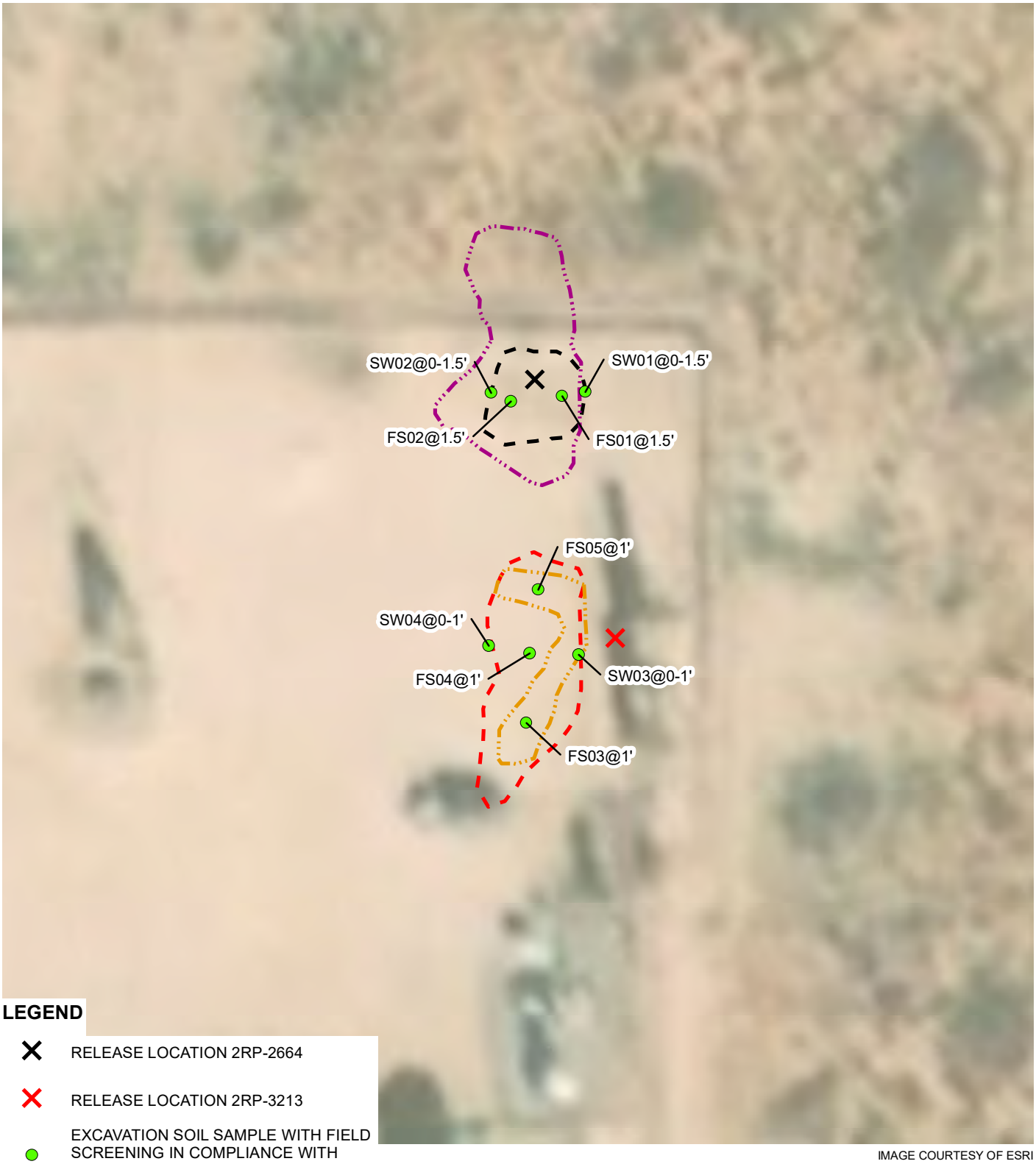

LEGEND

- RELEASE LOCATION 2RP-2664
- RELEASE LOCATION 2RP-3213
- EXCAVATION SOIL SAMPLE WITH FIELD SCREENING IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- EXCAVATION EXTENT 2RP-2664
- EXCAVATION EXTENT 2RP-3213
- RELEASE EXTENT 2RP-2664
- RELEASE EXTENT 2RP-3213

SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)
NOTE: REMEDIATION PERMIT NUMBERS 2RP-2664 AND 2RP-3213

IMAGE COURTESY OF ESRI

0 30 60
Feet

N

FIGURE 2
EXCAVATION SOIL SAMPLE LOCATIONS
BIG EDDY UNIT #74 TANK BATTERY
UNIT B SEC 25 T21S R28E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

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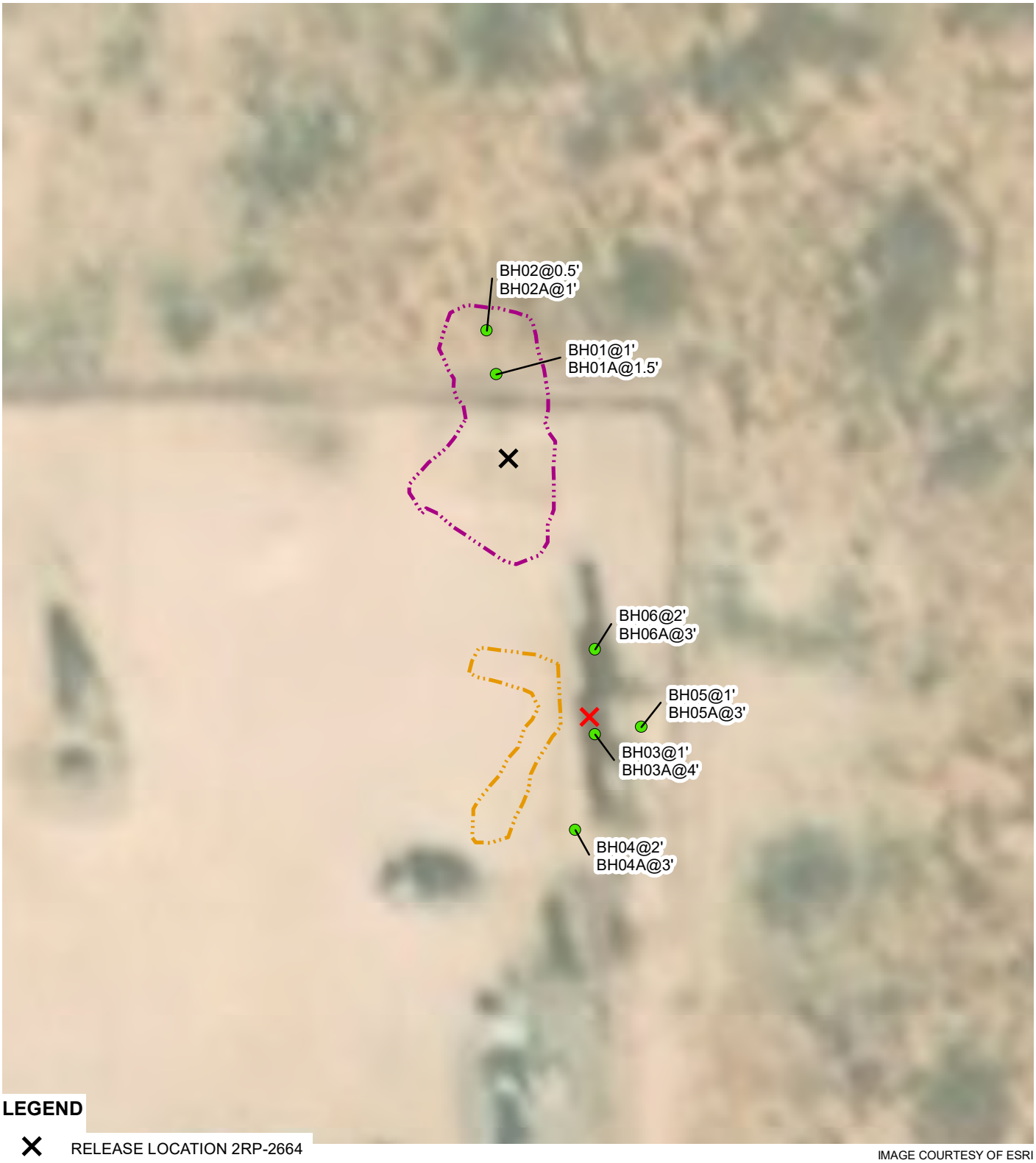

LEGEND

- RELEASE LOCATION 2RP-2664
- RELEASE LOCATION 2RP-3213
- DELINEATION SOIL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- RELEASE EXTENT 2RP-2664
- RELEASE EXTENT 2RP-3213

SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)
NOTE: REMEDIATION PERMIT NUMBERS
2RP-2664 AND 2RP-3213

IMAGE COURTESY OF ESRI

0 30 60
Feet

N

FIGURE 3
DELINEATION SOIL SAMPLE LOCATIONS
BIG EDDY UNIT #74 TANK BATTERY
UNIT B SEC 25 T21S R28E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012919116_BEU #74 TANK BATTERY\012919116_FIG02_DELINEATION_3213.mxd

TABLES

TABLE 1
SOIL ANALYTICAL RESULTS

BIG EDDY UNIT #74 TANK BATTERY
REMEDIATION PERMIT NUMBERS 2RP-2664 AND 2RP-3213
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

Sample Name	Sample Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
SW01	0-1.5	06/17/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	170
SW02	0-1.5	06/17/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	<15.0	348
SW03	0-1	06/17/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	132	18.1	150	150.1	15.5
SW04	0-1	06/17/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	<4.98
FS01	1.5	06/17/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	237
FS02	1.5	06/17/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	319
FS03	1	06/17/2019	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	<15.0	<5.02
FS04	1	06/17/2019	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	<15.0	<4.98
FS05	1	06/17/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	<4.96
BH01	1	06/17/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	<15.0	<5.00
BH01A	1.5	06/17/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	6.77
BH02	0.5	06/17/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	<15.0	<5.00
BH02A	1	06/17/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<14.9	<14.9	<14.9	<14.9	<14.9	<5.00
BH03	1	06/18/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	493	78.1	571	571.1	186
BH03A	4	06/18/2019	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	19.5	<15.0	19.5	19.5	98.2
BH04	2	06/18/2019	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	<15.0	47.8
BH04A	3	06/18/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<14.9	<14.9	<14.9	<14.9	<14.9	201
BH05	1	06/18/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	5.95
BH05A	3	06/18/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	<15.0	9.93
BH06	2	06/18/2019	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	<15.0	104
BH06A	3	06/18/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	117
NMOCD Table 1 Closure Criteria			**10**	NE	NE	NE	**50**	NE	NE	NE	**1,000**	**2,500**	**20,000**

Notes:

bgs - below ground surface
BTEX - benzene, toluene, ethylbenzene, and total xylenes
DRO - diesel range organics
GRO - gasoline range organics
mg/kg - milligrams per kilogram
NMAC - New Mexico Administrative Code
NMOCD - New Mexico Oil Conservation Division
NE - not established
ORO - oil range organics
TPH - total petroleum hydrocarbons
Bold - indicates result exceeds the applicable regulatory standard
< - indicates result is below laboratory reporting limits
Table 1 - closure criteria for soils impacted by a release per NMAC 19.15.29 August 2018

ATTACHMENT 1: INITIAL/FINAL NMOCD FORM C-141 (2RP-5332 and 2RP-5431)

NM OIL CONSERVATION
ARTESIA DISTRICT
DEC 15 2014
RECEIVED

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

nAB1435042878

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: BOPCO, L.P. 260737	Contact: Tony Savoie
Address: 522 W. Mermod, Suite 704 Carlsbad, N.M. 88220	Telephone No. 575-887-7329
Facility Name: Big Eddy Unit #74 Tank Battery	Facility Type: Exploration and Production

Surface Owner: Federal	Mineral Owner: Federal	API No. 30-015-22839

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
B	25	21S	28E					Eddy

Latitude N 32.456855 **Longitude** W 103.037608

NATURE OF RELEASE

Type of Release: Crude Oil and produced water	Volume of Release: 1 Bbl crude oil and 4 bbls produced water	Volume Recovered: 1 bbl total fluid
Source of Release: Facility flare stack	Date and Hour of Occurrence: 12/4/14 time unknown	Date and Hour of Discovery: 12/4/14 at approximately 1:00 p.m.
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
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 valve was found closed on the production tank coming from the water dump line, the float valve failed on the scrubber causing fluid to escape from the flare stack. The closed valve was opened and the float valve was repaired.

Describe Area Affected and Cleanup Action Taken.*
The spill misted approximately 500 sq.ft. of pasture area and puddled up in an area of approximately 648 sq.ft. of earthen containment around the flare stack. The pasture area was washed down with micro-blaze. All of the free standing fluid was recovered with a vacuum truck.
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

Printed Name: Tony Savoie

Title: Waste Management and Remediation Specialist

E-mail Address: tasavoie@basspet.com

Date: 12/15/14 Phone: 432-556-8730

OIL CONSERVATION DIVISION

Approved by Environmental Specialist: Signed By Brad Dimmick

Approval Date: 12/16/14 Expiration Date: N/A

Conditions of Approval: Attached ☐

Remediation per O.C.D. Rules & Guidelines
SUBMIT REMEDIATION PROPOSAL NO LATER THAN: 1/16/15

2RP-2664

* Attach Additional Sheets If Necessary

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

State of New Mexico
Energy Minerals and Natural Resources 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-2664
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-2664
Contact mailing address: 522 W. Mermod, Suite 704 Carlsbad, NM 88220	

Location of Release Source

Latitude N 32.456855 Longitude W -103.037608
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Big Eddy Unit #74 Tank Battery	Site Type: Production Well Facility
Date Release Discovered: 12/4/2014	API# *(if applicable):* 30-015-22839

Unit Letter	Section	Township	Range	County
B	25	21S	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): 1	Volume Recovered (bbls): 0.5
☒ Produced Water	Volume Released (bbls): 4	Volume Recovered (bbls): 0.5
	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 valve on the production tank coming from the water dump line was closed and the float valve on the scrubber failed causing approximately 1 barrel (bbl) of crude oil and 4 bbls of produced water to be released from the flare stack.

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	2RP-2664
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? N/A
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? N/A	

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:
N/A

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 Supervisor

Signature: Date: 10/4/2019

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-2664
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	>100 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☒ Yes ☐ No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: ***Each of the following items must be included in the report.***

☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
☒ Field data
☒ Data table of soil contaminant concentration data
☒ Depth to water determination
☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
☒ Boring or excavation logs
☒ Photographs including date and GIS information
☒ Topographic/Aerial maps
☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	2RP-2664
Facility ID	
Application ID	

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 Supervisor

Signature: Date: 10/4/2019

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

OCD Only

Received by: Date:

Form C-141
Page 6

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	2RP-2664
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 Supervisor

Signature: Date: 10/4/2019

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: Brittany Hall Date: 2/20/2023

Printed Name: Brittany Hall Title: Environmental Specialist

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

NAB1523231042 2RP-3213

OPERATOR ☒ Initial Report ☐ Final Report

Name of Company: BOPCO, L.P. 260737	Contact: Amy Ruth
Address: 522 W. Mermod, Suite 704 Carlsbad, N.M. 88220	Telephone No. 575-887-7329
Facility Name: Big Eddy Unit #74 Tank Battery	Facility Type: Exploration and Production

Surface Owner: Federal	Mineral Owner: Federal	API No. 30-015-22839

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
B	25	21S	28E	660	North	1980	East	Eddy

Latitude 32.456689° **Longitude** -104.037531°

NATURE OF RELEASE

Type of Release Crude Oil	Volume of Release 12 bbls	Volume Recovered 10 bbls
Source of Release Heater	Date and Hour of Occurrence 8/13/2015 time unknown	Date and Hour of Discovery 8/13/2015 11 am
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom? N/A	
By Whom? N/A	Date and Hour N/A	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	

NM OIL CONSERVATION
ARTESIA DISTRICT
AUG 17 2015
RECEIVED

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

Describe Cause of Problem and Remedial Action Taken.*
Heater began leaking from corroded bottom. The heater was drained, cleaned, and LOTO -- will not be in use until it is removed from location

Describe Area Affected and Cleanup Action Taken.*
The leak affected approximately 545 square feet of caliche pad. A vacuum truck recovered standing fluids.

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

Signature:

Printed Name: Amy Ruth

Title: ~~Assistant~~ Remediation Foreman

E-mail Address: ACRuth@basspet.com

Date: 8/17/2015 Phone: 432-661-0571

OIL CONSERVATION DIVISION

Approved by Environmental Specialist:

Approval Date: 8/20/15 Expiration Date: N/A

Conditions of Approval: Attached ☐

Remediation per O.C.D. Rules & Guidelines
SUBMIT REMEDIATION PROPOSAL NO LATER THAN: 9/21/15

2RP-3213

* Attach Additional Sheets If Necessary

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

State of New Mexico
Energy Minerals and Natural Resources 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-3213
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-3213
Contact mailing address: 522 W. Mermod, Suite 704 Carlsbad, NM 88220	

Location of Release Source

Latitude N 32.456689 Longitude W -103.037531
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Big Eddy Unit #74 Tank Battery	Site Type: Production Well Facility
Date Release Discovered: 8/13/2015	API# *(if applicable):* 30-015-22839

Unit Letter	Section	Township	Range	County
B	25	21S	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): 12	Volume Recovered (bbls): 10
☐ Produced Water	Volume Released (bbls):	Volume Recovered (bbls):
	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 heater began leaking from a corroded bottom. The leak affected approximately 545 square feet of caliche well pad.

State of New Mexico
Oil Conservation Division

Incident ID	
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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? N/A
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? N/A	

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:
N/A

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 Supervisor

Signature: Date: 10/4/2019

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-3213
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Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	>100 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: ***Each of the following items must be included in the report.***

☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
☒ Field data
☒ Data table of soil contaminant concentration data
☒ Depth to water determination
☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
☒ Boring or excavation logs
☒ Photographs including date and GIS information
☒ Topographic/Aerial maps
☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

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Page 4

State of New Mexico
Oil Conservation Division

Incident ID	
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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 Supervisor

Signature: Date: 10/4/2019

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-3213
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 Supervisor

Signature: Date: 10/4/2019

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: LITHOLOGIC / SOIL SAMPLE LOGS

LT Environmental, Inc.
508 West Stevens Street
Carlsbad, New Mexico 88220
Compliance · Engineering · Remediation

Identifier: BH01	Date: 06/17/19
Project Name: BEU 74	RP Number:
Logged By: Robert M	Method: Hand Auger
Lat/Long:	Field Screening:
Hole Diameter: 3"	Total Depth: 2'

LITHOLOGIC / SOIL SAMPLING LOG

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
1430 D	<128	0.8	N		0 1	1'	S	SP-SM Brown
1435 D	<128	1.2	N		2 3 4 5 6 7 8 9 10 11 12	1.5'	S	SP-SM Brown

LT Environmental, Inc.
508 West Stevens Street
Carlsbad, New Mexico 88220
Compliance · Engineering · Remediation

Identifier: BH02	Date: 06/17/19
Project Name: BEU 74	RP Number:
Logged By: Robert M	Method: Hand Auger
Hole Diameter: 3"	Total Depth: 2'
Lat/Long:	Field Screening:
Comments:	

LITHOLOGIC / SOIL SAMPLING LOG

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
1446 D	<128	1.3	N		0 1	0.5'	S	SP-SM Brown
1445 D	<128	1.1	N		2	1'	S	SP-SM Brown
					3 4 5 6 7 8 9 10 11 12			

LT Environmental, Inc.
508 West Stevens Street
Carlsbad, New Mexico 88220
Compliance · Engineering · Remediation

Identifier: BH03	Date: 06/18/19
Project Name: BEU 74	RP Number: 2RP-2664 2RP-3213
Logged By: Robert M.	Method: Hand Auger
Hole Diameter: 3"	Total Depth: 4'
Lat/Long:	Field Screening:

LITHOLOGIC / SOIL SAMPLING LOG

Comments:

	Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
0840	M	213	11.7	N		0–1	1'	S	SP-SM brown
0845	M	<124	1.3	N		1–2	2'	S	SP-SM brown
0850	M	<124	1.6	N		2–3	3'	S	SP-SC w/ trace silt reddish brown
0855	M	<124	6.7	N		3–4	4'	S	SP-SC reddish brown
						4–5			Hand Auger refusal
						5–6			
						6–7			
						7–8			
						8–9			
						9–10			
						10–11			
						11–12			

LT Environmental, Inc.
508 West Stevens Street
Carlsbad, New Mexico 88220
Compliance · Engineering · Remediation

Identifier: BH04	Date: 6/18/19
Project Name: BEU 74	RP Number:
Logged By: Spencer	Method: Hand Auger
Hole Diameter: 3"	Total Depth: 3'

LITHOLOGIC / SOIL SAMPLING LOG

Lat/Long:

Field Screening:

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
D	<124	.4	N		0–1	1'	S	SP-SM Brown trace caliché
D	213	.6	N		2	2'	S	SP-SC Reddish-Brown
D	213	.5	N		3	3'	S	SP-SC Reddish-Brown
					4			
					5			
					6			
					7			Refusal
					8			
					9			
					10			
					11			
					12			

LT Environmental, Inc.
508 West Stevens Street
Carlsbad, New Mexico 88220
Compliance · Engineering · Remediation

		Identifier: BH05	Date: 06/18/19
		Project Name: BEU 74	RP Number:
LITHOLOGIC / SOIL SAMPLING LOG		Logged By: Robert	Method: Hand Auger
Lat/Long:	Field Screening:	Hole Diameter: 3"	Total Depth: 3'
Comments:			

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
0915 D	<124	0.4	N		0	1'	S	SP - SM Brown
0920 M	<124	0.3	N		1	2'	S	SP - SM Brown
0925 M	<124	0.4	N		2	3'	S	SP - SC Reddish Brown
					3			Hand Auger Refusal
					4			
					5			
					6			
					7			
					8			
					9			
					10			
					11			
					12			

LT Environmental, Inc.
508 West Stevens Street
Carlsbad, New Mexico 88220
Compliance · Engineering · Remediation

Identifier: BH06	Date: 06/18/19
Project Name: BEV 074	RP Number:
Logged By: Robert M	Method: Hand Auger
Lat/Long:	Field Screening:
Hole Diameter: 3"	Total Depth: 3'

LITHOLOGIC / SOIL SAMPLING LOG

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
0930 D	<124	0.5	N		0–1	1'	S	SP-SM Brown
0935 M	<124	0.8	N		2	2'	S	SP-SC reddish Brown
0940 M	<124	0.5	N		3	3'	S	SP-SC red Brown
					4–12			hand auger refusal

ATTACHMENT 3: PHOTOGRAPHIC LOG

PHOTOGRAPHIC LOG

Photograph 1: View northeast corner of pad and release location (2RP-2664).

Photograph 2: View of the release location (2RP-2664) facing southeast.

Photograph 3: View of release location (2RP-2664) facing north.

Photograph 4: View of release location (2RP-2664) facing northwest.

Big Eddy Unit #74
Eddy County, New Mexico
Photographs Taken: June 14, 17 & 18, 2019

PHOTOGRAPHIC LOG

Photograph 5: View of excavated location (2RP-2664) facing northeast.

Photograph 6: View of excavated location (2RP-2664) facing west.

Photograph 7: View of excavated location (2RP-2664) facing north.

Photograph 8: View of completed excavation (2RP-2664) facing west.

PHOTOGRAPHIC LOG

Photograph 9: View eastern portion of pad and release location (2RP-3213).

Photograph 10: View of release location (2RP-3213) facing south.

Photograph 11: View of release location (2RP-3213) facing northeast.

Photograph 12: View of release location (2RP-3213) facing east.

PHOTOGRAPHIC LOG

Photograph 13: View of excavated location (2RP-3213) facing southeast.

Photograph 14: View of excavated location (2RP-3213) facing northeast.

Photograph 15: View of excavated location (2RP-3213).

Photograph 16: View of completed excavated location (2RP-3213) facing north.

ATTACHMENT 4: LABORATORY ANALYTICAL REPORTS

Analytical Report 628186

for

LT Environmental, Inc.

Project Manager: Ashley Ager

BEU 074

27-JUN-19

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-29), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-19-19), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-20)
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-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429), North Carolina (483)

27-JUN-19

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

Reference: XENCO Report No(s): **628186**
BEU 074
Project Address: Delaware Basin

Ashley Ager:

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) 628186. 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. 628186 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jessica Kramer

Jessica Kramer
Project Assistant

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
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Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America

Sample Cross Reference 628186

LT Environmental, Inc., Arvada, CO

BEU 074

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS01	S	06-17-19 13:30	1.5 ft	628186-001
FS02	S	06-17-19 13:35	1.5 ft	628186-002
SW01	S	06-17-19 13:45	0 - 1.5 ft	628186-003
SW02	S	06-17-19 13:50	0 - 1.5 ft	628186-004

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: BEU 074

Project ID:
Work Order Number(s): *628186*

Report Date: *27-JUN-19*
Date Received: *06/19/2019*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3093723 BTEX by EPA 8021B

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

Certificate of Analysis Summary 628186

LT Environmental, Inc., Arvada, CO

Project Name: BEU 074

Project Id:
Contact: Ashley Ager
Project Location: Delaware Basin

Date Received in Lab: Wed Jun-19-19 11:40 am
Report Date: 27-JUN-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	628186-001		628186-002		628186-003		628186-004					
	Field Id:	FS01		FS02		SW01		SW02					
	Depth:	1.5- ft		1.5- ft		0-1.5 ft		0-1.5 ft					
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	Jun-17-19 13:30		Jun-17-19 13:35		Jun-17-19 13:45		Jun-17-19 13:50					
BTEX by EPA 8021B	*Extracted:*	Jun-25-19 14:00		Jun-25-19 14:00		Jun-25-19 14:00		Jun-25-19 14:00					
	Analyzed:	Jun-27-19 02:51		Jun-27-19 03:14		Jun-27-19 03:37		Jun-27-19 10:27					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199				
Toluene		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199				
Ethylbenzene		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199				
m,p-Xylenes		<0.00399	0.00399	<0.00400	0.00400	<0.00401	0.00401	<0.00398	0.00398				
o-Xylene		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199				
Total Xylenes		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199				
Total BTEX		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199				
Chloride by EPA 300	*Extracted:*	Jun-19-19 16:10		Jun-19-19 16:10		Jun-19-19 17:00		Jun-19-19 17:00					
	Analyzed:	Jun-20-19 00:55		Jun-20-19 01:03		Jun-20-19 16:48		Jun-20-19 16:53					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		237	4.99	319	5.03	170	4.97	348	4.99				
TPH by SW8015 Mod	*Extracted:*	Jun-19-19 17:00		Jun-19-19 17:00		Jun-19-19 17:00		Jun-20-19 11:50					
	Analyzed:	Jun-20-19 09:02		Jun-20-19 09:26		Jun-20-19 09:51		Jun-21-19 10:46					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0				
Diesel Range Organics (DRO)		<15.0	15.0	<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	<15.0	15.0	<15.0	15.0				
Total TPH		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0				
Total GRO-DRO		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0				

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

Jessica Kramer
Project Assistant

Final 1.000

Certificate of Analytical Results 628186

LT Environmental, Inc., Arvada, CO

BEU 074

Sample Id:	**FS01**	Matrix:	Soil	Date Received:	06.19.19 11.40
Lab Sample Id:	628186-001	Date Collected:	06.17.19 13.30	Sample Depth:	1.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	06.19.19 16.10	Basis:	Wet Weight
Seq Number:	3092962				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**237**	4.99	mg/kg	06.20.19 00.55		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.19.19 17.00	Basis:	Wet Weight
Seq Number:	3092947				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.20.19 09.02	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.20.19 09.02	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.20.19 09.02	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.20.19 09.02	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	06.20.19 09.02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	06.20.19 09.02	
o-Terphenyl	84-15-1	92	%	70-135	06.20.19 09.02	

Certificate of Analytical Results 628186

LT Environmental, Inc., Arvada, CO

BEU 074

Sample Id:	**FS01**	Matrix:	Soil	Date Received:	06.19.19 11.40
Lab Sample Id:	628186-001	Date Collected:	06.17.19 13.30	Sample Depth:	1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	06.25.19 14.00	Basis:	Wet Weight
Seq Number:	3093723				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.27.19 02.51	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.27.19 02.51	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.27.19 02.51	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	06.27.19 02.51	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.27.19 02.51	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.27.19 02.51	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.27.19 02.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	127	%	70-130	06.27.19 02.51	
1,4-Difluorobenzene	540-36-3	92	%	70-130	06.27.19 02.51	

Certificate of Analytical Results 628186

LT Environmental, Inc., Arvada, CO

BEU 074

Sample Id:	**FS02**	Matrix:	Soil	Date Received:	06.19.19 11.40
Lab Sample Id:	628186-002	Date Collected:	06.17.19 13.35	Sample Depth:	1.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	06.19.19 16.10	Basis:	Wet Weight
Seq Number:	3092962				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**319**	5.03	mg/kg	06.20.19 01.03		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.19.19 17.00	Basis:	Wet Weight
Seq Number:	3092947				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.20.19 09.26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.20.19 09.26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.20.19 09.26	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.20.19 09.26	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	06.20.19 09.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	06.20.19 09.26	
o-Terphenyl	84-15-1	94	%	70-135	06.20.19 09.26	

Certificate of Analytical Results 628186

LT Environmental, Inc., Arvada, CO

BEU 074

Sample Id:	**FS02**	Matrix:	Soil	Date Received:	06.19.19 11.40
Lab Sample Id:	628186-002	Date Collected:	06.17.19 13.35	Sample Depth:	1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	06.25.19 14.00	Basis:	Wet Weight
Seq Number:	3093723				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.27.19 03.14	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.27.19 03.14	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.27.19 03.14	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	06.27.19 03.14	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.27.19 03.14	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.27.19 03.14	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.27.19 03.14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	129	%	70-130	06.27.19 03.14	
1,4-Difluorobenzene	540-36-3	91	%	70-130	06.27.19 03.14	

Certificate of Analytical Results 628186

LT Environmental, Inc., Arvada, CO

BEU 074

Sample Id:	**SW01**	Matrix:	Soil	Date Received:	06.19.19 11.40
Lab Sample Id:	628186-003	Date Collected:	06.17.19 13.45	Sample Depth:	0 - 1.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	06.19.19 17.00	Basis:	Wet Weight
Seq Number:	3093006				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**170**	4.97	mg/kg	06.20.19 16.48		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.19.19 17.00	Basis:	Wet Weight
Seq Number:	3092947				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.20.19 09.51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.20.19 09.51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.20.19 09.51	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.20.19 09.51	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	06.20.19 09.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	06.20.19 09.51	
o-Terphenyl	84-15-1	93	%	70-135	06.20.19 09.51	

Certificate of Analytical Results 628186

LT Environmental, Inc., Arvada, CO

BEU 074

Sample Id:	**SW01**	Matrix:	Soil	Date Received:	06.19.19 11.40
Lab Sample Id:	628186-003	Date Collected:	06.17.19 13.45	Sample Depth:	0 - 1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	06.25.19 14.00	Basis:	Wet Weight
Seq Number:	3093723				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.27.19 03.37	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.27.19 03.37	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.27.19 03.37	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	06.27.19 03.37	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.27.19 03.37	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.27.19 03.37	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.27.19 03.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	126	%	70-130	06.27.19 03.37	
1,4-Difluorobenzene	540-36-3	93	%	70-130	06.27.19 03.37	

Certificate of Analytical Results 628186

LT Environmental, Inc., Arvada, CO

BEU 074

Sample Id:	**SW02**	Matrix:	Soil	Date Received:	06.19.19 11.40
Lab Sample Id:	628186-004	Date Collected:	06.17.19 13.50	Sample Depth:	0 - 1.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	06.19.19 17.00	Basis:	Wet Weight
Seq Number:	3093006				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**348**	4.99	mg/kg	06.20.19 16.53		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.20.19 11.50	Basis:	Wet Weight
Seq Number:	3093110				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.21.19 10.46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.21.19 10.46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.21.19 10.46	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.21.19 10.46	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	06.21.19 10.46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	06.21.19 10.46	
o-Terphenyl	84-15-1	78	%	70-135	06.21.19 10.46	

Certificate of Analytical Results 628186

LT Environmental, Inc., Arvada, CO

BEU 074

Sample Id:	**SW02**	Matrix:	Soil	Date Received:	06.19.19 11.40
Lab Sample Id:	628186-004	Date Collected:	06.17.19 13.50	Sample Depth:	0 - 1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	06.25.19 14.00	Basis:	Wet Weight
Seq Number:	3093723				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.27.19 10.27	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.27.19 10.27	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.27.19 10.27	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.27.19 10.27	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.27.19 10.27	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.27.19 10.27	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.27.19 10.27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	116	%	70-130	06.27.19 10.27	
1,4-Difluorobenzene	540-36-3	96	%	70-130	06.27.19 10.27	

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 628186

LT Environmental, Inc.

BEU 074

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3092962 — Matrix: Solid — Date Prep: 06.19.19
MB Sample Id: 7680340-1-BLK — LCS Sample Id: 7680340-1-BKS — LCSD Sample Id: 7680340-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	246	98	246	98	90-110	0	20	mg/kg	06.19.19 21:32	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3093006 — Matrix: Solid — Date Prep: 06.19.19
MB Sample Id: 7680341-1-BLK — LCS Sample Id: 7680341-1-BKS — LCSD Sample Id: 7680341-1-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	245	98	246	98	90-110	0	20	mg/kg	06.20.19 14:42	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3092962 — Matrix: Soil — Date Prep: 06.19.19
Parent Sample Id: 628183-003 — MS Sample Id: 628183-003 S — MSD Sample Id: 628183-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	201	252	441	95	441	95	90-110	0	20	mg/kg	06.19.19 21:54	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3092962 — Matrix: Soil — Date Prep: 06.19.19
Parent Sample Id: 628185-006 — MS Sample Id: 628185-006 S — MSD Sample Id: 628185-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	79.2	248	333	102	332	102	90-110	0	20	mg/kg	06.19.19 23:35	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3093006 — Matrix: Soil — Date Prep: 06.19.19
Parent Sample Id: 628389-001 — MS Sample Id: 628389-001 S — MSD Sample Id: 628389-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	421	252	632	84	630	83	90-110	0	20	mg/kg	06.20.19 14:57	X

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 628186

LT Environmental, Inc.

BEU 074

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3093006 Matrix: Soil Date Prep: 06.19.19
Parent Sample Id: 628389-010 MS Sample Id: 628389-010 S MSD Sample Id: 628389-010 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.01	251	243	97	243	97	90-110	0	20	mg/kg	06.20.19 16:05	

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3092947 Matrix: Solid Date Prep: 06.19.19
MB Sample Id: 7680348-1-BLK LCS Sample Id: 7680348-1-BKS LCSD Sample Id: 7680348-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	916	92	963	96	70-135	5	20	mg/kg	06.19.19 23:53	
Diesel Range Organics (DRO)	<8.13	1000	873	87	876	88	70-135	0	20	mg/kg	06.19.19 23:53	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	116		101		105		70-135	%	06.19.19 23:53
o-Terphenyl	103		94		99		70-135	%	06.19.19 23:53

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3093110 Matrix: Solid Date Prep: 06.20.19
MB Sample Id: 7680420-1-BLK LCS Sample Id: 7680420-1-BKS LCSD Sample Id: 7680420-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	964	96	922	92	70-135	4	20	mg/kg	06.21.19 00:52	
Diesel Range Organics (DRO)	<8.13	1000	953	95	926	93	70-135	3	20	mg/kg	06.21.19 00:52	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	93		102		99		70-135	%	06.21.19 00:52
o-Terphenyl	84		101		104		70-135	%	06.21.19 00:52

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3092947 Matrix: Soil Date Prep: 06.19.19
Parent Sample Id: 628180-001 MS Sample Id: 628180-001 S MSD Sample Id: 628180-001 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)	14.4	998	958	95	998	99	70-135	4	20	mg/kg	06.20.19 01:06	
Diesel Range Organics (DRO)	11.5	998	893	88	1020	101	70-135	13	20	mg/kg	06.20.19 01:06	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	94		96		70-135	%	06.20.19 01:06
o-Terphenyl	84		94		70-135	%	06.20.19 01:06

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 628186

LT Environmental, Inc.

BEU 074

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3093110 Matrix: Soil Date Prep: 06.20.19
Parent Sample Id: 628185-001 MS Sample Id: 628185-001 S MSD Sample Id: 628185-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	808	81	858	86	70-135	6	20	mg/kg	06.21.19 02:05	
Diesel Range Organics (DRO)	10.7	1000	778	77	824	81	70-135	6	20	mg/kg	06.21.19 02:05	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	73		86		70-135	%	06.21.19 02:05
o-Terphenyl	71		87		70-135	%	06.21.19 02:05

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3093723 Matrix: Solid Date Prep: 06.25.19
MB Sample Id: 7680761-1-BLK LCS Sample Id: 7680761-1-BKS LCSD Sample Id: 7680761-1-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	0.0851	86	0.0936	94	70-130	10	35	mg/kg	06.26.19 19:56	
Toluene	<0.000453	0.0994	0.0953	96	0.102	102	70-130	7	35	mg/kg	06.26.19 19:56	
Ethylbenzene	<0.000561	0.0994	0.0973	98	0.106	106	70-130	9	35	mg/kg	06.26.19 19:56	
m,p-Xylenes	<0.00101	0.199	0.192	96	0.208	104	70-130	8	35	mg/kg	06.26.19 19:56	
o-Xylene	0.000431	0.0994	0.0939	94	0.101	101	70-130	7	35	mg/kg	06.26.19 19:56	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	98		96		95		70-130	%	06.26.19 19:56
4-Bromofluorobenzene	105		106		107		70-130	%	06.26.19 19:56

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3093723 Matrix: Soil Date Prep: 06.25.19
Parent Sample Id: 628028-009 MS Sample Id: 628028-009 S MSD Sample Id: 628028-009 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	0.0993	99	0.0998	100	70-130	1	35	mg/kg	06.26.19 19:09	
Toluene	0.000552	0.0998	0.102	102	0.103	102	70-130	1	35	mg/kg	06.26.19 19:09	
Ethylbenzene	0.000763	0.0998	0.103	102	0.103	102	70-130	0	35	mg/kg	06.26.19 19:09	
m,p-Xylenes	<0.00101	0.200	0.205	103	0.208	103	70-130	1	35	mg/kg	06.26.19 19:09	
o-Xylene	0.000612	0.0998	0.100	100	0.101	100	70-130	1	35	mg/kg	06.26.19 19:09	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		98		70-130	%	06.26.19 19:09
4-Bromofluorobenzene	107		104		70-130	%	06.26.19 19:09

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

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)

Work Order No: 628194

www.xenco.com Page 1 of 1

Project Manager:	Ashley Ager	Bill to: (if different)	Kyle Littrel
Company Name:	LT Environmental, Inc., Permian office	Company Name:	XTO-Energy
Address:	3300 North A Street	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM
Phone:	432.704.5178	Email:	aager@ltenv.com rmcafee@ltenv.com

Work Order Comments

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

Project Name:	BEU 074	Turn Around	
Project Number:		Routine ☐	
P.O. Number:	2RP-2664 2RP-3213	Rush: 3 day	
Sampler's Name:	Robert McAfee	Due Date: 06/21/19	

SAMPLE RECEIPT

Temperature (°C):	0.5/0.3	Temp Blank: Yes (No)	Wet Ice: (Yes) No
Received Intact:	(Yes) No	Thermometer ID:	
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Total Containers:	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
FS01	S	06/17/19	1330	1.5'	1	X	X	X
FS02			1335	1.5'		X	X	X
SW01			1345	0-1.5'		X	X	X
SW02			1350	0-1.5'		X	X	X

ANALYSIS REQUEST

Work Order Notes

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

Sample Comments

Composite

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
		6/17/19 16:40	2	FedEx	06/18/19 14:00
			4		06/19/19
			6		

Revised Date 051418 Rev. 2018.1

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 06/19/2019 11:40:00 AM

Work Order #: 628186

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

Temperature Measuring device used : R8

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

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

Analyst: PH Device/Lot#:

Checklist completed by: Brianna Teel Date: 06/19/2019
Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 06/19/2019
Jessica Kramer

Analytical Report 628187

for

LT Environmental, Inc.

Project Manager: Ashley Ager

BEU 074

27-JUN-19

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-29), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-19-19), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-20)
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-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429), North Carolina (483)

27-JUN-19

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

Reference: XENCO Report No(s): **628187**
BEU 074
Project Address: Delaware Basin

Ashley Ager:

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) 628187. 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. 628187 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 628187

LT Environmental, Inc., Arvada, CO

BEU 074

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS03	S	06-17-19 12:30	1 ft	628187-001
FS04	S	06-17-19 12:35	1 ft	628187-002
FS05	S	06-17-19 12:40	1 ft	628187-003
SW03	S	06-17-19 12:50	0 - 1 ft	628187-004
SW04	S	06-17-19 13:05	0 - 1 ft	628187-005

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: BEU 074

Project ID:
Work Order Number(s): *628187*

Report Date: *27-JUN-19*
Date Received: *06/19/2019*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3093583 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3093649 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analysis Summary 628187

LT Environmental, Inc., Arvada, CO

Project Name: BEU 074

Project Id:
Contact: Ashley Ager
Project Location: Delaware Basin

Date Received in Lab: Wed Jun-19-19 11:40 am
Report Date: 27-JUN-19
Project Manager: Jessica Kramer

Analysis Requested											
	Lab Id:	628187-001		628187-002		628187-003		628187-004		628187-005	
	Field Id:	FS03		FS04		FS05		SW03		SW04	
	Depth:	1- ft		1- ft		1- ft		0-1 ft		0-1 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jun-17-19 12:30		Jun-17-19 12:35		Jun-17-19 12:40		Jun-17-19 12:50		Jun-17-19 13:05	
BTEX by EPA 8021B	*Extracted:*	Jun-24-19 23:00		Jun-24-19 23:00		Jun-24-19 23:00		Jun-24-19 23:00		Jun-25-19 17:00	
	Analyzed:	Jun-25-19 22:42		Jun-25-19 23:04		Jun-25-19 23:26		Jun-25-19 23:48		Jun-26-19 14:14	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00201	0.00201	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200
Toluene		<0.00201	0.00201	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200
Ethylbenzene		<0.00201	0.00201	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200
m,p-Xylenes		<0.00402	0.00402	<0.00402	0.00402	<0.00401	0.00401	<0.00399	0.00399	<0.00399	0.00399
o-Xylene		<0.00201	0.00201	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200
Total Xylenes		<0.00201	0.00201	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200
Total BTEX		<0.00201	0.00201	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200
Chloride by EPA 300	*Extracted:*	Jun-19-19 17:00		Jun-19-19 17:00		Jun-19-19 19:00		Jun-19-19 19:00		Jun-19-19 19:00	
	Analyzed:	Jun-20-19 16:58		Jun-20-19 17:03		Jun-19-19 20:23		Jun-19-19 20:40		Jun-19-19 20:45	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		<5.02	5.02	<4.98	4.98	<4.96	4.96	15.5	5.03	<4.98	4.98
TPH by SW8015 Mod	*Extracted:*	Jun-20-19 11:50		Jun-20-19 11:50		Jun-20-19 11:50		Jun-19-19 12:00		Jun-19-19 12:00	
	Analyzed:	Jun-21-19 09:29		Jun-21-19 09:55		Jun-21-19 10:20		Jun-19-19 22:14		Jun-19-19 22:39	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	132	15.0	<15.0	15.0
Motor Oil Range Hydrocarbons (MRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	18.1	15.0	<15.0	15.0
Total TPH		<15.0	15.0	<15.0	15.0	<15.0	15.0	150	15.0	<15.0	15.0
Total GRO-DRO		<15.0	15.0	<15.0	15.0	<15.0	15.0	132	15.0	<15.0	15.0

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

Jessica Kramer
Project Assistant

Final 1.000

Certificate of Analytical Results 628187

LT Environmental, Inc., Arvada, CO

BEU 074

Sample Id:	**FS03**	Matrix:	Soil	Date Received:	06.19.19 11.40
Lab Sample Id:	628187-001	Date Collected:	06.17.19 12.30	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	06.19.19 17.00	Basis:	Wet Weight
Seq Number:	3093006				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.02	5.02	mg/kg	06.20.19 16.58	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.20.19 11.50	Basis:	Wet Weight
Seq Number:	3093110				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.21.19 09.29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.21.19 09.29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.21.19 09.29	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.21.19 09.29	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	06.21.19 09.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	80	%	70-135	06.21.19 09.29	
o-Terphenyl	84-15-1	85	%	70-135	06.21.19 09.29	

Certificate of Analytical Results 628187

LT Environmental, Inc., Arvada, CO

BEU 074

Sample Id:	**FS03**	Matrix:	Soil	Date Received:	06.19.19 11.40
Lab Sample Id:	628187-001	Date Collected:	06.17.19 12.30	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	06.24.19 23.00	Basis:	Wet Weight
Seq Number:	3093583				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.25.19 22.42	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	06.25.19 22.42	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.25.19 22.42	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.25.19 22.42	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.25.19 22.42	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.25.19 22.42	U	1
Total BTEX		<0.00201	0.00201	mg/kg	06.25.19 22.42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	06.25.19 22.42	
1,4-Difluorobenzene	540-36-3	96	%	70-130	06.25.19 22.42	

Certificate of Analytical Results 628187

LT Environmental, Inc., Arvada, CO

BEU 074

Sample Id:	**FS04**	Matrix:	Soil	Date Received:	06.19.19 11.40
Lab Sample Id:	628187-002	Date Collected:	06.17.19 12.35	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	06.19.19 17.00	Basis:	Wet Weight
Seq Number:	3093006				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.98	4.98	mg/kg	06.20.19 17.03	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.20.19 11.50	Basis:	Wet Weight
Seq Number:	3093110				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.21.19 09.55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.21.19 09.55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.21.19 09.55	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.21.19 09.55	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	06.21.19 09.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-135	06.21.19 09.55	
o-Terphenyl	84-15-1	75	%	70-135	06.21.19 09.55	

Certificate of Analytical Results 628187

LT Environmental, Inc., Arvada, CO

BEU 074

Sample Id:	**FS04**	Matrix:	Soil	Date Received:	06.19.19 11.40
Lab Sample Id:	628187-002	Date Collected:	06.17.19 12.35	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	06.24.19 23.00	Basis:	Wet Weight
Seq Number:	3093583				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.25.19 23.04	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	06.25.19 23.04	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.25.19 23.04	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.25.19 23.04	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.25.19 23.04	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.25.19 23.04	U	1
Total BTEX		<0.00201	0.00201	mg/kg	06.25.19 23.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	96	%	70-130	06.25.19 23.04	
4-Bromofluorobenzene	460-00-4	105	%	70-130	06.25.19 23.04	

Certificate of Analytical Results 628187

LT Environmental, Inc., Arvada, CO

BEU 074

Sample Id:	**FS05**	Matrix:	Soil	Date Received:	06.19.19 11.40
Lab Sample Id:	628187-003	Date Collected:	06.17.19 12.40	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	06.19.19 19.00	Basis:	Wet Weight
Seq Number:	3092993				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.96	4.96	mg/kg	06.19.19 20.23	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.20.19 11.50	Basis:	Wet Weight
Seq Number:	3093110				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.21.19 10.20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.21.19 10.20	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.21.19 10.20	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.21.19 10.20	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	06.21.19 10.20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	06.21.19 10.20	
o-Terphenyl	84-15-1	83	%	70-135	06.21.19 10.20	

Certificate of Analytical Results 628187

LT Environmental, Inc., Arvada, CO

BEU 074

Sample Id:	**FS05**	Matrix:	Soil	Date Received:	06.19.19 11.40
Lab Sample Id:	628187-003	Date Collected:	06.17.19 12.40	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	06.24.19 23.00	Basis:	Wet Weight
Seq Number:	3093583				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.25.19 23.26	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.25.19 23.26	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.25.19 23.26	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	06.25.19 23.26	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.25.19 23.26	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.25.19 23.26	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.25.19 23.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	06.25.19 23.26	
1,4-Difluorobenzene	540-36-3	96	%	70-130	06.25.19 23.26	

Certificate of Analytical Results 628187

LT Environmental, Inc., Arvada, CO

BEU 074

Sample Id:	**SW03**	Matrix:	Soil	Date Received:	06.19.19 11.40
Lab Sample Id:	628187-004	Date Collected:	06.17.19 12.50	Sample Depth:	0 - 1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	06.19.19 19.00	Basis:	Wet Weight
Seq Number:	3092993				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**15.5**	5.03	mg/kg	06.19.19 20.40		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.19.19 12.00	Basis:	Wet Weight
Seq Number:	3092946				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.19.19 22.14	U	1
Diesel Range Organics (DRO)	C10C28DRO	**132**	15.0	mg/kg	06.19.19 22.14		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**18.1**	15.0	mg/kg	06.19.19 22.14		1
Total TPH	PHC635	**150**	15.0	mg/kg	06.19.19 22.14		1
Total GRO-DRO	PHC628	**132**	15.0	mg/kg	06.19.19 22.14		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	06.19.19 22.14	
o-Terphenyl	84-15-1	94	%	70-135	06.19.19 22.14	

Certificate of Analytical Results 628187

LT Environmental, Inc., Arvada, CO

BEU 074

Sample Id:	**SW03**	Matrix:	Soil	Date Received:	06.19.19 11.40
Lab Sample Id:	628187-004	Date Collected:	06.17.19 12.50	Sample Depth:	0 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	06.24.19 23.00	Basis:	Wet Weight
Seq Number:	3093583				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.25.19 23.48	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.25.19 23.48	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.25.19 23.48	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	06.25.19 23.48	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.25.19 23.48	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.25.19 23.48	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.25.19 23.48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	96	%	70-130	06.25.19 23.48	
4-Bromofluorobenzene	460-00-4	109	%	70-130	06.25.19 23.48	

Certificate of Analytical Results 628187

LT Environmental, Inc., Arvada, CO

BEU 074

Sample Id:	**SW04**	Matrix:	Soil	Date Received:	06.19.19 11.40
Lab Sample Id:	628187-005	Date Collected:	06.17.19 13.05	Sample Depth:	0 - 1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	06.19.19 19.00	Basis:	Wet Weight
Seq Number:	3092993				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.98	4.98	mg/kg	06.19.19 20.45	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.19.19 12.00	Basis:	Wet Weight
Seq Number:	3092946				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.19.19 22.39	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.19.19 22.39	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.19.19 22.39	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.19.19 22.39	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	06.19.19 22.39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	06.19.19 22.39	
o-Terphenyl	84-15-1	92	%	70-135	06.19.19 22.39	

Certificate of Analytical Results 628187

LT Environmental, Inc., Arvada, CO

BEU 074

Sample Id:	**SW04**	Matrix:	Soil	Date Received:	06.19.19 11.40
Lab Sample Id:	628187-005	Date Collected:	06.17.19 13.05	Sample Depth:	0 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	06.25.19 17.00	Basis:	Wet Weight
Seq Number:	3093649				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.26.19 14.14	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.26.19 14.14	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.26.19 14.14	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	06.26.19 14.14	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.26.19 14.14	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.26.19 14.14	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.26.19 14.14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	92	%	70-130	06.26.19 14.14	
4-Bromofluorobenzene	460-00-4	102	%	70-130	06.26.19 14.14	

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 628187

LT Environmental, Inc.

BEU 074

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3093006 — Matrix: Solid — Date Prep: 06.19.19
MB Sample Id: 7680341-1-BLK — LCS Sample Id: 7680341-1-BKS — LCSD Sample Id: 7680341-1-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	245	98	246	98	90-110	0	20	mg/kg	06.20.19 14:42	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3092993 — Matrix: Solid — Date Prep: 06.19.19
MB Sample Id: 7680344-1-BLK — LCS Sample Id: 7680344-1-BKS — LCSD Sample Id: 7680344-1-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	256	102	256	102	90-110	0	20	mg/kg	06.19.19 20:12	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3093006 — Matrix: Soil — Date Prep: 06.19.19
Parent Sample Id: 628389-001 — MS Sample Id: 628389-001 S — MSD Sample Id: 628389-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	421	252	632	84	630	83	90-110	0	20	mg/kg	06.20.19 14:57	X

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3093006 — Matrix: Soil — Date Prep: 06.19.19
Parent Sample Id: 628389-010 — MS Sample Id: 628389-010 S — MSD Sample Id: 628389-010 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.01	251	243	97	243	97	90-110	0	20	mg/kg	06.20.19 16:05	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3092993 — Matrix: Soil — Date Prep: 06.19.19
Parent Sample Id: 628187-003 — MS Sample Id: 628187-003 S — MSD Sample Id: 628187-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	4.75	248	242	96	242	96	90-110	0	20	mg/kg	06.19.19 20:29	

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 628187

LT Environmental, Inc.

BEU 074

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3092993 — Matrix: Soil — Date Prep: 06.19.19
Parent Sample Id: 628192-007 — MS Sample Id: 628192-007 S — MSD Sample Id: 628192-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	171	248	408	96	410	96	90-110	0	20	mg/kg	06.19.19 21:46	

Analytical Method: TPH by SW8015 Mod — Prep Method: TX1005P
Seq Number: 3092946 — Matrix: Solid — Date Prep: 06.19.19
MB Sample Id: 7680347-1-BLK — LCS Sample Id: 7680347-1-BKS — LCSD Sample Id: 7680347-1-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)	10.1	1000	855	86	813	81	70-135	5	20	mg/kg	06.19.19 12:31	
Diesel Range Organics (DRO)	<8.13	1000	844	84	807	81	70-135	4	20	mg/kg	06.19.19 12:31	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	99		94		85		70-135	%	06.19.19 12:31
o-Terphenyl	92		99		86		70-135	%	06.19.19 12:31

Analytical Method: TPH by SW8015 Mod — Prep Method: TX1005P
Seq Number: 3093110 — Matrix: Solid — Date Prep: 06.20.19
MB Sample Id: 7680420-1-BLK — LCS Sample Id: 7680420-1-BKS — LCSD Sample Id: 7680420-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	964	96	922	92	70-135	4	20	mg/kg	06.21.19 00:52	
Diesel Range Organics (DRO)	<8.13	1000	953	95	926	93	70-135	3	20	mg/kg	06.21.19 00:52	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	93		102		99		70-135	%	06.21.19 00:52
o-Terphenyl	84		101		104		70-135	%	06.21.19 00:52

Analytical Method: TPH by SW8015 Mod — Prep Method: TX1005P
Seq Number: 3092946 — Matrix: Soil — Date Prep: 06.19.19
Parent Sample Id: 628025-001 — MS Sample Id: 628025-001 S — MSD Sample Id: 628025-001 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)	13.7	999	927	91	944	93	70-135	2	20	mg/kg	06.19.19 13:46	
Diesel Range Organics (DRO)	8.15	999	914	91	933	93	70-135	2	20	mg/kg	06.19.19 13:46	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	93		94		70-135	%	06.19.19 13:46
o-Terphenyl	93		91		70-135	%	06.19.19 13:46

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 628187

LT Environmental, Inc.

BEU 074

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P

Seq Number: 3093110 Matrix: Soil Date Prep: 06.20.19

Parent Sample Id: 628185-001 MS Sample Id: 628185-001 S MSD Sample Id: 628185-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	808	81	858	86	70-135	6	20	mg/kg	06.21.19 02:05	
Diesel Range Organics (DRO)	10.7	1000	778	77	824	81	70-135	6	20	mg/kg	06.21.19 02:05	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	73		86		70-135	%	06.21.19 02:05
o-Terphenyl	71		87		70-135	%	06.21.19 02:05

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

Seq Number: 3093583 Matrix: Solid Date Prep: 06.24.19

MB Sample Id: 7680657-1-BLK LCS Sample Id: 7680657-1-BKS LCSD Sample Id: 7680657-1-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	0.0884	88	0.0870	87	70-130	2	35	mg/kg	06.25.19 07:06	
Toluene	<0.00200	0.100	0.0784	78	0.0868	87	70-130	10	35	mg/kg	06.25.19 07:06	
Ethylbenzene	<0.00200	0.100	0.0738	74	0.0925	93	70-130	22	35	mg/kg	06.25.19 07:06	
m,p-Xylenes	<0.00400	0.200	0.144	72	0.185	93	70-130	25	35	mg/kg	06.25.19 07:06	
o-Xylene	<0.00200	0.100	0.0707	71	0.0857	86	70-130	19	35	mg/kg	06.25.19 07:06	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	93		97		95		70-130	%	06.25.19 07:06
4-Bromofluorobenzene	97		102		97		70-130	%	06.25.19 07:06

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

Seq Number: 3093649 Matrix: Solid Date Prep: 06.25.19

MB Sample Id: 7680760-1-BLK LCS Sample Id: 7680760-1-BKS LCSD Sample Id: 7680760-1-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	0.0927	93	0.0942	95	70-130	2	35	mg/kg	06.26.19 16:56	
Toluene	<0.00200	0.100	0.0942	94	0.0943	95	70-130	0	35	mg/kg	06.26.19 16:56	
Ethylbenzene	<0.00200	0.100	0.0952	95	0.0951	96	70-130	0	35	mg/kg	06.26.19 16:56	
m,p-Xylenes	<0.00400	0.200	0.189	95	0.187	94	70-130	1	35	mg/kg	06.26.19 16:56	
o-Xylene	<0.00200	0.100	0.0909	91	0.0914	92	70-130	1	35	mg/kg	06.26.19 16:56	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	95		96		99		70-130	%	06.26.19 16:56
4-Bromofluorobenzene	103		103		111		70-130	%	06.26.19 16:56

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 628187

LT Environmental, Inc.

BEU 074

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

Seq Number: 3093583 Matrix: Soil Date Prep: 06.24.19

Parent Sample Id: 627969-001 MS Sample Id: 627969-001 S MSD Sample Id: 627969-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.0922	92	0.0999	100	70-130	8	35	mg/kg	06.25.19 11:37	
Toluene	<0.00200	0.0998	0.0882	88	0.0968	97	70-130	9	35	mg/kg	06.25.19 11:37	
Ethylbenzene	<0.00200	0.0998	0.0941	94	0.102	102	70-130	8	35	mg/kg	06.25.19 11:37	
m,p-Xylenes	<0.00399	0.200	0.187	94	0.205	103	70-130	9	35	mg/kg	06.25.19 11:37	
o-Xylene	<0.00200	0.0998	0.0868	87	0.0954	96	70-130	9	35	mg/kg	06.25.19 11:37	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		100		70-130	%	06.25.19 11:37
4-Bromofluorobenzene	108		104		70-130	%	06.25.19 11:37

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

Seq Number: 3093649 Matrix: Soil Date Prep: 06.25.19

Parent Sample Id: 628191-001 MS Sample Id: 628191-001 S MSD Sample Id: 628191-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.0849	85	0.0910	91	70-130	7	35	mg/kg	06.26.19 17:40	
Toluene	<0.00200	0.0998	0.0820	82	0.0868	87	70-130	6	35	mg/kg	06.26.19 17:40	
Ethylbenzene	<0.00200	0.0998	0.0852	85	0.0907	91	70-130	6	35	mg/kg	06.26.19 17:40	
m,p-Xylenes	<0.00399	0.200	0.169	85	0.180	90	70-130	6	35	mg/kg	06.26.19 17:40	
o-Xylene	<0.00200	0.0998	0.0816	82	0.0867	87	70-130	6	35	mg/kg	06.26.19 17:40	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	98		97		70-130	%	06.26.19 17:40
4-Bromofluorobenzene	113		108		70-130	%	06.26.19 17:40

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

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

Work Order No: 602187

Page 1 of 1

Project Manager:	Ashley Ager	Bill to: (if different)	Kyle Littrel
Company Name:	LT Environmental, Inc., Permian office	Company Name:	XTO-Energy
Address:	3300 North A Street	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM
Phone:	432.704.5178	Email:	aager@ltenv.com rmcafee@ltenv.com

Work Order Comments

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

Project Name:	BEU 074
Project Number:	
P.O. Number:	2RP-2664 2RP-3213
Sampler's Name:	Robert McAfee

Turn Around

Routine ☐
Rush: 3 day
Due Date: 06/21/19

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	6-3+0.3	Thermometer ID:	
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes (No) N/A	Total Containers:	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)
FS03	S	06/17/19	1230	1'	1	X	X	X
FS04			1235	1'		X	X	X
FS05			1240	1'		X	X	X
SW03			1250	0-1'		X	X	X
SW04			1305	0-1'		X	X	X

Work Order Notes

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

Sample Comments

Composite

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
Robert McAfee	Courtney	6/17/19 16:40	2	FedEx 2-Day	06/18/19 14:00
			4		06/19/19
			6		

Revised Date 051418 Rev. 2018.1

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 06/19/2019 11:40:00 AM

Work Order #: 628187

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

Temperature Measuring device used : R8

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

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

Analyst: PH Device/Lot#:

Checklist completed by: Brianna Teel Date: 06/19/2019

Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 06/19/2019

Jessica Kramer

Analytical Report 628550

for

LT Environmental, Inc.

Project Manager: Dan Moir

BEU 74

29-JUN-19

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-29), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-19-19), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-20)
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-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429), North Carolina (483)

29-JUN-19

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

Reference: XENCO Report No(s): **628550**
BEU 74
Project Address: Delaware Basin

Dan Moir:

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) 628550. 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. 628550 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 628550

LT Environmental, Inc., Arvada, CO

BEU 74

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH01	S	06-17-19 14:30	1 ft	628550-001
BH01 A	S	06-17-19 14:35	1.5 ft	628550-002
BH02	S	06-17-19 14:40	0.5 ft	628550-003
BH02 A	S	06-17-19 14:45	1 ft	628550-004

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: BEU 74

Project ID:
Work Order Number(s): *628550*

Report Date: *29-JUN-19*
Date Received: *06/20/2019*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3093925 BTEX by EPA 8021B

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

Certificate of Analysis Summary 628550

LT Environmental, Inc., Arvada, CO

Project Name: BEU 74

Project Id:
Contact: Dan Moir
Project Location: Delaware Basin

Date Received in Lab: Thu Jun-20-19 02:30 pm
Report Date: 29-JUN-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	628550-001		628550-002		628550-003		628550-004					
	Field Id:	BH01		BH01 A		BH02		BH02 A					
	Depth:	1- ft		1.5- ft		0.5- ft		1- ft					
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	Jun-17-19 14:30		Jun-17-19 14:35		Jun-17-19 14:40		Jun-17-19 14:45					
BTEX by EPA 8021B SUB: T104704400-18-16	***Extracted:***	Jun-27-19 16:30		Jun-27-19 16:30		Jun-27-19 16:30		Jun-27-19 16:30					
	Analyzed:	Jun-28-19 11:36		Jun-28-19 11:58		Jun-28-19 12:20		Jun-28-19 12:42					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200				
Toluene		<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200				
Ethylbenzene		<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200				
m,p-Xylenes		<0.00398	0.00398	<0.00400	0.00400	<0.00398	0.00398	<0.00399	0.00399				
o-Xylene		<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200				
Total Xylenes		<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200				
Total BTEX		<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200				
Chloride by EPA 300 SUB: T104704400-18-16	***Extracted:***	Jun-22-19 17:30		Jun-22-19 17:30		Jun-22-19 17:30		Jun-22-19 17:30					
	Analyzed:	Jun-22-19 23:43		Jun-22-19 23:51		Jun-22-19 23:58		Jun-23-19 00:05					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		<5.00	5.00	6.77	5.00	<5.00	5.00	<5.00	5.00				
TPH by SW8015 Mod SUB: T104704400-18-16	***Extracted:***	Jun-23-19 12:00		Jun-23-19 12:00		Jun-23-19 12:00		Jun-23-19 12:00					
	Analyzed:	Jun-24-19 01:00		Jun-24-19 02:13		Jun-24-19 02:36		Jun-24-19 03:01					
	Units/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				
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9				
Motor Oil Range Hydrocarbons (MRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9				
Total TPH		<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9				
Total GRO-DRO		<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9				

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

Jessica Kramer
Project Assistant

Final 1.000

Certificate of Analytical Results 628550

LT Environmental, Inc., Arvada, CO

BEU 74

Sample Id:	**BH01**	Matrix:	Soil	Date Received:	06.20.19 14.30
Lab Sample Id:	628550-001	Date Collected:	06.17.19 14.30	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	06.22.19 17.30	Basis:	Wet Weight
Seq Number:	3093292			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.00	5.00	mg/kg	06.22.19 23.43	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.23.19 12.00	Basis:	Wet Weight
Seq Number:	3093434			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.24.19 01.00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.24.19 01.00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.24.19 01.00	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.24.19 01.00	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	06.24.19 01.00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-135	06.24.19 01.00	
o-Terphenyl	84-15-1	90	%	70-135	06.24.19 01.00	

Certificate of Analytical Results 628550

LT Environmental, Inc., Arvada, CO

BEU 74

Sample Id:	**BH01**	Matrix:	Soil	Date Received:	06.20.19 14.30
Lab Sample Id:	628550-001	Date Collected:	06.17.19 14.30	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	FOV	Date Prep:	06.27.19 16.30	Basis:	Wet Weight
Seq Number:	3093925			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.28.19 11.36	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.28.19 11.36	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.28.19 11.36	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.28.19 11.36	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.28.19 11.36	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.28.19 11.36	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.28.19 11.36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	97	%	70-130	06.28.19 11.36	
4-Bromofluorobenzene	460-00-4	110	%	70-130	06.28.19 11.36	

Certificate of Analytical Results 628550

LT Environmental, Inc., Arvada, CO

BEU 74

Sample Id:	**BH01 A**	Matrix:	Soil	Date Received:	06.20.19 14.30
Lab Sample Id:	628550-002	Date Collected:	06.17.19 14.35	Sample Depth:	1.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	06.22.19 17.30	Basis:	Wet Weight
Seq Number:	3093292			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**6.77**	5.00	mg/kg	06.22.19 23.51		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.23.19 12.00	Basis:	Wet Weight
Seq Number:	3093434			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.24.19 02.13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.24.19 02.13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.24.19 02.13	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.24.19 02.13	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	06.24.19 02.13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	77	%	70-135	06.24.19 02.13	
o-Terphenyl	84-15-1	81	%	70-135	06.24.19 02.13	

Certificate of Analytical Results 628550

LT Environmental, Inc., Arvada, CO

BEU 74

Sample Id:	**BH01 A**	Matrix:	Soil	Date Received:	06.20.19 14.30
Lab Sample Id:	628550-002	Date Collected:	06.17.19 14.35	Sample Depth:	1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	FOV	Date Prep:	06.27.19 16.30	Basis:	Wet Weight
Seq Number:	3093925			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.28.19 11.58	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.28.19 11.58	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.28.19 11.58	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	06.28.19 11.58	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.28.19 11.58	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.28.19 11.58	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.28.19 11.58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	06.28.19 11.58	
4-Bromofluorobenzene	460-00-4	110	%	70-130	06.28.19 11.58	

Certificate of Analytical Results 628550

LT Environmental, Inc., Arvada, CO

BEU 74

Sample Id:	**BH02**	Matrix:	Soil	Date Received:	06.20.19 14.30
Lab Sample Id:	628550-003	Date Collected:	06.17.19 14.40	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	06.22.19 17.30	Basis:	Wet Weight
Seq Number:	3093292			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.00	5.00	mg/kg	06.22.19 23.58	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.23.19 12.00	Basis:	Wet Weight
Seq Number:	3093434			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.24.19 02.36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.24.19 02.36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.24.19 02.36	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.24.19 02.36	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	06.24.19 02.36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	72	%	70-135	06.24.19 02.36	
o-Terphenyl	84-15-1	78	%	70-135	06.24.19 02.36	

Certificate of Analytical Results 628550

LT Environmental, Inc., Arvada, CO

BEU 74

Sample Id:	**BH02**	Matrix:	Soil	Date Received:	06.20.19 14.30
Lab Sample Id:	628550-003	Date Collected:	06.17.19 14.40	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	FOV	Date Prep:	06.27.19 16.30	Basis:	Wet Weight
Seq Number:	3093925			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.28.19 12.20	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.28.19 12.20	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.28.19 12.20	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.28.19 12.20	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.28.19 12.20	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.28.19 12.20	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.28.19 12.20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	95	%	70-130	06.28.19 12.20	
4-Bromofluorobenzene	460-00-4	103	%	70-130	06.28.19 12.20	

Certificate of Analytical Results 628550

LT Environmental, Inc., Arvada, CO

BEU 74

Sample Id:	**BH02 A**	Matrix:	Soil	Date Received:	06.20.19 14.30
Lab Sample Id:	628550-004	Date Collected:	06.17.19 14.45	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	06.22.19 17.30	Basis:	Wet Weight
Seq Number:	3093292			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.00	5.00	mg/kg	06.23.19 00.05	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.23.19 12.00	Basis:	Wet Weight
Seq Number:	3093434			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	06.24.19 03.01	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	06.24.19 03.01	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	14.9	mg/kg	06.24.19 03.01	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	06.24.19 03.01	U	1
Total GRO-DRO	PHC628	<14.9	14.9	mg/kg	06.24.19 03.01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-135	06.24.19 03.01	
o-Terphenyl	84-15-1	85	%	70-135	06.24.19 03.01	

Certificate of Analytical Results 628550

LT Environmental, Inc., Arvada, CO

BEU 74

Sample Id:	**BH02 A**	Matrix:	Soil	Date Received:	06.20.19 14.30
Lab Sample Id:	628550-004	Date Collected:	06.17.19 14.45	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	FOV	Date Prep:	06.27.19 16.30	Basis:	Wet Weight
Seq Number:	3093925			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.28.19 12.42	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.28.19 12.42	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.28.19 12.42	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	06.28.19 12.42	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.28.19 12.42	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.28.19 12.42	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.28.19 12.42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	110	%	70-130	06.28.19 12.42	
1,4-Difluorobenzene	540-36-3	100	%	70-130	06.28.19 12.42	

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 628550

LT Environmental, Inc.

BEU 74

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3093292 — Matrix: Solid — Date Prep: 06.22.19
MB Sample Id: 7680535-1-BLK — LCS Sample Id: 7680535-1-BKS — LCSD Sample Id: 7680535-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	248	99	248	99	90-110	0	20	mg/kg	06.22.19 23:07	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3093292 — Matrix: Soil — Date Prep: 06.22.19
Parent Sample Id: 628540-002 — MS Sample Id: 628540-002 S — MSD Sample Id: 628540-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	160	250	363	81	363	81	90-110	0	20	mg/kg	06.22.19 23:29	X

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3093292 — Matrix: Soil — Date Prep: 06.22.19
Parent Sample Id: 628585-002 — MS Sample Id: 628585-002 S — MSD Sample Id: 628585-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	53.9	250	320	106	320	106	90-110	0	20	mg/kg	06.23.19 01:10	

Analytical Method: TPH by SW8015 Mod — Prep Method: TX1005P
Seq Number: 3093434 — Matrix: Solid — Date Prep: 06.23.19
MB Sample Id: 7680671-1-BLK — LCS Sample Id: 7680671-1-BKS — LCSD Sample Id: 7680671-1-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)	9.45	1000	906	91	931	93	70-135	3	20	mg/kg	06.24.19 00:12	
Diesel Range Organics (DRO)	8.62	1000	1020	102	1030	103	70-135	1	20	mg/kg	06.24.19 00:12	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	97		77		72		70-135	%	06.24.19 00:12
o-Terphenyl	106		90		92		70-135	%	06.24.19 00:12

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 628550

LT Environmental, Inc.

BEU 74

Analytical Method: TPH by SW8015 Mod | Prep Method: TX1005P
Seq Number: 3093434 | Matrix: Soil | Date Prep: 06.23.19
Parent Sample Id: 628550-001 | MS Sample Id: 628550-001 S | MSD Sample Id: 628550-001 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)	10.9	998	966	96	952	94	70-135	1	20	mg/kg	06.24.19 01:24	
Diesel Range Organics (DRO)	9.40	998	996	99	1000	99	70-135	0	20	mg/kg	06.24.19 01:24	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	77		82		70-135	%	06.24.19 01:24
o-Terphenyl	95		91		70-135	%	06.24.19 01:24

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3093925 | Matrix: Solid | Date Prep: 06.27.19
MB Sample Id: 7681021-1-BLK | LCS Sample Id: 7681021-1-BKS | LCSD Sample Id: 7681021-1-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	0.0794	79	0.0845	85	70-130	6	35	mg/kg	06.28.19 02:14	
Toluene	<0.00200	0.100	0.0778	78	0.0828	83	70-130	6	35	mg/kg	06.28.19 02:14	
Ethylbenzene	<0.00200	0.100	0.0838	84	0.0889	89	70-130	6	35	mg/kg	06.28.19 02:14	
m,p-Xylenes	<0.00400	0.200	0.167	84	0.178	89	70-130	6	35	mg/kg	06.28.19 02:14	
o-Xylene	<0.00200	0.100	0.0814	81	0.0877	88	70-130	7	35	mg/kg	06.28.19 02:14	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	92		93		94		70-130	%	06.28.19 02:14
4-Bromofluorobenzene	100		103		103		70-130	%	06.28.19 02:14

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3093925 | Matrix: Soil | Date Prep: 06.27.19
Parent Sample Id: 628927-001 | MS Sample Id: 628927-001 S | MSD Sample Id: 628927-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0994	0.0871	88	0.0789	79	70-130	10	35	mg/kg	06.28.19 10:29	
Toluene	<0.00199	0.0994	0.0845	85	0.0778	78	70-130	8	35	mg/kg	06.28.19 10:29	
Ethylbenzene	<0.00199	0.0994	0.0851	86	0.0799	80	70-130	6	35	mg/kg	06.28.19 10:29	
m,p-Xylenes	<0.00398	0.199	0.169	85	0.160	80	70-130	5	35	mg/kg	06.28.19 10:29	
o-Xylene	<0.00199	0.0994	0.0808	81	0.0746	75	70-130	8	35	mg/kg	06.28.19 10:29	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		93		70-130	%	06.28.19 10:29
4-Bromofluorobenzene	111		98		70-130	%	06.28.19 10:29

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

XENCO LABORATORIES

Chain of Custody

Work Order No: 626550

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:	Dan Moir	Bill to: (if different)	Kyle Littrell
Company Name:	LT Environmental Inc.	Company Name:	XTO - Energy
Address:	3300 North A Street	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM
Phone:	(432) 704-5178	Email:	dmoir@ltenv.com rmcafee@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 74	Turn Around	
Project Number:		Routine ☐	
P.O. Number:	2RP - 2664	Rush: 3 day	
Sampler's Name:	Robert M.	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	3	Thermometer ID	
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Total Containers:	4

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)	Sample Comments
BH01	S	06/17/19	1430	1'	1	X	X	X	Discrete
BH01A			1435	1.5'		X	X	X	
BH02			1440	0.5		X	X	X	
BH02A			1445	1'		X	X	X	

ANALYSIS REQUEST

Work Order Notes

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

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 Robert M.		04/20/19 14:[illegible]			
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

Inter-Office Shipment

IOS Number **41948**

Date/Time: 06/20/19 16:41
Lab# From: **Carlsbad**
Lab# To: **Midland**

Created by: Carlos Castro
Delivery Priority:
Air Bill No.:

Please send report to: Jessica Kramer
Address: 1089 N Canal Street
E-Mail: jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
628550-001	S	BH01	06/17/19 14:30	E300_CL	Chloride by EPA 300	06/24/19	12/14/19	JKR	CL	
628550-001	S	BH01	06/17/19 14:30	SW8015MOD_NM	TPH by SW8015 Mod	06/24/19	07/01/19	JKR	GRO-DRO PHCC10C28 PI	
628550-001	S	BH01	06/17/19 14:30	SW8021B	BTEX by EPA 8021B	06/24/19	07/01/19	JKR	BR4FBZ BZ BZME EBZ X	
628550-002	S	BH01 A	06/17/19 14:35	SW8021B	BTEX by EPA 8021B	06/24/19	07/01/19	JKR	BR4FBZ BZ BZME EBZ X	
628550-002	S	BH01 A	06/17/19 14:35	SW8015MOD_NM	TPH by SW8015 Mod	06/24/19	07/01/19	JKR	GRO-DRO PHCC10C28 PI	
628550-002	S	BH01 A	06/17/19 14:35	E300_CL	Chloride by EPA 300	06/24/19	12/14/19	JKR	CL	
628550-003	S	BH02	06/17/19 14:40	SW8021B	BTEX by EPA 8021B	06/24/19	07/01/19	JKR	BR4FBZ BZ BZME EBZ X	
628550-003	S	BH02	06/17/19 14:40	SW8015MOD_NM	TPH by SW8015 Mod	06/24/19	07/01/19	JKR	GRO-DRO PHCC10C28 PI	
628550-003	S	BH02	06/17/19 14:40	E300_CL	Chloride by EPA 300	06/24/19	12/14/19	JKR	CL	
628550-004	S	BH02 A	06/17/19 14:45	SW8021B	BTEX by EPA 8021B	06/24/19	07/01/19	JKR	BR4FBZ BZ BZME EBZ X	
628550-004	S	BH02 A	06/17/19 14:45	E300_CL	Chloride by EPA 300	06/24/19	12/14/19	JKR	CL	
628550-004	S	BH02 A	06/17/19 14:45	SW8015MOD_NM	TPH by SW8015 Mod	06/24/19	07/01/19	JKR	GRO-DRO PHCC10C28 PI	

Inter Office Shipment or Sample Comments:

Relinquished By: Carlos Castro
Date Relinquished: 06/20/2019

Received By: Brianna Teel
Date Received: 06/21/2019 07:33
Cooler Temperature: 0.4

XENCO Laboratories

Inter Office Report- Sample Receipt Checklist

Sent To: Midland

IOS #: 41948

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient
Temperature Measuring device used : R8

Sent By: Carlos Castro **Date Sent:** 06/20/2019 04:41 PM

Received By: Brianna Teel **Date Received:** 06/21/2019 07:33 AM

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

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

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

Checklist reviewed by: Brianna Teel Date: 06/21/2019

Brianna Teel

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 06/20/2019 02:30:00 PM

Work Order #: 628550

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

Temperature Measuring device used : T NM 007

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	3	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**No**	
#5 Custody Seals intact on sample bottles?	**No**	
#6*Custody Seals Signed and dated?	**No**	
#7 *Chain of Custody present?	**Yes**	
#8 Any missing/extra samples?	**Yes**	
#9 Chain of Custody signed when relinquished/ received?	**Yes**	
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**	
#11 Container label(s) legible and intact?	**Yes**	
#12 Samples in proper container/ bottle?	**Yes**	
#13 Samples properly preserved?	**Yes**	
#14 Sample container(s) intact?	**Yes**	
#15 Sufficient sample amount for indicated test(s)?	**Yes**	
#16 All samples received within hold time?	**Yes**	
#17 Subcontract of sample(s)?	**Yes**	Subbed to Xenco Midland
#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: Carlos Castro Date: 06/20/2019

Checklist reviewed by: Jessica Kramer Date: 06/21/2019

Jessica Kramer

Analytical Report 628554

for

LT Environmental, Inc.

Project Manager: Dan Moir

BEU 74

30-JUN-19

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-29), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-19-19), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-20)
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-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429), North Carolina (483)

30-JUN-19

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

Reference: XENCO Report No(s): **628554**
BEU 74
Project Address: Delaware Basin

Dan Moir:

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) 628554. 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. 628554 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 628554

LT Environmental, Inc., Arvada, CO

BEU 74

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH03	S	06-18-19 08:40	1 ft	628554-001
BH03A	S	06-18-19 08:55	4 ft	628554-002
BH04	S	06-18-19 09:05	2 ft	628554-003
BH04A	S	06-18-19 09:10	3 ft	628554-004
BH05	S	06-18-19 09:15	1 ft	628554-005
BH05A	S	06-18-19 09:25	3 ft	628554-006
BH06	S	06-18-19 09:35	2 ft	628554-007
BH06A	S	06-18-19 09:40	3 ft	628554-008

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: BEU 74

Project ID:
Work Order Number(s): *628554*

Report Date: *30-JUN-19*
Date Received: *06/20/2019*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3093944 BTEX by EPA 8021B

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

Certificate of Analysis Summary 628554

LT Environmental, Inc., Arvada, CO

Project Name: BEU 74

Project Id:
Contact: Dan Moir
Project Location: Delaware Basin

Date Received in Lab: Thu Jun-20-19 02:10 pm
Report Date: 30-JUN-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	628554-001		628554-002		628554-003		628554-004		628554-005		628554-006	
	Field Id:	BH03		BH03A		BH04		BH04A		BH05		BH05A	
	Depth:	1- ft		4- ft		2- ft		3- ft		1- ft		3- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jun-18-19 08:40		Jun-18-19 08:55		Jun-18-19 09:05		Jun-18-19 09:10		Jun-18-19 09:15		Jun-18-19 09:25	
BTEX by EPA 8021B SUB: T104704400-18-16	*Extracted:*	Jun-28-19 17:04		Jun-28-19 17:04		Jun-28-19 17:04		Jun-28-19 17:04		Jun-28-19 17:04		Jun-28-19 17:04	
	Analyzed:	Jun-30-19 04:30		Jun-30-19 04:53		Jun-30-19 06:39		Jun-30-19 07:02		Jun-30-19 07:25		Jun-30-19 07:49	
	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	<0.00201	0.00201	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199
Toluene		<0.00200	0.00200	<0.00201	0.00201	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199
Ethylbenzene		<0.00200	0.00200	<0.00201	0.00201	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199
m,p-Xylenes		<0.00401	0.00401	<0.00402	0.00402	<0.00402	0.00402	<0.00399	0.00399	<0.00400	0.00400	<0.00398	0.00398
o-Xylene		<0.00200	0.00200	<0.00201	0.00201	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199
Total Xylenes		<0.00200	0.00200	<0.00201	0.00201	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199
Total BTEX		<0.00200	0.00200	<0.00201	0.00201	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199
Chloride by EPA 300 SUB: T104704400-18-16	*Extracted:*	Jun-22-19 18:00		Jun-22-19 18:00		Jun-22-19 18:00		Jun-22-19 18:00		Jun-22-19 18:00		Jun-22-19 18:30	
	Analyzed:	Jun-23-19 00:05		Jun-23-19 00:10		Jun-23-19 00:14		Jun-23-19 00:19		Jun-23-19 00:24		Jun-24-19 12:39	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		186	4.95	98.2	5.04	47.8	5.00	201	4.97	5.95	5.05	9.93	5.05
TPH by SW8015 Mod SUB: T104704400-18-16	*Extracted:*	Jun-23-19 12:00		Jun-23-19 12:00		Jun-23-19 12:00		Jun-23-19 12:00		Jun-23-19 12:00		Jun-23-19 12:00	
	Analyzed:	Jun-24-19 03:25		Jun-24-19 03:49		Jun-24-19 04:13		Jun-24-19 04:38		Jun-24-19 05:02		Jun-24-19 05:26	
	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)		493	15.0	19.5	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0
Motor Oil Range Hydrocarbons (MRO)		78.1	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0
Total TPH		571	15.0	19.5	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0
Total GRO-DRO		493	15.0	19.5	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0

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

Jessica Kramer
Project Assistant

Final 1.000

Certificate of Analysis Summary 628554

LT Environmental, Inc., Arvada, CO

Project Name: BEU 74

Project Id:
Contact: Dan Moir
Project Location: Delaware Basin

Date Received in Lab: Thu Jun-20-19 02:10 pm
Report Date: 30-JUN-19
Project Manager: Jessica Kramer

Analysis Requested									
	Lab Id:	628554-007		628554-008					
	Field Id:	BH06		BH06A					
	Depth:	2- ft		3- ft					
	Matrix:	SOIL		SOIL					
	Sampled:	Jun-18-19 09:35		Jun-18-19 09:40					
BTEX by EPA 8021B SUB: T104704400-18-16	***Extracted:***	Jun-28-19 17:04		Jun-28-19 17:04					
	Analyzed:	Jun-30-19 08:12		Jun-30-19 08:35					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Benzene		<0.00201	0.00201	<0.00200	0.00200				
Toluene		<0.00201	0.00201	<0.00200	0.00200				
Ethylbenzene		<0.00201	0.00201	<0.00200	0.00200				
m,p-Xylenes		<0.00402	0.00402	<0.00401	0.00401				
o-Xylene		<0.00201	0.00201	<0.00200	0.00200				
Total Xylenes		<0.00201	0.00201	<0.00200	0.00200				
Total BTEX		<0.00201	0.00201	<0.00200	0.00200				
Chloride by EPA 300 SUB: T104704400-18-16	***Extracted:***	Jun-22-19 18:30		Jun-22-19 18:30					
	Analyzed:	Jun-24-19 12:56		Jun-24-19 13:01					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Chloride		104	5.00	117	4.95				
TPH by SW8015 Mod SUB: T104704400-18-16	***Extracted:***	Jun-23-19 12:00		Jun-23-19 12:00					
	Analyzed:	Jun-24-19 06:14		Jun-24-19 06:39					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0				
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0				
Motor Oil Range Hydrocarbons (MRO)		<15.0	15.0	<15.0	15.0				
Total TPH		<15.0	15.0	<15.0	15.0				
Total GRO-DRO		<15.0	15.0	<15.0	15.0				

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

Jessica Kramer
Project Assistant

Final 1.000

Certificate of Analytical Results 628554

LT Environmental, Inc., Arvada, CO

BEU 74

Sample Id:	**BH03**	Matrix:	Soil	Date Received:	06.20.19 14.10
Lab Sample Id:	628554-001	Date Collected:	06.18.19 08.40	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	06.22.19 18.00	Basis:	Wet Weight
Seq Number:	3093323			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**186**	4.95	mg/kg	06.23.19 00.05		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.23.19 12.00	Basis:	Wet Weight
Seq Number:	3093434			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.24.19 03.25	U	1
Diesel Range Organics (DRO)	C10C28DRO	**493**	15.0	mg/kg	06.24.19 03.25		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**78.1**	15.0	mg/kg	06.24.19 03.25		1
Total TPH	PHC635	**571**	15.0	mg/kg	06.24.19 03.25		1
Total GRO-DRO	PHC628	**493**	15.0	mg/kg	06.24.19 03.25		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	75	%	70-135	06.24.19 03.25	
o-Terphenyl	84-15-1	86	%	70-135	06.24.19 03.25	

Certificate of Analytical Results 628554

LT Environmental, Inc., Arvada, CO

BEU 74

Sample Id:	**BH03**	Matrix:	Soil	Date Received:	06.20.19 14.10
Lab Sample Id:	628554-001	Date Collected:	06.18.19 08.40	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	FOV	Date Prep:	06.28.19 17.04	Basis:	Wet Weight
Seq Number:	3093944			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.30.19 04.30	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.30.19 04.30	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.30.19 04.30	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	06.30.19 04.30	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.30.19 04.30	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.30.19 04.30	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.30.19 04.30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	94	%	70-130	06.30.19 04.30	
4-Bromofluorobenzene	460-00-4	113	%	70-130	06.30.19 04.30	

Certificate of Analytical Results 628554

LT Environmental, Inc., Arvada, CO

BEU 74

Sample Id:	**BH03A**	Matrix:	Soil	Date Received:	06.20.19 14.10
Lab Sample Id:	628554-002	Date Collected:	06.18.19 08.55	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	06.22.19 18.00	Basis:	Wet Weight
Seq Number:	3093323			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**98.2**	5.04	mg/kg	06.23.19 00.10		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.23.19 12.00	Basis:	Wet Weight
Seq Number:	3093434			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.24.19 03.49	U	1
Diesel Range Organics (DRO)	C10C28DRO	**19.5**	15.0	mg/kg	06.24.19 03.49		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.24.19 03.49	U	1
Total TPH	PHC635	**19.5**	15.0	mg/kg	06.24.19 03.49		1
Total GRO-DRO	PHC628	**19.5**	15.0	mg/kg	06.24.19 03.49		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-135	06.24.19 03.49	
o-Terphenyl	84-15-1	87	%	70-135	06.24.19 03.49	

Certificate of Analytical Results 628554

LT Environmental, Inc., Arvada, CO

BEU 74

Sample Id:	**BH03A**	Matrix:	Soil	Date Received:	06.20.19 14.10
Lab Sample Id:	628554-002	Date Collected:	06.18.19 08.55	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	FOV	Date Prep:	06.28.19 17.04	Basis:	Wet Weight
Seq Number:	3093944			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.30.19 04.53	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	06.30.19 04.53	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.30.19 04.53	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.30.19 04.53	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.30.19 04.53	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.30.19 04.53	U	1
Total BTEX		<0.00201	0.00201	mg/kg	06.30.19 04.53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	91	%	70-130	06.30.19 04.53	
4-Bromofluorobenzene	460-00-4	126	%	70-130	06.30.19 04.53	

Certificate of Analytical Results 628554

LT Environmental, Inc., Arvada, CO

BEU 74

Sample Id:	**BH04**	Matrix:	Soil	Date Received:	06.20.19 14.10
Lab Sample Id:	628554-003	Date Collected:	06.18.19 09.05	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	06.22.19 18.00	Basis:	Wet Weight
Seq Number:	3093323			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**47.8**	5.00	mg/kg	06.23.19 00.14		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.23.19 12.00	Basis:	Wet Weight
Seq Number:	3093434			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.24.19 04.13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.24.19 04.13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.24.19 04.13	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.24.19 04.13	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	06.24.19 04.13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	06.24.19 04.13	
o-Terphenyl	84-15-1	91	%	70-135	06.24.19 04.13	

Certificate of Analytical Results 628554

LT Environmental, Inc., Arvada, CO

BEU 74

Sample Id:	**BH04**	Matrix:	Soil	Date Received:	06.20.19 14.10
Lab Sample Id:	628554-003	Date Collected:	06.18.19 09.05	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	FOV	Date Prep:	06.28.19 17.04	Basis:	Wet Weight
Seq Number:	3093944			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.30.19 06.39	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	06.30.19 06.39	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.30.19 06.39	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.30.19 06.39	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.30.19 06.39	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.30.19 06.39	U	1
Total BTEX		<0.00201	0.00201	mg/kg	06.30.19 06.39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	118	%	70-130	06.30.19 06.39	
1,4-Difluorobenzene	540-36-3	89	%	70-130	06.30.19 06.39	

Certificate of Analytical Results 628554

LT Environmental, Inc., Arvada, CO

BEU 74

Sample Id:	**BH04A**	Matrix:	Soil	Date Received:	06.20.19 14.10
Lab Sample Id:	628554-004	Date Collected:	06.18.19 09.10	Sample Depth:	3 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	06.22.19 18.00	Basis:	Wet Weight
Seq Number:	3093323			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**201**	4.97	mg/kg	06.23.19 00.19		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.23.19 12.00	Basis:	Wet Weight
Seq Number:	3093434			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	06.24.19 04.38	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	06.24.19 04.38	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	14.9	mg/kg	06.24.19 04.38	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	06.24.19 04.38	U	1
Total GRO-DRO	PHC628	<14.9	14.9	mg/kg	06.24.19 04.38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	06.24.19 04.38	
o-Terphenyl	84-15-1	88	%	70-135	06.24.19 04.38	

Certificate of Analytical Results 628554

LT Environmental, Inc., Arvada, CO

BEU 74

Sample Id:	**BH04A**	Matrix:	Soil	Date Received:	06.20.19 14.10
Lab Sample Id:	628554-004	Date Collected:	06.18.19 09.10	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	FOV	Date Prep:	06.28.19 17.04	Basis:	Wet Weight
Seq Number:	3093944			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.30.19 07.02	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.30.19 07.02	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.30.19 07.02	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	06.30.19 07.02	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.30.19 07.02	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.30.19 07.02	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.30.19 07.02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	91	%	70-130	06.30.19 07.02	
4-Bromofluorobenzene	460-00-4	118	%	70-130	06.30.19 07.02	

Certificate of Analytical Results 628554

LT Environmental, Inc., Arvada, CO

BEU 74

Sample Id:	**BH05**	Matrix:	Soil	Date Received:	06.20.19 14.10
Lab Sample Id:	628554-005	Date Collected:	06.18.19 09.15	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	06.22.19 18.00	Basis:	Wet Weight
Seq Number:	3093323			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**5.95**	5.05	mg/kg	06.23.19 00.24		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.23.19 12.00	Basis:	Wet Weight
Seq Number:	3093434			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.24.19 05.02	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.24.19 05.02	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.24.19 05.02	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.24.19 05.02	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	06.24.19 05.02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-135	06.24.19 05.02	
o-Terphenyl	84-15-1	87	%	70-135	06.24.19 05.02	

Certificate of Analytical Results 628554

LT Environmental, Inc., Arvada, CO

BEU 74

Sample Id:	**BH05**	Matrix:	Soil	Date Received:	06.20.19 14.10
Lab Sample Id:	628554-005	Date Collected:	06.18.19 09.15	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	FOV	Date Prep:	06.28.19 17.04	Basis:	Wet Weight
Seq Number:	3093944			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.30.19 07.25	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.30.19 07.25	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.30.19 07.25	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	06.30.19 07.25	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.30.19 07.25	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.30.19 07.25	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.30.19 07.25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	90	%	70-130	06.30.19 07.25	
4-Bromofluorobenzene	460-00-4	121	%	70-130	06.30.19 07.25	

Certificate of Analytical Results 628554

LT Environmental, Inc., Arvada, CO

BEU 74

Sample Id:	**BH05A**	Matrix:	Soil	Date Received:	06.20.19 14.10
Lab Sample Id:	628554-006	Date Collected:	06.18.19 09.25	Sample Depth:	3 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	06.22.19 18.30	Basis:	Wet Weight
Seq Number:	3093326			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**9.93**	5.05	mg/kg	06.24.19 12.39		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.23.19 12.00	Basis:	Wet Weight
Seq Number:	3093434			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.24.19 05.26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.24.19 05.26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.24.19 05.26	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.24.19 05.26	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	06.24.19 05.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	06.24.19 05.26	
o-Terphenyl	84-15-1	102	%	70-135	06.24.19 05.26	

Certificate of Analytical Results 628554

LT Environmental, Inc., Arvada, CO

BEU 74

Sample Id:	**BH05A**	Matrix:	Soil	Date Received:	06.20.19 14.10
Lab Sample Id:	628554-006	Date Collected:	06.18.19 09.25	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	FOV	Date Prep:	06.28.19 17.04	Basis:	Wet Weight
Seq Number:	3093944			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.30.19 07.49	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.30.19 07.49	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.30.19 07.49	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.30.19 07.49	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.30.19 07.49	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.30.19 07.49	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.30.19 07.49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	113	%	70-130	06.30.19 07.49	
1,4-Difluorobenzene	540-36-3	93	%	70-130	06.30.19 07.49	

Certificate of Analytical Results 628554

LT Environmental, Inc., Arvada, CO

BEU 74

Sample Id:	**BH06**	Matrix:	Soil	Date Received:	06.20.19 14.10
Lab Sample Id:	628554-007	Date Collected:	06.18.19 09.35	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	06.22.19 18.30	Basis:	Wet Weight
Seq Number:	3093326			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**104**	5.00	mg/kg	06.24.19 12.56		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.23.19 12.00	Basis:	Wet Weight
Seq Number:	3093434			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.24.19 06.14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.24.19 06.14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.24.19 06.14	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.24.19 06.14	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	06.24.19 06.14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-135	06.24.19 06.14	
o-Terphenyl	84-15-1	80	%	70-135	06.24.19 06.14	

Certificate of Analytical Results 628554

LT Environmental, Inc., Arvada, CO

BEU 74

Sample Id:	**BH06**	Matrix:	Soil	Date Received:	06.20.19 14.10
Lab Sample Id:	628554-007	Date Collected:	06.18.19 09.35	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	FOV	Date Prep:	06.28.19 17.04	Basis:	Wet Weight
Seq Number:	3093944			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.30.19 08.12	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	06.30.19 08.12	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.30.19 08.12	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.30.19 08.12	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.30.19 08.12	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.30.19 08.12	U	1
Total BTEX		<0.00201	0.00201	mg/kg	06.30.19 08.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	114	%	70-130	06.30.19 08.12	
1,4-Difluorobenzene	540-36-3	91	%	70-130	06.30.19 08.12	

Certificate of Analytical Results 628554

LT Environmental, Inc., Arvada, CO

BEU 74

Sample Id:	**BH06A**	Matrix:	Soil	Date Received:	06.20.19 14.10
Lab Sample Id:	628554-008	Date Collected:	06.18.19 09.40	Sample Depth:	3 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	06.22.19 18.30	Basis:	Wet Weight
Seq Number:	3093326			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**117**	4.95	mg/kg	06.24.19 13.01		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.23.19 12.00	Basis:	Wet Weight
Seq Number:	3093434			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.24.19 06.39	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.24.19 06.39	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.24.19 06.39	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.24.19 06.39	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	06.24.19 06.39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-135	06.24.19 06.39	
o-Terphenyl	84-15-1	90	%	70-135	06.24.19 06.39	

Certificate of Analytical Results 628554

LT Environmental, Inc., Arvada, CO

BEU 74

Sample Id:	**BH06A**	Matrix:	Soil	Date Received:	06.20.19 14.10
Lab Sample Id:	628554-008	Date Collected:	06.18.19 09.40	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	FOV	Date Prep:	06.28.19 17.04	Basis:	Wet Weight
Seq Number:	3093944			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.30.19 08.35	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.30.19 08.35	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.30.19 08.35	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	06.30.19 08.35	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.30.19 08.35	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.30.19 08.35	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.30.19 08.35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	116	%	70-130	06.30.19 08.35	
1,4-Difluorobenzene	540-36-3	91	%	70-130	06.30.19 08.35	

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 628554

LT Environmental, Inc.

BEU 74

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3093323 — Matrix: Solid — Date Prep: 06.22.19
MB Sample Id: 7680537-1-BLK — LCS Sample Id: 7680537-1-BKS — LCSD Sample Id: 7680537-1-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	237	95	236	94	90-110	0	20	mg/kg	06.22.19 22:04	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3093326 — Matrix: Solid — Date Prep: 06.22.19
MB Sample Id: 7680538-1-BLK — LCS Sample Id: 7680538-1-BKS — LCSD Sample Id: 7680538-1-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	06.24.19 12:28	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3093323 — Matrix: Soil — Date Prep: 06.22.19
Parent Sample Id: 628585-012 — MS Sample Id: 628585-012 S — MSD Sample Id: 628585-012 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	761	250	930	68	931	68	90-110	0	20	mg/kg	06.22.19 22:18	X

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3093323 — Matrix: Soil — Date Prep: 06.22.19
Parent Sample Id: 628586-006 — MS Sample Id: 628586-006 S — MSD Sample Id: 628586-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	33.8	248	272	96	272	96	90-110	0	20	mg/kg	06.22.19 23:26	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3093326 — Matrix: Soil — Date Prep: 06.22.19
Parent Sample Id: 628554-006 — MS Sample Id: 628554-006 S — MSD Sample Id: 628554-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	9.93	253	263	100	262	100	90-110	0	20	mg/kg	06.24.19 12:44	

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 628554

LT Environmental, Inc.

BEU 74

Analytical Method: TPH by SW8015 Mod — Prep Method: TX1005P
Seq Number: 3093434 — Matrix: Solid — Date Prep: 06.23.19
MB Sample Id: 7680671-1-BLK — LCS Sample Id: 7680671-1-BKS — LCSD Sample Id: 7680671-1-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)	9.45	1000	906	91	931	93	70-135	3	20	mg/kg	06.24.19 00:12	
Diesel Range Organics (DRO)	8.62	1000	1020	102	1030	103	70-135	1	20	mg/kg	06.24.19 00:12	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	97		77		72		70-135	%	06.24.19 00:12
o-Terphenyl	106		90		92		70-135	%	06.24.19 00:12

Analytical Method: TPH by SW8015 Mod — Prep Method: TX1005P
Seq Number: 3093434 — Matrix: Soil — Date Prep: 06.23.19
Parent Sample Id: 628550-001 — MS Sample Id: 628550-001 S — MSD Sample Id: 628550-001 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)	10.9	998	966	96	952	94	70-135	1	20	mg/kg	06.24.19 01:24	
Diesel Range Organics (DRO)	9.40	998	996	99	1000	99	70-135	0	20	mg/kg	06.24.19 01:24	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	77		82		70-135	%	06.24.19 01:24
o-Terphenyl	95		91		70-135	%	06.24.19 01:24

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3093944 — Matrix: Solid — Date Prep: 06.28.19
MB Sample Id: 7681016-1-BLK — LCS Sample Id: 7681016-1-BKS — LCSD Sample Id: 7681016-1-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	0.0718	72	0.0759	76	70-130	6	35	mg/kg	06.29.19 22:59	
Toluene	<0.00199	0.0996	0.0826	83	0.0855	86	70-130	3	35	mg/kg	06.29.19 22:59	
Ethylbenzene	0.000569	0.0996	0.0900	90	0.0945	95	70-130	5	35	mg/kg	06.29.19 22:59	
m,p-Xylenes	<0.00101	0.199	0.175	88	0.184	92	70-130	5	35	mg/kg	06.29.19 22:59	
o-Xylene	<0.00199	0.0996	0.0861	86	0.0897	90	70-130	4	35	mg/kg	06.29.19 22:59	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	84		91		92		70-130	%	06.29.19 22:59
4-Bromofluorobenzene	114		104		104		70-130	%	06.29.19 22:59

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 628554

LT Environmental, Inc.

BEU 74

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

Seq Number: 3093944 Matrix: Soil Date Prep: 06.28.19

Parent Sample Id: 629132-001 MS Sample Id: 629132-001 S MSD Sample Id: 629132-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0174	17	0.0189	19	70-130	8	35	mg/kg	06.29.19 23:46	X
Toluene	<0.00200	0.100	0.0266	27	0.0283	28	70-130	6	35	mg/kg	06.29.19 23:46	X
Ethylbenzene	<0.00200	0.100	0.0703	70	0.0661	65	70-130	6	35	mg/kg	06.29.19 23:46	X
m,p-Xylenes	<0.00401	0.200	0.0971	49	0.0985	49	70-130	1	35	mg/kg	06.29.19 23:46	X
o-Xylene	<0.00200	0.100	0.0516	52	0.0521	52	70-130	1	35	mg/kg	06.29.19 23:46	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	92		92		70-130	%	06.29.19 23:46
4-Bromofluorobenzene	113		114		70-130	%	06.29.19 23:46

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: 628554

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:	Dan Moir	Bill to: (if different)	Kyle Littrell
Company Name:	LT Environmental Inc.	Company Name:	XTO - Energy
Address:	3300 North A. Street	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM
Phone:	(432) 704-5178	Email:	dmoir@ltenv.com rmcAfee@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:	BEV 74	Turn Around	
Project Number:		Routine ☐	
P.O. Number:	2RP-3213	Rush: 3 day	
Sampler's Name:	Robert	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No	
Temperature (°C):	3	Thermometer ID		
Received Intact:	(Yes) No			
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No (N/A)	Total Containers:	8	

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	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)	Sample Comments
BH03	S	06/18/19	0840	1'	1	X	X	X	discrete
BH03A			0855	4'		X	X	X	
BH04			0905	2'		X	X	X	
BH04A			0910	3'		X	X	X	
BH05			0915	1'		X	X	X	
BH05A			0925	3'		X	X	X	
BH06			0935	2'		X	X	X	
BH06A			0940	3'		X	X	X	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr 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	Robert McGee		04-20-19 14:10			
3				4		
5				6		

Revised Date 051418 Rev. 2018.1

Inter-Office Shipment

IOS Number **41947**

Date/Time: 06/20/19 16:38
Created by: Carlos Castro
Please send report to: Jessica Kramer

Lab# From: **Carlsbad**
Delivery Priority:
Address: 1089 N Canal Street

Lab# To: **Midland**
Air Bill No.:
E-Mail: jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
628554-001	S	BH03	06/18/19 08:40	SW8015MOD_NM	TPH by SW8015 Mod	06/24/19	07/02/19	JKR	GRO-DRO PHCC10C28 PI	
628554-001	S	BH03	06/18/19 08:40	E300_CL	Chloride by EPA 300	06/24/19	12/15/19	JKR	CL	
628554-001	S	BH03	06/18/19 08:40	SW8021B	BTEX by EPA 8021B	06/24/19	07/02/19	JKR	BR4FBZ BZ BZME EBZ X	
628554-002	S	BH03A	06/18/19 08:55	SW8015MOD_NM	TPH by SW8015 Mod	06/24/19	07/02/19	JKR	GRO-DRO PHCC10C28 PI	
628554-002	S	BH03A	06/18/19 08:55	SW8021B	BTEX by EPA 8021B	06/24/19	07/02/19	JKR	BR4FBZ BZ BZME EBZ X	
628554-002	S	BH03A	06/18/19 08:55	E300_CL	Chloride by EPA 300	06/24/19	12/15/19	JKR	CL	
628554-003	S	BH04	06/18/19 09:05	SW8021B	BTEX by EPA 8021B	06/24/19	07/02/19	JKR	BR4FBZ BZ BZME EBZ X	
628554-003	S	BH04	06/18/19 09:05	SW8015MOD_NM	TPH by SW8015 Mod	06/24/19	07/02/19	JKR	GRO-DRO PHCC10C28 PI	
628554-003	S	BH04	06/18/19 09:05	E300_CL	Chloride by EPA 300	06/24/19	12/15/19	JKR	CL	
628554-004	S	BH04A	06/18/19 09:10	SW8021B	BTEX by EPA 8021B	06/24/19	07/02/19	JKR	BR4FBZ BZ BZME EBZ X	
628554-004	S	BH04A	06/18/19 09:10	SW8015MOD_NM	TPH by SW8015 Mod	06/24/19	07/02/19	JKR	GRO-DRO PHCC10C28 PI	
628554-004	S	BH04A	06/18/19 09:10	E300_CL	Chloride by EPA 300	06/24/19	12/15/19	JKR	CL	
628554-005	S	BH05	06/18/19 09:15	SW8021B	BTEX by EPA 8021B	06/24/19	07/02/19	JKR	BR4FBZ BZ BZME EBZ X	
628554-005	S	BH05	06/18/19 09:15	SW8015MOD_NM	TPH by SW8015 Mod	06/24/19	07/02/19	JKR	GRO-DRO PHCC10C28 PI	
628554-005	S	BH05	06/18/19 09:15	E300_CL	Chloride by EPA 300	06/24/19	12/15/19	JKR	CL	
628554-006	S	BH05A	06/18/19 09:25	SW8015MOD_NM	TPH by SW8015 Mod	06/24/19	07/02/19	JKR	GRO-DRO PHCC10C28 PI	
628554-006	S	BH05A	06/18/19 09:25	SW8021B	BTEX by EPA 8021B	06/24/19	07/02/19	JKR	BR4FBZ BZ BZME EBZ X	
628554-006	S	BH05A	06/18/19 09:25	E300_CL	Chloride by EPA 300	06/24/19	12/15/19	JKR	CL	
628554-007	S	BH06	06/18/19 09:35	E300_CL	Chloride by EPA 300	06/24/19	12/15/19	JKR	CL	
628554-007	S	BH06	06/18/19 09:35	SW8021B	BTEX by EPA 8021B	06/24/19	07/02/19	JKR	BR4FBZ BZ BZME EBZ X	
628554-007	S	BH06	06/18/19 09:35	SW8015MOD_NM	TPH by SW8015 Mod	06/24/19	07/02/19	JKR	GRO-DRO PHCC10C28 PI	
628554-008	S	BH06A	06/18/19 09:40	SW8021B	BTEX by EPA 8021B	06/24/19	07/02/19	JKR	BR4FBZ BZ BZME EBZ X	
628554-008	S	BH06A	06/18/19 09:40	E300_CL	Chloride by EPA 300	06/24/19	12/15/19	JKR	CL	
628554-008	S	BH06A	06/18/19 09:40	SW8015MOD_NM	TPH by SW8015 Mod	06/24/19	07/02/19	JKR	GRO-DRO PHCC10C28 PI	

Inter-Office Shipment

IOS Number **41947**

Date/Time: 06/20/19 16:38
Created by: Carlos Castro
Please send report to: Jessica Kramer

Lab# From: **Carlsbad**
Delivery Priority:
Address: 1089 N Canal Street

Lab# To: **Midland**
Air Bill No.:
E-Mail: jessica.kramer@xenco.com

Inter Office Shipment or Sample Comments:

Relinquished By: Carlos Castro

Date Relinquished: 06/20/2019

Received By: Brianna Teel

Date Received: 06/21/2019 07:33

Cooler Temperature: 0.4

XENCO Laboratories

Inter Office Report- Sample Receipt Checklist

Sent To: Midland

IOS #: 41947

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient
Temperature Measuring device used : R8

Sent By: Carlos Castro **Date Sent:** 06/20/2019 04:38 PM

Received By: Brianna Teel **Date Received:** 06/21/2019 07:33 AM

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

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

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

Checklist reviewed by: Brianna Teel Date: 06/21/2019

Brianna Teel

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 06/20/2019 02:10:00 PM

Work Order #: 628554

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

Temperature Measuring device used : T-NM 007

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	3	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**No**	
#5 Custody Seals intact on sample bottles?	**No**	
#6*Custody Seals Signed and dated?	**No**	
#7 *Chain of Custody present?	**Yes**	
#8 Any missing/extra samples?	**Yes**	
#9 Chain of Custody signed when relinquished/ received?	**Yes**	
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**	
#11 Container label(s) legible and intact?	**Yes**	
#12 Samples in proper container/ bottle?	**Yes**	
#13 Samples properly preserved?	**Yes**	
#14 Sample container(s) intact?	**Yes**	
#15 Sufficient sample amount for indicated test(s)?	**Yes**	
#16 All samples received within hold time?	**Yes**	
#17 Subcontract of sample(s)?	**Yes**	Subbed to Xenco Midland
#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: Carlos Castro Date: 06/20/2019

Checklist reviewed by: Jessica Kramer Date: 06/21/2019

Jessica Kramer

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

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

CONDITIONS

Action 188241

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 188241
	Action Type: [IM-SD] Incident File Support Doc (ENV) (IM-BNF)

CONDITIONS

Created By	Condition	Condition Date
bhall	None	2/20/2023