Advancing Opportunity

June 3, 2019

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

RE: Closure Request
Poker Lake Unit 400H
Remediation Permit Number 2RP-4142
Eddy County, New Mexico

Dear Mr. Billings:

LT Environmental, Inc. (LTE), on behalf of XTO Energy, Inc. (XTO), presents the following report detailing excavation and soil sampling activities at the Poker Lake Unit 400H well pad (Site) in Unit N, Section 22, Township 24 South, Range 31 East, in Eddy County, New Mexico (Figure 1). The purpose of the excavation and soil sampling activities was to address impacts to soil after a release of crude oil and produced water at the Site.

On February 27, 2017, a corrosion hole was discovered in a buried steel flow line from the wellhead. Approximately 0.5 barrels (bbls) of crude oil and 29.5 bbls of produced water were released onto the south-central area of the caliche well pad and the pasture land south of the well pad. Approximately 557 square feet of pasture was affected by the release. A vacuum truck was dispatched to the Site to recover the free-standing fluid; approximately 0.5 bbls of crude oil and 1.5 bbls of produced water were recovered. The former operator reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form C-141 on March 9, 2017, and was assigned Remediation Permit (RP) Number 2RP-4142 (Attachment 1). Although this release occurred while the facility was operated by the previous operator, XTO is the current operator and is committed to addressing any releases that remain unresolved.

The release is included in the Compliance Agreement for Remediation for Historical Releases (Compliance Agreement) between XTO and the NMOCD effective November 13, 2018. The purpose of the Compliance Agreement is to ensure that 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 release is categorized as a Tier IV site in the Compliance Agreement, meaning that the release occurred prior to August 14, 2018, the effective date of 19.15.29 NMAC; however, remediation had not been completed. Based on the excavation activities and results of the confirmation soil sampling events, XTO is requesting no further action for this release.

LT ENVIRONMENTAL 25 YEARS ADVANCING OPPORTUNITY 1992 2017

BACKGROUND

According to Section 12 of 19.15.29 NMAC, LTE applied Table 1, *Closure Criteria for Soils Impacted by a Release*. 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 is United States Geological Survey (USGS) well 24S.31E.33.231113, located approximately 1.5 miles southwest of the Site, with a depth to groundwater of 474 feet bgs and a total depth of 740 feet bgs. The water well is approximately 60 feet lower in elevation than the Site. The nearest continuously flowing water or significant watercourse to the Site is a seasonal pond located approximately 6,125 feet northwest 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 located in a low karst potential zone. Based on these criteria, the following NMOCD Table 1 closure criteria were applied: 10 milligrams per kilogram (mg/kg) benzene; 50 mg/kg total benzene, toluene, ethylbenzene, and total xylenes (BTEX); 2,500 mg/kg total petroleum hydrocarbons (TPH); 1,000 mg/kg TPH-gasoline range organics (GRO) and TPH-diesel range organics (DRO); and 20,000 mg/kg chloride. A closure criteria of 600 mg/kg chloride was applied to the undeveloped pasture that was impacted by the release, per NMAC 19.15.29.13.D (1) for the top 4 feet of areas that will be reclaimed following remediation.

PRELIMINARY SOIL SAMPLING ACTIVITIES

On April 19, 2018, an LTE scientist collected six preliminary soil samples (SS01 through SS06) within and around the release area to assess the lateral extent of impacted soil. The soil sample locations, depicted on Figure 2, were selected based on information provided on the initial Form C-141 and field observations. To eliminate the effects from weathering and natural degradation of contaminants at the ground surface, the soil samples were collected from a depth of 0.5 feet. The soil samples were screened for volatile aromatic hydrocarbons and chlorides using a photo-ionization detector (PID) and Hach® chloride QuanTab® test strips. The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler, method of analysis, and immediately placed on ice. The soil samples were shipped at 4 degrees Celsius (°C) under strict chain-of-custody procedures to Xenco Laboratories (Xenco) in Midland, Texas, for analysis of BTEX by United States Environmental Protection Agency (USEPA) Method 8021B, TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) by USEPA Method 8015M/D, and chloride by USEPA Method 300.0.

Laboratory analytical results for preliminary soil samples SS01 through SS04 and SS06 indicated that BTEX, GRO/DRO, TPH, and chloride concentrations were compliant with the NMOCD Table 1 closure criteria. Laboratory analytical results for preliminary soil sample SS05, collected from the pasture area, indicated that GRO/DRO and TPH concentrations exceeded the NMOCD Table 1 closure criteria and the chloride concentration exceeded 600 mg/kg. The laboratory analytical

results are depicted on Figure 2 and summarized in Table 1. The preliminary soil samples were collected prior to the Compliance Agreement and the August 14, 2018, NMOCD modification to 19.15.29 NMAC, which affected the remediation action level for chloride. At the time of sampling, XTO proceeded with remediation based on visible surface staining and laboratory analytical results for preliminary soil samples SS01, SS04, and SS05 indicating chloride concentrations exceeded 600 mg/kg chloride, which was the standard applied to all sites at that time.

EXCAVATION SOIL SAMPLING ACTIVITIES

During July, 2018, LTE personnel returned to the Site to oversee excavation of impacted soil as indicated by visible surface staining and laboratory analytical results. To delineate hydrocarbon and chloride impacts to soil and direct excavation activities, LTE screened soil samples using a PID and Hach® chloride QuanTab® test strips. Impacted soil was excavated from the release area to a depth ranging from 5.5 feet to 9 feet bgs. Following removal of impacted soil, LTE collected confirmation soil samples from the sidewalls and floor of the excavation. Confirmation soil samples FS01 through FS07 were collected from the floor of the excavation from depths ranging from 5.5 feet to 9 feet bgs. Confirmation soil samples SW03 through SW15 were collected from the sidewalls of the excavation from depths ranging from 3 feet to 5 feet bgs. Sidewall samples SW01 and SW02 were collected for field screening purposes only; the samples were not submitted for laboratory analysis.

The excavation soil samples were collected prior to the August 14, 2018, NMOCD modification to 19.15.29 NMAC, which requires 5-point composite soil sampling. The excavation soil samples were collected as discrete soil samples. LTE applied a judgmental sampling protocol, selecting sample locations based on visual observations. The soil samples were collected, handled, and analyzed as described above and submitted to Xenco Laboratories (Xenco) in Midland, Texas. The excavation soil sample locations are presented on Figure 3.

The excavation measured approximately 11,070 square feet in area and was completed to a depth ranging from 5.5 feet to 9 feet bgs. The horizontal extent of the excavation is presented on Figure 3. Approximately 2,000 cubic yards of impacted soil were removed from the excavation. 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 for excavation soil samples SW03 through SW15 and FS01 through FS07 collected from the final excavation extent indicated that BTEX, GRO/DRO, TPH, and chloride concentrations were compliant with the NMOCD Table 1 closure criteria, Additionally, chloride concentrations were below 600 mg/kg in all excavation soil samples. Based on the laboratory analytical results, no further excavation was required. The laboratory analytical results are

presented on Figure 3 and summarized in Table 1, and the complete laboratory analytical reports are included as Attachment 2.

CONCLUSIONS

Impacted soil was excavated from the release area and laboratory analytical results for the confirmation soil samples collected from the final excavation extent indicated that BTEX, GRO/DRO, TPH, and chloride concentrations were compliant with the NMOCD Table 1 closure criteria and chloride concentrations were below 600 mg/kg. Initial response efforts and excavation of impacted soil have mitigated impacts at the Site. XTO requests no further action for RP Number 2RP-4142. Upon approval of the no further action request, XTO will backfill the excavation with material purchased locally and recontour the Site to match pre-existing conditions. The pasture area will be reseeded with the Bureau of Land Management (BLM) seed mixture #2. An updated NMOCD Form C-141 is included in Attachment 1. A photographic log of the Site is included as Attachment 3.

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

Sincerely,

LT ENVIRONMENTAL, INC.

Ashley L. Ager

Ashley L. Ager, P.G.
Senior Geologist

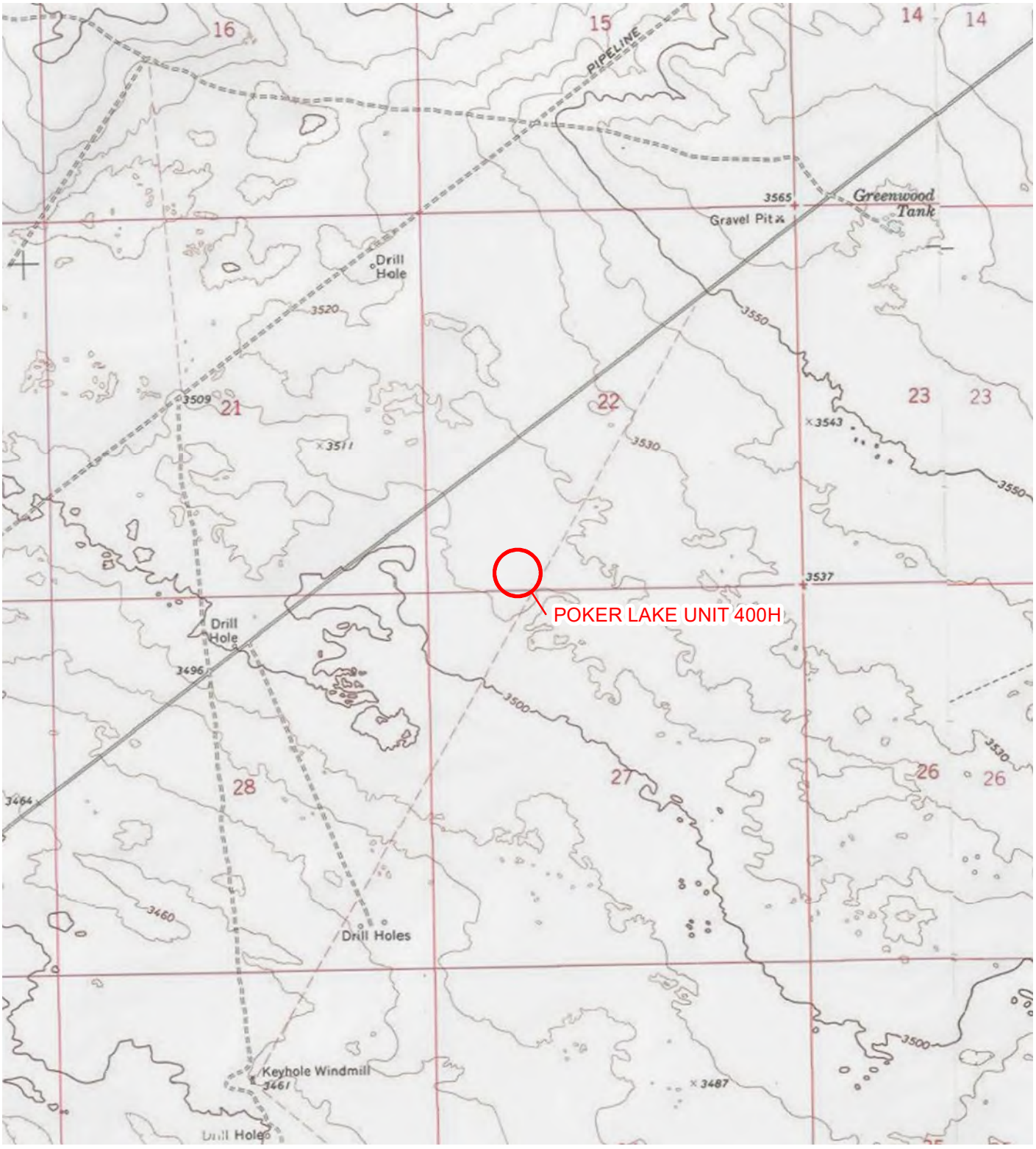
cc: Kyle Littrell, XTO Energy, Inc.
Michael Bratcher, NMOCD
Robert Hamlet, NMOCD
Victoria Venegas, NMOCD
Jim Amos, U.S. Bureau of Land Management

Attachments:

Figure 1	Site Location Map
Figure 2	Preliminary Soil Sample Locations
Figure 3	Excavation Soil Sample Locations
Table 1	Soil Analytical Results
Attachment 1	Initial/Final NMOCD Form C-141 (2RP-4142)

Attachment 2 Laboratory Analytical Reports
Attachment 3 Photographic Log

FIGURES



LEGEND

IMAGE COURTESY OF ESRI/USGS

SITE LOCATION

0 2,000 4,000

Feet

N

NEW MEXICO

NOTE: REMEDIATION PERMIT NUMBER 2RP-4142

FIGURE 1
SITE LOCATION MAP
POKER LAKE UNIT 400H
UNIT N SEC 22 T24S R31E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

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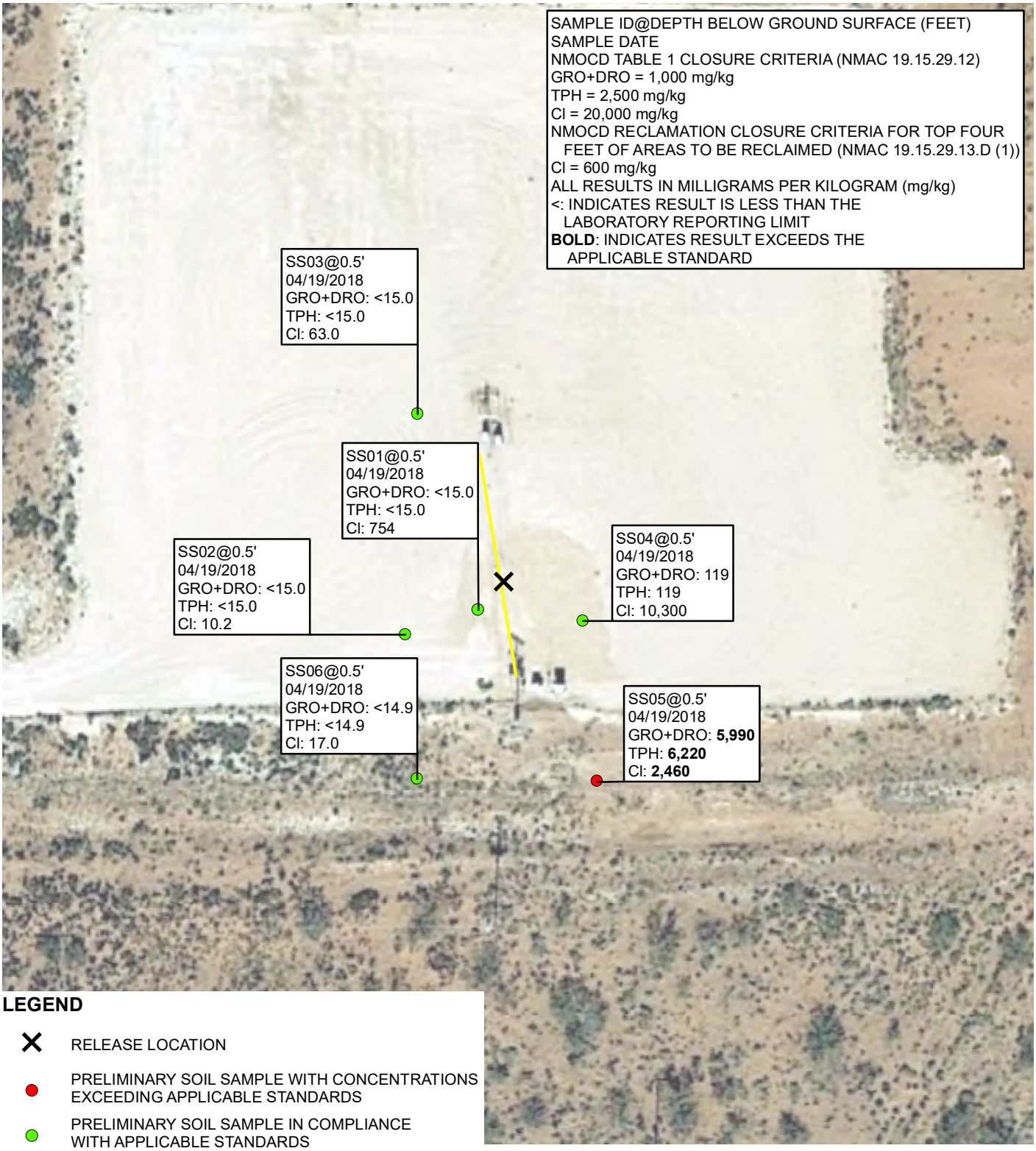


LEGEND

- RELEASE LOCATION
- PRELIMINARY SOIL SAMPLE WITH CONCENTRATIONS EXCEEDING APPLICABLE STANDARDS
- PRELIMINARY SOIL SAMPLE IN COMPLIANCE WITH APPLICABLE STANDARDS
- FLOWLINE

GRO – GASOLINE RANGE ORGANICS
DRO – DIESEL RANGE ORGANICS
TPH – TOTAL PETROLEUM HYDROCARBONS
Cl - CHLORIDE
NMAC – NEW MEXICO ADMINISTRATIVE CODE
NMOCD – NEW MEXICO OIL CONSERVATION DIVISION

NOTE: ONLY CONCENTRATIONS FOR PARAMETERS THAT EXCEED APPLICABLE CLOSURE CRITERIA STANDARDS ARE PRESENTED.

NOTE: REMEDIATION PERMIT NUMBER 2RP-4142

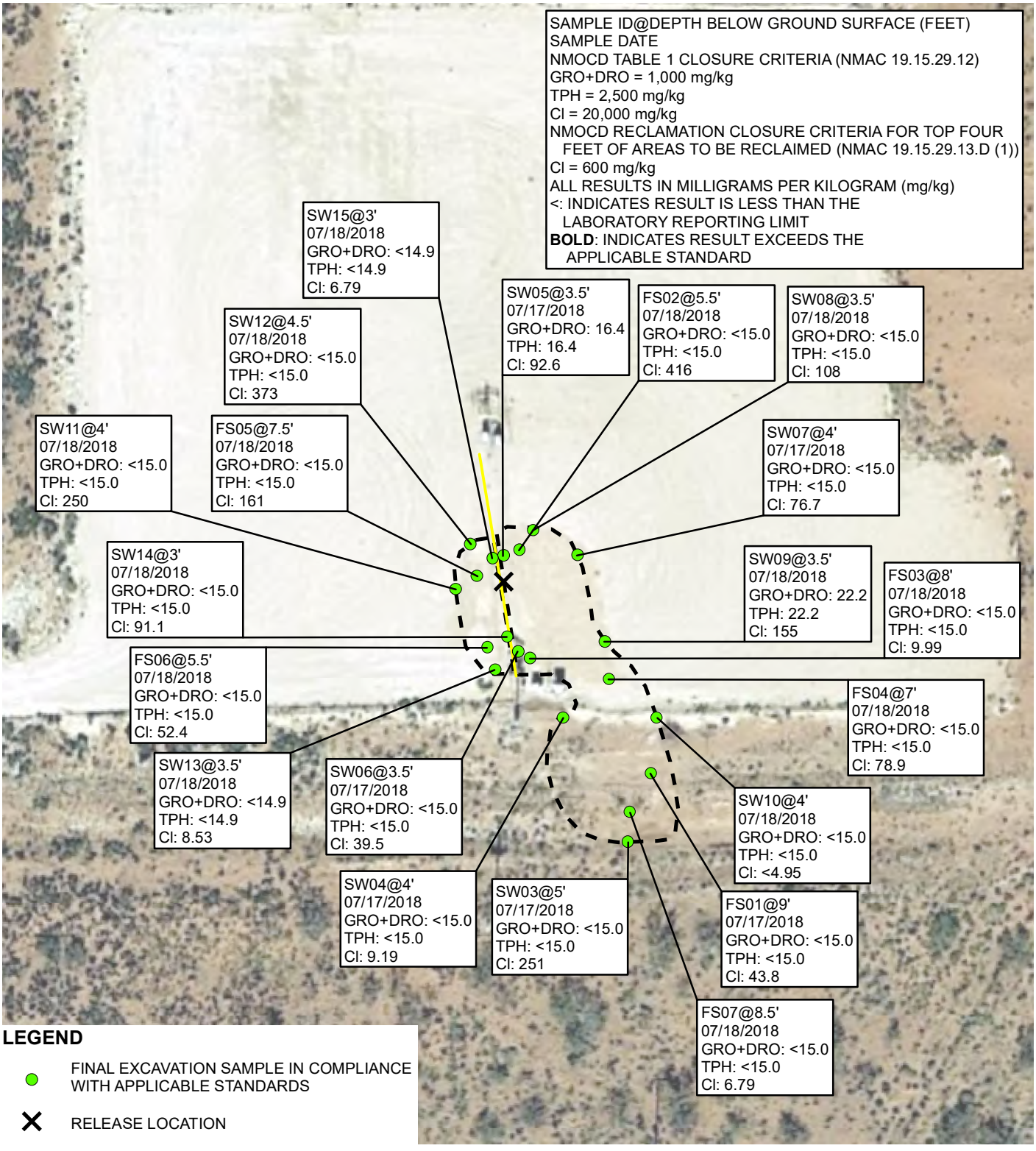
IMAGE COURTESY OF GOOGLE EARTH 2017

0 60 120
Feet

N

FIGURE 2
PRELIMINARY SOIL SAMPLE LOCATIONS
POKER LAKE UNIT 400H
UNIT N SEC 22 T24S R31E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012918107_PLU 400H\012918107_FIG02_PRELIMINARY_2018_4142.mxd



GRO – GASOLINE RANGE ORGANICS
DRO – DIESEL RANGE ORGANICS
TPH – TOTAL PETROLEUM HYDROCARBONS
Cl - CHLORIDE
NMAC – NEW MEXICO ADMINISTRATIVE CODE
NMOCD – NEW MEXICO OIL CONSERVATION DIVISION
NOTE: BENZENE AND BTEX CONCENTRATIONS IN ALL SAMPLES WERE BELOW LABORATORY DETECTION LIMITS.
NOTE: REMEDIATION PERMIT NUMBER 2RP-4142

FIGURE 3
EXCAVATION SOIL SAMPLE LOCATIONS
POKER LAKE UNIT 400H
UNIT N SEC 22 T24S R31E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012918107_PLU 400H\012918107_FIG03_EXCAVATION_2018_4142.mxd

TABLES

TABLE 1
SOIL ANALYTICAL RESULTS

POKER LAKE UNIT 400H
REMEDIATION PERMIT NUMBER 2RP-4142
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

Sample Name	Sample Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	C6-C10 GRO (mg/kg)	C10-C28 DRO (mg/kg)	C28-C40 ORO (mg/kg)	GRO and DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
SS01	0.5	04/19/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	754
SS02	0.5	04/19/2018	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<15.0	<15.0	<15.0	<15.0	<15.0	10.2
SS03	0.5	04/19/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	<15.0	63.0
SS04	0.5	04/19/2018	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<15.0	119	<15.0	119	119	10,300
SS05	0.5	04/19/2018	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<74.8	5,990	227	**5,990**	**6,220**	**2,460***
SS06	0.5	04/19/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<14.9	<14.9	<14.9	<14.9	<14.9	17.0*
FS01	9	07/17/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	<15.0	43.8*
SW03	5	07/17/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	251*
SW04	4	07/17/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	<15.0	9.19*
SW05	3.5	07/17/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	16.4	<14.9	<14.9	16.4	16.4	92.6
SW06	3.5	07/17/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	<15.0	39.5
SW07	4	07/17/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	<15.0	76.7
FS02	5.5	07/18/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	<15.0	416
FS03	8	07/18/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	<15.0	9.99
FS04	7	07/18/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	78.9
FS05	7.5	07/18/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	161
FS06	5.5	07/18/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	<15.0	52.4
FS07	8.5	07/18/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	<15.0	6.79*
SW08	3.5	07/18/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	108
SW09	3.5	07/18/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<14.9	22.2	<14.9	22.2	22.2	155
SW10	4	07/18/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	<15.0	<4.95*
SW11	4	07/18/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	250
SW12	4.5	07/18/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	<15.0	373
SW13	3.5	07/18/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<14.9	<14.9	<14.9	<14.9	<14.9	8.53
SW14	3	07/18/2018	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<15.0	<15.0	<15.0	<15.0	<15.0	91.1
SW15	3	07/18/2018	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<14.9	<14.9	<14.9	<14.9	<14.9	6.79
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
mg/kg - milligrams per kilogram
NE - not established
NMOCD - New Mexico Oil Conservation Division
DRO - diesel range organics
GRO - gasoline range organics
ORO - oil range organics
TPH - total petroleum hydrocarbons
< - indicates result is below laboratory reporting limits
Bold - indicates result exceeds the applicable regulatory standard
* - indicates sample was collected in area to be reclaimed after remediation is complete; closure criteria for chloride concentration in the top 4 feet of soil is 600 mg/kg
Table 1 - closure criteria for soils impacted by a release per NMAC 19.15.29 August 2018
NMAC - New Mexico Administrative Code

ATTACHMENT 1: INITIAL/FINAL NMOCD FORM C-141 (2RP-4142)

NM OIL CONSERVATION
ARTESIA DISTRICT
MAR 09 2017
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

nAB1707232926 2H0737

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: BOPCO, L.P.	Contact: Amy Ruth
Address: 522 W. Mermod, Suite 704 Carlsbad, N.M. 88220	Telephone No. 575-887-0300
Facility Name: PLU 400h	Facility Type: Exploration and Production

Surface Owner: Federal	Mineral Owner: Federal	API No. 30-015-40802

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
N	22	24S	31E	245	South	1330	West	Eddy

Latitude 32.196227° **Longitude** -103.769871°

NATURE OF RELEASE

Type of Release: Produced Water and Crude Oil	Volume of Release: 29.5 bbls PW, 0.5 bbls Oil	Volume Recovered: 1.5 bbls PW, 0.5 bbls Oil
Source of Release: Flow Line	Date and Hour of Occurrence: 2/27/2017 time unknown	Date and Hour of Discovery: 2/27/2017 3 pm
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Mike Bratcher/Crystal Weaver (NMOCD)	
By Whom? Jacob Foust	Date and Hour 2/28/2017 12:06 pm	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	

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

Describe Cause of Problem and Remedial Action Taken.*
Buried steel flow line from the wellhead developed hole due to external corrosion. Pipe section was replaced with coated steel line.

Describe Area Affected and Cleanup Action Taken.*
Leak affected south center portion of the caliche well pad and about 557 square feet of pasture south of the pad. Free standing fluids were recovered.

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

Signature:

Printed Name: Amy C. Ruth

Title: EHS Environmental Supervisor

E-mail Address: Acruth@basspet.com

Date: 3/8/2017 Phone: 432-661-0571

OIL CONSERVATION DIVISION

Signed By

Approved by Environmental Specialist:

Approval Date: 3/10/17 Expiration Date: N/A

Conditions of Approval: See attached

Attached ☒

* Attach Additional Sheets If Necessary

2RP-4142

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-4142
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-4142
Contact mailing address 522 W. Mermod, Suite 704 Carlsbad, NM 88220	

Location of Release Source

Latitude 32.196227 Longitude -103.769871
(NAD 83 in decimal degrees to 5 decimal places)

Site Name PLU 400H	Site Type Exploration and Production
Date Release Discovered 2/27/2017	API# *(if applicable)* 30-015-40802

Unit Letter	Section	Township	Range	County
N	22	24S	31E	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) 0.5	Volume Recovered (bbls) 0.5
☒ Produced Water	Volume Released (bbls) 29.5	Volume Recovered (bbls) 1.5
	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

Buried steel flow line from the wellhead developed hole due to external corrosion. Pipe section was replaced with coated steel line. The leak affected the south center portion of the caliche well pad and about 557 square feet of pasture south of the pad. Free standing fluids were recovered.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	2RP-4142
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? Volume released was greater than 25 bbls.

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

By Jacob Foust to Mike Bratcher/Crystal Weaver (NMOCD) on 2/28/2017.

Initial Response

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

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

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

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

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

Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature: Date: 6/11/2019

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-4142
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.

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	2RP-4142
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: 6/1/2019

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-4142
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). Site photographs are included.

☒ 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: 6/1/2019

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: 2/24/2023

Printed Name: Brittany Hall Title: Environmental Specialist

ATTACHMENT 2: LABORATORY ANALYTICAL REPORTS

Certificate of Analysis Summary 583287

LT Environmental, Inc., Arvada, CO

Project Name: PLU 400/2RP-4142

Project Id:
Contact: Adrian Baker
Project Location: NM

Date Received in Lab: Sat Apr-21-18 10:00 am
Report Date: 27-APR-18
Project Manager: Jessica Kramer

Analysis Requested		Lab Id:	583287-001		583287-002		583287-003		583287-004		583287-005		583287-006	
		Field Id:	SS01		SS02		SS03		SS04		SS05		SS06	
		Depth:	6- In		6- In		6- In		6- In		6- In		6- In	
		Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
		Sampled:	Apr-19-18 12:00		Apr-19-18 12:06		Apr-19-18 12:12		Apr-19-18 12:17		Apr-19-18 12:23		Apr-19-18 12:30	
BTEX by EPA 8021B		Extracted:	Apr-24-18 13:00		Apr-24-18 13:00		Apr-24-18 13:00		Apr-24-18 13:00		Apr-24-18 13:00		Apr-24-18 08:00	
		Analyzed:	Apr-25-18 01:29		Apr-25-18 01:49		Apr-25-18 02:08		Apr-25-18 02:27		Apr-25-18 02:46		Apr-24-18 17:09	
		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	<0.00198	0.00198	<0.00201	0.00201	<0.00202	0.00202	<0.00202	0.00202	<0.00200	0.00200
Toluene			<0.00200	0.00200	<0.00198	0.00198	<0.00201	0.00201	<0.00202	0.00202	<0.00202	0.00202	<0.00200	0.00200
Ethylbenzene			<0.00200	0.00200	<0.00198	0.00198	<0.00201	0.00201	<0.00202	0.00202	<0.00202	0.00202	<0.00200	0.00200
m,p-Xylenes			<0.00401	0.00401	<0.00397	0.00397	<0.00402	0.00402	<0.00404	0.00404	<0.00403	0.00403	<0.00399	0.00399
o-Xylene			<0.00200	0.00200	<0.00198	0.00198	<0.00201	0.00201	<0.00202	0.00202	<0.00202	0.00202	<0.00200	0.00200
Total Xylenes			<0.00200	0.00200	<0.00198	0.00198	<0.00201	0.00201	<0.00202	0.00202	<0.00202	0.00202	<0.00200	0.00200
Total BTEX			<0.00200	0.00200	<0.00198	0.00198	<0.00201	0.00201	<0.00202	0.00202	<0.00202	0.00202	<0.00200	0.00200
Chloride by EPA 300		Extracted:	Apr-27-18 09:00		Apr-27-18 09:00		Apr-27-18 09:00		Apr-27-18 09:00		Apr-27-18 09:00		Apr-27-18 09:00	
		Analyzed:	Apr-27-18 09:57		Apr-27-18 10:15		Apr-27-18 10:21		Apr-27-18 10:27		Apr-27-18 10:33		Apr-27-18 10:51	
		Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride			754	4.96	10.2	4.99	63.0	4.95	10300	99.4	2460	24.9	17.0	4.95
TPH By SW8015 Mod		Extracted:	Apr-24-18 14:00		Apr-24-18 14:00		Apr-24-18 14:00		Apr-24-18 14:00		Apr-24-18 14:00		Apr-24-18 14:00	
		Analyzed:	Apr-24-18 20:11		Apr-24-18 20:37		Apr-24-18 21:03		Apr-24-18 21:29		Apr-24-18 21:54		Apr-24-18 23:12	
		Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)			<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<74.8	74.8	<14.9	14.9
Diesel Range Organics (DRO)			<15.0	15.0	<15.0	15.0	<15.0	15.0	119	15.0	5990	74.8	<14.9	14.9
Oil Range Hydrocarbons (ORO)			<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	227	74.8	<14.9	14.9
Total TPH			<15.0	15.0	<15.0	15.0	<15.0	15.0	119	15.0	6220	74.8	<14.9	14.9

Jessica Kramer
Project Assistant

Analytical Report 583287

for

LT Environmental, Inc.

Project Manager: Adrian Baker

PLU 400/2RP-4142

27-APR-18

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

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

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-17-12)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-17-16)
Xenco-Odessa (EPA Lab Code: TX00158): Texas (T104704400-18-14)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-17-3)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Phoenix Mobile (EPA Lab Code: AZ00901): Arizona (AZM757)
Xenco-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429)
Xenco-Lakeland: Florida (E84098)

27-APR-18

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

Reference: XENCO Report No(s): **583287**
PLU 400/2RP-4142
Project Address: NM

Adrian Baker:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 583287. 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. 583287 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 583287

LT Environmental, Inc., Arvada, CO

PLU 400/2RP-4142

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS01	S	04-19-18 12:00	6 In	583287-001
SS02	S	04-19-18 12:06	6 In	583287-002
SS03	S	04-19-18 12:12	6 In	583287-003
SS04	S	04-19-18 12:17	6 In	583287-004
SS05	S	04-19-18 12:23	6 In	583287-005
SS06	S	04-19-18 12:30	6 In	583287-006

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: PLU 400/2RP-4142

Project ID:
Work Order Number(s): *583287*

Report Date: *27-APR-18*
Date Received: *04/21/2018*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3047814 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3047816 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analytical Results 583287

LT Environmental, Inc., Arvada, CO

PLU 400/2RP-4142

Sample Id:	**SS01**	Matrix:	Soil	Date Received:	04.21.18 10.00
Lab Sample Id:	583287-001	Date Collected:	04.19.18 12.00	Sample Depth:	6 In

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	SCM	Date Prep:	04.27.18 09.00	Basis:	Wet Weight
Seq Number:	3048161				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**754**	4.96	mg/kg	04.27.18 09.57		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	04.24.18 14.00	Basis:	Wet Weight
Seq Number:	3047856				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	04.24.18 20.11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	04.24.18 20.11	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	04.24.18 20.11	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	04.24.18 20.11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	04.24.18 20.11	
o-Terphenyl	84-15-1	111	%	70-135	04.24.18 20.11	

Certificate of Analytical Results 583287

LT Environmental, Inc., Arvada, CO

PLU 400/2RP-4142

Sample Id:	**SS01**	Matrix:	Soil	Date Received:	04.21.18 10.00
Lab Sample Id:	583287-001	Date Collected:	04.19.18 12.00	Sample Depth:	6 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	04.24.18 13.00	Basis:	Wet Weight
Seq Number:	3047816				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.25.18 01.29	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.25.18 01.29	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.25.18 01.29	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	04.25.18 01.29	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.25.18 01.29	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	04.25.18 01.29	U	1
Total BTEX		<0.00200	0.00200	mg/kg	04.25.18 01.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	94	%	70-130	04.25.18 01.29	
1,4-Difluorobenzene	540-36-3	97	%	70-130	04.25.18 01.29	

Certificate of Analytical Results 583287

LT Environmental, Inc., Arvada, CO

PLU 400/2RP-4142

Sample Id:	**SS02**	Matrix:	Soil	Date Received:	04.21.18 10.00
Lab Sample Id:	583287-002	Date Collected:	04.19.18 12.06	Sample Depth:	6 In

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	SCM	Date Prep:	04.27.18 09.00	Basis:	Wet Weight
Seq Number:	3048161				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**10.2**	4.99	mg/kg	04.27.18 10.15		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	04.24.18 14.00	Basis:	Wet Weight
Seq Number:	3047856				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	04.24.18 20.37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	04.24.18 20.37	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	04.24.18 20.37	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	04.24.18 20.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	04.24.18 20.37	
o-Terphenyl	84-15-1	108	%	70-135	04.24.18 20.37	

Certificate of Analytical Results 583287

LT Environmental, Inc., Arvada, CO

PLU 400/2RP-4142

Sample Id:	**SS02**	Matrix:	Soil	Date Received:	04.21.18 10.00
Lab Sample Id:	583287-002	Date Collected:	04.19.18 12.06	Sample Depth:	6 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	04.24.18 13.00	Basis:	Wet Weight
Seq Number:	3047816				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	04.25.18 01.49	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	04.25.18 01.49	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	04.25.18 01.49	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	04.25.18 01.49	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	04.25.18 01.49	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	04.25.18 01.49	U	1
Total BTEX		<0.00198	0.00198	mg/kg	04.25.18 01.49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	04.25.18 01.49	
4-Bromofluorobenzene	460-00-4	89	%	70-130	04.25.18 01.49	

Certificate of Analytical Results 583287

LT Environmental, Inc., Arvada, CO

PLU 400/2RP-4142

Sample Id:	**SS03**	Matrix:	Soil	Date Received:	04.21.18 10.00
Lab Sample Id:	583287-003	Date Collected:	04.19.18 12.12	Sample Depth:	6 In

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	SCM	Date Prep:	04.27.18 09.00	Basis:	Wet Weight
Seq Number:	3048161				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**63.0**	4.95	mg/kg	04.27.18 10.21		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	04.24.18 14.00	Basis:	Wet Weight
Seq Number:	3047856				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	04.24.18 21.03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	04.24.18 21.03	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	04.24.18 21.03	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	04.24.18 21.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	04.24.18 21.03	
o-Terphenyl	84-15-1	98	%	70-135	04.24.18 21.03	

Certificate of Analytical Results 583287

LT Environmental, Inc., Arvada, CO

PLU 400/2RP-4142

Sample Id:	**SS03**	Matrix:	Soil	Date Received:	04.21.18 10.00
Lab Sample Id:	583287-003	Date Collected:	04.19.18 12.12	Sample Depth:	6 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	04.24.18 13.00	Basis:	Wet Weight
Seq Number:	3047816				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	04.25.18 02.08	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	04.25.18 02.08	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	04.25.18 02.08	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	04.25.18 02.08	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	04.25.18 02.08	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	04.25.18 02.08	U	1
Total BTEX		<0.00201	0.00201	mg/kg	04.25.18 02.08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	95	%	70-130	04.25.18 02.08	
1,4-Difluorobenzene	540-36-3	95	%	70-130	04.25.18 02.08	

Certificate of Analytical Results 583287

LT Environmental, Inc., Arvada, CO

PLU 400/2RP-4142

Sample Id:	**SS04**	Matrix:	Soil	Date Received:	04.21.18 10.00
Lab Sample Id:	583287-004	Date Collected:	04.19.18 12.17	Sample Depth:	6 In

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	SCM	Date Prep:	04.27.18 09.00	Basis:	Wet Weight
Seq Number:	3048161				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**10300**	99.4	mg/kg	04.27.18 10.27		20

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	04.24.18 14.00	Basis:	Wet Weight
Seq Number:	3047856				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	04.24.18 21.29	U	1
Diesel Range Organics (DRO)	C10C28DRO	**119**	15.0	mg/kg	04.24.18 21.29		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	04.24.18 21.29	U	1
Total TPH	PHC635	**119**	15.0	mg/kg	04.24.18 21.29		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	04.24.18 21.29	
o-Terphenyl	84-15-1	108	%	70-135	04.24.18 21.29	

Certificate of Analytical Results 583287

LT Environmental, Inc., Arvada, CO

PLU 400/2RP-4142

Sample Id:	**SS04**	Matrix:	Soil	Date Received:	04.21.18 10.00
Lab Sample Id:	583287-004	Date Collected:	04.19.18 12.17	Sample Depth:	6 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	04.24.18 13.00	Basis:	Wet Weight
Seq Number:	3047816				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	04.25.18 02.27	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	04.25.18 02.27	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	04.25.18 02.27	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	04.25.18 02.27	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	04.25.18 02.27	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	04.25.18 02.27	U	1
Total BTEX		<0.00202	0.00202	mg/kg	04.25.18 02.27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	99	%	70-130	04.25.18 02.27	
1,4-Difluorobenzene	540-36-3	102	%	70-130	04.25.18 02.27	

Certificate of Analytical Results 583287

LT Environmental, Inc., Arvada, CO

PLU 400/2RP-4142

Sample Id:	**SS05**	Matrix:	Soil	Date Received:	04.21.18 10.00
Lab Sample Id:	583287-005	Date Collected:	04.19.18 12.23	Sample Depth:	6 In

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	SCM	Date Prep:	04.27.18 09.00	Basis:	Wet Weight
Seq Number:	3048161				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2460**	24.9	mg/kg	04.27.18 10.33		5

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	04.24.18 14.00	Basis:	Wet Weight
Seq Number:	3047856				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<74.8	74.8	mg/kg	04.24.18 21.54	U	5
Diesel Range Organics (DRO)	C10C28DRO	**5990**	74.8	mg/kg	04.24.18 21.54		5
Oil Range Hydrocarbons (ORO)	PHCG2835	**227**	74.8	mg/kg	04.24.18 21.54		5
Total TPH	PHC635	**6220**	74.8	mg/kg	04.24.18 21.54		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	04.24.18 21.54	
o-Terphenyl	84-15-1	93	%	70-135	04.24.18 21.54	

Certificate of Analytical Results 583287

LT Environmental, Inc., Arvada, CO

PLU 400/2RP-4142

Sample Id:	**SS05**	Matrix:	Soil	Date Received:	04.21.18 10.00
Lab Sample Id:	583287-005	Date Collected:	04.19.18 12.23	Sample Depth:	6 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	04.24.18 13.00	Basis:	Wet Weight
Seq Number:	3047816				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	04.25.18 02.46	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	04.25.18 02.46	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	04.25.18 02.46	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	04.25.18 02.46	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	04.25.18 02.46	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	04.25.18 02.46	U	1
Total BTEX		<0.00202	0.00202	mg/kg	04.25.18 02.46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	94	%	70-130	04.25.18 02.46	
4-Bromofluorobenzene	460-00-4	82	%	70-130	04.25.18 02.46	

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LT Environmental, Inc., Arvada, CO

PLU 400/2RP-4142

Sample Id:	**SS06**	Matrix:	Soil	Date Received:	04.21.18 10.00
Lab Sample Id:	583287-006	Date Collected:	04.19.18 12.30	Sample Depth:	6 In

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	SCM	Date Prep:	04.27.18 09.00	Basis:	Wet Weight
Seq Number:	3048161				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**17.0**	4.95	mg/kg	04.27.18 10.51		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	04.24.18 14.00	Basis:	Wet Weight
Seq Number:	3047856				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	04.24.18 23.12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	04.24.18 23.12	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<14.9	14.9	mg/kg	04.24.18 23.12	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	04.24.18 23.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	04.24.18 23.12	
o-Terphenyl	84-15-1	117	%	70-135	04.24.18 23.12	

Certificate of Analytical Results 583287

LT Environmental, Inc., Arvada, CO

PLU 400/2RP-4142

Sample Id:	**SS06**	Matrix:	Soil	Date Received:	04.21.18 10.00
Lab Sample Id:	583287-006	Date Collected:	04.19.18 12.30	Sample Depth:	6 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	04.24.18 08.00	Basis:	Wet Weight
Seq Number:	3047814				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.24.18 17.09	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.24.18 17.09	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.24.18 17.09	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	04.24.18 17.09	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.24.18 17.09	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	04.24.18 17.09	U	1
Total BTEX		<0.00200	0.00200	mg/kg	04.24.18 17.09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	96	%	70-130	04.24.18 17.09	
1,4-Difluorobenzene	540-36-3	102	%	70-130	04.24.18 17.09	

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 583287

LT Environmental, Inc.

PLU 400/2RP-4142

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3048161 — Matrix: Solid — Date Prep: 04.27.18
MB Sample Id: 7643535-1-BLK — LCS Sample Id: 7643535-1-BKS — LCSD Sample Id: 7643535-1-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	238	95	243	97	90-110	2	20	mg/kg	04.27.18 09:45	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3048161 — Matrix: Soil — Date Prep: 04.27.18
Parent Sample Id: 583287-001 — MS Sample Id: 583287-001 S — MSD Sample Id: 583287-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	754	248	984	93	986	94	90-110	0	20	mg/kg	04.27.18 10:03	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3048161 — Matrix: Soil — Date Prep: 04.27.18
Parent Sample Id: 583289-002 — MS Sample Id: 583289-002 S — MSD Sample Id: 583289-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<4.95	248	251	101	259	104	90-110	3	20	mg/kg	04.27.18 11:26	

Analytical Method: TPH By SW8015 Mod — Prep Method: TX1005P
Seq Number: 3047856 — Matrix: Solid — Date Prep: 04.24.18
MB Sample Id: 7643390-1-BLK — LCS Sample Id: 7643390-1-BKS — LCSD Sample Id: 7643390-1-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	949	95	942	94	70-135	1	20	mg/kg	04.24.18 16:06	
Diesel Range Organics (DRO)	<15.0	1000	1020	102	1010	101	70-135	1	20	mg/kg	04.24.18 16:06	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	96		113		112		70-135	%	04.24.18 16:06
o-Terphenyl	99		113		110		70-135	%	04.24.18 16:06

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 583287

LT Environmental, Inc.

PLU 400/2RP-4142

Analytical Method: TPH By SW8015 Mod — Prep Method: TX1005P
Seq Number: 3047856 — Matrix: Soil — Date Prep: 04.24.18
Parent Sample Id: 583283-001 — MS Sample Id: 583283-001 S — MSD Sample Id: 583283-001 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	998	950	95	1030	103	70-135	8	20	mg/kg	04.24.18 17:37	
Diesel Range Organics (DRO)	<15.0	998	982	98	1060	106	70-135	8	20	mg/kg	04.24.18 17:37	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	110		122		70-135	%	04.24.18 17:37
o-Terphenyl	109		117		70-135	%	04.24.18 17:37

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3047814 — Matrix: Solid — Date Prep: 04.24.18
MB Sample Id: 7643365-1-BLK — LCS Sample Id: 7643365-1-BKS — LCSD Sample Id: 7643365-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.120	119	0.115	115	70-130	4	35	mg/kg	04.24.18 07:51	
Toluene	<0.00202	0.101	0.114	113	0.110	110	70-130	4	35	mg/kg	04.24.18 07:51	
Ethylbenzene	<0.00202	0.101	0.116	115	0.112	112	70-130	4	35	mg/kg	04.24.18 07:51	
m,p-Xylenes	<0.00403	0.202	0.237	117	0.230	114	70-130	3	35	mg/kg	04.24.18 07:51	
o-Xylene	<0.00202	0.101	0.118	117	0.113	113	70-130	4	35	mg/kg	04.24.18 07:51	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	96		110		103		70-130	%	04.24.18 07:51
4-Bromofluorobenzene	88		97		92		70-130	%	04.24.18 07:51

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3047816 — Matrix: Solid — Date Prep: 04.24.18
MB Sample Id: 7643366-1-BLK — LCS Sample Id: 7643366-1-BKS — LCSD Sample Id: 7643366-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.115	114	0.114	114	70-130	1	35	mg/kg	04.24.18 17:48	
Toluene	<0.00202	0.101	0.109	108	0.108	108	70-130	1	35	mg/kg	04.24.18 17:48	
Ethylbenzene	<0.00202	0.101	0.110	109	0.108	108	70-130	2	35	mg/kg	04.24.18 17:48	
m,p-Xylenes	<0.00403	0.202	0.226	112	0.224	112	70-130	1	35	mg/kg	04.24.18 17:48	
o-Xylene	<0.00202	0.101	0.114	113	0.112	112	70-130	2	35	mg/kg	04.24.18 17:48	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	95		108		109		70-130	%	04.24.18 17:48
4-Bromofluorobenzene	89		102		93		70-130	%	04.24.18 17:48

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 583287

LT Environmental, Inc.

PLU 400/2RP-4142

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3047814 — Matrix: Soil — Date Prep: 04.24.18
Parent Sample Id: 583289-001 — MS Sample Id: 583289-001 S — MSD Sample Id: 583289-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.107	107	0.103	103	70-130	4	35	mg/kg	04.24.18 08:30	
Toluene	<0.00199	0.0996	0.0996	100	0.0952	95	70-130	5	35	mg/kg	04.24.18 08:30	
Ethylbenzene	<0.00199	0.0996	0.0965	97	0.0916	92	70-130	5	35	mg/kg	04.24.18 08:30	
m,p-Xylenes	<0.00398	0.199	0.197	99	0.186	93	70-130	6	35	mg/kg	04.24.18 08:30	
o-Xylene	<0.00199	0.0996	0.0993	100	0.0940	94	70-130	5	35	mg/kg	04.24.18 08:30	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		106		70-130	%	04.24.18 08:30
4-Bromofluorobenzene	98		102		70-130	%	04.24.18 08:30

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3047816 — Matrix: Soil — Date Prep: 04.24.18
Parent Sample Id: 583285-001 — MS Sample Id: 583285-001 S — MSD Sample Id: 583285-001 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	0.0983	98	0.0878	88	70-130	11	35	mg/kg	04.24.18 18:27	
Toluene	<0.00200	0.0998	0.0934	94	0.0824	82	70-130	13	35	mg/kg	04.24.18 18:27	
Ethylbenzene	<0.00200	0.0998	0.0937	94	0.0796	80	70-130	16	35	mg/kg	04.24.18 18:27	
m,p-Xylenes	<0.00399	0.200	0.192	96	0.162	81	70-130	17	35	mg/kg	04.24.18 18:27	
o-Xylene	<0.00200	0.0998	0.0977	98	0.0834	83	70-130	16	35	mg/kg	04.24.18 18:27	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		109		70-130	%	04.24.18 18:27
4-Bromofluorobenzene	106		103		70-130	%	04.24.18 18:27

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

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Xenco Job # 583287

Client / Reporting Information

Company Name / Branch: LTEnvironmental - Permian Office
Company Address: 3300 North "A" Street Building 1, unit 103 Midland
Email: ABaker@LTENV.com Phone No: (432)704-5178
~~Adrian Baker~~
Project Contact: Adrian Baker
Samplers's Name Glenn Thompson

Project Information

Project Name/Number: 2RP-4142 / 012 GT 30-015-40802
Project Location: PLU-400
Invoice To: XTO Energy - Kyle Littrell
PO Number: ~~012918107~~ 30-015-40802

Analytical Information

No.	Field ID / Point of Collection	Collection: Sample Depth	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	BTEX EPA Method 8021	TPH EPA Method 8015	Chloride EPA Method 300.1
1	SS01	6"	4/19/18	1200	S	1								X	X	X	X
2	SS02	6"	4/19/18	1206	S	1								X	X	X	X
3	SS03	6"	4/19/18	1212	S	1								X	X	X	X
4	SS04	6"	4/19/18	1217	S	1								X	X	X	X
5	SS05	6"	4/19/18	1223	S	1								X	X	X	X
6	SS06	6"	4/19/18	1230	S	1								X	X	X	X
7																	
8																	
9																	
10																	

Matrix Codes

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

Field Comments

Turnaround Time (Business days)

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

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

Data Deliverable Information

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

Notes:

FED-EX / UPS: Tracking #

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

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		4/19/18 1640	1	2	4/20 9:30	2 Esperanza Gonzalez
3	Esperanza Gonzalez	4/20 12:55	3	4		4
5	Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable	On Ice / Cooler Temp. / Thermo. Corr. Factor
			5			0.5

Notice: Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the Client if such loses are due to circumstances beyond the control of Xenco. A minimum charge of $75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xenco but not analyzed will be invoiced at $5 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract.

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 04/21/2018 10:00:00 AM

Work Order #: 583287

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

Temperature Measuring device used : R8

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	-1	
#2 *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**	TPH received in bulk container
#13 Samples properly preserved?	**Yes**	
#14 Sample container(s) intact?	**Yes**	
#15 Sufficient sample amount for indicated test(s)?	**Yes**	
#16 All samples received within hold time?	**Yes**	
#17 Subcontract of sample(s)?	**No**	
#18 Water VOC samples have zero headspace?	**N/A**	

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

Analyst: PH Device/Lot#:

Checklist completed by: Katie Lowe Date: 04/23/2018

Checklist reviewed by: Jessica Kramer Date: 04/23/2018

Jessica Kramer

Analytical Report 593078

for

LT Environmental, Inc.

Project Manager: Adrian Baker

PLU-400 H

26-JUL-18

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

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

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

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

26-JUL-18

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

Reference: XENCO Report No(s): **593078**
PLU-400 H
Project Address: Carlsbad, NM

Adrian Baker:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 593078. 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. 593078 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 593078

LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SW01	S	07-16-18 13:40	5.5 ft	593078-001
SW02	S	07-16-18 17:20	6 ft	593078-002

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: PLU-400 H

Project ID:
Work Order Number(s): *593078*

Report Date: *26-JUL-18*
Date Received: *07/20/2018*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3057273 BTEX by EPA 8021B

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

Certificate of Analysis Summary 593078

LT Environmental, Inc., Arvada, CO

Project Name: PLU-400 H

Project Id:
Contact: Adrian Baker
Project Location: Carlsbad, NM

Date Received in Lab: Fri Jul-20-18 10:53 am
Report Date: 26-JUL-18
Project Manager: Jessica Kramer

Analysis Requested									
	Lab Id:	593078-001		593078-002					
	Field Id:	SW01		SW02					
	Depth:	5.5- ft		6- ft					
	Matrix:	SOIL		SOIL					
	Sampled:	Jul-16-18 13:40		Jul-16-18 17:20					
BTEX by EPA 8021B	***Extracted:***	Jul-20-18 16:00		Jul-20-18 16:00					
	Analyzed:	Jul-22-18 21:08		Jul-22-18 21:29					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Benzene		<0.00200	0.00200	<0.00201	0.00201				
Toluene		<0.00200	0.00200	<0.00201	0.00201				
Ethylbenzene		<0.00200	0.00200	<0.00201	0.00201				
m,p-Xylenes		<0.00399	0.00399	<0.00402	0.00402				
o-Xylene		<0.00200	0.00200	<0.00201	0.00201				
Total Xylenes		<0.00200	0.00200	<0.00201	0.00201				
Total BTEX		<0.00200	0.00200	<0.00201	0.00201				
Inorganic Anions by EPA 300	***Extracted:***	Jul-25-18 12:00		Jul-25-18 12:00					
	Analyzed:	Jul-25-18 14:03		Jul-25-18 16:28					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Chloride		65.3	4.97	31.1	5.03				
TPH by SW8015 Mod	***Extracted:***	Jul-20-18 12:00		Jul-20-18 12:00					
	Analyzed:	Jul-20-18 16:44		Jul-20-18 17:04					
	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				
Oil Range Hydrocarbons (ORO)		<15.0	15.0	<15.0	15.0				
Total TPH		<15.0	15.0	<15.0	15.0				

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

Jessica Kramer
Project Assistant

Final 1.000

Certificate of Analytical Results 593078

LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id:	**SW01**	Matrix:	Soil	Date Received:	07.20.18 10.53
Lab Sample Id:	593078-001	Date Collected:	07.16.18 13.40	Sample Depth:	5.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	07.25.18 12.00	Basis:	Wet Weight
Seq Number:	3057753				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**65.3**	4.97	mg/kg	07.25.18 14.03		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	07.20.18 12.00	Basis:	Wet Weight
Seq Number:	3057246				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	07.20.18 16.44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	07.20.18 16.44	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	07.20.18 16.44	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	07.20.18 16.44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	07.20.18 16.44	
o-Terphenyl	84-15-1	109	%	70-135	07.20.18 16.44	

Certificate of Analytical Results 593078

LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id:	**SW01**	Matrix:	Soil	Date Received:	07.20.18 10.53
Lab Sample Id:	593078-001	Date Collected:	07.16.18 13.40	Sample Depth:	5.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	07.20.18 16.00	Basis:	Wet Weight
Seq Number:	3057273				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.22.18 21.08	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.22.18 21.08	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.22.18 21.08	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	07.22.18 21.08	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.22.18 21.08	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.22.18 21.08	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.22.18 21.08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	109	%	70-130	07.22.18 21.08	
1,4-Difluorobenzene	540-36-3	98	%	70-130	07.22.18 21.08	

Certificate of Analytical Results 593078

LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id:	**SW02**	Matrix:	Soil	Date Received:	07.20.18 10.53
Lab Sample Id:	593078-002	Date Collected:	07.16.18 17.20	Sample Depth:	6 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	07.25.18 12.00	Basis:	Wet Weight
Seq Number:	3057753				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**31.1**	5.03	mg/kg	07.25.18 16.28		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	07.20.18 12.00	Basis:	Wet Weight
Seq Number:	3057246				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	07.20.18 17.04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	07.20.18 17.04	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	07.20.18 17.04	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	07.20.18 17.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	07.20.18 17.04	
o-Terphenyl	84-15-1	100	%	70-135	07.20.18 17.04	

Certificate of Analytical Results 593078

LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id:	**SW02**	Matrix:	Soil	Date Received:	07.20.18 10.53
Lab Sample Id:	593078-002	Date Collected:	07.16.18 17.20	Sample Depth:	6 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	07.20.18 16.00	Basis:	Wet Weight
Seq Number:	3057273				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	07.22.18 21.29	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	07.22.18 21.29	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	07.22.18 21.29	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	07.22.18 21.29	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	07.22.18 21.29	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	07.22.18 21.29	U	1
Total BTEX		<0.00201	0.00201	mg/kg	07.22.18 21.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	07.22.18 21.29	
4-Bromofluorobenzene	460-00-4	106	%	70-130	07.22.18 21.29	

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 593078

LT Environmental, Inc.

PLU-400 H

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3057753 — Matrix: Solid — Date Prep: 07.25.18
MB Sample Id: 7659102-1-BLK — LCS Sample Id: 7659102-1-BKS — LCSD Sample Id: 7659102-1-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	255	102	90-110	0	20	mg/kg	07.25.18 13:42	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3057753 — Matrix: Soil — Date Prep: 07.25.18
Parent Sample Id: 593078-001 — MS Sample Id: 593078-001 S — MSD Sample Id: 593078-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	65.3	249	306	97	305	96	90-110	0	20	mg/kg	07.25.18 14:13	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3057753 — Matrix: Soil — Date Prep: 07.25.18
Parent Sample Id: 593078-002 — MS Sample Id: 593078-002 S — MSD Sample Id: 593078-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	31.1	252	273	96	273	96	90-110	0	20	mg/kg	07.25.18 16:38	

Analytical Method: TPH by SW8015 Mod — Prep Method: TX1005P
Seq Number: 3057246 — Matrix: Solid — Date Prep: 07.20.18
MB Sample Id: 7658835-1-BLK — LCS Sample Id: 7658835-1-BKS — LCSD Sample Id: 7658835-1-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	951	95	952	95	70-135	0	20	mg/kg	07.20.18 08:53	
Diesel Range Organics (DRO)	<15.0	1000	955	96	964	96	70-135	1	20	mg/kg	07.20.18 08:53	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	98		120		125		70-135	%	07.20.18 08:53
o-Terphenyl	103		109		109		70-135	%	07.20.18 08:53

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

QC Summary 593078

LT Environmental, Inc.

PLU-400 H

Analytical Method: TPH by SW8015 Mod — Prep Method: TX1005P
Seq Number: 3057246 — Matrix: Soil — Date Prep: 07.20.18
Parent Sample Id: 592900-001 — MS Sample Id: 592900-001 S — MSD Sample Id: 592900-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	999	958	96	954	95	70-135	0	20	mg/kg	07.20.18 09:51	
Diesel Range Organics (DRO)	<15.0	999	997	100	988	99	70-135	1	20	mg/kg	07.20.18 09:51	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	121		120		70-135	%	07.20.18 09:51
o-Terphenyl	113		112		70-135	%	07.20.18 09:51

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3057273 — Matrix: Solid — Date Prep: 07.20.18
MB Sample Id: 7658865-1-BLK — LCS Sample Id: 7658865-1-BKS — LCSD Sample Id: 7658865-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.0968	96	0.0981	98	70-130	1	35	mg/kg	07.22.18 12:49	
Toluene	<0.00202	0.101	0.105	104	0.105	105	70-130	0	35	mg/kg	07.22.18 12:49	
Ethylbenzene	<0.00202	0.101	0.101	100	0.101	101	70-130	0	35	mg/kg	07.22.18 12:49	
m,p-Xylenes	<0.00403	0.202	0.201	100	0.200	100	70-130	0	35	mg/kg	07.22.18 12:49	
o-Xylene	<0.00202	0.101	0.0990	98	0.0970	97	70-130	2	35	mg/kg	07.22.18 12:49	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	98		95		99		70-130	%	07.22.18 12:49
4-Bromofluorobenzene	99		98		100		70-130	%	07.22.18 12:49

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3057273 — Matrix: Soil — Date Prep: 07.20.18
Parent Sample Id: 593036-002 — MS Sample Id: 593036-002 S — MSD Sample Id: 593036-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.0302	30	0.0336	34	70-130	11	35	mg/kg	07.22.18 13:30	X
Toluene	<0.00199	0.0996	0.0318	32	0.0303	30	70-130	5	35	mg/kg	07.22.18 13:30	X
Ethylbenzene	<0.00199	0.0996	0.0302	30	0.0265	27	70-130	13	35	mg/kg	07.22.18 13:30	X
m,p-Xylenes	<0.00398	0.199	0.0602	30	0.0513	26	70-130	16	35	mg/kg	07.22.18 13:30	X
o-Xylene	<0.00199	0.0996	0.0329	33	0.0285	29	70-130	14	35	mg/kg	07.22.18 13:30	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		98		70-130	%	07.22.18 13:30
4-Bromofluorobenzene	106		106		70-130	%	07.22.18 13:30

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

Setting the Standard since 1990

Stafford,Texas (281-240-4200)
Dallas Texas (214-902-0300)

San Antonio, Texas (210-509-3334)
Midland, Texas (432-704-5251)

Phoenix, Arizona (480-355-0900)

www.xenco.com

CHAIN OF CUSTODY

Page 1 Of 1

Xenco Quote #
Xenco Job # 593078

Client / Reporting Information

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

Project Information

Project Name/Number: PLU-4004
Project Location: Carlsbad, NM
Invoice To: XTO Energy - Kyle Littrell
PO Number: 2RP-2142

Matrix Codes

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

No.	Field ID / Point of Collection	Sample Depth	Date	Time	Matrix	# of bottles	HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	BTEX EPA 8020	TPH EPA 8015	Chloride 300.1	Field Comments
1	SW01	5.5'	7/16/18	1340	S	1								X	X	X	X	
2	SW02	6'	7/16/18	1720	S	1								X	X	X	X	
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

7/16/18 BB

Turnaround Time (Business days)

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

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

Data Deliverable Information

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

Notes:

FED-EX / UPS: Tracking # 7737539905412

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

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 BT Bel	7/18/18 16:39	1 [signature]	2 [signature]	7/19/18 15:30	2 [signature] 7/20/18
Relinquished by: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable	On Ice: Y; Cooler Temp.: 0.3; Thermo. Corr. Factor: NS 0.0

Notice: Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the Client if such loses are due to circumstances beyond the control of Xenco. A minimum charge of $75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xenco but not analyzed will be invoiced at $5 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract.

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

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

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 07/20/2018 10:53:32 AM

Work Order #: 593078

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: 07/20/2018
Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 07/20/2018
Jessica Kramer

Analytical Report 593076

for

LT Environmental, Inc.

Project Manager: Adrian Baker

PLU-400 H

27-JUL-18

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

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

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

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

27-JUL-18

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

Reference: XENCO Report No(s): **593076**
PLU-400 H
Project Address: Carlsbad, NM

Adrian Baker:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 593076. 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. 593076 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 593076

LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SW03	S	07-17-18 09:30	5 ft	593076-001
FS01	S	07-17-18 14:00	9 ft	593076-002
SW04	S	07-17-18 14:45	4 ft	593076-003
SW05	S	07-17-18 15:00	3.5 ft	593076-004
SW06	S	07-17-18 15:10	3.5 ft	593076-005
SW07	S	07-17-18 15:30	4 ft	593076-006

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: PLU-400 H

Project ID:
Work Order Number(s): *593076*

Report Date: *27-JUL-18*
Date Received: *07/20/2018*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3057410 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3057486 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analysis Summary 593076

LT Environmental, Inc., Arvada, CO

Project Name: PLU-400 H

Project Id:
Contact: Adrian Baker
Project Location: Carlsbad, NM

Date Received in Lab: Fri Jul-20-18 10:35 am
Report Date: 27-JUL-18
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	593076-001		593076-002		593076-003		593076-004		593076-005		593076-006	
	Field Id:	SW03		FS01		SW04		SW05		SW06		SW07	
	Depth:	5- ft		9- ft		4- ft		3.5- ft		3.5- ft		4- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jul-17-18 09:30		Jul-17-18 14:00		Jul-17-18 14:45		Jul-17-18 15:00		Jul-17-18 15:10		Jul-17-18 15:30	
BTEX by EPA 8021B	***Extracted:***	Jul-23-18 17:00		Jul-24-18 08:00		Jul-24-18 08:00		Jul-24-18 08:00		Jul-24-18 08:00		Jul-24-18 08:00	
	Analyzed:	Jul-24-18 07:17		Jul-24-18 14:34		Jul-24-18 14:54		Jul-24-18 15:15		Jul-24-18 15:35		Jul-24-18 15:56	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199
Toluene		<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199
Ethylbenzene		<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199
m,p-Xylenes		<0.00399	0.00399	<0.00398	0.00398	<0.00398	0.00398	<0.00401	0.00401	<0.00402	0.00402	<0.00398	0.00398
o-Xylene		<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199
Total Xylenes		<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199
Total BTEX		<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199
Inorganic Anions by EPA 300	***Extracted:***	Jul-26-18 12:00		Jul-26-18 12:00		Jul-26-18 12:00		Jul-26-18 12:00		Jul-26-18 12:00		Jul-26-18 12:00	
	Analyzed:	Jul-26-18 14:47		Jul-26-18 14:53		Jul-26-18 14:58		Jul-26-18 15:04		Jul-26-18 15:09		Jul-26-18 15:14	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		251	5.03	43.8	4.98	9.19	4.97	92.6	4.96	39.5	5.00	76.7	4.95
TPH by SW8015 Mod	***Extracted:***	Jul-20-18 14:00		Jul-20-18 14:00		Jul-20-18 14:00		Jul-20-18 14:00		Jul-20-18 14:00		Jul-20-18 14:00	
	Analyzed:	Jul-20-18 22:01		Jul-20-18 22:20		Jul-20-18 23:18		Jul-20-18 23:38		Jul-20-18 23:57		Jul-21-18 00:16	
	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	16.4	14.9	<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0
Oil Range Hydrocarbons (ORO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0
Total TPH		<15.0	15.0	<15.0	15.0	<15.0	15.0	16.4	14.9	<15.0	15.0	<15.0	15.0

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

Jessica Kramer
Project Assistant

Final 1.000

Certificate of Analytical Results 593076

LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id:	**SW03**	Matrix:	Soil	Date Received:	07.20.18 10.35
Lab Sample Id:	593076-001	Date Collected:	07.17.18 09.30	Sample Depth:	5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	07.26.18 12.00	Basis:	Wet Weight
Seq Number:	3057921				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**251**	5.03	mg/kg	07.26.18 14.47		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	07.20.18 14.00	Basis:	Wet Weight
Seq Number:	3057247				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	07.20.18 22.01	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	07.20.18 22.01	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	07.20.18 22.01	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	07.20.18 22.01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	07.20.18 22.01	
o-Terphenyl	84-15-1	101	%	70-135	07.20.18 22.01	

Certificate of Analytical Results 593076

LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id:	**SW03**	Matrix:	Soil	Date Received:	07.20.18 10.35
Lab Sample Id:	593076-001	Date Collected:	07.17.18 09.30	Sample Depth:	5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	07.23.18 17.00	Basis:	Wet Weight
Seq Number:	3057410				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.24.18 07.17	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.24.18 07.17	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.24.18 07.17	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	07.24.18 07.17	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.24.18 07.17	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.24.18 07.17	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.24.18 07.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	108	%	70-130	07.24.18 07.17	
4-Bromofluorobenzene	460-00-4	92	%	70-130	07.24.18 07.17	

Certificate of Analytical Results 593076

LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id:	**FS01**	Matrix:	Soil	Date Received:	07.20.18 10.35
Lab Sample Id:	593076-002	Date Collected:	07.17.18 14.00	Sample Depth:	9 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	07.26.18 12.00	Basis:	Wet Weight
Seq Number:	3057921				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**43.8**	4.98	mg/kg	07.26.18 14.53		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	07.20.18 14.00	Basis:	Wet Weight
Seq Number:	3057247				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	07.20.18 22.20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	07.20.18 22.20	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	07.20.18 22.20	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	07.20.18 22.20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	07.20.18 22.20	
o-Terphenyl	84-15-1	103	%	70-135	07.20.18 22.20	

Certificate of Analytical Results 593076

LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id:	**FS01**	Matrix:	Soil	Date Received:	07.20.18 10.35
Lab Sample Id:	593076-002	Date Collected:	07.17.18 14.00	Sample Depth:	9 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	07.24.18 08.00	Basis:	Wet Weight
Seq Number:	3057486				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	07.24.18 14.34	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	07.24.18 14.34	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	07.24.18 14.34	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	07.24.18 14.34	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	07.24.18 14.34	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	07.24.18 14.34	U	1
Total BTEX		<0.00199	0.00199	mg/kg	07.24.18 14.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	87	%	70-130	07.24.18 14.34	
1,4-Difluorobenzene	540-36-3	108	%	70-130	07.24.18 14.34	

Certificate of Analytical Results 593076

LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id:	**SW04**	Matrix:	Soil	Date Received:	07.20.18 10.35
Lab Sample Id:	593076-003	Date Collected:	07.17.18 14.45	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	07.26.18 12.00	Basis:	Wet Weight
Seq Number:	3057921				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**9.19**	4.97	mg/kg	07.26.18 14.58		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	07.20.18 14.00	Basis:	Wet Weight
Seq Number:	3057247				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	07.20.18 23.18	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	07.20.18 23.18	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	07.20.18 23.18	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	07.20.18 23.18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	07.20.18 23.18	
o-Terphenyl	84-15-1	103	%	70-135	07.20.18 23.18	

Certificate of Analytical Results 593076

LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id:	**SW04**	Matrix:	Soil	Date Received:	07.20.18 10.35
Lab Sample Id:	593076-003	Date Collected:	07.17.18 14.45	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	07.24.18 08.00	Basis:	Wet Weight
Seq Number:	3057486				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	07.24.18 14.54	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	07.24.18 14.54	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	07.24.18 14.54	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	07.24.18 14.54	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	07.24.18 14.54	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	07.24.18 14.54	U	1
Total BTEX		<0.00199	0.00199	mg/kg	07.24.18 14.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	88	%	70-130	07.24.18 14.54	
1,4-Difluorobenzene	540-36-3	106	%	70-130	07.24.18 14.54	

Certificate of Analytical Results 593076

LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id:	**SW05**	Matrix:	Soil	Date Received:	07.20.18 10.35
Lab Sample Id:	593076-004	Date Collected:	07.17.18 15.00	Sample Depth:	3.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	07.26.18 12.00	Basis:	Wet Weight
Seq Number:	3057921				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**92.6**	4.96	mg/kg	07.26.18 15.04		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	07.20.18 14.00	Basis:	Wet Weight
Seq Number:	3057247				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**16.4**	14.9	mg/kg	07.20.18 23.38		1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	07.20.18 23.38	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<14.9	14.9	mg/kg	07.20.18 23.38	U	1
Total TPH	PHC635	**16.4**	14.9	mg/kg	07.20.18 23.38		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	07.20.18 23.38	
o-Terphenyl	84-15-1	94	%	70-135	07.20.18 23.38	

Certificate of Analytical Results 593076

LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id:	**SW05**	Matrix:	Soil	Date Received:	07.20.18 10.35
Lab Sample Id:	593076-004	Date Collected:	07.17.18 15.00	Sample Depth:	3.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	07.24.18 08.00	Basis:	Wet Weight
Seq Number:	3057486				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.24.18 15.15	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.24.18 15.15	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.24.18 15.15	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	07.24.18 15.15	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.24.18 15.15	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.24.18 15.15	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.24.18 15.15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	100	%	70-130	07.24.18 15.15	
1,4-Difluorobenzene	540-36-3	100	%	70-130	07.24.18 15.15	

Certificate of Analytical Results 593076

LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id:	**SW06**	Matrix:	Soil	Date Received:	07.20.18 10.35
Lab Sample Id:	593076-005	Date Collected:	07.17.18 15.10	Sample Depth:	3.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	07.26.18 12.00	Basis:	Wet Weight
Seq Number:	3057921				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**39.5**	5.00	mg/kg	07.26.18 15.09		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	07.20.18 14.00	Basis:	Wet Weight
Seq Number:	3057247				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	07.20.18 23.57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	07.20.18 23.57	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	07.20.18 23.57	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	07.20.18 23.57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	07.20.18 23.57	
o-Terphenyl	84-15-1	104	%	70-135	07.20.18 23.57	

Certificate of Analytical Results 593076

LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id:	**SW06**	Matrix:	Soil	Date Received:	07.20.18 10.35
Lab Sample Id:	593076-005	Date Collected:	07.17.18 15.10	Sample Depth:	3.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	07.24.18 08.00	Basis:	Wet Weight
Seq Number:	3057486				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	07.24.18 15.35	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	07.24.18 15.35	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	07.24.18 15.35	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	07.24.18 15.35	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	07.24.18 15.35	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	07.24.18 15.35	U	1
Total BTEX		<0.00201	0.00201	mg/kg	07.24.18 15.35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	108	%	70-130	07.24.18 15.35	
4-Bromofluorobenzene	460-00-4	88	%	70-130	07.24.18 15.35	

Certificate of Analytical Results 593076

LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id:	**SW07**	Matrix:	Soil	Date Received:	07.20.18 10.35
Lab Sample Id:	593076-006	Date Collected:	07.17.18 15.30	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	07.26.18 12.00	Basis:	Wet Weight
Seq Number:	3057921				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**76.7**	4.95	mg/kg	07.26.18 15.14		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	07.20.18 14.00	Basis:	Wet Weight
Seq Number:	3057247				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	07.21.18 00.16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	07.21.18 00.16	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	07.21.18 00.16	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	07.21.18 00.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	07.21.18 00.16	
o-Terphenyl	84-15-1	101	%	70-135	07.21.18 00.16	

Certificate of Analytical Results 593076

LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id:	**SW07**	Matrix:	Soil	Date Received:	07.20.18 10.35
Lab Sample Id:	593076-006	Date Collected:	07.17.18 15.30	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	07.24.18 08.00	Basis:	Wet Weight
Seq Number:	3057486				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	07.24.18 15.56	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	07.24.18 15.56	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	07.24.18 15.56	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	07.24.18 15.56	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	07.24.18 15.56	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	07.24.18 15.56	U	1
Total BTEX		<0.00199	0.00199	mg/kg	07.24.18 15.56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	90	%	70-130	07.24.18 15.56	
1,4-Difluorobenzene	540-36-3	103	%	70-130	07.24.18 15.56	

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 593076

LT Environmental, Inc.

PLU-400 H

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3057921 Matrix: Solid Date Prep: 07.26.18
MB Sample Id: 7659195-1-BLK LCS Sample Id: 7659195-1-BKS LCSD Sample Id: 7659195-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<4.99	250	251	100	232	93	90-110	8	20	mg/kg	07.26.18 12:38	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3057921 Matrix: Soil Date Prep: 07.26.18
Parent Sample Id: 593074-001 MS Sample Id: 593074-001 S MSD Sample Id: 593074-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	108	248	361	102	360	102	90-110	0	20	mg/kg	07.26.18 12:54	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3057921 Matrix: Soil Date Prep: 07.26.18
Parent Sample Id: 593074-011 MS Sample Id: 593074-011 S MSD Sample Id: 593074-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	78.9	250	335	102	334	102	90-110	0	20	mg/kg	07.26.18 14:10	

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3057247 Matrix: Solid Date Prep: 07.20.18
MB Sample Id: 7658836-1-BLK LCS Sample Id: 7658836-1-BKS LCSD Sample Id: 7658836-1-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	952	95	942	94	70-135	1	20	mg/kg	07.20.18 18:04	
Diesel Range Organics (DRO)	<15.0	1000	988	99	968	97	70-135	2	20	mg/kg	07.20.18 18:04	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	97		119		120		70-135	%	07.20.18 18:04
o-Terphenyl	103		111		105		70-135	%	07.20.18 18:04

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 593076

LT Environmental, Inc.

PLU-400 H

Analytical Method: TPH by SW8015 Mod — Prep Method: TX1005P
Seq Number: 3057247 — Matrix: Soil — Date Prep: 07.20.18
Parent Sample Id: 593071-001 — MS Sample Id: 593071-001 S — MSD Sample Id: 593071-001 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)	98.1	999	1090	99	1100	100	70-135	1	20	mg/kg	07.20.18 19:04	
Diesel Range Organics (DRO)	4660	999	6400	174	6480	182	70-135	1	20	mg/kg	07.20.18 19:04	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	107		121		70-135	%	07.20.18 19:04
o-Terphenyl	95		101		70-135	%	07.20.18 19:04

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3057410 — Matrix: Solid — Date Prep: 07.23.18
MB Sample Id: 7658923-1-BLK — LCS Sample Id: 7658923-1-BKS — LCSD Sample Id: 7658923-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.106	105	0.100	100	70-130	6	35	mg/kg	07.23.18 23:40	
Toluene	<0.00202	0.101	0.103	102	0.0959	96	70-130	7	35	mg/kg	07.23.18 23:40	
Ethylbenzene	<0.00202	0.101	0.111	110	0.105	105	70-130	6	35	mg/kg	07.23.18 23:40	
m,p-Xylenes	<0.00403	0.202	0.221	109	0.209	104	70-130	6	35	mg/kg	07.23.18 23:40	
o-Xylene	<0.00202	0.101	0.108	107	0.102	102	70-130	6	35	mg/kg	07.23.18 23:40	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		109		109		70-130	%	07.23.18 23:40
4-Bromofluorobenzene	86		81		82		70-130	%	07.23.18 23:40

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3057486 — Matrix: Solid — Date Prep: 07.24.18
MB Sample Id: 7658983-1-BLK — LCS Sample Id: 7658983-1-BKS — LCSD Sample Id: 7658983-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.108	107	0.105	105	70-130	3	35	mg/kg	07.24.18 10:00	
Toluene	<0.00202	0.101	0.108	107	0.104	104	70-130	4	35	mg/kg	07.24.18 10:00	
Ethylbenzene	<0.00202	0.101	0.118	117	0.114	114	70-130	3	35	mg/kg	07.24.18 10:00	
m,p-Xylenes	<0.00403	0.202	0.236	117	0.227	114	70-130	4	35	mg/kg	07.24.18 10:00	
o-Xylene	<0.00202	0.101	0.115	114	0.111	111	70-130	4	35	mg/kg	07.24.18 10:00	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	107		107		105		70-130	%	07.24.18 10:00
4-Bromofluorobenzene	85		85		87		70-130	%	07.24.18 10:00

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 593076

LT Environmental, Inc.

PLU-400 H

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3057410 | Matrix: Soil | Date Prep: 07.23.18
Parent Sample Id: 593074-009 | MS Sample Id: 593074-009 S | MSD Sample Id: 593074-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0994	0.0821	83	0.0861	86	70-130	5	35	mg/kg	07.24.18 00:22	
Toluene	<0.00199	0.0994	0.0790	79	0.0820	82	70-130	4	35	mg/kg	07.24.18 00:22	
Ethylbenzene	<0.00199	0.0994	0.0855	86	0.0896	90	70-130	5	35	mg/kg	07.24.18 00:22	
m,p-Xylenes	<0.00398	0.199	0.169	85	0.177	89	70-130	5	35	mg/kg	07.24.18 00:22	
o-Xylene	<0.00199	0.0994	0.0833	84	0.0871	87	70-130	4	35	mg/kg	07.24.18 00:22	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	110		108		70-130	%	07.24.18 00:22
4-Bromofluorobenzene	83		85		70-130	%	07.24.18 00:22

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3057486 | Matrix: Soil | Date Prep: 07.24.18
Parent Sample Id: 593002-001 | MS Sample Id: 593002-001 S | MSD Sample Id: 593002-001 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	0.0801	80	0.0830	83	70-130	4	35	mg/kg	07.24.18 10:41	
Toluene	<0.00200	0.100	0.0662	66	0.0729	73	70-130	10	35	mg/kg	07.24.18 10:41	X
Ethylbenzene	<0.00200	0.100	0.0568	57	0.0685	69	70-130	19	35	mg/kg	07.24.18 10:41	X
m,p-Xylenes	<0.00401	0.200	0.109	55	0.133	67	70-130	20	35	mg/kg	07.24.18 10:41	X
o-Xylene	<0.00200	0.100	0.0546	55	0.0656	66	70-130	18	35	mg/kg	07.24.18 10:41	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		110		70-130	%	07.24.18 10:41
4-Bromofluorobenzene	85		82		70-130	%	07.24.18 10:41

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

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Xenco Quote #:
Xenco Job #: 593074

Client / Reporting Information

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Email: Abaker@ltenv.com
Phone No: (432) 704-5178
Project Contact: Adrian Baker
Samplers's Name: Ben Belill

Project Information

Project Name/Number: PLU-400H
Project Location: Carlsbad, NM
Invoice To: XTO Energy - Kyle Littrell
PO Number: 2RP-2142

Matrix Codes

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

No.	Field ID / Point of Collection	Sample Depth	Date	Time	Matrix	# of bottles	HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	BTEX EPA 8020	TPH EPA 8015	Chloride 300.1	Field Comments
1	SW03	5'	7/17/18	0930	S	1								X	X	X	X	
2	FS01	9'	↓	1400	↓	↓								X	X	X	X	
3	SW04	4'	↓	1445	↓	↓								X	X	X	X	
4	SW05	3.5'	↓	1500	↓	↓								X	X	X	X	
5	SW06	3.8'	↓	1510	↓	↓								X	X	X	X	
6	SW07	4'	↓	1530	↓	↓								X	X	X	X	
7																		
8	7/17/18 BB																	
9																		
10																		

Turnaround Time (Business days)

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

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

Data Deliverable Information

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

Notes:

FED-EX / UPS: Tracking # 7727800CC542

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

	Relinquished by	Date Time	Received By	Relinquished By	Date Time	Received By
1 / 2	Relinquished by Sampler: [signature]	7/18/18 16:39	1 [signature]	[signature]	7/19/18 15:30	2 [signature] 7/20/18 10:3
3 / 4	Relinquished by:	Date Time:	3 Received By:	4 Relinquished By:	Date Time:	4 Received By:
5	Relinquished by:	Date Time:	5 Received By:	Custody Seal #	Preserved where applicable	On Ice: ✓ Cooler Temp.: 0.3 Thermo. Corr. Factor: 0.0

Notice: Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the Client if such loses are due to circumstances beyond the control of Xenco. A minimum charge of $75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xenco but not analyzed will be invoiced at $5 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract.

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

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

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 07/20/2018 10:35:00 AM

Work Order #: 593076

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: 07/20/2018
Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 07/20/2018
Jessica Kramer

Analytical Report 593074

for

LT Environmental, Inc.

Project Manager: Adrian Baker

PLU-400 H

27-JUL-18

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

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

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

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

27-JUL-18

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

Reference: XENCO Report No(s): **593074**
PLU-400 H
Project Address: Carlsbad, NM

Adrian Baker:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 593074. 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. 593074 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 593074

LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SW08	S	07-18-18 11:20	3.5 ft	593074-001
SW09	S	07-18-18 11:40	3.5 ft	593074-002
SW10	S	07-18-18 12:40	4 ft	593074-003
SW11	S	07-18-18 09:40	4 ft	593074-004
SW12	S	07-18-18 11:00	4.5 ft	593074-005
SW13	S	07-18-18 13:15	3.5 ft	593074-006
SW14	S	07-18-18 13:20	3 ft	593074-007
SW15	S	07-18-18 13:25	3 ft	593074-008
FS02	S	07-18-18 11:10	5.5 ft	593074-009
FS03	S	07-18-18 11:30	8 ft	593074-010
FS04	S	07-18-18 11:45	7 ft	593074-011
FS05	S	07-18-18 10:15	7.5 ft	593074-012
FS06	S	07-18-18 13:35	5.5 ft	593074-013
FS07	S	07-18-18 11:50	8.5 ft	593074-014

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: PLU-400 H

Project ID:
Work Order Number(s): *593074*

Report Date: *27-JUL-18*
Date Received: *07/20/2018*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3057273 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3057410 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analysis Summary 593074

LT Environmental, Inc., Arvada, CO

Project Name: PLU-400 H

Project Id:
Contact: Adrian Baker
Project Location: Carlsbad, NM

Date Received in Lab: Fri Jul-20-18 10:35 am
Report Date: 27-JUL-18
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	593074-001		593074-002		593074-003		593074-004		593074-005		593074-006	
	Field Id:	SW08		SW09		SW10		SW11		SW12		SW13	
	Depth:	3.5- ft		3.5- ft		4- ft		4- ft		4.5- ft		3.5- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jul-18-18 11:20		Jul-18-18 11:40		Jul-18-18 12:40		Jul-18-18 09:40		Jul-18-18 11:00		Jul-18-18 13:15	
BTEX by EPA 8021B	***Extracted:***	Jul-20-18 16:00		Jul-20-18 16:00		Jul-23-18 17:00		Jul-23-18 17:00		Jul-23-18 17:00		Jul-23-18 17:00	
	Analyzed:	Jul-22-18 21:50		Jul-22-18 22:11		Jul-24-18 03:49		Jul-24-18 02:05		Jul-24-18 02:26		Jul-24-18 02:46	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200
Toluene		<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200
Ethylbenzene		<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200
m,p-Xylenes		<0.00401	0.00401	<0.00398	0.00398	<0.00398	0.00398	<0.00401	0.00401	<0.00402	0.00402	<0.00399	0.00399
o-Xylene		<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200
Total Xylenes		<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200
Total BTEX		<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200
Inorganic Anions by EPA 300	***Extracted:***	Jul-26-18 12:00		Jul-26-18 12:00		Jul-26-18 12:00		Jul-26-18 12:00		Jul-26-18 12:00		Jul-26-18 12:00	
	Analyzed:	Jul-26-18 12:49		Jul-26-18 13:05		Jul-26-18 13:10		Jul-26-18 13:16		Jul-26-18 13:21		Jul-26-18 13:37	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		108	4.95	155	4.95	<4.95	4.95	250	4.95	373	5.00	8.53	4.97
TPH by SW8015 Mod	***Extracted:***	Jul-20-18 16:00		Jul-20-18 16:00		Jul-20-18 16:00		Jul-20-18 16:00		Jul-20-18 16:00		Jul-20-18 16:00	
	Analyzed:	Jul-21-18 03:50		Jul-21-18 04:48		Jul-21-18 05:08		Jul-21-18 05:28		Jul-21-18 05:48		Jul-21-18 06:07	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9
Diesel Range Organics (DRO)		<15.0	15.0	22.2	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9
Oil Range Hydrocarbons (ORO)		<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9
Total TPH		<15.0	15.0	22.2	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9

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

Jessica Kramer
Project Assistant

Final 1.000

Certificate of Analysis Summary 593074

LT Environmental, Inc., Arvada, CO

Project Name: PLU-400 H

Project Id:
Contact: Adrian Baker
Project Location: Carlsbad, NM

Date Received in Lab: Fri Jul-20-18 10:35 am
Report Date: 27-JUL-18
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	593074-007		593074-008		593074-009		593074-010		593074-011		593074-012	
	Field Id:	SW14		SW15		FS02		FS03		FS04		FS05	
	Depth:	3- ft		3- ft		5.5- ft		8- ft		7- ft		7.5- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jul-18-18 13:20		Jul-18-18 13:25		Jul-18-18 11:10		Jul-18-18 11:30		Jul-18-18 11:45		Jul-18-18 10:15	
BTEX by EPA 8021B	***Extracted:***	Jul-23-18 17:00		Jul-23-18 17:00		Jul-23-18 17:00		Jul-23-18 17:00		Jul-23-18 17:00		Jul-23-18 17:00	
	Analyzed:	Jul-24-18 03:07		Jul-24-18 03:28		Jul-24-18 01:45		Jul-24-18 04:10		Jul-24-18 04:31		Jul-24-18 06:15	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00198	0.00198	<0.00202	0.00202	<0.00201	0.00201	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200
Toluene		<0.00198	0.00198	<0.00202	0.00202	<0.00201	0.00201	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200
Ethylbenzene		<0.00198	0.00198	<0.00202	0.00202	<0.00201	0.00201	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200
m,p-Xylenes		<0.00397	0.00397	<0.00403	0.00403	<0.00402	0.00402	<0.00402	0.00402	<0.00399	0.00399	<0.00401	0.00401
o-Xylene		<0.00198	0.00198	<0.00202	0.00202	<0.00201	0.00201	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200
Total Xylenes		<0.00198	0.00198	<0.00202	0.00202	<0.00201	0.00201	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200
Total BTEX		<0.00198	0.00198	<0.00202	0.00202	<0.00201	0.00201	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200
Inorganic Anions by EPA 300	***Extracted:***	Jul-26-18 12:00		Jul-26-18 12:00		Jul-26-18 12:00		Jul-26-18 12:00		Jul-26-18 12:00		Jul-26-18 12:00	
	Analyzed:	Jul-26-18 13:43		Jul-26-18 13:48		Jul-26-18 13:53		Jul-26-18 13:59		Jul-26-18 14:04		Jul-26-18 14:20	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		91.1	4.99	6.79	4.98	416	4.95	9.99	4.97	78.9	5.00	161	4.97
TPH by SW8015 Mod	***Extracted:***	Jul-20-18 16:00		Jul-20-18 16:00		Jul-20-18 16:00		Jul-20-18 16:00		Jul-20-18 16:00		Jul-20-18 16:00	
	Analyzed:	Jul-21-18 06:27		Jul-21-18 06:47		Jul-21-18 07:07		Jul-21-18 07:26		Jul-21-18 08:26		Jul-21-18 08:46	
	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	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Oil Range Hydrocarbons (ORO)		<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Total TPH		<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0

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

Jessica Kramer
Project Assistant

Final 1.000

Certificate of Analysis Summary 593074

LT Environmental, Inc., Arvada, CO

Project Name: PLU-400 H

Project Id:
Contact: Adrian Baker
Project Location: Carlsbad, NM

Date Received in Lab: Fri Jul-20-18 10:35 am
Report Date: 27-JUL-18
Project Manager: Jessica Kramer

Analysis Requested									
	Lab Id:	593074-013		593074-014					
	Field Id:	FS06		FS07					
	Depth:	5.5- ft		8.5- ft					
	Matrix:	SOIL		SOIL					
	Sampled:	Jul-18-18 13:35		Jul-18-18 11:50					
BTEX by EPA 8021B	***Extracted:***	Jul-23-18 17:00		Jul-23-18 17:00					
	Analyzed:	Jul-24-18 06:36		Jul-24-18 06:57					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Benzene		<0.00201	0.00201	<0.00199	0.00199				
Toluene		<0.00201	0.00201	<0.00199	0.00199				
Ethylbenzene		<0.00201	0.00201	<0.00199	0.00199				
m,p-Xylenes		<0.00402	0.00402	<0.00398	0.00398				
o-Xylene		<0.00201	0.00201	<0.00199	0.00199				
Total Xylenes		<0.00201	0.00201	<0.00199	0.00199				
Total BTEX		<0.00201	0.00201	<0.00199	0.00199				
Inorganic Anions by EPA 300	***Extracted:***	Jul-26-18 12:00		Jul-26-18 12:00					
	Analyzed:	Jul-26-18 14:26		Jul-26-18 14:42					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Chloride		52.4	4.99	6.79	4.96				
TPH by SW8015 Mod	***Extracted:***	Jul-20-18 16:00		Jul-20-18 16:00					
	Analyzed:	Jul-21-18 09:05		Jul-21-18 09:25					
	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				
Oil Range Hydrocarbons (ORO)		<15.0	15.0	<15.0	15.0				
Total TPH		<15.0	15.0	<15.0	15.0				

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

Jessica Kramer
Project Assistant

Final 1.000

Certificate of Analytical Results 593074

LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id:	**SW08**	Matrix:	Soil	Date Received:	07.20.18 10.35
Lab Sample Id:	593074-001	Date Collected:	07.18.18 11.20	Sample Depth:	3.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	07.26.18 12.00	Basis:	Wet Weight
Seq Number:	3057921				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**108**	4.95	mg/kg	07.26.18 12.49		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	07.20.18 16.00	Basis:	Wet Weight
Seq Number:	3057252				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	07.21.18 03.50	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	07.21.18 03.50	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	07.21.18 03.50	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	07.21.18 03.50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	07.21.18 03.50	
o-Terphenyl	84-15-1	103	%	70-135	07.21.18 03.50	

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LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id:	**SW08**	Matrix:	Soil	Date Received:	07.20.18 10.35
Lab Sample Id:	593074-001	Date Collected:	07.18.18 11.20	Sample Depth:	3.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	07.20.18 16.00	Basis:	Wet Weight
Seq Number:	3057273				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.22.18 21.50	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.22.18 21.50	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.22.18 21.50	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	07.22.18 21.50	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.22.18 21.50	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.22.18 21.50	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.22.18 21.50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	07.22.18 21.50	
1,4-Difluorobenzene	540-36-3	98	%	70-130	07.22.18 21.50	

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LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id:	**SW09**	Matrix:	Soil	Date Received:	07.20.18 10.35
Lab Sample Id:	593074-002	Date Collected:	07.18.18 11.40	Sample Depth:	3.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	07.26.18 12.00	Basis:	Wet Weight
Seq Number:	3057921				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**155**	4.95	mg/kg	07.26.18 13.05		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	07.20.18 16.00	Basis:	Wet Weight
Seq Number:	3057252				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	07.21.18 04.48	U	1
Diesel Range Organics (DRO)	C10C28DRO	**22.2**	14.9	mg/kg	07.21.18 04.48		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<14.9	14.9	mg/kg	07.21.18 04.48	U	1
Total TPH	PHC635	**22.2**	14.9	mg/kg	07.21.18 04.48		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	07.21.18 04.48	
o-Terphenyl	84-15-1	101	%	70-135	07.21.18 04.48	

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LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id:	**SW09**	Matrix:	Soil	Date Received:	07.20.18 10.35
Lab Sample Id:	593074-002	Date Collected:	07.18.18 11.40	Sample Depth:	3.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	07.20.18 16.00	Basis:	Wet Weight
Seq Number:	3057273				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	07.22.18 22.11	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	07.22.18 22.11	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	07.22.18 22.11	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	07.22.18 22.11	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	07.22.18 22.11	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	07.22.18 22.11	U	1
Total BTEX		<0.00199	0.00199	mg/kg	07.22.18 22.11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	108	%	70-130	07.22.18 22.11	
1,4-Difluorobenzene	540-36-3	98	%	70-130	07.22.18 22.11	

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LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id:	**SW10**	Matrix:	Soil	Date Received:	07.20.18 10.35
Lab Sample Id:	593074-003	Date Collected:	07.18.18 12.40	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	07.26.18 12.00	Basis:	Wet Weight
Seq Number:	3057921				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.95	4.95	mg/kg	07.26.18 13.10	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	07.20.18 16.00	Basis:	Wet Weight
Seq Number:	3057252				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	07.21.18 05.08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	07.21.18 05.08	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	07.21.18 05.08	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	07.21.18 05.08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	07.21.18 05.08	
o-Terphenyl	84-15-1	103	%	70-135	07.21.18 05.08	

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LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id:	**SW10**	Matrix:	Soil	Date Received:	07.20.18 10.35
Lab Sample Id:	593074-003	Date Collected:	07.18.18 12.40	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	07.23.18 17.00	Basis:	Wet Weight
Seq Number:	3057410				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	07.24.18 03.49	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	07.24.18 03.49	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	07.24.18 03.49	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	07.24.18 03.49	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	07.24.18 03.49	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	07.24.18 03.49	U	1
Total BTEX		<0.00199	0.00199	mg/kg	07.24.18 03.49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	82	%	70-130	07.24.18 03.49	
1,4-Difluorobenzene	540-36-3	107	%	70-130	07.24.18 03.49	

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LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id:	**SW11**	Matrix:	Soil	Date Received:	07.20.18 10.35
Lab Sample Id:	593074-004	Date Collected:	07.18.18 09.40	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	07.26.18 12.00	Basis:	Wet Weight
Seq Number:	3057921				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**250**	4.95	mg/kg	07.26.18 13.16		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	07.20.18 16.00	Basis:	Wet Weight
Seq Number:	3057252				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	07.21.18 05.28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	07.21.18 05.28	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	07.21.18 05.28	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	07.21.18 05.28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	07.21.18 05.28	
o-Terphenyl	84-15-1	103	%	70-135	07.21.18 05.28	

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LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id:	**SW11**	Matrix:	Soil	Date Received:	07.20.18 10.35
Lab Sample Id:	593074-004	Date Collected:	07.18.18 09.40	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	07.23.18 17.00	Basis:	Wet Weight
Seq Number:	3057410				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.24.18 02.05	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.24.18 02.05	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.24.18 02.05	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	07.24.18 02.05	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.24.18 02.05	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.24.18 02.05	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.24.18 02.05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	111	%	70-130	07.24.18 02.05	
4-Bromofluorobenzene	460-00-4	89	%	70-130	07.24.18 02.05	

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LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id:	**SW12**	Matrix:	Soil	Date Received:	07.20.18 10.35
Lab Sample Id:	593074-005	Date Collected:	07.18.18 11.00	Sample Depth:	4.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	07.26.18 12.00	Basis:	Wet Weight
Seq Number:	3057921				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**373**	5.00	mg/kg	07.26.18 13.21		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	07.20.18 16.00	Basis:	Wet Weight
Seq Number:	3057252				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	07.21.18 05.48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	07.21.18 05.48	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	07.21.18 05.48	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	07.21.18 05.48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	07.21.18 05.48	
o-Terphenyl	84-15-1	103	%	70-135	07.21.18 05.48	

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LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id:	**SW12**	Matrix:	Soil	Date Received:	07.20.18 10.35
Lab Sample Id:	593074-005	Date Collected:	07.18.18 11.00	Sample Depth:	4.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	07.23.18 17.00	Basis:	Wet Weight
Seq Number:	3057410				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	07.24.18 02.26	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	07.24.18 02.26	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	07.24.18 02.26	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	07.24.18 02.26	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	07.24.18 02.26	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	07.24.18 02.26	U	1
Total BTEX		<0.00201	0.00201	mg/kg	07.24.18 02.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	89	%	70-130	07.24.18 02.26	
1,4-Difluorobenzene	540-36-3	109	%	70-130	07.24.18 02.26	

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LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id:	**SW13**	Matrix:	Soil	Date Received:	07.20.18 10.35
Lab Sample Id:	593074-006	Date Collected:	07.18.18 13.15	Sample Depth:	3.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	07.26.18 12.00	Basis:	Wet Weight
Seq Number:	3057921				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**8.53**	4.97	mg/kg	07.26.18 13.37		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	07.20.18 16.00	Basis:	Wet Weight
Seq Number:	3057252				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	07.21.18 06.07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	07.21.18 06.07	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<14.9	14.9	mg/kg	07.21.18 06.07	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	07.21.18 06.07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	07.21.18 06.07	
o-Terphenyl	84-15-1	100	%	70-135	07.21.18 06.07	

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LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id:	**SW13**	Matrix:	Soil	Date Received:	07.20.18 10.35
Lab Sample Id:	593074-006	Date Collected:	07.18.18 13.15	Sample Depth:	3.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	07.23.18 17.00	Basis:	Wet Weight
Seq Number:	3057410				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.24.18 02.46	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.24.18 02.46	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.24.18 02.46	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	07.24.18 02.46	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.24.18 02.46	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.24.18 02.46	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.24.18 02.46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	88	%	70-130	07.24.18 02.46	
1,4-Difluorobenzene	540-36-3	114	%	70-130	07.24.18 02.46	

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PLU-400 H

Sample Id:	**SW14**	Matrix:	Soil	Date Received:	07.20.18 10.35
Lab Sample Id:	593074-007	Date Collected:	07.18.18 13.20	Sample Depth:	3 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	07.26.18 12.00	Basis:	Wet Weight
Seq Number:	3057921				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**91.1**	4.99	mg/kg	07.26.18 13.43		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	07.20.18 16.00	Basis:	Wet Weight
Seq Number:	3057252				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	07.21.18 06.27	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	07.21.18 06.27	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	07.21.18 06.27	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	07.21.18 06.27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	07.21.18 06.27	
o-Terphenyl	84-15-1	94	%	70-135	07.21.18 06.27	

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LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id:	**SW14**	Matrix:	Soil	Date Received:	07.20.18 10.35
Lab Sample Id:	593074-007	Date Collected:	07.18.18 13.20	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	07.23.18 17.00	Basis:	Wet Weight
Seq Number:	3057410				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	07.24.18 03.07	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	07.24.18 03.07	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	07.24.18 03.07	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	07.24.18 03.07	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	07.24.18 03.07	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	07.24.18 03.07	U	1
Total BTEX		<0.00198	0.00198	mg/kg	07.24.18 03.07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	84	%	70-130	07.24.18 03.07	
1,4-Difluorobenzene	540-36-3	111	%	70-130	07.24.18 03.07	

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PLU-400 H

Sample Id:	**SW15**	Matrix:	Soil	Date Received:	07.20.18 10.35
Lab Sample Id:	593074-008	Date Collected:	07.18.18 13.25	Sample Depth:	3 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	07.26.18 12.00	Basis:	Wet Weight
Seq Number:	3057921				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**6.79**	4.98	mg/kg	07.26.18 13.48		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	07.20.18 16.00	Basis:	Wet Weight
Seq Number:	3057252				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	07.21.18 06.47	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	07.21.18 06.47	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<14.9	14.9	mg/kg	07.21.18 06.47	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	07.21.18 06.47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	07.21.18 06.47	
o-Terphenyl	84-15-1	105	%	70-135	07.21.18 06.47	

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LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id:	**SW15**	Matrix:	Soil	Date Received:	07.20.18 10.35
Lab Sample Id:	593074-008	Date Collected:	07.18.18 13.25	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	07.23.18 17.00	Basis:	Wet Weight
Seq Number:	3057410				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	07.24.18 03.28	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	07.24.18 03.28	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	07.24.18 03.28	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	07.24.18 03.28	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	07.24.18 03.28	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	07.24.18 03.28	U	1
Total BTEX		<0.00202	0.00202	mg/kg	07.24.18 03.28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	106	%	70-130	07.24.18 03.28	
4-Bromofluorobenzene	460-00-4	81	%	70-130	07.24.18 03.28	

Certificate of Analytical Results 593074

LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id:	**FS02**	Matrix:	Soil	Date Received:	07.20.18 10.35
Lab Sample Id:	593074-009	Date Collected:	07.18.18 11.10	Sample Depth:	5.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	07.26.18 12.00	Basis:	Wet Weight
Seq Number:	3057921				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**416**	4.95	mg/kg	07.26.18 13.53		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	07.20.18 16.00	Basis:	Wet Weight
Seq Number:	3057252				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	07.21.18 07.07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	07.21.18 07.07	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	07.21.18 07.07	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	07.21.18 07.07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	07.21.18 07.07	
o-Terphenyl	84-15-1	102	%	70-135	07.21.18 07.07	

Certificate of Analytical Results 593074

LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id:	**FS02**	Matrix:	Soil	Date Received:	07.20.18 10.35
Lab Sample Id:	593074-009	Date Collected:	07.18.18 11.10	Sample Depth:	5.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	07.23.18 17.00	Basis:	Wet Weight
Seq Number:	3057410				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	07.24.18 01.45	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	07.24.18 01.45	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	07.24.18 01.45	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	07.24.18 01.45	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	07.24.18 01.45	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	07.24.18 01.45	U	1
Total BTEX		<0.00201	0.00201	mg/kg	07.24.18 01.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	86	%	70-130	07.24.18 01.45	
1,4-Difluorobenzene	540-36-3	110	%	70-130	07.24.18 01.45	

Certificate of Analytical Results 593074

LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id:	**FS03**	Matrix:	Soil	Date Received:	07.20.18 10.35
Lab Sample Id:	593074-010	Date Collected:	07.18.18 11.30	Sample Depth:	8 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	07.26.18 12.00	Basis:	Wet Weight
Seq Number:	3057921				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**9.99**	4.97	mg/kg	07.26.18 13.59		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	07.20.18 16.00	Basis:	Wet Weight
Seq Number:	3057252				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	07.21.18 07.26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	07.21.18 07.26	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	07.21.18 07.26	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	07.21.18 07.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	07.21.18 07.26	
o-Terphenyl	84-15-1	103	%	70-135	07.21.18 07.26	

Certificate of Analytical Results 593074

LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id:	**FS03**	Matrix:	Soil	Date Received:	07.20.18 10.35
Lab Sample Id:	593074-010	Date Collected:	07.18.18 11.30	Sample Depth:	8 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	07.23.18 17.00	Basis:	Wet Weight
Seq Number:	3057410				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	07.24.18 04.10	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	07.24.18 04.10	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	07.24.18 04.10	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	07.24.18 04.10	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	07.24.18 04.10	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	07.24.18 04.10	U	1
Total BTEX		<0.00201	0.00201	mg/kg	07.24.18 04.10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	86	%	70-130	07.24.18 04.10	
1,4-Difluorobenzene	540-36-3	110	%	70-130	07.24.18 04.10	

Certificate of Analytical Results 593074

LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id:	**FS04**	Matrix:	Soil	Date Received:	07.20.18 10.35
Lab Sample Id:	593074-011	Date Collected:	07.18.18 11.45	Sample Depth:	7 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	07.26.18 12.00	Basis:	Wet Weight
Seq Number:	3057921				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**78.9**	5.00	mg/kg	07.26.18 14.04		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	07.20.18 16.00	Basis:	Wet Weight
Seq Number:	3057252				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	07.21.18 08.26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	07.21.18 08.26	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	07.21.18 08.26	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	07.21.18 08.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	07.21.18 08.26	
o-Terphenyl	84-15-1	100	%	70-135	07.21.18 08.26	

Certificate of Analytical Results 593074

LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id:	**FS04**	Matrix:	Soil	Date Received:	07.20.18 10.35
Lab Sample Id:	593074-011	Date Collected:	07.18.18 11.45	Sample Depth:	7 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	07.23.18 17.00	Basis:	Wet Weight
Seq Number:	3057410				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.24.18 04.31	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.24.18 04.31	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.24.18 04.31	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	07.24.18 04.31	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.24.18 04.31	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.24.18 04.31	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.24.18 04.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	109	%	70-130	07.24.18 04.31	
4-Bromofluorobenzene	460-00-4	85	%	70-130	07.24.18 04.31	

Certificate of Analytical Results 593074

LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id:	**FS05**	Matrix:	Soil	Date Received:	07.20.18 10.35
Lab Sample Id:	593074-012	Date Collected:	07.18.18 10.15	Sample Depth:	7.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	07.26.18 12.00	Basis:	Wet Weight
Seq Number:	3057921				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**161**	4.97	mg/kg	07.26.18 14.20		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	07.20.18 16.00	Basis:	Wet Weight
Seq Number:	3057252				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	07.21.18 08.46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	07.21.18 08.46	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	07.21.18 08.46	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	07.21.18 08.46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	07.21.18 08.46	
o-Terphenyl	84-15-1	104	%	70-135	07.21.18 08.46	

Certificate of Analytical Results 593074

LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id:	**FS05**	Matrix:	Soil	Date Received:	07.20.18 10.35
Lab Sample Id:	593074-012	Date Collected:	07.18.18 10.15	Sample Depth:	7.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	07.23.18 17.00	Basis:	Wet Weight
Seq Number:	3057410				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.24.18 06.15	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.24.18 06.15	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.24.18 06.15	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	07.24.18 06.15	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.24.18 06.15	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.24.18 06.15	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.24.18 06.15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	85	%	70-130	07.24.18 06.15	
1,4-Difluorobenzene	540-36-3	109	%	70-130	07.24.18 06.15	

Certificate of Analytical Results 593074

LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id:	**FS06**	Matrix:	Soil	Date Received:	07.20.18 10.35
Lab Sample Id:	593074-013	Date Collected:	07.18.18 13.35	Sample Depth:	5.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	07.26.18 12.00	Basis:	Wet Weight
Seq Number:	3057921				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**52.4**	4.99	mg/kg	07.26.18 14.26		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	07.20.18 16.00	Basis:	Wet Weight
Seq Number:	3057252				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	07.21.18 09.05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	07.21.18 09.05	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	07.21.18 09.05	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	07.21.18 09.05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	07.21.18 09.05	
o-Terphenyl	84-15-1	98	%	70-135	07.21.18 09.05	

Certificate of Analytical Results 593074

LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id:	**FS06**	Matrix:	Soil	Date Received:	07.20.18 10.35
Lab Sample Id:	593074-013	Date Collected:	07.18.18 13.35	Sample Depth:	5.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	07.23.18 17.00	Basis:	Wet Weight
Seq Number:	3057410				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	07.24.18 06.36	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	07.24.18 06.36	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	07.24.18 06.36	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	07.24.18 06.36	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	07.24.18 06.36	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	07.24.18 06.36	U	1
Total BTEX		<0.00201	0.00201	mg/kg	07.24.18 06.36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	107	%	70-130	07.24.18 06.36	
4-Bromofluorobenzene	460-00-4	86	%	70-130	07.24.18 06.36	

Certificate of Analytical Results 593074

LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id:	**FS07**	Matrix:	Soil	Date Received:	07.20.18 10.35
Lab Sample Id:	593074-014	Date Collected:	07.18.18 11.50	Sample Depth:	8.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	07.26.18 12.00	Basis:	Wet Weight
Seq Number:	3057921				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**6.79**	4.96	mg/kg	07.26.18 14.42		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	07.20.18 16.00	Basis:	Wet Weight
Seq Number:	3057252				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	07.21.18 09.25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	07.21.18 09.25	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	07.21.18 09.25	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	07.21.18 09.25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	07.21.18 09.25	
o-Terphenyl	84-15-1	106	%	70-135	07.21.18 09.25	

Certificate of Analytical Results 593074

LT Environmental, Inc., Arvada, CO

PLU-400 H

Sample Id:	**FS07**	Matrix:	Soil	Date Received:	07.20.18 10.35
Lab Sample Id:	593074-014	Date Collected:	07.18.18 11.50	Sample Depth:	8.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	07.23.18 17.00	Basis:	Wet Weight
Seq Number:	3057410				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	07.24.18 06.57	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	07.24.18 06.57	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	07.24.18 06.57	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	07.24.18 06.57	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	07.24.18 06.57	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	07.24.18 06.57	U	1
Total BTEX		<0.00199	0.00199	mg/kg	07.24.18 06.57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	85	%	70-130	07.24.18 06.57	
1,4-Difluorobenzene	540-36-3	107	%	70-130	07.24.18 06.57	

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 593074

LT Environmental, Inc.

PLU-400 H

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3057921 — Matrix: Solid — Date Prep: 07.26.18
MB Sample Id: 7659195-1-BLK — LCS Sample Id: 7659195-1-BKS — LCSD Sample Id: 7659195-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<4.99	250	251	100	232	93	90-110	8	20	mg/kg	07.26.18 12:38	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3057921 — Matrix: Soil — Date Prep: 07.26.18
Parent Sample Id: 593074-001 — MS Sample Id: 593074-001 S — MSD Sample Id: 593074-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	108	248	361	102	360	102	90-110	0	20	mg/kg	07.26.18 12:54	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3057921 — Matrix: Soil — Date Prep: 07.26.18
Parent Sample Id: 593074-011 — MS Sample Id: 593074-011 S — MSD Sample Id: 593074-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	78.9	250	335	102	334	102	90-110	0	20	mg/kg	07.26.18 14:10	

Analytical Method: TPH by SW8015 Mod — Prep Method: TX1005P
Seq Number: 3057252 — Matrix: Solid — Date Prep: 07.20.18
MB Sample Id: 7658837-1-BLK — LCS Sample Id: 7658837-1-BKS — LCSD Sample Id: 7658837-1-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	967	97	987	99	70-135	2	20	mg/kg	07.21.18 03:10	
Diesel Range Organics (DRO)	<15.0	1000	964	96	994	99	70-135	3	20	mg/kg	07.21.18 03:10	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	101		124		124		70-135	%	07.21.18 03:10
o-Terphenyl	106		112		120		70-135	%	07.21.18 03:10

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 593074

LT Environmental, Inc.

PLU-400 H

Analytical Method: TPH by SW8015 Mod | Prep Method: TX1005P
Seq Number: 3057252 | Matrix: Soil | Date Prep: 07.20.18
Parent Sample Id: 593074-001 | MS Sample Id: 593074-001 S | MSD Sample Id: 593074-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	999	994	99	989	99	70-135	1	20	mg/kg	07.21.18 04:09	
Diesel Range Organics (DRO)	<15.0	999	1010	101	1000	100	70-135	1	20	mg/kg	07.21.18 04:09	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	122		121		70-135	%	07.21.18 04:09
o-Terphenyl	114		113		70-135	%	07.21.18 04:09

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3057273 | Matrix: Solid | Date Prep: 07.20.18
MB Sample Id: 7658865-1-BLK | LCS Sample Id: 7658865-1-BKS | LCSD Sample Id: 7658865-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.0968	96	0.0981	98	70-130	1	35	mg/kg	07.22.18 12:49	
Toluene	<0.00202	0.101	0.105	104	0.105	105	70-130	0	35	mg/kg	07.22.18 12:49	
Ethylbenzene	<0.00202	0.101	0.101	100	0.101	101	70-130	0	35	mg/kg	07.22.18 12:49	
m,p-Xylenes	<0.00403	0.202	0.201	100	0.200	100	70-130	0	35	mg/kg	07.22.18 12:49	
o-Xylene	<0.00202	0.101	0.0990	98	0.0970	97	70-130	2	35	mg/kg	07.22.18 12:49	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	98		95		99		70-130	%	07.22.18 12:49
4-Bromofluorobenzene	99		98		100		70-130	%	07.22.18 12:49

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3057410 | Matrix: Solid | Date Prep: 07.23.18
MB Sample Id: 7658923-1-BLK | LCS Sample Id: 7658923-1-BKS | LCSD Sample Id: 7658923-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.106	105	0.100	100	70-130	6	35	mg/kg	07.23.18 23:40	
Toluene	<0.00202	0.101	0.103	102	0.0959	96	70-130	7	35	mg/kg	07.23.18 23:40	
Ethylbenzene	<0.00202	0.101	0.111	110	0.105	105	70-130	6	35	mg/kg	07.23.18 23:40	
m,p-Xylenes	<0.00403	0.202	0.221	109	0.209	104	70-130	6	35	mg/kg	07.23.18 23:40	
o-Xylene	<0.00202	0.101	0.108	107	0.102	102	70-130	6	35	mg/kg	07.23.18 23:40	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		109		109		70-130	%	07.23.18 23:40
4-Bromofluorobenzene	86		81		82		70-130	%	07.23.18 23:40

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

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

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

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

Final 1.000

QC Summary 593074

LT Environmental, Inc.

PLU-400 H

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

Seq Number: 3057273 Matrix: Soil Date Prep: 07.20.18

Parent Sample Id: 593036-002 MS Sample Id: 593036-002 S MSD Sample Id: 593036-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.0302	30	0.0336	34	70-130	11	35	mg/kg	07.22.18 13:30	X
Toluene	<0.00199	0.0996	0.0318	32	0.0303	30	70-130	5	35	mg/kg	07.22.18 13:30	X
Ethylbenzene	<0.00199	0.0996	0.0302	30	0.0265	27	70-130	13	35	mg/kg	07.22.18 13:30	X
m,p-Xylenes	<0.00398	0.199	0.0602	30	0.0513	26	70-130	16	35	mg/kg	07.22.18 13:30	X
o-Xylene	<0.00199	0.0996	0.0329	33	0.0285	29	70-130	14	35	mg/kg	07.22.18 13:30	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		98		70-130	%	07.22.18 13:30
4-Bromofluorobenzene	106		106		70-130	%	07.22.18 13:30

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

Seq Number: 3057410 Matrix: Soil Date Prep: 07.23.18

Parent Sample Id: 593074-009 MS Sample Id: 593074-009 S MSD Sample Id: 593074-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0994	0.0821	83	0.0861	86	70-130	5	35	mg/kg	07.24.18 00:22	
Toluene	<0.00199	0.0994	0.0790	79	0.0820	82	70-130	4	35	mg/kg	07.24.18 00:22	
Ethylbenzene	<0.00199	0.0994	0.0855	86	0.0896	90	70-130	5	35	mg/kg	07.24.18 00:22	
m,p-Xylenes	<0.00398	0.199	0.169	85	0.177	89	70-130	5	35	mg/kg	07.24.18 00:22	
o-Xylene	<0.00199	0.0994	0.0833	84	0.0871	87	70-130	4	35	mg/kg	07.24.18 00:22	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	110		108		70-130	%	07.24.18 00:22
4-Bromofluorobenzene	83		85		70-130	%	07.24.18 00:22

MS/MSD Percent Recovery [D] = 100*(C-A) / B LCS = Laboratory Control Sample MS = Matrix Spike

Relative Percent Difference RPD = 200* | (C-E) / (C+E) | A = Parent Result B = Spike Added

LCS/LCSD Recovery [D] = 100 * (C) / [B] C = MS/LCS Result D = MSD/LCSD % Rec

Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample) E = MSD/LCSD Result

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CHAIN OF CUSTODY

Page 1 Of 2

Xenco Quote #:
Xenco Job #: 593074

Client / Reporting Information

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

Project Information

Project Name/Number: PLU-400H
Project Location: Carlsbad, NM
Invoice To: XTO Energy - Kyle Littrell
PO Number: 2RP-2142

Matrix Codes

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

No.	Field ID / Point of Collection	Sample Depth	Collection Date	Collection Time	Matrix	# of bottles	HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	BTEX EPA 8020	TPH EPA 8015	Chloride 300.1	Field Comments
1	SW08	3.5'	7/18/18	1120	S	1								X	X	X	X	
2	SW09	3.5'		1140										X	X	X	X	
3	SW10	4'		1240										X	X	X	X	
4	SW11	4'		0940										X	X	X	X	
5	SW12	4.5'		1100										X	X	X	X	
6	SW13	3.5'		1315										X	X	X	X	
7	SW14	3'		1320										X	X	X	X	
8	SW15	3'		1325										X	X	X	X	
9	FS02	5.5'		1110										X	X	X	X	
10	FS03	8'		1130										X	X	X	X	

Turnaround Time (Business days)

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

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

Data Deliverable Information

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

Notes:

FED-EX / UPS: Tracking # 7723508405u2

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

Relinquished by	Date Time	Received By	Relinquished By	Date Time	Received By
1 Relinquished by Sampler: B. T. Belill	7/18/18 16:39	1 [signature]	2 [signature]	7/19/18 15:30	2 [signature] 7/20/18 1035
3 Relinquished by:		3 Received By:	4 Relinquished By:		4 Received By:
5 Relinquished by:		5 Received By:	Custody Seal #	Preserved where applicable	On Ice: X; Cooler Temp.: 0.3; Thermo. Corr. Factor: R8 0.0

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the Client if such loses are due to circumstances beyond the control of Xenco. A minimum charge of $75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xenco but not analyzed will be invoiced at $5 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract.

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CHAIN OF CUSTODY

Page 2 Of 2

Xenco Quote #

Xenco Job #

Client / Reporting Information

Company Name / Branch: LT Environmental, Inc. - Permian Office

Company Address: 3300 North "A" Street, Building 1, Unit #103, Midland, TX 79705

Email: Abaker@ltenv.com

Phone No: (432) 704-5178

Project Contact: Adrian Baker

Samplers's Name: BenBelill

Project Information

Project Name/Number: PLU 4001H

Project Location: Carlsbad, NM

Invoice To: XTO Energy - Kyle Littrell

PO Number: 2RP-2142

Analytical Information

BTEX EPA 8021

TPH EPA 8015

Chloride 300.1

Matrix Codes

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

No.	Field ID / Point of Collection	Collection: Sample Depth	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	Field Comments
1	FS04	7'	7/18/18	1145	S	1								X	
2	FS05	7.5'	↓	1015	↓	↓								X	
3	FS06	5.5'		1335										X	
4	FS07	8.5'		1150										X	
5															
6															
7															
8															
9															
10															

Turnaround Time (Business days)

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

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

Data Deliverable Information

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

Notes:

FED-EX / UPS: Tracking # 777528090542

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

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	BT Bell	7/18/18 16:39	1	2	7/19/18 15:30	2
3	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
5	Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable	On Ice: X

Cooler Temp. 0.3 NB

Thermo. Corr. Factor 0.0

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2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

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Phoenix, Arizona (480-355-0900)

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CHAIN OF CUSTODY

Page 1 of 2

Xenco Quote #

Xenco Job # 593074

Client / Reporting Information

Company Name / Branch: LT Environmental, Inc. - Permian Office

Company Address: 3300 North "A" Street, Building 1, Unit #103, Midland, TX 79705

Email: Abaker@ltenv.com

Phone No: (432) 704-5178

Project Contact: Adrian Baker

Samplers's Name: Ben Belill

Project Information

Project Name/Number: PLU-400H

Project Location: Carlsbad, NM

Invoice To: XTO Energy - Kyle Littrell

PO Number: 2RP-2142

Analytical Information

BTEX EPA 8020

TPH EPA 8015

Chloride 3221

Matrix Codes

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

No.	Field ID / Point of Collection	Collection: Sample Depth	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	Field Comments
1	SW08	3.5'	7/18/18	1120	S	1								X	
2	SW09	3.5'		1140										X	
3	SW10	4'		1240										X	
4	SW11	4'		0940										X	
5	SW12	4.5'		1100										X	
6	SW13	3.5'		1315										X	
7	SW14	3'		1320										X	
8	SW15	3'		1325										X	
9	FS02	3.5'		1110										X	
10	FS03	8'		1130										X	

Turnaround Time (Business days)

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

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

Data Deliverable Information

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

Notes:

FED-EX / UPS: Tracking # 772508446552

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

		Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	Relinquished by Sampler: Ben Belill	7/18/18 16:39	1	2	7/19/18 15:30	2 7/20/18 1035
3	Relinquished by:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable	On Ice: X Cooler Temp.: 0.5 Thermo. Corr. Factor: 0.0

Notice: Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the Client if such loses are due to circumstances beyond the control of Xenco. A minimum charge of $75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xenco but not analyzed will be invoiced at $5 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract.

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Phoenix, Arizona (480-355-0900)
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CHAIN OF CUSTODY

Page 2 Of 2

Xenco Quote #

Xenco Job # 593074

Client / Reporting Information

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

Project Information

Project Name/Number: PLU 400H
Project Location: Carlsbad, NM
Invoice To: XTO Energy - Kyle Littrell
PO Number: 2RP-2142

Analytical Information

BTEX EPA 8021
TPH EPA 8015
Chloride 300.1

Matrix Codes

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

No.	Field ID / Point of Collection	Collection: Sample Depth	Date	Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	Field Comments
1	FS04	7'	7/18/18	1145	S	1								X	
2	FS05	7.5'	↓	1015	↓	↓								X	
3	FS06	5.5'		1335										X	
4	FS07	8.5'	↓	1150	↓	↓								X	
5															
6															
7															
8															
9															
10															

Turnaround Time (Business days)

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

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

Data Deliverable Information

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

Notes:

FED-EX / UPS: Tracking # 777528905542

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

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	BJ Belill	7/18/18 16:39	1			
2				2	7/19/18 15:30	2
3	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
			3	4		4
5	Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable	On Ice: X
			5			Cooler Temp. 0.3

Thermo. Corr. Factor 0.0

Notice: Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the Client if such loses are due to circumstances beyond the control of Xenco. A minimum charge of $75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xenco but not analyzed will be invoiced at $5 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract.

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 07/20/2018 10:35:00 AM

Work Order #: 593074

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: 07/20/2018
Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 07/20/2018
Jessica Kramer

ATTACHMENT 3: PHOTOGRAPHIC LOG

West facing view of the release area on the well pad.

Project: 012918107	XTO Energy, Inc. Poker Lake Unit 400H	LTE Advancing Opportunity
April 19, 2018	Photographic Log	

West facing view of the release area in the pasture.

Project: 012918107	XTO Energy, Inc. Poker Lake Unit 400H	LTE Advancing Opportunity
April 19, 2018	Photographic Log	

Southeast facing view of the open excavation.

Project: 012918107	XTO Energy, Inc. Poker Lake Unit 400H	LTE Advancing Opportunity
July 18, 2018	Photographic Log	

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 190384

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 190384
	Action Type: [IM-SD] Incident File Support Doc (ENV) (IM-BNF)

CONDITIONS

Created By	Condition	Condition Date
bhall	None	2/24/2023