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

February 21, 2020

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

RE: Closure Request
Corral Canyon Fed #4H
Remediation Permit Number 2RP-3713
Eddy County, New Mexico

Dear Mr. Billings:

LT Environmental, Inc. (LTE), on behalf of XTO Energy, Inc. (XTO), presents the following Closure Request report detailing site assessment, soil sampling, and excavation activities at the Corral Canyon Fed #4H (Site) in Unit P, Section 5, Township 25 South, Range 29 East, in Eddy County, New Mexico (Figure 1). The purpose of the site assessment, soil sampling, and excavation activities was to address impacts to soil after a natural gas fire and release of crude oil and produced water at the Site.

The release is included in the Compliance Agreement for Remediation for Historical Releases (Compliance Agreement) between XTO and the New Mexico Oil Conservation Division (NMOCD) effective November 13, 2018. The purpose of the Compliance Agreement is to ensure reportable releases that occurred prior to August 14, 2018, where XTO is responsible for the corrective action, comply with Title 19, Chapter 15, Part 29 (19.15.29) of the New Mexico Administrative Code (NMAC) as amended on August 14, 2018. The release is categorized as a Tier IV site in the Compliance Agreement, meaning the release occurred prior to August 14, 2018, the effective date of 19.15.29 NMAC; however, remediation was ongoing. Based on the site assessment activities and results of the soil sampling events, XTO is requesting no further action for this release.

RELEASE BACKGROUND

On May 21, 2016, a connection on the wellhead failed, causing natural gas, crude oil, and produced water to release. Approximately 1,552 mcf of natural gas were released; a spark caused the natural gas to ignite. Due to the fire, the volume of crude oil and produced water released could not be gauged. The release affected the well pad area surrounding the wellhead. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form C-141 on June 2, 2016, and was assigned Remediation Permit (RP) Number 2RP-3713 (Attachment 1).

SITE CHARACTERIZATION

LTE characterized the Site according to Table 1, *Closure Criteria for Soils Impacted by a Release*, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Depth to groundwater at the Site is estimated to be between 51 and 100 feet below ground surface (bgs) based on the nearest water well data. The closest permitted water well with depth to water data is New Mexico Office of the State Engineer (NM OSE) well #RA7162, located approximately 6,500 feet southeast of the Site. The water well has a depth to groundwater of approximately 40 feet bgs and a total depth of 55 feet bgs. However, as part of remediation efforts at a nearby site, Corral Canyon #1H flow line (2RP-5201), LTE installed six monitoring wells (MW01 through MW06) to assess depth to groundwater. The groundwater monitoring wells are located approximately 779 feet southeast of the Site. Static water level measured in monitoring wells MW01 through MW06 on September 13, 2019, ranged from 57.26 feet bgs in monitoring well MW04 to 62.29 feet bgs in monitoring well MW02 with an average depth to water of 58.80 feet bgs. The depth to water measurements are provided in the table below and the location of the monitoring wells is identified on Figure 1.

MONITORING WELL INFORMATION

Sample Name	Total Depth (feet bgs)	Depth to Water (feet bgs)	Sample Date
MW01	68.44	58.17	09/13/2019
MW02	68.10	62.29	09/13/2019
MW03	75.58	58.30	09/13/2019
MW04	69.08	57.26	09/13/2019
MW05	64.80	58.54	09/13/2019
MW06	64.11	58.25	09/13/2019

Notes:
bgs – below ground surface

Based on depth to water measured recently in the nearby monitoring wells, depth to water at the Site is estimated to be between 51 and 100 feet bgs. The closest continuously flowing water or significant watercourse to the Site is an unnamed dry wash, located approximately 1,650 feet southeast of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is located in a medium-potential karst area.

CLOSURE CRITERIA

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

- Benzene: 10 milligrams per kilogram (mg/kg);
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg;
- TPH-gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg;
- Total petroleum hydrocarbons (TPH): 2,500 mg/kg; and
- Chloride: 10,000 mg/kg.

SITE ASSESSMENT, EXCAVATION, AND DELINEATION SOIL SAMPLING ACTIVITIES

During June 2016, excavation of impacted soil was directed by Environmental Plus, Inc. (EPI), an environmental consulting firm that is no longer in operation. The available documentation from June 2016 is provided in Attachment 2. Documentation includes site photographs, a release map, correspondence with NMOCD, and soil sample laboratory analytical results. Based on the laboratory analytical results for soil samples collected by EPI in June 2016, the depth of soil impacts did not extend past 1 foot bgs. EPI indicated that the release area surrounding the wellhead was excavated to a depth of 1 foot bgs, and the remaining release area was scraped to a depth of 0.5 feet bgs. Due to the absence of confirmation soil sampling records from the June 2016 excavation activities, LTE personnel conducted additional site assessment and soil sampling activities to confirm that the Closure Criteria requirements were met.

On October 29, 2019, LTE personnel was at the Site to complete site assessment activities. Potholes were advanced via backhoe within and around the documented release area to assess for the presence or absence of impacted soil. Potholes PH01 through PH09 were advanced to a depth of 2 feet bgs. Two delineation soil samples were collected from each pothole from depths from 0.5 feet and 2 feet bgs. Soil from the potholes was field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photoionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. Field screening results and observations for the potholes were logged on lithologic/soil sampling logs, which are included in Attachment 3. The delineation soil sample locations are depicted on Figure 2.

The delineation soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were shipped at or below 4 degrees Celsius (°C) under strict chain-of-custody (COC) procedures to Xenco Laboratories (Xenco) in Carlsbad, New Mexico, for analysis of BTEX following United States Environmental Protection Agency (USEPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following USEPA Method 8015M/D; and chloride following USEPA Method 300.0. Based on laboratory analytical results for the delineation soil samples, excavation of impacted soil was required in the area around pothole PH02.

On November 12, 2019, LTE personnel returned to the Site to oversee excavation of impacted soil as indicated by field screening activities and laboratory analytical results for the delineation

soil samples. To direct excavation activities, LTE screened soil for volatile aromatic hydrocarbons and chloride utilizing a PID and Hach® chloride QuanTab® test strips, respectively. Impacted soil was excavated to a depth of 2 feet bgs in the area around pothole PH02. Following removal of impacted soil, LTE collected 5-point composite soil samples every 200 square feet from the sidewalls and floors of the excavations. The 5-point composite samples were collected by depositing five aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil sample SW01 was collected from the sidewalls of the excavation from a depth of 0.5 feet to 2 feet bgs. Composite soil sample FS01 was collected from the floor of the excavation from a depth of 2 feet bgs. The excavation extent and excavation soil sample locations are depicted on Figure 3. The excavation soil samples were collected, handled, and analyzed as described above and submitted to Xenco. Photographic documentation was conducted during the Site visits. Photographs are included in Attachment 4.

The excavation measured approximately 150 square feet in area and was completed to a depth of 2 feet bgs. A total of approximately 15 cubic yards of impacted soil were removed from the excavation. The impacted soil was transported and properly disposed of at the R360 Landfill located in Hobbs, New Mexico.

ANALYTICAL RESULTS

Laboratory analytical results for the delineation soil samples, collected from potholes PH01 and PH03 through PH09 indicated that BTEX, GRO/DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Laboratory analytical results for delineation soil sample PH02, collected at a depth of 0.5 feet bgs, indicated that GRO/DRO and TPH concentrations exceeded the Closure Criteria. Subsequent delineation soil sample PH02A, collected at a depth of 2 feet bgs, was compliant with the Closure Criteria. Impacted soil was excavated from the area around pothole PH02. Laboratory analytical results for excavation soil samples SW01 and FS01 indicated that BTEX, GRO/DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Attachment 5.

CLOSURE REQUEST

Impacted soil was excavated from the Site during June 2016 to address the May 21, 2016, release of crude oil and produced water at the Site. Due to the absence of soil sample analytical results from the June 2016 excavation, site assessment activities were completed in October 2019 to confirm the removal of impacted soil. Nine potholes (PH01 through PH09) were advanced within the release extent to assess for the presence or absence of impacted soil. Based on the soil sample laboratory analytical results from the site assessment activities, impacted soil was excavated from the area around pothole PH02. Laboratory analytical results for the excavation soil samples indicated that BTEX, GRO/DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Laboratory analytical results for the delineation soil samples collected

from potholes PH01 and PH03 through PH09, indicated that BTEX, GRO/DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Based on the excavation and delineation soil sample analytical results, no further remediation was required.

Initial response efforts, natural attenuation, and excavation of impacted soil have mitigated impacts at this Site. XTO requests no further action for RP Number 2RP-3713. XTO backfilled the excavation with material purchased locally and recontoured the Site to match pre-existing site conditions. An updated NMOCD Form C-141 is included in Attachment 1.

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

Sincerely,

LT ENVIRONMENTAL, INC.

Aimee Cole
Project Environmental Scientist

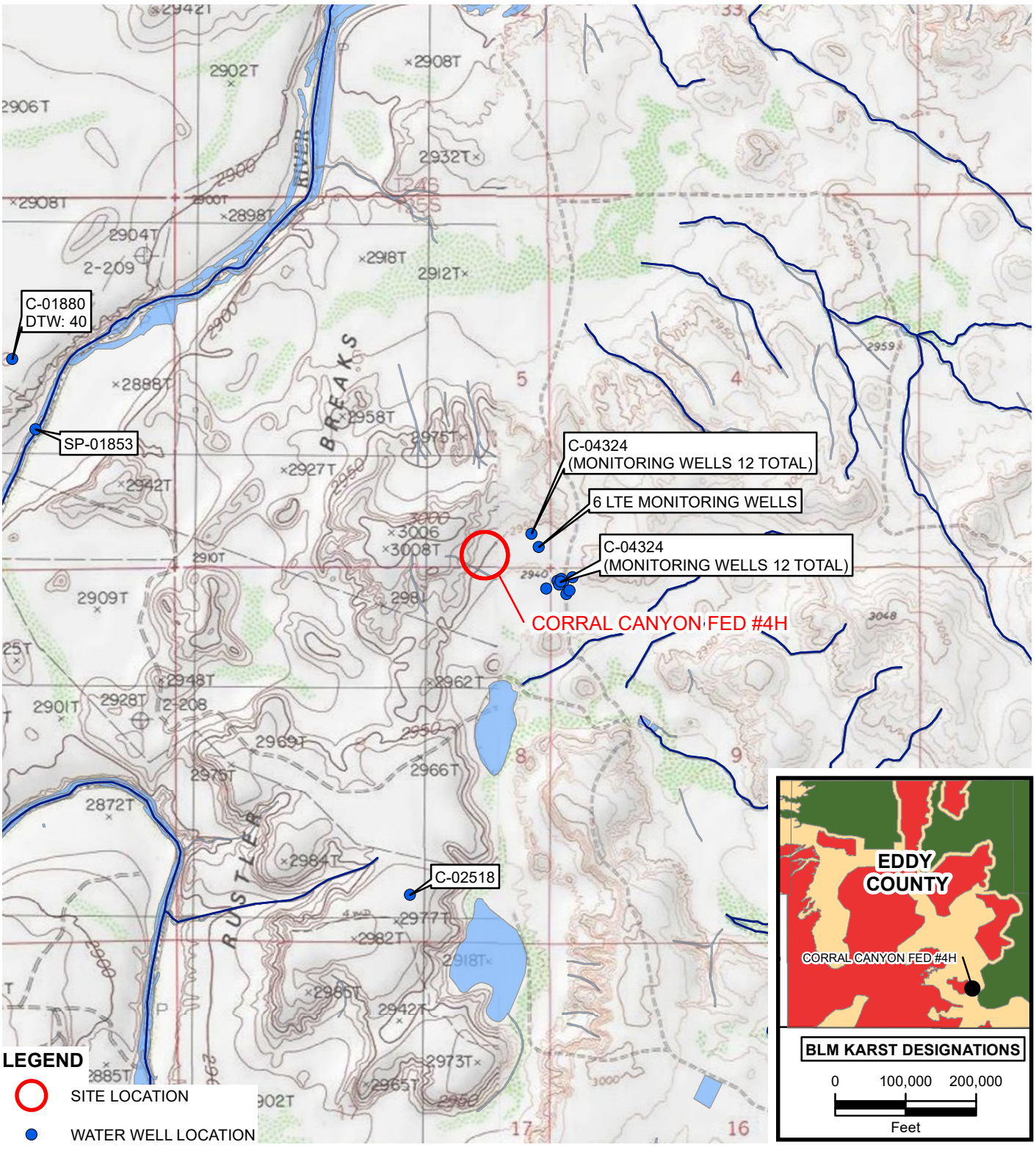
Ashley L. Ager, P.G.
Senior Geologist

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

Attachments:

Figure 1	Site Location Map
Figure 2	Excavation Soil Sample Locations
Figure 3	Delineation Soil Sample Locations
Table 1	Soil Analytical Results
Attachment 1	Initial/Final NMOCD Form C-141 (2RP-3713)
Attachment 2	Historical Documentation
Attachment 3	Lithologic / Soil Sample Logs
Attachment 4	Photographic Log
Attachment 5	Laboratory Analytical Reports

FIGURES



NOTE: REMEDIATION PERMIT NUMBER 2RP-3713
DTW: DEPTH TO WATER IN FEET

FIGURE 1
SITE LOCATION MAP
CORRAL CANYON FED #4H
UNIT P SEC 5 T25S R29E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

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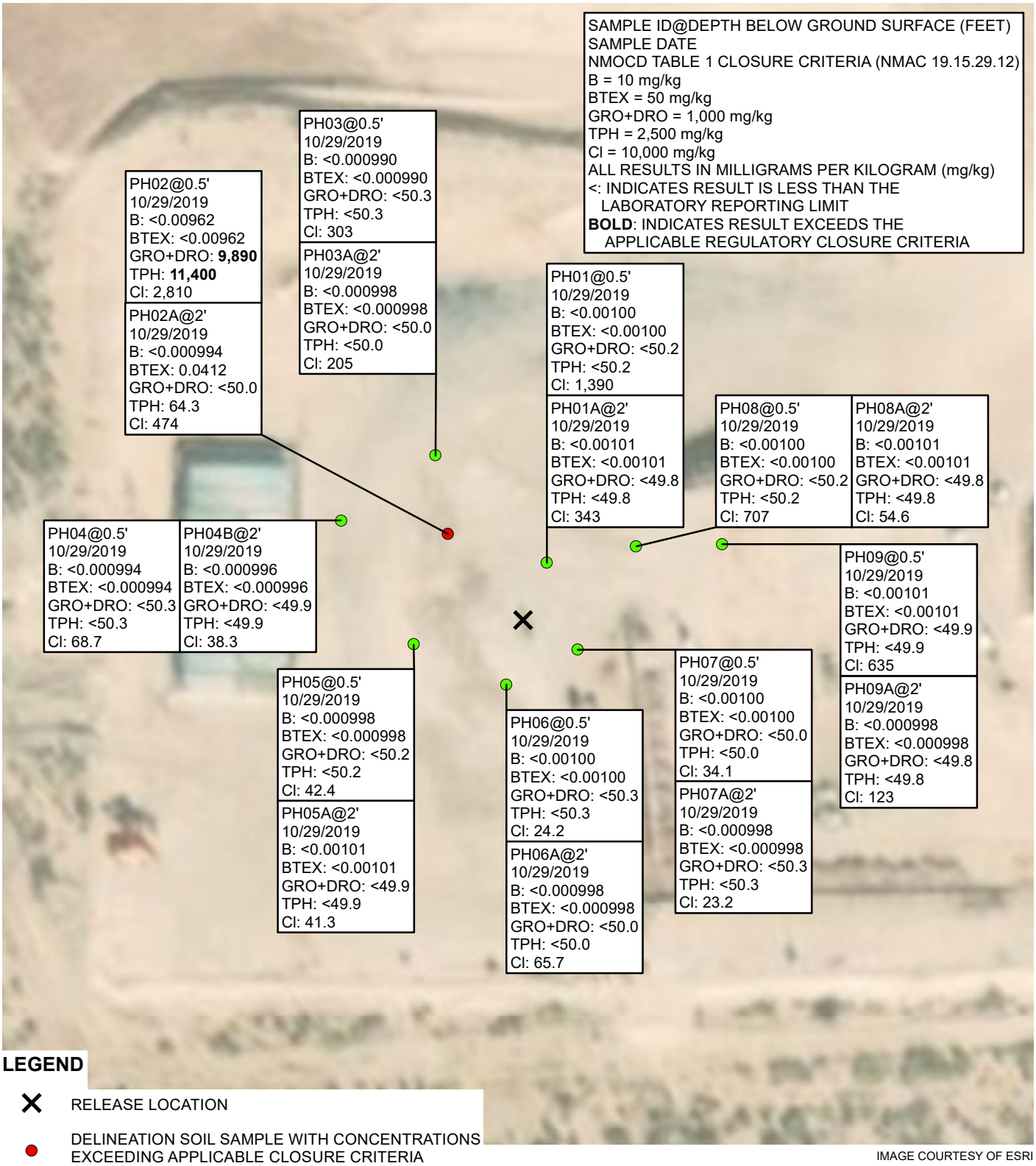


B: BENZENE
BTEX: TOTAL BENZENE, TOLUENE, ETHYLBENZENE, AND TOTAL XYLENES
GRO: GASOLINE RANGE ORGANICS
DRO: DIESEL RANGE ORGANICS
TPH: TOTAL PETROLEUM HYDROCARBONS
Cl: CHLORIDE
NMAC: NEW MEXICO ADMINISTRATIVE CODE
NMOCD: NEW MEXICO OIL CONSERVATION DIVISION
NOTE: REMEDIATION PERMIT NUMBER 2RP-3713

FIGURE 2
DELINEATION SOIL SAMPLE LOCATIONS
CORRAL CANYON FED #4H
UNIT P SEC 5 T25S R29E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012919124_CORRAL CANYON #4H\012919124_FIG02_DELINEATION_3713.mxd

B: BENZENE
BTEX: TOTAL BENZENE, TOLUENE, ETHYLBENZENE, AND TOTAL XYLENES
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: REMEDIATION PERMIT NUMBER 2RP-3713

FIGURE 3
EXCAVATION SOIL SAMPLE LOCATIONS
CORRAL CANYON FED #4H
UNIT P SEC 5 T25S R29E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012919124_CORRAL CANYON #4H\012919124_FIG03_EXCAVATION_3713.mxd

TABLES

TABLE 1
SOIL ANALYTICAL RESULTS

CORRAL CANYON FED #4H
REMEDIATION PERMIT NUMBER 2RP-3713
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

Sample Name	Sample Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
PH01	0.5	10/29/2019	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<50.2	<50.2	<50.2	<50.2	<50.2	1,390
PH01A	2	10/29/2019	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	<49.8	<49.8	<49.8	<49.8	<49.8	343
PH02	0.5	10/29/2019	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<251	9,890	1,460	**9,890**	**11,400**	2,810
PH02A	2	10/29/2019	<0.000994	<0.000994	<0.000994	0.0412	0.0412	<50.0	<50.0	64.3	<50.0	64.3	474
PH03	0.5	10/29/2019	<0.000990	<0.000990	<0.000990	<0.000990	<0.000990	<50.3	<50.3	<50.3	<50.3	<50.3	303
PH03A	1	10/29/2019	<0.000998	<0.000998	<0.000998	<0.000998	<0.000998	<50.0	<50.0	<50.0	<50.0	<50.0	205
PH03B	2	10/29/2019	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	<50.2	<50.2	<50.2	<50.2	<50.2	531
PH04	0.5	10/29/2019	<0.000994	<0.000994	<0.000994	<0.000994	<0.000994	<50.3	<50.3	<50.3	<50.3	<50.3	68.7
PH04B	2	10/29/2019	<0.000996	<0.000996	<0.000996	<0.000996	<0.000996	<49.9	<49.9	<49.9	<49.9	<49.9	38.3
PH05	0.5	10/29/2019	<0.000998	<0.000998	<0.000998	<0.000998	<0.000998	<50.2	<50.2	<50.2	<50.2	<50.2	42.4
PH05A	2	10/29/2019	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	<49.9	<49.9	<49.9	<49.9	<49.9	41.3
PH06	0.5	10/29/2019	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<50.3	<50.3	<50.3	<50.3	<50.3	24.2
PH06A	2	10/29/2019	<0.000988	<0.000988	<0.000988	<0.000988	<0.000988	<50.0	<50.0	<50.0	<50.0	<50.0	65.7
PH07	0.5	10/29/2019	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<50.0	<50.0	<50.0	<50.0	<50.0	34.1
PH07A	2	10/29/2019	<0.000998	<0.000998	<0.000998	<0.000998	<0.000998	<50.3	<50.3	<50.3	<50.3	<50.3	23.2
PH08	0.5	10/29/2019	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<50.2	<50.2	<50.2	<50.2	<50.2	707
PH08A	2	10/29/2019	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	<49.8	<49.8	<49.8	<49.8	<49.8	54.6
PH09	0.5	10/29/2019	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	<49.9	<49.9	<49.9	<49.9	<49.9	635
PH09A	2	10/29/2019	<0.000998	<0.000998	<0.000998	<0.000998	<0.000998	<49.8	<49.8	<49.8	<49.8	<49.8	123
SW01	0.5 - 2	11/12/2019	<0.000988	<0.000988	<0.000988	<0.000988	<0.000988	<50.3	<50.3	<50.3	<50.3	<50.3	126
FS01	2	11/12/2019	<0.000996	<0.000996	<0.000996	<0.000996	<0.000996	<50.0	<50.0	<50.0	<50.0	<50.0	128
NMOCD Table 1 Closure Criteria			**10**	NE	NE	NE	**50**	NE	NE	NE	**1,000**	**2,500**	**10,000**

Notes:

bgs - below ground surface

BTEX - benzene, toluene, ethylbenzene, and total xylenes

DRO - diesel range organics

GRO - gasoline range organics

mg/kg - milligrams per kilogram

MRO - motor oil range organics

NMAC - New Mexico Administrative Code

NMOCD - New Mexico Oil Conservation Division

NE - not established

TPH - total petroleum hydrocarbons

Bold - indicates result exceeds the applicable regulatory standard

< - indicates result is below laboratory reporting limits

Table 1 - closure criteria for soils impacted by a release per NMAC 19.15.29 August 2018

ATTACHMENT 1: INITIAL/FINAL NMOCD FORM C-141 (2RP-3713)

Received 6/2/2016
NMOCD Artesia

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

nHMP1615523982

OPERATOR

X Initial Report ☐ Final Report

Name of Company XTO Energy, Inc. 5380	Contact John Robinson
Address 500 W. Illinois, Suite 100, Midland, TX 79701	Telephone No. 575-441-5199
Facility Name Corral Canyon Fed #4 H	Facility Type Well

Surface Owner BLM	Mineral Owner BLM / NMSLO	API No. 30-015-42923

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
P	5	T25S	R29E	200	South	760	East	Eddy

Latitude 32.152346'N___ **Longitude**_104.000009'W___

NATURE OF RELEASE

Type of Release Wellhead Fire Oil, Produced Water and Natural Gas	Volume of Release 1552 mcf. Due to fire we were not able to gauge fluids.	Volume Recovered 0
Source of Release Wellhead	Date and Hour of Occurrence 5-21-16 4:00 am	Date and Hour of Discovery 5-21-16 4:00 am
Was Immediate Notice Given? X Yes ☐ No ☐ Not Required	If YES, To Whom? Jim Amos BLM, Heather Patterson OCD	
By Whom? John Robinson	Date and Hour 5-21-16 11:00 am	
Was a Watercourse Reached? ☐ Yes X No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
Connection on wellhead failed and caused a leak. Something sparked and caught natural gas on fire. Once fire was out we sprayed overspray area with micro blaze and will clean up rest of contamination asap.

Describe Area Affected and Cleanup Action Taken.*
Fire was contained to wellhead area. Will take samples from contaminated area and clean up contaminated soil and replace with clean soil.

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: John Robinson

Printed Name: John Robinson

Title: Maintenance Foreman

E-mail Address: john_robinson@xtoenergy.com

Date: 6-2-16 Phone: 575-441-5199

OIL CONSERVATION DIVISION

Approved by Environmental Specialist:

Approval Date: 6/3/2016 Expiration Date: N/A

Conditions of Approval: Attached ☐

Remediation per OCD Rules and Guidelines
Submit Remediation Proposal No Later Than 7/3/2016

* Attach Additional Sheets If Necessary

2RP-3713

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	
District RP	
Facility ID	2RP-3713
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-3713
Contact mailing address: 522 W. Mermod, Suite 704 Carlsbad, NM 88220	

Location of Release Source

Latitude N 32.152346 Longitude W -104.000009
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Corral Canyon Fed #4H	Site Type: Production Facility
Date Release Discovered: 5/21/2016	API# *(if applicable):* 30-015-42923

Unit Letter	Section	Township	Range	County
P	5	25S	29E	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): Unknown	Volume Recovered (bbls): 0
☒ Produced Water	Volume Released (bbls): Unknown	Volume Recovered (bbls): 0
	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): 1,552	Volume Recovered (Mcf): 0
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release
A connection on the wellhead failed and caused a leak. A spark caused the natural gas to catch on fire. The volume of released fluids could not be gauged due to the fire.

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	2RP-3713
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? Natural gas fire, unknown volume of fluid was released.

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
Immediate notice was given by John Robinson to Heather Patterson (NMOCD) and Jim Amos (BLM) on May 21, 2016 at 11:00 AM.

Initial Response

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

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

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

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

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

Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature: Date: 2-21-2020

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	
Facility ID	2RP-3713
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?	51-100 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	2RP-3713
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: 2-21-2020

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

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	NHMP1615523982
District RP	
Facility ID	2RP-3713
Application ID	

Closure

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

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

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

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

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

☒ Description of remediation activities

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

Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature: Date: 2-21-2020

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: Bradford Billings Date: 02/01/2021

Printed Name: Bradford Billings Title: E.Spec.A

ATTACHMENT 2: HISTORICAL DOCUMENTATION


XTO
ENERGY INC.
CORRAL CANYON FEDERAL #4H
200' FSL & 760' FEL
UNIT P, SEC.5-T25S-R29E
EDDY COUNTY, NM
API #30-015-42923
FED LEASE ID: NMNM15302
EMERGENCY PH: (575)-396-0542

From: Daniel Dominguez
To: Patterson, Heather, EMNRD; Robinson, John
Subject: Corral Canyon Federal #4H
Date: Thursday, June 16, 2016 11:53:58 AM
Attachments: Corral Canyon Federal #4H Sample Map.pdf
H601228 EPI.pdf

Heather,

Attached is the Sample Map and Analytical Data for the Corral Canyon Federal #4H, operated by XTO. The release area around the well head has been excavated 1 foot with the remaining area excavated 6 inches.

Laboratory analytical data indicates the excavation to be void of BTEX, TPH and Chloride in excess of NMOCD RRALs.

EPI proposes to backfill the excavation with clean soil and submit a Final Closure Report to NMOCD and XTO.

--
Sincerely,
ENVIRONMENTAL PLUS, INC.

Daniel Dominguez
Environmental Consultant/Safety Director

Environmental Plus, Inc.
P.O. Box 1558
2100 Avenue 'O'
Eunice, NM 88231
(575) 631-0401 (Cell)
(575) 394-3481 (Office)
(575) 394-2601 (fax)

XTO

Corral Canyon Federal #4H

N 32.152474
W 104.000507

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

June 13, 2016

Daniel Dominguez

Environmental Plus, Inc.

P.O. Box 1558

Eunice, NM 88231

RE: CORRAL CANYON FED 4H

Enclosed are the results of analyses for samples received by the laboratory on 06/06/16 15:35.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-15-7. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Environmental Plus, Inc.
Daniel Dominguez
P.O. Box 1558
Eunice NM, 88231
Fax To: (505) 394-2601

Received:	06/06/2016	Sampling Date:	06/06/2016
Reported:	06/13/2016	Sampling Type:	Soil
Project Name:	CORRAL CANYON FED 4H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	UL-P SEC.5,T25S,R29E		

Sample ID: SP1 (SURFACE) (H601228-01)

BTEX 8260B mg/kg Analyzed By: CK

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	06/09/2016	ND	1.99	99.3	2.00	1.59	
Toluene*	**0.272**	0.200	06/09/2016	ND	2.08	104	2.00	0.988	
Ethylbenzene*	<0.200	0.200	06/09/2016	ND	2.03	102	2.00	1.85	
Total Xylenes*	**1.07**	0.600	06/09/2016	ND	6.78	113	6.00	1.79	
Total BTEX	**1.35**	1.20	06/09/2016	ND					

Surrogate: Dibromofluoromethane	*105 %*	*90.4-111*
Surrogate: Toluene-d8	*96.3 %*	*85.3-114*
Surrogate: 4-Bromofluorobenzene	*103 %*	*80.1-121*

Chloride, SM4500Cl-B mg/kg Analyzed By: AP

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**33200**	16.0	06/07/2016	ND	400	100	400	3.92	

TPH 8015M mg/kg Analyzed By: CK S-06

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<100	100	06/07/2016	ND	169	84.7	200	11.4	
DRO >C10-C28	**23200**	100	06/07/2016	ND	183	91.6	200	14.1	

Surrogate: 1-Chlorooctane	*57.0 %*	*35-147*
Surrogate: 1-Chlorooctadecane	*1010 %*	*28-171*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Environmental Plus, Inc.
Daniel Dominguez
P.O. Box 1558
Eunice NM, 88231
Fax To: (505) 394-2601

Received:	06/06/2016	Sampling Date:	06/06/2016
Reported:	06/13/2016	Sampling Type:	Soil
Project Name:	CORRAL CANYON FED 4H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	UL-P SEC.5,T25S,R29E		

Sample ID: SP1 (1') (H601228-02)

BTEX 8260B mg/kg Analyzed By: CK

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/09/2016	ND	1.99	99.3	2.00	1.59	
Toluene*	<0.050	0.050	06/09/2016	ND	2.08	104	2.00	0.988	
Ethylbenzene*	<0.050	0.050	06/09/2016	ND	2.03	102	2.00	1.85	
Total Xylenes*	<0.150	0.150	06/09/2016	ND	6.78	113	6.00	1.79	
Total BTEX	<0.300	0.300	06/09/2016	ND					

Surrogate: Dibromofluoromethane	*103 %*	*90.4-111*
Surrogate: Toluene-d8	*101 %*	*85.3-114*
Surrogate: 4-Bromofluorobenzene	*101 %*	*80.1-121*

Chloride, SM4500Cl-B mg/kg Analyzed By: AP

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**112**	16.0	06/07/2016	ND	400	100	400	3.92	

TPH 8015M mg/kg Analyzed By: CK

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/07/2016	ND	169	84.7	200	11.4	
DRO >C10-C28	**12.7**	10.0	06/07/2016	ND	183	91.6	200	14.1	

Surrogate: 1-Chlorooctane	*62.6 %*	*35-147*
Surrogate: 1-Chlorooctadecane	*86.2 %*	*28-171*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Environmental Plus, Inc.
Daniel Dominguez
P.O. Box 1558
Eunice NM, 88231
Fax To: (505) 394-2601

Received:	06/06/2016	Sampling Date:	06/06/2016
Reported:	06/13/2016	Sampling Type:	Soil
Project Name:	CORRAL CANYON FED 4H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	UL-P SEC.5,T25S,R29E		

Sample ID: SP2 (SURFACE) (H601228-03)

BTEX 8260B mg/kg Analyzed By: CK

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	06/09/2016	ND	1.99	99.3	2.00	1.59	
Toluene*	<0.200	0.200	06/09/2016	ND	2.08	104	2.00	0.988	
Ethylbenzene*	<0.200	0.200	06/09/2016	ND	2.03	102	2.00	1.85	
Total Xylenes*	<0.600	0.600	06/09/2016	ND	6.78	113	6.00	1.79	
Total BTEX	<1.20	1.20	06/09/2016	ND					

Surrogate: Dibromofluoromethane	*105 %*	*90.4-111*
Surrogate: Toluene-d8	*97.2 %*	*85.3-114*
Surrogate: 4-Bromofluorobenzene	*100 %*	*80.1-121*

Chloride, SM4500Cl-B mg/kg Analyzed By: AP

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**34800**	16.0	06/07/2016	ND	400	100	400	3.92	

TPH 8015M mg/kg Analyzed By: CK **S-06**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<100	100	06/07/2016	ND	169	84.7	200	11.4	
DRO >C10-C28	**6080**	100	06/07/2016	ND	183	91.6	200	14.1	

Surrogate: 1-Chlorooctane	*46.2 %*	*35-147*
Surrogate: 1-Chlorooctadecane	*257 %*	*28-171*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Environmental Plus, Inc.
Daniel Dominguez
P.O. Box 1558
Eunice NM, 88231
Fax To: (505) 394-2601

Received:	06/06/2016	Sampling Date:	06/06/2016
Reported:	06/13/2016	Sampling Type:	Soil
Project Name:	CORRAL CANYON FED 4H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	UL-P SEC.5,T25S,R29E		

Sample ID: SP2 (1') (H601228-04)

BTEX 8260B mg/kg Analyzed By: CK

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/09/2016	ND	1.99	99.3	2.00	1.59	
Toluene*	<0.050	0.050	06/09/2016	ND	2.08	104	2.00	0.988	
Ethylbenzene*	<0.050	0.050	06/09/2016	ND	2.03	102	2.00	1.85	
Total Xylenes*	<0.150	0.150	06/09/2016	ND	6.78	113	6.00	1.79	
Total BTEX	<0.300	0.300	06/09/2016	ND					

Surrogate: Dibromofluoromethane	*104 %*	*90.4-111*
Surrogate: Toluene-d8	*97.9 %*	*85.3-114*
Surrogate: 4-Bromofluorobenzene	*99.6 %*	*80.1-121*

Chloride, SM4500Cl-B mg/kg Analyzed By: AP

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/07/2016	ND	400	100	400	3.92	

TPH 8015M mg/kg Analyzed By: CK

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/07/2016	ND	169	84.7	200	11.4	
DRO >C10-C28	<10.0	10.0	06/07/2016	ND	183	91.6	200	14.1	

Surrogate: 1-Chlorooctane	*62.2 %*	*35-147*
Surrogate: 1-Chlorooctadecane	*88.0 %*	*28-171*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
QR-02	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

Environmental Plus, Inc.

2100 Avenue O, Eunice, NM 88231
(575) 394-3481 FAX: (575) 394-2601
P.O. Box 1558, Eunice, NM 88231

Chain of Custody Form

LAB Cardinal

Company Name	Environmental Plus, Inc.
EPI Project Manager	Daniel Dominguez
Mailing Address	P.O. BOX 1558
City, State, Zip	Eunice New Mexico 88231
EPI Phone#/Fax#	575-394-3481 / 575-394-2601
Client Company	XTO
Facility Name	Corral Canyon Fed 4H
Location	UL-P Sec. 5, T25S, R29E
Project Reference	
EPI Sampler Name	David Robinson

Bill To

Attn: Daniel Dominguez
P.O. Box 1558
Eunice, NM 88231

LAB I.D.	SAMPLE I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUND WATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE	ICE/COOL	OTHER	SAMPLING: DATE	TIME	BTEX 8021B	TPH 8015M	CHLORIDES (Cl^-)	SULFATES ($SO_4^{=}$)	pH	TCLP	OTHER >>>	PAH
H601228																						
1	SP1 (Surface)	G	1			X					X		06-Jun-16	10:16	X	X	X					
2	SP1 (1')	G	1			X					X		06-Jun-16	10:45	X	X	X					
3	SP2 (Surface)	G	1			X					X		06-Jun-16	11:35	X	X	X					
4	SP2 (1')	G	1			X					X		06-Jun-16	11:41	X	X	X					
5																						
6																						
7																						
8																						
9																						
10																						

Sampler Relinquished: David Robinson
Date 6/6/16
Time 2:00 pm
Received By:

Relinquished by: David Dominguez
Date 6/6/16
Time 3:35 pm
Received By: (lab staff) Jodi Henson

Delivered by: -4.7°C
Sample Cool & Intact: Yes / No
Checked By:

#75

E-mail results to: ddominguezepi@gmail.com & joann_robinson@xtoenergy.com
NOTES:

From: Patterson, Heather, EMNRD
To: "Daniel Dominguez"; Robinson, John
Subject: RE: Corral Canyon Federal #4H
Date: Friday, June 17, 2016 2:16:00 PM

Was SP2 included in the 1' excavation or the 6" excavation?

Heather Patterson
Environmental Specialist
NMOCD District II
Office (575)748-1283 ext.101
Cell (575)703-0228

From: Daniel Dominguez [mailto:ddominguezepi@gmail.com]
Sent: Thursday, June 16, 2016 11:54 AM
To: Patterson, Heather, EMNRD; Robinson, John
Subject: Corral Canyon Federal #4H

Heather,

Attached is the Sample Map and Analytical Data for the Corral Canyon Federal #4H, operated by XTO. The release area around the well head has been excavated 1 foot with the remaining area excavated 6 inches.

Laboratory analytical data indicates the excavation to be void of BTEX, TPH and Chloride in excess of NMOCD RRALs.

EPI proposes to backfill the excavation with clean soil and submit a Final Closure Report to NMOCD and XTO.

--
Sincerely,
ENVIRONMENTAL PLUS, INC.

Daniel Dominguez
Environmental Consultant/Safety Director

Environmental Plus, Inc.
P.O. Box 1558
2100 Avenue 'O'
Eunice, NM 88231
(575) 631-0401 (Cell)
(575) 394-3481 (Office)
(575) 394-2601 (fax)

ATTACHMENT 3: LITHOLOGIC / SOIL SAMPLE LOGS

LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance · Engineering · Remediation		Identifier: PH01	Date: 10/29/19
		Project Name: Corral Canyon 4H (on 16H Pad)	RP Number: 2RP-3713
LITHOLOGIC / SOIL SAMPLING LOG		Logged By: Anna Byers	Method: Backhoe
Field Screening: HACH Chloride Test Strips and MiniRAE PID		Hole Diameter: N/A	Total Depth: 2 feet
Comments:			

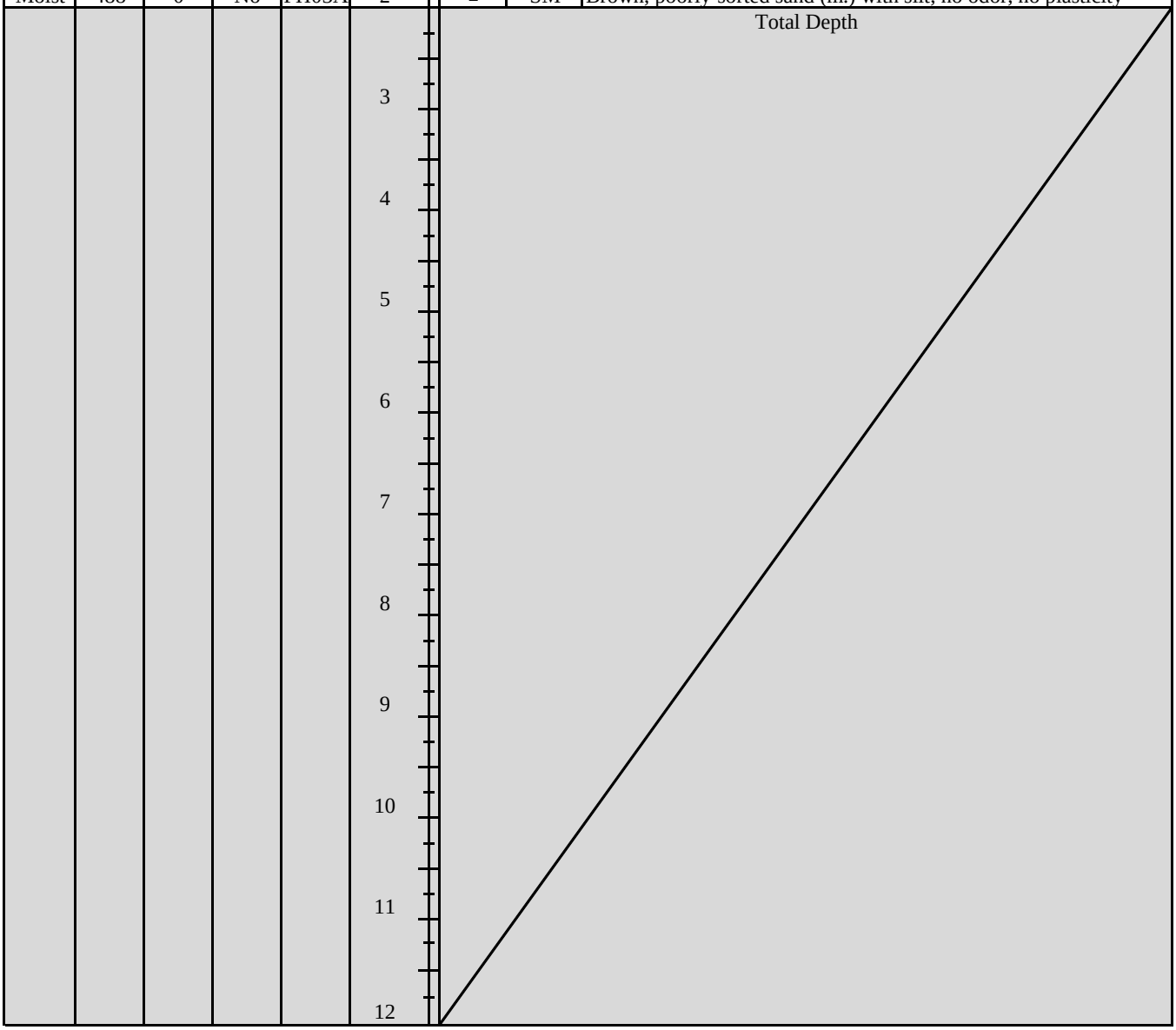
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0			
Dry	1320	0	No	PH01		0.5	Caliche	Pad surface caliche, no odor
Moist	312	0	No		1	1	SM	Brown, poorly-sorted sand (m.) with silt; no odor, no plasticity
Moist	312	0	No	PH01A	2	2	SM	Brown, poorly-sorted sand (m.) with silt; no odor, no plasticity
								Total Depth
					3			
					4			
					5			
					6			
					7			
					8			
					9			
					10			
					11			
					12			

LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance · Engineering · Remediation		Identifier: PH02	Date: 10/29/19
		Project Name: Corral Canyon 4H (on 16H Pad)	RP Number: 2RP-3713
LITHOLOGIC / SOIL SAMPLING LOG		Logged By: Anna Byers	Method: Backhoe
Field Screening: HACH Chloride Test Strips and MiniRAE PID		Hole Diameter: N/A	Total Depth: 2 feet
Comments:			

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0			
Dry	4256	0	No	PH02		0.5	Caliche	Pad surface caliche, no odor
Moist	2512	0	No		1	1	SM	Brown, poorly-sorted sand (m.) with silt; no odor, no plasticity
Moist	488	0	No	PH02A	2	2	SM	Brown, poorly-sorted sand (m.) with silt; no odor, no plasticity
					3			Total Depth
					4			
					5			
					6			
					7			
					8			
					9			
					10			
					11			
					12			

LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance · Engineering · Remediation		Identifier: PH03	Date: 10/29/19
		Project Name: Corral Canyon 4H (on 16H Pad)	RP Number: 2RP-3713
LITHOLOGIC / SOIL SAMPLING LOG		Logged By: Anna Byers	Method: Backhoe
Field Screening: HACH Chloride Test Strips and MiniRAE PID		Hole Diameter: N/A	Total Depth: 2 feet
Comments:			

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0			
Dry	244	0	No	PH03		0.5	Caliche	Pad surface caliche, no odor
Moist	1228	0	No		1	1	SM	Brown, poorly-sorted sand (m.) with silt; no odor, no plasticity
Moist	488	0	No	PH03A	2	2	SM	Brown, poorly-sorted sand (m.) with silt; no odor, no plasticity



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

Identifier: PH04	Date: 10/29/19
Project Name: Corral Canyon 4H (on 16H Pad)	RP Number: 2RP-3713

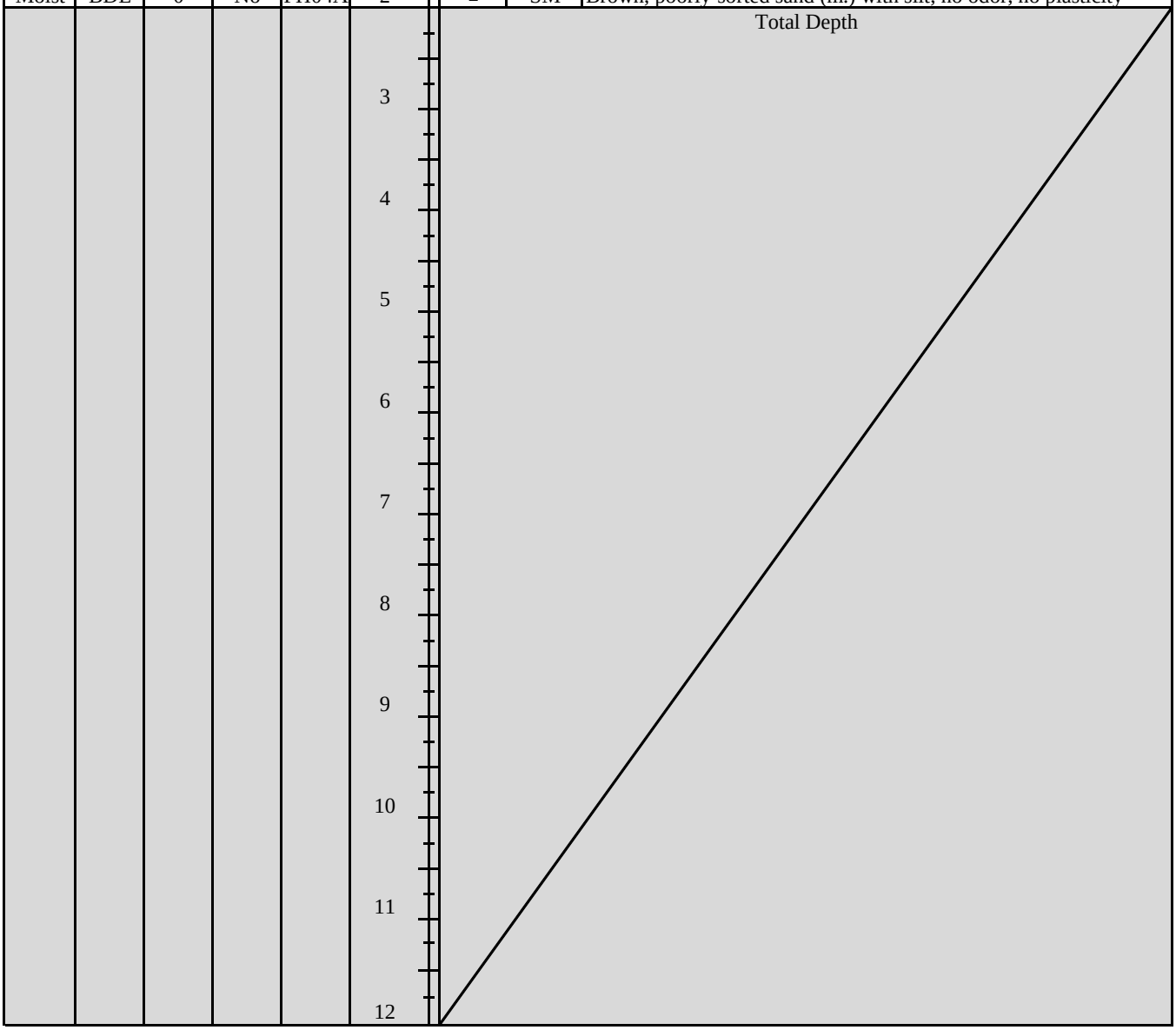
LITHOLOGIC / SOIL SAMPLING LOG

Logged By: Anna Byers	Method: Backhoe
Hole Diameter: N/A	Total Depth: 2 feet

Field Screening: HACH Chloride Test Strips and MiniRAE PID

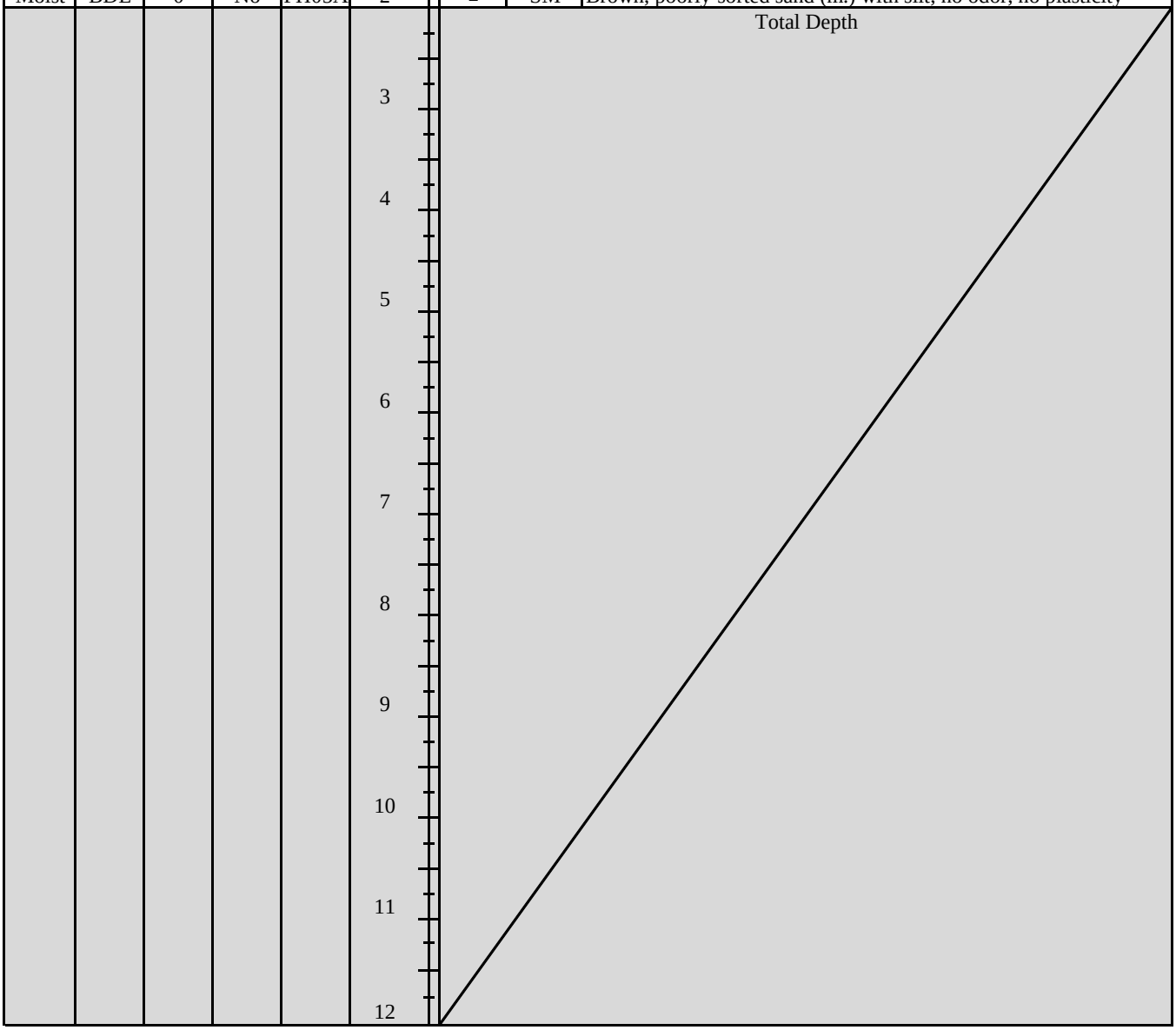
Comments: BDL - Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
Dry	BDL	0	No	PH04	0	0.5	Caliche	Pad surface caliche, no odor
Moist	BDL	0	No		1	1	SM	Brown, poorly-sorted sand (m.) with silt; no odor, no plasticity
Moist	BDL	0	No	PH04A	2	2	SM	Brown, poorly-sorted sand (m.) with silt; no odor, no plasticity



LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance · Engineering · Remediation		Identifier: PH05	Date: 10/29/19
		Project Name: Corral Canyon 4H (on 16H Pad)	RP Number: 2RP-3713
LITHOLOGIC / SOIL SAMPLING LOG		Logged By: Anna Byers	Method: Backhoe
Field Screening: HACH Chloride Test Strips and MiniRAE PID		Hole Diameter: N/A	Total Depth: 2 feet
Comments: BDL - Below Detection Limit			

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
Dry	BDL	0	No	PH05	0	0.5	Caliche	Pad surface caliche, no odor
Moist	BDL	0	No		1	1	SM	Brown, poorly-sorted sand (m.) with silt; no odor, no plasticity
Moist	BDL	0	No	PH05A	2	2	SM	Brown, poorly-sorted sand (m.) with silt; no odor, no plasticity



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

Identifier: PH06	Date: 10/29/19
Project Name: Corral Canyon 4H (on 16H Pad)	RP Number: 2RP-3713

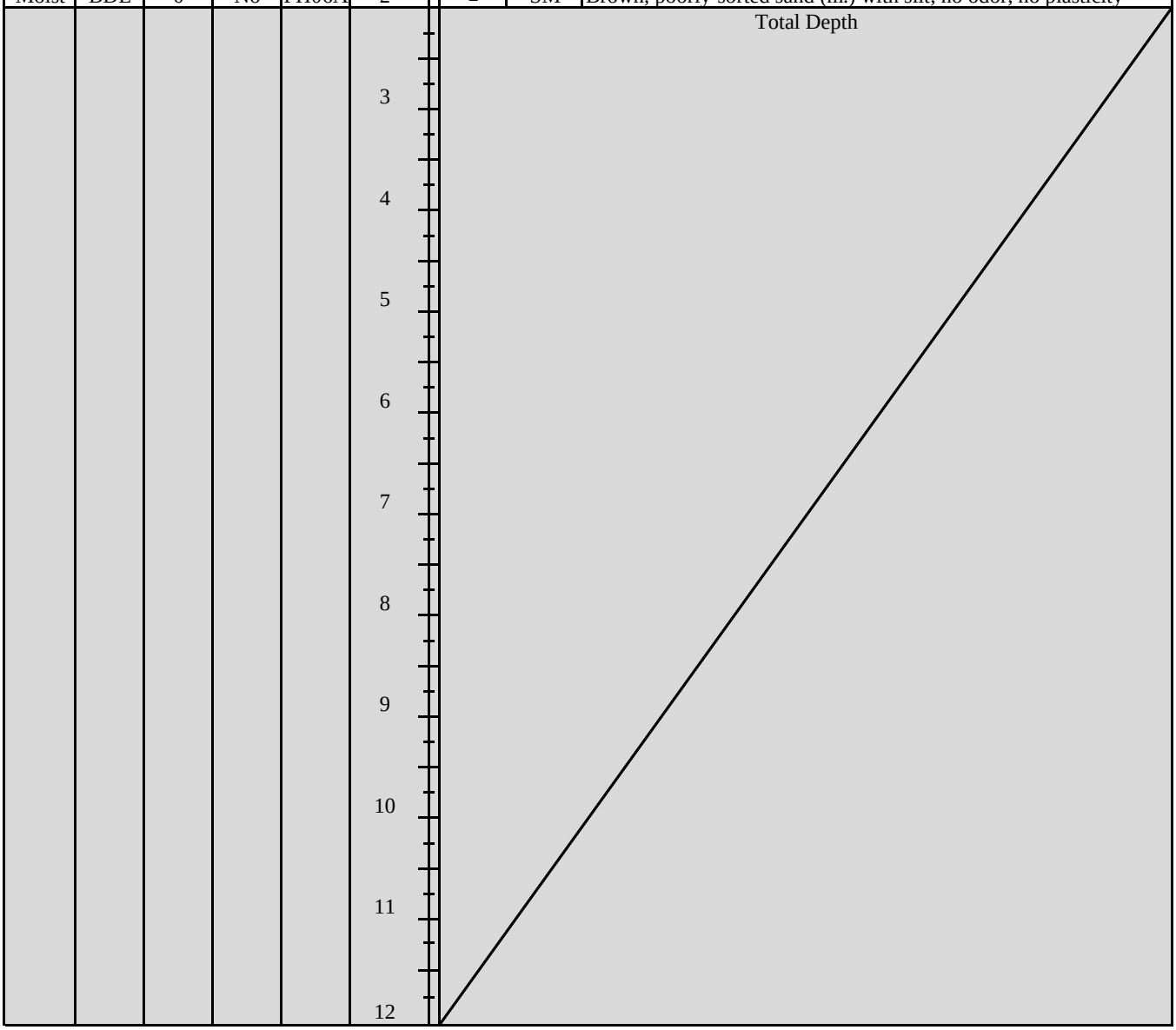
LITHOLOGIC / SOIL SAMPLING LOG

Logged By: Anna Byers	Method: Backhoe
Hole Diameter: N/A	Total Depth: 2 feet

Field Screening: HACH Chloride Test Strips and MiniRAE PID

Comments: BDL - Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
Dry	BDL	0	No	PH06	0	0.5	Caliche	Pad surface caliche, no odor
Moist	BDL	0	No		1	1	SM	Brown, poorly-sorted sand (m.) with silt; no odor, no plasticity
Moist	BDL	0	No	PH06A	2	2	SM	Brown, poorly-sorted sand (m.) with silt; no odor, no plasticity



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

Identifier: PH07	Date: 10/29/19
Project Name: Corral Canyon 4H (on 16H Pad)	RP Number: 2RP-3713

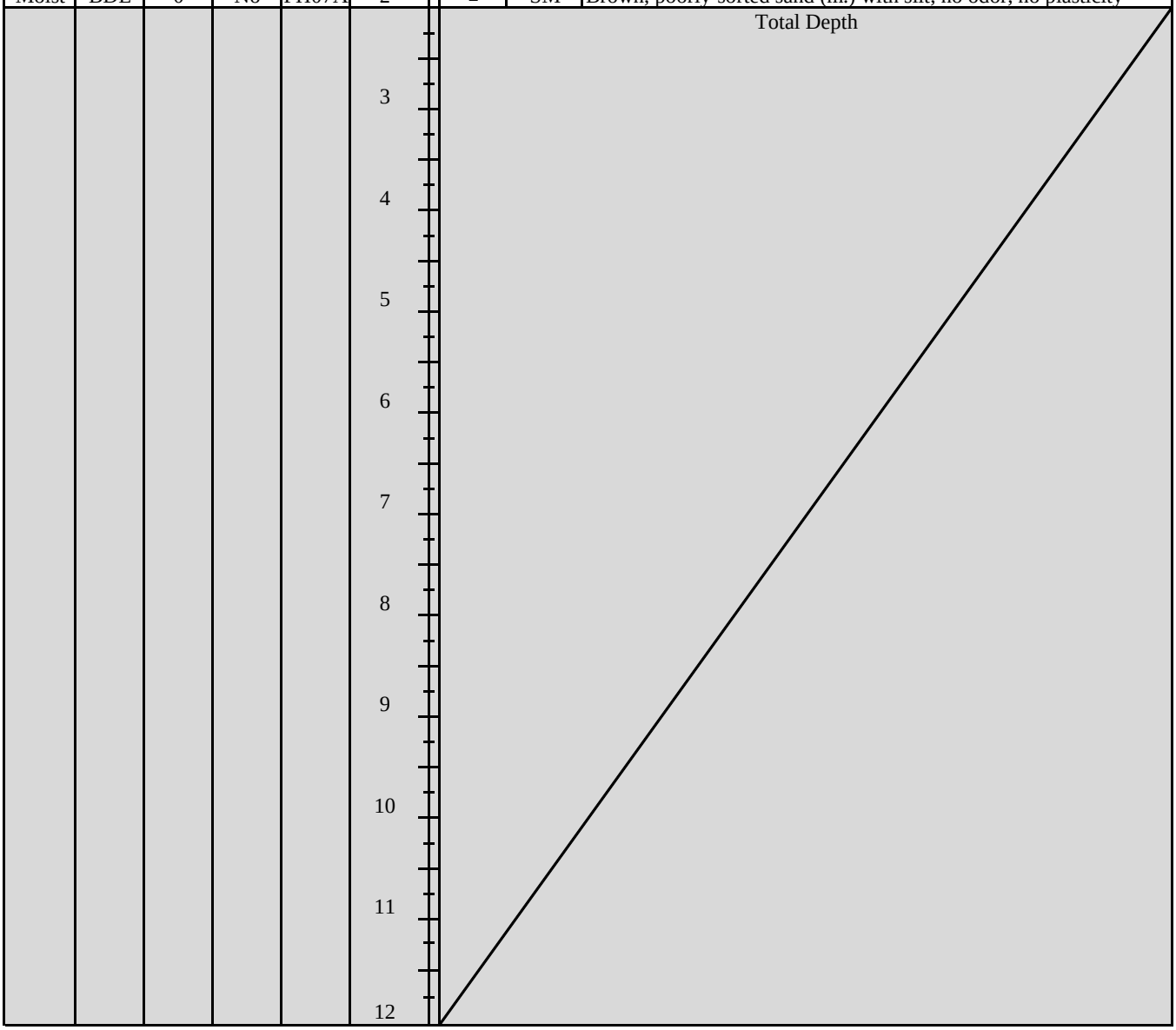
LITHOLOGIC / SOIL SAMPLING LOG

Logged By: Anna Byers	Method: Backhoe
Hole Diameter: N/A	Total Depth: 2 feet

Field Screening: HACH Chloride Test Strips and MiniRAE PID

Comments: BDL - Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
Dry	BDL	0	No	PH07	0	0.5	Caliche	Pad surface caliche, no odor
Moist	BDL	0	No		1	1	SM	Brown, poorly-sorted sand (m.) with silt; no odor, no plasticity
Moist	BDL	0	No	PH07A	2	2	SM	Brown, poorly-sorted sand (m.) with silt; no odor, no plasticity



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

Identifier: PH08	Date: 10/29/19
Project Name: Corral Canyon 4H (on 16H Pad)	RP Number: 2RP-3713

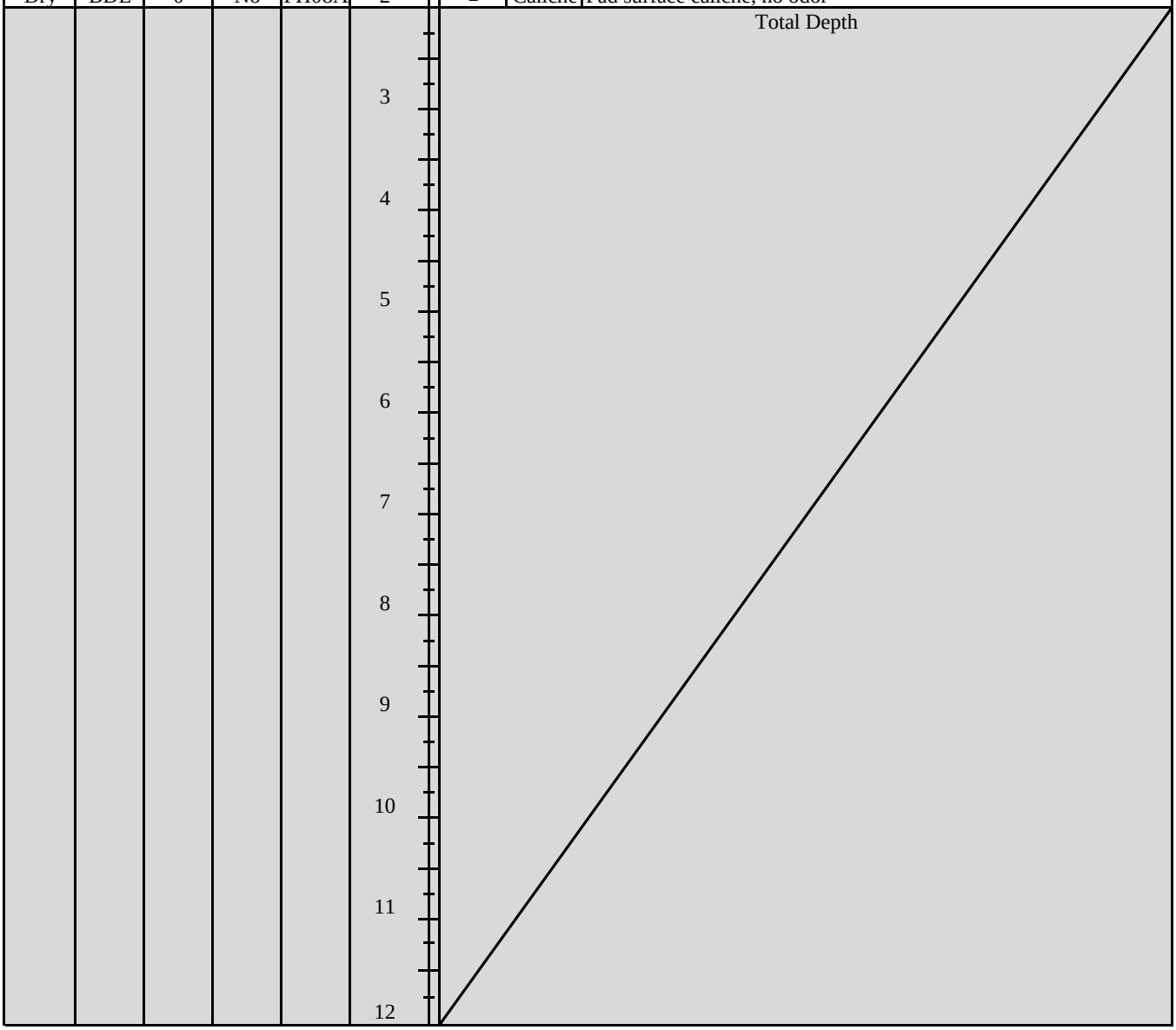
LITHOLOGIC / SOIL SAMPLING LOG

Logged By: Anna Byers	Method: Backhoe
Hole Diameter: N/A	Total Depth: 2 feet

Field Screening: HACH Chloride Test Strips and MiniRAE PID

Comments: BDL - Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
Dry	244	0	No	PH08		0.5	Caliche	Pad surface caliche, no odor
Dry	212	0	No		1	1	Caliche	Pad surface caliche, no odor
Dry	BDL	0	No	PH08A	2	2	Caliche	Pad surface caliche, no odor



LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance · Engineering · Remediation		Identifier: PH09	Date: 10/29/19
		Project Name: Corral Canyon 4H (on 16H Pad)	RP Number: 2RP-3713
LITHOLOGIC / SOIL SAMPLING LOG		Logged By: Anna Byers	Method: Backhoe
Field Screening: HACH Chloride Test Strips and MiniRAE PID		Hole Diameter: N/A	Total Depth: 2 feet
Comments:			

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0			
Dry	536	0	No	PH09		0.5	Caliche	Pad surface caliche, no odor
Moist	156	0	No		1	1	SM	Brown, poorly-sorted sand (m.) with silt; no odor, no plasticity
Moist	128	0	No	PH09A	2	2	SM	Brown, poorly-sorted sand (m.) with silt; no odor, no plasticity
								Total Depth
					3			
					4			
					5			
					6			
					7			
					8			
					9			
					10			
					11			
					12			

ATTACHMENT 4: PHOTOGRAPHIC LOG

PHOTOGRAPHIC LOG

Photograph 1: View of wellhead and former release area, during assessment activities.

Photograph 2: View of wellhead and former release area, during assessment activities.

PHOTOGRAPHIC LOG

Photograph 3: View of open excavation.

Photograph 4: View of open excavation.

PHOTOGRAPHIC LOG

Photograph 5: View of backfilled excavation.

Photograph 6: View of backfilled excavation.

ATTACHMENT 5: LABORATORY ANALYTICAL REPORTS

Analytical Report 641857

for

LT Environmental, Inc.

Project Manager: Aimee Cole

Corral Canyon 4H

012919124

05-NOV-19

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

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

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

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

05-NOV-19

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

Reference: XENCO Report No(s): **641857**
Corral Canyon 4H
Project Address: Rural Eddy County

Aimee Cole:

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) 641857. 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. 641857 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 641857

LT Environmental, Inc., Arvada, CO

Corral Canyon 4H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH01	S	10-29-19 10:30	0.5 ft	641857-001
PH01A	S	10-29-19 10:40	2 ft	641857-002
PH02	S	10-29-19 10:55	0.5 ft	641857-003
PH02A	S	10-29-19 11:05	2 ft	641857-004
PH03	S	10-29-19 11:30	0.5 ft	641857-005
PH03A	S	10-29-19 11:35	1 ft	641857-006
PH03B	S	10-29-19 11:40	2 ft	641857-007
PH04	S	10-29-19 11:55	0.5 ft	641857-008
PH04B	S	10-29-19 12:05	2 ft	641857-009
PH05	S	10-29-19 12:30	0.5 ft	641857-010
PH05A	S	10-29-19 12:40	2 ft	641857-011
PH06	S	10-29-19 13:00	0.5 ft	641857-012
PH06A	S	10-29-19 13:10	2 ft	641857-013
PH07	S	10-29-19 13:20	0.5 ft	641857-014
PH07A	S	10-29-19 13:30	2 ft	641857-015
PH08	S	10-29-19 13:45	0.5 ft	641857-016
PH08A	S	10-29-19 13:55	2 ft	641857-017
PH09	S	10-29-19 14:00	0.5 ft	641857-018
PH09A	S	10-29-19 14:05	2 ft	641857-019

CASE NARRATIVE

Client Name: LT Environmental, Inc.
Project Name: Corral Canyon 4H

Project ID: *012919124*
Work Order Number(s): *641857*

Report Date: *05-NOV-19*
Date Received: *11/01/2019*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3106342 BTEX by EPA 8021B
Lab Sample ID 641857-014 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Ethylbenzene, m,p-Xylenes , o-Xylene recovered below QC limits in the Matrix Spike. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 641857-001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -011, -012, -013, -014, -015, -016, -017, -018, -019.
The Laboratory Control Sample for m,p-Xylenes , Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3106466 Chloride by EPA 300
Lab Sample ID 641857-011 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered above QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 641857-001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -011, -012, -013, -014, -015, -016, -017, -018, -019.
The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3106467 TPH by SW8015 Mod
Surrogate o-Terphenyl recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.
Samples affected are: 641857-012,641857-007,641857-013,641857-002.
Surrogate 1-Chlorooctane recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.
Samples affected are: 641857-012,641857-013.

Certificate of Analysis Summary 641857

LT Environmental, Inc., Arvada, CO

Project Name: Corral Canyon 4H

Project Id: 012919124
Contact: Aimee Cole
Project Location: Rural Eddy County

Date Received in Lab: Fri Nov-01-19 01:59 pm
Report Date: 05-NOV-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	641857-001		641857-002		641857-003		641857-004		641857-005		641857-006	
	Field Id:	PH01		PH01A		PH02		PH02A		PH03		PH03A	
	Depth:	0.5- ft		2- ft		0.5- ft		2- ft		0.5- ft		1- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-29-19 10:30		Oct-29-19 10:40		Oct-29-19 10:55		Oct-29-19 11:05		Oct-29-19 11:30		Oct-29-19 11:35	
BTEX by EPA 8021B	***Extracted:***	Nov-01-19 18:11		Nov-01-19 18:11		Nov-01-19 18:11		Nov-01-19 18:11		Nov-01-19 18:11		Nov-01-19 18:11	
	Analyzed:	Nov-02-19 09:13		Nov-02-19 09:32		Nov-02-19 09:51		Nov-02-19 10:11		Nov-02-19 10:30		Nov-02-19 10:49	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00100	0.00100	<0.00101	0.00101	<0.00962	0.00962	<0.000994	0.000994	<0.000990	0.000990	<0.000998	0.000998
Toluene		<0.00100	0.00100	<0.00101	0.00101	<0.00962	0.00962	<0.000994	0.000994	<0.000990	0.000990	<0.000998	0.000998
Ethylbenzene		<0.00100	0.00100	<0.00101	0.00101	<0.00962	0.00962	<0.000994	0.000994	<0.000990	0.000990	<0.000998	0.000998
m,p-Xylenes		<0.00201	0.00201	<0.00201	0.00201	<0.0192	0.0192	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200
o-Xylene		<0.00100	0.00100	<0.00101	0.00101	<0.00962	0.00962	0.0412	0.000994	<0.000990	0.000990	<0.000998	0.000998
Total Xylenes		<0.00100	0.00100	<0.00101	0.00101	<0.00962	0.00962	0.0412	0.000994	<0.000990	0.000990	<0.000998	0.000998
Total BTEX		<0.00100	0.00100	<0.00101	0.00101	<0.00962	0.00962	0.0412	0.000994	<0.000990	0.000990	<0.000998	0.000998
Chloride by EPA 300	***Extracted:***	Nov-05-19 07:30		Nov-05-19 07:30		Nov-05-19 07:30		Nov-05-19 07:30		Nov-05-19 07:30		Nov-05-19 07:30	
	Analyzed:	Nov-05-19 08:27		Nov-05-19 08:45		Nov-05-19 08:51		Nov-05-19 08:57		Nov-05-19 09:03		Nov-05-19 09:21	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		1390	49.4	343	9.96	2810	99.6	474	9.98	303	10.1	205	10.1
TPH by SW8015 Mod	***Extracted:***	Nov-04-19 17:00		Nov-04-19 17:00		Nov-04-19 17:00		Nov-04-19 17:00		Nov-04-19 17:00		Nov-04-19 17:00	
	Analyzed:	Nov-05-19 01:12		Nov-05-19 02:13		Nov-05-19 11:47		Nov-05-19 02:53		Nov-05-19 12:07		Nov-05-19 03:33	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.2	50.2	<49.8	49.8	<251	251	<50.0	50.0	<50.3	50.3	<50.0	50.0
Diesel Range Organics (DRO)		<50.2	50.2	<49.8	49.8	9890	251	<50.0	50.0	<50.3	50.3	<50.0	50.0
Motor Oil Range Hydrocarbons (MRO)		<50.2	50.2	<49.8	49.8	1460	251	64.3	50.0	<50.3	50.3	<50.0	50.0
Total GRO-DRO		<50.2	50.2	<49.8	49.8	9890	251	<50.0	50.0	<50.3	50.3	<50.0	50.0
Total TPH		<50.2	50.2	<49.8	49.8	11400	251	64.3	50.0	<50.3	50.3	<50.0	50.0

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

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 641857

LT Environmental, Inc., Arvada, CO

Project Name: Corral Canyon 4H

Project Id: 012919124
Contact: Aimee Cole
Project Location: Rural Eddy County

Date Received in Lab: Fri Nov-01-19 01:59 pm
Report Date: 05-NOV-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	641857-007		641857-008		641857-009		641857-010		641857-011		641857-012	
	Field Id:	PH03B		PH04		PH04B		PH05		PH05A		PH06	
	Depth:	2- ft		0.5- ft		2- ft		0.5- ft		2- ft		0.5- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-29-19 11:40		Oct-29-19 11:55		Oct-29-19 12:05		Oct-29-19 12:30		Oct-29-19 12:40		Oct-29-19 13:00	
BTEX by EPA 8021B	**Extracted:**	Nov-01-19 18:11		Nov-01-19 18:11		Nov-01-19 18:11		Nov-01-19 18:11		Nov-01-19 18:11		Nov-01-19 18:11	
	Analyzed:	Nov-02-19 11:08		Nov-02-19 11:27		Nov-02-19 11:46		Nov-02-19 12:50		Nov-02-19 13:09		Nov-02-19 13:29	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00101	0.00101	<0.000994	0.000994	<0.000996	0.000996	<0.000998	0.000998	<0.00101	0.00101	<0.00100	0.00100
Toluene		<0.00101	0.00101	<0.000994	0.000994	<0.000996	0.000996	<0.000998	0.000998	<0.00101	0.00101	<0.00100	0.00100
Ethylbenzene		<0.00101	0.00101	<0.000994	0.000994	<0.000996	0.000996	<0.000998	0.000998	<0.00101	0.00101	<0.00100	0.00100
m,p-Xylenes		<0.00201	0.00201	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00202	0.00202	<0.00201	0.00201
o-Xylene		<0.00101	0.00101	<0.000994	0.000994	<0.000996	0.000996	<0.000998	0.000998	<0.00101	0.00101	<0.00100	0.00100
Total Xylenes		<0.00101	0.00101	<0.000994	0.000994	<0.000996	0.000996	<0.000998	0.000998	<0.00101	0.00101	<0.00100	0.00100
Total BTEX		<0.00101	0.00101	<0.000994	0.000994	<0.000996	0.000996	<0.000998	0.000998	<0.00101	0.00101	<0.00100	0.00100
Chloride by EPA 300	**Extracted:**	Nov-05-19 07:30		Nov-05-19 07:30		Nov-05-19 07:30		Nov-05-19 07:30		Nov-05-19 07:30		Nov-05-19 07:30	
	Analyzed:	Nov-05-19 09:27		Nov-05-19 09:33		Nov-05-19 09:39		Nov-05-19 09:45		Nov-05-19 09:51		Nov-05-19 10:09	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		531	10.1	68.7	10.0	38.3	10.0	42.4	9.98	41.3	9.92	24.2	9.98
TPH by SW8015 Mod	**Extracted:**	Nov-04-19 17:00		Nov-04-19 17:00		Nov-04-19 17:00		Nov-04-19 17:00		Nov-04-19 17:00		Nov-04-19 17:00	
	Analyzed:	Nov-05-19 03:54		Nov-05-19 04:14		Nov-05-19 04:34		Nov-05-19 04:54		Nov-05-19 05:34		Nov-05-19 05:54	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.2	50.2	<50.3	50.3	<49.9	49.9	<50.2	50.2	<49.9	49.9	<50.3	50.3
Diesel Range Organics (DRO)		<50.2	50.2	<50.3	50.3	<49.9	49.9	<50.2	50.2	<49.9	49.9	<50.3	50.3
Motor Oil Range Hydrocarbons (MRO)		<50.2	50.2	<50.3	50.3	<49.9	49.9	<50.2	50.2	<49.9	49.9	<50.3	50.3
Total GRO-DRO		<50.2	50.2	<50.3	50.3	<49.9	49.9	<50.2	50.2	<49.9	49.9	<50.3	50.3
Total TPH		<50.2	50.2	<50.3	50.3	<49.9	49.9	<50.2	50.2	<49.9	49.9	<50.3	50.3

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

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 641857

LT Environmental, Inc., Arvada, CO

Project Name: Corral Canyon 4H

Project Id: 012919124
Contact: Aimee Cole
Project Location: Rural Eddy County

Date Received in Lab: Fri Nov-01-19 01:59 pm
Report Date: 05-NOV-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	641857-013		641857-014		641857-015		641857-016		641857-017		641857-018	
	Field Id:	PH06A		PH07		PH07A		PH08		PH08A		PH09	
	Depth:	2- ft		0.5- ft		2- ft		0.5- ft		2- ft		0.5- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-29-19 13:10		Oct-29-19 13:20		Oct-29-19 13:30		Oct-29-19 13:45		Oct-29-19 13:55		Oct-29-19 14:00	
BTEX by EPA 8021B	*Extracted:*	Nov-01-19 18:11		Nov-01-19 18:11		Nov-01-19 18:11		Nov-01-19 18:11		Nov-01-19 18:11		Nov-01-19 18:11	
	Analyzed:	Nov-02-19 13:48		Nov-02-19 08:54		Nov-02-19 14:07		Nov-02-19 14:26		Nov-02-19 14:45		Nov-02-19 15:04	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.000988	0.000988	<0.00100	0.00100	<0.000998	0.000998	<0.00100	0.00100	<0.00101	0.00101	<0.00101	0.00101
Toluene		<0.000988	0.000988	<0.00100	0.00100	<0.000998	0.000998	<0.00100	0.00100	<0.00101	0.00101	<0.00101	0.00101
Ethylbenzene		<0.000988	0.000988	<0.00100	0.00100	<0.000998	0.000998	<0.00100	0.00100	<0.00101	0.00101	<0.00101	0.00101
m,p-Xylenes		<0.00198	0.00198	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00202	0.00202
o-Xylene		<0.000988	0.000988	<0.00100	0.00100	<0.000998	0.000998	<0.00100	0.00100	<0.00101	0.00101	<0.00101	0.00101
Total Xylenes		<0.000988	0.000988	<0.00100	0.00100	<0.000998	0.000998	<0.00100	0.00100	<0.00101	0.00101	<0.00101	0.00101
Total BTEX		<0.000988	0.000988	<0.00100	0.00100	<0.000998	0.000998	<0.00100	0.00100	<0.00101	0.00101	<0.00101	0.00101
Chloride by EPA 300	*Extracted:*	Nov-05-19 07:30		Nov-05-19 07:30		Nov-05-19 07:30		Nov-05-19 07:30		Nov-05-19 07:30		Nov-05-19 07:30	
	Analyzed:	Nov-05-19 10:15		Nov-05-19 10:33		Nov-05-19 10:39		Nov-05-19 10:45		Nov-05-19 10:51		Nov-05-19 10:57	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		65.7	50.4	34.1	10.0	23.2	10.1	707	20.2	54.6	9.98	635	49.8
TPH by SW8015 Mod	*Extracted:*	Nov-04-19 17:00		Nov-04-19 17:00		Nov-04-19 17:00		Nov-04-19 17:00		Nov-04-19 17:00		Nov-04-19 17:00	
	Analyzed:	Nov-05-19 06:14		Nov-05-19 06:34		Nov-05-19 06:54		Nov-05-19 07:14		Nov-05-19 07:34		Nov-05-19 07:54	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	<50.0	50.0	<50.3	50.3	<50.2	50.2	<49.8	49.8	<49.9	49.9
Diesel Range Organics (DRO)		<50.0	50.0	<50.0	50.0	<50.3	50.3	<50.2	50.2	<49.8	49.8	<49.9	49.9
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<50.0	50.0	<50.3	50.3	<50.2	50.2	<49.8	49.8	<49.9	49.9
Total GRO-DRO		<50.0	50.0	<50.0	50.0	<50.3	50.3	<50.2	50.2	<49.8	49.8	<49.9	49.9
Total TPH		<50.0	50.0	<50.0	50.0	<50.3	50.3	<50.2	50.2	<49.8	49.8	<49.9	49.9

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 641857

LT Environmental, Inc., Arvada, CO

Project Name: Corral Canyon 4H

Project Id: 012919124
Contact: Aimee Cole
Project Location: Rural Eddy County

Date Received in Lab: Fri Nov-01-19 01:59 pm
Report Date: 05-NOV-19
Project Manager: Jessica Kramer

Analysis Requested							
	Lab Id:	641857-019					
	Field Id:	PH09A					
	Depth:	2- ft					
	Matrix:	SOIL					
	Sampled:	Oct-29-19 14:05					
BTEX by EPA 8021B	***Extracted:***	Nov-01-19 18:11					
	Analyzed:	Nov-02-19 15:24					
	Units/RL:	mg/kg RL					
Benzene		<0.000998 0.000998					
Toluene		<0.000998 0.000998					
Ethylbenzene		<0.000998 0.000998					
m,p-Xylenes		<0.00200 0.00200					
o-Xylene		<0.000998 0.000998					
Total Xylenes		<0.000998 0.000998					
Total BTEX		<0.000998 0.000998					
Chloride by EPA 300	***Extracted:***	Nov-05-19 07:30					
	Analyzed:	Nov-05-19 11:03					
	Units/RL:	mg/kg RL					
Chloride		123 9.94					
TPH by SW8015 Mod	***Extracted:***	Nov-04-19 17:00					
	Analyzed:	Nov-05-19 08:14					
	Units/RL:	mg/kg RL					
Gasoline Range Hydrocarbons (GRO)		<49.8 49.8					
Diesel Range Organics (DRO)		<49.8 49.8					
Motor Oil Range Hydrocarbons (MRO)		<49.8 49.8					
Total GRO-DRO		<49.8 49.8					
Total TPH		<49.8 49.8					

Jessica Kramer
Project Assistant

Certificate of Analytical Results 641857

LT Environmental, Inc., Arvada, CO

Corral Canyon 4H

Sample Id:	**PH01**	Matrix:	Soil	Date Received:	11.01.19 13.59
Lab Sample Id:	641857-001	Date Collected:	10.29.19 10.30	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.05.19 07.30	Basis:	Wet Weight
Seq Number:	3106466				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1390**	49.4	mg/kg	11.05.19 08.27		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	11.04.19 17.00	Basis:	Wet Weight
Seq Number:	3106467				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	11.05.19 01.12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	11.05.19 01.12	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	11.05.19 01.12	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	11.05.19 01.12	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	11.05.19 01.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	72	%	70-135	11.05.19 01.12	
o-Terphenyl	84-15-1	76	%	70-135	11.05.19 01.12	

Certificate of Analytical Results 641857

LT Environmental, Inc., Arvada, CO

Corral Canyon 4H

Sample Id:	**PH01**	Matrix:	Soil	Date Received:	11.01.19 13.59
Lab Sample Id:	641857-001	Date Collected:	10.29.19 10.30	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.01.19 18.11	Basis:	Wet Weight
Seq Number:	3106342				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00100	0.00100	mg/kg	11.02.19 09.13	U	1
Toluene	108-88-3	<0.00100	0.00100	mg/kg	11.02.19 09.13	U	1
Ethylbenzene	100-41-4	<0.00100	0.00100	mg/kg	11.02.19 09.13	U	1
m,p-Xylenes	179601-23-1	<0.00201	0.00201	mg/kg	11.02.19 09.13	U	1
o-Xylene	95-47-6	<0.00100	0.00100	mg/kg	11.02.19 09.13	U	1
Total Xylenes	1330-20-7	<0.00100	0.00100	mg/kg	11.02.19 09.13	U	1
Total BTEX		<0.00100	0.00100	mg/kg	11.02.19 09.13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	117	%	70-130	11.02.19 09.13	
1,4-Difluorobenzene	540-36-3	100	%	70-130	11.02.19 09.13	

Certificate of Analytical Results 641857

LT Environmental, Inc., Arvada, CO

Corral Canyon 4H

Sample Id:	**PH01A**	Matrix:	Soil	Date Received:	11.01.19 13.59
Lab Sample Id:	641857-002	Date Collected:	10.29.19 10.40	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.05.19 07.30	Basis:	Wet Weight
Seq Number:	3106466				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**343**	9.96	mg/kg	11.05.19 08.45		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	11.04.19 17.00	Basis:	Wet Weight
Seq Number:	3106467				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	11.05.19 02.13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	11.05.19 02.13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	11.05.19 02.13	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	11.05.19 02.13	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	11.05.19 02.13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	134	%	70-135	11.05.19 02.13	
o-Terphenyl	84-15-1	142	%	70-135	11.05.19 02.13	**

Certificate of Analytical Results 641857

LT Environmental, Inc., Arvada, CO

Corral Canyon 4H

Sample Id:	**PH01A**	Matrix:	Soil	Date Received:	11.01.19 13.59
Lab Sample Id:	641857-002	Date Collected:	10.29.19 10.40	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.01.19 18.11	Basis:	Wet Weight
Seq Number:	3106342				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00101	0.00101	mg/kg	11.02.19 09.32	U	1
Toluene	108-88-3	<0.00101	0.00101	mg/kg	11.02.19 09.32	U	1
Ethylbenzene	100-41-4	<0.00101	0.00101	mg/kg	11.02.19 09.32	U	1
m,p-Xylenes	179601-23-1	<0.00201	0.00201	mg/kg	11.02.19 09.32	U	1
o-Xylene	95-47-6	<0.00101	0.00101	mg/kg	11.02.19 09.32	U	1
Total Xylenes	1330-20-7	<0.00101	0.00101	mg/kg	11.02.19 09.32	U	1
Total BTEX		<0.00101	0.00101	mg/kg	11.02.19 09.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	124	%	70-130	11.02.19 09.32	
1,4-Difluorobenzene	540-36-3	104	%	70-130	11.02.19 09.32	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 4H

Sample Id:	**PH02**	Matrix:	Soil	Date Received:	11.01.19 13.59
Lab Sample Id:	641857-003	Date Collected:	10.29.19 10.55	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.05.19 07.30	Basis:	Wet Weight
Seq Number:	3106466				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2810**	99.6	mg/kg	11.05.19 08.51		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	11.04.19 17.00	Basis:	Wet Weight
Seq Number:	3106467				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<251	251	mg/kg	11.05.19 11.47	U	5
Diesel Range Organics (DRO)	C10C28DRO	**9890**	251	mg/kg	11.05.19 11.47		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**1460**	251	mg/kg	11.05.19 11.47		5
Total GRO-DRO	PHC628	**9890**	251	mg/kg	11.05.19 11.47		5
Total TPH	PHC635	**11400**	251	mg/kg	11.05.19 11.47		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	11.05.19 11.47	
o-Terphenyl	84-15-1	107	%	70-135	11.05.19 11.47	

Certificate of Analytical Results 641857

LT Environmental, Inc., Arvada, CO

Corral Canyon 4H

Sample Id:	**PH02**	Matrix:	Soil	Date Received:	11.01.19 13.59
Lab Sample Id:	641857-003	Date Collected:	10.29.19 10.55	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.01.19 18.11	Basis:	Wet Weight
Seq Number:	3106342				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00962	0.00962	mg/kg	11.02.19 09.51	U	1
Toluene	108-88-3	<0.00962	0.00962	mg/kg	11.02.19 09.51	U	1
Ethylbenzene	100-41-4	<0.00962	0.00962	mg/kg	11.02.19 09.51	U	1
m,p-Xylenes	179601-23-1	<0.0192	0.0192	mg/kg	11.02.19 09.51	U	1
o-Xylene	95-47-6	<0.00962	0.00962	mg/kg	11.02.19 09.51	U	1
Total Xylenes	1330-20-7	<0.00962	0.00962	mg/kg	11.02.19 09.51	U	1
Total BTEX		<0.00962	0.00962	mg/kg	11.02.19 09.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	114	%	70-130	11.02.19 09.51	
1,4-Difluorobenzene	540-36-3	102	%	70-130	11.02.19 09.51	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 4H

Sample Id:	**PH02A**	Matrix:	Soil	Date Received:	11.01.19 13.59
Lab Sample Id:	641857-004	Date Collected:	10.29.19 11.05	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.05.19 07.30	Basis:	Wet Weight
Seq Number:	3106466				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**474**	9.98	mg/kg	11.05.19 08.57		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	11.04.19 17.00	Basis:	Wet Weight
Seq Number:	3106467				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	11.05.19 02.53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	11.05.19 02.53	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**64.3**	50.0	mg/kg	11.05.19 02.53		1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	11.05.19 02.53	U	1
Total TPH	PHC635	**64.3**	50.0	mg/kg	11.05.19 02.53		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	11.05.19 02.53	
o-Terphenyl	84-15-1	97	%	70-135	11.05.19 02.53	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 4H

Sample Id:	**PH02A**	Matrix:	Soil	Date Received:	11.01.19 13.59
Lab Sample Id:	641857-004	Date Collected:	10.29.19 11.05	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.01.19 18.11	Basis:	Wet Weight
Seq Number:	3106342				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000994	0.000994	mg/kg	11.02.19 10.11	U	1
Toluene	108-88-3	<0.000994	0.000994	mg/kg	11.02.19 10.11	U	1
Ethylbenzene	100-41-4	<0.000994	0.000994	mg/kg	11.02.19 10.11	U	1
m,p-Xylenes	179601-23-1	<0.00199	0.00199	mg/kg	11.02.19 10.11	U	1
o-Xylene	95-47-6	**0.0412**	0.000994	mg/kg	11.02.19 10.11		1
Total Xylenes	1330-20-7	**0.0412**	0.000994	mg/kg	11.02.19 10.11		1
Total BTEX		**0.0412**	0.000994	mg/kg	11.02.19 10.11		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	121	%	70-130	11.02.19 10.11	
1,4-Difluorobenzene	540-36-3	102	%	70-130	11.02.19 10.11	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 4H

Sample Id:	**PH03**	Matrix:	Soil	Date Received:	11.01.19 13.59
Lab Sample Id:	641857-005	Date Collected:	10.29.19 11.30	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.05.19 07.30	Basis:	Wet Weight
Seq Number:	3106466				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**303**	10.1	mg/kg	11.05.19 09.03		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	11.04.19 17.00	Basis:	Wet Weight
Seq Number:	3106467				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	11.05.19 12.07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	11.05.19 12.07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	11.05.19 12.07	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	11.05.19 12.07	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	11.05.19 12.07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	11.05.19 12.07	
o-Terphenyl	84-15-1	110	%	70-135	11.05.19 12.07	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 4H

Sample Id:	**PH03**	Matrix:	Soil	Date Received:	11.01.19 13.59
Lab Sample Id:	641857-005	Date Collected:	10.29.19 11.30	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.01.19 18.11	Basis:	Wet Weight
Seq Number:	3106342				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000990	0.000990	mg/kg	11.02.19 10.30	U	1
Toluene	108-88-3	<0.000990	0.000990	mg/kg	11.02.19 10.30	U	1
Ethylbenzene	100-41-4	<0.000990	0.000990	mg/kg	11.02.19 10.30	U	1
m,p-Xylenes	179601-23-1	<0.00198	0.00198	mg/kg	11.02.19 10.30	U	1
o-Xylene	95-47-6	<0.000990	0.000990	mg/kg	11.02.19 10.30	U	1
Total Xylenes	1330-20-7	<0.000990	0.000990	mg/kg	11.02.19 10.30	U	1
Total BTEX		<0.000990	0.000990	mg/kg	11.02.19 10.30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	124	%	70-130	11.02.19 10.30	
1,4-Difluorobenzene	540-36-3	103	%	70-130	11.02.19 10.30	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 4H

Sample Id:	**PH03A**	Matrix:	Soil	Date Received:	11.01.19 13.59
Lab Sample Id:	641857-006	Date Collected:	10.29.19 11.35	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.05.19 07.30	Basis:	Wet Weight
Seq Number:	3106466				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**205**	10.1	mg/kg	11.05.19 09.21		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	11.04.19 17.00	Basis:	Wet Weight
Seq Number:	3106467				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	11.05.19 03.33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	11.05.19 03.33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	11.05.19 03.33	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	11.05.19 03.33	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	11.05.19 03.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	11.05.19 03.33	
o-Terphenyl	84-15-1	94	%	70-135	11.05.19 03.33	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 4H

Sample Id:	**PH03A**	Matrix:	Soil	Date Received:	11.01.19 13.59
Lab Sample Id:	641857-006	Date Collected:	10.29.19 11.35	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.01.19 18.11	Basis:	Wet Weight
Seq Number:	3106342				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000998	0.000998	mg/kg	11.02.19 10.49	U	1
Toluene	108-88-3	<0.000998	0.000998	mg/kg	11.02.19 10.49	U	1
Ethylbenzene	100-41-4	<0.000998	0.000998	mg/kg	11.02.19 10.49	U	1
m,p-Xylenes	179601-23-1	<0.00200	0.00200	mg/kg	11.02.19 10.49	U	1
o-Xylene	95-47-6	<0.000998	0.000998	mg/kg	11.02.19 10.49	U	1
Total Xylenes	1330-20-7	<0.000998	0.000998	mg/kg	11.02.19 10.49	U	1
Total BTEX		<0.000998	0.000998	mg/kg	11.02.19 10.49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	11.02.19 10.49	
4-Bromofluorobenzene	460-00-4	117	%	70-130	11.02.19 10.49	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 4H

Sample Id:	**PH03B**	Matrix:	Soil	Date Received:	11.01.19 13.59
Lab Sample Id:	641857-007	Date Collected:	10.29.19 11.40	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.05.19 07.30	Basis:	Wet Weight
Seq Number:	3106466				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**531**	10.1	mg/kg	11.05.19 09.27		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	11.04.19 17.00	Basis:	Wet Weight
Seq Number:	3106467				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	11.05.19 03.54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	11.05.19 03.54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	11.05.19 03.54	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	11.05.19 03.54	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	11.05.19 03.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	135	%	70-135	11.05.19 03.54	
o-Terphenyl	84-15-1	144	%	70-135	11.05.19 03.54	**

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LT Environmental, Inc., Arvada, CO

Corral Canyon 4H

Sample Id:	**PH03B**	Matrix:	Soil	Date Received:	11.01.19 13.59
Lab Sample Id:	641857-007	Date Collected:	10.29.19 11.40	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.01.19 18.11	Basis:	Wet Weight
Seq Number:	3106342				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00101	0.00101	mg/kg	11.02.19 11.08	U	1
Toluene	108-88-3	<0.00101	0.00101	mg/kg	11.02.19 11.08	U	1
Ethylbenzene	100-41-4	<0.00101	0.00101	mg/kg	11.02.19 11.08	U	1
m,p-Xylenes	179601-23-1	<0.00201	0.00201	mg/kg	11.02.19 11.08	U	1
o-Xylene	95-47-6	<0.00101	0.00101	mg/kg	11.02.19 11.08	U	1
Total Xylenes	1330-20-7	<0.00101	0.00101	mg/kg	11.02.19 11.08	U	1
Total BTEX		<0.00101	0.00101	mg/kg	11.02.19 11.08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	95	%	70-130	11.02.19 11.08	
4-Bromofluorobenzene	460-00-4	115	%	70-130	11.02.19 11.08	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 4H

Sample Id:	**PH04**	Matrix:	Soil	Date Received:	11.01.19 13.59
Lab Sample Id:	641857-008	Date Collected:	10.29.19 11.55	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.05.19 07.30	Basis:	Wet Weight
Seq Number:	3106466				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**68.7**	10.0	mg/kg	11.05.19 09.33		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	11.04.19 17.00	Basis:	Wet Weight
Seq Number:	3106467				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	11.05.19 04.14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	11.05.19 04.14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	11.05.19 04.14	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	11.05.19 04.14	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	11.05.19 04.14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-135	11.05.19 04.14	
o-Terphenyl	84-15-1	86	%	70-135	11.05.19 04.14	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 4H

Sample Id:	**PH04**	Matrix:	Soil	Date Received:	11.01.19 13.59
Lab Sample Id:	641857-008	Date Collected:	10.29.19 11.55	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.01.19 18.11	Basis:	Wet Weight
Seq Number:	3106342				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000994	0.000994	mg/kg	11.02.19 11.27	U	1
Toluene	108-88-3	<0.000994	0.000994	mg/kg	11.02.19 11.27	U	1
Ethylbenzene	100-41-4	<0.000994	0.000994	mg/kg	11.02.19 11.27	U	1
m,p-Xylenes	179601-23-1	<0.00199	0.00199	mg/kg	11.02.19 11.27	U	1
o-Xylene	95-47-6	<0.000994	0.000994	mg/kg	11.02.19 11.27	U	1
Total Xylenes	1330-20-7	<0.000994	0.000994	mg/kg	11.02.19 11.27	U	1
Total BTEX		<0.000994	0.000994	mg/kg	11.02.19 11.27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	70-130	11.02.19 11.27	
4-Bromofluorobenzene	460-00-4	121	%	70-130	11.02.19 11.27	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 4H

Sample Id:	**PH04B**	Matrix:	Soil	Date Received:	11.01.19 13.59
Lab Sample Id:	641857-009	Date Collected:	10.29.19 12.05	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.05.19 07.30	Basis:	Wet Weight
Seq Number:	3106466				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**38.3**	10.0	mg/kg	11.05.19 09.39		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	11.04.19 17.00	Basis:	Wet Weight
Seq Number:	3106467				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	11.05.19 04.34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	11.05.19 04.34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	11.05.19 04.34	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	11.05.19 04.34	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	11.05.19 04.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	119	%	70-135	11.05.19 04.34	
o-Terphenyl	84-15-1	128	%	70-135	11.05.19 04.34	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 4H

Sample Id:	**PH04B**	Matrix:	Soil	Date Received:	11.01.19 13.59
Lab Sample Id:	641857-009	Date Collected:	10.29.19 12.05	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.01.19 18.11	Basis:	Wet Weight
Seq Number:	3106342				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000996	0.000996	mg/kg	11.02.19 11.46	U	1
Toluene	108-88-3	<0.000996	0.000996	mg/kg	11.02.19 11.46	U	1
Ethylbenzene	100-41-4	<0.000996	0.000996	mg/kg	11.02.19 11.46	U	1
m,p-Xylenes	179601-23-1	<0.00199	0.00199	mg/kg	11.02.19 11.46	U	1
o-Xylene	95-47-6	<0.000996	0.000996	mg/kg	11.02.19 11.46	U	1
Total Xylenes	1330-20-7	<0.000996	0.000996	mg/kg	11.02.19 11.46	U	1
Total BTEX		<0.000996	0.000996	mg/kg	11.02.19 11.46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	11.02.19 11.46	
4-Bromofluorobenzene	460-00-4	124	%	70-130	11.02.19 11.46	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 4H

Sample Id:	**PH05**	Matrix:	Soil	Date Received:	11.01.19 13.59
Lab Sample Id:	641857-010	Date Collected:	10.29.19 12.30	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.05.19 07.30	Basis:	Wet Weight
Seq Number:	3106466				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**42.4**	9.98	mg/kg	11.05.19 09.45		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	11.04.19 17.00	Basis:	Wet Weight
Seq Number:	3106467				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	11.05.19 04.54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	11.05.19 04.54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	11.05.19 04.54	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	11.05.19 04.54	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	11.05.19 04.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	82	%	70-135	11.05.19 04.54	
o-Terphenyl	84-15-1	88	%	70-135	11.05.19 04.54	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 4H

Sample Id:	**PH05**	Matrix:	Soil	Date Received:	11.01.19 13.59
Lab Sample Id:	641857-010	Date Collected:	10.29.19 12.30	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.01.19 18.11	Basis:	Wet Weight
Seq Number:	3106342				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000998	0.000998	mg/kg	11.02.19 12.50	U	1
Toluene	108-88-3	<0.000998	0.000998	mg/kg	11.02.19 12.50	U	1
Ethylbenzene	100-41-4	<0.000998	0.000998	mg/kg	11.02.19 12.50	U	1
m,p-Xylenes	179601-23-1	<0.00200	0.00200	mg/kg	11.02.19 12.50	U	1
o-Xylene	95-47-6	<0.000998	0.000998	mg/kg	11.02.19 12.50	U	1
Total Xylenes	1330-20-7	<0.000998	0.000998	mg/kg	11.02.19 12.50	U	1
Total BTEX		<0.000998	0.000998	mg/kg	11.02.19 12.50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	114	%	70-130	11.02.19 12.50	
1,4-Difluorobenzene	540-36-3	101	%	70-130	11.02.19 12.50	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 4H

Sample Id:	**PH05A**	Matrix:	Soil	Date Received:	11.01.19 13.59
Lab Sample Id:	641857-011	Date Collected:	10.29.19 12.40	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.05.19 07.30	Basis:	Wet Weight
Seq Number:	3106466				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**41.3**	9.92	mg/kg	11.05.19 09.51		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	11.04.19 17.00	Basis:	Wet Weight
Seq Number:	3106467				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	11.05.19 05.34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	11.05.19 05.34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	11.05.19 05.34	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	11.05.19 05.34	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	11.05.19 05.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-135	11.05.19 05.34	
o-Terphenyl	84-15-1	123	%	70-135	11.05.19 05.34	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 4H

Sample Id:	**PH05A**	Matrix:	Soil	Date Received:	11.01.19 13.59
Lab Sample Id:	641857-011	Date Collected:	10.29.19 12.40	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.01.19 18.11	Basis:	Wet Weight
Seq Number:	3106342				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00101	0.00101	mg/kg	11.02.19 13.09	U	1
Toluene	108-88-3	<0.00101	0.00101	mg/kg	11.02.19 13.09	U	1
Ethylbenzene	100-41-4	<0.00101	0.00101	mg/kg	11.02.19 13.09	U	1
m,p-Xylenes	179601-23-1	<0.00202	0.00202	mg/kg	11.02.19 13.09	U	1
o-Xylene	95-47-6	<0.00101	0.00101	mg/kg	11.02.19 13.09	U	1
Total Xylenes	1330-20-7	<0.00101	0.00101	mg/kg	11.02.19 13.09	U	1
Total BTEX		<0.00101	0.00101	mg/kg	11.02.19 13.09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	104	%	70-130	11.02.19 13.09	
4-Bromofluorobenzene	460-00-4	120	%	70-130	11.02.19 13.09	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 4H

Sample Id:	**PH06**	Matrix:	Soil	Date Received:	11.01.19 13.59
Lab Sample Id:	641857-012	Date Collected:	10.29.19 13.00	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.05.19 07.30	Basis:	Wet Weight
Seq Number:	3106466				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**24.2**	9.98	mg/kg	11.05.19 10.09		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	11.04.19 17.00	Basis:	Wet Weight
Seq Number:	3106467				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	11.05.19 05.54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	11.05.19 05.54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	11.05.19 05.54	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	11.05.19 05.54	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	11.05.19 05.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	174	%	70-135	11.05.19 05.54	**
o-Terphenyl	84-15-1	187	%	70-135	11.05.19 05.54	**

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LT Environmental, Inc., Arvada, CO

Corral Canyon 4H

Sample Id:	**PH06**	Matrix:	Soil	Date Received:	11.01.19 13.59
Lab Sample Id:	641857-012	Date Collected:	10.29.19 13.00	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.01.19 18.11	Basis:	Wet Weight
Seq Number:	3106342				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00100	0.00100	mg/kg	11.02.19 13.29	U	1
Toluene	108-88-3	<0.00100	0.00100	mg/kg	11.02.19 13.29	U	1
Ethylbenzene	100-41-4	<0.00100	0.00100	mg/kg	11.02.19 13.29	U	1
m,p-Xylenes	179601-23-1	<0.00201	0.00201	mg/kg	11.02.19 13.29	U	1
o-Xylene	95-47-6	<0.00100	0.00100	mg/kg	11.02.19 13.29	U	1
Total Xylenes	1330-20-7	<0.00100	0.00100	mg/kg	11.02.19 13.29	U	1
Total BTEX		<0.00100	0.00100	mg/kg	11.02.19 13.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	103	%	70-130	11.02.19 13.29	
4-Bromofluorobenzene	460-00-4	121	%	70-130	11.02.19 13.29	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 4H

Sample Id:	**PH06A**	Matrix:	Soil	Date Received:	11.01.19 13.59
Lab Sample Id:	641857-013	Date Collected:	10.29.19 13.10	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.05.19 07.30	Basis:	Wet Weight
Seq Number:	3106466				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**65.7**	50.4	mg/kg	11.05.19 10.15		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	11.04.19 17.00	Basis:	Wet Weight
Seq Number:	3106467				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	11.05.19 06.14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	11.05.19 06.14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	11.05.19 06.14	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	11.05.19 06.14	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	11.05.19 06.14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	138	%	70-135	11.05.19 06.14	**
o-Terphenyl	84-15-1	146	%	70-135	11.05.19 06.14	**

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LT Environmental, Inc., Arvada, CO

Corral Canyon 4H

Sample Id:	**PH06A**	Matrix:	Soil	Date Received:	11.01.19 13.59
Lab Sample Id:	641857-013	Date Collected:	10.29.19 13.10	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.01.19 18.11	Basis:	Wet Weight
Seq Number:	3106342				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000988	0.000988	mg/kg	11.02.19 13.48	U	1
Toluene	108-88-3	<0.000988	0.000988	mg/kg	11.02.19 13.48	U	1
Ethylbenzene	100-41-4	<0.000988	0.000988	mg/kg	11.02.19 13.48	U	1
m,p-Xylenes	179601-23-1	<0.00198	0.00198	mg/kg	11.02.19 13.48	U	1
o-Xylene	95-47-6	<0.000988	0.000988	mg/kg	11.02.19 13.48	U	1
Total Xylenes	1330-20-7	<0.000988	0.000988	mg/kg	11.02.19 13.48	U	1
Total BTEX		<0.000988	0.000988	mg/kg	11.02.19 13.48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	70-130	11.02.19 13.48	
4-Bromofluorobenzene	460-00-4	118	%	70-130	11.02.19 13.48	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 4H

Sample Id:	**PH07**	Matrix:	Soil	Date Received:	11.01.19 13.59
Lab Sample Id:	641857-014	Date Collected:	10.29.19 13.20	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.05.19 07.30	Basis:	Wet Weight
Seq Number:	3106466				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**34.1**	10.0	mg/kg	11.05.19 10.33		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	11.04.19 17.00	Basis:	Wet Weight
Seq Number:	3106467				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	11.05.19 06.34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	11.05.19 06.34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	11.05.19 06.34	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	11.05.19 06.34	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	11.05.19 06.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-135	11.05.19 06.34	
o-Terphenyl	84-15-1	83	%	70-135	11.05.19 06.34	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 4H

Sample Id:	**PH07**	Matrix:	Soil	Date Received:	11.01.19 13.59
Lab Sample Id:	641857-014	Date Collected:	10.29.19 13.20	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.01.19 18.11	Basis:	Wet Weight
Seq Number:	3106342				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00100	0.00100	mg/kg	11.02.19 08.54	U	1
Toluene	108-88-3	<0.00100	0.00100	mg/kg	11.02.19 08.54	U	1
Ethylbenzene	100-41-4	<0.00100	0.00100	mg/kg	11.02.19 08.54	U	1
m,p-Xylenes	179601-23-1	<0.00200	0.00200	mg/kg	11.02.19 08.54	U	1
o-Xylene	95-47-6	<0.00100	0.00100	mg/kg	11.02.19 08.54	U	1
Total Xylenes	1330-20-7	<0.00100	0.00100	mg/kg	11.02.19 08.54	U	1
Total BTEX		<0.00100	0.00100	mg/kg	11.02.19 08.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	11.02.19 08.54	
4-Bromofluorobenzene	460-00-4	115	%	70-130	11.02.19 08.54	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 4H

Sample Id:	**PH07A**	Matrix:	Soil	Date Received:	11.01.19 13.59
Lab Sample Id:	641857-015	Date Collected:	10.29.19 13.30	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.05.19 07.30	Basis:	Wet Weight
Seq Number:	3106466				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**23.2**	10.1	mg/kg	11.05.19 10.39		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	11.04.19 17.00	Basis:	Wet Weight
Seq Number:	3106467				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	11.05.19 06.54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	11.05.19 06.54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	11.05.19 06.54	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	11.05.19 06.54	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	11.05.19 06.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	11.05.19 06.54	
o-Terphenyl	84-15-1	121	%	70-135	11.05.19 06.54	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 4H

Sample Id:	**PH07A**	Matrix:	Soil	Date Received:	11.01.19 13.59
Lab Sample Id:	641857-015	Date Collected:	10.29.19 13.30	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.01.19 18.11	Basis:	Wet Weight
Seq Number:	3106342				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000998	0.000998	mg/kg	11.02.19 14.07	U	1
Toluene	108-88-3	<0.000998	0.000998	mg/kg	11.02.19 14.07	U	1
Ethylbenzene	100-41-4	<0.000998	0.000998	mg/kg	11.02.19 14.07	U	1
m,p-Xylenes	179601-23-1	<0.00200	0.00200	mg/kg	11.02.19 14.07	U	1
o-Xylene	95-47-6	<0.000998	0.000998	mg/kg	11.02.19 14.07	U	1
Total Xylenes	1330-20-7	<0.000998	0.000998	mg/kg	11.02.19 14.07	U	1
Total BTEX		<0.000998	0.000998	mg/kg	11.02.19 14.07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	104	%	70-130	11.02.19 14.07	
4-Bromofluorobenzene	460-00-4	120	%	70-130	11.02.19 14.07	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 4H

Sample Id:	**PH08**	Matrix:	Soil	Date Received:	11.01.19 13.59
Lab Sample Id:	641857-016	Date Collected:	10.29.19 13.45	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.05.19 07.30	Basis:	Wet Weight
Seq Number:	3106466				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**707**	20.2	mg/kg	11.05.19 10.45		2

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	11.04.19 17.00	Basis:	Wet Weight
Seq Number:	3106467				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	11.05.19 07.14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	11.05.19 07.14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	11.05.19 07.14	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	11.05.19 07.14	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	11.05.19 07.14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	11.05.19 07.14	
o-Terphenyl	84-15-1	102	%	70-135	11.05.19 07.14	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 4H

Sample Id:	**PH08**	Matrix:	Soil	Date Received:	11.01.19 13.59
Lab Sample Id:	641857-016	Date Collected:	10.29.19 13.45	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.01.19 18.11	Basis:	Wet Weight
Seq Number:	3106342				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00100	0.00100	mg/kg	11.02.19 14.26	U	1
Toluene	108-88-3	<0.00100	0.00100	mg/kg	11.02.19 14.26	U	1
Ethylbenzene	100-41-4	<0.00100	0.00100	mg/kg	11.02.19 14.26	U	1
m,p-Xylenes	179601-23-1	<0.00200	0.00200	mg/kg	11.02.19 14.26	U	1
o-Xylene	95-47-6	<0.00100	0.00100	mg/kg	11.02.19 14.26	U	1
Total Xylenes	1330-20-7	<0.00100	0.00100	mg/kg	11.02.19 14.26	U	1
Total BTEX		<0.00100	0.00100	mg/kg	11.02.19 14.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	121	%	70-130	11.02.19 14.26	
1,4-Difluorobenzene	540-36-3	104	%	70-130	11.02.19 14.26	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 4H

Sample Id:	**PH08A**	Matrix:	Soil	Date Received:	11.01.19 13.59
Lab Sample Id:	641857-017	Date Collected:	10.29.19 13.55	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.05.19 07.30	Basis:	Wet Weight
Seq Number:	3106466				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**54.6**	9.98	mg/kg	11.05.19 10.51		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	11.04.19 17.00	Basis:	Wet Weight
Seq Number:	3106467				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	11.05.19 07.34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	11.05.19 07.34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	11.05.19 07.34	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	11.05.19 07.34	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	11.05.19 07.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	11.05.19 07.34	
o-Terphenyl	84-15-1	99	%	70-135	11.05.19 07.34	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 4H

Sample Id:	**PH08A**	Matrix:	Soil	Date Received:	11.01.19 13.59
Lab Sample Id:	641857-017	Date Collected:	10.29.19 13.55	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.01.19 18.11	Basis:	Wet Weight
Seq Number:	3106342				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00101	0.00101	mg/kg	11.02.19 14.45	U	1
Toluene	108-88-3	<0.00101	0.00101	mg/kg	11.02.19 14.45	U	1
Ethylbenzene	100-41-4	<0.00101	0.00101	mg/kg	11.02.19 14.45	U	1
m,p-Xylenes	179601-23-1	<0.00202	0.00202	mg/kg	11.02.19 14.45	U	1
o-Xylene	95-47-6	<0.00101	0.00101	mg/kg	11.02.19 14.45	U	1
Total Xylenes	1330-20-7	<0.00101	0.00101	mg/kg	11.02.19 14.45	U	1
Total BTEX		<0.00101	0.00101	mg/kg	11.02.19 14.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	92	%	70-130	11.02.19 14.45	
1,4-Difluorobenzene	540-36-3	84	%	70-130	11.02.19 14.45	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 4H

Sample Id:	**PH09**	Matrix:	Soil	Date Received:	11.01.19 13.59
Lab Sample Id:	641857-018	Date Collected:	10.29.19 14.00	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.05.19 07.30	Basis:	Wet Weight
Seq Number:	3106466				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**635**	49.8	mg/kg	11.05.19 10.57		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	11.04.19 17.00	Basis:	Wet Weight
Seq Number:	3106467				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	11.05.19 07.54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	11.05.19 07.54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	11.05.19 07.54	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	11.05.19 07.54	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	11.05.19 07.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	11.05.19 07.54	
o-Terphenyl	84-15-1	104	%	70-135	11.05.19 07.54	

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Corral Canyon 4H

Sample Id:	**PH09**	Matrix:	Soil	Date Received:	11.01.19 13.59
Lab Sample Id:	641857-018	Date Collected:	10.29.19 14.00	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.01.19 18.11	Basis:	Wet Weight
Seq Number:	3106342				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00101	0.00101	mg/kg	11.02.19 15.04	U	1
Toluene	108-88-3	<0.00101	0.00101	mg/kg	11.02.19 15.04	U	1
Ethylbenzene	100-41-4	<0.00101	0.00101	mg/kg	11.02.19 15.04	U	1
m,p-Xylenes	179601-23-1	<0.00202	0.00202	mg/kg	11.02.19 15.04	U	1
o-Xylene	95-47-6	<0.00101	0.00101	mg/kg	11.02.19 15.04	U	1
Total Xylenes	1330-20-7	<0.00101	0.00101	mg/kg	11.02.19 15.04	U	1
Total BTEX		<0.00101	0.00101	mg/kg	11.02.19 15.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	105	%	70-130	11.02.19 15.04	
4-Bromofluorobenzene	460-00-4	122	%	70-130	11.02.19 15.04	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 4H

Sample Id:	**PH09A**	Matrix:	Soil	Date Received:	11.01.19 13.59
Lab Sample Id:	641857-019	Date Collected:	10.29.19 14.05	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.05.19 07.30	Basis:	Wet Weight
Seq Number:	3106466				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**123**	9.94	mg/kg	11.05.19 11.03		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	11.04.19 17.00	Basis:	Wet Weight
Seq Number:	3106467				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	11.05.19 08.14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	11.05.19 08.14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	11.05.19 08.14	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	11.05.19 08.14	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	11.05.19 08.14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	11.05.19 08.14	
o-Terphenyl	84-15-1	98	%	70-135	11.05.19 08.14	

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Corral Canyon 4H

Sample Id:	**PH09A**	Matrix:	Soil	Date Received:	11.01.19 13.59
Lab Sample Id:	641857-019	Date Collected:	10.29.19 14.05	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.01.19 18.11	Basis:	Wet Weight
Seq Number:	3106342				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000998	0.000998	mg/kg	11.02.19 15.24	U	1
Toluene	108-88-3	<0.000998	0.000998	mg/kg	11.02.19 15.24	U	1
Ethylbenzene	100-41-4	<0.000998	0.000998	mg/kg	11.02.19 15.24	U	1
m,p-Xylenes	179601-23-1	<0.00200	0.00200	mg/kg	11.02.19 15.24	U	1
o-Xylene	95-47-6	<0.000998	0.000998	mg/kg	11.02.19 15.24	U	1
Total Xylenes	1330-20-7	<0.000998	0.000998	mg/kg	11.02.19 15.24	U	1
Total BTEX		<0.000998	0.000998	mg/kg	11.02.19 15.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	70-130	11.02.19 15.24	
4-Bromofluorobenzene	460-00-4	122	%	70-130	11.02.19 15.24	

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 641857

LT Environmental, Inc.

Corral Canyon 4H

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3106466 — Matrix: Solid — Date Prep: 11.05.19
MB Sample Id: 7689438-1-BLK — LCS Sample Id: 7689438-1-BKS — LCSD Sample Id: 7689438-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	235	94	237	95	90-110	1	20	mg/kg	11.05.19 08:15	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3106466 — Matrix: Soil — Date Prep: 11.05.19
Parent Sample Id: 641857-001 — MS Sample Id: 641857-001 S — MSD Sample Id: 641857-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1390	998	2670	128	2680	130	90-110	0	20	mg/kg	11.05.19 08:33	X

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3106466 — Matrix: Soil — Date Prep: 11.05.19
Parent Sample Id: 641857-011 — MS Sample Id: 641857-011 S — MSD Sample Id: 641857-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	41.3	199	270	115	269	116	90-110	0	20	mg/kg	11.05.19 09:57	X

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3106467 — Matrix: Solid — Date Prep: 11.04.19
MB Sample Id: 7689599-1-BLK — LCS Sample Id: 7689599-1-BKS — LCSD Sample Id: 7689599-1-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)	<50.0	1000	893	89	945	95	70-135	6	35	mg/kg	11.05.19 00:32	
Diesel Range Organics (DRO)	<50.0	1000	990	99	1030	103	70-135	4	35	mg/kg	11.05.19 00:32	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	95		109		114		70-135	%	11.05.19 00:32
o-Terphenyl	102		109		112		70-135	%	11.05.19 00:32

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3106467 — Matrix: Solid — Date Prep: 11.04.19
MB Sample Id: 7689599-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	11.05.19 00:12	

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

QC Summary 641857

LT Environmental, Inc.

Corral Canyon 4H

Analytical Method: TPH by SW8015 Mod | Prep Method: SW8015P
Seq Number: 3106467 | Matrix: Soil | Date Prep: 11.04.19
Parent Sample Id: 641857-001 | MS Sample Id: 641857-001 S | MSD Sample Id: 641857-001 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)	<50.2	1000	964	96	1000	100	70-135	4	35	mg/kg	11.05.19 01:32	
Diesel Range Organics (DRO)	<50.2	1000	1080	108	1130	113	70-135	5	35	mg/kg	11.05.19 01:32	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	120		126		70-135	%	11.05.19 01:32
o-Terphenyl	120		126		70-135	%	11.05.19 01:32

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3106342 | Matrix: Solid | Date Prep: 11.01.19
MB Sample Id: 7689543-1-BLK | LCS Sample Id: 7689543-1-BKS | LCSD Sample Id: 7689543-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00100	0.100	0.0976	98	0.100	100	70-130	2	35	mg/kg	11.02.19 07:12	
Toluene	<0.00100	0.100	0.0999	100	0.101	101	70-130	1	35	mg/kg	11.02.19 07:12	
Ethylbenzene	<0.00100	0.100	0.0949	95	0.0979	98	71-129	3	35	mg/kg	11.02.19 07:12	
m,p-Xylenes	<0.00200	0.200	0.202	101	0.208	104	70-135	3	35	mg/kg	11.02.19 07:12	
o-Xylene	<0.00100	0.100	0.104	104	0.106	106	71-133	2	35	mg/kg	11.02.19 07:12	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	98		103		100		70-130	%	11.02.19 07:12
4-Bromofluorobenzene	112		116		114		70-130	%	11.02.19 07:12

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3106342 | Matrix: Soil | Date Prep: 11.01.19
Parent Sample Id: 641857-014 | MS Sample Id: 641857-014 S | MSD Sample Id: 641857-014 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00100	0.100	0.0715	72	0.0837	84	70-130	16	35	mg/kg	11.02.19 07:50	
Toluene	<0.00100	0.100	0.0702	70	0.0769	77	70-130	9	35	mg/kg	11.02.19 07:50	
Ethylbenzene	<0.00100	0.100	0.0614	61	0.0715	72	71-129	15	35	mg/kg	11.02.19 07:50	X
m,p-Xylenes	<0.00200	0.200	0.129	65	0.150	75	70-135	15	35	mg/kg	11.02.19 07:50	X
o-Xylene	<0.00100	0.100	0.0667	67	0.0800	80	71-133	18	35	mg/kg	11.02.19 07:50	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		104		70-130	%	11.02.19 07:50
4-Bromofluorobenzene	119		123		70-130	%	11.02.19 07:50

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

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

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

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

Final 1.000

Chain of Custody

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432) 704-5440 EL Paso,TX (915) 585-3443 Lubbock,TX (806) 794-1296 Crasbad, NM (432) 704-5440
Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701
www.xenco.com

Work Order No: 641857

Page 1 of 2

Project Manager:	AIMEE COLE	Bill to: (if different)	KYLE LITTRELL
Company Name:	LT ENVIRONMENTAL	Company Name:	XTO ENERGY
Address:	3300 NORTH A ST	Address:	3104 E. GREENE ST
City, State ZIP:	MIDLAND TX 79705	City, State ZIP:	CARLSBAD NM 88220
Phone:	720 384 7365	Email:	acole@ltenv.com & abyers@ltenv.com

Work Order Comments

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

Project Name:	Corral Canyon 4H	Turn Around	
Project Number:	01291912 4	Routine	☐
Project Location	Rural Eddy County	Rush:	5 DAY
Sampler's Name:	Anna Byers	Due Date:	
PO #:	2RP-3713	Quote #:	

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):	-0.2	Thermometer ID	T-NM-007
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Total Containers:	19

ANALYSIS REQUEST

Preservative Codes: MeOH: Me; None: NO; HNO3: HN; H2S04: H2; HCL: HL; NaOH: Na; Zn Acetate+ NaOH: Zn

TAT starts the day recevied by the lab, if received by 4:00pm

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)	Sample Comments
	PH01	S	10/29/19	1030	0.5'					
	PH01A	S		1040	2'					
	PH02	S		1055	0.5'					
	PH02A	S		1105	2'					
	PH03	S		1130	0.5'					
	PH03A	S		1135	1'					
	PH03B	S		1140	2'					
	PH04	S		1155	0.5'					
	PH04A	S		1205	2'					
	PH05	S	↓	1230	0.5'					

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Anna Byers		11/1/19 1209	2		11/1/19 1359
			4		
			6		

Revised Date 022619 Rev. 2019.1

Chain of Custody

XENCO LABORATORIES
Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432) 704-5440 EL Paso,TX (915) 585-3443 Lubbock,TX (806) 794-1296 Craslbad, NM (432) 704-5440
Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701
www.xenco.com

Work Order No: 641857

Project Manager:	AIMEE COLE	Bill to: (if different)	KYLE LITTRELL
Company Name:	LT ENVIRONMENTAL	Company Name:	XTO ENERGY
Address:	3300 NORTH A ST	Address:	3104 E. GREENE ST
City, State ZIP:	MIDLAND TX 79705	City, State ZIP:	CARLSBAD NM 88220
Phone:	720 384 7365	Email:	acole@ltenv.com & abyers@ltenv.com

Work Order Comments

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

Project Name:	Corral Canyon 4H	Turn Around	
Project Number:	012919124	Routine	☐
Project Location	Rural Eddy County	Rush:	5 DAY
Sampler's Name:	Anna Byers	Due Date:	
PO #:	2RP-3713	Quote #:	

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

Preservative Codes

MeOH: Me
None: NO
HNO3: HN
H2S04: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day recevied by the lab, if received by 4:00pm

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Pres. Code	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)	Sample Comments
	PH05A	S	10/29/19	1240	2'	1					
	PH06	S		1300	0.5'	1					
	PH06A	S		1310	2'	1					
	PH07	S		1320	0.5'	1					
	PH07A	S		1330	2'	1					
	PH08	S		1345	0.5'	1					
	PH08A	S		1355	2'	1					
	PH09	S		1400	0.5'	1					
	PH09A	S	↓	1405	2'	1					

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

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

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	Anna Byers		11/1/19 1209	2		11.1.19 1359
3				4		
5				6		

Revised Date 022619 Rev. 2019.1

Analytical Report 642948

for

LT Environmental, Inc.

Project Manager: Dan Moir

Coral Canyon Fed 4H

012919124

15-NOV-19

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

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

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

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

15-NOV-19

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

Reference: XENCO Report No(s): **642948**
Coral Canyon Fed 4H
Project Address:

Dan Moir:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 642948. 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. 642948 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 642948

LT Environmental, Inc., Arvada, CO

Coral Canyon Fed 4H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS01	S	11-12-19 12:20	2 ft	642948-001

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: Coral Canyon Fed 4H

Project ID: *012919124*
Work Order Number(s): *642948*

Report Date: *15-NOV-19*
Date Received: *11/12/2019*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3107284 BTEX by EPA 8021B

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

Certificate of Analysis Summary 642948

LT Environmental, Inc., Arvada, CO

Project Name: Coral Canyon Fed 4H

Project Id: 012919124
Contact: Dan Moir
Project Location:

Date Received in Lab: Tue Nov-12-19 03:53 pm
Report Date: 15-NOV-19
Project Manager: Jessica Kramer

Analysis Requested							
	Lab Id:	642948-001					
	Field Id:	FS01					
	Depth:	2- ft					
	Matrix:	SOIL					
	Sampled:	Nov-12-19 12:20					
BTEX by EPA 8021B	***Extracted:***	Nov-12-19 17:30					
	Analyzed:	Nov-13-19 04:25					
	Units/RL:	mg/kg RL					
Benzene		<0.000996 0.000996					
Toluene		<0.000996 0.000996					
Ethylbenzene		<0.000996 0.000996					
m,p-Xylenes		<0.00199 0.00199					
o-Xylene		<0.000996 0.000996					
Total Xylenes		<0.000996 0.000996					
Total BTEX		<0.000996 0.000996					
Chloride by EPA 300	***Extracted:***	Nov-12-19 17:30					
	Analyzed:	Nov-13-19 11:13					
	Units/RL:	mg/kg RL					
Chloride		128 9.92					
TPH by SW8015 Mod	***Extracted:***	Nov-13-19 17:11					
	Analyzed:	Nov-14-19 03:16					
	Units/RL:	mg/kg RL					
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0					
Diesel Range Organics (DRO)		<50.0 50.0					
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0					
Total GRO-DRO		<50.0 50.0					
Total TPH		<50.0 50.0					

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

Jessica Kramer
Project Assistant

Certificate of Analytical Results 642948

LT Environmental, Inc., Arvada, CO

Coral Canyon Fed 4H

Sample Id:	**FS01**	Matrix:	Soil	Date Received:	11.12.19 15.53
Lab Sample Id:	642948-001	Date Collected:	11.12.19 12.20	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.12.19 17.30	Basis:	Wet Weight
Seq Number:	3107444				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**128**	9.92	mg/kg	11.13.19 11.13		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	11.13.19 17.11	Basis:	Wet Weight
Seq Number:	3107504				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	11.14.19 03.16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	11.14.19 03.16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	11.14.19 03.16	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	11.14.19 03.16	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	11.14.19 03.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	11.14.19 03.16	
o-Terphenyl	84-15-1	119	%	70-135	11.14.19 03.16	

Certificate of Analytical Results 642948

LT Environmental, Inc., Arvada, CO

Coral Canyon Fed 4H

Sample Id:	**FS01**	Matrix:	Soil	Date Received:	11.12.19 15.53
Lab Sample Id:	642948-001	Date Collected:	11.12.19 12.20	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.12.19 17.30	Basis:	Wet Weight
Seq Number:	3107284				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000996	0.000996	mg/kg	11.13.19 04.25	U	1
Toluene	108-88-3	<0.000996	0.000996	mg/kg	11.13.19 04.25	U	1
Ethylbenzene	100-41-4	<0.000996	0.000996	mg/kg	11.13.19 04.25	U	1
m,p-Xylenes	179601-23-1	<0.00199	0.00199	mg/kg	11.13.19 04.25	U	1
o-Xylene	95-47-6	<0.000996	0.000996	mg/kg	11.13.19 04.25	U	1
Total Xylenes	1330-20-7	<0.000996	0.000996	mg/kg	11.13.19 04.25	U	1
Total BTEX		<0.000996	0.000996	mg/kg	11.13.19 04.25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	121	%	70-130	11.13.19 04.25	
1,4-Difluorobenzene	540-36-3	102	%	70-130	11.13.19 04.25	

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 642948

LT Environmental, Inc.

Coral Canyon Fed 4H

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3107444 — Matrix: Solid — Date Prep: 11.12.19
MB Sample Id: 7690121-1-BLK — LCS Sample Id: 7690121-1-BKS — LCSD Sample Id: 7690121-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	251	100	250	100	90-110	0	20	mg/kg	11.13.19 08:44	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3107444 — Matrix: Soil — Date Prep: 11.12.19
Parent Sample Id: 642845-021 — MS Sample Id: 642845-021 S — MSD Sample Id: 642845-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	37.9	201	241	101	247	105	90-110	2	20	mg/kg	11.13.19 09:01	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3107444 — Matrix: Soil — Date Prep: 11.12.19
Parent Sample Id: 642845-031 — MS Sample Id: 642845-031 S — MSD Sample Id: 642845-031 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	324	200	523	100	521	99	90-110	0	20	mg/kg	11.13.19 10:26	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3107504 — Matrix: Solid — Date Prep: 11.13.19
MB Sample Id: 7690340-1-BLK — LCS Sample Id: 7690340-1-BKS — LCSD Sample Id: 7690340-1-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)	<50.0	1000	958	96	980	98	70-135	2	35	mg/kg	11.14.19 00:55	
Diesel Range Organics (DRO)	<50.0	1000	971	97	987	99	70-135	2	35	mg/kg	11.14.19 00:55	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	120		112		116		70-135	%	11.14.19 00:55
o-Terphenyl	123		104		107		70-135	%	11.14.19 00:55

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3107504 — Matrix: Solid — Date Prep: 11.13.19
MB Sample Id: 7690340-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	11.14.19 00:35	

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

Final 1.000

QC Summary 642948

LT Environmental, Inc.

Coral Canyon Fed 4H

Analytical Method: TPH by SW8015 Mod | Prep Method: SW8015P
Seq Number: 3107504 | Matrix: Soil | Date Prep: 11.13.19
Parent Sample Id: 642783-010 | MS Sample Id: 642783-010 S | MSD Sample Id: 642783-010 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)	<50.3	1010	1100	109	921	92	70-135	18	35	mg/kg	11.14.19 01:55	
Diesel Range Organics (DRO)	40.9	1010	1150	110	936	90	70-135	21	35	mg/kg	11.14.19 01:55	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	133		99		70-135	%	11.14.19 01:55
o-Terphenyl	128		94		70-135	%	11.14.19 01:55

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3107284 | Matrix: Solid | Date Prep: 11.12.19
MB Sample Id: 7690178-1-BLK | LCS Sample Id: 7690178-1-BKS | LCSD Sample Id: 7690178-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00100	0.100	0.0892	89	0.0933	93	70-130	4	35	mg/kg	11.12.19 21:12	
Toluene	<0.00100	0.100	0.0910	91	0.0939	94	70-130	3	35	mg/kg	11.12.19 21:12	
Ethylbenzene	<0.00100	0.100	0.0914	91	0.0943	94	71-129	3	35	mg/kg	11.12.19 21:12	
m,p-Xylenes	<0.00200	0.200	0.195	98	0.201	101	70-135	3	35	mg/kg	11.12.19 21:12	
o-Xylene	<0.00100	0.100	0.0992	99	0.102	102	71-133	3	35	mg/kg	11.12.19 21:12	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		102		103		70-130	%	11.12.19 21:12
4-Bromofluorobenzene	110		115		114		70-130	%	11.12.19 21:12

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3107284 | Matrix: Soil | Date Prep: 11.12.19
Parent Sample Id: 642845-021 | MS Sample Id: 642845-021 S | MSD Sample Id: 642845-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000990	0.0990	0.0744	75	0.0941	93	70-130	23	35	mg/kg	11.13.19 09:46	
Toluene	<0.000990	0.0990	0.0770	78	0.0953	94	70-130	21	35	mg/kg	11.13.19 09:46	
Ethylbenzene	<0.000990	0.0990	0.0782	79	0.0957	95	71-129	20	35	mg/kg	11.13.19 09:46	
m,p-Xylenes	<0.00198	0.198	0.168	85	0.205	101	70-135	20	35	mg/kg	11.13.19 09:46	
o-Xylene	<0.000990	0.0990	0.0823	83	0.102	101	71-133	21	35	mg/kg	11.13.19 09:46	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		105		70-130	%	11.13.19 09:46
4-Bromofluorobenzene	113		120		70-130	%	11.13.19 09:46

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

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

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

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

Chain of Custody

Work Order No: 442948

XENCO LABORATORIES

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

www.xenco.com Page 1 of 1

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littrell
Company Name:	LT Environmental, Inc., Permian office	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 E Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	432.236.3849	Email:	ldelval@ltenv.com

Work Order Comments

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

Project Name:	Coral Canyon Fed 4H	Turn Around	
Project Number:	01829/9124	Routine	☒
P.O. Number:		Rush:	
Sampler's Name:	~~Benjamin Belill~~ Luis Del Val	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No	
Temperature (°C):	3.6	Thermometer ID	T-NM-007	
Received Intact:	(Yes) No			
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes (No) N/A	Total Containers:	1	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
FS01	S	11/12/2019	1220	2'	1	X	X	X

ANALYSIS REQUEST

Work Order Notes

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

Sample Comments

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Luis Del Val		11/12/19 15:53	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 11/12/2019 03:53:00 PM

Work Order #: 642948

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

Temperature Measuring device used : T-NM-007

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	2.6
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**
#5 Custody Seals intact on sample bottles?	**Yes**
#6*Custody Seals Signed and dated?	**Yes**
#7 *Chain of Custody present?	**Yes**
#8 Any missing/extra samples?	**No**
#9 Chain of Custody signed when relinquished/ received?	**Yes**
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**
#11 Container label(s) legible and intact?	**Yes**
#12 Samples in proper container/ bottle?	**Yes**
#13 Samples properly preserved?	**Yes**
#14 Sample container(s) intact?	**Yes**
#15 Sufficient sample amount for indicated test(s)?	**Yes**
#16 All samples received within hold time?	**Yes**
#17 Subcontract of sample(s)?	**No**
#18 Water VOC samples have zero headspace?	**N/A**

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

Analyst: PH Device/Lot#:

Checklist completed by: Elizabeth McClellan Date: 11/12/2019

Checklist reviewed by: Jessica Kramer Date: 11/14/2019

Jessica Kramer

Analytical Report 642951

for

LT Environmental, Inc.

Project Manager: Dan Moir

Coral Canyon Fed 4H

012919124

15-NOV-19

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

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

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

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

15-NOV-19

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

Reference: XENCO Report No(s): **642951**
Coral Canyon Fed 4H
Project Address:

Dan Moir:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 642951. 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. 642951 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 642951

LT Environmental, Inc., Arvada, CO

Coral Canyon Fed 4H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SW01	S	11-12-19 12:34	0.5 - 2 ft	642951-001

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: Coral Canyon Fed 4H

Project ID: *012919124*
Work Order Number(s): *642951*

Report Date: *15-NOV-19*
Date Received: *11/12/2019*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3107284 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3107504 TPH by SW8015 Mod
Surrogate o-Terphenyl recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.
Samples affected are: 642951-001.

Certificate of Analysis Summary 642951

LT Environmental, Inc., Arvada, CO

Project Name: Coral Canyon Fed 4H

Project Id: 012919124
Contact: Dan Moir
Project Location:

Date Received in Lab: Tue Nov-12-19 03:53 pm
Report Date: 15-NOV-19
Project Manager: Jessica Kramer

Analysis Requested							
	Lab Id:	642951-001					
	Field Id:	SW01					
	Depth:	0.5-2 ft					
	Matrix:	SOIL					
	Sampled:	Nov-12-19 12:34					
BTEX by EPA 8021B	***Extracted:***	Nov-12-19 17:30					
	Analyzed:	Nov-13-19 04:44					
	Units/RL:	mg/kg RL					
Benzene		<0.000988 0.000988					
Toluene		<0.000988 0.000988					
Ethylbenzene		<0.000988 0.000988					
m,p-Xylenes		<0.00198 0.00198					
o-Xylene		<0.000988 0.000988					
Total Xylenes		<0.000988 0.000988					
Total BTEX		<0.000988 0.000988					
Chloride by EPA 300	***Extracted:***	Nov-12-19 17:30					
	Analyzed:	Nov-13-19 11:19					
	Units/RL:	mg/kg RL					
Chloride		126 9.88					
TPH by SW8015 Mod	***Extracted:***	Nov-13-19 17:11					
	Analyzed:	Nov-14-19 03:36					
	Units/RL:	mg/kg RL					
Gasoline Range Hydrocarbons (GRO)		<50.3 50.3					
Diesel Range Organics (DRO)		<50.3 50.3					
Motor Oil Range Hydrocarbons (MRO)		<50.3 50.3					
Total GRO-DRO		<50.3 50.3					
Total TPH		<50.3 50.3					

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

Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analytical Results 642951

LT Environmental, Inc., Arvada, CO

Coral Canyon Fed 4H

Sample Id:	**SW01**	Matrix:	Soil	Date Received:	11.12.19 15.53
Lab Sample Id:	642951-001	Date Collected:	11.12.19 12.34	Sample Depth:	0.5 - 2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.12.19 17.30	Basis:	Wet Weight
Seq Number:	3107444				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**126**	9.88	mg/kg	11.13.19 11.19		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	11.13.19 17.11	Basis:	Wet Weight
Seq Number:	3107504				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	11.14.19 03.36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	11.14.19 03.36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	11.14.19 03.36	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	11.14.19 03.36	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	11.14.19 03.36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	131	%	70-135	11.14.19 03.36	
o-Terphenyl	84-15-1	140	%	70-135	11.14.19 03.36	**

Certificate of Analytical Results 642951

LT Environmental, Inc., Arvada, CO

Coral Canyon Fed 4H

Sample Id:	**SW01**	Matrix:	Soil	Date Received:	11.12.19 15.53
Lab Sample Id:	642951-001	Date Collected:	11.12.19 12.34	Sample Depth:	0.5 - 2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.12.19 17.30	Basis:	Wet Weight
Seq Number:	3107284				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000988	0.000988	mg/kg	11.13.19 04.44	U	1
Toluene	108-88-3	<0.000988	0.000988	mg/kg	11.13.19 04.44	U	1
Ethylbenzene	100-41-4	<0.000988	0.000988	mg/kg	11.13.19 04.44	U	1
m,p-Xylenes	179601-23-1	<0.00198	0.00198	mg/kg	11.13.19 04.44	U	1
o-Xylene	95-47-6	<0.000988	0.000988	mg/kg	11.13.19 04.44	U	1
Total Xylenes	1330-20-7	<0.000988	0.000988	mg/kg	11.13.19 04.44	U	1
Total BTEX		<0.000988	0.000988	mg/kg	11.13.19 04.44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	11.13.19 04.44	
4-Bromofluorobenzene	460-00-4	125	%	70-130	11.13.19 04.44	

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

QC Summary 642951

LT Environmental, Inc.

Coral Canyon Fed 4H

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3107444 — Matrix: Solid — Date Prep: 11.12.19
MB Sample Id: 7690121-1-BLK — LCS Sample Id: 7690121-1-BKS — LCSD Sample Id: 7690121-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	251	100	250	100	90-110	0	20	mg/kg	11.13.19 08:44	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3107444 — Matrix: Soil — Date Prep: 11.12.19
Parent Sample Id: 642845-021 — MS Sample Id: 642845-021 S — MSD Sample Id: 642845-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	37.9	201	241	101	247	105	90-110	2	20	mg/kg	11.13.19 09:01	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3107444 — Matrix: Soil — Date Prep: 11.12.19
Parent Sample Id: 642845-031 — MS Sample Id: 642845-031 S — MSD Sample Id: 642845-031 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	324	200	523	100	521	99	90-110	0	20	mg/kg	11.13.19 10:26	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3107504 — Matrix: Solid — Date Prep: 11.13.19
MB Sample Id: 7690340-1-BLK — LCS Sample Id: 7690340-1-BKS — LCSD Sample Id: 7690340-1-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)	<50.0	1000	958	96	980	98	70-135	2	35	mg/kg	11.14.19 00:55	
Diesel Range Organics (DRO)	<50.0	1000	971	97	987	99	70-135	2	35	mg/kg	11.14.19 00:55	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	120		112		116		70-135	%	11.14.19 00:55
o-Terphenyl	123		104		107		70-135	%	11.14.19 00:55

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3107504 — Matrix: Solid — Date Prep: 11.13.19
MB Sample Id: 7690340-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	11.14.19 00:35	

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

Final 1.000

QC Summary 642951

LT Environmental, Inc.

Coral Canyon Fed 4H

Analytical Method: TPH by SW8015 Mod | Prep Method: SW8015P
Seq Number: 3107504 | Matrix: Soil | Date Prep: 11.13.19
Parent Sample Id: 642783-010 | MS Sample Id: 642783-010 S | MSD Sample Id: 642783-010 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)	<50.3	1010	1100	109	921	92	70-135	18	35	mg/kg	11.14.19 01:55	
Diesel Range Organics (DRO)	40.9	1010	1150	110	936	90	70-135	21	35	mg/kg	11.14.19 01:55	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	133		99		70-135	%	11.14.19 01:55
o-Terphenyl	128		94		70-135	%	11.14.19 01:55

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3107284 | Matrix: Solid | Date Prep: 11.12.19
MB Sample Id: 7690178-1-BLK | LCS Sample Id: 7690178-1-BKS | LCSD Sample Id: 7690178-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00100	0.100	0.0892	89	0.0933	93	70-130	4	35	mg/kg	11.12.19 21:12	
Toluene	<0.00100	0.100	0.0910	91	0.0939	94	70-130	3	35	mg/kg	11.12.19 21:12	
Ethylbenzene	<0.00100	0.100	0.0914	91	0.0943	94	71-129	3	35	mg/kg	11.12.19 21:12	
m,p-Xylenes	<0.00200	0.200	0.195	98	0.201	101	70-135	3	35	mg/kg	11.12.19 21:12	
o-Xylene	<0.00100	0.100	0.0992	99	0.102	102	71-133	3	35	mg/kg	11.12.19 21:12	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		102		103		70-130	%	11.12.19 21:12
4-Bromofluorobenzene	110		115		114		70-130	%	11.12.19 21:12

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3107284 | Matrix: Soil | Date Prep: 11.12.19
Parent Sample Id: 642845-021 | MS Sample Id: 642845-021 S | MSD Sample Id: 642845-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000990	0.0990	0.0744	75	0.0941	93	70-130	23	35	mg/kg	11.13.19 09:46	
Toluene	<0.000990	0.0990	0.0770	78	0.0953	94	70-130	21	35	mg/kg	11.13.19 09:46	
Ethylbenzene	<0.000990	0.0990	0.0782	79	0.0957	95	71-129	20	35	mg/kg	11.13.19 09:46	
m,p-Xylenes	<0.00198	0.198	0.168	85	0.205	101	70-135	20	35	mg/kg	11.13.19 09:46	
o-Xylene	<0.000990	0.0990	0.0823	83	0.102	101	71-133	21	35	mg/kg	11.13.19 09:46	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		105		70-130	%	11.13.19 09:46
4-Bromofluorobenzene	113		120		70-130	%	11.13.19 09:46

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

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

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

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

Chain of Custody

Work Order No: 642951

XENCO LABORATORIES

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

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Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littrell
Company Name:	LT Environmental, Inc., Permian office	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 E Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	432.236.3849	Email:	Idelval@ltenv.com

Work Order Comments

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

Project Name:	Coral Canyon Fed 4H	Turn Around	
Project Number:	01291912 4	Routine	☒
P.O. Number:		Rush:	
Sampler's Name:	~~Benjamin Belill~~ Luis Del Val	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	2.1	Thermometer ID	T-N-M-007
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes (No) N/A	Total Containers:	1

ANALYSIS REQUEST

Work Order Notes

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)	Sample Comments
SW01	S	11/12/19	1234	0.5-2'	1	X	X	X	

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Luis Del Val		11/12/19 15:53	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 11/12/2019 03:53:00 PM

Work Order #: 642951

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

Temperature Measuring device used : T-NM-007

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	2.6
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**
#5 Custody Seals intact on sample bottles?	**Yes**
#6*Custody Seals Signed and dated?	**Yes**
#7 *Chain of Custody present?	**Yes**
#8 Any missing/extra samples?	**No**
#9 Chain of Custody signed when relinquished/ received?	**Yes**
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**
#11 Container label(s) legible and intact?	**Yes**
#12 Samples in proper container/ bottle?	**Yes**
#13 Samples properly preserved?	**Yes**
#14 Sample container(s) intact?	**Yes**
#15 Sufficient sample amount for indicated test(s)?	**Yes**
#16 All samples received within hold time?	**Yes**
#17 Subcontract of sample(s)?	**No**
#18 Water VOC samples have zero headspace?	**N/A**

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

Analyst: PH Device/Lot#:

Checklist completed by: Elizabeth McClellan Date: 11/12/2019

Checklist reviewed by: Jessica Kramer Date: 11/14/2019

Jessica Kramer