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

October 29, 2019

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

RE: Closure Request
Corral Canyon Federal Com #013H
Remediation Permit Numbers 2RP-4534
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 and soil sampling activities at the Corral Canyon Federal Com #013H (Site), located in Unit P, Section 6, Township 25 South, Range 29 East, in Eddy County, New Mexico (Figure 1). The purpose of the site assessment and soil sampling activities was to assess for the presence or absence of impacted soil resulting from a crude oil release within lined containment 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 laboratory analytical results for soil samples collected at the Site, XTO is submitting this Closure Request, describing site assessment activities that have occurred and requesting no further action for the release event.

RELEASE BACKGROUND

On December 13, 2017, fluid escaped the side manway plate on a hydraulic fracturing tank. Approximately 24 barrels (bbls) of crude oil were released within the impermeable lined containment around the tanks. The plate was tightened to stop the release. A vacuum truck recovered all 24 bbls of released fluid from within the containment. No fill material was placed in the lined containment. XTO personnel inspected the liner for integrity and verified there was no evidence of a liner breach. XTO reported the release to the NMOCD on a Release Notification

and Corrective Action Form C-141 (Form C-141) on December 21, 2017, and was assigned Remediation Permit (RP) Number 2RP-4534 (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 Sate Engineer (NM OSE) Well #C01880, located approximately 3,385 feet northwest of the Site. According to the NM OSE database, the well was installed and depth to water was measured in 1979. Based on the age of the well, LTE field personnel field-verified the presence or absence of the well. The well could not be located within an approximate 1,000 foot radius of the coordinates provided by the NM OSE. 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 5,750 feet east 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 the Pecos River, located approximately 2,195 feet west-northwest of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-

year floodplain or overlying a subsurface mine. The Site is not located in an unstable geological area, such as karst formations.

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;
- Total petroleum hydrocarbons (TPH)-gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg;
- TPH: 2,500 mg/kg; and
- Chloride: 10,000 mg/kg.

SITE ASSESSMENT AND SOIL SAMPLING ACTIVITIES

On October 18, 2019, LTE personnel inspected the Site to evaluate the release extent and assess the soil within the release area. Potholes were advanced via track-hoe at seven locations beneath and around the former tank containment location to assess for potential soil impacts. Potholes PH01 through PH07 were advanced to a depth of 4 feet bgs. Delineation soil samples were collected from each pothole from depths ranging from 0.5 feet to 4 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 each pothole were logged on lithologic/soil sampling logs, which are included in Attachment 2. The delineation soil sample locations were mapped utilizing a handheld Global Positing System (GPS) unit and 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 Midland, Texas, for analysis of BTEX following United States Environmental Protection Agency (USEPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following USEPA Method 8015M/D; and chloride following USEPA Method 300.0.

Photographic documentation was conducted during the Site visit. Photographs are included in Attachment 3.

ANALYTICAL RESULTS

Laboratory analytical results indicated that BTEX, GRO/DRO, TPH, and chloride concentrations were compliant with the Closure Criteria in all delineation soil samples collected from potholes PH01 through PH07. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Attachment 4.

CLOSURE REQUEST

Potholes were advanced at seven locations beneath and around the former tank containment release area to assess for potential soil impacts as a result of the December 13, 2017, crude oil release. Laboratory analytical results for the delineation soil samples collected from potholes PH01 through PH07 indicated that BTEX, GRO/DRO, TPH, and chloride concentrations were compliant with the Closure Criteria and no further remediation was required.

The release occurred within lined containment and all released fluids were recovered during initial response activities. Based on visual observations, field screening, and laboratory analytical results, no impacted soil was identified as a result of the historical release. XTO requests no further action for RP Number 2RP-4534. An updated NMOCD Form C-141 is included as 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

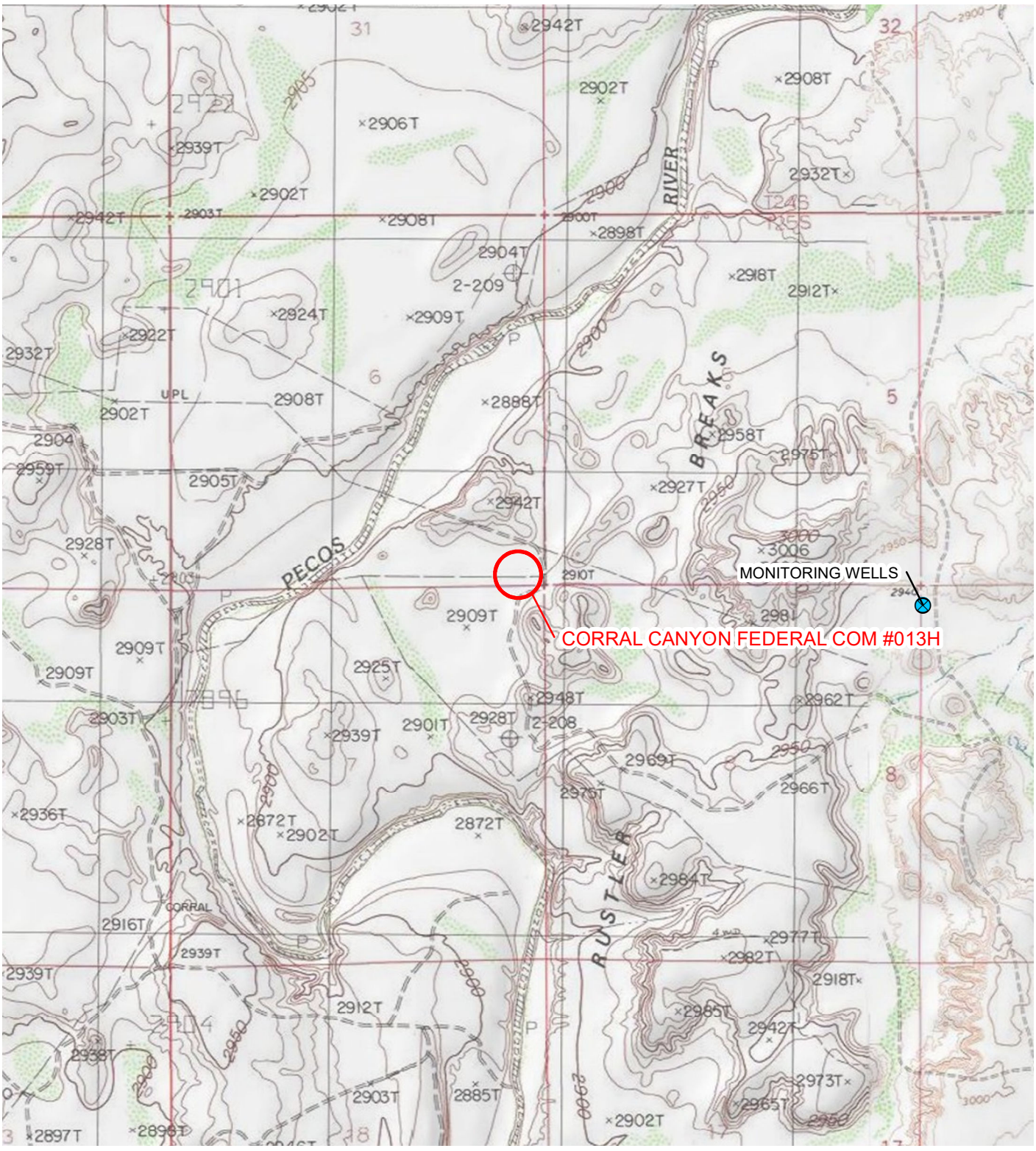
Ashley L. Ager, P.G.
Senior Geologist

cc: Kyle Littrell, XTO
Mike Bratcher, NMOCD
Ryan Mann, State Land Office

Attachments:

Figure 1	Site Location Map
Figure 2	Delineation Soil Sample Locations
Table 1	Soil Analytical Results
Attachment 1	Initial/Final NMOCD Form C-141 (2RP-4534)
Attachment 2	Lithologic/Soil Sample Logs
Attachment 3	Photographic Log
Attachment 4	Laboratory Analytical Reports

FIGURES



LEGEND

SITE LOCATION

IMAGE COURTESY OF ESRI/USGS

0 2,000 4,000

Feet

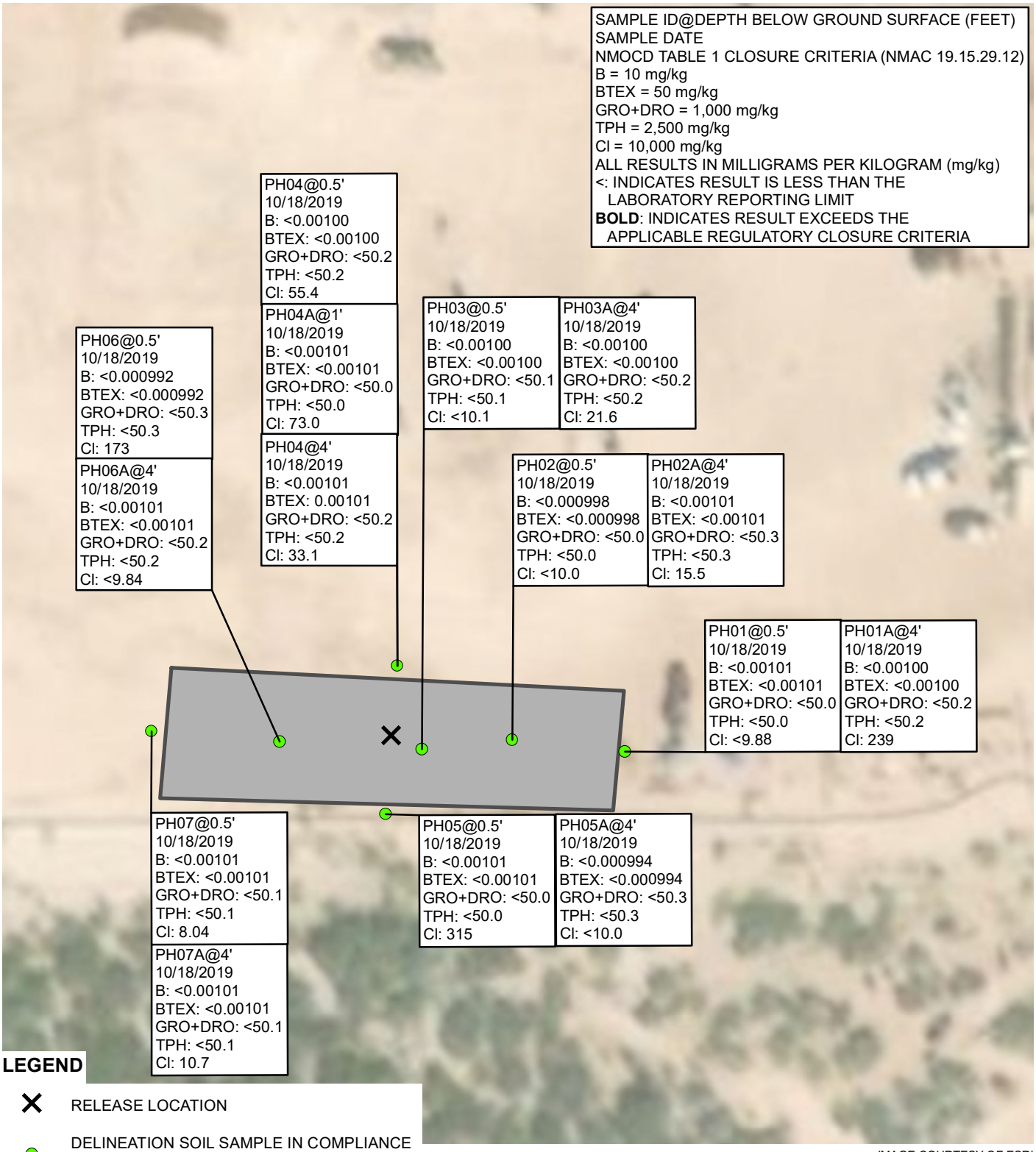
N

NEW MEXICO

NOTE: REMEDIATION PERMIT NUMBER 2RP-4534

FIGURE 1
SITE LOCATION MAP
CORRAL CANYON FEDERAL COM #013H
UNIT P SEC 6 T25S R29E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012918117_CORRAL CANYON FEDERAL COM #013H\012918117_FIG01_SL_4534.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-4534

FIGURE 2
DELINEATION SOIL SAMPLE LOCATIONS
CORRAL CANYON FEDERAL COM #013H
UNIT P SEC 6 T25S R29E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012918117_CORRAL CANYON FEDERAL COM #013H\012918117_FIG02_DELINEATION_4534.mxd

TABLES

TABLE 1
SOIL ANALYTICAL RESULTS

CORRAL CANYON FEDERAL COM #013H
REMEDIATION PERMIT NUMBER 2RP-4534
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	10/18/2019	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	<50.0	<50.0	<50.0	<50.0	<50.0	<9.88
PH01A	4	10/18/2019	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<50.2	<50.2	<50.2	<50.2	<50.2	239
PH02	0.5	10/18/2019	<0.000998	<0.000998	<0.000998	<0.000998	<0.000998	<50.0	<50.0	<50.0	<50.0	<50.0	<10.0
PH02A	4	10/18/2019	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	<50.3	<50.3	<50.3	<50.3	<50.3	15.5
PH03	0.5	10/18/2019	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<50.1	<50.1	<50.1	<50.1	<50.1	<10.1
PH03A	4	10/18/2019	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<50.2	<50.2	<50.2	<50.2	<50.2	21.6
PH04	0.5	10/18/2019	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<50.2	<50.2	<50.2	<50.2	<50.2	55.4
PH04A	1	10/18/2019	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	<50.0	<50.0	<50.0	<50.0	<50.0	73.0
PH04B	4	10/18/2019	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	<50.2	<50.2	<50.2	<50.2	<50.2	33.1
PH05	0.5	10/18/2019	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	<50.0	<50.0	<50.0	<50.0	<50.0	315
PH05A	4	10/18/2019	<0.000994	<0.000994	<0.000994	<0.000994	<0.000994	<50.3	<50.3	<50.3	<50.3	<50.3	<10.0
PH06	0.5	10/18/2019	<0.000992	<0.000992	<0.000992	<0.000992	<0.000992	<50.3	<50.3	<50.3	<50.3	<50.3	173
PH06A	4	10/18/2019	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	<50.2	<50.2	<50.2	<50.2	<50.2	<9.84
PH07	0.5	10/18/2019	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	<50.1	<50.1	<50.1	<50.1	<50.1	8.04
PH07A	4	10/18/2019	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	<50.1	<50.1	<50.1	<50.1	<50.1	10.7
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 xylene
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-4534)

NM OIL CONSERVATION ARTESIA DISTRICT DEC 21 2017 RECEIVED

NM OIL CONSERVATION ARTESIA DISTRICT DEC 21 2017 RECEIVED

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

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

Form C-141
Revised April 3, 2017

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

Release Notification and Corrective Action

nAB1736136697

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: XTO Energy 5380	Contact: Kyle Littrell
Address: 522 W. Mermod, Suite 704 Carlsbad, N.M. 88220	Telephone No: 432-221-7331
Facility Name: Corral Canyon Federal Com #013H	Facility Type: Exploration and Production

Surface Owner: State of NM	Mineral Owner: State of NM	API No: 30-015-43493

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
P	6	25S	29E	140	South	385	East	Eddy

Latitude 32.152439° Longitude -104.016389° NAD83

NATURE OF RELEASE

Type of Release: Crude Oil	Volume of Release: 24 bbls	Volume Recovered: 24 bbls
Source of Release: Frac Tank	Date and Hour of Occurrence: 12/13/2017 time unknown	Date and Hour of Discovery: 12/13/2017 1 am
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom? N/A	
By Whom? N/A	Date and Hour: N/A	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	

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

Describe Cause of Problem and Remedial Action Taken.*
Fluid escaped from the frac tank side manway plate. The plate was tightened.

Describe Area Affected and Cleanup Action Taken.*
The leak affected the temporary impermeable lined containment surrounding the frac tanks. No fill material was located inside containment. A XTO EHS Coordinator who is competent in the operation, maintenance, and inspection of all on-site equipment and facilities visually inspected the containment and verified there was no visual evidence of a liner breach. All free-standing liquids were recovered from the containment. The frac job is anticipated to last another month. Once completed, the frac tanks will be removed and the containment will be power washed and removed from location.

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

Signature:	OIL CONSERVATION DIVISION
Printed Name: Kyle Littrell	Approved by Environmental Specialist:
Title: Environmental Coordinator	Approval Date: 12/21/17 Expiration Date: N/A
E-mail Address: Kyle_Littrell@xtoenergy.com	Conditions of Approval: See attached Attached ☒ 2RP-4534
Date: 12/21/2017 Phone: 432-221-7331	

* Attach Additional Sheets If Necessary

12/22/17 AB

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	
District RP	2RP-4534
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: XTO Energy, Inc	OGRID: 5380
Contact Name: Kyle Littrell	Contact Telephone: (432)-221-7331
Contact email: Kyle_Littrell@xtoenergy.com	Incident #: 2RP-4534
Contact mailing address: 522 W. Mermod, Suite 704 Carlsbad, NM 88220	

Location of Release Source

Latitude N 32.152439 Longitude W -104.016389
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Corral Canyon Federal Com #013H	Site Type: Production Well Facility
Date Release Discovered: 12/13/2017	API# *(if applicable):* 30-015-43493

Unit Letter	Section	Township	Range	County
P	6	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): 24	Volume Recovered (bbls): 24
☐ Produced Water	Volume Released (bbls):	Volume Recovered (bbls):
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release
Fluid escaped from the frac tank side manway plate. The leak affected the temporary impermeable lined containment surrounding the frac tanks. All free-standing fluids were recovered from the containment.

Form C-141
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State of New Mexico
Oil Conservation Division

Incident ID	
District RP	2RP-4534
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ No	If YES, for what reason(s) does the responsible party consider this a major release? N/A
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? N/A	

Initial Response

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

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

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

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

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

Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature: Date: 10-29-2019

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

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	2RP-4534
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	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.

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	2RP-4534
Facility ID	
Application ID	

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

Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature: Date: 10-29-2019

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

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	2RP-4534
Facility ID	
Application ID	

Closure

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

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

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

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

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

☒ Description of remediation activities

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

Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature: Date: 10-29-2019

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

OCD Only

Received by: OCD Date: 5/19/2020

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: Ashley Maxwell Date: 9/14/2022

Printed Name: Ashley Maxwell Title: Environmental Specialist

ATTACHMENT 2: LITHOLOGIC / SOIL SAMPLE LOGS

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

Identifier: PH01	Date: 10/18/19
Project Name: Corral Canyon 13H	RP Number: 2RP-4534

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: Anna Byers	Method: Track Hoe		
Lat/Long: 32.15216102N, 104.01670237W	Field Screening: Hach Chloride Test Strips & Mini RAE PID	Hole Diameter: N/A	Total Depth: 4 feet

Comments: Chloride test performed with a 1:4 dilution factor

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0			
Dry	<128	<15	No	PH01		0.5 ft	caliche	Pad caliche
Moist	<128	<15	No		1	1 ft	SP-SM	Brown, non-plastic, poorly graded sand (f.) with silt with trace organics; no odor
Moist	<128	<15	No		2	2 ft	SP-SM	Brown, non-plastic, poorly graded sand (f.) with silt with trace organics; no odor
Moist	<128	<15	No		3	3 ft	SP-SM	Brown, non-plastic, poorly graded sand (f.) with silt with trace organics; no odor
Moist	312	<15	No	PH01A	4	4 ft	SP-SM	Brown, non-plastic, poorly graded sand (f.) with silt with trace organics; no odor
					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: 10/18/19
	Project Name: Corral Canyon 13H	RP Number: 2RP-4534
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Anna Byers	Method: Track Hoe
Lat/Long: 32.15217261N, 104.01683086W Field Screening: Hach Chloride Test Strips & Mini RAE PID	Hole Diameter: N/A	Total Depth: 4 feet
Comments: Chloride test performed with a 1:4 dilution factor		

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0			
Dry	<128	<15	No	PH02		0.5 ft	caliche	Pad caliche
Moist	<128	<15	No		1	1 ft	SP-SM	Brown, non-plastic, poorly graded sand (f.) with silt with trace organics; no odor
Moist	<128	<15	No		2	2 ft	SP-SM	Brown, non-plastic, poorly graded sand (f.) with silt with trace organics; no odor
Moist	<128	<15	No		3	3 ft	SP-SM	Brown, non-plastic, poorly graded sand (f.) with silt with trace organics; no odor
Moist	<128	<15	No	PH02A	4	4 ft	SP-SM	Brown, non-plastic, poorly graded sand (f.) with silt with trace organics; no odor
					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: 10/18/19
		Project Name: Corral Canyon 13H	RP Number: 2RP-4534
LITHOLOGIC / SOIL SAMPLING LOG		Logged By: Anna Byers	Method: Track Hoe
Lat/Long: 32.15216391N, 104.01693451W	Field Screening: Hach Chloride Test Strips & Mini RAE PID	Hole Diameter: N/A	Total Depth: 4 feet
Comments: Chloride test performed with a 1:4 dilution factor			

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0			
Dry	<128	<15	No	PH03		0.5 ft	caliche	Pad caliche
Moist	<128	<15	No		1	1 ft	SP-SM	Brown, non-plastic, poorly graded sand (f.) with silt with trace organics; no odor
Moist	<128	<15	No		2	2 ft	SP-SM	Brown, non-plastic, poorly graded sand (f.) with silt with trace organics; no odor
Moist	<128	<15	No		3	3 ft	SP-SM	Brown, non-plastic, poorly graded sand (f.) with silt with trace organics; no odor
Moist	<128	<15	No	PH03A	4	4 ft	SP-SM	Brown, non-plastic, poorly graded sand (f.) with silt with trace organics; no odor
					5			
					6			
					7			
					8			
					9			
					10			
					11			
					12			

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

Identifier: PH04	Date: 10/18/19
Project Name: Corral Canyon 13H	RP Number: 2RP-4534

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: Anna Byers	Method: Track Hoe		
Lat/Long: 32.15224518N, 104.01696218W	Field Screening: Hach Chloride Test Strips & Mini RAE PID	Hole Diameter: N/A	Total Depth: 4 feet

Comments: Chloride test performed with a 1:4 dilution factor

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0			
Dry	<128	<15	No	PH04		0.5 ft	caliche	Pad caliche
Moist	212	<15	No	PH04A	1	1 ft	SP-SM	Brown, non-plastic, poorly graded sand (f.) with silt with trace organics; no odor
Moist	212	<15	No		2	2 ft	SP-SM	Brown, non-plastic, poorly graded sand (f.) with silt with trace organics; no odor
Moist	<128	<15	No		3	3 ft	SP-SM	Brown, non-plastic, poorly graded sand (f.) with silt with trace organics; no odor
Moist	<128	<15	No	PH04B	4	4 ft	SP-SM	Brown, non-plastic, poorly graded sand (f.) with silt with trace organics; no odor
					5			
					6			
					7			
					8			
					9			
					10			
					11			
					12			

LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance · Engineering · Remediation		Identifier: PH05	Date: 10/18/19
		Project Name: Corral Canyon 13H	RP Number: 2RP-4534
LITHOLOGIC / SOIL SAMPLING LOG		Logged By: Anna Byers	Method: Track Hoe
Lat/Long: 32.15210091N, 104.01697638W	Field Screening: Hach Chloride Test Strips & Mini RAE PID	Hole Diameter: N/A	Total Depth: 4 feet
Comments: Chloride test performed with a 1:4 dilution factor			

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0			
Dry	396	<15	No	PH05		0.5 ft	caliche	Pad caliche
Moist	358	<15	No		1	1 ft	SP-SM	Brown, non-plastic, poorly graded sand (f.) with silt with trace organics; no odor
Moist	312	<15	No		2	2 ft	SP-SM	Brown, non-plastic, poorly graded sand (f.) with silt with trace organics; no odor
Moist	<128	<15	No		3	3 ft	SP-SM	Brown, non-plastic, poorly graded sand (f.) with silt with trace organics; no odor
Moist	<128	<15	No	PH05A	4	4 ft	SP-SM	Brown, non-plastic, poorly graded sand (f.) with silt with trace organics; no odor
					5			
					6			
					7			
					8			
					9			
					10			
					11			
					12			

LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance · Engineering · Remediation		Identifier: PH06	Date: 10/18/19
		Project Name: Corral Canyon 13H	RP Number: 2RP-4534
LITHOLOGIC / SOIL SAMPLING LOG		Logged By: Anna Byers	Method: Track Hoe
Lat/Long: 32.15217151N, 104.01709691W	Field Screening: Hach Chloride Test Strips & Mini RAE PID	Hole Diameter: N/A	Total Depth: 4 feet
Comments: Chloride test performed with a 1:4 dilution factor			

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0			
Dry	488	<15	No	PH06		0.5 ft	caliche	Pad caliche
Moist	358	<15	No		1	1 ft	SP-SM	Brown, non-plastic, poorly graded sand (f.) with silt with trace organics; no odor
Moist	156	<15	No		2	2 ft	SP-SM	Brown, non-plastic, poorly graded sand (f.) with silt with trace organics; no odor
Moist	<128	<15	No		3	3 ft	SP-SM	Brown, non-plastic, poorly graded sand (f.) with silt with trace organics; no odor
Moist	128	<15	No	PH06A	4	4 ft	SP-SM	Brown, non-plastic, poorly graded sand (f.) with silt with trace organics; no odor
					5			
					6			
					7			
					8			
					9			
					10			
					11			
					12			

LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance · Engineering · Remediation		Identifier: PH07	Date: 10/18/19
		Project Name: Corral Canyon 13H	RP Number: 2RP-4534
LITHOLOGIC / SOIL SAMPLING LOG		Logged By: Anna Byers	Method: Track Hoe
Lat/Long: 32.15218194N, 104.01724358W	Field Screening: Hach Chloride Test Strips & Mini RAE PID	Hole Diameter: N/A	Total Depth: 4 feet
Comments: Chloride test performed with a 1:4 dilution factor			

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0			
Dry	908	<15	No	PH01		0.5 ft	caliche	Pad caliche
Moist	396	<15	No		1	1 ft	SP-SM	Brown, non-plastic, poorly graded sand (f.) with silt with trace organics; no odor
Moist	180	<15	No		2	2 ft	SP-SM	Brown, non-plastic, poorly graded sand (f.) with silt with trace organics; no odor
Moist	<128	<15	No		3	3 ft	SP-SM	Brown, non-plastic, poorly graded sand (f.) with silt with trace organics; no odor
Moist	<128	<15	No	PH01A	4	4 ft	SP-SM	Brown, non-plastic, poorly graded sand (f.) with silt with trace organics; no odor
					5			
					6			
					7			
					8			
					9			
					10			
					11			
					12			

ATTACHMENT 3: PHOTOGRAPHIC LOG

View facing east of the former tank containment release area.

Project: 012918117	XTO Energy, Inc. Corral Canyon Federal Com #013H	LTE Advancing Opportunity
October 18, 2019	Photographic Log	

View facing southwest of the former tank containment release area.

Project: 012918117	XTO Energy, Inc. Corral Canyon Federal Com #013H	LTE Advancing Opportunity
October 18, 2019	Photographic Log	

View facing west of the former tank containment release area.

Project: 012918117	XTO Energy, Inc. Corral Canyon Federal Com #013H	LTE Advancing Opportunity
October 18, 2019	Photographic Log	

ATTACHMENT 4: LABORATORY ANALYTICAL REPORTS

Analytical Report 640495

for

LT Environmental, Inc.

Project Manager: Aimee Cole

Corral Canyon 13H

012918117

22-OCT-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 (2017-142), North Carolina (681)

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-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)

22-OCT-19

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

Reference: XENCO Report No(s): **640495**
Corral Canyon 13H
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) 640495. 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. 640495 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 640495

LT Environmental, Inc., Arvada, CO

Corral Canyon 13H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH01	S	10-18-19 09:20	0.5 ft	640495-001
PH01A	S	10-18-19 09:40	4 ft	640495-002
PH02	S	10-18-19 10:05	0.5 ft	640495-003
PH02A	S	10-18-19 10:15	4 ft	640495-004
PH03	S	10-18-19 10:30	0.5 ft	640495-005
PH03A	S	10-18-19 10:40	4 ft	640495-006
PH04	S	10-18-19 10:55	0.5 ft	640495-007
PH04A	S	10-18-19 10:57	1 ft	640495-008
PH04B	S	10-18-19 11:05	4 ft	640495-009
PH05	S	10-18-19 11:15	0.5 ft	640495-010
PH05A	S	10-18-19 11:25	4 ft	640495-011
PH06	S	10-18-19 11:37	0.5 ft	640495-012
PH06A	S	10-18-19 11:50	4 ft	640495-013
PH07	S	10-18-19 12:10	0.5 ft	640495-014
PH07A	S	10-18-19 12:20	4 ft	640495-015

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: Corral Canyon 13H

Project ID: *012918117*
Work Order Number(s): *640495*

Report Date: *22-OCT-19*
Date Received: *10/21/2019*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3104972 TPH by SW8015 Mod
Surrogate 1-Chlorooctane, Surrogate o-Terphenyl recovered below QC limits. Matrix interferences is suspected; data confirmed by re-analysis.
Samples affected are: 640495-005.

Batch: LBA-3104975 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3104977 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analysis Summary 640495

LT Environmental, Inc., Arvada, CO

Project Name: Corral Canyon 13H

Project Id: 012918117
Contact: Aimee Cole
Project Location: Rural Eddy County

Date Received in Lab: Mon Oct-21-19 09:10 am
Report Date: 22-OCT-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	640495-001		640495-002		640495-003		640495-004		640495-005		640495-006	
	Field Id:	PH01		PH01A		PH02		PH02A		PH03		PH03A	
	Depth:	0.5- ft		4- ft		0.5- ft		4- ft		0.5- ft		4- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-18-19 09:20		Oct-18-19 09:40		Oct-18-19 10:05		Oct-18-19 10:15		Oct-18-19 10:30		Oct-18-19 10:40	
BTEX by EPA 8021B	*Extracted:*	Oct-21-19 10:10		Oct-21-19 10:10		Oct-21-19 10:10		Oct-21-19 10:10		Oct-21-19 10:10		Oct-21-19 10:10	
	Analyzed:	Oct-21-19 20:10		Oct-21-19 20:31		Oct-21-19 20:51		Oct-21-19 21:11		Oct-21-19 21:32		Oct-21-19 21:52	
	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	<0.00100	0.00100	<0.000998	0.000998	<0.00101	0.00101	<0.00100	0.00100	<0.00100	0.00100
Toluene		<0.00101	0.00101	<0.00100	0.00100	<0.000998	0.000998	<0.00101	0.00101	<0.00100	0.00100	<0.00100	0.00100
Ethylbenzene		<0.00101	0.00101	<0.00100	0.00100	<0.000998	0.000998	<0.00101	0.00101	<0.00100	0.00100	<0.00100	0.00100
m,p-Xylenes		<0.00202	0.00202	<0.00201	0.00201	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200
o-Xylene		<0.00101	0.00101	<0.00100	0.00100	<0.000998	0.000998	<0.00101	0.00101	<0.00100	0.00100	<0.00100	0.00100
Total Xylenes		<0.00101	0.00101	<0.00100	0.00100	<0.000998	0.000998	<0.00101	0.00101	<0.00100	0.00100	<0.00100	0.00100
Total BTEX		<0.00101	0.00101	<0.00100	0.00100	<0.000998	0.000998	<0.00101	0.00101	<0.00100	0.00100	<0.00100	0.00100
Chloride by EPA 300	*Extracted:*	Oct-21-19 17:10		Oct-21-19 17:10		Oct-21-19 17:10		Oct-21-19 17:10		Oct-21-19 17:10		Oct-21-19 17:10	
	Analyzed:	Oct-21-19 17:40		Oct-21-19 17:59		Oct-21-19 18:06		Oct-21-19 18:53		Oct-21-19 18:59		Oct-21-19 19:20	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		<9.88	9.88	239	9.86	<10.0	10.0	15.5	10.0	<10.1	10.1	21.6	10.1
TPH by SW8015 Mod	*Extracted:*	** ** ** **		** ** ** **		Oct-21-19 14:00		Oct-21-19 14:00		Oct-21-19 14:00		Oct-21-19 14:00	
	Analyzed:	Oct-21-19 13:32		Oct-21-19 13:32		Oct-21-19 14:32		Oct-21-19 14:52		Oct-21-19 15:11		Oct-21-19 15:11	
	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	<50.2	50.2	<50.0	50.0	<50.3	50.3	<50.1	50.1	<50.2	50.2
Diesel Range Organics (DRO)		<50.0	50.0	<50.2	50.2	<50.0	50.0	<50.3	50.3	<50.1	50.1	<50.2	50.2
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<50.2	50.2	<50.0	50.0	<50.3	50.3	<50.1	50.1	<50.2	50.2
Total GRO-DRO		<50.0	50.0	<50.2	50.2	<50.0	50.0	<50.3	50.3	<50.1	50.1	<50.2	50.2
Total TPH		<50.0	50.0	<50.2	50.2	<50.0	50.0	<50.3	50.3	<50.1	50.1	<50.2	50.2

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

Jessica Kramer
Project Assistant

Final 1.000

Certificate of Analysis Summary 640495

LT Environmental, Inc., Arvada, CO

Project Name: Corral Canyon 13H

Project Id: 012918117
Contact: Aimee Cole
Project Location: Rural Eddy County

Date Received in Lab: Mon Oct-21-19 09:10 am
Report Date: 22-OCT-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	640495-007		640495-008		640495-009		640495-010		640495-011		640495-012	
	Field Id:	PH04		PH04A		PH04B		PH05		PH05A		PH06	
	Depth:	0.5- ft		1- ft		4- ft		0.5- ft		4- ft		0.5- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-18-19 10:55		Oct-18-19 10:57		Oct-18-19 11:05		Oct-18-19 11:15		Oct-18-19 11:25		Oct-18-19 11:37	
BTEX by EPA 8021B	*Extracted:*	Oct-21-19 10:10		Oct-21-19 14:10		Oct-21-19 14:10		Oct-21-19 14:10		Oct-21-19 14:10		Oct-21-19 14:10	
	Analyzed:	Oct-21-19 22:13		Oct-22-19 01:44		Oct-22-19 02:04		Oct-22-19 02:25		Oct-22-19 02:45		Oct-22-19 03:06	
	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	<0.00101	0.00101	<0.00101	0.00101	<0.000994	0.000994	<0.000992	0.000992
Toluene		<0.00100	0.00100	<0.00101	0.00101	<0.00101	0.00101	<0.00101	0.00101	<0.000994	0.000994	<0.000992	0.000992
Ethylbenzene		<0.00100	0.00100	<0.00101	0.00101	<0.00101	0.00101	<0.00101	0.00101	<0.000994	0.000994	<0.000992	0.000992
m,p-Xylenes		<0.00200	0.00200	<0.00201	0.00201	<0.00201	0.00201	<0.00201	0.00201	<0.00199	0.00199	<0.00198	0.00198
o-Xylene		<0.00100	0.00100	<0.00101	0.00101	<0.00101	0.00101	<0.00101	0.00101	<0.000994	0.000994	<0.000992	0.000992
Total Xylenes		<0.00100	0.00100	<0.00101	0.00101	<0.00101	0.00101	<0.00101	0.00101	<0.000994	0.000994	<0.000992	0.000992
Total BTEX		<0.00100	0.00100	<0.00101	0.00101	<0.00101	0.00101	<0.00101	0.00101	<0.000994	0.000994	<0.000992	0.000992
Chloride by EPA 300	*Extracted:*	Oct-21-19 17:10		Oct-21-19 17:10		Oct-21-19 17:10		Oct-21-19 17:10		Oct-21-19 17:10		Oct-21-19 17:10	
	Analyzed:	Oct-21-19 19:27		Oct-21-19 19:33		Oct-21-19 19:39		Oct-21-19 19:45		Oct-21-19 19:52		Oct-21-19 20:10	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		55.4	9.98	73.0	9.92	33.1	10.1	315	10.0	<10.0	10.0	173	49.4
TPH by SW8015 Mod	*Extracted:*	Oct-21-19 14:00		Oct-21-19 14:00		Oct-21-19 14:00		Oct-21-19 14:00		Oct-21-19 14:00		Oct-21-19 14:00	
	Analyzed:	Oct-21-19 15:31		Oct-21-19 15:31		Oct-21-19 15:51		Oct-21-19 15:51		Oct-21-19 16:11		Oct-21-19 16:11	
	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	<50.0	50.0	<50.2	50.2	<50.0	50.0	<50.3	50.3	<50.3	50.3
Diesel Range Organics (DRO)		<50.2	50.2	<50.0	50.0	<50.2	50.2	<50.0	50.0	<50.3	50.3	<50.3	50.3
Motor Oil Range Hydrocarbons (MRO)		<50.2	50.2	<50.0	50.0	<50.2	50.2	<50.0	50.0	<50.3	50.3	<50.3	50.3
Total GRO-DRO		<50.2	50.2	<50.0	50.0	<50.2	50.2	<50.0	50.0	<50.3	50.3	<50.3	50.3
Total TPH		<50.2	50.2	<50.0	50.0	<50.2	50.2	<50.0	50.0	<50.3	50.3	<50.3	50.3

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

Jessica Kramer
Project Assistant

Final 1.000

Certificate of Analysis Summary 640495

LT Environmental, Inc., Arvada, CO

Project Name: Corral Canyon 13H

Project Id: 012918117
Contact: Aimee Cole
Project Location: Rural Eddy County

Date Received in Lab: Mon Oct-21-19 09:10 am
Report Date: 22-OCT-19
Project Manager: Jessica Kramer

Analysis Requested											
	Lab Id:	640495-013		640495-014		640495-015					
	Field Id:	PH06A		PH07		PH07A					
	Depth:	4- ft		0.5- ft		4- ft					
	Matrix:	SOIL		SOIL		SOIL					
	Sampled:	Oct-18-19 11:50		Oct-18-19 12:10		Oct-18-19 12:20					
BTEX by EPA 8021B	***Extracted:***	Oct-21-19 14:10		Oct-21-19 14:10		Oct-21-19 14:10					
	Analyzed:	Oct-22-19 03:26		Oct-22-19 03:46		Oct-22-19 04:07					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		<0.00101	0.00101	<0.00101	0.00101	<0.00101	0.00101				
Toluene		<0.00101	0.00101	<0.00101	0.00101	<0.00101	0.00101				
Ethylbenzene		<0.00101	0.00101	<0.00101	0.00101	<0.00101	0.00101				
m,p-Xylenes		<0.00201	0.00201	<0.00201	0.00201	<0.00202	0.00202				
o-Xylene		<0.00101	0.00101	<0.00101	0.00101	<0.00101	0.00101				
Total Xylenes		<0.00101	0.00101	<0.00101	0.00101	<0.00101	0.00101				
Total BTEX		<0.00101	0.00101	<0.00101	0.00101	<0.00101	0.00101				
Chloride by EPA 300	***Extracted:***	Oct-21-19 17:10		Oct-21-19 17:10		Oct-21-19 17:10					
	Analyzed:	Oct-21-19 20:17		Oct-21-19 20:33		Oct-21-19 20:39					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		<9.84	9.84	8.04	0.501	10.7	10.0				
TPH by SW8015 Mod	***Extracted:***	Oct-21-19 14:00		Oct-21-19 14:00		Oct-21-19 14:00					
	Analyzed:	Oct-21-19 16:31		Oct-21-19 16:51		Oct-21-19 16:51					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<50.2	50.2	<50.1	50.1	<50.1	50.1				
Diesel Range Organics (DRO)		<50.2	50.2	<50.1	50.1	<50.1	50.1				
Motor Oil Range Hydrocarbons (MRO)		<50.2	50.2	<50.1	50.1	<50.1	50.1				
Total GRO-DRO		<50.2	50.2	<50.1	50.1	<50.1	50.1				
Total TPH		<50.2	50.2	<50.1	50.1	<50.1	50.1				

Jessica Kramer
Project Assistant

Certificate of Analytical Results 640495

LT Environmental, Inc., Arvada, CO

Corral Canyon 13H

Sample Id:	**PH01**	Matrix:	Soil	Date Received:	10.21.19 09.10
Lab Sample Id:	640495-001	Date Collected:	10.18.19 09.20	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.21.19 17.10	Basis:	Wet Weight
Seq Number:	3104961				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.88	9.88	mg/kg	10.21.19 17.40	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.21.19 08.50	Basis:	Wet Weight
Seq Number:	3104862				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.21.19 13.32	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.21.19 13.32	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.21.19 13.32	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.21.19 13.32	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.21.19 13.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	84	%	70-135	10.21.19 13.32	
o-Terphenyl	84-15-1	81	%	70-135	10.21.19 13.32	

Certificate of Analytical Results 640495

LT Environmental, Inc., Arvada, CO

Corral Canyon 13H

Sample Id:	**PH01**	Matrix:	Soil	Date Received:	10.21.19 09.10
Lab Sample Id:	640495-001	Date Collected:	10.18.19 09.20	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.21.19 10.10	Basis:	Wet Weight
Seq Number:	3104975				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00101	0.00101	mg/kg	10.21.19 20.10	U	1
Toluene	108-88-3	<0.00101	0.00101	mg/kg	10.21.19 20.10	U	1
Ethylbenzene	100-41-4	<0.00101	0.00101	mg/kg	10.21.19 20.10	U	1
m,p-Xylenes	179601-23-1	<0.00202	0.00202	mg/kg	10.21.19 20.10	U	1
o-Xylene	95-47-6	<0.00101	0.00101	mg/kg	10.21.19 20.10	U	1
Total Xylenes	1330-20-7	<0.00101	0.00101	mg/kg	10.21.19 20.10	U	1
Total BTEX		<0.00101	0.00101	mg/kg	10.21.19 20.10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	114	%	70-130	10.21.19 20.10	
1,4-Difluorobenzene	540-36-3	104	%	70-130	10.21.19 20.10	

Certificate of Analytical Results 640495

LT Environmental, Inc., Arvada, CO

Corral Canyon 13H

Sample Id:	**PH01A**	Matrix:	Soil	Date Received:	10.21.19 09.10
Lab Sample Id:	640495-002	Date Collected:	10.18.19 09.40	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.21.19 17.10	Basis:	Wet Weight
Seq Number:	3104961				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**239**	9.86	mg/kg	10.21.19 17.59		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.21.19 08.50	Basis:	Wet Weight
Seq Number:	3104862				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	10.21.19 13.32	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	10.21.19 13.32	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	10.21.19 13.32	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	10.21.19 13.32	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	10.21.19 13.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	81	%	70-135	10.21.19 13.32	
o-Terphenyl	84-15-1	80	%	70-135	10.21.19 13.32	

Certificate of Analytical Results 640495

LT Environmental, Inc., Arvada, CO

Corral Canyon 13H

Sample Id:	**PH01A**	Matrix:	Soil	Date Received:	10.21.19 09.10
Lab Sample Id:	640495-002	Date Collected:	10.18.19 09.40	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.21.19 10.10	Basis:	Wet Weight
Seq Number:	3104975				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00100	0.00100	mg/kg	10.21.19 20.31	U	1
Toluene	108-88-3	<0.00100	0.00100	mg/kg	10.21.19 20.31	U	1
Ethylbenzene	100-41-4	<0.00100	0.00100	mg/kg	10.21.19 20.31	U	1
m,p-Xylenes	179601-23-1	<0.00201	0.00201	mg/kg	10.21.19 20.31	U	1
o-Xylene	95-47-6	<0.00100	0.00100	mg/kg	10.21.19 20.31	U	1
Total Xylenes	1330-20-7	<0.00100	0.00100	mg/kg	10.21.19 20.31	U	1
Total BTEX		<0.00100	0.00100	mg/kg	10.21.19 20.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	111	%	70-130	10.21.19 20.31	
1,4-Difluorobenzene	540-36-3	104	%	70-130	10.21.19 20.31	

Certificate of Analytical Results 640495

LT Environmental, Inc., Arvada, CO

Corral Canyon 13H

Sample Id:	**PH02**	Matrix:	Soil	Date Received:	10.21.19 09.10
Lab Sample Id:	640495-003	Date Collected:	10.18.19 10.05	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.21.19 17.10	Basis:	Wet Weight
Seq Number:	3104961				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<10.0	10.0	mg/kg	10.21.19 18.06	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.21.19 14.00	Basis:	Wet Weight
Seq Number:	3104972				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.21.19 14.32	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.21.19 14.32	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.21.19 14.32	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.21.19 14.32	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.21.19 14.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	77	%	70-135	10.21.19 14.32	
o-Terphenyl	84-15-1	75	%	70-135	10.21.19 14.32	

Certificate of Analytical Results 640495

LT Environmental, Inc., Arvada, CO

Corral Canyon 13H

Sample Id:	**PH02**	Matrix:	Soil	Date Received:	10.21.19 09.10
Lab Sample Id:	640495-003	Date Collected:	10.18.19 10.05	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.21.19 10.10	Basis:	Wet Weight
Seq Number:	3104975				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000998	0.000998	mg/kg	10.21.19 20.51	U	1
Toluene	108-88-3	<0.000998	0.000998	mg/kg	10.21.19 20.51	U	1
Ethylbenzene	100-41-4	<0.000998	0.000998	mg/kg	10.21.19 20.51	U	1
m,p-Xylenes	179601-23-1	<0.00200	0.00200	mg/kg	10.21.19 20.51	U	1
o-Xylene	95-47-6	<0.000998	0.000998	mg/kg	10.21.19 20.51	U	1
Total Xylenes	1330-20-7	<0.000998	0.000998	mg/kg	10.21.19 20.51	U	1
Total BTEX		<0.000998	0.000998	mg/kg	10.21.19 20.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	103	%	70-130	10.21.19 20.51	
4-Bromofluorobenzene	460-00-4	112	%	70-130	10.21.19 20.51	

Certificate of Analytical Results 640495

LT Environmental, Inc., Arvada, CO

Corral Canyon 13H

Sample Id:	**PH02A**	Matrix:	Soil	Date Received:	10.21.19 09.10
Lab Sample Id:	640495-004	Date Collected:	10.18.19 10.15	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.21.19 17.10	Basis:	Wet Weight
Seq Number:	3104961				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**15.5**	10.0	mg/kg	10.21.19 18.53		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.21.19 14.00	Basis:	Wet Weight
Seq Number:	3104972				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	10.21.19 14.52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	10.21.19 14.52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	10.21.19 14.52	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	10.21.19 14.52	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	10.21.19 14.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	72	%	70-135	10.21.19 14.52	
o-Terphenyl	84-15-1	73	%	70-135	10.21.19 14.52	

Certificate of Analytical Results 640495

LT Environmental, Inc., Arvada, CO

Corral Canyon 13H

Sample Id:	**PH02A**	Matrix:	Soil	Date Received:	10.21.19 09.10
Lab Sample Id:	640495-004	Date Collected:	10.18.19 10.15	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.21.19 10.10	Basis:	Wet Weight
Seq Number:	3104975				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00101	0.00101	mg/kg	10.21.19 21.11	U	1
Toluene	108-88-3	<0.00101	0.00101	mg/kg	10.21.19 21.11	U	1
Ethylbenzene	100-41-4	<0.00101	0.00101	mg/kg	10.21.19 21.11	U	1
m,p-Xylenes	179601-23-1	<0.00201	0.00201	mg/kg	10.21.19 21.11	U	1
o-Xylene	95-47-6	<0.00101	0.00101	mg/kg	10.21.19 21.11	U	1
Total Xylenes	1330-20-7	<0.00101	0.00101	mg/kg	10.21.19 21.11	U	1
Total BTEX		<0.00101	0.00101	mg/kg	10.21.19 21.11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	10.21.19 21.11	
4-Bromofluorobenzene	460-00-4	107	%	70-130	10.21.19 21.11	

Certificate of Analytical Results 640495

LT Environmental, Inc., Arvada, CO

Corral Canyon 13H

Sample Id:	**PH03**	Matrix:	Soil	Date Received:	10.21.19 09.10
Lab Sample Id:	640495-005	Date Collected:	10.18.19 10.30	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.21.19 17.10	Basis:	Wet Weight
Seq Number:	3104961				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<10.1	10.1	mg/kg	10.21.19 18.59	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.21.19 14.00	Basis:	Wet Weight
Seq Number:	3104972				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	10.21.19 15.11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	10.21.19 15.11	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	10.21.19 15.11	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	10.21.19 15.11	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	10.21.19 15.11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	69	%	70-135	10.21.19 15.11	**
o-Terphenyl	84-15-1	69	%	70-135	10.21.19 15.11	**

Certificate of Analytical Results 640495

LT Environmental, Inc., Arvada, CO

Corral Canyon 13H

Sample Id:	**PH03**	Matrix:	Soil	Date Received:	10.21.19 09.10
Lab Sample Id:	640495-005	Date Collected:	10.18.19 10.30	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.21.19 10.10	Basis:	Wet Weight
Seq Number:	3104975				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00100	0.00100	mg/kg	10.21.19 21.32	U	1
Toluene	108-88-3	<0.00100	0.00100	mg/kg	10.21.19 21.32	U	1
Ethylbenzene	100-41-4	<0.00100	0.00100	mg/kg	10.21.19 21.32	U	1
m,p-Xylenes	179601-23-1	<0.00200	0.00200	mg/kg	10.21.19 21.32	U	1
o-Xylene	95-47-6	<0.00100	0.00100	mg/kg	10.21.19 21.32	U	1
Total Xylenes	1330-20-7	<0.00100	0.00100	mg/kg	10.21.19 21.32	U	1
Total BTEX		<0.00100	0.00100	mg/kg	10.21.19 21.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	10.21.19 21.32	
4-Bromofluorobenzene	460-00-4	110	%	70-130	10.21.19 21.32	

Certificate of Analytical Results 640495

LT Environmental, Inc., Arvada, CO

Corral Canyon 13H

Sample Id:	**PH03A**	Matrix:	Soil	Date Received:	10.21.19 09.10
Lab Sample Id:	640495-006	Date Collected:	10.18.19 10.40	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.21.19 17.10	Basis:	Wet Weight
Seq Number:	3104961				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**21.6**	10.1	mg/kg	10.21.19 19.20		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.21.19 14.00	Basis:	Wet Weight
Seq Number:	3104972				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	10.21.19 15.11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	10.21.19 15.11	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	10.21.19 15.11	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	10.21.19 15.11	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	10.21.19 15.11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	72	%	70-135	10.21.19 15.11	
o-Terphenyl	84-15-1	70	%	70-135	10.21.19 15.11	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 13H

Sample Id:	**PH03A**	Matrix:	Soil	Date Received:	10.21.19 09.10
Lab Sample Id:	640495-006	Date Collected:	10.18.19 10.40	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.21.19 10.10	Basis:	Wet Weight
Seq Number:	3104975				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00100	0.00100	mg/kg	10.21.19 21.52	U	1
Toluene	108-88-3	<0.00100	0.00100	mg/kg	10.21.19 21.52	U	1
Ethylbenzene	100-41-4	<0.00100	0.00100	mg/kg	10.21.19 21.52	U	1
m,p-Xylenes	179601-23-1	<0.00200	0.00200	mg/kg	10.21.19 21.52	U	1
o-Xylene	95-47-6	<0.00100	0.00100	mg/kg	10.21.19 21.52	U	1
Total Xylenes	1330-20-7	<0.00100	0.00100	mg/kg	10.21.19 21.52	U	1
Total BTEX		<0.00100	0.00100	mg/kg	10.21.19 21.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	10.21.19 21.52	
4-Bromofluorobenzene	460-00-4	106	%	70-130	10.21.19 21.52	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 13H

Sample Id:	**PH04**	Matrix:	Soil	Date Received:	10.21.19 09.10
Lab Sample Id:	640495-007	Date Collected:	10.18.19 10.55	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.21.19 17.10	Basis:	Wet Weight
Seq Number:	3104961				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**55.4**	9.98	mg/kg	10.21.19 19.27		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.21.19 14.00	Basis:	Wet Weight
Seq Number:	3104972				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	10.21.19 15.31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	10.21.19 15.31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	10.21.19 15.31	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	10.21.19 15.31	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	10.21.19 15.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	72	%	70-135	10.21.19 15.31	
o-Terphenyl	84-15-1	73	%	70-135	10.21.19 15.31	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 13H

Sample Id:	**PH04**	Matrix:	Soil	Date Received:	10.21.19 09.10
Lab Sample Id:	640495-007	Date Collected:	10.18.19 10.55	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.21.19 10.10	Basis:	Wet Weight
Seq Number:	3104975				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00100	0.00100	mg/kg	10.21.19 22.13	U	1
Toluene	108-88-3	<0.00100	0.00100	mg/kg	10.21.19 22.13	U	1
Ethylbenzene	100-41-4	<0.00100	0.00100	mg/kg	10.21.19 22.13	U	1
m,p-Xylenes	179601-23-1	<0.00200	0.00200	mg/kg	10.21.19 22.13	U	1
o-Xylene	95-47-6	<0.00100	0.00100	mg/kg	10.21.19 22.13	U	1
Total Xylenes	1330-20-7	<0.00100	0.00100	mg/kg	10.21.19 22.13	U	1
Total BTEX		<0.00100	0.00100	mg/kg	10.21.19 22.13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	113	%	70-130	10.21.19 22.13	
1,4-Difluorobenzene	540-36-3	104	%	70-130	10.21.19 22.13	

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Corral Canyon 13H

Sample Id:	**PH04A**	Matrix:	Soil	Date Received:	10.21.19 09.10
Lab Sample Id:	640495-008	Date Collected:	10.18.19 10.57	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.21.19 17.10	Basis:	Wet Weight
Seq Number:	3104961				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**73.0**	9.92	mg/kg	10.21.19 19.33		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.21.19 14.00	Basis:	Wet Weight
Seq Number:	3104972				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.21.19 15.31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.21.19 15.31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.21.19 15.31	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.21.19 15.31	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.21.19 15.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	74	%	70-135	10.21.19 15.31	
o-Terphenyl	84-15-1	78	%	70-135	10.21.19 15.31	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 13H

Sample Id:	**PH04A**	Matrix:	Soil	Date Received:	10.21.19 09.10
Lab Sample Id:	640495-008	Date Collected:	10.18.19 10.57	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.21.19 14.10	Basis:	Wet Weight
Seq Number:	3104977				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00101	0.00101	mg/kg	10.22.19 01.44	U	1
Toluene	108-88-3	<0.00101	0.00101	mg/kg	10.22.19 01.44	U	1
Ethylbenzene	100-41-4	<0.00101	0.00101	mg/kg	10.22.19 01.44	U	1
m,p-Xylenes	179601-23-1	<0.00201	0.00201	mg/kg	10.22.19 01.44	U	1
o-Xylene	95-47-6	<0.00101	0.00101	mg/kg	10.22.19 01.44	U	1
Total Xylenes	1330-20-7	<0.00101	0.00101	mg/kg	10.22.19 01.44	U	1
Total BTEX		<0.00101	0.00101	mg/kg	10.22.19 01.44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	70-130	10.22.19 01.44	
4-Bromofluorobenzene	460-00-4	106	%	70-130	10.22.19 01.44	

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Corral Canyon 13H

Sample Id:	**PH04B**	Matrix:	Soil	Date Received:	10.21.19 09.10
Lab Sample Id:	640495-009	Date Collected:	10.18.19 11.05	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.21.19 17.10	Basis:	Wet Weight
Seq Number:	3104961				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**33.1**	10.1	mg/kg	10.21.19 19.39		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.21.19 14.00	Basis:	Wet Weight
Seq Number:	3104972				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	10.21.19 15.51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	10.21.19 15.51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	10.21.19 15.51	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	10.21.19 15.51	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	10.21.19 15.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	72	%	70-135	10.21.19 15.51	
o-Terphenyl	84-15-1	70	%	70-135	10.21.19 15.51	

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Corral Canyon 13H

Sample Id:	**PH04B**	Matrix:	Soil	Date Received:	10.21.19 09.10
Lab Sample Id:	640495-009	Date Collected:	10.18.19 11.05	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.21.19 14.10	Basis:	Wet Weight
Seq Number:	3104977				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00101	0.00101	mg/kg	10.22.19 02.04	U	1
Toluene	108-88-3	<0.00101	0.00101	mg/kg	10.22.19 02.04	U	1
Ethylbenzene	100-41-4	<0.00101	0.00101	mg/kg	10.22.19 02.04	U	1
m,p-Xylenes	179601-23-1	<0.00201	0.00201	mg/kg	10.22.19 02.04	U	1
o-Xylene	95-47-6	<0.00101	0.00101	mg/kg	10.22.19 02.04	U	1
Total Xylenes	1330-20-7	<0.00101	0.00101	mg/kg	10.22.19 02.04	U	1
Total BTEX		<0.00101	0.00101	mg/kg	10.22.19 02.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	112	%	70-130	10.22.19 02.04	
1,4-Difluorobenzene	540-36-3	103	%	70-130	10.22.19 02.04	

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Corral Canyon 13H

Sample Id:	**PH05**	Matrix:	Soil	Date Received:	10.21.19 09.10
Lab Sample Id:	640495-010	Date Collected:	10.18.19 11.15	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.21.19 17.10	Basis:	Wet Weight
Seq Number:	3104961				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**315**	10.0	mg/kg	10.21.19 19.45		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.21.19 14.00	Basis:	Wet Weight
Seq Number:	3104972				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.21.19 15.51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.21.19 15.51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.21.19 15.51	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.21.19 15.51	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.21.19 15.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	74	%	70-135	10.21.19 15.51	
o-Terphenyl	84-15-1	76	%	70-135	10.21.19 15.51	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 13H

Sample Id:	**PH05**	Matrix:	Soil	Date Received:	10.21.19 09.10
Lab Sample Id:	640495-010	Date Collected:	10.18.19 11.15	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.21.19 14.10	Basis:	Wet Weight
Seq Number:	3104977				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00101	0.00101	mg/kg	10.22.19 02.25	U	1
Toluene	108-88-3	<0.00101	0.00101	mg/kg	10.22.19 02.25	U	1
Ethylbenzene	100-41-4	<0.00101	0.00101	mg/kg	10.22.19 02.25	U	1
m,p-Xylenes	179601-23-1	<0.00201	0.00201	mg/kg	10.22.19 02.25	U	1
o-Xylene	95-47-6	<0.00101	0.00101	mg/kg	10.22.19 02.25	U	1
Total Xylenes	1330-20-7	<0.00101	0.00101	mg/kg	10.22.19 02.25	U	1
Total BTEX		<0.00101	0.00101	mg/kg	10.22.19 02.25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	115	%	70-130	10.22.19 02.25	
1,4-Difluorobenzene	540-36-3	105	%	70-130	10.22.19 02.25	

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LT Environmental, Inc., Arvada, CO

Corral Canyon 13H

Sample Id:	**PH05A**	Matrix:	Soil	Date Received:	10.21.19 09.10
Lab Sample Id:	640495-011	Date Collected:	10.18.19 11.25	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.21.19 17.10	Basis:	Wet Weight
Seq Number:	3104961				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<10.0	10.0	mg/kg	10.21.19 19.52	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.21.19 14.00	Basis:	Wet Weight
Seq Number:	3104972				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	10.21.19 16.11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	10.21.19 16.11	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	10.21.19 16.11	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	10.21.19 16.11	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	10.21.19 16.11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	10.21.19 16.11	
o-Terphenyl	84-15-1	84	%	70-135	10.21.19 16.11	

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Corral Canyon 13H

Sample Id:	**PH05A**	Matrix:	Soil	Date Received:	10.21.19 09.10
Lab Sample Id:	640495-011	Date Collected:	10.18.19 11.25	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.21.19 14.10	Basis:	Wet Weight
Seq Number:	3104977				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000994	0.000994	mg/kg	10.22.19 02.45	U	1
Toluene	108-88-3	<0.000994	0.000994	mg/kg	10.22.19 02.45	U	1
Ethylbenzene	100-41-4	<0.000994	0.000994	mg/kg	10.22.19 02.45	U	1
m,p-Xylenes	179601-23-1	<0.00199	0.00199	mg/kg	10.22.19 02.45	U	1
o-Xylene	95-47-6	<0.000994	0.000994	mg/kg	10.22.19 02.45	U	1
Total Xylenes	1330-20-7	<0.000994	0.000994	mg/kg	10.22.19 02.45	U	1
Total BTEX		<0.000994	0.000994	mg/kg	10.22.19 02.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	104	%	70-130	10.22.19 02.45	
4-Bromofluorobenzene	460-00-4	111	%	70-130	10.22.19 02.45	

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Corral Canyon 13H

Sample Id:	**PH06**	Matrix:	Soil	Date Received:	10.21.19 09.10
Lab Sample Id:	640495-012	Date Collected:	10.18.19 11.37	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.21.19 17.10	Basis:	Wet Weight
Seq Number:	3104961				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**173**	49.4	mg/kg	10.21.19 20.10		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.21.19 14.00	Basis:	Wet Weight
Seq Number:	3104972				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	10.21.19 16.11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	10.21.19 16.11	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	10.21.19 16.11	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	10.21.19 16.11	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	10.21.19 16.11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	75	%	70-135	10.21.19 16.11	
o-Terphenyl	84-15-1	77	%	70-135	10.21.19 16.11	

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Corral Canyon 13H

Sample Id:	**PH06**	Matrix:	Soil	Date Received:	10.21.19 09.10
Lab Sample Id:	640495-012	Date Collected:	10.18.19 11.37	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.21.19 14.10	Basis:	Wet Weight
Seq Number:	3104977				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000992	0.000992	mg/kg	10.22.19 03.06	U	1
Toluene	108-88-3	<0.000992	0.000992	mg/kg	10.22.19 03.06	U	1
Ethylbenzene	100-41-4	<0.000992	0.000992	mg/kg	10.22.19 03.06	U	1
m,p-Xylenes	179601-23-1	<0.00198	0.00198	mg/kg	10.22.19 03.06	U	1
o-Xylene	95-47-6	<0.000992	0.000992	mg/kg	10.22.19 03.06	U	1
Total Xylenes	1330-20-7	<0.000992	0.000992	mg/kg	10.22.19 03.06	U	1
Total BTEX		<0.000992	0.000992	mg/kg	10.22.19 03.06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	106	%	70-130	10.22.19 03.06	
4-Bromofluorobenzene	460-00-4	113	%	70-130	10.22.19 03.06	

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Corral Canyon 13H

Sample Id:	**PH06A**	Matrix:	Soil	Date Received:	10.21.19 09.10
Lab Sample Id:	640495-013	Date Collected:	10.18.19 11.50	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.21.19 17.10	Basis:	Wet Weight
Seq Number:	3104961				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.84	9.84	mg/kg	10.21.19 20.17	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.21.19 14.00	Basis:	Wet Weight
Seq Number:	3104972				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	10.21.19 16.31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	10.21.19 16.31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	10.21.19 16.31	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	10.21.19 16.31	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	10.21.19 16.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	81	%	70-135	10.21.19 16.31	
o-Terphenyl	84-15-1	80	%	70-135	10.21.19 16.31	

Certificate of Analytical Results 640495

LT Environmental, Inc., Arvada, CO

Corral Canyon 13H

Sample Id:	**PH06A**	Matrix:	Soil	Date Received:	10.21.19 09.10
Lab Sample Id:	640495-013	Date Collected:	10.18.19 11.50	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.21.19 14.10	Basis:	Wet Weight
Seq Number:	3104977				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00101	0.00101	mg/kg	10.22.19 03.26	U	1
Toluene	108-88-3	<0.00101	0.00101	mg/kg	10.22.19 03.26	U	1
Ethylbenzene	100-41-4	<0.00101	0.00101	mg/kg	10.22.19 03.26	U	1
m,p-Xylenes	179601-23-1	<0.00201	0.00201	mg/kg	10.22.19 03.26	U	1
o-Xylene	95-47-6	<0.00101	0.00101	mg/kg	10.22.19 03.26	U	1
Total Xylenes	1330-20-7	<0.00101	0.00101	mg/kg	10.22.19 03.26	U	1
Total BTEX		<0.00101	0.00101	mg/kg	10.22.19 03.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	109	%	70-130	10.22.19 03.26	
1,4-Difluorobenzene	540-36-3	102	%	70-130	10.22.19 03.26	

Certificate of Analytical Results 640495

LT Environmental, Inc., Arvada, CO

Corral Canyon 13H

Sample Id:	**PH07**	Matrix:	Soil	Date Received:	10.21.19 09.10
Lab Sample Id:	640495-014	Date Collected:	10.18.19 12.10	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.21.19 17.10	Basis:	Wet Weight
Seq Number:	3104961				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**8.04**	0.501	mg/kg	10.21.19 20.33		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.21.19 14.00	Basis:	Wet Weight
Seq Number:	3104972				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	10.21.19 16.51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	10.21.19 16.51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	10.21.19 16.51	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	10.21.19 16.51	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	10.21.19 16.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-135	10.21.19 16.51	
o-Terphenyl	84-15-1	83	%	70-135	10.21.19 16.51	

Certificate of Analytical Results 640495

LT Environmental, Inc., Arvada, CO

Corral Canyon 13H

Sample Id:	**PH07**	Matrix:	Soil	Date Received:	10.21.19 09.10
Lab Sample Id:	640495-014	Date Collected:	10.18.19 12.10	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.21.19 14.10	Basis:	Wet Weight
Seq Number:	3104977				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00101	0.00101	mg/kg	10.22.19 03.46	U	1
Toluene	108-88-3	<0.00101	0.00101	mg/kg	10.22.19 03.46	U	1
Ethylbenzene	100-41-4	<0.00101	0.00101	mg/kg	10.22.19 03.46	U	1
m,p-Xylenes	179601-23-1	<0.00201	0.00201	mg/kg	10.22.19 03.46	U	1
o-Xylene	95-47-6	<0.00101	0.00101	mg/kg	10.22.19 03.46	U	1
Total Xylenes	1330-20-7	<0.00101	0.00101	mg/kg	10.22.19 03.46	U	1
Total BTEX		<0.00101	0.00101	mg/kg	10.22.19 03.46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	109	%	70-130	10.22.19 03.46	
1,4-Difluorobenzene	540-36-3	101	%	70-130	10.22.19 03.46	

Certificate of Analytical Results 640495

LT Environmental, Inc., Arvada, CO

Corral Canyon 13H

Sample Id:	**PH07A**	Matrix:	Soil	Date Received:	10.21.19 09.10
Lab Sample Id:	640495-015	Date Collected:	10.18.19 12.20	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.21.19 17.10	Basis:	Wet Weight
Seq Number:	3104961				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**10.7**	10.0	mg/kg	10.21.19 20.39		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.21.19 14.00	Basis:	Wet Weight
Seq Number:	3104972				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	10.21.19 16.51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	10.21.19 16.51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	10.21.19 16.51	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	10.21.19 16.51	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	10.21.19 16.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-135	10.21.19 16.51	
o-Terphenyl	84-15-1	78	%	70-135	10.21.19 16.51	

Certificate of Analytical Results 640495

LT Environmental, Inc., Arvada, CO

Corral Canyon 13H

Sample Id:	**PH07A**	Matrix:	Soil	Date Received:	10.21.19 09.10
Lab Sample Id:	640495-015	Date Collected:	10.18.19 12.20	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.21.19 14.10	Basis:	Wet Weight
Seq Number:	3104977				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00101	0.00101	mg/kg	10.22.19 04.07	U	1
Toluene	108-88-3	<0.00101	0.00101	mg/kg	10.22.19 04.07	U	1
Ethylbenzene	100-41-4	<0.00101	0.00101	mg/kg	10.22.19 04.07	U	1
m,p-Xylenes	179601-23-1	<0.00202	0.00202	mg/kg	10.22.19 04.07	U	1
o-Xylene	95-47-6	<0.00101	0.00101	mg/kg	10.22.19 04.07	U	1
Total Xylenes	1330-20-7	<0.00101	0.00101	mg/kg	10.22.19 04.07	U	1
Total BTEX		<0.00101	0.00101	mg/kg	10.22.19 04.07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	104	%	70-130	10.22.19 04.07	
4-Bromofluorobenzene	460-00-4	112	%	70-130	10.22.19 04.07	

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 640495

LT Environmental, Inc.

Corral Canyon 13H

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3104961 Matrix: Solid Date Prep: 10.21.19
MB Sample Id: 7688570-1-BLK LCS Sample Id: 7688570-1-BKS LCSD Sample Id: 7688570-1-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	272	109	274	110	90-110	1	20	mg/kg	10.21.19 18:33	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3104961 Matrix: Soil Date Prep: 10.21.19
Parent Sample Id: 640495-001 MS Sample Id: 640495-001 S MSD Sample Id: 640495-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<9.88	198	212	107	210	106	90-110	1	20	mg/kg	10.21.19 17:47	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3104961 Matrix: Soil Date Prep: 10.21.19
Parent Sample Id: 640495-011 MS Sample Id: 640495-011 S MSD Sample Id: 640495-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	201	216	107	214	106	90-110	1	20	mg/kg	10.21.19 19:58	

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3104862 Matrix: Solid Date Prep: 10.21.19
MB Sample Id: 7688525-1-BLK LCS Sample Id: 7688525-1-BKS LCSD Sample Id: 7688525-1-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	848	85	854	85	70-135	1	35	mg/kg	10.21.19 09:22	
Diesel Range Organics (DRO)	<50.0	1000	888	89	885	89	70-135	0	35	mg/kg	10.21.19 09:22	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	88		97		99		70-135	%	10.21.19 09:22
o-Terphenyl	83		90		90		70-135	%	10.21.19 09:22

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

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

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

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

QC Summary 640495

LT Environmental, Inc.

Corral Canyon 13H

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3104972 — Matrix: Solid — Date Prep: 10.21.19
MB Sample Id: 7688557-1-BLK — LCS Sample Id: 7688557-1-BKS — LCSD Sample Id: 7688557-1-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	937	94	938	94	70-135	0	35	mg/kg	10.21.19 14:12	
Diesel Range Organics (DRO)	<50.0	1000	828	83	862	86	70-135	4	35	mg/kg	10.21.19 14:12	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	89		113		113		70-135	%	10.21.19 14:12
o-Terphenyl	91		107		112		70-135	%	10.21.19 14:12

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3104862 — Matrix: Solid — Date Prep: 10.21.19
MB Sample Id: 7688525-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	10.21.19 09:03	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3104972 — Matrix: Solid — Date Prep: 10.21.19
MB Sample Id: 7688557-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	10.21.19 13:52	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3104862 — Matrix: Soil — Date Prep: 10.21.19
Parent Sample Id: 640490-001 — MS Sample Id: 640490-001 S — MSD Sample Id: 640490-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<13.9	1000	848	85	857	86	70-135	1	35	mg/kg	10.21.19 10:02	
Diesel Range Organics (DRO)	12.5	1000	766	75	788	78	70-135	3	35	mg/kg	10.21.19 10:02	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	103		103		70-135	%	10.21.19 10:02
o-Terphenyl	101		101		70-135	%	10.21.19 10:02

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 640495

LT Environmental, Inc.

Corral Canyon 13H

Analytical Method: TPH by SW8015 Mod | Prep Method: SW8015P
Seq Number: 3104972 | Matrix: Soil | Date Prep: 10.21.19
Parent Sample Id: 640495-003 | MS Sample Id: 640495-003 S | MSD Sample Id: 640495-003 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	886	89	846	85	70-135	5	35	mg/kg	10.21.19 14:32	
Diesel Range Organics (DRO)	<50.2	1000	809	81	765	77	70-135	6	35	mg/kg	10.21.19 14:32	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	101		85		70-135	%	10.21.19 14:32
o-Terphenyl	87		81		70-135	%	10.21.19 14:32

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3104975 | Matrix: Solid | Date Prep: 10.21.19
MB Sample Id: 7688598-1-BLK | LCS Sample Id: 7688598-1-BKS | LCSD Sample Id: 7688598-1-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	0.0984	98	0.0911	91	70-130	8	35	mg/kg	10.21.19 12:54	
Toluene	<0.00100	0.100	0.0956	96	0.0886	89	70-130	8	35	mg/kg	10.21.19 12:54	
Ethylbenzene	<0.00100	0.100	0.0992	99	0.0915	92	71-129	8	35	mg/kg	10.21.19 12:54	
m,p-Xylenes	<0.00200	0.200	0.199	100	0.184	92	70-135	8	35	mg/kg	10.21.19 12:54	
o-Xylene	<0.00100	0.100	0.0988	99	0.0921	92	71-133	7	35	mg/kg	10.21.19 12:54	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		103		101		70-130	%	10.21.19 12:54
4-Bromofluorobenzene	104		106		105		70-130	%	10.21.19 12:54

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3104977 | Matrix: Solid | Date Prep: 10.21.19
MB Sample Id: 7688601-1-BLK | LCS Sample Id: 7688601-1-BKS | LCSD Sample Id: 7688601-1-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	0.0975	98	0.0993	99	70-130	2	35	mg/kg	10.21.19 23:48	
Toluene	<0.00100	0.100	0.0935	94	0.0949	95	70-130	1	35	mg/kg	10.21.19 23:48	
Ethylbenzene	<0.00100	0.100	0.0955	96	0.0960	96	71-129	1	35	mg/kg	10.21.19 23:48	
m,p-Xylenes	<0.00200	0.200	0.190	95	0.191	96	70-135	1	35	mg/kg	10.21.19 23:48	
o-Xylene	<0.00100	0.100	0.0959	96	0.0981	98	71-133	2	35	mg/kg	10.21.19 23:48	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		104		105		70-130	%	10.21.19 23:48
4-Bromofluorobenzene	106		106		110		70-130	%	10.21.19 23:48

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

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

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

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

Final 1.000

QC Summary 640495

LT Environmental, Inc.

Corral Canyon 13H

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3104975 | Matrix: Soil | Date Prep: 10.21.19
Parent Sample Id: 640494-001 | MS Sample Id: 640494-001 S | MSD Sample Id: 640494-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00101	0.101	0.106	105	0.0955	95	70-130	10	35	mg/kg	10.21.19 13:35	
Toluene	<0.00101	0.101	0.103	102	0.0924	91	70-130	11	35	mg/kg	10.21.19 13:35	
Ethylbenzene	<0.00101	0.101	0.106	105	0.0951	94	71-129	11	35	mg/kg	10.21.19 13:35	
m,p-Xylenes	<0.00201	0.201	0.213	106	0.191	95	70-135	11	35	mg/kg	10.21.19 13:35	
o-Xylene	<0.00101	0.101	0.106	105	0.0951	94	71-133	11	35	mg/kg	10.21.19 13:35	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	106		103		70-130	%	10.21.19 13:35
4-Bromofluorobenzene	112		112		70-130	%	10.21.19 13:35

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3104977 | Matrix: Soil | Date Prep: 10.21.19
Parent Sample Id: 640495-008 | MS Sample Id: 640495-008 S | MSD Sample Id: 640495-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00100	0.100	0.0799	80	0.0751	75	70-130	6	35	mg/kg	10.22.19 00:29	
Toluene	<0.00100	0.100	0.0754	75	0.0705	71	70-130	7	35	mg/kg	10.22.19 00:29	
Ethylbenzene	<0.00100	0.100	0.0783	78	0.0744	74	71-129	5	35	mg/kg	10.22.19 00:29	
m,p-Xylenes	<0.00200	0.200	0.155	78	0.147	74	70-135	5	35	mg/kg	10.22.19 00:29	
o-Xylene	<0.00100	0.100	0.0786	79	0.0742	74	71-133	6	35	mg/kg	10.22.19 00:29	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		102		70-130	%	10.22.19 00:29
4-Bromofluorobenzene	110		106		70-130	%	10.22.19 00:29

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference 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

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 Crasibad, 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

Work Order No: 640495

www.xenco.com 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 Street	Address:	3104 E. Greene Street
City, State ZIP:	Midland TX 79705	City, State ZIP:	Carlsbad NM 88220
Phone:	720 384 7365	Email:	acole@ltenv.com at 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 13H	Turn Around	
Project Number:	012918117	Routine ☐	
Project Location	Rural Eddy County	Rush: 3 day	
Sampler's Name:	Anna Byers	Due Date:	
PO #:	2RP-4534	Quote #:	

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Temperature (°C):	2.4	Thermometer ID	
Received Intact:	Yes No	T-NM-007	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Total Containers:	15

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)
	PH01	S	10/18/19	0920	0.5'	1			
	PH01A	S		0940	4'	1			
	PH02	S		1005	0.5'	1			
	PH02A	S		1015	4	1			
	PH03	S		1030	0.5'	1			
	PH03A	S		1040	4'	1			
	PH04	S		1055	0.5'	1			
	PH04A	S		1057	1'	1			
	PH04B	S		1105	4'	1			
	PH05	S		1115	0.5'	1			

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

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
Anna Byers	Cortez J	10/21/19 09:10	2		
			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
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Work Order No: 640495

www.xenco.com Page 2 of 2

Project Manager:	Aimee Cole	Bill to: (if different)	Kyle Littrell
Company Name:	LT Environmental	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 E. Greene Street
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 13H	Turn Around	
Project Number:	012918117	Routine ☐	
Project Location	Rural Eddy County	Rush: 3 day	
Sampler's Name:	Anna Byers	Due Date:	
PO #:	2RP-4534	Quote #:	

SAMPLE RECEIPT

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

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)
	PH05A	S	10/18/19	1125	4'	1		X	X	X
	PH06	S		1137	0.5'	1		X	X	X
	PH06A	S		1150	4'	1		X	X	X
	PH07	S		1210	0.5'	1		X	X	X
	PH07A	S	↓	1220	4'	1		X	X	X

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

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

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	Relinquished by: (Signature)	Received by: (Signature)	Date/Time		Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	Anna Byers	Corbin J	10/21/19 09:10	2			
3				4			
5				6			

Revised Date 022619 Rev. 2019.1

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

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

CONDITIONS

Action 8363

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 8363
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	None	9/14/2022