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

October 4, 2019

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

RE: Closure Request
Hat Mesa Federal 31 #2
Remediation Permit Number 1RP-2387
Lea 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 Hat Mesa Federal 31 #2 (Site) in Unit A, Section 31, Township 20 South, Range 33 East, in Lea 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 historical release of crude oil and produced water at the Site.

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

RELEASE BACKGROUND

On December 20, 2009, the well head stuffing box rubbers failed due to high flow line pressure, which resulted in the release of 10 barrels (bbls) of crude oil and produced water. Approximately 8,500 square feet of the caliche well pad was affected by the release and approximately 20,000 square feet of pasture was affected by affected by a light mist. The well was turned off upon discovery of the release. Vacuum trucks were dispatched to the Site to recover free-standing fluids; approximately 5 bbls of fluid were recovered. The affected vegetation in the pasture was mowed with a brush hog. The former operator reported the release to the NMOCD on a Release Notification and Corrective Action Form C-141 on December 28, 2009, and was assigned

Remediation Permit (RP) Number 1RP-2387 (Attachment 1). Although the release occurred while the facility was operated by the previous operator, XTO is the current operator and is committed to addressing any releases that remain unresolved.

SITE CHARACTERIZATION

LTE characterized the Site according to Table 1, *Closure Criteria for Soils Impacted by a Release*, of 19.15.29.12 of the NMAC. Depth to groundwater at the Site is estimated to be less than 50 feet below ground surface (bgs) based on the nearest water well data. The nearest permitted water well with depth to water data is USGS Well 323202103425201 20S.32E.36.22311, located approximately 5,697 feet west of the Site. The water well has a depth to groundwater of 45.82 feet bgs and a total depth of 65 feet bgs. Ground surface elevation at the water well location is approximately 3,587 feet above mean sea level (AMSL), which is approximately 24 feet lower in elevation than the Site. The closest continuously flowing water or significant watercourse to the Site is Laguna Gatuna, located approximately 11,400 feet north of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is located in a medium potential karst area.

CLOSURE CRITERIA

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

- Benzene: 10 milligrams per kilogram (mg/kg);
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg;
- Total petroleum hydrocarbons (TPH): 100 mg/kg; and
- Chloride: 600 mg/kg.

SITE ASSESSMENT AND SOIL SAMPLING ACTIVITIES

During June 2019, LTE personnel inspected the Site to evaluate the release extent. Due to the absence of visible indications of the historical release area, potholes were advanced via backhoe at ten locations around the well pad and pasture area north of the well pad to assess for potential soil impacts. Potholes PH01 through PH10 were advanced to a depth of 4 feet bgs. During potholing activities, a historical liner was discovered on the southern edge of pothole PH09. The liner was encountered but not damaged. Additional potholes were advanced east and west of the liner, the integrity of the liner was not compromised. Based on historical aerial photographs, the disturbed area where the liner was installed pre-dates the subject release and the area was not included in the assessment activities. Two delineation soil samples were collected from each

pothole PH01 through PH10 from depths of 2 feet and 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 pothole delineation soil sample locations and approximate historical liner location 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.

Based on visual observations, field screening, and laboratory analytical results for the delineation soil samples, excavation of soil was not warranted. Photographic documentation was conducted during the Site visit. Photographs are included in Attachment 3.

ANALYTICAL RESULTS

Laboratory analytical results indicated that BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria in all delineation soil samples collected from potholes PH01 through PH10. 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 ten locations around the well pad and pasture area north of the well pad to assess for potential soil impacts as a result of the December 20, 2009 oil and produced water release. Laboratory analytical results for the delineation soil samples collected from potholes PH01 through PH10 indicated that BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria and no further remediation was required. Based on visual observations, field screening, and laboratory analytical results, no impacted soil was identified as a result of the historical release.

Initial response efforts and natural attenuation have mitigated impacts at the Site. XTO requests no further action for RP Number 1RP-2387. 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.

Bryan Paraspolo
Project Environmental Scientist

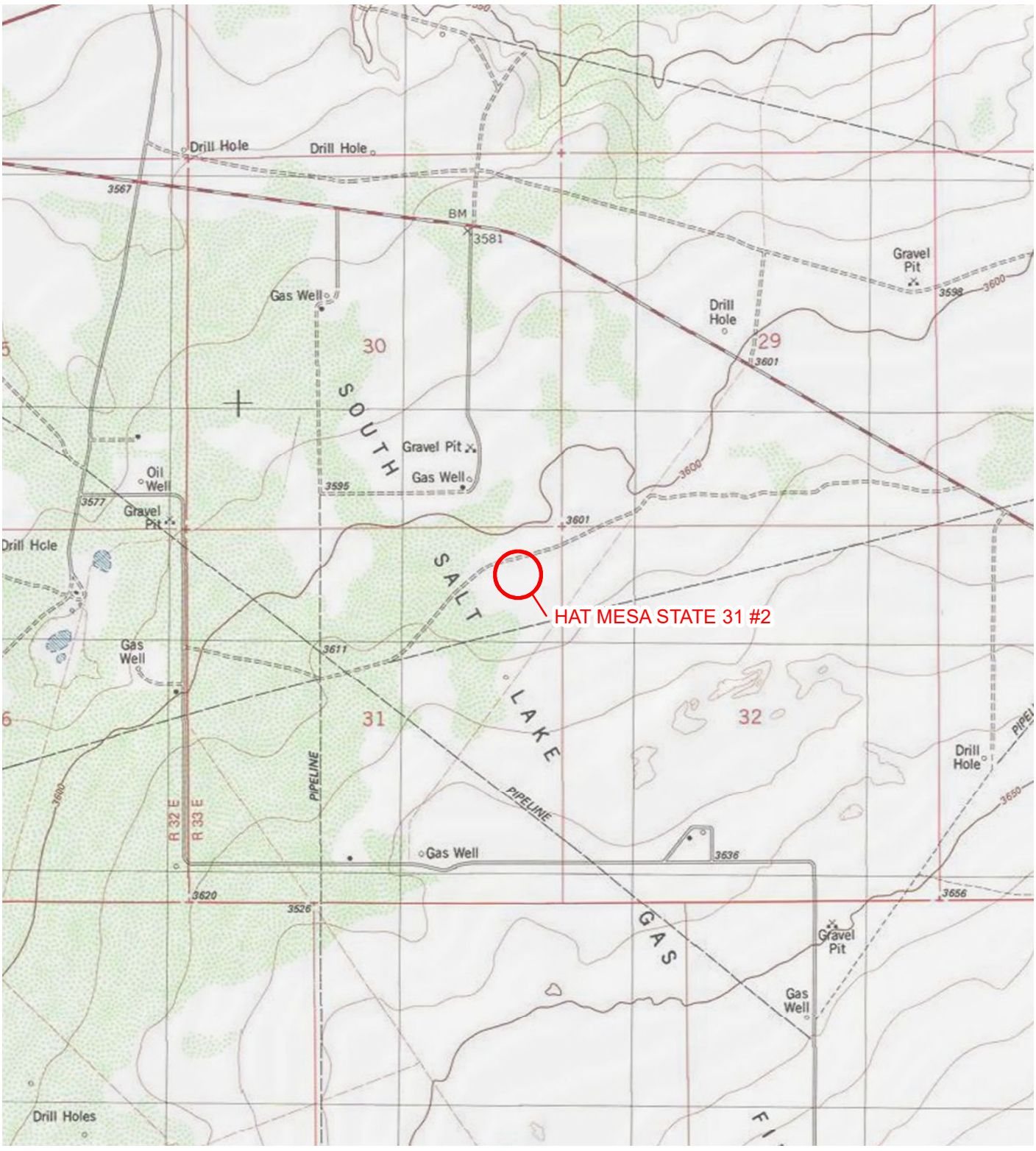
Ashley L. Ager, P.G.
Senior Geologist

cc: Kyle Littrell, XTO
Bureau of Land Management
NMOCD District 1

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 (1RP-2387)
Attachment 2	Lithologic/Soil Sample Logs
Attachment 3	Photographic Log
Attachment 4	Laboratory Analytical Report

FIGURES



LEGEND

SITE LOCATION

IMAGE COURTESY OF ESRI/USGS

0 2,000 4,000

Feet

N

NOTE: REMEDIATION PERMIT NUMBERS 1RP-2387

FIGURE 1
SITE LOCATION MAP
HAT MESA STATE 31 #2
UNIT A SEC 31 T20S R33E
LEA COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012919115_HAT MESA FEDERAL 31 #2\012919115_FIG01_SL_2387.mxd

LEGEND

IMAGE COURTESY OF ESRI

RELEASE LOCATION

DELINEATION SOIL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA

LINER OUTLINE

0 50 100

Feet

N

SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)
NOTE: REMEDIATION PERMIT NUMBER 1RP-2387

FIGURE 2
DELINEATION SOIL SAMPLE LOCATIONS
HAT MESA STATE 31 #2
UNIT A SEC 31 T20S R33E
LEA COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012919115_HAT MESA FEDERAL 31 #2\012919115_FIG02_DELINEATION_2387.mxd

TABLE

Released to Imaging: 3/10/2023 9:24:17 AM
Received by OCD: 3/10/2023 9:22:45 AM

TABLE 1
SOIL ANALYTICAL RESULTS

HAT MESA FEDERAL 31 #2
REMEDIATION PERMIT NUMBER 1RP-2387
LEA 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	2	6/11/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	<15.0	508
PH01A	4	6/11/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	28.0
PH02	2	6/11/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	68.6
PH02A	4	6/11/2019	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	<15.0	107
PH03	2	6/11/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	<15.0	56.6
PH03A	4	6/11/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	44.4
PH04	2	6/11/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<14.9	<14.9	<14.9	<14.9	<14.9	460
PH04A	4	6/11/2019	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	<15.0	204
PH05	2	6/11/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	53.7
PH05A	4	6/11/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	99.0
PH06	2	6/11/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	<15.0	285
PH06A	4	6/11/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	<15.0	235
PH07	2	6/11/2019	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<15.0	<15.0	<15.0	<15.0	<15.0	70.2
PH07A	4	6/11/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	61.2
PH08	2	6/11/2019	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<14.9	<14.9	<14.9	<14.9	<14.9	37.0
PH08A	4	6/11/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	83.8
PH09	2	6/11/2019	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	<15.0	12.9
PH09A	4	6/11/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	<4.95
PH10	2	6/11/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	<15.0	<4.99
PH10A	4	6/11/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	<15.0	15.3
NMOCD Table 1 Closure Criteria			**10**	NE	NE	NE	**50**	NE	NE	NE	NE	**100**	**600**

Notes:

bgs - below ground surface
BTEX - benzene, toluene, ethylbenzene, and total xylenes
DRO - diesel range organics
GRO - gasoline range organics
mg/kg - milligrams per kilogram
ORO - 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 (1RP-2387)

District I
1625 N French Dr , Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

RECEIVED
DEC 31 2009
HOBBSOCD

State of New Mexico
Energy Minerals and Natural Resources

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

RECEIVED
DEC 31 2009
HOBBSOCD

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company BOPCO, L.P.	Contact Tony Savoie
Address 522 W. Mermod, Suite 704 Carlsbad, N.M. 88220	Telephone No. 432-556-8730
Facility Name Hat Mesa Federal 31 #2	Facility Type E&P

Surface Owner Federal	Mineral Owner Federal	Lease No.

LOCATION OF RELEASE

API#30-025-34594-00-00

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	31	~~24S~~ 20S	33E					Lea

Latitude N 32.534947 **Longitude W 103.696089**

NATURE OF RELEASE

Type of Release: Crude oil, natural gas, and produced water	Volume of Release: 10 bbl crude oil and produced water	Volume Recovered: 5 bbls total volume
Source of Release: Stuffing Box Failure	Date and Hour of Occurrence 12/20/09, Hour unknown	Date and Hour of Discovery 12/20/09 8:30 a.m.
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? NMOCD on-call operator Robert Harrison	
By Whom? Tony Savoie	Date and Hour 12/20/09 9:41 a.m.	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

WATER @ 70'

Describe Cause of Problem and Remedial Action Taken.* The well head stuffing box rubbers failed due to high flowline pressure. The well was turned off by the individual who discovered the event.

Describe Area Affected and Cleanup Action Taken.*An area measuring approximately 8500 sq.ft on the caliche well pad was affected by the release, the oil had puddled up in 3 locations, all of the free oil was vacuumed up. An area measuring approximately 20,000 sq.ft. of pasture land was affected with a light mist of crude oil, very little of the mist affected the soil. The vegetation in the pasture was mowed with a brush hog.
The area will be remediated in accordance the the NMOCD and BLM guidelines.

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

Signature: Tony Savoie	OIL CONSERVATION DIVISION
Printed Name: Tony Savoie	ENV ENGINEER: Approved by ~~District Supervisor~~: Geoffrey Leking
Title: Waste Mgmt.& Remediation Specialist	Approval Date: 01/08/10 Expiration Date: 03/08/10
E-mail Address: TASavoie@BassPet.com	Conditions of Approval: DELINEATE TO CLEAN +1. SUBMIT FINAL C-141 BY Attached ☐ IRP-10-1-2387
Date: 12/28/09 Phone:432-556-8730	

* Attach Additional Sheets If Necessary

fGRL1000848958

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	1RP-2387
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 #: 1RP-2387
Contact mailing address: 522 W. Mermod, Suite 704 Carlsbad, NM 88220	

Location of Release Source

Latitude N 32.534947 Longitude W -103.696089
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Hat Mesa Federal 31 #2	Site Type: Production Well Facility
Date Release Discovered: 12/20/2009	API# *(if applicable):* 30-025-34594

Unit Letter	Section	Township	Range	County
A	31	20S	33E	Lea

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

Nature and Volume of Release

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

☒ Crude Oil	Volume Released (bbls): 5	Volume Recovered (bbls): 2.5
☒ Produced Water	Volume Released (bbls): 5	Volume Recovered (bbls): 2.5
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release
The well head stuffing box rubbers failed due to high flowline pressure. An area measuring approximately 8500 sq.ft on the caliche well pad was affected by the release, the oil puddled up in 3 locations, all of the free oil was vacuumed up. An area measuring approximately 20,000 sq.ft. of pasture land was affected with a light mist of crude oil, very little of the mist affected the soil. The vegetation in the pasture was mowed with a brush hog.

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	1RP-2387
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)? Reported by Tony Savoie to NMOCD 12/20/2009 at 9:41 am.	

Initial Response

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

☒ The source of the release has been stopped.

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

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

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

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

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

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

Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature: Date: 10/4/2019

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

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	1RP-2387
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?	<50 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☒ Yes ☐ No

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	1RP-2387
Facility ID	
Application ID	

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

Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature: Date: 10/4/2019

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

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	1RP-2387
Facility ID	
Application ID	

Closure

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

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

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

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

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

☒ Description of remediation activities

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

Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature: Date: 10/4/2019

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

OCD Only

Received by: Date:

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

Closure Approved by: Brittany Hall Date: 3/10/2023

Printed Name: Brittany Hall 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: 06/11/2019
Project Name: Hat Mesa 31 #2	RP Number: 1RP-2387
Logged By: L. Lambuth	Method: backhoe
Lat/Long:	Field Screening: PID, chlorides
Hole Diameter: 2'	Total Depth: 4'

LITHOLOGIC / SOIL SAMPLING LOG

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
M	<2	36.7	/	PH01	0			
					1'		SP	topsoil/alluvium
M	3.4	22.3	/		2'		caliche +SP	caliche alluvium mix
					3			
M	2.3	30.8	/	PH01A	4'		caliche	Caliche
					5			deepest depth
					6			
					7			
					8			
					9			
					10			
					11			
					12			

LT Environmental, Inc.
508 West Stevens Street
Carlsbad, New Mexico 88220
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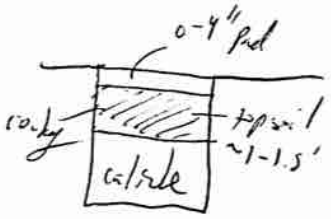
Identifier: PH02	Date: 06/11/2017
Project Name: Hat Mesa 31 #2	RP Number: IRP-2387
Logged By: L. Lumbreras	Method: backhoe
Lat/Long:	Field Screening: PID chlorides
Hole Diameter: 2'	Total Depth: 4'

LITHOLOGIC / SOIL SAMPLING LOG

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0			caliche pad
M	<192	23.8		PH02	1'		SP	topsoil
M	<192	24.7		↓	2'			caliche/topsoil mix
					3			
dry	<192	3.3		PH02@4'	4'			caliche
					5			deepest depth
					6			
					7			
					8			
					9			
					10			
					11			
					12			



LT Environmental, Inc.
508 West Stevens Street
Carlsbad, New Mexico 88220
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Identifier: PH-3	Date: 06/11/2019
Project Name: Hat Mesa 31 #2	RP Number: 1RP 2387
Logged By: L. Lambach	Method: Backhoe
Hole Diameter: 2'	Total Depth: 4'

LITHOLOGIC / SOIL SAMPLING LOG

Lat/Long:

Field Screening: PID chlorides

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0			
M	1.8				1'		SP	sandy loam w/ fine rocks
M	15.4			PH-3	2'			caliche / ↑
	2.0				3			
Dry	3.9			PH-3A	4'			caliche
	1.6				5			deepest depth
					6			
					7			
					8			
					9			
					10			
					11			
					12			

LT Environmental, Inc.
508 West Stevens Street
Carlsbad, New Mexico 88220
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Identifier: PH-4	Date: 06/11/2019
Project Name: Hat Mesa 31 #2	RP Number: 1RP-2387
Logged By: L. Lambrith	Method: backhoe
Lat/Long:	Field Screening: PID chlorides
Hole Diameter: 2'	Total Depth: 4'

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0			0-4" caliche layer
		16.8			1		SP	topsoil
	3.0	10.2		PH-4	2			caliche / topsoil mix
					3			
	2.0	17.0		PH-4A	4			caliche
					5			deepest depth
					6			
					7			
					8			
					9			
					10			
					11			
					12			

LT Environmental, Inc.
508 West Stevens Street
Carlsbad, New Mexico 88220
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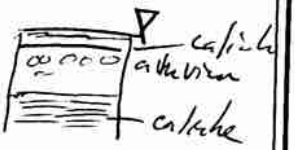
Identifier: PH-5	Date: 06/11/2019
Project Name: Hat Mesa 31#2	RP Number: 1RP-2387
Logged By: L. Lambert	Method: backhoe
Lat/Long:	Field Screening: PID chlorides
Hole Diameter: PID, chlorides	Total Depth: 4'

LITHOLOGIC / SOIL SAMPLING LOG

Comments: delineation

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0			caliche ~0-4" pack
	(1.4) <192				1		SP	alluvium
	(3.2) ~510	18.0		PH-5	2			↓ caliche/alluvium mix
					3			
	(1.8) <192	10.2		PH-5@4	4			caliche
					5			deepest depth
					6			
					7			
					8			
					9			
					10			
					11			
					12			



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

Identifier: PH6	Date: 06/11/2019
Project Name: Hat Mesa 31 #2	RP Number: IRP 2387
Logged By: L. Laumbach	Method: backhoe
Hole Diameter: 2'	Total Depth: 4'
Field Screening: PID, chlorides	

LITHOLOGIC / SOIL SAMPLING LOG

Lat/Long:

Comments: deliveration

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0			0-4" caliche pad
dry	<192	13.4			1		SP	alluvium/topsoil
dry	(2.0) <192	16.2		PH6	2			caliche mix
					3			
dry	(1.6) <192	11.6		PH6A	4			caliche
					5			deepest depth
					6			
					7			
					8			
					9			
					10			
					11			
					12			

Nodor dry

LT Environmental, Inc.
508 West Stevens Street
Carlsbad, New Mexico 88220
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Identifier:	Date:
PH07	06/11/2019
Project Name:	**RP Number:**
Hat Mesa 31#2	IRP-2387
Logged By: L. Lambuth	**Method:** backhoe
Lat/Long:	**Field Screening:** PID, chlorides
Hole Diameter: 2'	**Total Depth:** 4'

LITHOLOGIC / SOIL SAMPLING LOG

Comments: delineation

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
dry	<192	13.4			0			
dry	<192	3.2		PH07	1		SP	dry, sandy loam, fine w/rocks, no odor
					2			caliche mix, caliche flaked off - "peel apart"
dry	~~4.4~~ (1.8) <192	4.4		PH07A	3			
					4			caliche, dry, no odor
					5			deepest depth
					6			
					7			
					8			
					9			
					10			
					11			
					12			

LT Environmental, Inc.
508 West Stevens Street
Carlsbad, New Mexico 88220

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LITHOLOGIC / SOIL SAMPLING LOG

Identifier: PH08	Date: 06/11/2019
Project Name: Hat Mesa 31 #2	RP Number: 1RP2387
Logged By: L. Lambeck	Method: backhoe
Hole Diameter: 2'	Total Depth: 4'

Lat/Long:

Field Screening: PID, chlorides

Comments: delineation

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0			damp from recent rains
damp	<192	11.6			1		SP	topsoil, damp, No odor
damp	<192	8.1		PH08	2			topsoil/caliche
					3			
dry	<192	0.8		PH08A	4			caliche, dry/No odor, No stain deepest depth
					5			
					6			
					7			
					8			
					9			
					10			
					11			
					12			

? void

LT Environmental, Inc.
508 West Stevens Street
Carlsbad, New Mexico 88220
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Identifier: ~~PH-9~~	Date: 06/11/2019
Project Name: Hat Mesa 31 #2	RP Number: 1RP-2387
Logged By: L. Lumbreck	Method: backhoe
Hole Diameter: 2'	Total Depth: 4'
Field Screening: PID, chlorides	
Comments: delineation	

LITHOLOGIC / SOIL SAMPLING LOG

Lat/Long:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0		SP	sand/loam
	1.2(h)	18.8			1			sand/clay – 90/10, odor, brown/N stain
	1.6(h)	4.6			2			clay, oil residue/black sludge like
					3			odor stain black/brown
	5.4(h)	20.3			4			
					5			digging down to 6' grazed southern edge of liner – Possibly old tailing pit. After samples were cooled in ice, TPH odor prevelant. Will not dig further to not risk damaging integrity of liner
					6			
					7			
					8			
					9			
					10			
					11			did not jar for analysis
					12			

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Identifier: PH-9 (new)	Date: 06/11/2019
Project Name: Hat Mesa 31#2	RP Number: 1RP 2387
Logged By: L. Lambert	Method: ~~bailer~~ hand auger
Hole Diameter: 2.5"	Total Depth: ~~4~~ 1.5'
Lat/Long:	Field Screening:

LITHOLOGIC / SOIL SAMPLING LOG

Comments: liner delineation

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
dry	<192	10.2		PH-9	0		SP	sand/loam
dry	<192	0.8		PH-9f	1			
					1.5'			
					2			deepest depth
					3			outside of one call -
					4			outside of plant death scar
					5			
					6			
					7			
					8			
					9			
					10			
					11			
					12			

LT Environmental, Inc.

LT Environmental, Inc.
508 West Stevens Street
Carlsbad, New Mexico 88220

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Identifier: PH10	Date: 06/11/2019
Project Name: Hat Mesa 31 #2	RP Number: 1RP 2387
Logged By: L. Lambert	Method: Hand Auger
Hole Diameter: 2.5"	Total Depth: 2'
Lat/Long:	Field Screening: PID, chlorides

LITHOLOGIC / SOIL SAMPLING LOG

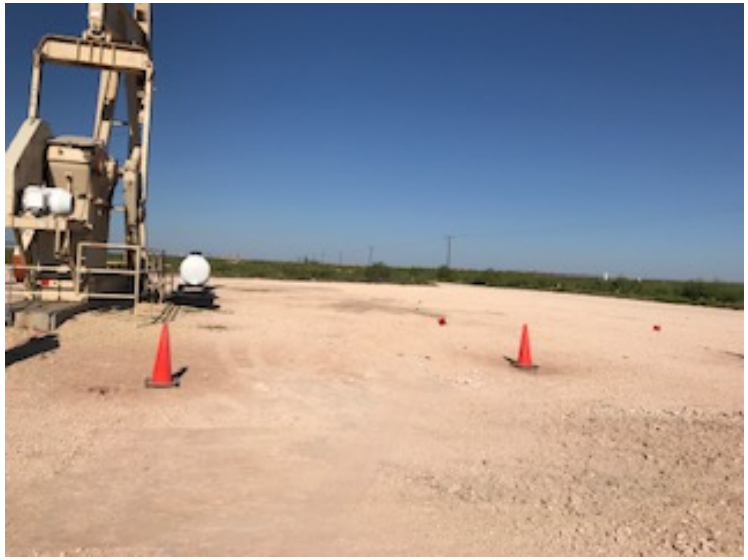
Comments: liner delineation

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
dry	<42	1.8		PH10	0–1		SP	Sdy loam, reddish brown
dry	<42	3.4		PH10A	1–2			
					2–3			deepest depth
					3–4			
					4–5			
					5–6			
					6–7			
					7–8			
					8–9			
					9–10			
					10–11			
					11–12			

ATTACHMENT 3: PHOTOGRAPHIC LOG

PHOTOGRAPHIC LOG

Photograph 1: View of the northwest edge of the well pad facing east.



Photograph 2: View of the southern edge of the well pad facing east.

Photograph 3: View of the liner on the north side of the Site facing south.

Photograph 4: View of the northeastern edge of the well pad facing north.

Hat Mesa Federal 31 #2 (1RP-2387)
Lea County, New Mexico
Photographs Taken: June 11, 2019

PHOTOGRAPHIC LOG

Photograph 5: View of the well pad facing south.

Photograph 6: View of well pad facing south.

Photograph 7: View of the sidewall of pothole.

Photograph 8: View of the northeastern portion of the pad with vegetation.

ATTACHMENT 4: LABORATORY ANALYTICAL REPORT

Analytical Report 627513

for

LT Environmental, Inc.

Project Manager: Dan Moir

Hat Mesa 31 #2

012919115

25-JUN-19

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

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

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-20)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429), North Carolina (483)

25-JUN-19

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

Reference: XENCO Report No(s): **627513**
Hat Mesa 31 #2
Project Address: Delaware Basin

Dan Moir:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 627513. 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. 627513 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 627513

LT Environmental, Inc., Arvada, CO

Hat Mesa 31 #2

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH01	S	06-11-19 10:00	2 ft	627513-001
PH01A	S	06-11-19 10:10	4 ft	627513-002
PH02	S	06-11-19 10:30	2 ft	627513-003
PH02A	S	06-11-19 10:40	4 ft	627513-004
PH03	S	06-11-19 11:00	2 ft	627513-005
PH03A	S	06-11-19 11:15	4 ft	627513-006
PH04	S	06-11-19 11:30	2 ft	627513-007
PH04A	S	06-11-19 11:45	4 ft	627513-008
PH05	S	06-11-19 12:00	2 ft	627513-009
PH05A	S	06-11-19 12:15	4 ft	627513-010
PH06	S	06-11-19 12:45	2 ft	627513-011
PH06A	S	06-11-19 13:00	4 ft	627513-012
PH07	S	06-11-19 13:15	2 ft	627513-013
PH07A	S	06-11-19 13:30	4 ft	627513-014
PH08	S	06-11-19 13:45	2 ft	627513-015
PH08A	S	06-11-19 14:00	4 ft	627513-016
PH09	S	06-11-19 15:25	1 ft	627513-017
PH09A	S	06-11-19 15:35	1.5 ft	627513-018
PH10	S	06-11-19 15:55	1 ft	627513-019
PH10A	S	06-11-19 16:15	2 ft	627513-020

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: Hat Mesa 31 #2

Project ID: *012919115*
Work Order Number(s): *627513*

Report Date: *25-JUN-19*
Date Received: *06/13/2019*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3092436 TPH by SW8015 Mod
Surrogate o-Terphenyl recovered below QC limits. Samples affected are: 7680004-1-BLK.

Batch: LBA-3092871 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analysis Summary 627513

LT Environmental, Inc., Arvada, CO

Project Name: Hat Mesa 31 #2

Project Id: 012919115
Contact: Dan Moir
Project Location: Delaware Basin

Date Received in Lab: Thu Jun-13-19 11:20 am
Report Date: 25-JUN-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	627513-001		627513-002		627513-003		627513-004		627513-005		627513-006	
	Field Id:	PH01		PH01A		PH02		PH02A		PH03		PH03A	
	Depth:	2- ft		4- ft		2- ft		4- ft		2- ft		4- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jun-11-19 10:00		Jun-11-19 10:10		Jun-11-19 10:30		Jun-11-19 10:40		Jun-11-19 11:00		Jun-11-19 11:15	
BTEX by EPA 8021B	***Extracted:***	Jun-18-19 13:00		Jun-18-19 13:00		Jun-18-19 13:00		Jun-18-19 13:00		Jun-18-19 13:00		Jun-18-19 13:00	
	Analyzed:	Jun-18-19 23:06		Jun-18-19 23:28		Jun-18-19 23:50		Jun-19-19 00:12		Jun-19-19 00:34		Jun-19-19 00:56	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200
Toluene		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200
Ethylbenzene		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200
m,p-Xylenes		<0.00398	0.00398	<0.00399	0.00399	<0.00401	0.00401	<0.00402	0.00402	<0.00398	0.00398	<0.00399	0.00399
o-Xylene		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200
Total Xylenes		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200
Total BTEX		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200
Chloride by EPA 300	***Extracted:***	Jun-21-19 11:30		Jun-13-19 16:30		Jun-13-19 16:30		Jun-13-19 16:30		Jun-13-19 16:30		Jun-13-19 16:30	
	Analyzed:	Jun-21-19 15:52		Jun-13-19 18:39		Jun-13-19 18:44		Jun-13-19 18:49		Jun-13-19 18:54		Jun-13-19 18:59	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		508	5.03	28.0	4.99	68.6	5.04	107	4.97	56.6	4.95	44.4	5.00
TPH by SW8015 Mod	***Extracted:***	Jun-15-19 08:00		Jun-15-19 08:00		Jun-15-19 08:00		Jun-15-19 08:00		Jun-15-19 08:00		Jun-15-19 08:00	
	Analyzed:	Jun-15-19 16:15		Jun-15-19 17:28		Jun-15-19 17:52		Jun-15-19 18:16		Jun-15-19 18:40		Jun-15-19 19:04	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Motor Oil Range Hydrocarbons (MRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Total TPH		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Total GRO-DRO		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0

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The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories.
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Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 627513

LT Environmental, Inc., Arvada, CO

Project Name: Hat Mesa 31 #2

Project Id: 012919115
Contact: Dan Moir
Project Location: Delaware Basin

Date Received in Lab: Thu Jun-13-19 11:20 am
Report Date: 25-JUN-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	627513-007		627513-008		627513-009		627513-010		627513-011		627513-012	
	Field Id:	PH04		PH04A		PH05		PH05A		PH06		PH06A	
	Depth:	2- ft		4- ft		2- ft		4- ft		2- ft		4- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jun-11-19 11:30		Jun-11-19 11:45		Jun-11-19 12:00		Jun-11-19 12:15		Jun-11-19 12:45		Jun-11-19 13:00	
BTEX by EPA 8021B	*Extracted:*	Jun-18-19 13:00		Jun-18-19 13:00		Jun-18-19 13:00		Jun-18-19 13:00		Jun-18-19 13:00		Jun-18-19 13:00	
	Analyzed:	Jun-19-19 01:18		Jun-19-19 01:40		Jun-19-19 02:02		Jun-19-19 13:45		Jun-19-19 03:33		Jun-19-19 03:55	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199
Toluene		<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199
Ethylbenzene		<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199
m,p-Xylenes		<0.00401	0.00401	<0.00402	0.00402	<0.00401	0.00401	<0.00399	0.00399	<0.00398	0.00398	<0.00398	0.00398
o-Xylene		<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199
Total Xylenes		<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199
Total BTEX		<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199
Chloride by EPA 300	*Extracted:*	Jun-13-19 16:30		Jun-13-19 16:30		Jun-13-19 16:30		Jun-13-19 16:30		Jun-13-19 16:30		Jun-13-19 16:30	
	Analyzed:	Jun-13-19 19:13		Jun-13-19 19:18		Jun-13-19 19:33		Jun-13-19 19:37		Jun-13-19 19:42		Jun-13-19 19:47	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		460	4.96	204	4.99	53.7	4.95	99.0	4.98	285	5.03	235	5.05
TPH by SW8015 Mod	*Extracted:*	Jun-15-19 08:00		Jun-15-19 08:00		Jun-15-19 08:00		Jun-15-19 08:00		Jun-15-19 08:00		Jun-15-19 08:00	
	Analyzed:	Jun-15-19 19:29		Jun-15-19 19:53		Jun-15-19 20:17		Jun-15-19 20:42		Jun-15-19 21:31		Jun-15-19 21:55	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Motor Oil Range Hydrocarbons (MRO)		<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Total TPH		<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Total GRO-DRO		<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0

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Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 627513

LT Environmental, Inc., Arvada, CO

Project Name: Hat Mesa 31 #2

Project Id: 012919115
Contact: Dan Moir
Project Location: Delaware Basin

Date Received in Lab: Thu Jun-13-19 11:20 am
Report Date: 25-JUN-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	627513-013		627513-014		627513-015		627513-016		627513-017		627513-018	
	Field Id:	PH07		PH07A		PH08		PH08A		PH09		PH09A	
	Depth:	2- ft		4- ft		2- ft		4- ft		1- ft		1.5- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jun-11-19 13:15		Jun-11-19 13:30		Jun-11-19 13:45		Jun-11-19 14:00		Jun-11-19 15:25		Jun-11-19 15:35	
BTEX by EPA 8021B	***Extracted:***	Jun-18-19 13:00		Jun-18-19 13:00		Jun-18-19 13:00		Jun-18-19 13:00		Jun-18-19 13:00		Jun-18-19 13:00	
	Analyzed:	Jun-19-19 04:17		Jun-19-19 14:07		Jun-19-19 05:01		Jun-19-19 05:23		Jun-19-19 14:30		Jun-19-19 06:07	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00198	0.00198	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200
Toluene		<0.00198	0.00198	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200
Ethylbenzene		<0.00198	0.00198	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200
m,p-Xylenes		<0.00397	0.00397	<0.00400	0.00400	<0.00402	0.00402	<0.00401	0.00401	<0.00402	0.00402	<0.00400	0.00400
o-Xylene		<0.00198	0.00198	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200
Total Xylenes		<0.00198	0.00198	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200
Total BTEX		<0.00198	0.00198	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200
Chloride by EPA 300	***Extracted:***	Jun-13-19 16:30		Jun-13-19 16:30		Jun-13-19 16:30		Jun-13-19 16:45		Jun-13-19 16:45		Jun-13-19 16:45	
	Analyzed:	Jun-13-19 19:52		Jun-13-19 19:57		Jun-13-19 20:02		Jun-13-19 20:31		Jun-13-19 20:45		Jun-13-19 20:50	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		70.2	5.05	61.2	5.00	37.0	5.00	83.8	5.02	12.9	4.98	<4.95	4.95
TPH by SW8015 Mod	***Extracted:***	Jun-15-19 08:00		Jun-15-19 08:00		Jun-15-19 08:00		Jun-15-19 08:00		Jun-15-19 08:00		Jun-15-19 08:00	
	Analyzed:	Jun-15-19 22:19		Jun-15-19 22:43		Jun-15-19 23:07		Jun-15-19 23:31		Jun-15-19 23:55		Jun-16-19 00:18	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0
Motor Oil Range Hydrocarbons (MRO)		<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0
Total TPH		<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0
Total GRO-DRO		<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0

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Jessica Kramer
Project Assistant

Certificate of Analysis Summary 627513

LT Environmental, Inc., Arvada, CO

Project Name: Hat Mesa 31 #2

Project Id: 012919115
Contact: Dan Moir
Project Location: Delaware Basin

Date Received in Lab: Thu Jun-13-19 11:20 am
Report Date: 25-JUN-19
Project Manager: Jessica Kramer

Analysis Requested									
	Lab Id:	627513-019		627513-020					
	Field Id:	PH10		PH10A					
	Depth:	1- ft		2- ft					
	Matrix:	SOIL		SOIL					
	Sampled:	Jun-11-19 15:55		Jun-11-19 16:15					
BTEX by EPA 8021B	***Extracted:***	Jun-18-19 13:00		Jun-18-19 13:00					
	Analyzed:	Jun-19-19 06:29		Jun-19-19 06:51					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Benzene		<0.00199	0.00199	<0.00199	0.00199				
Toluene		<0.00199	0.00199	<0.00199	0.00199				
Ethylbenzene		<0.00199	0.00199	<0.00199	0.00199				
m,p-Xylenes		<0.00398	0.00398	<0.00398	0.00398				
o-Xylene		<0.00199	0.00199	<0.00199	0.00199				
Total Xylenes		<0.00199	0.00199	<0.00199	0.00199				
Total BTEX		<0.00199	0.00199	<0.00199	0.00199				
Chloride by EPA 300	***Extracted:***	Jun-13-19 16:45		Jun-13-19 16:45					
	Analyzed:	Jun-13-19 20:55		Jun-13-19 21:00					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Chloride		<4.99	4.99	15.3	5.04				
TPH by SW8015 Mod	***Extracted:***	Jun-15-19 08:00		Jun-15-19 08:00					
	Analyzed:	Jun-16-19 00:42		Jun-16-19 01:06					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0				
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0				
Motor Oil Range Hydrocarbons (MRO)		<15.0	15.0	<15.0	15.0				
Total TPH		<15.0	15.0	<15.0	15.0				
Total GRO-DRO		<15.0	15.0	<15.0	15.0				

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Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analytical Results 627513

LT Environmental, Inc., Arvada, CO

Hat Mesa 31 #2

Sample Id:	**PH01**	Matrix:	Soil	Date Received:	06.13.19 11.20
Lab Sample Id:	627513-001	Date Collected:	06.11.19 10.00	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	06.21.19 11.30	Basis:	Wet Weight
Seq Number:	3093262				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**508**	5.03	mg/kg	06.21.19 15.52		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.15.19 08.00	Basis:	Wet Weight
Seq Number:	3092436				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.15.19 16.15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.15.19 16.15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.15.19 16.15	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.15.19 16.15	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	06.15.19 16.15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	06.15.19 16.15	
o-Terphenyl	84-15-1	101	%	70-135	06.15.19 16.15	

Certificate of Analytical Results 627513

LT Environmental, Inc., Arvada, CO

Hat Mesa 31 #2

Sample Id:	**PH01**	Matrix:	Soil	Date Received:	06.13.19 11.20
Lab Sample Id:	627513-001	Date Collected:	06.11.19 10.00	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	06.18.19 13.00	Basis:	Wet Weight
Seq Number:	3092871				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.18.19 23.06	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.18.19 23.06	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.18.19 23.06	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.18.19 23.06	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.18.19 23.06	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.18.19 23.06	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.18.19 23.06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	108	%	70-130	06.18.19 23.06	
4-Bromofluorobenzene	460-00-4	86	%	70-130	06.18.19 23.06	

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LT Environmental, Inc., Arvada, CO

Hat Mesa 31 #2

Sample Id:	**PH01A**	Matrix:	Soil	Date Received:	06.13.19 11.20
Lab Sample Id:	627513-002	Date Collected:	06.11.19 10.10	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	06.13.19 16.30	Basis:	Wet Weight
Seq Number:	3092273				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**28.0**	4.99	mg/kg	06.13.19 18.39		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.15.19 08.00	Basis:	Wet Weight
Seq Number:	3092436				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.15.19 17.28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.15.19 17.28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.15.19 17.28	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.15.19 17.28	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	06.15.19 17.28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	06.15.19 17.28	
o-Terphenyl	84-15-1	115	%	70-135	06.15.19 17.28	

Certificate of Analytical Results 627513

LT Environmental, Inc., Arvada, CO

Hat Mesa 31 #2

Sample Id:	**PH01A**	Matrix:	Soil	Date Received:	06.13.19 11.20
Lab Sample Id:	627513-002	Date Collected:	06.11.19 10.10	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	06.18.19 13.00	Basis:	Wet Weight
Seq Number:	3092871				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.18.19 23.28	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.18.19 23.28	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.18.19 23.28	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	06.18.19 23.28	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.18.19 23.28	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.18.19 23.28	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.18.19 23.28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	99	%	70-130	06.18.19 23.28	
1,4-Difluorobenzene	540-36-3	115	%	70-130	06.18.19 23.28	

Certificate of Analytical Results 627513

LT Environmental, Inc., Arvada, CO

Hat Mesa 31 #2

Sample Id:	**PH02**	Matrix:	Soil	Date Received:	06.13.19 11.20
Lab Sample Id:	627513-003	Date Collected:	06.11.19 10.30	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	06.13.19 16.30	Basis:	Wet Weight
Seq Number:	3092273				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**68.6**	5.04	mg/kg	06.13.19 18.44		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.15.19 08.00	Basis:	Wet Weight
Seq Number:	3092436				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.15.19 17.52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.15.19 17.52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.15.19 17.52	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.15.19 17.52	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	06.15.19 17.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	06.15.19 17.52	
o-Terphenyl	84-15-1	106	%	70-135	06.15.19 17.52	

Certificate of Analytical Results 627513

LT Environmental, Inc., Arvada, CO

Hat Mesa 31 #2

Sample Id:	**PH02**	Matrix:	Soil	Date Received:	06.13.19 11.20
Lab Sample Id:	627513-003	Date Collected:	06.11.19 10.30	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	06.18.19 13.00	Basis:	Wet Weight
Seq Number:	3092871				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.18.19 23.50	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.18.19 23.50	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.18.19 23.50	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	06.18.19 23.50	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.18.19 23.50	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.18.19 23.50	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.18.19 23.50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	95	%	70-130	06.18.19 23.50	
1,4-Difluorobenzene	540-36-3	109	%	70-130	06.18.19 23.50	

Certificate of Analytical Results 627513

LT Environmental, Inc., Arvada, CO

Hat Mesa 31 #2

Sample Id:	**PH02A**	Matrix:	Soil	Date Received:	06.13.19 11.20
Lab Sample Id:	627513-004	Date Collected:	06.11.19 10.40	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	06.13.19 16.30	Basis:	Wet Weight
Seq Number:	3092273				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**107**	4.97	mg/kg	06.13.19 18.49		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.15.19 08.00	Basis:	Wet Weight
Seq Number:	3092436				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.15.19 18.16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.15.19 18.16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.15.19 18.16	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.15.19 18.16	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	06.15.19 18.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	118	%	70-135	06.15.19 18.16	
o-Terphenyl	84-15-1	124	%	70-135	06.15.19 18.16	

Certificate of Analytical Results 627513

LT Environmental, Inc., Arvada, CO

Hat Mesa 31 #2

Sample Id:	**PH02A**	Matrix:	Soil	Date Received:	06.13.19 11.20
Lab Sample Id:	627513-004	Date Collected:	06.11.19 10.40	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	06.18.19 13.00	Basis:	Wet Weight
Seq Number:	3092871				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.19.19 00.12	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	06.19.19 00.12	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.19.19 00.12	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.19.19 00.12	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.19.19 00.12	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.19.19 00.12	U	1
Total BTEX		<0.00201	0.00201	mg/kg	06.19.19 00.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	99	%	70-130	06.19.19 00.12	
1,4-Difluorobenzene	540-36-3	111	%	70-130	06.19.19 00.12	

Certificate of Analytical Results 627513

LT Environmental, Inc., Arvada, CO

Hat Mesa 31 #2

Sample Id:	**PH03**	Matrix:	Soil	Date Received:	06.13.19 11.20
Lab Sample Id:	627513-005	Date Collected:	06.11.19 11.00	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	06.13.19 16.30	Basis:	Wet Weight
Seq Number:	3092273				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**56.6**	4.95	mg/kg	06.13.19 18.54		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.15.19 08.00	Basis:	Wet Weight
Seq Number:	3092436				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.15.19 18.40	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.15.19 18.40	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.15.19 18.40	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.15.19 18.40	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	06.15.19 18.40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	06.15.19 18.40	
o-Terphenyl	84-15-1	98	%	70-135	06.15.19 18.40	

Certificate of Analytical Results 627513

LT Environmental, Inc., Arvada, CO

Hat Mesa 31 #2

Sample Id:	**PH03**	Matrix:	Soil	Date Received:	06.13.19 11.20
Lab Sample Id:	627513-005	Date Collected:	06.11.19 11.00	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	06.18.19 13.00	Basis:	Wet Weight
Seq Number:	3092871				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.19.19 00.34	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.19.19 00.34	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.19.19 00.34	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.19.19 00.34	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.19.19 00.34	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.19.19 00.34	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.19.19 00.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	102	%	70-130	06.19.19 00.34	
1,4-Difluorobenzene	540-36-3	111	%	70-130	06.19.19 00.34	

Certificate of Analytical Results 627513

LT Environmental, Inc., Arvada, CO

Hat Mesa 31 #2

Sample Id:	**PH03A**	Matrix:	Soil	Date Received:	06.13.19 11.20
Lab Sample Id:	627513-006	Date Collected:	06.11.19 11.15	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	06.13.19 16.30	Basis:	Wet Weight
Seq Number:	3092273				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**44.4**	5.00	mg/kg	06.13.19 18.59		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.15.19 08.00	Basis:	Wet Weight
Seq Number:	3092436				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.15.19 19.04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.15.19 19.04	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.15.19 19.04	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.15.19 19.04	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	06.15.19 19.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	06.15.19 19.04	
o-Terphenyl	84-15-1	103	%	70-135	06.15.19 19.04	

Certificate of Analytical Results 627513

LT Environmental, Inc., Arvada, CO

Hat Mesa 31 #2

Sample Id:	**PH03A**	Matrix:	Soil	Date Received:	06.13.19 11.20
Lab Sample Id:	627513-006	Date Collected:	06.11.19 11.15	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	06.18.19 13.00	Basis:	Wet Weight
Seq Number:	3092871				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.19.19 00.56	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.19.19 00.56	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.19.19 00.56	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	06.19.19 00.56	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.19.19 00.56	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.19.19 00.56	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.19.19 00.56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	70-130	06.19.19 00.56	
1,4-Difluorobenzene	540-36-3	113	%	70-130	06.19.19 00.56	

Certificate of Analytical Results 627513

LT Environmental, Inc., Arvada, CO

Hat Mesa 31 #2

Sample Id:	**PH04**	Matrix:	Soil	Date Received:	06.13.19 11.20
Lab Sample Id:	627513-007	Date Collected:	06.11.19 11.30	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	06.13.19 16.30	Basis:	Wet Weight
Seq Number:	3092273				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**460**	4.96	mg/kg	06.13.19 19.13		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.15.19 08.00	Basis:	Wet Weight
Seq Number:	3092436				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	06.15.19 19.29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	06.15.19 19.29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	14.9	mg/kg	06.15.19 19.29	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	06.15.19 19.29	U	1
Total GRO-DRO	PHC628	<14.9	14.9	mg/kg	06.15.19 19.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	06.15.19 19.29	
o-Terphenyl	84-15-1	99	%	70-135	06.15.19 19.29	

Certificate of Analytical Results 627513

LT Environmental, Inc., Arvada, CO

Hat Mesa 31 #2

Sample Id:	**PH04**	Matrix:	Soil	Date Received:	06.13.19 11.20
Lab Sample Id:	627513-007	Date Collected:	06.11.19 11.30	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	06.18.19 13.00	Basis:	Wet Weight
Seq Number:	3092871				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.19.19 01.18	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.19.19 01.18	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.19.19 01.18	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	06.19.19 01.18	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.19.19 01.18	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.19.19 01.18	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.19.19 01.18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	111	%	70-130	06.19.19 01.18	
4-Bromofluorobenzene	460-00-4	100	%	70-130	06.19.19 01.18	

Certificate of Analytical Results 627513

LT Environmental, Inc., Arvada, CO

Hat Mesa 31 #2

Sample Id:	**PH04A**	Matrix:	Soil	Date Received:	06.13.19 11.20
Lab Sample Id:	627513-008	Date Collected:	06.11.19 11.45	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	06.13.19 16.30	Basis:	Wet Weight
Seq Number:	3092273				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**204**	4.99	mg/kg	06.13.19 19.18		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.15.19 08.00	Basis:	Wet Weight
Seq Number:	3092436				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.15.19 19.53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.15.19 19.53	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.15.19 19.53	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.15.19 19.53	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	06.15.19 19.53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	06.15.19 19.53	
o-Terphenyl	84-15-1	109	%	70-135	06.15.19 19.53	

Certificate of Analytical Results 627513

LT Environmental, Inc., Arvada, CO

Hat Mesa 31 #2

Sample Id:	**PH04A**	Matrix:	Soil	Date Received:	06.13.19 11.20
Lab Sample Id:	627513-008	Date Collected:	06.11.19 11.45	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	06.18.19 13.00	Basis:	Wet Weight
Seq Number:	3092871				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.19.19 01.40	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	06.19.19 01.40	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.19.19 01.40	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.19.19 01.40	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.19.19 01.40	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.19.19 01.40	U	1
Total BTEX		<0.00201	0.00201	mg/kg	06.19.19 01.40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	102	%	70-130	06.19.19 01.40	
1,4-Difluorobenzene	540-36-3	111	%	70-130	06.19.19 01.40	

Certificate of Analytical Results 627513

LT Environmental, Inc., Arvada, CO

Hat Mesa 31 #2

Sample Id:	**PH05**	Matrix:	Soil	Date Received:	06.13.19 11.20
Lab Sample Id:	627513-009	Date Collected:	06.11.19 12.00	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	06.13.19 16.30	Basis:	Wet Weight
Seq Number:	3092273				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**53.7**	4.95	mg/kg	06.13.19 19.33		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.15.19 08.00	Basis:	Wet Weight
Seq Number:	3092436				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.15.19 20.17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.15.19 20.17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.15.19 20.17	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.15.19 20.17	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	06.15.19 20.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	06.15.19 20.17	
o-Terphenyl	84-15-1	115	%	70-135	06.15.19 20.17	

Certificate of Analytical Results 627513

LT Environmental, Inc., Arvada, CO

Hat Mesa 31 #2

Sample Id:	**PH05**	Matrix:	Soil	Date Received:	06.13.19 11.20
Lab Sample Id:	627513-009	Date Collected:	06.11.19 12.00	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	06.18.19 13.00	Basis:	Wet Weight
Seq Number:	3092871				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.19.19 02.02	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.19.19 02.02	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.19.19 02.02	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	06.19.19 02.02	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.19.19 02.02	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.19.19 02.02	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.19.19 02.02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	111	%	70-130	06.19.19 02.02	
4-Bromofluorobenzene	460-00-4	100	%	70-130	06.19.19 02.02	

Certificate of Analytical Results 627513

LT Environmental, Inc., Arvada, CO

Hat Mesa 31 #2

Sample Id:	**PH05A**	Matrix:	Soil	Date Received:	06.13.19 11.20
Lab Sample Id:	627513-010	Date Collected:	06.11.19 12.15	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	06.13.19 16.30	Basis:	Wet Weight
Seq Number:	3092273				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**99.0**	4.98	mg/kg	06.13.19 19.37		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.15.19 08.00	Basis:	Wet Weight
Seq Number:	3092436				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.15.19 20.42	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.15.19 20.42	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.15.19 20.42	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.15.19 20.42	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	06.15.19 20.42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	06.15.19 20.42	
o-Terphenyl	84-15-1	120	%	70-135	06.15.19 20.42	

Certificate of Analytical Results 627513

LT Environmental, Inc., Arvada, CO

Hat Mesa 31 #2

Sample Id:	**PH05A**	Matrix:	Soil	Date Received:	06.13.19 11.20
Lab Sample Id:	627513-010	Date Collected:	06.11.19 12.15	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	06.18.19 13.00	Basis:	Wet Weight
Seq Number:	3092871				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.19.19 13.45	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.19.19 13.45	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.19.19 13.45	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	06.19.19 13.45	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.19.19 13.45	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.19.19 13.45	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.19.19 13.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	93	%	70-130	06.19.19 13.45	
1,4-Difluorobenzene	540-36-3	101	%	70-130	06.19.19 13.45	

Certificate of Analytical Results 627513

LT Environmental, Inc., Arvada, CO

Hat Mesa 31 #2

Sample Id:	**PH06**	Matrix:	Soil	Date Received:	06.13.19 11.20
Lab Sample Id:	627513-011	Date Collected:	06.11.19 12.45	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	06.13.19 16.30	Basis:	Wet Weight
Seq Number:	3092273				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**285**	5.03	mg/kg	06.13.19 19.42		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.15.19 08.00	Basis:	Wet Weight
Seq Number:	3092436				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.15.19 21.31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.15.19 21.31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.15.19 21.31	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.15.19 21.31	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	06.15.19 21.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	06.15.19 21.31	
o-Terphenyl	84-15-1	123	%	70-135	06.15.19 21.31	

Certificate of Analytical Results 627513

LT Environmental, Inc., Arvada, CO

Hat Mesa 31 #2

Sample Id:	**PH06**	Matrix:	Soil	Date Received:	06.13.19 11.20
Lab Sample Id:	627513-011	Date Collected:	06.11.19 12.45	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	06.18.19 13.00	Basis:	Wet Weight
Seq Number:	3092871				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.19.19 03.33	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.19.19 03.33	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.19.19 03.33	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.19.19 03.33	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.19.19 03.33	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.19.19 03.33	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.19.19 03.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	93	%	70-130	06.19.19 03.33	
1,4-Difluorobenzene	540-36-3	105	%	70-130	06.19.19 03.33	

Certificate of Analytical Results 627513

LT Environmental, Inc., Arvada, CO

Hat Mesa 31 #2

Sample Id:	**PH06A**	Matrix:	Soil	Date Received:	06.13.19 11.20
Lab Sample Id:	627513-012	Date Collected:	06.11.19 13.00	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	06.13.19 16.30	Basis:	Wet Weight
Seq Number:	3092273				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**235**	5.05	mg/kg	06.13.19 19.47		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.15.19 08.00	Basis:	Wet Weight
Seq Number:	3092436				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.15.19 21.55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.15.19 21.55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.15.19 21.55	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.15.19 21.55	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	06.15.19 21.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	06.15.19 21.55	
o-Terphenyl	84-15-1	91	%	70-135	06.15.19 21.55	

Certificate of Analytical Results 627513

LT Environmental, Inc., Arvada, CO

Hat Mesa 31 #2

Sample Id:	**PH06A**	Matrix:	Soil	Date Received:	06.13.19 11.20
Lab Sample Id:	627513-012	Date Collected:	06.11.19 13.00	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	06.18.19 13.00	Basis:	Wet Weight
Seq Number:	3092871				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.19.19 03.55	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.19.19 03.55	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.19.19 03.55	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.19.19 03.55	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.19.19 03.55	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.19.19 03.55	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.19.19 03.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	06.19.19 03.55	
4-Bromofluorobenzene	460-00-4	91	%	70-130	06.19.19 03.55	

Certificate of Analytical Results 627513

LT Environmental, Inc., Arvada, CO

Hat Mesa 31 #2

Sample Id:	**PH07**	Matrix:	Soil	Date Received:	06.13.19 11.20
Lab Sample Id:	627513-013	Date Collected:	06.11.19 13.15	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	06.13.19 16.30	Basis:	Wet Weight
Seq Number:	3092273				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**70.2**	5.05	mg/kg	06.13.19 19.52		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.15.19 08.00	Basis:	Wet Weight
Seq Number:	3092436				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.15.19 22.19	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.15.19 22.19	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.15.19 22.19	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.15.19 22.19	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	06.15.19 22.19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	06.15.19 22.19	
o-Terphenyl	84-15-1	88	%	70-135	06.15.19 22.19	

Certificate of Analytical Results 627513

LT Environmental, Inc., Arvada, CO

Hat Mesa 31 #2

Sample Id:	**PH07**	Matrix:	Soil	Date Received:	06.13.19 11.20
Lab Sample Id:	627513-013	Date Collected:	06.11.19 13.15	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	06.18.19 13.00	Basis:	Wet Weight
Seq Number:	3092871				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	06.19.19 04.17	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	06.19.19 04.17	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	06.19.19 04.17	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	06.19.19 04.17	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	06.19.19 04.17	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	06.19.19 04.17	U	1
Total BTEX		<0.00198	0.00198	mg/kg	06.19.19 04.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	111	%	70-130	06.19.19 04.17	
4-Bromofluorobenzene	460-00-4	97	%	70-130	06.19.19 04.17	

Certificate of Analytical Results 627513

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Hat Mesa 31 #2

Sample Id:	**PH07A**	Matrix:	Soil	Date Received:	06.13.19 11.20
Lab Sample Id:	627513-014	Date Collected:	06.11.19 13.30	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	06.13.19 16.30	Basis:	Wet Weight
Seq Number:	3092273				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**61.2**	5.00	mg/kg	06.13.19 19.57		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.15.19 08.00	Basis:	Wet Weight
Seq Number:	3092436				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.15.19 22.43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.15.19 22.43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.15.19 22.43	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.15.19 22.43	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	06.15.19 22.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	06.15.19 22.43	
o-Terphenyl	84-15-1	112	%	70-135	06.15.19 22.43	

Certificate of Analytical Results 627513

LT Environmental, Inc., Arvada, CO

Hat Mesa 31 #2

Sample Id:	**PH07A**	Matrix:	Soil	Date Received:	06.13.19 11.20
Lab Sample Id:	627513-014	Date Collected:	06.11.19 13.30	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	06.18.19 13.00	Basis:	Wet Weight
Seq Number:	3092871				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.19.19 14.07	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.19.19 14.07	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.19.19 14.07	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	06.19.19 14.07	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.19.19 14.07	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.19.19 14.07	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.19.19 14.07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	95	%	70-130	06.19.19 14.07	
1,4-Difluorobenzene	540-36-3	104	%	70-130	06.19.19 14.07	

Certificate of Analytical Results 627513

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Hat Mesa 31 #2

Sample Id:	**PH08**	Matrix:	Soil	Date Received:	06.13.19 11.20
Lab Sample Id:	627513-015	Date Collected:	06.11.19 13.45	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	06.13.19 16.30	Basis:	Wet Weight
Seq Number:	3092273				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**37.0**	5.00	mg/kg	06.13.19 20.02		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.15.19 08.00	Basis:	Wet Weight
Seq Number:	3092436				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	06.15.19 23.07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	06.15.19 23.07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	14.9	mg/kg	06.15.19 23.07	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	06.15.19 23.07	U	1
Total GRO-DRO	PHC628	<14.9	14.9	mg/kg	06.15.19 23.07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	06.15.19 23.07	
o-Terphenyl	84-15-1	90	%	70-135	06.15.19 23.07	

Certificate of Analytical Results 627513

LT Environmental, Inc., Arvada, CO

Hat Mesa 31 #2

Sample Id:	**PH08**	Matrix:	Soil	Date Received:	06.13.19 11.20
Lab Sample Id:	627513-015	Date Collected:	06.11.19 13.45	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	06.18.19 13.00	Basis:	Wet Weight
Seq Number:	3092871				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.19.19 05.01	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	06.19.19 05.01	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.19.19 05.01	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.19.19 05.01	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.19.19 05.01	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.19.19 05.01	U	1
Total BTEX		<0.00201	0.00201	mg/kg	06.19.19 05.01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	98	%	70-130	06.19.19 05.01	
1,4-Difluorobenzene	540-36-3	112	%	70-130	06.19.19 05.01	

Certificate of Analytical Results 627513

LT Environmental, Inc., Arvada, CO

Hat Mesa 31 #2

Sample Id:	**PH08A**	Matrix:	Soil	Date Received:	06.13.19 11.20
Lab Sample Id:	627513-016	Date Collected:	06.11.19 14.00	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	06.13.19 16.45	Basis:	Wet Weight
Seq Number:	3092275				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**83.8**	5.02	mg/kg	06.13.19 20.31		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.15.19 08.00	Basis:	Wet Weight
Seq Number:	3092436				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.15.19 23.31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.15.19 23.31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.15.19 23.31	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.15.19 23.31	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	06.15.19 23.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	06.15.19 23.31	
o-Terphenyl	84-15-1	121	%	70-135	06.15.19 23.31	

Certificate of Analytical Results 627513

LT Environmental, Inc., Arvada, CO

Hat Mesa 31 #2

Sample Id:	**PH08A**	Matrix:	Soil	Date Received:	06.13.19 11.20
Lab Sample Id:	627513-016	Date Collected:	06.11.19 14.00	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	06.18.19 13.00	Basis:	Wet Weight
Seq Number:	3092871				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.19.19 05.23	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.19.19 05.23	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.19.19 05.23	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	06.19.19 05.23	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.19.19 05.23	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.19.19 05.23	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.19.19 05.23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	109	%	70-130	06.19.19 05.23	
4-Bromofluorobenzene	460-00-4	101	%	70-130	06.19.19 05.23	

Certificate of Analytical Results 627513

LT Environmental, Inc., Arvada, CO

Hat Mesa 31 #2

Sample Id:	**PH09**	Matrix:	Soil	Date Received:	06.13.19 11.20
Lab Sample Id:	627513-017	Date Collected:	06.11.19 15.25	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	06.13.19 16.45	Basis:	Wet Weight
Seq Number:	3092275				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**12.9**	4.98	mg/kg	06.13.19 20.45		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.15.19 08.00	Basis:	Wet Weight
Seq Number:	3092436				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.15.19 23.55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.15.19 23.55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.15.19 23.55	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.15.19 23.55	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	06.15.19 23.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	06.15.19 23.55	
o-Terphenyl	84-15-1	120	%	70-135	06.15.19 23.55	

Certificate of Analytical Results 627513

LT Environmental, Inc., Arvada, CO

Hat Mesa 31 #2

Sample Id:	**PH09**	Matrix:	Soil	Date Received:	06.13.19 11.20
Lab Sample Id:	627513-017	Date Collected:	06.11.19 15.25	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	06.18.19 13.00	Basis:	Wet Weight
Seq Number:	3092871				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.19.19 14.30	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	06.19.19 14.30	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.19.19 14.30	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.19.19 14.30	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.19.19 14.30	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.19.19 14.30	U	1
Total BTEX		<0.00201	0.00201	mg/kg	06.19.19 14.30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	06.19.19 14.30	
1,4-Difluorobenzene	540-36-3	105	%	70-130	06.19.19 14.30	

Certificate of Analytical Results 627513

LT Environmental, Inc., Arvada, CO

Hat Mesa 31 #2

Sample Id:	**PH09A**	Matrix:	Soil	Date Received:	06.13.19 11.20
Lab Sample Id:	627513-018	Date Collected:	06.11.19 15.35	Sample Depth:	1.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	06.13.19 16.45	Basis:	Wet Weight
Seq Number:	3092275				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.95	4.95	mg/kg	06.13.19 20.50	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.15.19 08.00	Basis:	Wet Weight
Seq Number:	3092436				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.16.19 00.18	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.16.19 00.18	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.16.19 00.18	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.16.19 00.18	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	06.16.19 00.18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	06.16.19 00.18	
o-Terphenyl	84-15-1	97	%	70-135	06.16.19 00.18	

Certificate of Analytical Results 627513

LT Environmental, Inc., Arvada, CO

Hat Mesa 31 #2

Sample Id:	**PH09A**	Matrix:	Soil	Date Received:	06.13.19 11.20
Lab Sample Id:	627513-018	Date Collected:	06.11.19 15.35	Sample Depth:	1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	06.18.19 13.00	Basis:	Wet Weight
Seq Number:	3092871				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.19.19 06.07	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.19.19 06.07	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.19.19 06.07	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	06.19.19 06.07	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.19.19 06.07	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.19.19 06.07	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.19.19 06.07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	06.19.19 06.07	
4-Bromofluorobenzene	460-00-4	100	%	70-130	06.19.19 06.07	

Certificate of Analytical Results 627513

LT Environmental, Inc., Arvada, CO

Hat Mesa 31 #2

Sample Id:	**PH10**	Matrix:	Soil	Date Received:	06.13.19 11.20
Lab Sample Id:	627513-019	Date Collected:	06.11.19 15.55	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	06.13.19 16.45	Basis:	Wet Weight
Seq Number:	3092275				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.99	4.99	mg/kg	06.13.19 20.55	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.15.19 08.00	Basis:	Wet Weight
Seq Number:	3092436				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.16.19 00.42	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.16.19 00.42	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.16.19 00.42	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.16.19 00.42	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	06.16.19 00.42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	06.16.19 00.42	
o-Terphenyl	84-15-1	109	%	70-135	06.16.19 00.42	

Certificate of Analytical Results 627513

LT Environmental, Inc., Arvada, CO

Hat Mesa 31 #2

Sample Id:	**PH10**	Matrix:	Soil	Date Received:	06.13.19 11.20
Lab Sample Id:	627513-019	Date Collected:	06.11.19 15.55	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	06.18.19 13.00	Basis:	Wet Weight
Seq Number:	3092871				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.19.19 06.29	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.19.19 06.29	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.19.19 06.29	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.19.19 06.29	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.19.19 06.29	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.19.19 06.29	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.19.19 06.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	96	%	70-130	06.19.19 06.29	
1,4-Difluorobenzene	540-36-3	111	%	70-130	06.19.19 06.29	

Certificate of Analytical Results 627513

LT Environmental, Inc., Arvada, CO

Hat Mesa 31 #2

Sample Id:	**PH10A**	Matrix:	Soil	Date Received:	06.13.19 11.20
Lab Sample Id:	627513-020	Date Collected:	06.11.19 16.15	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	06.13.19 16.45	Basis:	Wet Weight
Seq Number:	3092275				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**15.3**	5.04	mg/kg	06.13.19 21.00		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.15.19 08.00	Basis:	Wet Weight
Seq Number:	3092436				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.16.19 01.06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.16.19 01.06	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	06.16.19 01.06	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.16.19 01.06	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	06.16.19 01.06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	06.16.19 01.06	
o-Terphenyl	84-15-1	123	%	70-135	06.16.19 01.06	

Certificate of Analytical Results 627513

LT Environmental, Inc., Arvada, CO

Hat Mesa 31 #2

Sample Id:	**PH10A**	Matrix:	Soil	Date Received:	06.13.19 11.20
Lab Sample Id:	627513-020	Date Collected:	06.11.19 16.15	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	DVM			% Moisture:	
Analyst:	DVM	Date Prep:	06.18.19 13.00	Basis:	Wet Weight
Seq Number:	3092871				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.19.19 06.51	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.19.19 06.51	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.19.19 06.51	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.19.19 06.51	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.19.19 06.51	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.19.19 06.51	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.19.19 06.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	100	%	70-130	06.19.19 06.51	
1,4-Difluorobenzene	540-36-3	109	%	70-130	06.19.19 06.51	

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 627513

LT Environmental, Inc.

Hat Mesa 31 #2

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3092273 — Matrix: Solid — Date Prep: 06.13.19
MB Sample Id: 7679885-1-BLK — LCS Sample Id: 7679885-1-BKS — LCSD Sample Id: 7679885-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	250	100	251	100	90-110	0	20	mg/kg	06.13.19 17:41	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3092275 — Matrix: Solid — Date Prep: 06.13.19
MB Sample Id: 7679886-1-BLK — LCS Sample Id: 7679886-1-BKS — LCSD Sample Id: 7679886-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	250	100	249	100	90-110	0	20	mg/kg	06.13.19 20:21	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3093262 — Matrix: Solid — Date Prep: 06.21.19
MB Sample Id: 7680447-1-BLK — LCS Sample Id: 7680447-1-BKS — LCSD Sample Id: 7680447-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	242	97	242	97	90-110	0	20	mg/kg	06.21.19 15:28	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3092273 — Matrix: Soil — Date Prep: 06.13.19
Parent Sample Id: 627513-006 — MS Sample Id: 627513-006 S — MSD Sample Id: 627513-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	44.4	250	303	103	303	103	90-110	0	20	mg/kg	06.13.19 19:04	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3092273 — Matrix: Soil — Date Prep: 06.13.19
Parent Sample Id: 627519-003 — MS Sample Id: 627519-003 S — MSD Sample Id: 627519-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	938	250	1100	65	1100	65	90-110	0	20	mg/kg	06.13.19 17:56	X

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

QC Summary 627513

LT Environmental, Inc.

Hat Mesa 31 #2

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3092275 — Matrix: Soil — Date Prep: 06.13.19
Parent Sample Id: 627513-016 — MS Sample Id: 627513-016 S — MSD Sample Id: 627513-016 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	83.8	251	338	101	338	101	90-110	0	20	mg/kg	06.13.19 20:36	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3092275 — Matrix: Soil — Date Prep: 06.13.19
Parent Sample Id: 627514-006 — MS Sample Id: 627514-006 S — MSD Sample Id: 627514-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	13.5	250	272	103	271	103	90-110	0	20	mg/kg	06.13.19 21:43	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3093262 — Matrix: Soil — Date Prep: 06.21.19
Parent Sample Id: 627984-005 — MS Sample Id: 627984-005 S — MSD Sample Id: 627984-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	457	252	666	83	666	83	90-110	0	20	mg/kg	06.21.19 15:42	X

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3093262 — Matrix: Soil — Date Prep: 06.21.19
Parent Sample Id: 628028-001 — MS Sample Id: 628028-001 S — MSD Sample Id: 628028-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	42.0	251	296	101	296	101	90-110	0	20	mg/kg	06.21.19 16:50	

Analytical Method: TPH by SW8015 Mod — Prep Method: TX1005P
Seq Number: 3092436 — Matrix: Solid — Date Prep: 06.15.19
MB Sample Id: 7680004-1-BLK — LCS Sample Id: 7680004-1-BKS — LCSD Sample Id: 7680004-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<8.00	1000	849	85	838	84	70-135	1	20	mg/kg	06.15.19 15:26	
Diesel Range Organics (DRO)	<8.13	1000	825	83	824	82	70-135	0	20	mg/kg	06.15.19 15:26	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	95		94		87		70-135	%	06.15.19 15:26
o-Terphenyl	60	**	81		72		70-135	%	06.15.19 15:26

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 627513

LT Environmental, Inc.

Hat Mesa 31 #2

Analytical Method: TPH by SW8015 Mod | Prep Method: TX1005P
Seq Number: 3092436 | Matrix: Soil | Date Prep: 06.15.19
Parent Sample Id: 627513-001 | MS Sample Id: 627513-001 S | MSD Sample Id: 627513-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	9.30	999	867	86	876	87	70-135	1	20	mg/kg	06.15.19 16:39	
Diesel Range Organics (DRO)	<8.12	999	946	95	931	93	70-135	2	20	mg/kg	06.15.19 16:39	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	103		102		70-135	%	06.15.19 16:39
o-Terphenyl	110		110		70-135	%	06.15.19 16:39

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3092871 | Matrix: Solid | Date Prep: 06.18.19
MB Sample Id: 7680266-1-BLK | LCS Sample Id: 7680266-1-BKS | LCSD Sample Id: 7680266-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0912	91	0.0941	94	70-130	3	35	mg/kg	06.18.19 20:51	
Toluene	<0.00200	0.100	0.0855	86	0.0881	88	70-130	3	35	mg/kg	06.18.19 20:51	
Ethylbenzene	<0.00200	0.100	0.0942	94	0.0982	98	70-130	4	35	mg/kg	06.18.19 20:51	
m,p-Xylenes	<0.00401	0.200	0.187	94	0.197	99	70-130	5	35	mg/kg	06.18.19 20:51	
o-Xylene	<0.00200	0.100	0.0894	89	0.0933	93	70-130	4	35	mg/kg	06.18.19 20:51	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	79		103		107		70-130	%	06.18.19 20:51
4-Bromofluorobenzene	76		104		108		70-130	%	06.18.19 20:51

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3092871 | Matrix: Soil | Date Prep: 06.18.19
Parent Sample Id: 627513-001 | MS Sample Id: 627513-001 S | MSD Sample Id: 627513-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0940	94	0.0822	82	70-130	13	35	mg/kg	06.18.19 21:35	
Toluene	<0.00200	0.100	0.0885	89	0.0759	76	70-130	15	35	mg/kg	06.18.19 21:35	
Ethylbenzene	<0.00200	0.100	0.0972	97	0.0822	82	70-130	17	35	mg/kg	06.18.19 21:35	
m,p-Xylenes	<0.00401	0.200	0.194	97	0.164	82	70-130	17	35	mg/kg	06.18.19 21:35	
o-Xylene	<0.00200	0.100	0.0926	93	0.0774	77	70-130	18	35	mg/kg	06.18.19 21:35	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	105		104		70-130	%	06.18.19 21:35
4-Bromofluorobenzene	105		103		70-130	%	06.18.19 21:35

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

Page 85 of 88

Chain of Custody

Work Order No: 627513

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

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littrell
Company Name:	LT Environmental, Inc., Permian office	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	
City, State ZIP:	Midland, Tx 79705	City, State ZIP:	
Phone:	(432) 236-3849 Email:		llaumbach@ltenv.com, dmoir@ltenv.com

Work Order Comments

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

Project Name:	Hat Mesa 31 #2	Turn Around	
Project Number:	01291911.5	Routine	X
P.O. Number:	1RP-2387	Rush:	
Sampler's Name:	Lynda Laumbach	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	0.4 0.4	Thermometer ID	D2
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes (No) N/A	Total Containers:	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
PH01	S	06/11/2019	10:00	2'	1	X	X	X
PH01A	S		10:10	4'	1			
PH02	S		10:30	2'	1			
PH02A			10:40	4'	1			
PH03			11:00	2'	1			
PH03A			11:15	4'	1			
PH04			11:30	2'	1			
PH04A			11:45	4'	1			
PH05			12:00	2'	1			
PH05A			12:15	4'	1			

ANALYSIS REQUEST

Work Order Notes

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

Sample Comments

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

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

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

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			6/12/19@1355	2		6/13/19 1120
3				4		
5				6		

Revised Date 051418 Rev. 2018.1

Received by OCD: 3/10/2023 9:22:45 AM
Released to Imaging: 3/10/2023 9:24:17 AM
Final 1.001
Page 53 of 55

Page 86 of 88

Chain of Custody

Work Order No: 627513

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Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littrell
Company Name:	LT Environmental, Inc., Permian office	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	
City, State ZIP:	Midland, Tx 79705	City, State ZIP:	
Phone:	(432) 236-3849 Email:		llaumbach@ltenv.com, dmoir@ltenv.com

Work Order Comments

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

Project Name:	Hat Mesa 31 #2	Turn Around	
Project Number:	012919115	Routine	X
P.O. Number:	1RP-2387	Rush:	
Sampler's Name:	Lynda Laumbach	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	0.1/0.4	Thermometer ID	
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Total Containers:	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
PH06	S	06/11/2019	12:45	2'	1	X	X	X
PH06A	S		13:00	4'	1			
PH07	S		13:15	2'	1			
PH07A			13:30	4'	1			
PH08			13:45	2'	1			
PH08A			14:00	4'	1			
PH09			15:25	1'	1			
PH09A			15:35	1.5'	1			
PH10			15:55	1'	1			
PH10A			16:15	2'	1			

ANALYSIS REQUEST

Work Order Notes

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

Sample Comments

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

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

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	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			6/12/2019 3:55	2		6/13/19 1120
3				4		
5				6		

Revised Date 051418 Rev. 2018.1

Received by OCD: 3/10/2023 9:22:45 AM
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Final 1.001
Page 54 of 55

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 06/13/2019 11:20:00 AM

Work Order #: 627513

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

Temperature Measuring device used : R8

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

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

Analyst: PH Device/Lot#:

Checklist completed by: Brianna Teel Date: 06/13/2019

Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 06/13/2019

Jessica Kramer

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

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

CONDITIONS

Action 195698

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 195698
	Action Type: [IM-SD] Incident File Support Doc (ENV) (IM-BNF)

CONDITIONS

Created By	Condition	Condition Date
bhall	None	3/10/2023