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	NDHR1918947061
District RP	1RP-5608
Facility ID	
Application ID	pDHR1918946731

Release Notification

Responsible Party

Responsible Party XTO Energy	OGRID 5380
Contact Name Kyle Littrell	Contact Telephone 432-221-7331
Contact email Kyle_Littrell@xtoenergy.com	Incident # *(assigned by OCD)* NDHR1918947061
Contact mailing address 522 W. Mermod, Carlsbad, NM 88220	

Location of Release Source

Latitude 32.255270° Longitude -103.609679°

(NAD 83 in decimal degrees to 5 decimal places)

Site Name Mis Amigos Battery	Site Type Bulk Storage and Separation Facility
Date Release Discovered 6/20/2019	API# *(if applicable)* 30-025-40590

Unit Letter	Section	Township	Range	County
O	31	23S	33E	Lea

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

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)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) 8.56	Volume Recovered (bbls) 0
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

A produced water poly line ruptured just north of the facility pad due to weakening from flare heat. Fluids were released to pasture soil. The line was repaired and the line was moved away from the flare. Additional third party resources have been retained to assist with remediation.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NDHR1918947061
District RP	1RP-5608
Facility ID	
Application ID	pDHR1918946731

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

Initial Response

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

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

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

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

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

Printed Name: Amy C. Ruth
Title: SH&E Coordinator
Signature:
Date: 7/2/2019
email: Amy_Ruth@xtoenergy.com
Telephone: 575-689-3380

OCD Only

Received by: Dylan Rose-Coss
Date: 07/08/2019

Form C-141
Page 3

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	1RP-5608
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	NDHR1918947061
District RP	1RP-5608
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: 12/17/2019

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

OCD Only

Received by: Cristina Eads Date: 02/20/2020

Form C-141
Page 6

State of New Mexico
Oil Conservation Division

Incident ID	NDHR1918947061
District RP	1RP-5608
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: 12/17/2019

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

OCD Only

Received by: Cristina Eads Date: 02/20/2020

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

Closure Approved by: Cristina Eads Date: 02/20/2020

Printed Name: Cristina Eads Title: Environmental Specialist

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

December 17, 2019

District I
New Mexico Oil Conservation Division
1625 N. French Drive
Hobbs, New Mexico 88240

RE: Closure Request
Mis Amigos Battery
Remediation Permit Number 1RP-5608
Lea County, New Mexico

To Whom It May Concern:

LT Environmental, Inc. (LTE), on behalf of XTO Energy, Inc. (XTO), presents the following report detailing site assessment and soil sampling activities at the Mis Amigos Battery (Site) in Unit O, Section 31, Township 23 South, Range 33 East, in Lea County, New Mexico (Figure 1). The purpose of the site assessment and soil sampling activities was to confirm the presence or absence of impacts to soil following a release of produced water at the Site. Based on field observations, field screening, and laboratory analytical results from soil sampling activities, XTO is submitting this Closure Request and requesting no further action for Remediation Permit (RP) Number 1RP-5608.

RELEASE BACKGROUND

On June 20, 2019, a produced water poly line ruptured as a result of weakening from the flare stack on Site. This resulted in the release of approximately 8.56 barrels (bbls) of produced water into the pasture area north of the caliche well pad. The line was repaired and the poly line was moved away from the flare stack. No fluids were recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form C-141 (Form C-141) on July 2, 2019, and was assigned RP Number 1RP-5608.

SITE CHARACTERIZATION

LTE characterized the Site according to Table 1, *Closure Criteria for Soils Impacted by a Release*, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest water well data. The closest permitted water well with depth to water data is United States Geological Survey (USGS) well 321555103381501, located approximately 1.84 miles northwest of the Site. The water well has a depth to groundwater of approximately 487 feet bgs and a total depth of 700 feet bgs. Ground surface elevation at the

water well location is 3,693 feet above mean sea level (AMSL), which is approximately 34 feet higher in elevation than the Site. The closest continuously flowing water or significant watercourse to the Site is an unnamed dry wash, located approximately 12,291 feet southeast of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is located in a low 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)-gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg
- TPH: 2,500 mg/kg
- Chloride: 20,000 mg/kg

Additionally, a closure criteria of 600 mg/kg chloride was applied to the undeveloped pasture that was impacted by the release, per NMAC 19.15.29.13.D (1) for the top four feet for areas that were reclaimed following remediation.

SITE ASSESSMENT AND SOIL SAMPLING ACTIVITIES

On November 27, 2019, LTE personnel were at the Site to evaluate the release extent based on information provided on the Form C-141 and visual observations. LTE personnel advanced potholes within the release extent via track-mounted backhoe to confirm the presence or absence of impacted soil. Potholes PH01 through PH06 were advanced to a depth of 2 feet bgs. Two delineation soil samples were collected from each pothole from depths of 0.5 foot and 2 feet bgs. Soil from the potholes was field screened for volatile aromatic hydrocarbons utilizing a photo-ionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. Field screening results and observations for each pothole were logged on lithologic/soil sampling logs, that are presented as Attachment 1. All potholes were backfilled with the removed soil. The release extent, potholes and delineation soil sample locations were mapped utilizing a handheld Global Positioning 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 Carlsbad, New Mexico, for analysis of BTEX following United States Environmental Protection Agency (USEPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following USEPA Method 8015M/D; and chloride following USEPA Method 300.0.

Based on laboratory analytical results for the delineation soil samples collected on November 27, 2019, excavation activities did not appear to be warranted. Photographic documentation was conducted during the Site visit. Photographs are included in Attachment 2.

ANALYTICAL RESULTS

Laboratory analytical results indicated benzene, BTEX, TPH-GRO and TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria in delineation soil samples PH01/PH01A through PH06/PH06A collected at depths of approximately 0.5 foot and 2 feet bgs. Laboratory analytical results are presented on Figure 2 and summarized in Table 1. The complete laboratory analytical reports are included as Attachment 3.

CONCLUSIONS

Delineation soil samples PH01/PH01A through PH06/PH06A were collected from within the release extent from depths of 0.5 foot and 2 feet bgs to assess for the presence or absence of soil impacts as a result of the June 20, 2019, release. Laboratory analytical results for all soil samples indicated benzene, BTEX, TPH-GRO and TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Additionally, field screening of soil indicated volatile aromatic hydrocarbons and chloride concentrations were not elevated and soil staining and petroleum hydrocarbon odors were not identified within the release extent.

Based on initial response efforts, absence of elevated field screening results, and soil sample laboratory analytical results compliant with the Closure Criteria, no impacted soil was identified and no soil remediation was required as a result of the produced water release. XTO requests no further action for RP Number 1RP-5608.

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

Sincerely,

LT ENVIRONMENTAL, INC.

Carol Ann Whaley
Staff Geologist

Ashley L. Ager, P.G.
Senior Geologist

cc: Kyle Littrell, XTO
Ryan Mann, State Land Office
Robert Hamlet, NMOCD
Victoria Venegas, NMOCD

Appendices:

Figure 1	Site Location Map
Figure 2	Delineation Soil Sample Locations
Table 1	Soil Analytical Results
Attachment 1	Lithologic / Soil Sampling Logs
Attachment 2	Photographic Log
Attachment 3	Laboratory Analytical Reports

FIGURES

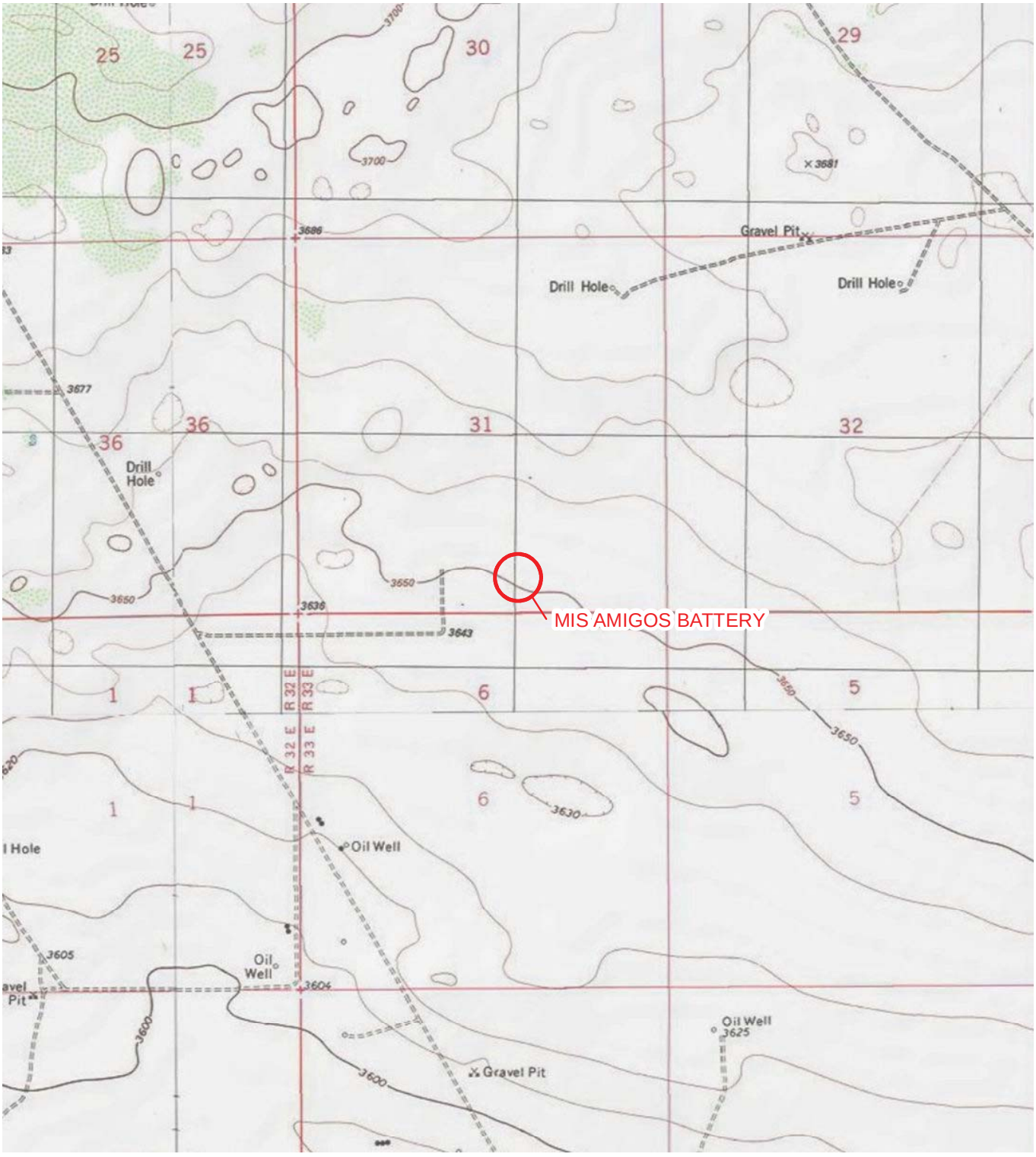


IMAGE COURTESY OF ESRI/USGS

LEGEND

SITE LOCATION

0 2,000 4,000

Feet

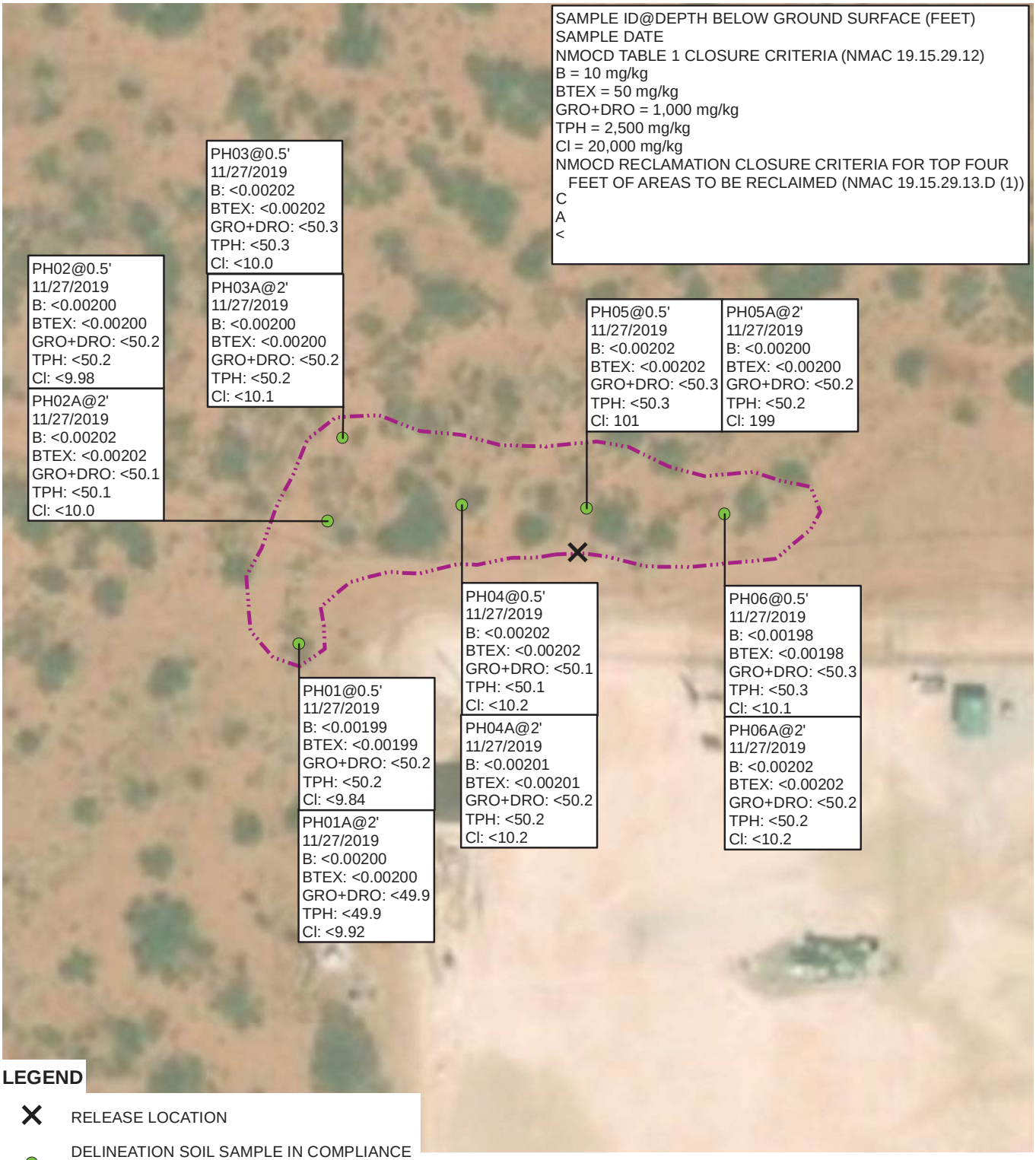
N

NEW MEXICO

FIGURE 1
SITE LOCATION MAP
MIS AMIGOS BATTERY
UNIT O SEC 31 T23S R33E
LEA COUNTY, NEW MEXICO
XTO ENERGY, INC.

NOTE: REMEDIATION PERMIT NUMBER 1RP-5608

P:\XTO Energy\GIS\MXD\012919151_MIS AMIGOS BATTERY (1RP-5608)\012919151_FIG01_SL_5608.mxd



B: BENZENE
BTEX: TOTAL BENZENE, TOLUENE, ETHYLBENZENE, AND TOTAL XYLENES
GRO: GASOLINE RANGE ORGANICS
DRO: DIESEL RANGE ORGANICS
TPH: TOTAL PETROLEUM HYDROCARBONS
Cl: CHLORIDE
NMAC: NEW MEXICO ADMINISTRATIVE CODE
NMOCD: NEW MEXICO OIL CONSERVATION DIVISION
NOTE: REMEDIATION PERMIT NUMBER 1RP-5608

FIGURE 2
DELINEATION SOIL SAMPLE LOCATIONS
MIS AMIGOS BATTERY
UNIT O SEC 31 T23S R33E
LEA COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012919151_MIS AMIGOS BATTERY (1RP-5608)\012919151_FIG03_DELINEATION_5608.mxd

TABLE

TABLE 1
SOIL ANALYTICAL RESULTS

MIS AMIGOS BATTERY
REMEDIATION PERMIT NUMBER 1RP-5608
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)
NMOCD Table 1 Closure Criteria			**10**	NE	NE	NE	**50**	NE	NE	NE	**1,000**	**2,500**	**20,000**
PH01	0.5	11/27/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.2	<50.2	<50.2	<50.2	<50.2	<9.84*
PH01A	2	11/27/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	<9.92*
PH02	0.5	11/27/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	<9.98*
PH02A	2	11/27/2019	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.1	<50.1	<50.1	<50.1	<50.1	<10.0*
PH03	0.5	11/27/2019	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.3	<50.3	<50.3	<50.3	<50.3	<10.0*
PH03A	2	11/27/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	<10.1*
PH04	0.5	11/27/2019	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.1	<50.1	<50.1	<50.1	<50.1	<10.2*
PH04A	2	11/27/2019	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.2	<50.2	<50.2	<50.2	<50.2	<10.2*
PH05	0.5	11/27/2019	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.3	<50.3	<50.3	<50.3	<50.3	101*
PH05A	2	11/27/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	199*
PH06	0.5	11/27/2019	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.3	<50.3	<50.3	<50.3	<50.3	<10.1*
PH06A	2	11/27/2019	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.2	<50.2	<50.2	<50.2	<50.2	<10.2*

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 - motor oil range organics
NMAC - New Mexico Administrative Code
NMOCD - New Mexico Oil Conservation Division
NE - not established
TPH - total petroleum hydrocarbons
Bold - indicates result exceeds the applicable regulatory standard
< - indicates result is below laboratory reporting limits
Table 1 - closure criteria for soils impacted by a release per NMAC 19.15.29 August 2018
* - indicates sample was collected in area to be reclaimed after remediation is complete; closure criteria for chloride concentration in the top 4 feet of soil is 600 mg/kg

ATTACHMENT 1: LITHOLOGIC / SOIL SAMPLING LOGS

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

Identifier:	Date:
PH01	11/27/19
Project Name:	**RP Number:**
Mis Amigos Battery	1RP-5608
Logged By: Fatima Smith	Method:
Hole Diameter:	Total Depth: 2'

LITHOLOGIC / SOIL SAMPLING LOG

Lat/Long:

Field Screening:

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
Dry	<179	0.3	N		0	0.5	S	reddish brwn, sand, fine grained, no cohesiveness
Dry	<179	0.4	N		1		S	deepest sample @ 2'
					2			
					3			
					4			
					5			
					6			
					7			
					8			
					9			
					10			
					11			
					12			

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

Identifier:	Date:
PH02	11/27/19
Project Name:	**RP Number:**
Mis Amigos Battery	1RP-5608
Logged By: Fatima Smith	Method:
Hole Diameter:	Total Depth: 2'
Lat/Long:	Field Screening:

LITHOLOGIC / SOIL SAMPLING LOG

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
Dry	<179	0.4	N		0	0.5	S	reddish brwn, sand, fine grained, no cohesiveness
Dry	<179	0.4	N		1		S	↓
					2			deepest sample @ 2'
					3			
					4			
					5			
					6			
					7			
					8			
					9			
					10			
					11			
					12			

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

Identifier:	Date:
PH03	11/27/19
Project Name:	**RP Number:**
Mis Amigos Battery	IRP-5608
Logged By: Fatima Smith	**Method:**
Lat/Long:	**Field Screening:**
Hole Diameter:	**Total Depth:** 2'

LITHOLOGIC / SOIL SAMPLING LOG

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
Dry	<179	0.2	N		0	0.5	S	reddish brwn, sand, fine grained, no cohesiveness
Dry	<179	0.2	N		1		S	deepest sample @ 2'
					2			
					3			
					4			
					5			
					6			
					7			
					8			
					9			
					10			
					11			
					12			

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

Identifier:	Date:
PH04	11/27/19
Project Name:	**RP Number:**
Mis Amigos Battery	IRP - 5608
Logged By: Fatima Smith	**Method:**
Lat/Long:	**Field Screening:**
Hole Diameter:	**Total Depth:** 2'

LITHOLOGIC / SOIL SAMPLING LOG

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
Dry	<179	0.2	N		0	0.5	S	reddish brwn, sand, fine grained, no cohesiveness
Dry	<179	0.1	N		1		S	↓
					2			deepest sample @ 2'
					3			
					4			
					5			
					6			
					7			
					8			
					9			
					10			
					11			
					12			

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

Identifier:	Date:
PH05	11/27/19
Project Name:	**RP Number:**
Mis Amigos Battery	IRP-5608
Logged By: Fatima Smith	**Method:**
Lat/Long:	**Field Screening:**
Hole Diameter:	**Total Depth:** 2'

LITHOLOGIC / SOIL SAMPLING LOG

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
Dry	<179	0.0	N		0	0.5	S	reddish brwn, sand, fine grained, no cohesiveness
Dry	<179	0.3	N		1		S	deepest sample @ 2'
					2			
					3			
					4			
					5			
					6			
					7			
					8			
					9			
					10			
					11			
					12			

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

Identifier:	Date:
PH06	11/27/19
Project Name:	**RP Number:**
Mis Amigos Battery	IRP- 5608
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Fatima Smith / Method:
Lat/Long: / Field Screening:	Hole Diameter: / Total Depth: 2'

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
Dry	<179	0.2	N		0	0.5	S	reddish brwn, sand, fine grained, no cohesiveness
Dry	<179	0.1	N		1		S	deepest sample @ 2'
					2			
					3			
					4			
					5			
					6			
					7			
					8			
					9			
					10			
					11			
					12			

ATTACHMENT 2: PHOTOGRAPHIC LOG

Southern view of release area and caliche well pad during site assessment activities.

Project: 012919151	XTO Energy, Inc. Mis Amigos Battery	LTE Advancing Opportunity
November 27, 2019	Photographic Log	

Northern view of release area during site assessment activities.

Project: 012919151	XTO Energy, Inc. Mis Amigos Battery	LTE Advancing Opportunity
November 27, 2019	Photographic Log	

ATTACHMENT 3: LABORATORY ANALYTICAL REPORTS

Analytical Report 644665

for

LT Environmental, Inc.

Project Manager: Dan Moir

Mis Amigos Battery

012919151

02-DEC-19

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

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

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

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

02-DEC-19

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

Reference: XENCO Report No(s): **644665**
Mis Amigos Battery
Project Address:

Dan Moir:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 644665. 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. 644665 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

Sample Cross Reference 644665

LT Environmental, Inc., Arvada, CO

Mis Amigos Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH01	S	11-27-19 10:10	0.5 ft	644665-001
PH01A	S	11-27-19 10:12	2 ft	644665-002
PH02	S	11-27-19 10:24	0.5 ft	644665-003
PH02A	S	11-27-19 10:25	2 ft	644665-004
PH03	S	11-27-19 10:27	0.5 ft	644665-005
PH03A	S	11-27-19 10:28	2 ft	644665-006
PH04	S	11-27-19 10:30	0.5 ft	644665-007
PH04A	S	11-27-19 10:31	2 ft	644665-008
PH05	S	11-27-19 10:39	0.5 ft	644665-009
PH05A	S	11-27-19 10:40	2 ft	644665-010
PH06	S	11-27-19 10:43	0.5 ft	644665-011
PH06A	S	11-27-19 10:44	2 ft	644665-012

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: Mis Amigos Battery

Project ID: *012919151*
Work Order Number(s): *644665*

Report Date: *02-DEC-19*
Date Received: *11/27/2019*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3109038 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3109041 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3109044 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analysis Summary 644665

LT Environmental, Inc., Arvada, CO

Project Name: Mis Amigos Battery

Project Id: 012919151
Contact: Dan Moir
Project Location:

Date Received in Lab: Wed Nov-27-19 02:58 pm
Report Date: 02-DEC-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	644665-001		644665-002		644665-003		644665-004		644665-005		644665-006	
	Field Id:	PH01		PH01A		PH02		PH02A		PH03		PH03A	
	Depth:	0.5- ft		2- ft		0.5- ft		2- ft		0.5- ft		2- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Nov-27-19 10:10		Nov-27-19 10:12		Nov-27-19 10:24		Nov-27-19 10:25		Nov-27-19 10:27		Nov-27-19 10:28	
BTEX by EPA 8021B	***Extracted:***	Dec-01-19 11:11		Dec-01-19 11:11		Nov-27-19 17:11		Nov-27-19 17:11		Nov-27-19 17:11		Nov-27-19 17:11	
	Analyzed:	Dec-02-19 01:26		Dec-02-19 01:45		Nov-28-19 21:03		Nov-28-19 21:22		Nov-28-19 21:41		Nov-28-19 22:42	
	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	<0.00202	0.00202	<0.00202	0.00202	<0.00200	0.00200
Toluene		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00202	0.00202	<0.00200	0.00200
Ethylbenzene		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00202	0.00202	<0.00200	0.00200
m,p-Xylenes		<0.00398	0.00398	<0.00399	0.00399	<0.00401	0.00401	<0.00403	0.00403	<0.00404	0.00404	<0.00401	0.00401
o-Xylene		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00202	0.00202	<0.00200	0.00200
Total Xylenes		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00202	0.00202	<0.00200	0.00200
Total BTEX		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00202	0.00202	<0.00200	0.00200
Chloride by EPA 300	***Extracted:***	Nov-30-19 17:00		Nov-30-19 17:00		Nov-30-19 17:00		Nov-30-19 17:00		Nov-30-19 17:00		Nov-30-19 17:00	
	Analyzed:	Nov-30-19 21:55		Nov-30-19 22:01		Nov-30-19 22:07		Nov-30-19 22:13		Nov-30-19 22:19		Nov-30-19 22:25	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		<9.84	9.84	<9.92	9.92	<9.98	9.98	<10.0	10.0	<10.0	10.0	<10.1	10.1
TPH by SW8015 Mod	***Extracted:***	Nov-27-19 17:30		Nov-27-19 17:30		Nov-27-19 17:30		Nov-27-19 17:30		Nov-27-19 17:30		Nov-27-19 17:30	
	Analyzed:	Nov-28-19 05:36		Nov-28-19 05:55		Nov-28-19 05:55		Nov-28-19 06:15		Nov-28-19 06:15		Nov-28-19 06:35	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.2	50.2	<49.9	49.9	<50.2	50.2	<50.1	50.1	<50.3	50.3	<50.2	50.2
Diesel Range Organics (DRO)		<50.2	50.2	<49.9	49.9	<50.2	50.2	<50.1	50.1	<50.3	50.3	<50.2	50.2
Motor Oil Range Hydrocarbons (MRO)		<50.2	50.2	<49.9	49.9	<50.2	50.2	<50.1	50.1	<50.3	50.3	<50.2	50.2
Total GRO-DRO		<50.2	50.2	<49.9	49.9	<50.2	50.2	<50.1	50.1	<50.3	50.3	<50.2	50.2
Total TPH		<50.2	50.2	<49.9	49.9	<50.2	50.2	<50.1	50.1	<50.3	50.3	<50.2	50.2

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

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 644665

LT Environmental, Inc., Arvada, CO

Project Name: Mis Amigos Battery

Project Id: 012919151
Contact: Dan Moir
Project Location:

Date Received in Lab: Wed Nov-27-19 02:58 pm
Report Date: 02-DEC-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	644665-007		644665-008		644665-009		644665-010		644665-011		644665-012	
	Field Id:	PH04		PH04A		PH05		PH05A		PH06		PH06A	
	Depth:	0.5- ft		2- ft		0.5- ft		2- ft		0.5- ft		2- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Nov-27-19 10:30		Nov-27-19 10:31		Nov-27-19 10:39		Nov-27-19 10:40		Nov-27-19 10:43		Nov-27-19 10:44	
BTEX by EPA 8021B	***Extracted:***	Nov-27-19 17:11		Nov-27-19 17:11		Nov-27-19 17:11		Dec-01-19 11:11		Dec-01-19 11:11		Dec-01-19 11:11	
	Analyzed:	Nov-28-19 23:04		Nov-28-19 23:23		Nov-29-19 00:02		Dec-02-19 05:48		Dec-02-19 06:07		Dec-02-19 04:50	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00202	0.00202	<0.00201	0.00201	<0.00202	0.00202	<0.00200	0.00200	<0.00198	0.00198	<0.00202	0.00202
Toluene		<0.00202	0.00202	<0.00201	0.00201	<0.00202	0.00202	<0.00200	0.00200	<0.00198	0.00198	<0.00202	0.00202
Ethylbenzene		<0.00202	0.00202	<0.00201	0.00201	<0.00202	0.00202	<0.00200	0.00200	<0.00198	0.00198	<0.00202	0.00202
m,p-Xylenes		<0.00403	0.00403	<0.00402	0.00402	<0.00403	0.00403	<0.00399	0.00399	<0.00397	0.00397	<0.00403	0.00403
o-Xylene		<0.00202	0.00202	<0.00201	0.00201	<0.00202	0.00202	<0.00200	0.00200	<0.00198	0.00198	<0.00202	0.00202
Total Xylenes		<0.00202	0.00202	<0.00201	0.00201	<0.00202	0.00202	<0.00200	0.00200	<0.00198	0.00198	<0.00202	0.00202
Total BTEX		<0.00202	0.00202	<0.00201	0.00201	<0.00202	0.00202	<0.00200	0.00200	<0.00198	0.00198	<0.00202	0.00202
Chloride by EPA 300	***Extracted:***	Nov-30-19 17:00		Nov-30-19 17:00		Nov-30-19 17:00		Nov-30-19 17:00		Nov-30-19 17:00		Nov-30-19 17:00	
	Analyzed:	Nov-30-19 22:43		Nov-30-19 22:49		Nov-30-19 23:07		Nov-30-19 23:13		Nov-30-19 23:19		Nov-30-19 23:25	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		<10.2	10.2	<10.2	10.2	101	10.2	199	10.0	<10.1	10.1	<10.2	10.2
TPH by SW8015 Mod	***Extracted:***	Nov-27-19 17:30		Nov-27-19 17:30		Nov-27-19 17:30		Nov-27-19 17:30		Nov-27-19 17:30		Nov-27-19 17:30	
	Analyzed:	Nov-28-19 06:35		Nov-28-19 06:54		Nov-28-19 07:14		Nov-28-19 07:14		Nov-28-19 07:34		Nov-28-19 07:34	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.1	50.1	<50.2	50.2	<50.3	50.3	<50.2	50.2	<50.3	50.3	<50.2	50.2
Diesel Range Organics (DRO)		<50.1	50.1	<50.2	50.2	<50.3	50.3	<50.2	50.2	<50.3	50.3	<50.2	50.2
Motor Oil Range Hydrocarbons (MRO)		<50.1	50.1	<50.2	50.2	<50.3	50.3	<50.2	50.2	<50.3	50.3	<50.2	50.2
Total GRO-DRO		<50.1	50.1	<50.2	50.2	<50.3	50.3	<50.2	50.2	<50.3	50.3	<50.2	50.2
Total TPH		<50.1	50.1	<50.2	50.2	<50.3	50.3	<50.2	50.2	<50.3	50.3	<50.2	50.2

Jessica Kramer
Project Assistant

Certificate of Analytical Results 644665

LT Environmental, Inc., Arvada, CO

Mis Amigos Battery

Sample Id:	**PH01**	Matrix:	Soil	Date Received:	11.27.19 14.58
Lab Sample Id:	644665-001	Date Collected:	11.27.19 10.10	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.30.19 17.00	Basis:	Wet Weight
Seq Number:	3109029				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.84	9.84	mg/kg	11.30.19 21.55	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	11.27.19 17.30	Basis:	Wet Weight
Seq Number:	3109061				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	11.28.19 05.36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	11.28.19 05.36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	11.28.19 05.36	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	11.28.19 05.36	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	11.28.19 05.36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-135	11.28.19 05.36	
o-Terphenyl	84-15-1	120	%	70-135	11.28.19 05.36	

Certificate of Analytical Results 644665

LT Environmental, Inc., Arvada, CO

Mis Amigos Battery

Sample Id:	**PH01**	Matrix:	Soil	Date Received:	11.27.19 14.58
Lab Sample Id:	644665-001	Date Collected:	11.27.19 10.10	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	12.01.19 11.11	Basis:	Wet Weight
Seq Number:	3109041				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	12.02.19 01.26	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	12.02.19 01.26	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	12.02.19 01.26	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	12.02.19 01.26	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	12.02.19 01.26	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	12.02.19 01.26	U	1
Total BTEX		<0.00199	0.00199	mg/kg	12.02.19 01.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	121	%	70-130	12.02.19 01.26	
1,4-Difluorobenzene	540-36-3	102	%	70-130	12.02.19 01.26	

Certificate of Analytical Results 644665

LT Environmental, Inc., Arvada, CO

Mis Amigos Battery

Sample Id:	**PH01A**	Matrix:	Soil	Date Received:	11.27.19 14.58
Lab Sample Id:	644665-002	Date Collected:	11.27.19 10.12	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.30.19 17.00	Basis:	Wet Weight
Seq Number:	3109029				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.92	9.92	mg/kg	11.30.19 22.01	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	11.27.19 17.30	Basis:	Wet Weight
Seq Number:	3109061				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	11.28.19 05.55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	11.28.19 05.55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	11.28.19 05.55	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	11.28.19 05.55	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	11.28.19 05.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	11.28.19 05.55	
o-Terphenyl	84-15-1	125	%	70-135	11.28.19 05.55	

Certificate of Analytical Results 644665

LT Environmental, Inc., Arvada, CO

Mis Amigos Battery

Sample Id:	**PH01A**	Matrix:	Soil	Date Received:	11.27.19 14.58
Lab Sample Id:	644665-002	Date Collected:	11.27.19 10.12	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	12.01.19 11.11	Basis:	Wet Weight
Seq Number:	3109041				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.02.19 01.45	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.02.19 01.45	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.02.19 01.45	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	12.02.19 01.45	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.02.19 01.45	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	12.02.19 01.45	U	1
Total BTEX		<0.00200	0.00200	mg/kg	12.02.19 01.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	103	%	70-130	12.02.19 01.45	
4-Bromofluorobenzene	460-00-4	121	%	70-130	12.02.19 01.45	

Certificate of Analytical Results 644665

LT Environmental, Inc., Arvada, CO

Mis Amigos Battery

Sample Id:	**PH02**	Matrix:	Soil	Date Received:	11.27.19 14.58
Lab Sample Id:	644665-003	Date Collected:	11.27.19 10.24	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.30.19 17.00	Basis:	Wet Weight
Seq Number:	3109029				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.98	9.98	mg/kg	11.30.19 22.07	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	11.27.19 17.30	Basis:	Wet Weight
Seq Number:	3109061				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	11.28.19 05.55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	11.28.19 05.55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	11.28.19 05.55	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	11.28.19 05.55	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	11.28.19 05.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	120	%	70-135	11.28.19 05.55	
o-Terphenyl	84-15-1	127	%	70-135	11.28.19 05.55	

Certificate of Analytical Results 644665

LT Environmental, Inc., Arvada, CO

Mis Amigos Battery

Sample Id:	**PH02**	Matrix:	Soil	Date Received:	11.27.19 14.58
Lab Sample Id:	644665-003	Date Collected:	11.27.19 10.24	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.27.19 17.11	Basis:	Wet Weight
Seq Number:	3109038				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	11.28.19 21.03	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	11.28.19 21.03	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	11.28.19 21.03	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	11.28.19 21.03	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	11.28.19 21.03	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	11.28.19 21.03	U	1
Total BTEX		<0.00200	0.00200	mg/kg	11.28.19 21.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	101	%	70-130	11.28.19 21.03	
1,4-Difluorobenzene	540-36-3	85	%	70-130	11.28.19 21.03	

Certificate of Analytical Results 644665

LT Environmental, Inc., Arvada, CO

Mis Amigos Battery

Sample Id:	**PH02A**	Matrix:	Soil	Date Received:	11.27.19 14.58
Lab Sample Id:	644665-004	Date Collected:	11.27.19 10.25	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.30.19 17.00	Basis:	Wet Weight
Seq Number:	3109029				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<10.0	10.0	mg/kg	11.30.19 22.13	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	11.27.19 17.30	Basis:	Wet Weight
Seq Number:	3109061				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	11.28.19 06.15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	11.28.19 06.15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	11.28.19 06.15	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	11.28.19 06.15	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	11.28.19 06.15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	126	%	70-135	11.28.19 06.15	
o-Terphenyl	84-15-1	135	%	70-135	11.28.19 06.15	

Certificate of Analytical Results 644665

LT Environmental, Inc., Arvada, CO

Mis Amigos Battery

Sample Id:	**PH02A**	Matrix:	Soil	Date Received:	11.27.19 14.58
Lab Sample Id:	644665-004	Date Collected:	11.27.19 10.25	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.27.19 17.11	Basis:	Wet Weight
Seq Number:	3109038				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	11.28.19 21.22	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	11.28.19 21.22	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	11.28.19 21.22	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	11.28.19 21.22	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	11.28.19 21.22	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	11.28.19 21.22	U	1
Total BTEX		<0.00202	0.00202	mg/kg	11.28.19 21.22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	115	%	70-130	11.28.19 21.22	
1,4-Difluorobenzene	540-36-3	103	%	70-130	11.28.19 21.22	

Certificate of Analytical Results 644665

LT Environmental, Inc., Arvada, CO

Mis Amigos Battery

Sample Id:	**PH03**	Matrix:	Soil	Date Received:	11.27.19 14.58
Lab Sample Id:	644665-005	Date Collected:	11.27.19 10.27	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.30.19 17.00	Basis:	Wet Weight
Seq Number:	3109029				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<10.0	10.0	mg/kg	11.30.19 22.19	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	11.27.19 17.30	Basis:	Wet Weight
Seq Number:	3109061				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	11.28.19 06.15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	11.28.19 06.15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	11.28.19 06.15	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	11.28.19 06.15	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	11.28.19 06.15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	11.28.19 06.15	
o-Terphenyl	84-15-1	115	%	70-135	11.28.19 06.15	

Certificate of Analytical Results 644665

LT Environmental, Inc., Arvada, CO

Mis Amigos Battery

Sample Id:	**PH03**	Matrix:	Soil	Date Received:	11.27.19 14.58
Lab Sample Id:	644665-005	Date Collected:	11.27.19 10.27	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.27.19 17.11	Basis:	Wet Weight
Seq Number:	3109038				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	11.28.19 21.41	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	11.28.19 21.41	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	11.28.19 21.41	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	11.28.19 21.41	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	11.28.19 21.41	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	11.28.19 21.41	U	1
Total BTEX		<0.00202	0.00202	mg/kg	11.28.19 21.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	114	%	70-130	11.28.19 21.41	
1,4-Difluorobenzene	540-36-3	102	%	70-130	11.28.19 21.41	

Certificate of Analytical Results 644665

LT Environmental, Inc., Arvada, CO

Mis Amigos Battery

Sample Id:	**PH03A**	Matrix:	Soil	Date Received:	11.27.19 14.58
Lab Sample Id:	644665-006	Date Collected:	11.27.19 10.28	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.30.19 17.00	Basis:	Wet Weight
Seq Number:	3109029				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<10.1	10.1	mg/kg	11.30.19 22.25	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	11.27.19 17.30	Basis:	Wet Weight
Seq Number:	3109061				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	11.28.19 06.35	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	11.28.19 06.35	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	11.28.19 06.35	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	11.28.19 06.35	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	11.28.19 06.35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	11.28.19 06.35	
o-Terphenyl	84-15-1	116	%	70-135	11.28.19 06.35	

Certificate of Analytical Results 644665

LT Environmental, Inc., Arvada, CO

Mis Amigos Battery

Sample Id:	**PH03A**	Matrix:	Soil	Date Received:	11.27.19 14.58
Lab Sample Id:	644665-006	Date Collected:	11.27.19 10.28	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.27.19 17.11	Basis:	Wet Weight
Seq Number:	3109038				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	11.28.19 22.42	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	11.28.19 22.42	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	11.28.19 22.42	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	11.28.19 22.42	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	11.28.19 22.42	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	11.28.19 22.42	U	1
Total BTEX		<0.00200	0.00200	mg/kg	11.28.19 22.42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	95	%	70-130	11.28.19 22.42	
1,4-Difluorobenzene	540-36-3	104	%	70-130	11.28.19 22.42	

Certificate of Analytical Results 644665

LT Environmental, Inc., Arvada, CO

Mis Amigos Battery

Sample Id:	**PH04**	Matrix:	Soil	Date Received:	11.27.19 14.58
Lab Sample Id:	644665-007	Date Collected:	11.27.19 10.30	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.30.19 17.00	Basis:	Wet Weight
Seq Number:	3109029				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<10.2	10.2	mg/kg	11.30.19 22.43	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	11.27.19 17.30	Basis:	Wet Weight
Seq Number:	3109061				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	11.28.19 06.35	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	11.28.19 06.35	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	11.28.19 06.35	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	11.28.19 06.35	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	11.28.19 06.35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	11.28.19 06.35	
o-Terphenyl	84-15-1	116	%	70-135	11.28.19 06.35	

Certificate of Analytical Results 644665

LT Environmental, Inc., Arvada, CO

Mis Amigos Battery

Sample Id:	**PH04**	Matrix:	Soil	Date Received:	11.27.19 14.58
Lab Sample Id:	644665-007	Date Collected:	11.27.19 10.30	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.27.19 17.11	Basis:	Wet Weight
Seq Number:	3109038				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	11.28.19 23.04	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	11.28.19 23.04	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	11.28.19 23.04	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	11.28.19 23.04	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	11.28.19 23.04	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	11.28.19 23.04	U	1
Total BTEX		<0.00202	0.00202	mg/kg	11.28.19 23.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	103	%	70-130	11.28.19 23.04	
4-Bromofluorobenzene	460-00-4	98	%	70-130	11.28.19 23.04	

Certificate of Analytical Results 644665

LT Environmental, Inc., Arvada, CO

Mis Amigos Battery

Sample Id:	**PH04A**	Matrix:	Soil	Date Received:	11.27.19 14.58
Lab Sample Id:	644665-008	Date Collected:	11.27.19 10.31	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.30.19 17.00	Basis:	Wet Weight
Seq Number:	3109029				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<10.2	10.2	mg/kg	11.30.19 22.49	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	11.27.19 17.30	Basis:	Wet Weight
Seq Number:	3109061				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	11.28.19 06.54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	11.28.19 06.54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	11.28.19 06.54	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	11.28.19 06.54	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	11.28.19 06.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	11.28.19 06.54	
o-Terphenyl	84-15-1	117	%	70-135	11.28.19 06.54	

Certificate of Analytical Results 644665

LT Environmental, Inc., Arvada, CO

Mis Amigos Battery

Sample Id:	**PH04A**	Matrix:	Soil	Date Received:	11.27.19 14.58
Lab Sample Id:	644665-008	Date Collected:	11.27.19 10.31	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.27.19 17.11	Basis:	Wet Weight
Seq Number:	3109038				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	11.28.19 23.23	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	11.28.19 23.23	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	11.28.19 23.23	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	11.28.19 23.23	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	11.28.19 23.23	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	11.28.19 23.23	U	1
Total BTEX		<0.00201	0.00201	mg/kg	11.28.19 23.23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	91	%	70-130	11.28.19 23.23	
1,4-Difluorobenzene	540-36-3	84	%	70-130	11.28.19 23.23	

Certificate of Analytical Results 644665

LT Environmental, Inc., Arvada, CO

Mis Amigos Battery

Sample Id:	**PH05**	Matrix:	Soil	Date Received:	11.27.19 14.58
Lab Sample Id:	644665-009	Date Collected:	11.27.19 10.39	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.30.19 17.00	Basis:	Wet Weight
Seq Number:	3109029				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**101**	10.2	mg/kg	11.30.19 23.07		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	11.27.19 17.30	Basis:	Wet Weight
Seq Number:	3109061				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	11.28.19 07.14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	11.28.19 07.14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	11.28.19 07.14	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	11.28.19 07.14	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	11.28.19 07.14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	11.28.19 07.14	
o-Terphenyl	84-15-1	114	%	70-135	11.28.19 07.14	

Certificate of Analytical Results 644665

LT Environmental, Inc., Arvada, CO

Mis Amigos Battery

Sample Id:	**PH05**	Matrix:	Soil	Date Received:	11.27.19 14.58
Lab Sample Id:	644665-009	Date Collected:	11.27.19 10.39	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.27.19 17.11	Basis:	Wet Weight
Seq Number:	3109038				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	11.29.19 00.02	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	11.29.19 00.02	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	11.29.19 00.02	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	11.29.19 00.02	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	11.29.19 00.02	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	11.29.19 00.02	U	1
Total BTEX		<0.00202	0.00202	mg/kg	11.29.19 00.02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	98	%	70-130	11.29.19 00.02	
1,4-Difluorobenzene	540-36-3	92	%	70-130	11.29.19 00.02	

Certificate of Analytical Results 644665

LT Environmental, Inc., Arvada, CO

Mis Amigos Battery

Sample Id:	**PH05A**	Matrix:	Soil	Date Received:	11.27.19 14.58
Lab Sample Id:	644665-010	Date Collected:	11.27.19 10.40	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.30.19 17.00	Basis:	Wet Weight
Seq Number:	3109029				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**199**	10.0	mg/kg	11.30.19 23.13		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	11.27.19 17.30	Basis:	Wet Weight
Seq Number:	3109061				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	11.28.19 07.14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	11.28.19 07.14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	11.28.19 07.14	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	11.28.19 07.14	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	11.28.19 07.14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	11.28.19 07.14	
o-Terphenyl	84-15-1	115	%	70-135	11.28.19 07.14	

Certificate of Analytical Results 644665

LT Environmental, Inc., Arvada, CO

Mis Amigos Battery

Sample Id:	**PH05A**	Matrix:	Soil	Date Received:	11.27.19 14.58
Lab Sample Id:	644665-010	Date Collected:	11.27.19 10.40	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	12.01.19 11.11	Basis:	Wet Weight
Seq Number:	3109044				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.02.19 05.48	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.02.19 05.48	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.02.19 05.48	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	12.02.19 05.48	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.02.19 05.48	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	12.02.19 05.48	U	1
Total BTEX		<0.00200	0.00200	mg/kg	12.02.19 05.48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	70-130	12.02.19 05.48	
4-Bromofluorobenzene	460-00-4	123	%	70-130	12.02.19 05.48	

Certificate of Analytical Results 644665

LT Environmental, Inc., Arvada, CO

Mis Amigos Battery

Sample Id:	**PH06**	Matrix:	Soil	Date Received:	11.27.19 14.58
Lab Sample Id:	644665-011	Date Collected:	11.27.19 10.43	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.30.19 17.00	Basis:	Wet Weight
Seq Number:	3109029				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<10.1	10.1	mg/kg	11.30.19 23.19	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	11.27.19 17.30	Basis:	Wet Weight
Seq Number:	3109061				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	11.28.19 07.34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	11.28.19 07.34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	11.28.19 07.34	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	11.28.19 07.34	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	11.28.19 07.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	11.28.19 07.34	
o-Terphenyl	84-15-1	116	%	70-135	11.28.19 07.34	

Certificate of Analytical Results 644665

LT Environmental, Inc., Arvada, CO

Mis Amigos Battery

Sample Id:	**PH06**	Matrix:	Soil	Date Received:	11.27.19 14.58
Lab Sample Id:	644665-011	Date Collected:	11.27.19 10.43	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	12.01.19 11.11	Basis:	Wet Weight
Seq Number:	3109044				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	12.02.19 06.07	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	12.02.19 06.07	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	12.02.19 06.07	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	12.02.19 06.07	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	12.02.19 06.07	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	12.02.19 06.07	U	1
Total BTEX		<0.00198	0.00198	mg/kg	12.02.19 06.07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	103	%	70-130	12.02.19 06.07	
4-Bromofluorobenzene	460-00-4	121	%	70-130	12.02.19 06.07	

Certificate of Analytical Results 644665

LT Environmental, Inc., Arvada, CO

Mis Amigos Battery

Sample Id:	**PH06A**	Matrix:	Soil	Date Received:	11.27.19 14.58
Lab Sample Id:	644665-012	Date Collected:	11.27.19 10.44	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.30.19 17.00	Basis:	Wet Weight
Seq Number:	3109029				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<10.2	10.2	mg/kg	11.30.19 23.25	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	11.27.19 17.30	Basis:	Wet Weight
Seq Number:	3109061				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	11.28.19 07.34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	11.28.19 07.34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	11.28.19 07.34	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	11.28.19 07.34	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	11.28.19 07.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	11.28.19 07.34	
o-Terphenyl	84-15-1	117	%	70-135	11.28.19 07.34	

Certificate of Analytical Results 644665

LT Environmental, Inc., Arvada, CO

Mis Amigos Battery

Sample Id:	**PH06A**	Matrix:	Soil	Date Received:	11.27.19 14.58
Lab Sample Id:	644665-012	Date Collected:	11.27.19 10.44	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	12.01.19 11.11	Basis:	Wet Weight
Seq Number:	3109044				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	12.02.19 04.50	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	12.02.19 04.50	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	12.02.19 04.50	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	12.02.19 04.50	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	12.02.19 04.50	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	12.02.19 04.50	U	1
Total BTEX		<0.00202	0.00202	mg/kg	12.02.19 04.50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	112	%	70-130	12.02.19 04.50	
1,4-Difluorobenzene	540-36-3	100	%	70-130	12.02.19 04.50	

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 644665

LT Environmental, Inc.

Mis Amigos Battery

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3109029 — Matrix: Solid — Date Prep: 11.30.19
MB Sample Id: 7691387-1-BLK — LCS Sample Id: 7691387-1-BKS — LCSD Sample Id: 7691387-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	262	105	264	106	90-110	1	20	mg/kg	11.30.19 20:53	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3109029 — Matrix: Soil — Date Prep: 11.30.19
Parent Sample Id: 644662-007 — MS Sample Id: 644662-007 S — MSD Sample Id: 644662-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	786	200	967	91	946	80	90-110	2	20	mg/kg	11.30.19 21:10	X

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3109029 — Matrix: Soil — Date Prep: 11.30.19
Parent Sample Id: 644665-006 — MS Sample Id: 644665-006 S — MSD Sample Id: 644665-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	5.75	202	206	99	215	103	90-110	4	20	mg/kg	11.30.19 22:31	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3109061 — Matrix: Solid — Date Prep: 11.27.19
MB Sample Id: 7691374-1-BLK — LCS Sample Id: 7691374-1-BKS — LCSD Sample Id: 7691374-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1200	120	869	87	70-135	32	35	mg/kg	12.02.19 12:39	
Diesel Range Organics (DRO)	<50.0	1000	1340	134	1040	104	70-135	25	35	mg/kg	12.02.19 12:39	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	106		130		113		70-135	%	12.02.19 12:39
o-Terphenyl	113		131		119		70-135	%	12.02.19 12:39

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3109061 — Matrix: Solid — Date Prep: 11.27.19
MB Sample Id: 7691374-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	11.28.19 04:17	

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

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

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

QC Summary 644665

LT Environmental, Inc.

Mis Amigos Battery

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3109061 — Matrix: Soil — Date Prep: 11.27.19
Parent Sample Id: 644662-009 — MS Sample Id: 644662-009 S — MSD Sample Id: 644662-009 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)	<49.8	996	1060	106	959	96	70-135	10	35	mg/kg	12.02.19 11:35	
Diesel Range Organics (DRO)	218	996	1400	119	1090	88	70-135	25	35	mg/kg	12.02.19 11:35	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	133		130		70-135	%	12.02.19 11:35
o-Terphenyl	123		122		70-135	%	12.02.19 11:35

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3109038 — Matrix: Solid — Date Prep: 11.27.19
MB Sample Id: 7691380-1-BLK — LCS Sample Id: 7691380-1-BKS — LCSD Sample Id: 7691380-1-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	0.0773	77	0.0848	85	70-130	9	35	mg/kg	11.28.19 07:33	
Toluene	<0.00200	0.100	0.0791	79	0.0879	88	70-130	11	35	mg/kg	11.28.19 07:33	
Ethylbenzene	<0.00200	0.100	0.0771	77	0.0860	86	71-129	11	35	mg/kg	11.28.19 07:33	
m,p-Xylenes	<0.00400	0.200	0.165	83	0.184	92	70-135	11	35	mg/kg	11.28.19 07:33	
o-Xylene	<0.00200	0.100	0.0861	86	0.0963	96	71-133	11	35	mg/kg	11.28.19 07:33	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		99		101		70-130	%	11.28.19 07:33
4-Bromofluorobenzene	104		107		109		70-130	%	11.28.19 07:33

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3109041 — Matrix: Solid — Date Prep: 12.01.19
MB Sample Id: 7691381-1-BLK — LCS Sample Id: 7691381-1-BKS — LCSD Sample Id: 7691381-1-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	0.0895	90	70-130	2	35	mg/kg	12.01.19 17:15	
Toluene	<0.00200	0.100	0.0939	94	0.0918	92	70-130	2	35	mg/kg	12.01.19 17:15	
Ethylbenzene	<0.00200	0.100	0.0939	94	0.0915	92	71-129	3	35	mg/kg	12.01.19 17:15	
m,p-Xylenes	<0.00400	0.200	0.200	100	0.194	97	70-135	3	35	mg/kg	12.01.19 17:15	
o-Xylene	<0.00200	0.100	0.101	101	0.0983	98	71-133	3	35	mg/kg	12.01.19 17:15	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		102		101		70-130	%	12.01.19 17:15
4-Bromofluorobenzene	106		116		114		70-130	%	12.01.19 17:15

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 644665

LT Environmental, Inc.

Mis Amigos Battery

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3109044 — Matrix: Solid — Date Prep: 12.01.19
MB Sample Id: 7691382-1-BLK — LCS Sample Id: 7691382-1-BKS — LCSD Sample Id: 7691382-1-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	0.0835	84	0.0767	77	70-130	8	35	mg/kg	12.02.19 03:08	
Toluene	<0.00200	0.100	0.0854	85	0.0795	80	70-130	7	35	mg/kg	12.02.19 03:08	
Ethylbenzene	<0.00200	0.100	0.0845	85	0.0791	79	71-129	7	35	mg/kg	12.02.19 03:08	
m,p-Xylenes	<0.00400	0.200	0.178	89	0.168	84	70-135	6	35	mg/kg	12.02.19 03:08	
o-Xylene	<0.00200	0.100	0.0918	92	0.0862	86	71-133	6	35	mg/kg	12.02.19 03:08	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		100		97		70-130	%	12.02.19 03:08
4-Bromofluorobenzene	108		115		113		70-130	%	12.02.19 03:08

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3109038 — Matrix: Soil — Date Prep: 11.27.19
Parent Sample Id: 644618-013 — MS Sample Id: 644618-013 S — MSD Sample Id: 644618-013 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	0.0225	23	0.0619	61	70-130	93	35	mg/kg	11.28.19 18:05	XF
Toluene	<0.00200	0.100	0.0265	27	0.0628	62	70-130	81	35	mg/kg	11.28.19 18:05	XF
Ethylbenzene	<0.00200	0.100	0.0268	27	0.0600	59	71-129	76	35	mg/kg	11.28.19 18:05	XF
m,p-Xylenes	<0.00401	0.200	0.0587	29	0.125	62	70-135	72	35	mg/kg	11.28.19 18:05	XF
o-Xylene	<0.00200	0.100	0.0352	35	0.0691	68	71-133	65	35	mg/kg	11.28.19 18:05	XF

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		100		70-130	%	11.28.19 18:05
4-Bromofluorobenzene	116		113		70-130	%	11.28.19 18:05

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3109041 — Matrix: Soil — Date Prep: 12.01.19
Parent Sample Id: 644623-001 — MS Sample Id: 644623-001 S — MSD Sample Id: 644623-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00198	0.0992	0.0869	88	0.0827	83	70-130	5	35	mg/kg	12.01.19 17:54	
Toluene	<0.00198	0.0992	0.0875	88	0.0835	84	70-130	5	35	mg/kg	12.01.19 17:54	
Ethylbenzene	<0.00198	0.0992	0.0853	86	0.0814	82	71-129	5	35	mg/kg	12.01.19 17:54	
m,p-Xylenes	<0.00397	0.198	0.180	91	0.173	87	70-135	4	35	mg/kg	12.01.19 17:54	
o-Xylene	<0.00198	0.0992	0.0916	92	0.0881	89	71-133	4	35	mg/kg	12.01.19 17:54	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	105		104		70-130	%	12.01.19 17:54
4-Bromofluorobenzene	119		122		70-130	%	12.01.19 17:54

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 644665

LT Environmental, Inc.

Mis Amigos Battery

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

Seq Number: 3109044 Matrix: Soil Date Prep: 12.01.19

Parent Sample Id: 644665-012 MS Sample Id: 644665-012 S MSD Sample Id: 644665-012 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	0.0836	84	0.0754	75	70-130	10	35	mg/kg	12.02.19 03:46	
Toluene	<0.00200	0.100	0.0826	83	0.0745	75	70-130	10	35	mg/kg	12.02.19 03:46	
Ethylbenzene	<0.00200	0.100	0.0798	80	0.0720	72	71-129	10	35	mg/kg	12.02.19 03:46	
m,p-Xylenes	<0.00401	0.200	0.166	83	0.149	74	70-135	11	35	mg/kg	12.02.19 03:46	
o-Xylene	<0.00200	0.100	0.0856	86	0.0774	77	71-133	10	35	mg/kg	12.02.19 03:46	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		103		70-130	%	12.02.19 03:46
4-Bromofluorobenzene	119		121		70-130	%	12.02.19 03:46

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

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

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

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

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300, San Antonio, TX (210) 509-3334
Midland, TX (432) 704-5440, EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701
Atlanta, GA (770) 449-8800

Work Order No: 644665

www.xenco.com Page 1 of 2

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littrell
Company Name:	LT Environmental, Inc., Permian Office	Company Name:	XTO Energy, Inc.
Address:	3300 North A Street	Address:	3104 E Greene St
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(432) 236-3849	Email:	fsmith@ltenv.com, dmoir@ltenv.com

Work Order Comments

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

Project Name:	Mis Amigos Battery	Turn Around	
Project Number:	012919151	Routine:	☐
PO #:	IRP-5608	Rush:	2 days
Sampler's Name:	Fatima Smith	Due Date:	

SAMPLE RECEIPT			
Temperature (°C):	1.0	Temp Blank:	(Yes) No
Received Intact:	(Yes) No	Thermometer ID	T-NM-007
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes (No) N/A	Total Containers:	12

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
PH01	S	11/27/19	1010	0.5	1	X	X	X
PH01A			1012	2				
PH02			1024	0.5				
PH02A			1025	2				
PH03			1027	0.5				
PH03A			1028	2				
PH04			1030	0.5				
PH04A			1031	2				
PH05			1039	0.5				
PH05A			1040	2				

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	Fatima		11/27/19 1458	2		
3				4		
5				6		

Revised Date101419 Rev. 2019.1

Chain of Custody

Work Order No: 1044 LECO5

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, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701
Atlanta, GA (770) 449-8800

www.xenco.com

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littrell
Company Name:	LT Environmental, Inc., Permian Office	Company Name:	XTO Energy, Inc.
Address:	3300 North A Street	Address:	3104 E Greene St
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(432) 236-3849	Email:	fsmith@ltenv.com, dmoir@ltenv.com

Work Order Comments

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

Project Name:	Mis Amigos Battery	Turn Around	
Project Number:	012919151	Routine: ☐	
PO #:	IRP-5608	Rush: 2 days	
Sampler's Name:	Fatima Smith	Due Date:	

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)
PH06	S	11/27/19	0.5	1043	1	X	X	X
PH06A	S	11/27/19	2	1044	1	X	X	X

ANALYSIS REQUEST

Work Order Notes

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

Sample Comments

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

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			11/27/19 1458	2		
3				4		
5				6		

Revised Date101419 Rev. 2019.1

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 11/27/2019 02:58:00 PM

Work Order #: 644665

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

Temperature Measuring device used : T-NM-007

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

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

Analyst: PH Device/Lot#:

Checklist completed by: Elizabeth McClellan Date: 11/27/2019

Checklist reviewed by: Jessica Kramer Date: 11/27/2019