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	NAB1923244202
District RP	2RP-5589
Facility ID	fAB1902338252
Application ID	pAB1923243963

Release Notification BMDKL-190802-C-1410

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)* NAB1923244202
Contact mailing address 522 W. Mermod, Carlsbad, NM 88220	

Location of Release Source

Latitude 32.276963° Longitude -103.942717°

(NAD 83 in decimal degrees to 5 decimal places)

Site Name Remuda 100 Tank Battery	Site Type Bulk Storage and Separation Facility
Date Release Discovered 7/20/2019	API# *(if applicable)*** 30-015-44231 (Remuda N 25 St 902H nearest)

Unit Letter	Section	Township	Range	County
E	25	23S	29E	Eddy

** Tank Battery has existing facility
AB

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) 53.91	Volume Recovered (bbls) 3
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	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 level controller lost supply air causing the heater treater to overload and send oil to the compressor. A loose connection on the compressor allowed fluid to escape to the facility pad. A vacuum truck recovered free fluid. 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	NAB1923244202
District RP	2RP-5589
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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? An unauthorized release of a volume of 25 barrels or more

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
Notice provided by Amy Ruth to Mike Bratcher, Rob Hamlet, Victoria Venegas, and Jim Griswold (NMOCD), and Ryan Mann (SLO) on 7/20/2019 by email

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: 8/2/2019

email: Amy_Ruth@xtoenergy.com Telephone: 575-689-3380

OCD Only

Received by: Amalia Bustamante Date: 8/20/2019

Form C-141
Page 3

State of New Mexico
Oil Conservation Division

Incident ID	NAB1923244202
District RP	2RP-5589
Facility ID	fAB1902338252
Application ID	pAB1923243963

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 feet 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	NAB1923244202
District RP	2RP-5589
Facility ID	fAB1902338252
Application ID	pAB1923243963

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: 12/5/2019

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

OCD Only

Received by: Date:

Form C-141
Page 5

State of New Mexico
Oil Conservation Division

Incident ID	NAB1923244202
District RP	2RP-5589
Facility ID	fAB1902338252
Application ID	pAB1923243963

Remediation Plan

Remediation Plan Checklist: ***Each of the following items must be included in the plan.***

- ☐ Detailed description of proposed remediation technique
- ☐ Scaled sitemap with GPS coordinates showing delineation points
- ☐ Estimated volume of material to be remediated
- ☐ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☐ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: ***Each of the following items must be confirmed as part of any request for deferral of remediation.***

- ☒ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☒ Extents of contamination must be fully delineated.
- ☒ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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: 12/5/2019

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

OCD Only

Received by: _____ Date: _____

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: _____ Date: _____

LT Environmental, Inc.
3300 North "A" Street
Building 1, Unit 222
Midland, Texas 79705
432.704.5178

December 5, 2019

Mr. Mike Bratcher
New Mexico Oil Conservation Division
811 South First Street
Artesia, New Mexico 88210

RE: Deferral Request
Remuda 100 Tank Battery
Remediation Permit Number 2RP-5589
Eddy County, New Mexico

Dear Mr. Bratcher

LT Environmental, Inc. (LTE), on behalf of XTO Energy, Inc. (XTO), presents the following report detailing soil sampling and excavation activities at the Remuda 100 Tank Battery (Site) in Unit E, Section 25, Township 23 South, Range 29 East, in Eddy County, New Mexico (Figure 1). The purpose of the soil sampling and excavation activities was to address impacts to soil after a crude oil release at the Site.

On July 20, 2019, a level controller lost air supply, causing the heater-treater to overload and send oil to the compressor. A loose connection on the compressor allowed approximately 53.91 barrels (bbls) of crude oil to escape to the facility pad. A vacuum truck was able to recover approximately 3 bbls of free fluid. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form C-141 on August 2, 2019 and was assigned Remediation Permit (RP) Number 2RP-5589 (Attachment 1). Based on the excavation activities and results of the soil sampling events, XTO is describing remediation that has occurred and submitting a deferral request of final remediation.

BACKGROUND

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 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 United States Geological Survey (USGS) well 321717103561001 located approximately 4,497 feet northeast of the Site. The water well has a depth to groundwater of 50 feet bgs. The total depth of the water well was not available. Ground surface elevation at the water well location is 3,033 feet, which is 39 feet lower in elevation than the Site. The closest continuously-flowing water or significant watercourse to the Site is a dry wash located approximately 222 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, or church. The nearest wetland is less than 300 feet from the Site. 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. Based on these criteria, the following NMOCD Table 1 closure criteria were applied: 10 milligrams per kilogram (mg/kg) benzene; 50 mg/kg total benzene, toluene, ethylbenzene, and total xylenes (BTEX); 100 mg/kg total petroleum hydrocarbons (TPH); and 600 mg/kg chloride.

PRELIMINARY SOIL SAMPLING

On August 21, 2019, LTE personnel inspected the Site to evaluate the release extent. Surface hydrocarbon staining was observed in the release area. The release extent was mapped using a handheld Global Positing System (GPS) unit and is depicted on Figure 2. LTE personnel collected four preliminary soil samples (SS01 through SS04) within the release area from a depth of 0.5 feet bgs to assess the lateral extent of soil impacts. The soil samples were screened for volatile aromatic hydrocarbons and chlorides using a photo-ionization detector (PID) and Hach® chloride QuanTab® test strips. The soil samples were placed directly into pre-cleaned glass jars, labeled with location, date, time, sampler, and method of analysis, and immediately placed on ice. The samples were shipped to Xenco Laboratories (Xenco) in Midland, Texas, at 4 degrees Celsius (°C) under strict chain-of-custody (COC) procedures for analysis of BTEX by United States Environmental Protection Agency (EPA) Method 8021B, TPH-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-oil range organics (ORO) by EPA Method 8015M/D, and chloride by EPA Method 300.0. The soil sample locations are presented on Figure 2.

Laboratory analytical results indicated that TPH concentrations exceeded the NMOCD Table 1 Closure Criteria in preliminary soil samples SS01 through SS03; BTEX concentrations exceeded the NMOCD Table 1 Closure Criteria in preliminary soil sample SS01; and TPH concentrations exceeded the NMOCD Table 1 Closure Criteria in preliminary soil samples SS01 through SS04. Based on the laboratory analytical results, potholing was scheduled to delineate the lateral and vertical extent of impacted soil and direct excavation activities. Laboratory analytical results are presented on Figure 2 and summarized in Table 1, and the laboratory analytical report is included in Attachment 2.

DELINEATION ACTIVITIES

Between October 14 and October 16, 2019, LTE personnel returned to the Site to oversee potholing activities to delineate the lateral and vertical extent of impacted soil and to direct excavation activities. Boreholes BH01 through BH10 were advanced in and around the release area via hand auger to depths ranging from 2.5 feet to 5 feet bgs. Soil was field screened in the potholes using a PID and Hach® chloride QuanTab® test strips. Two delineation soil samples were collected for laboratory analysis from each borehole BH01 through BH10 from depths ranging from 1 foot to 5 feet bgs. The delineation soil samples were collected, handled, and analyzed as

described above and submitted to Xenco in Midland, Texas. The soil sample locations and depths are depicted on Figure 3 and soil sample logs are included in Attachment 3.

Laboratory analytical results indicated that TPH concentrations exceeded the NMOCD Table 1 Closure Criteria in delineation soil sample BH02 collected at a depth of 1-foot bgs. Laboratory analytical results indicated that BTEX, TPH, and chloride concentrations were compliant with the NMOCD Table 1 Closure Criteria in subsequent vertical delineation soil samples at a depth of 5 feet bgs. Laboratory analytical results indicated that BTEX, TPH, and chloride concentrations were compliant with the NMOCD Table 1 Closure Criteria in all delineation soil samples collected from boreholes BH01 and BH03 through BH10. Based on the laboratory analytical results, the lateral and vertical extent of impacted soil was defined. Laboratory analytical results are presented on Figure 3 and summarized in Table 1, and the laboratory analytical reports are included in Attachment 2.

EXCAVATION ACTIVITIES

Hydro-excavation activities were conducted between October 1 and October 4, 2019 and on October 7, 2019 in the areas around active production equipment. Hydro-excavation activities were conducted to the extent possible; however, aboveground piping, tight spacing between equipment, and high-pressure lines limited the lateral extent that was safe to complete. XTO safety policy restricts soil-disturbing activities to a 2-foot radius of any on-site production equipment and pipelines. This XTO safety policy is established to protect workers and reduce the likelihood of compromising the foundation of the production equipment or pipelines. This policy was enforced where impacted soil was identified within 2 feet of active production equipment or pipelines. Between October 14 and October 16, 2019, LTE personnel oversaw excavation of impacted soil with heavy equipment in areas outside of the active production equipment.

To direct all excavation activities, LTE screened soil samples using a PID and Hach® chloride QuanTab® test strips. Due to the presence of active production equipment and pipelines in the release area, impacted soil was excavated to the extent possible to a depth ranging from 1 foot to 7 feet bgs. Following removal of impacted soil, LTE collected 5-point composite soil samples every 200 square feet from the sidewalls and floor of the excavation. The 5-point composite samples were collected by depositing 5 aliquots of soil into a 1-gallon, resealable plastic bag, and homogenizing the samples by thoroughly mixing. Composite soil samples SW01 through SW07 were collected from the sidewalls of the excavation from depths ranging from 0 feet to 3 feet bgs and 0 feet to 7 feet bgs. Composite soil samples FS01 through FS14 were collected from the floor of the excavation from depths ranging from 1 foot to 7 feet bgs. No sidewall samples were collected in areas that were only 1 foot or less in depth. The excavation soil samples were collected, handled, and analyzed as described above and submitted to Xenco in Midland, Texas. The excavation soil sample locations are presented on Figure 4.

The excavation measured approximately 4,500 square feet in area. The horizontal extent of the excavation is presented on Figure 4. A total of approximately 700 cubic yards of impacted soil were removed from the excavation. The impacted soil was transported and properly disposed of at the Lea Land landfill facility located in Hobbs, New Mexico.

ANALYTICAL RESULTS

Laboratory analytical results indicated that preliminary soil samples SS01 through SS04 and delineation soil samples BH02 exceeded the NMOCD Table 1 Closure Criteria. Impacted soil was excavated to the furthest extent possible. Laboratory analytical results for excavation sidewall samples SW01, SW02, SW03, SW05, and SW07, and excavation floor samples FS03 through FS11 and FS13 through FS14, indicated that BTEX, GRO/DRO, TPH, and chloride concentrations were compliant with the NMOCD Table 1 Closure Criteria. Laboratory analytical results for excavation sidewall samples SW04 and SW06 and excavation floor samples FS01, FS02, and FS12 indicated that TPH concentrations exceeded the NMOCD Table 1 Closure Criteria.

Although hydro-excavation was conducted, further excavation of impacted soil beyond excavation sidewall samples SW04 and SW06, and excavation floor samples FS01, FS02, and FS12, was limited by the presence of active production equipment and pipelines. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Attachment 2.

DEFERRAL REQUEST

A total of 700 cubic yards of impacted soil were excavated from the Site; however, residual impacted soil was left in place for compliance with the XTO safety policy regarding soil-disturbing activities within 2 feet of active production equipment and pipelines. Prior to mechanical excavation, hydro-excavation was conducted to remove impacted soil to the extent possible in the active production area.

The exterior excavation sidewall samples are all compliant the NMOCD Table 1 Closure Criteria except for SW04 and SW06, which represent soil remaining in place around the northern side of the active storage tanks, flowlines, and production equipment. Excavation floor samples FS01, FS02, and FS12, and borehole sample BH02 exceeded the NMOCD Table 1 Closure Criteria for TPH; however, continued vertical excavation was limited by pipelines and production equipment in the space needed laterally to slope the excavation in a manner that would not compromise the integrity of the storage tanks. An active high-pressure pipeline runs north-south through the middle of the excavated area, and storage tanks and production equipment are located on the southern side of the excavation. The impacted soil remaining in place around and beneath the storage tanks is delineated vertically and laterally by delineation soil samples collected from boreholes BH01 through BH10 and excavation soil samples SW01, SW02, SW03, SW05 and SW07. An estimated 370 cubic yards of impacted soil remain in place between 0 feet and 5 feet bgs,

assuming a maximum 5-foot depth based on borehole soil samples BH01A through BH10A collected from depths ranging from 2.5 feet to 5 feet bgs that were compliant with the NMOCD Table 1 Closure Criteria.

XTO requests to backfill the existing excavation and complete remediation during any future major construction/alteration or final plugging and abandonment, whichever occurs first. Due to the elevated TPH concentrations at FS01 and FS02, Micro-blaze® will be applied to the excavation prior to backfill. LTE and XTO do not believe deferment will result in imminent risk to human health, the environment, or groundwater. XTO requests deferral of final remediation for RP Number 2RP-5589. Upon approval of this deferral request, XTO will backfill the excavation with material purchased locally and recontour the Site to match pre-existing Site conditions. An updated NMOCD Form C-141 is included as Attachment 1. A photographic log of the Site is included as Attachment 4.

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

Sincerely,
LT ENVIRONMENTAL, INC.

Allison S. White, P.E.
Project Engineer

Ashley L. Ager, P.G.
Senior Geologist

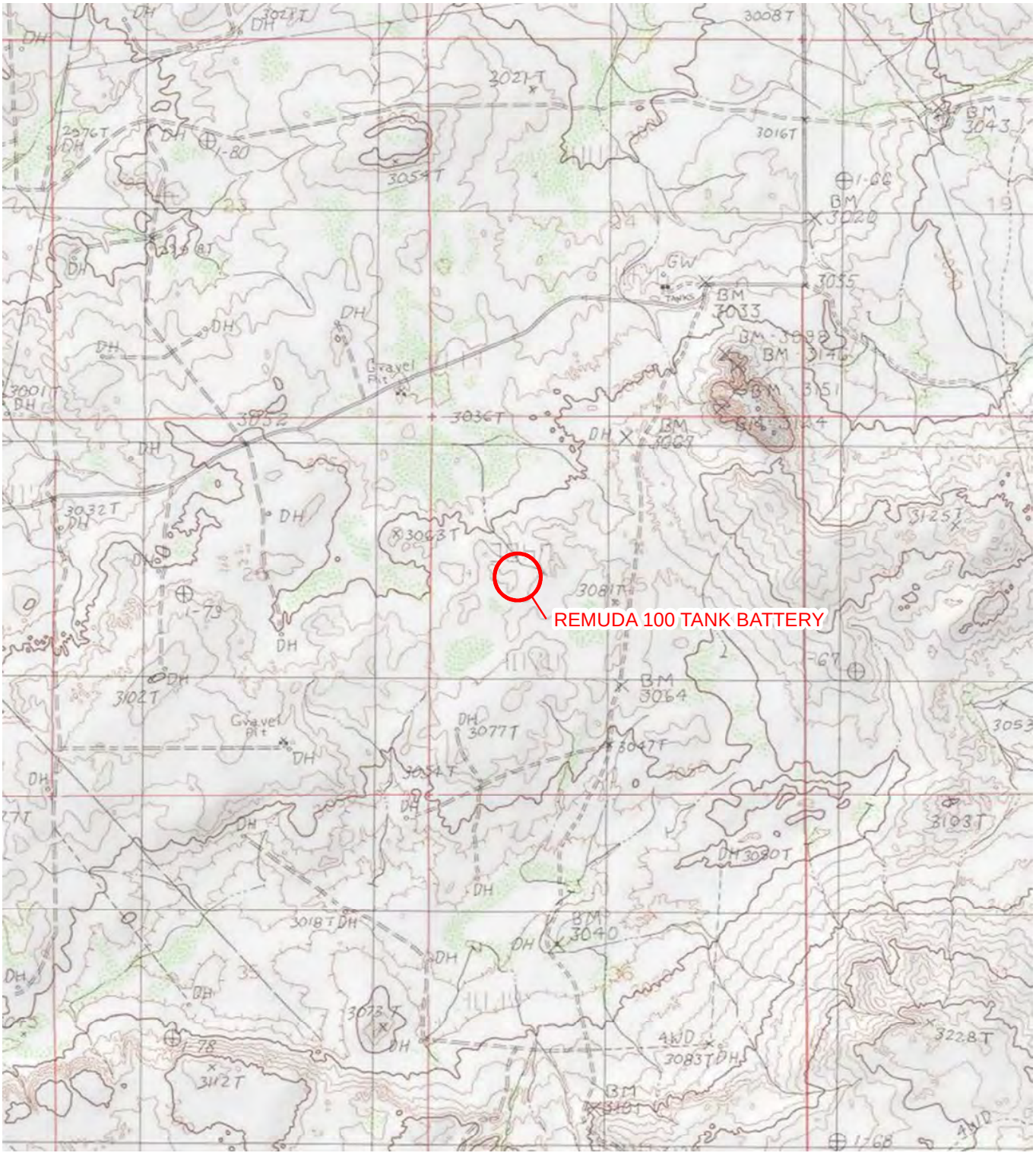
cc: Kyle Littrell, XTO
Robert Hamlet, NMOCD
Victoria Venegas, NMOCD
Ryann Mann, State Land Office

Appendices:

Figure 1	Site Location Map
Figure 2	Preliminary Soil Sample Locations
Figure 3	Delineation Soil Sample Locations
Figure 4	Excavation Soil Sample Locations
Table 1	Soil Analytical Results

Attachment 1 Initial/Final NMOCD Form C-141 (2RP-5589)
Attachment 2 Laboratory Analytical Reports
Attachment 3 Soil Sample Logs
Attachment 4 Photographic Log

FIGURES



LEGEND

SITE LOCATION

IMAGE COURTESY OF ESRI/USGS

0 2,000 4,000

Feet

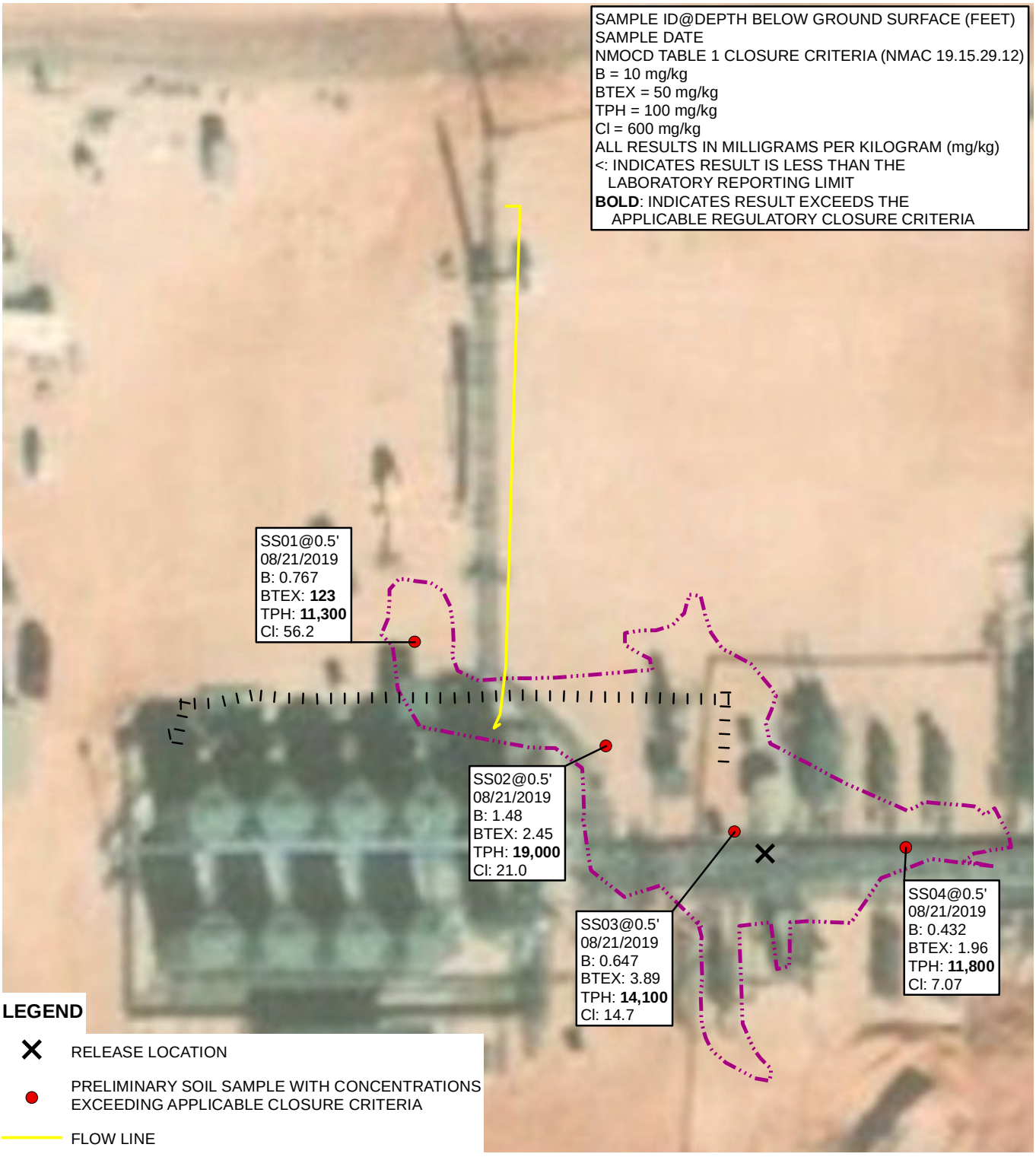
N

NEW MEXICO

NOTE: REMEDIATION PERMIT NUMBER 2RP-5589

FIGURE 1
SITE LOCATION MAP
REMUDA 100 TANK BATTERY
UNIT E SEC 25 T23S R29E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

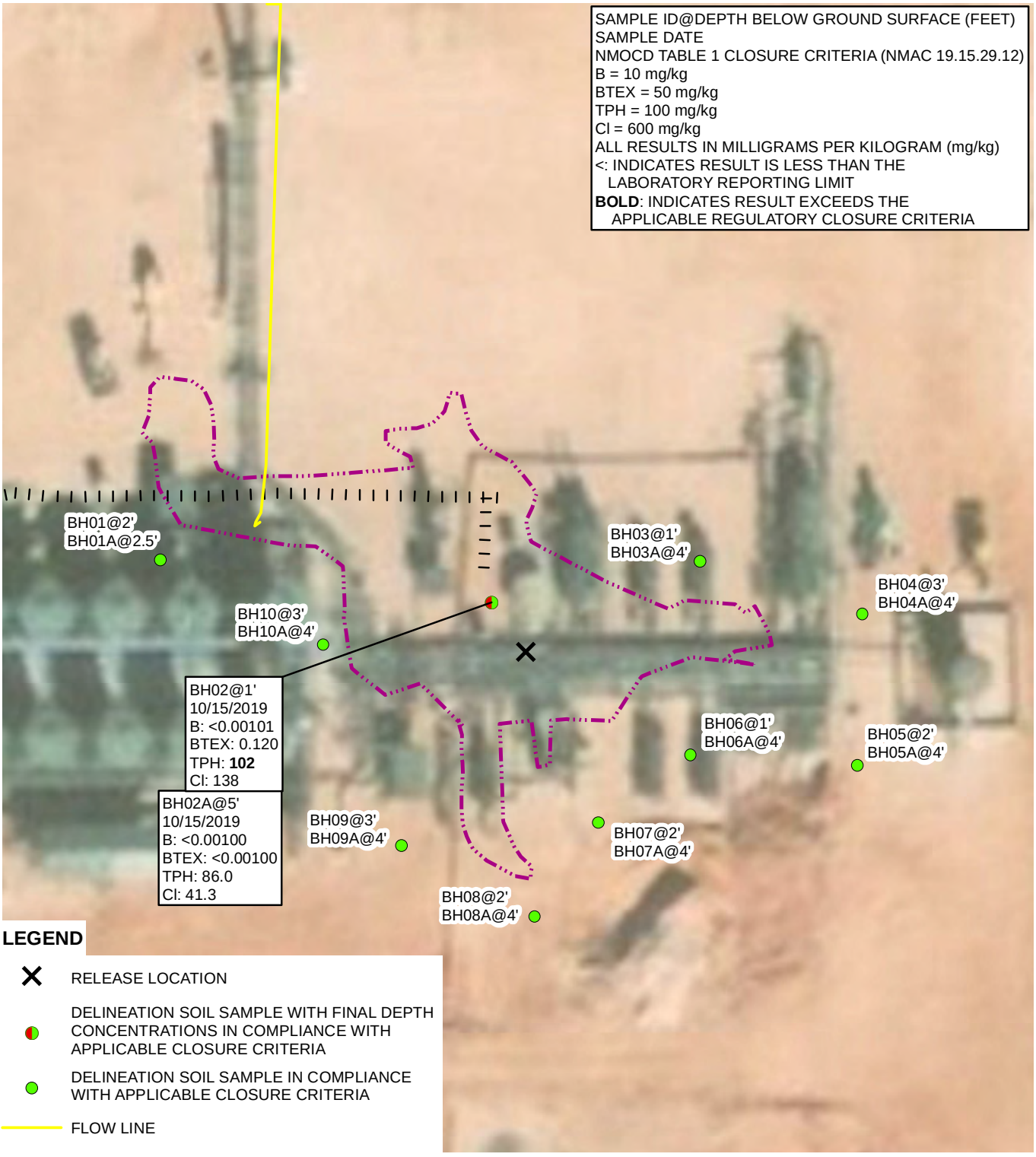
P:\XTO Energy\GIS\MXD\012919174_REMUDA 100 BATTERY\012919174_FIG01_SL_5589.mxd



B: BENZENE
BTEX: TOTAL BENZENE, TOLUENE, ETHYLBENZENE, AND TOTAL XYLENES
TPH: TOTAL PETROLEUM HYDROCARBONS
Cl: CHLORIDE
NMAC: NEW MEXICO ADMINISTRATIVE CODE
NMOCD: NEW MEXICO OIL CONSERVATION DIVISION
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)
NOTE: REMEDIATION PERMIT NUMBER 2RP-5589

FIGURE 2
PRELIMINARY SOIL SAMPLE LOCATIONS
REMUDA 100 TANK BATTERY
UNIT E SEC 25 T23S R29E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

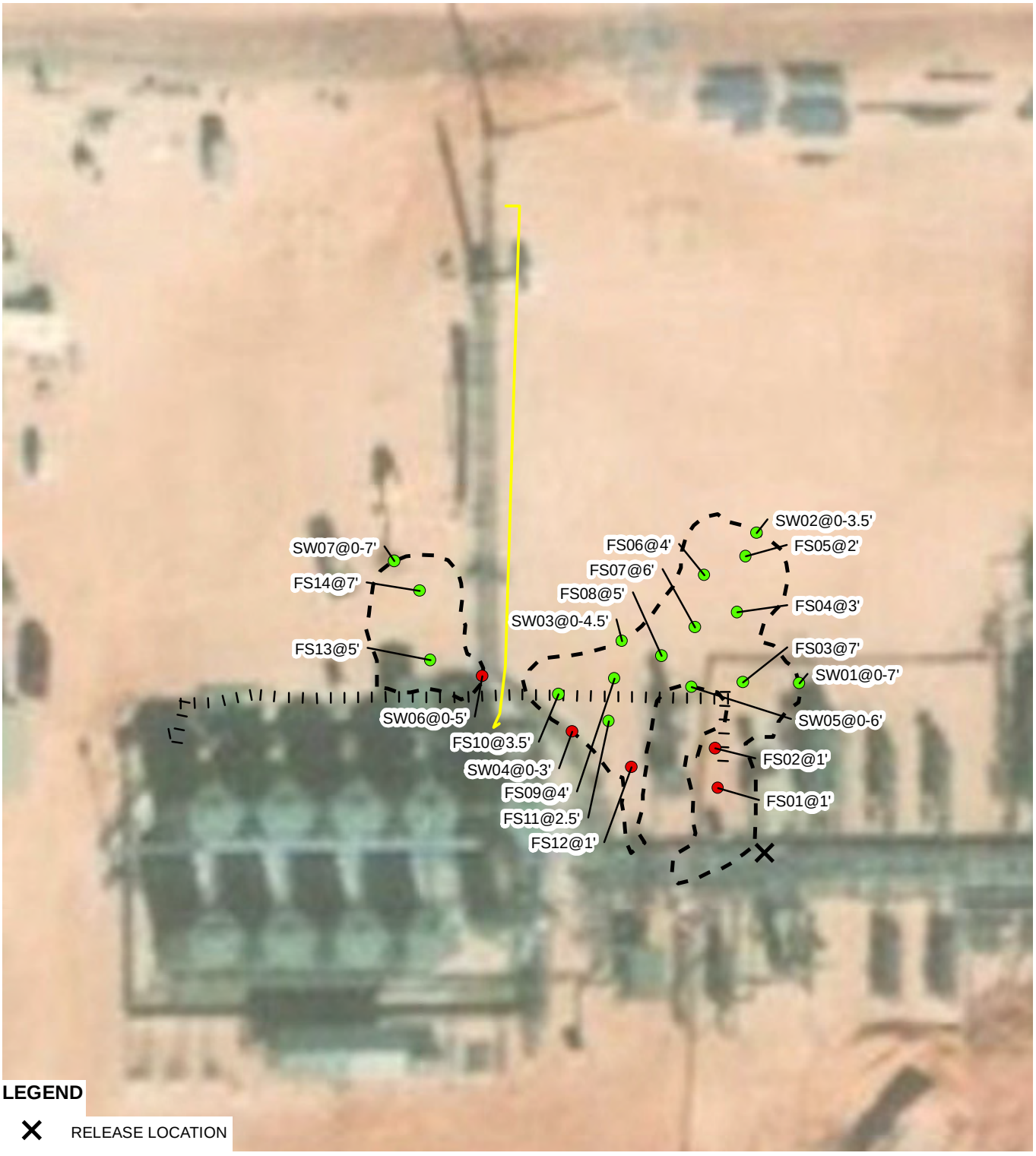
P:\XTO Energy\GIS\MXD\012919174_REMUDA 100 BATTERY\012919174_FIG02_PRELIMINARY_5589.mxd



B: BENZENE
BTEX: TOTAL BENZENE, TOLUENE, ETHYLBENZENE, AND TOTAL XYLENES
TPH: TOTAL PETROLEUM HYDROCARBONS
Cl: CHLORIDE
NMAC: NEW MEXICO ADMINISTRATIVE CODE
NMOCD: NEW MEXICO OIL CONSERVATION DIVISION
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)
NOTE: REMEDIATION PERMIT NUMBER 2RP-5589

FIGURE 3
DELINEATION SOIL SAMPLE LOCATIONS
REMUDA 100 TANK BATTERY
UNIT E SEC 25 T23S R29E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012919174_REMUDA 100 BATTERY\012919174_FIG03_DELINEATION_5589_1.mxd



LEGEND

- RELEASE LOCATION
- EXCAVATION SOIL SAMPLE WITH CONCENTRATIONS EXCEEDING APPLICABLE CLOSURE CRITERIA
- EXCAVATION SOIL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- FLOW LINE
- 8' POLY BARRIER
- EXCAVATION EXTENT

SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)
NOTE: REMEDIATION PERMIT NUMBER 2RP-5589

IMAGE COURTESY OF ESRI

0 40 80
Feet

N

FIGURE 4
EXCAVATION SOIL SAMPLE LOCATIONS
REMUDA 100 TANK BATTERY
UNIT E SEC 25 T23S R29E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012919174_REMUDA 100 BATTERY\012919174_FIG04_EXCAVATION_5589.mxd

TABLES

TABLE 1
SOIL ANALYTICAL RESULTS

REMUDA 100 BATTERY
REMEDIATION PERMIT NUMBER 2RP-5589
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

Sample Name	Sample Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
SS01	0.5	08/21/2019	0.767	27.6	3.27	91.5	**123**	3,510	7,180	587	10,700	**11,300**	56.2
SS02	0.5	08/21/2019	1.48	0.479	<0.201	0.490	2.45	5,420	12,300	1,270	17,700	**19,000**	21.0
SS03	0.5	08/21/2019	0.647	0.746	2.50	<0.200	3.89	4,010	9,160	957	13,200	**14,100**	14.7
SS04	0.5	08/21/2019	0.432	0.913	0.616	<0.198	1.96	3,120	7,860	786	11,000	**11,800**	7.07
BH01	2	10/15/2019	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	<50.0	<50.0	<50.0	<50.0	<50.0	166
BH01A	2.5	10/15/2019	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	<50.2	<50.2	<50.2	<50.2	<50.2	251
BH02	1	10/15/2019	<0.00101	0.00232	0.0160	0.102	0.120	<50.2	102	<50.2	102	**102**	138
BH02A	5	10/15/2019	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<50.2	86.0	<50.2	86.0	86.0	41.3
BH03	1	10/15/2019	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<50.1	<50.1	<50.1	<50.1	<50.1	49.4
BH03A	4	10/15/2019	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<50.0	<50.0	<50.0	<50.0	<50.0	16.3
BH04	3	10/15/2019	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<50.0	<50.0	<50.0	<50.0	<50.0	42.0
BH04A	4	10/15/2019	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<50.1	<50.1	<50.1	<50.1	<50.1	95.7
BH05	2	10/15/2019	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	<50.2	<50.2	<50.2	<50.2	<50.2	189
BH05A	4	10/15/2019	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	<50.3	<50.3	<50.3	<50.3	<50.3	307
BH06	1	10/15/2019	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	<50.2	<50.2	<50.2	<50.2	<50.2	76.8
BH06A	4	10/15/2019	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	<50.0	<50.0	<50.0	<50.0	<50.0	153
BH07	2	10/16/2019	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<50.2	<50.2	<50.2	<50.2	<50.2	221
BH07A	4	10/16/2019	<0.000992	<0.000992	<0.000992	<0.000992	<0.000992	<50.2	<50.2	<50.2	<50.2	<50.2	263
BH08	2	10/16/2019	<0.000998	<0.000998	<0.000998	<0.000998	<0.000998	<50.0	<50.0	<50.0	<50.0	<50.0	96.9
BH08A	4	10/16/2019	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<50.0	<50.0	<50.0	<50.0	<50.0	129
BH09	3	10/16/2019	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<50.2	<50.2	<50.2	<50.2	<50.2	343
BH09A	4	10/16/2019	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	<50.1	<50.1	<50.1	<50.1	<50.1	365
BH10	3	10/16/2019	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	<50.3	<50.3	<50.3	<50.3	<50.3	**615**
BH10A	4	10/16/2019	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	<50.2	<50.2	<50.2	<50.2	<50.2	437
FS01	1	10/16/2019	0.00260	0.243	0.251	20.4	20.9	1,320	2,840	206	4,160	**4,370**	85.6
FS02	1	10/16/2019	0.00434	0.167	0.251	12.7	13.1	448	1,980	149	2,430	**2,580**	140
NMOCD Table 1 Closure Criteria			**10**	NE	NE	NE	**50**	NE	NE	NE	NE	**100**	**600**

TABLE 1
SOIL ANALYTICAL RESULTS

REMUDA 100 BATTERY
REMEDIATION PERMIT NUMBER 2RP-5589
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

Sample Name	Sample Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
FS03	7	10/16/2019	<0.00100	0.00145	<0.00100	0.00582	0.00727	<50.3	<50.3	<50.3	<50.3	<50.3	368
FS04	3	10/16/2019	<0.000996	<0.000996	<0.000996	<0.000996	<0.000996	<50.1	54.4	<50.1	54.4	54.4	66.7
FS05	2	10/16/2019	<0.00101	<0.00101	<0.00101	0.00355	0.00355	<50.1	<50.1	<50.1	<50.1	<50.1	124
FS06	4	10/16/2019	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<50.1	<50.1	<50.1	<50.1	<50.1	130
FS07	6	10/16/2019	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	<50.3	<50.3	<50.3	<50.3	<50.3	163
FS08	5	10/16/2019	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	<50.2	<50.2	<50.2	<50.2	<50.2	244
FS09	4	10/16/2019	<0.000994	<0.000994	<0.000994	<0.000994	<0.000994	<49.8	<49.8	<49.8	<49.8	<49.8	310
FS10	3.5	10/16/2019	<0.000994	<0.000994	<0.000994	<0.000994	<0.000994	<50.1	<50.1	<50.1	<50.1	<50.1	227
FS11	2.5	10/16/2019	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<49.8	<49.8	<49.8	<49.8	<49.8	69.2
FS12	1	10/16/2019	<0.00101	0.00115	0.00712	0.0425	0.0508	<50.1	767	77.1	767	**844**	70.9
FS13	5	10/16/2019	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<50.1	<50.1	<50.1	<50.1	<50.1	47.6
FS14	7	10/16/2019	<0.000998	<0.000998	<0.000998	<0.000998	<0.000998	<49.9	<49.9	<49.9	<49.9	<49.9	96.3
SW01	0 - 7	10/16/2019	<0.000994	<0.000994	<0.000994	<0.000994	<0.000994	<49.8	<49.8	<49.8	<49.8	<49.8	55.7
SW02	0 - 3.5	10/16/2019	<0.000986	<0.000986	<0.000986	<0.000986	<0.000986	<50.3	<50.3	<50.3	<50.3	<50.3	16.7
SW03	0 - 4.5	10/16/2019	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<50.3	<50.3	<50.3	<50.3	<50.3	226
SW04	0 - 3	10/16/2019	<0.000998	<0.000998	<0.000998	0.00412	0.00412	<49.7	224	<49.7	224	**224**	194
SW05	0 - 6	10/16/2019	<0.000988	<0.000988	<0.000988	<0.000988	<0.000988	<49.9	<49.9	<49.9	<49.9	<49.9	70.5
SW06	0 - 5	10/16/2019	<0.000998	<0.000998	0.00261	0.0211	0.0238	<49.8	234	<49.8	234	**234**	431
SW07	0 - 7	10/16/2019	<0.000998	<0.000998	<0.000998	<0.000998	<0.000998	<50.1	50.5	<50.1	50.5	50.5	550
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
MRO - motor oil range organics
NMAC - New Mexico Administrative Code
NMOCD - New Mexico Oil Conservation Division
NE - not established
TPH - total petroleum hydrocarbons
Bold - indicates result exceeds the applicable regulatory standard
< - indicates result is below laboratory reporting limits
Table 1 - closure criteria for soils impacted by a release per NMAC 19.15.29 August 2018

ATTACHMENT 1: INITIAL/FINAL NMOCD FORM C-141 (2RP-5589)

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	NAB1923244202
District RP	2RP-5589
Facility ID	fAB1902338252
Application ID	pAB1923243963

Release Notification BMDKL-190802-C-1410

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)* NAB1923244202
Contact mailing address 522 W. Mermod, Carlsbad, NM 88220	

Location of Release Source

Latitude 32.276963° Longitude -103.942717°

(NAD 83 in decimal degrees to 5 decimal places)

Site Name Remuda 100 Tank Battery	Site Type Bulk Storage and Separation Facility
Date Release Discovered 7/20/2019	API# *(if applicable)*** 30-015-44231 (Remuda N 25 St 902H nearest)

Unit Letter	Section	Township	Range	County
E	25	23S	29E	Eddy

** Tank Battery has existing facility
AB

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) 53.91	Volume Recovered (bbls) 3
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	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 level controller lost supply air causing the heater treater to overload and send oil to the compressor. A loose connection on the compressor allowed fluid to escape to the facility pad. A vacuum truck recovered free fluid. 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	NAB1923244202
District RP	2RP-5589
Facility ID	fAB1902338252
Application ID	pAB1923243963

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? An unauthorized release of a volume of 25 barrels or more
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Notice provided by Amy Ruth to Mike Bratcher, Rob Hamlet, Victoria Venegas, and Jim Griswold (NMOCD), and Ryan Mann (SLO) on 7/20/2019 by email	

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: 8/2/2019

email: Amy_Ruth@xtoenergy.com Telephone: 575-689-3380

OCD Only

Received by: Amalia Bustamante Date: 8/20/2019

Form C-141
Page 3

State of New Mexico
Oil Conservation Division

Incident ID	NAB1923244202
District RP	2RP-5589
Facility ID	fAB1902338252
Application ID	pAB1923243963

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 feet 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	NAB1923244202
District RP	2RP-5589
Facility ID	fAB1902338252
Application ID	pAB1923243963

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: 12/5/2019

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

OCD Only

Received by: Cristina Eads Date: 02/17/2020

Form C-141
Page 5

State of New Mexico
Oil Conservation Division

Incident ID	NAB1923244202
District RP	2RP-5589
Facility ID	fAB1902338252
Application ID	pAB1923243963

Remediation Plan

Remediation Plan Checklist: ***Each of the following items must be included in the plan.***

- ☐ Detailed description of proposed remediation technique
- ☐ Scaled sitemap with GPS coordinates showing delineation points
- ☐ Estimated volume of material to be remediated
- ☐ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☐ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: ***Each of the following items must be confirmed as part of any request for deferral of remediation.***

- ☒ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☒ Extents of contamination must be fully delineated.
- ☒ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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: 12/5/2019

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

OCD Only

Received by: Cristina Eads Date: 02/17/2020

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☒ Deferral Approved

Signature: Cristina Eads Date: 02/17/2020

ATTACHMENT 2: LABORATORY ANALYTICAL REPORTS

Analytical Report 634743

for

LT Environmental, Inc.

Project Manager: Dan Moir

Remuda 100 Battery

2RP-5589

28-AUG-19

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-29), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142), North Carolina (681)

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)

28-AUG-19

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

Reference: XENCO Report No(s): **634743**
Remuda 100 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) 634743. 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. 634743 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 634743

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS01	S	08-21-19 10:20	0.5 ft	634743-001
SS02	S	08-21-19 10:25	0.5 ft	634743-002
SS03	S	08-21-19 10:30	0.5 ft	634743-003
SS04	S	08-21-19 10:35	0.5 ft	634743-004

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: Remuda 100 Battery

Project ID: *2RP-5589*
Work Order Number(s): *634743*

Report Date: *28-AUG-19*
Date Received: *08/21/2019*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3099503 BTEX by EPA 8021B
Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected;
Samples affected are: 634743-001,634743-002,634743-004,634743-003.
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3099533 TPH by SW8015 Mod
Lab Sample ID 634743-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Diesel Range Organics (DRO), Gasoline Range Hydrocarbons (GRO) recovered above QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 634743-001, -002, -003, -004.
The Laboratory Control Sample for Gasoline Range Hydrocarbons (GRO), Diesel Range Organics (DRO) is within laboratory Control Limits, therefore the data was accepted.

Certificate of Analysis Summary 634743

LT Environmental, Inc., Arvada, CO

Project Name: Remuda 100 Battery

Project Id: 2RP-5589
Contact: Dan Moir
Project Location:

Date Received in Lab: Wed Aug-21-19 02:09 pm
Report Date: 28-AUG-19
Project Manager: Jessica Kramer

Analysis Requested											
	Lab Id:	634743-001		634743-002		634743-003		634743-004			
	Field Id:	SS01		SS02		SS03		SS04			
	Depth:	0.5- ft		0.5- ft		0.5- ft		0.5- ft			
	Matrix:	SOIL		SOIL		SOIL		SOIL			
	Sampled:	Aug-21-19 10:20		Aug-21-19 10:25		Aug-21-19 10:30		Aug-21-19 10:35			
BTEX by EPA 8021B SUB: T104704400-18-16	***Extracted:***	Aug-22-19 13:30		Aug-22-19 13:30		Aug-22-19 13:30		Aug-22-19 13:30			
	Analyzed:	Aug-22-19 17:56		Aug-22-19 18:16		Aug-22-19 18:37		Aug-22-19 18:57			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Benzene		0.767	0.0202	1.48	0.0201	0.647	0.0200	0.432	0.0198		
Toluene		27.6 D	0.202	0.479	0.0201	0.746	0.0200	0.913	0.0198		
Ethylbenzene		3.27	0.0202	<0.201	0.201	2.50	0.0200	0.616	0.0198		
m,p-Xylenes		68.2 D	0.403	0.490 D	0.402	<0.399	0.399	<0.397	0.397		
o-Xylene		23.3 D	0.202	<0.201	0.201	<0.200	0.200	<0.198	0.198		
Total Xylenes		91.5	0.202	0.490	0.201	<0.200	0.200	<0.198	0.198		
Total BTEX		123	0.0202	2.45	0.0201	3.89	0.0200	1.96	0.0198		
Chloride by EPA 300 SUB: T104704400-18-16	***Extracted:***	Aug-22-19 15:00		Aug-22-19 15:00		Aug-22-19 15:00		Aug-22-19 15:00			
	Analyzed:	Aug-22-19 15:43		Aug-22-19 16:04		Aug-22-19 16:11		Aug-22-19 16:17			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Chloride		56.2	4.97	21.0	4.95	14.7	4.99	7.07	4.98		
TPH by SW8015 Mod SUB: T104704400-18-16	***Extracted:***	Aug-23-19 09:00		Aug-23-19 09:00		Aug-23-19 09:00		Aug-23-19 09:00			
	Analyzed:	Aug-23-19 13:33		Aug-24-19 14:56		Aug-24-19 15:15		Aug-23-19 15:09			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Gasoline Range Hydrocarbons (GRO)		3510	24.9	5420	125	4010	125	3120	25.0		
Diesel Range Organics (DRO)		7180	24.9	12300	125	9160	125	7860	25.0		
Motor Oil Range Hydrocarbons (MRO)		587	24.9	1270	125	957	125	786	25.0		
Total TPH		11300	24.9	19000	125	14100	125	11800	25.0		
Total GRO-DRO		10700	24.9	17700	125	13200	125	11000	25.0		

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

Jessica Kramer
Project Assistant

Certificate of Analytical Results 634743

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**SS01**	Matrix:	Soil	Date Received:	08.21.19 14.09
Lab Sample Id:	634743-001	Date Collected:	08.21.19 10.20	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	08.22.19 15.00	Basis:	Wet Weight
Seq Number:	3099370			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**56.2**	4.97	mg/kg	08.22.19 15.43		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	08.23.19 09.00	Basis:	Wet Weight
Seq Number:	3099533			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**3510**	24.9	mg/kg	08.23.19 13.33		1
Diesel Range Organics (DRO)	C10C28DRO	**7180**	24.9	mg/kg	08.23.19 13.33		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**587**	24.9	mg/kg	08.23.19 13.33		1
Total TPH	PHC635	**11300**	24.9	mg/kg	08.23.19 13.33		1
Total GRO-DRO	PHC628	**10700**	24.9	mg/kg	08.23.19 13.33		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	08.23.19 13.33	
o-Terphenyl	84-15-1	120	%	70-135	08.23.19 13.33	

Certificate of Analytical Results 634743

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**SS01**	Matrix:	Soil	Date Received:	08.21.19 14.09
Lab Sample Id:	634743-001	Date Collected:	08.21.19 10.20	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	08.22.19 13.30	Basis:	Wet Weight
Seq Number:	3099503			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	**0.767**	0.0202	mg/kg	08.22.19 17.56		10
Toluene	108-88-3	**27.6**	0.202	mg/kg	08.26.19 14.32	D	100
Ethylbenzene	100-41-4	**3.27**	0.0202	mg/kg	08.22.19 17.56		10
m,p-Xylenes	179601-23-1	**68.2**	0.403	mg/kg	08.26.19 14.32	D	100
o-Xylene	95-47-6	**23.3**	0.202	mg/kg	08.26.19 14.32	D	100
Total Xylenes	1330-20-7	**91.5**	0.202	mg/kg	08.26.19 14.32		100
Total BTEX		**123**	0.0202	mg/kg	08.26.19 14.32		100

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	300	%	70-130	08.22.19 17.56	**
1,4-Difluorobenzene	540-36-3	107	%	70-130	08.22.19 17.56	

Certificate of Analytical Results 634743

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**SS02**	Matrix:	Soil	Date Received:	08.21.19 14.09
Lab Sample Id:	634743-002	Date Collected:	08.21.19 10.25	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	08.22.19 15.00	Basis:	Wet Weight
Seq Number:	3099370			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**21.0**	4.95	mg/kg	08.22.19 16.04		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	08.23.19 09.00	Basis:	Wet Weight
Seq Number:	3099533			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**5420**	125	mg/kg	08.24.19 14.56		5
Diesel Range Organics (DRO)	C10C28DRO	**12300**	125	mg/kg	08.24.19 14.56		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**1270**	125	mg/kg	08.24.19 14.56		5
Total TPH	PHC635	**19000**	125	mg/kg	08.24.19 14.56		5
Total GRO-DRO	PHC628	**17700**	125	mg/kg	08.24.19 14.56		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	126	%	70-135	08.24.19 14.56	
o-Terphenyl	84-15-1	97	%	70-135	08.24.19 14.56	

Certificate of Analytical Results 634743

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**SS02**	Matrix:	Soil	Date Received:	08.21.19 14.09
Lab Sample Id:	634743-002	Date Collected:	08.21.19 10.25	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	08.22.19 13.30	Basis:	Wet Weight
Seq Number:	3099503			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	**1.48**	0.0201	mg/kg	08.22.19 18.16		10
Toluene	108-88-3	**0.479**	0.0201	mg/kg	08.22.19 18.16		10
Ethylbenzene	100-41-4	<0.201	0.201	mg/kg	08.26.19 14.52	UD	100
m,p-Xylenes	179601-23-1	**0.490**	0.402	mg/kg	08.26.19 14.52	D	100
o-Xylene	95-47-6	<0.201	0.201	mg/kg	08.26.19 14.52	UD	100
Total Xylenes	1330-20-7	**0.490**	0.201	mg/kg	08.26.19 14.52		100
Total BTEX		**2.45**	0.0201	mg/kg	08.26.19 14.52		100

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	323	%	70-130	08.22.19 18.16	**
1,4-Difluorobenzene	540-36-3	84	%	70-130	08.22.19 18.16	

Certificate of Analytical Results 634743

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**SS03**	Matrix:	Soil	Date Received:	08.21.19 14.09
Lab Sample Id:	634743-003	Date Collected:	08.21.19 10.30	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	08.22.19 15.00	Basis:	Wet Weight
Seq Number:	3099370			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**14.7**	4.99	mg/kg	08.22.19 16.11		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	08.23.19 09.00	Basis:	Wet Weight
Seq Number:	3099533			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**4010**	125	mg/kg	08.24.19 15.15		5
Diesel Range Organics (DRO)	C10C28DRO	**9160**	125	mg/kg	08.24.19 15.15		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**957**	125	mg/kg	08.24.19 15.15		5
Total TPH	PHC635	**14100**	125	mg/kg	08.24.19 15.15		5
Total GRO-DRO	PHC628	**13200**	125	mg/kg	08.24.19 15.15		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	08.24.19 15.15	
o-Terphenyl	84-15-1	111	%	70-135	08.24.19 15.15	

Certificate of Analytical Results 634743

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**SS03**	Matrix:	Soil	Date Received:	08.21.19 14.09
Lab Sample Id:	634743-003	Date Collected:	08.21.19 10.30	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	08.22.19 13.30	Basis:	Wet Weight
Seq Number:	3099503			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	**0.647**	0.0200	mg/kg	08.22.19 18.37		10
Toluene	108-88-3	**0.746**	0.0200	mg/kg	08.22.19 18.37		10
Ethylbenzene	100-41-4	**2.50**	0.0200	mg/kg	08.22.19 18.37		10
m,p-Xylenes	179601-23-1	<0.399	0.399	mg/kg	08.26.19 15.12	UD	100
o-Xylene	95-47-6	<0.200	0.200	mg/kg	08.26.19 15.12	UD	100
Total Xylenes	1330-20-7	<0.200	0.200	mg/kg	08.26.19 15.12	U	100
Total BTEX		**3.89**	0.0200	mg/kg	08.26.19 15.12		100

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	234	%	70-130	08.22.19 18.37	**
1,4-Difluorobenzene	540-36-3	104	%	70-130	08.22.19 18.37	

Certificate of Analytical Results 634743

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**SS04**	Matrix:	Soil	Date Received:	08.21.19 14.09
Lab Sample Id:	634743-004	Date Collected:	08.21.19 10.35	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	08.22.19 15.00	Basis:	Wet Weight
Seq Number:	3099370			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**7.07**	4.98	mg/kg	08.22.19 16.17		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	08.23.19 09.00	Basis:	Wet Weight
Seq Number:	3099533			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**3120**	25.0	mg/kg	08.23.19 15.09		1
Diesel Range Organics (DRO)	C10C28DRO	**7860**	25.0	mg/kg	08.23.19 15.09		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**786**	25.0	mg/kg	08.23.19 15.09		1
Total TPH	PHC635	**11800**	25.0	mg/kg	08.23.19 15.09		1
Total GRO-DRO	PHC628	**11000**	25.0	mg/kg	08.23.19 15.09		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	08.23.19 15.09	
o-Terphenyl	84-15-1	110	%	70-135	08.23.19 15.09	

Certificate of Analytical Results 634743

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**SS04**	Matrix:	Soil	Date Received:	08.21.19 14.09
Lab Sample Id:	634743-004	Date Collected:	08.21.19 10.35	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	08.22.19 13.30	Basis:	Wet Weight
Seq Number:	3099503			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	**0.432**	0.0198	mg/kg	08.22.19 18.57		10
Toluene	108-88-3	**0.913**	0.0198	mg/kg	08.22.19 18.57		10
Ethylbenzene	100-41-4	**0.616**	0.0198	mg/kg	08.22.19 18.57		10
m,p-Xylenes	179601-23-1	<0.397	0.397	mg/kg	08.26.19 15.32	UD	100
o-Xylene	95-47-6	<0.198	0.198	mg/kg	08.26.19 15.32	UD	100
Total Xylenes	1330-20-7	<0.198	0.198	mg/kg	08.26.19 15.32	U	100
Total BTEX		**1.96**	0.0198	mg/kg	08.26.19 15.32		100

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.22.19 18.57	
4-Bromofluorobenzene	460-00-4	397	%	70-130	08.22.19 18.57	**

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

QC Summary 634743

LT Environmental, Inc.

Remuda 100 Battery

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3099370 — Matrix: Solid — Date Prep: 08.22.19
MB Sample Id: 7684779-1-BLK — LCS Sample Id: 7684779-1-BKS — LCSD Sample Id: 7684779-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	258	103	258	103	90-110	0	20	mg/kg	08.22.19 15:29	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3099370 — Matrix: Soil — Date Prep: 08.22.19
Parent Sample Id: 634743-001 — MS Sample Id: 634743-001 S — MSD Sample Id: 634743-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	56.2	249	304	100	304	100	90-110	0	20	mg/kg	08.22.19 15:50	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3099533 — Matrix: Solid — Date Prep: 08.23.19
MB Sample Id: 7684807-1-BLK — LCS Sample Id: 7684807-1-BKS — LCSD Sample Id: 7684807-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	944	94	916	92	70-135	3	20	mg/kg	08.23.19 12:54	
Diesel Range Organics (DRO)	<25.0	1000	992	99	979	98	70-135	1	20	mg/kg	08.23.19 12:54	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	94		125		122		70-135	%	08.23.19 12:54
o-Terphenyl	97		107		104		70-135	%	08.23.19 12:54

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3099533 — Matrix: Soil — Date Prep: 08.23.19
Parent Sample Id: 634743-001 — MS Sample Id: 634743-001 S — MSD Sample Id: 634743-001 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)	3510	996	5120	162	5150	164	70-135	1	20	mg/kg	08.23.19 13:52	X
Diesel Range Organics (DRO)	7180	996	9330	216	9300	212	70-135	0	20	mg/kg	08.23.19 13:52	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	119		122		70-135	%	08.23.19 13:52
o-Terphenyl	95		117		70-135	%	08.23.19 13:52

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 634743

LT Environmental, Inc.

Remuda 100 Battery

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3099503 | Matrix: Solid | Date Prep: 08.22.19
MB Sample Id: 7684799-1-BLK | LCS Sample Id: 7684799-1-BKS | LCSD Sample Id: 7684799-1-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	0.0942	94	0.107	107	70-130	13	35	mg/kg	08.22.19 14:56	
Toluene	<0.00200	0.100	0.0922	92	0.106	106	70-130	14	35	mg/kg	08.22.19 14:56	
Ethylbenzene	<0.00200	0.100	0.0970	97	0.113	113	70-130	15	35	mg/kg	08.22.19 14:56	
m,p-Xylenes	<0.00101	0.200	0.187	94	0.220	110	70-130	16	35	mg/kg	08.22.19 14:56	
o-Xylene	<0.00200	0.100	0.0956	96	0.113	113	70-130	17	35	mg/kg	08.22.19 14:56	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		100		103		70-130	%	08.22.19 14:56
4-Bromofluorobenzene	97		103		110		70-130	%	08.22.19 14:56

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3099503 | Matrix: Soil | Date Prep: 08.22.19
Parent Sample Id: 634655-001 | MS Sample Id: 634655-001 S | MSD Sample Id: 634655-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.0262	26	0.0225	23	70-130	15	35	mg/kg	08.22.19 15:37	X
Toluene	<0.00200	0.0998	0.0122	12	0.0112	11	70-130	9	35	mg/kg	08.22.19 15:37	X
Ethylbenzene	<0.00200	0.0998	0.00759	8	0.00699	7	70-130	8	35	mg/kg	08.22.19 15:37	X
m,p-Xylenes	<0.00399	0.200	0.0129	6	0.0127	6	70-130	2	35	mg/kg	08.22.19 15:37	X
o-Xylene	<0.00200	0.0998	0.00703	7	0.00699	7	70-130	1	35	mg/kg	08.22.19 15:37	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		119		70-130	%	08.22.19 15:37
4-Bromofluorobenzene	99		91		70-130	%	08.22.19 15:37

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

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

Work Order No: 634743

Page 1 of 1

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littrel
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:	Carlsbad, NM
Phone:	432.704.5178 Email:		dmoir@ltenv.com rmcafee@ltenv.com

Work Order Comments

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

Project Name:	Remuda 100 Battery
Project Number:	
P.O. Number:	2RP-5589
Sampler's Name:	Robert McAfee

Turn Around: Routine ☑ Rush: Due Date:

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):	1.5	Thermometer ID	
Received Intact:	(Yes) No	THM007	
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes (No) N/A	Total Containers:	4

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	Sample Comments
SS01	S	08/21/19	1020	0.5'	1	X	X	X	discrete
SS02			1025			X	X	X	
SS03			1030			X	X	X	
SS04			1035			X	X	X	

ANALYSIS REQUEST

Work Order Notes

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

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
Robert McAfee		8/21/19 14:09	2		
			4		
			6		

Revised Date 051418 Rev. 2018.1

Inter-Office Shipment

IOS Number **46697**

Date/Time: 08/21/19 15:28

Lab# From: **Carlsbad**

Lab# To: **Midland**

Created by: Elizabeth Mcclellan

Delivery Priority:

Air Bill No.: 776044793098

Please send report to: Jessica Kramer

Address: 1089 N Canal Street

E-Mail: jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
634743-001	S	SS01	08/21/19 10:20	SW8015MOD_NM	TPH by SW8015 Mod	08/27/19	09/04/19	JKR	GRO-DRO PHCC10C28 PI	
634743-001	S	SS01	08/21/19 10:20	SW8021B	BTEX by EPA 8021B	08/27/19	09/04/19	JKR	BR4FBZ BZ BZME EBZ X	
634743-001	S	SS01	08/21/19 10:20	E300_CL	Chloride by EPA 300	08/27/19	02/17/20	JKR	CL	
634743-002	S	SS02	08/21/19 10:25	SW8021B	BTEX by EPA 8021B	08/27/19	09/04/19	JKR	BR4FBZ BZ BZME EBZ X	
634743-002	S	SS02	08/21/19 10:25	SW8015MOD_NM	TPH by SW8015 Mod	08/27/19	09/04/19	JKR	GRO-DRO PHCC10C28 PI	
634743-002	S	SS02	08/21/19 10:25	E300_CL	Chloride by EPA 300	08/27/19	02/17/20	JKR	CL	
634743-003	S	SS03	08/21/19 10:30	SW8021B	BTEX by EPA 8021B	08/27/19	09/04/19	JKR	BR4FBZ BZ BZME EBZ X	
634743-003	S	SS03	08/21/19 10:30	E300_CL	Chloride by EPA 300	08/27/19	02/17/20	JKR	CL	
634743-003	S	SS03	08/21/19 10:30	SW8015MOD_NM	TPH by SW8015 Mod	08/27/19	09/04/19	JKR	GRO-DRO PHCC10C28 PI	
634743-004	S	SS04	08/21/19 10:35	E300_CL	Chloride by EPA 300	08/27/19	02/17/20	JKR	CL	
634743-004	S	SS04	08/21/19 10:35	SW8021B	BTEX by EPA 8021B	08/27/19	09/04/19	JKR	BR4FBZ BZ BZME EBZ X	
634743-004	S	SS04	08/21/19 10:35	SW8015MOD_NM	TPH by SW8015 Mod	08/27/19	09/04/19	JKR	GRO-DRO PHCC10C28 PI	

Inter Office Shipment or Sample Comments:

Relinquished By: Elizabeth McClellan

Date Relinquished: 08/21/2019

Received By: Brianna Teel

Date Received: 08/22/2019 10:56

Cooler Temperature: 0.4

XENCO Laboratories

Inter Office Report- Sample Receipt Checklist

Sent To: Midland

IOS #: 46697

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient
Temperature Measuring device used : R8

Sent By: Elizabeth McClellan **Date Sent:** 08/21/2019 03:28 PM

Received By: Brianna Teel **Date Received:** 08/22/2019 10:56 AM

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	.4	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received with appropriate temperature?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 *Custody Seals Signed and dated for Containers/coolers	**Yes**	
#6 *IOS present?	**Yes**	
#7 Any missing/extra samples?	**No**	
#8 IOS agrees with sample label(s)/matrix?	**Yes**	
#9 Sample matrix/ properties agree with IOS?	**Yes**	
#10 Samples in proper container/ bottle?	**Yes**	
#11 Samples properly preserved?	**Yes**	
#12 Sample container(s) intact?	**Yes**	
#13 Sufficient sample amount for indicated test(s)?	**Yes**	
#14 All samples received within hold time?	**Yes**	

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ **Contacted by :** _____ **Date:** _____

Checklist reviewed by: Brianna Teel Date: 08/22/2019

Brianna Teel

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 08/21/2019 02:09:00 PM

Work Order #: 634743

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)?	1.5	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**No**	
#5 Custody Seals intact on sample bottles?	**No**	
#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)?	**Yes**	Subbed to Xenco Midland
#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: 08/21/2019

Checklist reviewed by: Kelsey Brooks Date: 08/22/2019

Analytical Report 640246

for

LT Environmental, Inc.

Project Manager: Dan Moir

Remuda 100 Battery

18-OCT-19

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142), North Carolina (681)

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

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

18-OCT-19

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

Reference: XENCO Report No(s): **640246**
Remuda 100 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) 640246. 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. 640246 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 640246

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH01	S	10-15-19 11:30	2 ft	640246-001
BH01A	S	10-15-19 11:35	2.5 ft	640246-002
BH02	S	10-15-19 12:05	1 ft	640246-003
BH02A	S	10-15-19 12:25	5 ft	640246-004
BH03	S	10-15-19 11:40	1 ft	640246-005
BH03A	S	10-15-19 11:55	4 ft	640246-006
BH04	S	10-15-19 13:00	3 ft	640246-007
BH04A	S	10-15-19 13:05	4 ft	640246-008
BH05	S	10-15-19 13:15	2 ft	640246-009
BH05A	S	10-15-19 13:25	4 ft	640246-010
BH06	S	10-15-19 13:25	1 ft	640246-011
BH06A	S	10-15-19 13:25	4 ft	640246-012
BH07	S	10-16-19 09:35	2 ft	640246-013
BH07A	S	10-16-19 09:45	4 ft	640246-014
BH08	S	10-16-19 10:05	2 ft	640246-015
BH08A	S	10-16-19 10:15	4 ft	640246-016
BH09	S	10-16-19 13:30	3 ft	640246-017
BH09A	S	10-16-19 13:35	4 ft	640246-018
BH10	S	10-16-19 13:45	3 ft	640246-019
BH10A	S	10-16-19 13:50	4 ft	640246-020

CASE NARRATIVE

Client Name: LT Environmental, Inc.
Project Name: Remuda 100 Battery

Project ID:
Work Order Number(s): *640246*

Report Date: *18-OCT-19*
Date Received: *10/17/2019*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3104721 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3104724 TPH by SW8015 Mod
Lab Sample ID 640246-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Diesel Range Organics (DRO) recovered below QC limits in the Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 640246-001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -011, -012, -013, -014, -015, -016, -017, -018, -019, -020.
The Laboratory Control Sample for Diesel Range Organics (DRO) is within laboratory Control Limits, therefore the data was accepted.

Certificate of Analysis Summary 640246

LT Environmental, Inc., Arvada, CO

Project Name: Remuda 100 Battery

Project Id:

Contact: Dan Moir

Project Location:

Date Received in Lab: Thu Oct-17-19 08:30 am

Report Date: 18-OCT-19

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	640246-001		640246-002		640246-003		640246-004		640246-005		640246-006	
	Field Id:	BH01		BH01A		BH02		BH02A		BH03		BH03A	
	Depth:	2- ft		2.5- ft		1- ft		5- ft		1- ft		4- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-15-19 11:30		Oct-15-19 11:35		Oct-15-19 12:05		Oct-15-19 12:25		Oct-15-19 11:40		Oct-15-19 11:55	
BTEX by EPA 8021B	*Extracted:*	Oct-17-19 11:10		Oct-17-19 11:10		Oct-17-19 11:10		Oct-17-19 11:10		Oct-17-19 11:10		Oct-17-19 11:10	
	Analyzed:	Oct-17-19 15:14		Oct-17-19 15:34		Oct-17-19 15:55		Oct-17-19 16:15		Oct-17-19 16:35		Oct-17-19 16:56	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00101	0.00101	<0.00101	0.00101	<0.00101	0.00101	<0.00100	0.00100	<0.00100	0.00100	<0.00100	0.00100
Toluene		<0.00101	0.00101	<0.00101	0.00101	0.00232	0.00101	<0.00100	0.00100	<0.00100	0.00100	<0.00100	0.00100
Ethylbenzene		<0.00101	0.00101	<0.00101	0.00101	0.0160	0.00101	<0.00100	0.00100	<0.00100	0.00100	<0.00100	0.00100
m,p-Xylenes		<0.00202	0.00202	<0.00201	0.00201	0.0611	0.00202	<0.00201	0.00201	<0.00200	0.00200	<0.00201	0.00201
o-Xylene		<0.00101	0.00101	<0.00101	0.00101	0.0408	0.00101	<0.00100	0.00100	<0.00100	0.00100	<0.00100	0.00100
Total Xylenes		<0.00101	0.00101	<0.00101	0.00101	0.102	0.00101	<0.00100	0.00100	<0.00100	0.00100	<0.00100	0.00100
Total BTEX		<0.00101	0.00101	<0.00101	0.00101	0.120	0.00101	<0.00100	0.00100	<0.00100	0.00100	<0.00100	0.00100
Chloride by EPA 300	*Extracted:*	Oct-17-19 10:10		Oct-17-19 10:10		Oct-17-19 10:10		Oct-17-19 10:10		Oct-17-19 10:10		Oct-17-19 10:10	
	Analyzed:	Oct-17-19 13:08		Oct-17-19 13:27		Oct-17-19 13:33		Oct-17-19 13:39		Oct-17-19 13:46		Oct-17-19 14:04	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		166	100	251	98.8	138	9.96	41.3	9.96	49.4	9.98	16.3	9.98
TPH by SW8015 Mod	*Extracted:*	Oct-17-19 14:00		Oct-17-19 14:00		Oct-17-19 14:00		Oct-17-19 14:00		Oct-17-19 14:00		Oct-17-19 14:00	
	Analyzed:	Oct-17-19 15:48		Oct-17-19 16:28		Oct-17-19 16:28		Oct-17-19 16:48		Oct-17-19 16:48		Oct-17-19 17:08	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	<50.2	50.2	<50.2	50.2	<50.2	50.2	<50.1	50.1	<50.0	50.0
Diesel Range Organics (DRO)		<50.0	50.0	<50.2	50.2	102	50.2	86.0	50.2	<50.1	50.1	<50.0	50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<50.2	50.2	<50.2	50.2	<50.2	50.2	<50.1	50.1	<50.0	50.0
Total GRO-DRO		<50.0	50.0	<50.2	50.2	102	50.2	86.0	50.2	<50.1	50.1	<50.0	50.0
Total TPH		<50.0	50.0	<50.2	50.2	102	50.2	86.0	50.2	<50.1	50.1	<50.0	50.0

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

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 640246

LT Environmental, Inc., Arvada, CO

Project Name: Remuda 100 Battery

Project Id:

Contact: Dan Moir

Project Location:

Date Received in Lab: Thu Oct-17-19 08:30 am

Report Date: 18-OCT-19

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	640246-007		640246-008		640246-009		640246-010		640246-011		640246-012	
	Field Id:	BH04		BH04A		BH05		BH05A		BH06		BH06A	
	Depth:	3- ft		4- ft		2- ft		4- ft		1- ft		4- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-15-19 13:00		Oct-15-19 13:05		Oct-15-19 13:15		Oct-15-19 13:25		Oct-15-19 13:25		Oct-15-19 13:25	
BTEX by EPA 8021B	***Extracted:***	Oct-17-19 11:10		Oct-17-19 11:10		Oct-17-19 11:10		Oct-17-19 11:10		Oct-17-19 11:10		Oct-17-19 11:10	
	Analyzed:	Oct-17-19 17:16		Oct-17-19 17:37		Oct-17-19 17:57		Oct-17-19 18:17		Oct-17-19 19:33		Oct-17-19 19:53	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00100	0.00100	<0.00100	0.00100	<0.00101	0.00101	<0.00101	0.00101	<0.00101	0.00101	<0.00101	0.00101
Toluene		<0.00100	0.00100	<0.00100	0.00100	<0.00101	0.00101	<0.00101	0.00101	<0.00101	0.00101	<0.00101	0.00101
Ethylbenzene		<0.00100	0.00100	<0.00100	0.00100	<0.00101	0.00101	<0.00101	0.00101	<0.00101	0.00101	<0.00101	0.00101
m,p-Xylenes		<0.00200	0.00200	<0.00201	0.00201	<0.00202	0.00202	<0.00202	0.00202	<0.00202	0.00202	<0.00202	0.00202
o-Xylene		<0.00100	0.00100	<0.00100	0.00100	<0.00101	0.00101	<0.00101	0.00101	<0.00101	0.00101	<0.00101	0.00101
Total Xylenes		<0.00100	0.00100	<0.00100	0.00100	<0.00101	0.00101	<0.00101	0.00101	<0.00101	0.00101	<0.00101	0.00101
Total BTEX		<0.00100	0.00100	<0.00100	0.00100	<0.00101	0.00101	<0.00101	0.00101	<0.00101	0.00101	<0.00101	0.00101
Chloride by EPA 300	***Extracted:***	Oct-17-19 10:10		Oct-17-19 10:10		Oct-17-19 10:10		Oct-17-19 10:10		Oct-17-19 10:10		Oct-17-19 10:10	
	Analyzed:	Oct-17-19 14:11		Oct-17-19 14:17		Oct-17-19 14:23		Oct-17-19 14:30		Oct-17-19 14:36		Oct-17-19 14:55	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		42.0	9.82	95.7	9.86	189	9.90	307	10.0	76.8	10.0	153	10.1
TPH by SW8015 Mod	***Extracted:***	Oct-17-19 14:00		Oct-17-19 14:00		Oct-17-19 14:00		Oct-17-19 14:00		Oct-17-19 14:00		Oct-17-19 14:00	
	Analyzed:	Oct-17-19 17:08		Oct-17-19 17:28		Oct-17-19 17:28		Oct-17-19 20:37		Oct-17-19 22:16		Oct-17-19 22:36	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	<50.1	50.1	<50.2	50.2	<50.3	50.3	<50.2	50.2	<50.0	50.0
Diesel Range Organics (DRO)		<50.0	50.0	<50.1	50.1	<50.2	50.2	<50.3	50.3	<50.2	50.2	<50.0	50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<50.1	50.1	<50.2	50.2	<50.3	50.3	<50.2	50.2	<50.0	50.0
Total GRO-DRO		<50.0	50.0	<50.1	50.1	<50.2	50.2	<50.3	50.3	<50.2	50.2	<50.0	50.0
Total TPH		<50.0	50.0	<50.1	50.1	<50.2	50.2	<50.3	50.3	<50.2	50.2	<50.0	50.0

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 640246

LT Environmental, Inc., Arvada, CO

Project Name: Remuda 100 Battery

Project Id:

Contact: Dan Moir

Project Location:

Date Received in Lab: Thu Oct-17-19 08:30 am

Report Date: 18-OCT-19

Project Manager: Jessica Kramer

Analysis Requested		640246-013		640246-014		640246-015		640246-016		640246-017		640246-018	
	Lab Id:	640246-013		640246-014		640246-015		640246-016		640246-017		640246-018	
	Field Id:	BH07		BH07A		BH08		BH08A		BH09		BH09A	
	Depth:	2- ft		4- ft		2- ft		4- ft		3- ft		4- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-16-19 09:35		Oct-16-19 09:45		Oct-16-19 10:05		Oct-16-19 10:15		Oct-16-19 13:30		Oct-16-19 13:35	
BTEX by EPA 8021B	Extracted:	Oct-17-19 11:10		Oct-17-19 11:10		Oct-17-19 11:10		Oct-17-19 11:10		Oct-17-19 11:10		Oct-17-19 11:10	
	Analyzed:	Oct-17-19 20:14		Oct-17-19 20:34		Oct-17-19 20:55		Oct-17-19 21:15		Oct-17-19 21:35		Oct-17-19 21:56	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00100	0.00100	<0.000992	0.000992	<0.000998	0.000998	<0.00100	0.00100	<0.00100	0.00100	<0.00101	0.00101
Toluene		<0.00100	0.00100	<0.000992	0.000992	<0.000998	0.000998	<0.00100	0.00100	<0.00100	0.00100	<0.00101	0.00101
Ethylbenzene		<0.00100	0.00100	<0.000992	0.000992	<0.000998	0.000998	<0.00100	0.00100	<0.00100	0.00100	<0.00101	0.00101
m,p-Xylenes		<0.00201	0.00201	<0.00198	0.00198	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00202	0.00202
o-Xylene		<0.00100	0.00100	<0.000992	0.000992	<0.000998	0.000998	<0.00100	0.00100	<0.00100	0.00100	<0.00101	0.00101
Total Xylenes		<0.00100	0.00100	<0.000992	0.000992	<0.000998	0.000998	<0.00100	0.00100	<0.00100	0.00100	<0.00101	0.00101
Total BTEX		<0.00100	0.00100	<0.000992	0.000992	<0.000998	0.000998	<0.00100	0.00100	<0.00100	0.00100	<0.00101	0.00101
Chloride by EPA 300	Extracted:	Oct-17-19 10:10		Oct-17-19 10:10		Oct-17-19 10:10		Oct-17-19 10:10		Oct-17-19 10:10		Oct-17-19 10:10	
	Analyzed:	Oct-17-19 15:13		Oct-17-19 15:20		Oct-17-19 15:26		Oct-17-19 15:32		Oct-17-19 15:38		Oct-17-19 15:45	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		221	9.86	263	49.9	96.9	9.98	129	9.88	343	49.3	365	101
TPH by SW8015 Mod	Extracted:	Oct-17-19 14:00		Oct-17-19 14:00		Oct-17-19 14:00		Oct-17-19 14:00		Oct-17-19 14:00		Oct-17-19 14:00	
	Analyzed:	Oct-17-19 22:55		Oct-17-19 23:15		Oct-17-19 23:35		Oct-17-19 23:54		Oct-18-19 00:14		Oct-18-19 00:34	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.2	50.2	<50.2	50.2	<50.0	50.0	<50.0	50.0	<50.2	50.2	<50.1	50.1
Diesel Range Organics (DRO)		<50.2	50.2	<50.2	50.2	<50.0	50.0	<50.0	50.0	<50.2	50.2	<50.1	50.1
Motor Oil Range Hydrocarbons (MRO)		<50.2	50.2	<50.2	50.2	<50.0	50.0	<50.0	50.0	<50.2	50.2	<50.1	50.1
Total GRO-DRO		<50.2	50.2	<50.2	50.2	<50.0	50.0	<50.0	50.0	<50.2	50.2	<50.1	50.1
Total TPH		<50.2	50.2	<50.2	50.2	<50.0	50.0	<50.0	50.0	<50.2	50.2	<50.1	50.1

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 640246

LT Environmental, Inc., Arvada, CO

Project Name: Remuda 100 Battery

Project Id:

Contact: Dan Moir

Project Location:

Date Received in Lab: Thu Oct-17-19 08:30 am

Report Date: 18-OCT-19

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	640246-019		640246-020									
	Field Id:	BH10		BH10A									
	Depth:	3- ft		4- ft									
	Matrix:	SOIL		SOIL									
	Sampled:	Oct-16-19 13:45		Oct-16-19 13:50									
BTEX by EPA 8021B	***Extracted:***	Oct-17-19 11:10		Oct-17-19 11:10									
	Analyzed:	Oct-17-19 22:16		Oct-17-19 22:37									
	Units/RL:	mg/kg	RL	mg/kg	RL								
Benzene		<0.00101	0.00101	<0.00101	0.00101								
Toluene		<0.00101	0.00101	<0.00101	0.00101								
Ethylbenzene		<0.00101	0.00101	<0.00101	0.00101								
m,p-Xylenes		<0.00202	0.00202	<0.00202	0.00202								
o-Xylene		<0.00101	0.00101	<0.00101	0.00101								
Total Xylenes		<0.00101	0.00101	<0.00101	0.00101								
Total BTEX		<0.00101	0.00101	<0.00101	0.00101								
Chloride by EPA 300	***Extracted:***	Oct-17-19 10:10		Oct-17-19 10:10									
	Analyzed:	Oct-17-19 15:51		Oct-17-19 15:57									
	Units/RL:	mg/kg	RL	mg/kg	RL								
Chloride		615	49.7	437	50.0								
TPH by SW8015 Mod	***Extracted:***	Oct-17-19 14:00		Oct-17-19 14:00									
	Analyzed:	Oct-18-19 00:53		Oct-18-19 01:13									
	Units/RL:	mg/kg	RL	mg/kg	RL								
Gasoline Range Hydrocarbons (GRO)		<50.3	50.3	<50.2	50.2								
Diesel Range Organics (DRO)		<50.3	50.3	<50.2	50.2								
Motor Oil Range Hydrocarbons (MRO)		<50.3	50.3	<50.2	50.2								
Total GRO-DRO		<50.3	50.3	<50.2	50.2								
Total TPH		<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 Analytical Results 640246

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**BH01**	Matrix:	Soil	Date Received:	10.17.19 08.30
Lab Sample Id:	640246-001	Date Collected:	10.15.19 11.30	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 10.10	Basis:	Wet Weight
Seq Number:	3104710				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**166**	100	mg/kg	10.17.19 13.08		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.17.19 14.00	Basis:	Wet Weight
Seq Number:	3104724				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.17.19 15.48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.17.19 15.48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.17.19 15.48	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.17.19 15.48	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.17.19 15.48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	10.17.19 15.48	
o-Terphenyl	84-15-1	102	%	70-135	10.17.19 15.48	

Certificate of Analytical Results 640246

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**BH01**	Matrix:	Soil	Date Received:	10.17.19 08.30
Lab Sample Id:	640246-001	Date Collected:	10.15.19 11.30	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 11.10	Basis:	Wet Weight
Seq Number:	3104721				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00101	0.00101	mg/kg	10.17.19 15.14	U	1
Toluene	108-88-3	<0.00101	0.00101	mg/kg	10.17.19 15.14	U	1
Ethylbenzene	100-41-4	<0.00101	0.00101	mg/kg	10.17.19 15.14	U	1
m,p-Xylenes	179601-23-1	<0.00202	0.00202	mg/kg	10.17.19 15.14	U	1
o-Xylene	95-47-6	<0.00101	0.00101	mg/kg	10.17.19 15.14	U	1
Total Xylenes	1330-20-7	<0.00101	0.00101	mg/kg	10.17.19 15.14	U	1
Total BTEX		<0.00101	0.00101	mg/kg	10.17.19 15.14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	103	%	70-130	10.17.19 15.14	
4-Bromofluorobenzene	460-00-4	106	%	70-130	10.17.19 15.14	

Certificate of Analytical Results 640246

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**BH01A**	Matrix:	Soil	Date Received:	10.17.19 08.30
Lab Sample Id:	640246-002	Date Collected:	10.15.19 11.35	Sample Depth:	2.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 10.10	Basis:	Wet Weight
Seq Number:	3104710				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**251**	98.8	mg/kg	10.17.19 13.27		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.17.19 14.00	Basis:	Wet Weight
Seq Number:	3104724				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	10.17.19 16.28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	10.17.19 16.28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	10.17.19 16.28	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	10.17.19 16.28	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	10.17.19 16.28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	82	%	70-135	10.17.19 16.28	
o-Terphenyl	84-15-1	84	%	70-135	10.17.19 16.28	

Certificate of Analytical Results 640246

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**BH01A**	Matrix:	Soil	Date Received:	10.17.19 08.30
Lab Sample Id:	640246-002	Date Collected:	10.15.19 11.35	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 11.10	Basis:	Wet Weight
Seq Number:	3104721				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00101	0.00101	mg/kg	10.17.19 15.34	U	1
Toluene	108-88-3	<0.00101	0.00101	mg/kg	10.17.19 15.34	U	1
Ethylbenzene	100-41-4	<0.00101	0.00101	mg/kg	10.17.19 15.34	U	1
m,p-Xylenes	179601-23-1	<0.00201	0.00201	mg/kg	10.17.19 15.34	U	1
o-Xylene	95-47-6	<0.00101	0.00101	mg/kg	10.17.19 15.34	U	1
Total Xylenes	1330-20-7	<0.00101	0.00101	mg/kg	10.17.19 15.34	U	1
Total BTEX		<0.00101	0.00101	mg/kg	10.17.19 15.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	10.17.19 15.34	
1,4-Difluorobenzene	540-36-3	103	%	70-130	10.17.19 15.34	

Certificate of Analytical Results 640246

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**BH02**	Matrix:	Soil	Date Received:	10.17.19 08.30
Lab Sample Id:	640246-003	Date Collected:	10.15.19 12.05	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 10.10	Basis:	Wet Weight
Seq Number:	3104710				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**138**	9.96	mg/kg	10.17.19 13.33		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.17.19 14.00	Basis:	Wet Weight
Seq Number:	3104724				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	10.17.19 16.28	U	1
Diesel Range Organics (DRO)	C10C28DRO	**102**	50.2	mg/kg	10.17.19 16.28		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	10.17.19 16.28	U	1
Total GRO-DRO	PHC628	**102**	50.2	mg/kg	10.17.19 16.28		1
Total TPH	PHC635	**102**	50.2	mg/kg	10.17.19 16.28		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	10.17.19 16.28	
o-Terphenyl	84-15-1	88	%	70-135	10.17.19 16.28	

Certificate of Analytical Results 640246

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**BH02**	Matrix:	Soil	Date Received:	10.17.19 08.30
Lab Sample Id:	640246-003	Date Collected:	10.15.19 12.05	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 11.10	Basis:	Wet Weight
Seq Number:	3104721				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00101	0.00101	mg/kg	10.17.19 15.55	U	1
Toluene	108-88-3	**0.00232**	0.00101	mg/kg	10.17.19 15.55		1
Ethylbenzene	100-41-4	**0.0160**	0.00101	mg/kg	10.17.19 15.55		1
m,p-Xylenes	179601-23-1	**0.0611**	0.00202	mg/kg	10.17.19 15.55		1
o-Xylene	95-47-6	**0.0408**	0.00101	mg/kg	10.17.19 15.55		1
Total Xylenes	1330-20-7	**0.102**	0.00101	mg/kg	10.17.19 15.55		1
Total BTEX		**0.120**	0.00101	mg/kg	10.17.19 15.55		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	114	%	70-130	10.17.19 15.55	
1,4-Difluorobenzene	540-36-3	101	%	70-130	10.17.19 15.55	

Certificate of Analytical Results 640246

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**BH02A**	Matrix:	Soil	Date Received:	10.17.19 08.30
Lab Sample Id:	640246-004	Date Collected:	10.15.19 12.25	Sample Depth:	5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 10.10	Basis:	Wet Weight
Seq Number:	3104710				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**41.3**	9.96	mg/kg	10.17.19 13.39		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.17.19 14.00	Basis:	Wet Weight
Seq Number:	3104724				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	10.17.19 16.48	U	1
Diesel Range Organics (DRO)	C10C28DRO	**86.0**	50.2	mg/kg	10.17.19 16.48		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	10.17.19 16.48	U	1
Total GRO-DRO	PHC628	**86.0**	50.2	mg/kg	10.17.19 16.48		1
Total TPH	PHC635	**86.0**	50.2	mg/kg	10.17.19 16.48		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	10.17.19 16.48	
o-Terphenyl	84-15-1	90	%	70-135	10.17.19 16.48	

Certificate of Analytical Results 640246

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**BH02A**	Matrix:	Soil	Date Received:	10.17.19 08.30
Lab Sample Id:	640246-004	Date Collected:	10.15.19 12.25	Sample Depth:	5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 11.10	Basis:	Wet Weight
Seq Number:	3104721				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00100	0.00100	mg/kg	10.17.19 16.15	U	1
Toluene	108-88-3	<0.00100	0.00100	mg/kg	10.17.19 16.15	U	1
Ethylbenzene	100-41-4	<0.00100	0.00100	mg/kg	10.17.19 16.15	U	1
m,p-Xylenes	179601-23-1	<0.00201	0.00201	mg/kg	10.17.19 16.15	U	1
o-Xylene	95-47-6	<0.00100	0.00100	mg/kg	10.17.19 16.15	U	1
Total Xylenes	1330-20-7	<0.00100	0.00100	mg/kg	10.17.19 16.15	U	1
Total BTEX		<0.00100	0.00100	mg/kg	10.17.19 16.15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	10.17.19 16.15	
4-Bromofluorobenzene	460-00-4	124	%	70-130	10.17.19 16.15	

Certificate of Analytical Results 640246

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**BH03**	Matrix:	Soil	Date Received:	10.17.19 08.30
Lab Sample Id:	640246-005	Date Collected:	10.15.19 11.40	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 10.10	Basis:	Wet Weight
Seq Number:	3104710				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**49.4**	9.98	mg/kg	10.17.19 13.46		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.17.19 14.00	Basis:	Wet Weight
Seq Number:	3104724				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	10.17.19 16.48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	10.17.19 16.48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	10.17.19 16.48	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	10.17.19 16.48	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	10.17.19 16.48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	10.17.19 16.48	
o-Terphenyl	84-15-1	94	%	70-135	10.17.19 16.48	

Certificate of Analytical Results 640246

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**BH03**	Matrix:	Soil	Date Received:	10.17.19 08.30
Lab Sample Id:	640246-005	Date Collected:	10.15.19 11.40	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 11.10	Basis:	Wet Weight
Seq Number:	3104721				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00100	0.00100	mg/kg	10.17.19 16.35	U	1
Toluene	108-88-3	<0.00100	0.00100	mg/kg	10.17.19 16.35	U	1
Ethylbenzene	100-41-4	<0.00100	0.00100	mg/kg	10.17.19 16.35	U	1
m,p-Xylenes	179601-23-1	<0.00200	0.00200	mg/kg	10.17.19 16.35	U	1
o-Xylene	95-47-6	<0.00100	0.00100	mg/kg	10.17.19 16.35	U	1
Total Xylenes	1330-20-7	<0.00100	0.00100	mg/kg	10.17.19 16.35	U	1
Total BTEX		<0.00100	0.00100	mg/kg	10.17.19 16.35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	106	%	70-130	10.17.19 16.35	
4-Bromofluorobenzene	460-00-4	119	%	70-130	10.17.19 16.35	

Certificate of Analytical Results 640246

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**BH03A**	Matrix:	Soil	Date Received:	10.17.19 08.30
Lab Sample Id:	640246-006	Date Collected:	10.15.19 11.55	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 10.10	Basis:	Wet Weight
Seq Number:	3104710				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**16.3**	9.98	mg/kg	10.17.19 14.04		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.17.19 14.00	Basis:	Wet Weight
Seq Number:	3104724				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.17.19 17.08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.17.19 17.08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.17.19 17.08	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.17.19 17.08	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.17.19 17.08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	10.17.19 17.08	
o-Terphenyl	84-15-1	87	%	70-135	10.17.19 17.08	

Certificate of Analytical Results 640246

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**BH03A**	Matrix:	Soil	Date Received:	10.17.19 08.30
Lab Sample Id:	640246-006	Date Collected:	10.15.19 11.55	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 11.10	Basis:	Wet Weight
Seq Number:	3104721				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00100	0.00100	mg/kg	10.17.19 16.56	U	1
Toluene	108-88-3	<0.00100	0.00100	mg/kg	10.17.19 16.56	U	1
Ethylbenzene	100-41-4	<0.00100	0.00100	mg/kg	10.17.19 16.56	U	1
m,p-Xylenes	179601-23-1	<0.00201	0.00201	mg/kg	10.17.19 16.56	U	1
o-Xylene	95-47-6	<0.00100	0.00100	mg/kg	10.17.19 16.56	U	1
Total Xylenes	1330-20-7	<0.00100	0.00100	mg/kg	10.17.19 16.56	U	1
Total BTEX		<0.00100	0.00100	mg/kg	10.17.19 16.56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	113	%	70-130	10.17.19 16.56	
1,4-Difluorobenzene	540-36-3	104	%	70-130	10.17.19 16.56	

Certificate of Analytical Results 640246

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**BH04**	Matrix:	Soil	Date Received:	10.17.19 08.30
Lab Sample Id:	640246-007	Date Collected:	10.15.19 13.00	Sample Depth:	3 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 10.10	Basis:	Wet Weight
Seq Number:	3104710				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**42.0**	9.82	mg/kg	10.17.19 14.11		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.17.19 14.00	Basis:	Wet Weight
Seq Number:	3104724				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.17.19 17.08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.17.19 17.08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.17.19 17.08	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.17.19 17.08	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.17.19 17.08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	10.17.19 17.08	
o-Terphenyl	84-15-1	87	%	70-135	10.17.19 17.08	

Certificate of Analytical Results 640246

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**BH04**	Matrix:	Soil	Date Received:	10.17.19 08.30
Lab Sample Id:	640246-007	Date Collected:	10.15.19 13.00	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 11.10	Basis:	Wet Weight
Seq Number:	3104721				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00100	0.00100	mg/kg	10.17.19 17.16	U	1
Toluene	108-88-3	<0.00100	0.00100	mg/kg	10.17.19 17.16	U	1
Ethylbenzene	100-41-4	<0.00100	0.00100	mg/kg	10.17.19 17.16	U	1
m,p-Xylenes	179601-23-1	<0.00200	0.00200	mg/kg	10.17.19 17.16	U	1
o-Xylene	95-47-6	<0.00100	0.00100	mg/kg	10.17.19 17.16	U	1
Total Xylenes	1330-20-7	<0.00100	0.00100	mg/kg	10.17.19 17.16	U	1
Total BTEX		<0.00100	0.00100	mg/kg	10.17.19 17.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	10.17.19 17.16	
4-Bromofluorobenzene	460-00-4	108	%	70-130	10.17.19 17.16	

Certificate of Analytical Results 640246

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**BH04A**	Matrix:	Soil	Date Received:	10.17.19 08.30
Lab Sample Id:	640246-008	Date Collected:	10.15.19 13.05	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 10.10	Basis:	Wet Weight
Seq Number:	3104710				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**95.7**	9.86	mg/kg	10.17.19 14.17		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.17.19 14.00	Basis:	Wet Weight
Seq Number:	3104724				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	10.17.19 17.28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	10.17.19 17.28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	10.17.19 17.28	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	10.17.19 17.28	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	10.17.19 17.28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	10.17.19 17.28	
o-Terphenyl	84-15-1	103	%	70-135	10.17.19 17.28	

Certificate of Analytical Results 640246

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**BH04A**	Matrix:	Soil	Date Received:	10.17.19 08.30
Lab Sample Id:	640246-008	Date Collected:	10.15.19 13.05	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 11.10	Basis:	Wet Weight
Seq Number:	3104721				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00100	0.00100	mg/kg	10.17.19 17.37	U	1
Toluene	108-88-3	<0.00100	0.00100	mg/kg	10.17.19 17.37	U	1
Ethylbenzene	100-41-4	<0.00100	0.00100	mg/kg	10.17.19 17.37	U	1
m,p-Xylenes	179601-23-1	<0.00201	0.00201	mg/kg	10.17.19 17.37	U	1
o-Xylene	95-47-6	<0.00100	0.00100	mg/kg	10.17.19 17.37	U	1
Total Xylenes	1330-20-7	<0.00100	0.00100	mg/kg	10.17.19 17.37	U	1
Total BTEX		<0.00100	0.00100	mg/kg	10.17.19 17.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	105	%	70-130	10.17.19 17.37	
4-Bromofluorobenzene	460-00-4	112	%	70-130	10.17.19 17.37	

Certificate of Analytical Results 640246

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**BH05**	Matrix:	Soil	Date Received:	10.17.19 08.30
Lab Sample Id:	640246-009	Date Collected:	10.15.19 13.15	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 10.10	Basis:	Wet Weight
Seq Number:	3104710				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**189**	9.90	mg/kg	10.17.19 14.23		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.17.19 14.00	Basis:	Wet Weight
Seq Number:	3104724				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	10.17.19 17.28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	10.17.19 17.28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	10.17.19 17.28	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	10.17.19 17.28	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	10.17.19 17.28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	10.17.19 17.28	
o-Terphenyl	84-15-1	98	%	70-135	10.17.19 17.28	

Certificate of Analytical Results 640246

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**BH05**	Matrix:	Soil	Date Received:	10.17.19 08.30
Lab Sample Id:	640246-009	Date Collected:	10.15.19 13.15	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 11.10	Basis:	Wet Weight
Seq Number:	3104721				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00101	0.00101	mg/kg	10.17.19 17.57	U	1
Toluene	108-88-3	<0.00101	0.00101	mg/kg	10.17.19 17.57	U	1
Ethylbenzene	100-41-4	<0.00101	0.00101	mg/kg	10.17.19 17.57	U	1
m,p-Xylenes	179601-23-1	<0.00202	0.00202	mg/kg	10.17.19 17.57	U	1
o-Xylene	95-47-6	<0.00101	0.00101	mg/kg	10.17.19 17.57	U	1
Total Xylenes	1330-20-7	<0.00101	0.00101	mg/kg	10.17.19 17.57	U	1
Total BTEX		<0.00101	0.00101	mg/kg	10.17.19 17.57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	107	%	70-130	10.17.19 17.57	
1,4-Difluorobenzene	540-36-3	103	%	70-130	10.17.19 17.57	

Certificate of Analytical Results 640246

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**BH05A**	Matrix:	Soil	Date Received:	10.17.19 08.30
Lab Sample Id:	640246-010	Date Collected:	10.15.19 13.25	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 10.10	Basis:	Wet Weight
Seq Number:	3104710				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**307**	10.0	mg/kg	10.17.19 14.30		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.17.19 14.00	Basis:	Wet Weight
Seq Number:	3104724				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	10.17.19 20.37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	10.17.19 20.37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	10.17.19 20.37	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	10.17.19 20.37	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	10.17.19 20.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	10.17.19 20.37	
o-Terphenyl	84-15-1	93	%	70-135	10.17.19 20.37	

Certificate of Analytical Results 640246

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**BH05A**	Matrix:	Soil	Date Received:	10.17.19 08.30
Lab Sample Id:	640246-010	Date Collected:	10.15.19 13.25	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 11.10	Basis:	Wet Weight
Seq Number:	3104721				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00101	0.00101	mg/kg	10.17.19 18.17	U	1
Toluene	108-88-3	<0.00101	0.00101	mg/kg	10.17.19 18.17	U	1
Ethylbenzene	100-41-4	<0.00101	0.00101	mg/kg	10.17.19 18.17	U	1
m,p-Xylenes	179601-23-1	<0.00202	0.00202	mg/kg	10.17.19 18.17	U	1
o-Xylene	95-47-6	<0.00101	0.00101	mg/kg	10.17.19 18.17	U	1
Total Xylenes	1330-20-7	<0.00101	0.00101	mg/kg	10.17.19 18.17	U	1
Total BTEX		<0.00101	0.00101	mg/kg	10.17.19 18.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	114	%	70-130	10.17.19 18.17	
1,4-Difluorobenzene	540-36-3	106	%	70-130	10.17.19 18.17	

Certificate of Analytical Results 640246

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**BH06**	Matrix:	Soil	Date Received:	10.17.19 08.30
Lab Sample Id:	640246-011	Date Collected:	10.15.19 13.25	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 10.10	Basis:	Wet Weight
Seq Number:	3104710				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**76.8**	10.0	mg/kg	10.17.19 14.36		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.17.19 14.00	Basis:	Wet Weight
Seq Number:	3104724				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	10.17.19 22.16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	10.17.19 22.16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	10.17.19 22.16	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	10.17.19 22.16	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	10.17.19 22.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	10.17.19 22.16	
o-Terphenyl	84-15-1	92	%	70-135	10.17.19 22.16	

Certificate of Analytical Results 640246

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**BH06**	Matrix:	Soil	Date Received:	10.17.19 08.30
Lab Sample Id:	640246-011	Date Collected:	10.15.19 13.25	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 11.10	Basis:	Wet Weight
Seq Number:	3104721				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00101	0.00101	mg/kg	10.17.19 19.33	U	1
Toluene	108-88-3	<0.00101	0.00101	mg/kg	10.17.19 19.33	U	1
Ethylbenzene	100-41-4	<0.00101	0.00101	mg/kg	10.17.19 19.33	U	1
m,p-Xylenes	179601-23-1	<0.00202	0.00202	mg/kg	10.17.19 19.33	U	1
o-Xylene	95-47-6	<0.00101	0.00101	mg/kg	10.17.19 19.33	U	1
Total Xylenes	1330-20-7	<0.00101	0.00101	mg/kg	10.17.19 19.33	U	1
Total BTEX		<0.00101	0.00101	mg/kg	10.17.19 19.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	104	%	70-130	10.17.19 19.33	
4-Bromofluorobenzene	460-00-4	105	%	70-130	10.17.19 19.33	

Certificate of Analytical Results 640246

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**BH06A**	Matrix:	Soil	Date Received:	10.17.19 08.30
Lab Sample Id:	640246-012	Date Collected:	10.15.19 13.25	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 10.10	Basis:	Wet Weight
Seq Number:	3104710				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**153**	10.1	mg/kg	10.17.19 14.55		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.17.19 14.00	Basis:	Wet Weight
Seq Number:	3104724				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.17.19 22.36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.17.19 22.36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.17.19 22.36	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.17.19 22.36	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.17.19 22.36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	10.17.19 22.36	
o-Terphenyl	84-15-1	100	%	70-135	10.17.19 22.36	

Certificate of Analytical Results 640246

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**BH06A**	Matrix:	Soil	Date Received:	10.17.19 08.30
Lab Sample Id:	640246-012	Date Collected:	10.15.19 13.25	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 11.10	Basis:	Wet Weight
Seq Number:	3104721				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00101	0.00101	mg/kg	10.17.19 19.53	U	1
Toluene	108-88-3	<0.00101	0.00101	mg/kg	10.17.19 19.53	U	1
Ethylbenzene	100-41-4	<0.00101	0.00101	mg/kg	10.17.19 19.53	U	1
m,p-Xylenes	179601-23-1	<0.00202	0.00202	mg/kg	10.17.19 19.53	U	1
o-Xylene	95-47-6	<0.00101	0.00101	mg/kg	10.17.19 19.53	U	1
Total Xylenes	1330-20-7	<0.00101	0.00101	mg/kg	10.17.19 19.53	U	1
Total BTEX		<0.00101	0.00101	mg/kg	10.17.19 19.53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	107	%	70-130	10.17.19 19.53	
1,4-Difluorobenzene	540-36-3	104	%	70-130	10.17.19 19.53	

Certificate of Analytical Results 640246

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**BH07**	Matrix:	Soil	Date Received:	10.17.19 08.30
Lab Sample Id:	640246-013	Date Collected:	10.16.19 09.35	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 10.10	Basis:	Wet Weight
Seq Number:	3104710				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**221**	9.86	mg/kg	10.17.19 15.13		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.17.19 14.00	Basis:	Wet Weight
Seq Number:	3104724				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	10.17.19 22.55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	10.17.19 22.55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	10.17.19 22.55	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	10.17.19 22.55	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	10.17.19 22.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	10.17.19 22.55	
o-Terphenyl	84-15-1	94	%	70-135	10.17.19 22.55	

Certificate of Analytical Results 640246

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**BH07**	Matrix:	Soil	Date Received:	10.17.19 08.30
Lab Sample Id:	640246-013	Date Collected:	10.16.19 09.35	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 11.10	Basis:	Wet Weight
Seq Number:	3104721				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00100	0.00100	mg/kg	10.17.19 20.14	U	1
Toluene	108-88-3	<0.00100	0.00100	mg/kg	10.17.19 20.14	U	1
Ethylbenzene	100-41-4	<0.00100	0.00100	mg/kg	10.17.19 20.14	U	1
m,p-Xylenes	179601-23-1	<0.00201	0.00201	mg/kg	10.17.19 20.14	U	1
o-Xylene	95-47-6	<0.00100	0.00100	mg/kg	10.17.19 20.14	U	1
Total Xylenes	1330-20-7	<0.00100	0.00100	mg/kg	10.17.19 20.14	U	1
Total BTEX		<0.00100	0.00100	mg/kg	10.17.19 20.14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	112	%	70-130	10.17.19 20.14	
1,4-Difluorobenzene	540-36-3	106	%	70-130	10.17.19 20.14	

Certificate of Analytical Results 640246

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**BH07A**	Matrix:	Soil	Date Received:	10.17.19 08.30
Lab Sample Id:	640246-014	Date Collected:	10.16.19 09.45	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 10.10	Basis:	Wet Weight
Seq Number:	3104710				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**263**	49.9	mg/kg	10.17.19 15.20		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.17.19 14.00	Basis:	Wet Weight
Seq Number:	3104724				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	10.17.19 23.15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	10.17.19 23.15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	10.17.19 23.15	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	10.17.19 23.15	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	10.17.19 23.15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-135	10.17.19 23.15	
o-Terphenyl	84-15-1	88	%	70-135	10.17.19 23.15	

Certificate of Analytical Results 640246

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**BH07A**	Matrix:	Soil	Date Received:	10.17.19 08.30
Lab Sample Id:	640246-014	Date Collected:	10.16.19 09.45	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 11.10	Basis:	Wet Weight
Seq Number:	3104721				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000992	0.000992	mg/kg	10.17.19 20.34	U	1
Toluene	108-88-3	<0.000992	0.000992	mg/kg	10.17.19 20.34	U	1
Ethylbenzene	100-41-4	<0.000992	0.000992	mg/kg	10.17.19 20.34	U	1
m,p-Xylenes	179601-23-1	<0.00198	0.00198	mg/kg	10.17.19 20.34	U	1
o-Xylene	95-47-6	<0.000992	0.000992	mg/kg	10.17.19 20.34	U	1
Total Xylenes	1330-20-7	<0.000992	0.000992	mg/kg	10.17.19 20.34	U	1
Total BTEX		<0.000992	0.000992	mg/kg	10.17.19 20.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	110	%	70-130	10.17.19 20.34	
1,4-Difluorobenzene	540-36-3	102	%	70-130	10.17.19 20.34	

Certificate of Analytical Results 640246

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**BH08**	Matrix:	Soil	Date Received:	10.17.19 08.30
Lab Sample Id:	640246-015	Date Collected:	10.16.19 10.05	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 10.10	Basis:	Wet Weight
Seq Number:	3104710				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**96.9**	9.98	mg/kg	10.17.19 15.26		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.17.19 14.00	Basis:	Wet Weight
Seq Number:	3104724				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.17.19 23.35	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.17.19 23.35	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.17.19 23.35	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.17.19 23.35	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.17.19 23.35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	10.17.19 23.35	
o-Terphenyl	84-15-1	98	%	70-135	10.17.19 23.35	

Certificate of Analytical Results 640246

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**BH08**	Matrix:	Soil	Date Received:	10.17.19 08.30
Lab Sample Id:	640246-015	Date Collected:	10.16.19 10.05	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 11.10	Basis:	Wet Weight
Seq Number:	3104721				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000998	0.000998	mg/kg	10.17.19 20.55	U	1
Toluene	108-88-3	<0.000998	0.000998	mg/kg	10.17.19 20.55	U	1
Ethylbenzene	100-41-4	<0.000998	0.000998	mg/kg	10.17.19 20.55	U	1
m,p-Xylenes	179601-23-1	<0.00200	0.00200	mg/kg	10.17.19 20.55	U	1
o-Xylene	95-47-6	<0.000998	0.000998	mg/kg	10.17.19 20.55	U	1
Total Xylenes	1330-20-7	<0.000998	0.000998	mg/kg	10.17.19 20.55	U	1
Total BTEX		<0.000998	0.000998	mg/kg	10.17.19 20.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	112	%	70-130	10.17.19 20.55	
1,4-Difluorobenzene	540-36-3	103	%	70-130	10.17.19 20.55	

Certificate of Analytical Results 640246

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**BH08A**	Matrix:	Soil	Date Received:	10.17.19 08.30
Lab Sample Id:	640246-016	Date Collected:	10.16.19 10.15	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 10.10	Basis:	Wet Weight
Seq Number:	3104710				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**129**	9.88	mg/kg	10.17.19 15.32		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.17.19 14.00	Basis:	Wet Weight
Seq Number:	3104724				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.17.19 23.54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.17.19 23.54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.17.19 23.54	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.17.19 23.54	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.17.19 23.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	10.17.19 23.54	
o-Terphenyl	84-15-1	96	%	70-135	10.17.19 23.54	

Certificate of Analytical Results 640246

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**BH08A**	Matrix:	Soil	Date Received:	10.17.19 08.30
Lab Sample Id:	640246-016	Date Collected:	10.16.19 10.15	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 11.10	Basis:	Wet Weight
Seq Number:	3104721				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00100	0.00100	mg/kg	10.17.19 21.15	U	1
Toluene	108-88-3	<0.00100	0.00100	mg/kg	10.17.19 21.15	U	1
Ethylbenzene	100-41-4	<0.00100	0.00100	mg/kg	10.17.19 21.15	U	1
m,p-Xylenes	179601-23-1	<0.00200	0.00200	mg/kg	10.17.19 21.15	U	1
o-Xylene	95-47-6	<0.00100	0.00100	mg/kg	10.17.19 21.15	U	1
Total Xylenes	1330-20-7	<0.00100	0.00100	mg/kg	10.17.19 21.15	U	1
Total BTEX		<0.00100	0.00100	mg/kg	10.17.19 21.15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	103	%	70-130	10.17.19 21.15	
4-Bromofluorobenzene	460-00-4	110	%	70-130	10.17.19 21.15	

Certificate of Analytical Results 640246

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**BH09**	Matrix:	Soil	Date Received:	10.17.19 08.30
Lab Sample Id:	640246-017	Date Collected:	10.16.19 13.30	Sample Depth:	3 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 10.10	Basis:	Wet Weight
Seq Number:	3104710				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**343**	49.3	mg/kg	10.17.19 15.38		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.17.19 14.00	Basis:	Wet Weight
Seq Number:	3104724				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	10.18.19 00.14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	10.18.19 00.14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	10.18.19 00.14	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	10.18.19 00.14	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	10.18.19 00.14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	82	%	70-135	10.18.19 00.14	
o-Terphenyl	84-15-1	83	%	70-135	10.18.19 00.14	

Certificate of Analytical Results 640246

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**BH09**	Matrix:	Soil	Date Received:	10.17.19 08.30
Lab Sample Id:	640246-017	Date Collected:	10.16.19 13.30	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 11.10	Basis:	Wet Weight
Seq Number:	3104721				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00100	0.00100	mg/kg	10.17.19 21.35	U	1
Toluene	108-88-3	<0.00100	0.00100	mg/kg	10.17.19 21.35	U	1
Ethylbenzene	100-41-4	<0.00100	0.00100	mg/kg	10.17.19 21.35	U	1
m,p-Xylenes	179601-23-1	<0.00201	0.00201	mg/kg	10.17.19 21.35	U	1
o-Xylene	95-47-6	<0.00100	0.00100	mg/kg	10.17.19 21.35	U	1
Total Xylenes	1330-20-7	<0.00100	0.00100	mg/kg	10.17.19 21.35	U	1
Total BTEX		<0.00100	0.00100	mg/kg	10.17.19 21.35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	110	%	70-130	10.17.19 21.35	
1,4-Difluorobenzene	540-36-3	102	%	70-130	10.17.19 21.35	

Certificate of Analytical Results 640246

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**BH09A**	Matrix:	Soil	Date Received:	10.17.19 08.30
Lab Sample Id:	640246-018	Date Collected:	10.16.19 13.35	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 10.10	Basis:	Wet Weight
Seq Number:	3104710				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**365**	101	mg/kg	10.17.19 15.45		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.17.19 14.00	Basis:	Wet Weight
Seq Number:	3104724				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	10.18.19 00.34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	10.18.19 00.34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	10.18.19 00.34	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	10.18.19 00.34	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	10.18.19 00.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	10.18.19 00.34	
o-Terphenyl	84-15-1	95	%	70-135	10.18.19 00.34	

Certificate of Analytical Results 640246

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**BH09A**	Matrix:	Soil	Date Received:	10.17.19 08.30
Lab Sample Id:	640246-018	Date Collected:	10.16.19 13.35	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 11.10	Basis:	Wet Weight
Seq Number:	3104721				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00101	0.00101	mg/kg	10.17.19 21.56	U	1
Toluene	108-88-3	<0.00101	0.00101	mg/kg	10.17.19 21.56	U	1
Ethylbenzene	100-41-4	<0.00101	0.00101	mg/kg	10.17.19 21.56	U	1
m,p-Xylenes	179601-23-1	<0.00202	0.00202	mg/kg	10.17.19 21.56	U	1
o-Xylene	95-47-6	<0.00101	0.00101	mg/kg	10.17.19 21.56	U	1
Total Xylenes	1330-20-7	<0.00101	0.00101	mg/kg	10.17.19 21.56	U	1
Total BTEX		<0.00101	0.00101	mg/kg	10.17.19 21.56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	10.17.19 21.56	
4-Bromofluorobenzene	460-00-4	108	%	70-130	10.17.19 21.56	

Certificate of Analytical Results 640246

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**BH10**	Matrix:	Soil	Date Received:	10.17.19 08.30
Lab Sample Id:	640246-019	Date Collected:	10.16.19 13.45	Sample Depth:	3 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 10.10	Basis:	Wet Weight
Seq Number:	3104710				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**615**	49.7	mg/kg	10.17.19 15.51		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.17.19 14.00	Basis:	Wet Weight
Seq Number:	3104724				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	10.18.19 00.53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	10.18.19 00.53	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	10.18.19 00.53	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	10.18.19 00.53	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	10.18.19 00.53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	10.18.19 00.53	
o-Terphenyl	84-15-1	92	%	70-135	10.18.19 00.53	

Certificate of Analytical Results 640246

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**BH10**	Matrix:	Soil	Date Received:	10.17.19 08.30
Lab Sample Id:	640246-019	Date Collected:	10.16.19 13.45	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 11.10	Basis:	Wet Weight
Seq Number:	3104721				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00101	0.00101	mg/kg	10.17.19 22.16	U	1
Toluene	108-88-3	<0.00101	0.00101	mg/kg	10.17.19 22.16	U	1
Ethylbenzene	100-41-4	<0.00101	0.00101	mg/kg	10.17.19 22.16	U	1
m,p-Xylenes	179601-23-1	<0.00202	0.00202	mg/kg	10.17.19 22.16	U	1
o-Xylene	95-47-6	<0.00101	0.00101	mg/kg	10.17.19 22.16	U	1
Total Xylenes	1330-20-7	<0.00101	0.00101	mg/kg	10.17.19 22.16	U	1
Total BTEX		<0.00101	0.00101	mg/kg	10.17.19 22.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	105	%	70-130	10.17.19 22.16	
4-Bromofluorobenzene	460-00-4	116	%	70-130	10.17.19 22.16	

Certificate of Analytical Results 640246

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**BH10A**	Matrix:	Soil	Date Received:	10.17.19 08.30
Lab Sample Id:	640246-020	Date Collected:	10.16.19 13.50	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 10.10	Basis:	Wet Weight
Seq Number:	3104710				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**437**	50.0	mg/kg	10.17.19 15.57		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.17.19 14.00	Basis:	Wet Weight
Seq Number:	3104724				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	10.18.19 01.13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	10.18.19 01.13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	10.18.19 01.13	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	10.18.19 01.13	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	10.18.19 01.13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	10.18.19 01.13	
o-Terphenyl	84-15-1	87	%	70-135	10.18.19 01.13	

Certificate of Analytical Results 640246

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**BH10A**	Matrix:	Soil	Date Received:	10.17.19 08.30
Lab Sample Id:	640246-020	Date Collected:	10.16.19 13.50	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 11.10	Basis:	Wet Weight
Seq Number:	3104721				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00101	0.00101	mg/kg	10.17.19 22.37	U	1
Toluene	108-88-3	<0.00101	0.00101	mg/kg	10.17.19 22.37	U	1
Ethylbenzene	100-41-4	<0.00101	0.00101	mg/kg	10.17.19 22.37	U	1
m,p-Xylenes	179601-23-1	<0.00202	0.00202	mg/kg	10.17.19 22.37	U	1
o-Xylene	95-47-6	<0.00101	0.00101	mg/kg	10.17.19 22.37	U	1
Total Xylenes	1330-20-7	<0.00101	0.00101	mg/kg	10.17.19 22.37	U	1
Total BTEX		<0.00101	0.00101	mg/kg	10.17.19 22.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	70-130	10.17.19 22.37	
4-Bromofluorobenzene	460-00-4	110	%	70-130	10.17.19 22.37	

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 640246

LT Environmental, Inc.

Remuda 100 Battery

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3104710 — Matrix: Solid — Date Prep: 10.17.19
MB Sample Id: 7688307-1-BLK — LCS Sample Id: 7688307-1-BKS — LCSD Sample Id: 7688307-1-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	243	97	244	98	90-110	0	20	mg/kg	10.17.19 12:06	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3104710 — Matrix: Soil — Date Prep: 10.17.19
Parent Sample Id: 640246-001 — MS Sample Id: 640246-001 S — MSD Sample Id: 640246-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	166	2010	2070	95	2050	94	90-110	1	20	mg/kg	10.17.19 13:14	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3104710 — Matrix: Solid — Date Prep: 10.17.19
Parent Sample Id: 640246-011 — MS Sample Id: 640246-011 S — MSD Sample Id: 640246-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	76.8	198	277	101	279	102	90-110	1	20	mg/kg	10.18.19 14:40	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3104724 — Matrix: Solid — Date Prep: 10.17.19
MB Sample Id: 7688354-1-BLK — LCS Sample Id: 7688354-1-BKS — LCSD Sample Id: 7688354-1-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)	17.3	1000	1010	101	978	98	70-135	3	35	mg/kg	10.17.19 15:28	
Diesel Range Organics (DRO)	12.8	1000	866	87	857	86	70-135	1	35	mg/kg	10.17.19 15:28	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	92		122		123		70-135	%	10.17.19 15:28
o-Terphenyl	97		106		108		70-135	%	10.17.19 15:28

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3104724 — Matrix: Solid — Date Prep: 10.17.19
MB Sample Id: 7688354-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	10.17.19 15:28	

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 640246

LT Environmental, Inc.

Remuda 100 Battery

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3104724 — Matrix: Soil — Date Prep: 10.17.19
Parent Sample Id: 640246-001 — MS Sample Id: 640246-001 S — MSD Sample Id: 640246-001 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)	22.2	999	840	82	743	72	70-135	12	35	mg/kg	10.17.19 16:08	
Diesel Range Organics (DRO)	13.3	999	737	72	616	60	70-135	18	35	mg/kg	10.17.19 16:08	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	70		103		70-135	%	10.17.19 16:08
o-Terphenyl	108		96		70-135	%	10.17.19 16:08

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3104721 — Matrix: Solid — Date Prep: 10.17.19
MB Sample Id: 7688368-1-BLK — LCS Sample Id: 7688368-1-BKS — LCSD Sample Id: 7688368-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00100	0.100	0.0846	85	0.0835	84	70-130	1	35	mg/kg	10.17.19 13:18	
Toluene	<0.00100	0.100	0.0801	80	0.0801	80	70-130	0	35	mg/kg	10.17.19 13:18	
Ethylbenzene	<0.00100	0.100	0.0864	86	0.0817	82	71-129	6	35	mg/kg	10.17.19 13:18	
m,p-Xylenes	<0.00200	0.200	0.174	87	0.163	82	70-135	7	35	mg/kg	10.17.19 13:18	
o-Xylene	<0.00100	0.100	0.0854	85	0.0835	84	71-133	2	35	mg/kg	10.17.19 13:18	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		101		102		70-130	%	10.17.19 13:18
4-Bromofluorobenzene	105		99		107		70-130	%	10.17.19 13:18

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3104721 — Matrix: Soil — Date Prep: 10.17.19
Parent Sample Id: 640246-001 — MS Sample Id: 640246-001 S — MSD Sample Id: 640246-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00101	0.101	0.0841	83	0.114	113	70-130	30	35	mg/kg	10.17.19 13:59	
Toluene	<0.00101	0.101	0.0819	81	0.0938	93	70-130	14	35	mg/kg	10.17.19 13:59	
Ethylbenzene	<0.00101	0.101	0.0842	83	0.0963	95	71-129	13	35	mg/kg	10.17.19 13:59	
m,p-Xylenes	<0.00201	0.201	0.170	85	0.195	97	70-135	14	35	mg/kg	10.17.19 13:59	
o-Xylene	<0.00101	0.101	0.0865	86	0.0986	98	71-133	13	35	mg/kg	10.17.19 13:59	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		106		70-130	%	10.17.19 13:59
4-Bromofluorobenzene	110		111		70-130	%	10.17.19 13:59

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

Work Order No: 640240

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 Littrel
Company Name:	LT Environmental, Inc., Permian office	Company Name:	XTO-Energy
Address:	3300 North A Street	Address:	3104 E. Greene Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM
Phone:	432.704.5178	Email:	dmoir@ltenv.com rmcafee@ltenv.com

Work Order Comments

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

Project Name:	Remuda 100 Battery	Turn Around	
Project Number:		Routine ☐	
P.O. Number:	2RP-5589	Rush: 24 hr	
Sampler's Name:	Robert McAfee	Due Date:	

SAMPLE RECEIPT			
Temperature (°C):	2.0	Temp Blank: (Yes) No	Wet Ice: (Yes) No
Received Intact:	(Yes) No	Thermometer ID	TNM007
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes (No) N/A	Total Containers:	20

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	Sample Comments
BH01	S	10/15/19	1130	2'	1	X	X	X	discrete
BH01A			1135	2.5'		X	X	X	
BH02			1205	1'		X	X	X	
BH02A			1225	5'		X	X	X	
BH03			1140	1'		X	X	X	
BH03A			1155	4'		X	X	X	
BH04			1300	3'		X	X	X	
BH04A			1305	4'		X	X	X	
BH05			1315	2'		X	X	X	
BH05A			1325	4'		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
Robert McAfee	Anna Byers	10/17/19 @ 0800	2 Anna Byers	Mark	10/17/19 0830
			4		
			6		

Chain of Custody

Work Order No: 640246

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 Littrel
Company Name:	LT Environmental, Inc., Permian office	Company Name:	XTO-Energy
Address:	3300 North A Street	Address:	3104 E. Greene Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM
Phone:	432.704.5178 Email:		dmoir@ltenv.com rmcafee@ltenv.com

Work Order Comments

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

Project Name:	Bermuda 100 Battery	Turn Around	
Project Number:		Routine ☐	
P.O. Number:	2RP - 5589	Rush: 24hr	
Sampler's Name:	Robert McAfee	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Temperature (°C):	5.2	Thermometer ID	IR2	
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 0=8021)	Chloride (EPA 300.0)	Sample Comments
BH06	S	10/15/19	1330	1'	1	X	X	X	discrete
BH06A		10/15/19	1345	4'		X	X	X	
BH07		10/16/19	0935	2'		X	X	X	
BH07A			0945	4'		X	X	X	
BH08			1005	2'		X	X	X	
BH08A			1015	4'		X	X	X	
BH09			1330	3'		X	X	X	
BH09A			1336	4'		X	X	X	
BH10			1345	3'		X	X	X	
BH10A			1350	4'		X	X	X	

ANALYSIS REQUEST

Work Order Notes

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

Sample Comments

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

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

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

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	Robert McAfee	Anna Byers	10/17/19 @ 0800	2 Anna Byers	Mail.	10/17/19 0830
3				4		
5				6		

Revised Date 051418 Rev. 2018 1

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 10/17/2019 08:30:00 AM

Work Order #: 640246

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

Temperature Measuring device used : T-NM-007

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	2
#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: 10/17/2019

Checklist reviewed by: Jessica Kramer Date: 10/17/2019

Jessica Kramer

Analytical Report 640361

for

LT Environmental, Inc.

Project Manager: Dan Moir

Remuda 100 Battery

21-OCT-19

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142), North Carolina (681)

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

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

21-OCT-19

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

Reference: XENCO Report No(s): **640361**
Remuda 100 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) 640361. 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. 640361 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

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Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America

Sample Cross Reference 640361

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS01	S	10-16-19 10:20	1 ft	640361-001
FS02	S	10-16-19 10:25	1 ft	640361-002
FS03	S	10-16-19 10:30	7 ft	640361-003
FS04	S	10-16-19 10:40	3 ft	640361-004
FS05	S	10-16-19 10:50	2 ft	640361-005
FS06	S	10-16-19 10:55	4 ft	640361-006
FS07	S	10-16-19 11:00	6 ft	640361-007
FS08	S	10-16-19 11:20	5 ft	640361-008
FS09	S	10-16-19 11:30	4 ft	640361-009
FS10	S	10-16-19 11:45	3.5 ft	640361-010
FS11	S	10-16-19 11:50	2.5 ft	640361-011
FS12	S	10-16-19 11:55	1 ft	640361-012
FS13	S	10-16-19 14:55	5 ft	640361-013
FS14	S	10-16-19 15:00	7 ft	640361-014
SW01	S	10-16-19 12:30	0 - 7 ft	640361-015
SW02	S	10-16-19 12:35	0 - 3.5 ft	640361-016
SW03	S	10-16-19 12:40	0 - 4.5 ft	640361-017
SW04	S	10-16-19 12:45	0 - 3 ft	640361-018
SW05	S	10-16-19 12:50	0 - 6 ft	640361-019
SW06	S	10-16-19 15:05	0 - 5 ft	640361-020
SW07	S	10-16-19 15:10	0 - 7 ft	640361-021

CASE NARRATIVE

Client Name: LT Environmental, Inc.
Project Name: Remuda 100 Battery

Project ID:
Work Order Number(s): *640361*

Report Date: *21-OCT-19*
Date Received: *10/17/2019*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3104727 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.
Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.
Samples affected are: 640360-001 SD,640361-001,640361-015,640361-009,640361-010,640361-014,640361-002,640361-008.

Batch: LBA-3104782 BTEX by EPA 8021B
Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.
Samples affected are: 640361-017.
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analysis Summary 640361

LT Environmental, Inc., Arvada, CO

Project Name: Remuda 100 Battery

Project Id:

Contact: Dan Moir

Project Location:

Date Received in Lab: Thu Oct-17-19 04:05 pm

Report Date: 21-OCT-19

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	640361-001		640361-002		640361-003		640361-004		640361-005		640361-006	
	Field Id:	FS01		FS02		FS03		FS04		FS05		FS06	
	Depth:	1- ft		1- ft		7- ft		3- ft		2- ft		4- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-16-19 10:20		Oct-16-19 10:25		Oct-16-19 10:30		Oct-16-19 10:40		Oct-16-19 10:50		Oct-16-19 10:55	
BTEX by EPA 8021B	*Extracted:*	Oct-17-19 17:10		Oct-17-19 17:10		Oct-17-19 17:10		Oct-17-19 17:10		Oct-17-19 17:10		Oct-17-19 17:10	
	Analyzed:	Oct-18-19 00:53		Oct-18-19 00:34		Oct-18-19 00:15		Oct-17-19 23:56		Oct-17-19 23:36		Oct-18-19 12:34	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		0.00260	0.00101	0.00434	0.00101	<0.00100	0.00100	<0.000996	0.000996	<0.00101	0.00101	<0.00100	0.00100
Toluene		0.243	0.00101	0.167	0.00101	0.00145	0.00100	<0.000996	0.000996	<0.00101	0.00101	<0.00100	0.00100
Ethylbenzene		0.251	0.00101	0.251	0.00101	<0.00100	0.00100	<0.000996	0.000996	<0.00101	0.00101	<0.00100	0.00100
m,p-Xylenes		13.7 D	0.403	9.23 D	0.202	0.00436	0.00200	<0.00199	0.00199	0.00248	0.00202	<0.00200	0.00200
o-Xylene		6.69 D	0.202	3.47 D	0.101	0.00146	0.00100	<0.000996	0.000996	0.00107	0.00101	<0.00100	0.00100
Total Xylenes		20.4	0.202	12.7	0.101	0.00582	0.00100	<0.000996	0.000996	0.00355	0.00101	<0.00100	0.00100
Total BTEX		20.9	0.00101	13.1	0.00101	0.00727	0.00100	<0.000996	0.000996	0.00355	0.00101	<0.00100	0.00100
Chloride by EPA 300	*Extracted:*	Oct-17-19 17:30		Oct-17-19 17:30		Oct-17-19 17:30		Oct-17-19 17:30		Oct-17-19 17:30		Oct-17-19 17:30	
	Analyzed:	Oct-17-19 20:17		Oct-17-19 20:24		Oct-17-19 20:30		Oct-17-19 20:36		Oct-17-19 20:42		Oct-17-19 20:49	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		85.6	9.90	140	49.2	368	49.2	66.7	10.0	124	99.2	130	9.82
TPH by SW8015 Mod	*Extracted:*	Oct-18-19 13:10		Oct-18-19 13:10		Oct-18-19 13:10		Oct-18-19 13:10		Oct-18-19 13:10		Oct-18-19 13:10	
	Analyzed:	Oct-18-19 15:17		Oct-18-19 15:37		Oct-18-19 15:37		Oct-18-19 15:57		Oct-18-19 15:57		Oct-18-19 16:17	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		1320	50.1	448	49.8	<50.3	50.3	<50.1	50.1	<50.1	50.1	<50.1	50.1
Diesel Range Organics (DRO)		2840	50.1	1980	49.8	<50.3	50.3	54.4	50.1	<50.1	50.1	<50.1	50.1
Motor Oil Range Hydrocarbons (MRO)		206	50.1	149	49.8	<50.3	50.3	<50.1	50.1	<50.1	50.1	<50.1	50.1
Total GRO-DRO		4160	50.1	2430	49.8	<50.3	50.3	54.4	50.1	<50.1	50.1	<50.1	50.1
Total TPH		4370	50.1	2580	49.8	<50.3	50.3	54.4	50.1	<50.1	50.1	<50.1	50.1

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 640361

LT Environmental, Inc., Arvada, CO

Project Name: Remuda 100 Battery

Project Id:

Contact: Dan Moir

Project Location:

Date Received in Lab: Thu Oct-17-19 04:05 pm

Report Date: 21-OCT-19

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	640361-007		640361-008		640361-009		640361-010		640361-011		640361-012	
	Field Id:	FS07		FS08		FS09		FS10		FS11		FS12	
	Depth:	6- ft		5- ft		4- ft		3.5- ft		2.5- ft		1- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-16-19 11:00		Oct-16-19 11:20		Oct-16-19 11:30		Oct-16-19 11:45		Oct-16-19 11:50		Oct-16-19 11:55	
BTEX by EPA 8021B	Extracted:	Oct-17-19 17:10		Oct-17-19 17:10		Oct-17-19 17:10		Oct-17-19 17:10		Oct-17-19 17:10		Oct-17-19 17:10	
	Analyzed:	Oct-18-19 02:41		Oct-18-19 03:00		Oct-18-19 03:19		Oct-18-19 03:39		Oct-18-19 03:58		Oct-18-19 04:17	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00101	0.00101	<0.00101	0.00101	<0.000994	0.000994	<0.000994	0.000994	<0.00100	0.00100	<0.00101	0.00101
Toluene		<0.00101	0.00101	<0.00101	0.00101	<0.000994	0.000994	<0.000994	0.000994	<0.00100	0.00100	0.00115	0.00101
Ethylbenzene		<0.00101	0.00101	<0.00101	0.00101	<0.000994	0.000994	<0.000994	0.000994	<0.00100	0.00100	0.00712	0.00101
m,p-Xylenes		<0.00201	0.00201	<0.00202	0.00202	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	0.0211	0.00201
o-Xylene		<0.00101	0.00101	<0.00101	0.00101	<0.000994	0.000994	<0.000994	0.000994	<0.00100	0.00100	0.0214	0.00101
Total Xylenes		<0.00101	0.00101	<0.00101	0.00101	<0.000994	0.000994	<0.000994	0.000994	<0.00100	0.00100	0.0425	0.00101
Total BTEX		<0.00101	0.00101	<0.00101	0.00101	<0.000994	0.000994	<0.000994	0.000994	<0.00100	0.00100	0.0508	0.00101
Chloride by EPA 300	Extracted:	Oct-17-19 17:30		Oct-17-19 17:30		Oct-17-19 17:30		Oct-17-19 17:30		Oct-17-19 17:30		Oct-17-19 17:30	
	Analyzed:	Oct-17-19 20:55		Oct-17-19 21:01		Oct-17-19 21:07		Oct-17-19 21:14		Oct-17-19 21:32		Oct-17-19 21:39	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		163	100	244	98.8	310	99.4	227	9.86	69.2	9.96	70.9	9.94
TPH by SW8015 Mod	Extracted:	Oct-18-19 13:10		Oct-18-19 13:10		Oct-18-19 13:10		Oct-18-19 13:10		Oct-18-19 13:10		Oct-18-19 13:10	
	Analyzed:	Oct-18-19 16:37		Oct-18-19 16:37		Oct-18-19 16:57		Oct-18-19 16:57		Oct-18-19 17:17		Oct-18-19 17:17	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.3	50.3	<50.2	50.2	<49.8	49.8	<50.1	50.1	<49.8	49.8	<50.1	50.1
Diesel Range Organics (DRO)		<50.3	50.3	<50.2	50.2	<49.8	49.8	<50.1	50.1	<49.8	49.8	767	50.1
Motor Oil Range Hydrocarbons (MRO)		<50.3	50.3	<50.2	50.2	<49.8	49.8	<50.1	50.1	<49.8	49.8	77.1	50.1
Total GRO-DRO		<50.3	50.3	<50.2	50.2	<49.8	49.8	<50.1	50.1	<49.8	49.8	767	50.1
Total TPH		<50.3	50.3	<50.2	50.2	<49.8	49.8	<50.1	50.1	<49.8	49.8	844	50.1

Jessica Kramer
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Certificate of Analysis Summary 640361

LT Environmental, Inc., Arvada, CO

Project Name: Remuda 100 Battery

Project Id:

Contact: Dan Moir

Project Location:

Date Received in Lab: Thu Oct-17-19 04:05 pm

Report Date: 21-OCT-19

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	640361-013		640361-014		640361-015		640361-016		640361-017		640361-018	
	Field Id:	FS13		FS14		SW01		SW02		SW03		SW04	
	Depth:	5- ft		7- ft		0-7 ft		0-3.5 ft		0-4.5 ft		0-3 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-16-19 14:55		Oct-16-19 15:00		Oct-16-19 12:30		Oct-16-19 12:35		Oct-16-19 12:40		Oct-16-19 12:45	
BTEX by EPA 8021B	Extracted:	Oct-17-19 17:10		Oct-17-19 17:10		Oct-17-19 17:10		Oct-17-19 17:10		Oct-17-19 17:10		Oct-17-19 17:10	
	Analyzed:	Oct-18-19 04:36		Oct-18-19 04:55		Oct-18-19 05:14		Oct-18-19 08:19		Oct-18-19 08:38		Oct-18-19 08:57	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00100	0.00100	<0.000998	0.000998	<0.000994	0.000994	<0.000986	0.000986	<0.00100	0.00100	<0.000998	0.000998
Toluene		<0.00100	0.00100	<0.000998	0.000998	<0.000994	0.000994	<0.000986	0.000986	<0.00100	0.00100	<0.000998	0.000998
Ethylbenzene		<0.00100	0.00100	<0.000998	0.000998	<0.000994	0.000994	<0.000986	0.000986	<0.00100	0.00100	<0.000998	0.000998
m,p-Xylenes		<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00197	0.00197	<0.00200	0.00200	0.00221	0.00200
o-Xylene		<0.00100	0.00100	<0.000998	0.000998	<0.000994	0.000994	<0.000986	0.000986	<0.00100	0.00100	0.00191	0.000998
Total Xylenes		<0.00100	0.00100	<0.000998	0.000998	<0.000994	0.000994	<0.000986	0.000986	<0.00100	0.00100	0.00412	0.000998
Total BTEX		<0.00100	0.00100	<0.000998	0.000998	<0.000994	0.000994	<0.000986	0.000986	<0.00100	0.00100	0.00412	0.000998
Chloride by EPA 300	Extracted:	Oct-17-19 17:30		Oct-17-19 17:30		Oct-17-19 17:10		Oct-17-19 17:10		Oct-17-19 17:10		Oct-17-19 17:10	
	Analyzed:	Oct-17-19 21:45		Oct-17-19 21:51		Oct-17-19 22:48		Oct-17-19 23:06		Oct-17-19 23:13		Oct-17-19 23:19	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		47.6	10.1	96.3	10.0	55.7	10.0	16.7	9.84	226	49.4	194	98.8
TPH by SW8015 Mod	Extracted:	Oct-18-19 13:10		Oct-18-19 13:10		Oct-18-19 13:10		Oct-17-19 16:30		Oct-17-19 16:30		Oct-17-19 16:30	
	Analyzed:	Oct-18-19 17:36		Oct-18-19 17:36		Oct-18-19 17:56		Oct-18-19 02:50		Oct-18-19 03:49		Oct-18-19 04:08	
	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	<49.9	49.9	<49.8	49.8	<50.3	50.3	<50.3	50.3	<49.7	49.7
Diesel Range Organics (DRO)		<50.1	50.1	<49.9	49.9	<49.8	49.8	<50.3	50.3	<50.3	50.3	224	49.7
Motor Oil Range Hydrocarbons (MRO)		<50.1	50.1	<49.9	49.9	<49.8	49.8	<50.3	50.3	<50.3	50.3	<49.7	49.7
Total GRO-DRO		<50.1	50.1	<49.9	49.9	<49.8	49.8	<50.3	50.3	<50.3	50.3	224	49.7
Total TPH		<50.1	50.1	<49.9	49.9	<49.8	49.8	<50.3	50.3	<50.3	50.3	224	49.7

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Certificate of Analysis Summary 640361

LT Environmental, Inc., Arvada, CO

Project Name: Remuda 100 Battery

Project Id:

Contact: Dan Moir

Project Location:

Date Received in Lab: Thu Oct-17-19 04:05 pm

Report Date: 21-OCT-19

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	640361-019		640361-020		640361-021							
	Field Id:	SW05		SW06		SW07							
	Depth:	0-6 ft		0-5 ft		0-7 ft							
	Matrix:	SOIL		SOIL		SOIL							
	Sampled:	Oct-16-19 12:50		Oct-16-19 15:05		Oct-16-19 15:10							
BTEX by EPA 8021B	***Extracted:***	Oct-17-19 17:10		Oct-17-19 17:10		Oct-17-19 17:10							
	Analyzed:	Oct-18-19 09:19		Oct-18-19 09:38		Oct-18-19 09:57							
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL						
Benzene		<0.000988	0.000988	<0.000998	0.000998	<0.000998	0.000998						
Toluene		<0.000988	0.000988	<0.000998	0.000998	<0.000998	0.000998						
Ethylbenzene		<0.000988	0.000988	0.00261	0.000998	<0.000998	0.000998						
m,p-Xylenes		<0.00198	0.00198	0.0131	0.00200	<0.00200	0.00200						
o-Xylene		<0.000988	0.000988	0.00804	0.000998	<0.000998	0.000998						
Total Xylenes		<0.000988	0.000988	0.0211	0.000998	<0.000998	0.000998						
Total BTEX		<0.000988	0.000988	0.0238	0.000998	<0.000998	0.000998						
Chloride by EPA 300	***Extracted:***	Oct-17-19 17:10		Oct-17-19 17:10		Oct-17-19 17:10							
	Analyzed:	Oct-17-19 23:38		Oct-17-19 23:43		Oct-17-19 23:48							
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL						
Chloride		70.5 D	9.90	431 D	9.84	550 D	100						
TPH by SW8015 Mod	***Extracted:***	Oct-17-19 16:30		Oct-17-19 16:30		Oct-17-19 16:30							
	Analyzed:	Oct-18-19 04:28		Oct-18-19 04:47		Oct-18-19 05:07							
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL						
Gasoline Range Hydrocarbons (GRO)		<49.9	49.9	<49.8	49.8	<50.1	50.1						
Diesel Range Organics (DRO)		<49.9	49.9	234	49.8	50.5	50.1						
Motor Oil Range Hydrocarbons (MRO)		<49.9	49.9	<49.8	49.8	<50.1	50.1						
Total GRO-DRO		<49.9	49.9	234	49.8	50.5	50.1						
Total TPH		<49.9	49.9	234	49.8	50.5	50.1						

Jessica Kramer
Project Assistant

Certificate of Analytical Results 640361

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**FS01**	Matrix:	Soil	Date Received:	10.17.19 16.05
Lab Sample Id:	640361-001	Date Collected:	10.16.19 10.20	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 17.30	Basis:	Wet Weight
Seq Number:	3104735				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**85.6**	9.90	mg/kg	10.17.19 20.17		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.18.19 13.10	Basis:	Wet Weight
Seq Number:	3104794				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**1320**	50.1	mg/kg	10.18.19 15.17		1
Diesel Range Organics (DRO)	C10C28DRO	**2840**	50.1	mg/kg	10.18.19 15.17		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**206**	50.1	mg/kg	10.18.19 15.17		1
Total GRO-DRO	PHC628	**4160**	50.1	mg/kg	10.18.19 15.17		1
Total TPH	PHC635	**4370**	50.1	mg/kg	10.18.19 15.17		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	134	%	70-135	10.18.19 15.17	
o-Terphenyl	84-15-1	122	%	70-135	10.18.19 15.17	

Certificate of Analytical Results 640361

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**FS01**	Matrix:	Soil	Date Received:	10.17.19 16.05
Lab Sample Id:	640361-001	Date Collected:	10.16.19 10.20	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 17.10	Basis:	Wet Weight
Seq Number:	3104727				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	**0.00260**	0.00101	mg/kg	10.18.19 00.53		1
Toluene	108-88-3	**0.243**	0.00101	mg/kg	10.18.19 00.53		1
Ethylbenzene	100-41-4	**0.251**	0.00101	mg/kg	10.18.19 00.53		1
m,p-Xylenes	179601-23-1	**13.7**	0.403	mg/kg	10.18.19 12.54	D	200
o-Xylene	95-47-6	**6.69**	0.202	mg/kg	10.18.19 12.54	D	200
Total Xylenes	1330-20-7	**20.4**	0.202	mg/kg	10.18.19 12.54		200
Total BTEX		**20.9**	0.00101	mg/kg	10.18.19 12.54		200

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	168	%	70-130	10.18.19 00.53	**
1,4-Difluorobenzene	540-36-3	99	%	70-130	10.18.19 00.53	

Certificate of Analytical Results 640361

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**FS02**	Matrix:	Soil	Date Received:	10.17.19 16.05
Lab Sample Id:	640361-002	Date Collected:	10.16.19 10.25	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 17.30	Basis:	Wet Weight
Seq Number:	3104735				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**140**	49.2	mg/kg	10.17.19 20.24		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.18.19 13.10	Basis:	Wet Weight
Seq Number:	3104794				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**448**	49.8	mg/kg	10.18.19 15.37		1
Diesel Range Organics (DRO)	C10C28DRO	**1980**	49.8	mg/kg	10.18.19 15.37		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**149**	49.8	mg/kg	10.18.19 15.37		1
Total GRO-DRO	PHC628	**2430**	49.8	mg/kg	10.18.19 15.37		1
Total TPH	PHC635	**2580**	49.8	mg/kg	10.18.19 15.37		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	123	%	70-135	10.18.19 15.37	
o-Terphenyl	84-15-1	97	%	70-135	10.18.19 15.37	

Certificate of Analytical Results 640361

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**FS02**	Matrix:	Soil	Date Received:	10.17.19 16.05
Lab Sample Id:	640361-002	Date Collected:	10.16.19 10.25	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 17.10	Basis:	Wet Weight
Seq Number:	3104727				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	**0.00434**	0.00101	mg/kg	10.18.19 00.34		1
Toluene	108-88-3	**0.167**	0.00101	mg/kg	10.18.19 00.34		1
Ethylbenzene	100-41-4	**0.251**	0.00101	mg/kg	10.18.19 00.34		1
m,p-Xylenes	179601-23-1	**9.23**	0.202	mg/kg	10.18.19 13.14	D	100
o-Xylene	95-47-6	**3.47**	0.101	mg/kg	10.18.19 13.14	D	100
Total Xylenes	1330-20-7	**12.7**	0.101	mg/kg	10.18.19 13.14		100
Total BTEX		**13.1**	0.00101	mg/kg	10.18.19 13.14		100

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	95	%	70-130	10.18.19 00.34	
4-Bromofluorobenzene	460-00-4	231	%	70-130	10.18.19 00.34	**

Certificate of Analytical Results 640361

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**FS03**	Matrix:	Soil	Date Received:	10.17.19 16.05
Lab Sample Id:	640361-003	Date Collected:	10.16.19 10.30	Sample Depth:	7 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 17.30	Basis:	Wet Weight
Seq Number:	3104735				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**368**	49.2	mg/kg	10.17.19 20.30		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.18.19 13.10	Basis:	Wet Weight
Seq Number:	3104794				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	10.18.19 15.37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	10.18.19 15.37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	10.18.19 15.37	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	10.18.19 15.37	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	10.18.19 15.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	10.18.19 15.37	
o-Terphenyl	84-15-1	115	%	70-135	10.18.19 15.37	

Certificate of Analytical Results 640361

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**FS03**	Matrix:	Soil	Date Received:	10.17.19 16.05
Lab Sample Id:	640361-003	Date Collected:	10.16.19 10.30	Sample Depth:	7 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 17.10	Basis:	Wet Weight
Seq Number:	3104727				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00100	0.00100	mg/kg	10.18.19 00.15	U	1
Toluene	108-88-3	**0.00145**	0.00100	mg/kg	10.18.19 00.15		1
Ethylbenzene	100-41-4	<0.00100	0.00100	mg/kg	10.18.19 00.15	U	1
m,p-Xylenes	179601-23-1	**0.00436**	0.00200	mg/kg	10.18.19 00.15		1
o-Xylene	95-47-6	**0.00146**	0.00100	mg/kg	10.18.19 00.15		1
Total Xylenes	1330-20-7	**0.00582**	0.00100	mg/kg	10.18.19 00.15		1
Total BTEX		**0.00727**	0.00100	mg/kg	10.18.19 00.15		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	103	%	70-130	10.18.19 00.15	
4-Bromofluorobenzene	460-00-4	125	%	70-130	10.18.19 00.15	

Certificate of Analytical Results 640361

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**FS04**	Matrix:	Soil	Date Received:	10.17.19 16.05
Lab Sample Id:	640361-004	Date Collected:	10.16.19 10.40	Sample Depth:	3 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 17.30	Basis:	Wet Weight
Seq Number:	3104735				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**66.7**	10.0	mg/kg	10.17.19 20.36		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.18.19 13.10	Basis:	Wet Weight
Seq Number:	3104794				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	10.18.19 15.57	U	1
Diesel Range Organics (DRO)	C10C28DRO	**54.4**	50.1	mg/kg	10.18.19 15.57		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	10.18.19 15.57	U	1
Total GRO-DRO	PHC628	**54.4**	50.1	mg/kg	10.18.19 15.57		1
Total TPH	PHC635	**54.4**	50.1	mg/kg	10.18.19 15.57		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	10.18.19 15.57	
o-Terphenyl	84-15-1	86	%	70-135	10.18.19 15.57	

Certificate of Analytical Results 640361

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**FS04**	Matrix:	Soil	Date Received:	10.17.19 16.05
Lab Sample Id:	640361-004	Date Collected:	10.16.19 10.40	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 17.10	Basis:	Wet Weight
Seq Number:	3104727				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000996	0.000996	mg/kg	10.17.19 23.56	U	1
Toluene	108-88-3	<0.000996	0.000996	mg/kg	10.17.19 23.56	U	1
Ethylbenzene	100-41-4	<0.000996	0.000996	mg/kg	10.17.19 23.56	U	1
m,p-Xylenes	179601-23-1	<0.00199	0.00199	mg/kg	10.17.19 23.56	U	1
o-Xylene	95-47-6	<0.000996	0.000996	mg/kg	10.17.19 23.56	U	1
Total Xylenes	1330-20-7	<0.000996	0.000996	mg/kg	10.17.19 23.56	U	1
Total BTEX		<0.000996	0.000996	mg/kg	10.17.19 23.56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	95	%	70-130	10.17.19 23.56	
1,4-Difluorobenzene	540-36-3	93	%	70-130	10.17.19 23.56	

Certificate of Analytical Results 640361

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**FS05**	Matrix:	Soil	Date Received:	10.17.19 16.05
Lab Sample Id:	640361-005	Date Collected:	10.16.19 10.50	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 17.30	Basis:	Wet Weight
Seq Number:	3104735				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**124**	99.2	mg/kg	10.17.19 20.42		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.18.19 13.10	Basis:	Wet Weight
Seq Number:	3104794				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	10.18.19 15.57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	10.18.19 15.57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	10.18.19 15.57	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	10.18.19 15.57	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	10.18.19 15.57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	10.18.19 15.57	
o-Terphenyl	84-15-1	107	%	70-135	10.18.19 15.57	

Certificate of Analytical Results 640361

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**FS05**	Matrix:	Soil	Date Received:	10.17.19 16.05
Lab Sample Id:	640361-005	Date Collected:	10.16.19 10.50	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 17.10	Basis:	Wet Weight
Seq Number:	3104727				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00101	0.00101	mg/kg	10.17.19 23.36	U	1
Toluene	108-88-3	<0.00101	0.00101	mg/kg	10.17.19 23.36	U	1
Ethylbenzene	100-41-4	<0.00101	0.00101	mg/kg	10.17.19 23.36	U	1
m,p-Xylenes	179601-23-1	**0.00248**	0.00202	mg/kg	10.17.19 23.36		1
o-Xylene	95-47-6	**0.00107**	0.00101	mg/kg	10.17.19 23.36		1
Total Xylenes	1330-20-7	**0.00355**	0.00101	mg/kg	10.17.19 23.36		1
Total BTEX		**0.00355**	0.00101	mg/kg	10.17.19 23.36		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	128	%	70-130	10.17.19 23.36	
1,4-Difluorobenzene	540-36-3	103	%	70-130	10.17.19 23.36	

Certificate of Analytical Results 640361

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**FS06**	Matrix:	Soil	Date Received:	10.17.19 16.05
Lab Sample Id:	640361-006	Date Collected:	10.16.19 10.55	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 17.30	Basis:	Wet Weight
Seq Number:	3104735				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**130**	9.82	mg/kg	10.17.19 20.49		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.18.19 13.10	Basis:	Wet Weight
Seq Number:	3104794				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	10.18.19 16.17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	10.18.19 16.17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	10.18.19 16.17	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	10.18.19 16.17	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	10.18.19 16.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	10.18.19 16.17	
o-Terphenyl	84-15-1	104	%	70-135	10.18.19 16.17	

Certificate of Analytical Results 640361

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**FS06**	Matrix:	Soil	Date Received:	10.17.19 16.05
Lab Sample Id:	640361-006	Date Collected:	10.16.19 10.55	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 17.10	Basis:	Wet Weight
Seq Number:	3104727				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00100	0.00100	mg/kg	10.18.19 12.34	U	1
Toluene	108-88-3	<0.00100	0.00100	mg/kg	10.18.19 12.34	U	1
Ethylbenzene	100-41-4	<0.00100	0.00100	mg/kg	10.18.19 12.34	U	1
m,p-Xylenes	179601-23-1	<0.00200	0.00200	mg/kg	10.18.19 12.34	U	1
o-Xylene	95-47-6	<0.00100	0.00100	mg/kg	10.18.19 12.34	U	1
Total Xylenes	1330-20-7	<0.00100	0.00100	mg/kg	10.18.19 12.34	U	1
Total BTEX		<0.00100	0.00100	mg/kg	10.18.19 12.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	10.18.19 12.34	
1,4-Difluorobenzene	540-36-3	102	%	70-130	10.18.19 12.34	

Certificate of Analytical Results 640361

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**FS07**	Matrix:	Soil	Date Received:	10.17.19 16.05
Lab Sample Id:	640361-007	Date Collected:	10.16.19 11.00	Sample Depth:	6 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 17.30	Basis:	Wet Weight
Seq Number:	3104735				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**163**	100	mg/kg	10.17.19 20.55		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.18.19 13.10	Basis:	Wet Weight
Seq Number:	3104794				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	10.18.19 16.37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	10.18.19 16.37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	10.18.19 16.37	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	10.18.19 16.37	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	10.18.19 16.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	10.18.19 16.37	
o-Terphenyl	84-15-1	91	%	70-135	10.18.19 16.37	

Certificate of Analytical Results 640361

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**FS07**	Matrix:	Soil	Date Received:	10.17.19 16.05
Lab Sample Id:	640361-007	Date Collected:	10.16.19 11.00	Sample Depth:	6 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 17.10	Basis:	Wet Weight
Seq Number:	3104727				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00101	0.00101	mg/kg	10.18.19 02.41	U	1
Toluene	108-88-3	<0.00101	0.00101	mg/kg	10.18.19 02.41	U	1
Ethylbenzene	100-41-4	<0.00101	0.00101	mg/kg	10.18.19 02.41	U	1
m,p-Xylenes	179601-23-1	<0.00201	0.00201	mg/kg	10.18.19 02.41	U	1
o-Xylene	95-47-6	<0.00101	0.00101	mg/kg	10.18.19 02.41	U	1
Total Xylenes	1330-20-7	<0.00101	0.00101	mg/kg	10.18.19 02.41	U	1
Total BTEX		<0.00101	0.00101	mg/kg	10.18.19 02.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	103	%	70-130	10.18.19 02.41	
4-Bromofluorobenzene	460-00-4	125	%	70-130	10.18.19 02.41	

Certificate of Analytical Results 640361

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**FS08**	Matrix:	Soil	Date Received:	10.17.19 16.05
Lab Sample Id:	640361-008	Date Collected:	10.16.19 11.20	Sample Depth:	5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 17.30	Basis:	Wet Weight
Seq Number:	3104735				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**244**	98.8	mg/kg	10.17.19 21.01		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.18.19 13.10	Basis:	Wet Weight
Seq Number:	3104794				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	10.18.19 16.37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	10.18.19 16.37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	10.18.19 16.37	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	10.18.19 16.37	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	10.18.19 16.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	10.18.19 16.37	
o-Terphenyl	84-15-1	101	%	70-135	10.18.19 16.37	

Certificate of Analytical Results 640361

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**FS08**	Matrix:	Soil	Date Received:	10.17.19 16.05
Lab Sample Id:	640361-008	Date Collected:	10.16.19 11.20	Sample Depth:	5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 17.10	Basis:	Wet Weight
Seq Number:	3104727				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00101	0.00101	mg/kg	10.18.19 03.00	U	1
Toluene	108-88-3	<0.00101	0.00101	mg/kg	10.18.19 03.00	U	1
Ethylbenzene	100-41-4	<0.00101	0.00101	mg/kg	10.18.19 03.00	U	1
m,p-Xylenes	179601-23-1	<0.00202	0.00202	mg/kg	10.18.19 03.00	U	1
o-Xylene	95-47-6	<0.00101	0.00101	mg/kg	10.18.19 03.00	U	1
Total Xylenes	1330-20-7	<0.00101	0.00101	mg/kg	10.18.19 03.00	U	1
Total BTEX		<0.00101	0.00101	mg/kg	10.18.19 03.00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	131	%	70-130	10.18.19 03.00	**
1,4-Difluorobenzene	540-36-3	106	%	70-130	10.18.19 03.00	

Certificate of Analytical Results 640361

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**FS09**	Matrix:	Soil	Date Received:	10.17.19 16.05
Lab Sample Id:	640361-009	Date Collected:	10.16.19 11.30	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 17.30	Basis:	Wet Weight
Seq Number:	3104735				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**310**	99.4	mg/kg	10.18.19 13.45		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.18.19 13.10	Basis:	Wet Weight
Seq Number:	3104794				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	10.18.19 16.57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	10.18.19 16.57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	10.18.19 16.57	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	10.18.19 16.57	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	10.18.19 16.57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	82	%	70-135	10.18.19 16.57	
o-Terphenyl	84-15-1	86	%	70-135	10.18.19 16.57	

Certificate of Analytical Results 640361

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**FS09**	Matrix:	Soil	Date Received:	10.17.19 16.05
Lab Sample Id:	640361-009	Date Collected:	10.16.19 11.30	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 17.10	Basis:	Wet Weight
Seq Number:	3104727				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000994	0.000994	mg/kg	10.18.19 03.19	U	1
Toluene	108-88-3	<0.000994	0.000994	mg/kg	10.18.19 03.19	U	1
Ethylbenzene	100-41-4	<0.000994	0.000994	mg/kg	10.18.19 03.19	U	1
m,p-Xylenes	179601-23-1	<0.00199	0.00199	mg/kg	10.18.19 03.19	U	1
o-Xylene	95-47-6	<0.000994	0.000994	mg/kg	10.18.19 03.19	U	1
Total Xylenes	1330-20-7	<0.000994	0.000994	mg/kg	10.18.19 03.19	U	1
Total BTEX		<0.000994	0.000994	mg/kg	10.18.19 03.19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	104	%	70-130	10.18.19 03.19	
4-Bromofluorobenzene	460-00-4	134	%	70-130	10.18.19 03.19	**

Certificate of Analytical Results 640361

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**FS10**	Matrix:	Soil	Date Received:	10.17.19 16.05
Lab Sample Id:	640361-010	Date Collected:	10.16.19 11.45	Sample Depth:	3.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 17.30	Basis:	Wet Weight
Seq Number:	3104735				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**227**	9.86	mg/kg	10.17.19 21.14		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.18.19 13.10	Basis:	Wet Weight
Seq Number:	3104794				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	10.18.19 16.57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	10.18.19 16.57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	10.18.19 16.57	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	10.18.19 16.57	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	10.18.19 16.57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-135	10.18.19 16.57	
o-Terphenyl	84-15-1	94	%	70-135	10.18.19 16.57	

Certificate of Analytical Results 640361

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**FS10**	Matrix:	Soil	Date Received:	10.17.19 16.05
Lab Sample Id:	640361-010	Date Collected:	10.16.19 11.45	Sample Depth:	3.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 17.10	Basis:	Wet Weight
Seq Number:	3104727				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000994	0.000994	mg/kg	10.18.19 03.39	U	1
Toluene	108-88-3	<0.000994	0.000994	mg/kg	10.18.19 03.39	U	1
Ethylbenzene	100-41-4	<0.000994	0.000994	mg/kg	10.18.19 03.39	U	1
m,p-Xylenes	179601-23-1	<0.00199	0.00199	mg/kg	10.18.19 03.39	U	1
o-Xylene	95-47-6	<0.000994	0.000994	mg/kg	10.18.19 03.39	U	1
Total Xylenes	1330-20-7	<0.000994	0.000994	mg/kg	10.18.19 03.39	U	1
Total BTEX		<0.000994	0.000994	mg/kg	10.18.19 03.39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	103	%	70-130	10.18.19 03.39	
4-Bromofluorobenzene	460-00-4	133	%	70-130	10.18.19 03.39	**

Certificate of Analytical Results 640361

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**FS11**	Matrix:	Soil	Date Received:	10.17.19 16.05
Lab Sample Id:	640361-011	Date Collected:	10.16.19 11.50	Sample Depth:	2.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 17.30	Basis:	Wet Weight
Seq Number:	3104735				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**69.2**	9.96	mg/kg	10.17.19 21.32		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.18.19 13.10	Basis:	Wet Weight
Seq Number:	3104794				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	10.18.19 17.17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	10.18.19 17.17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	10.18.19 17.17	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	10.18.19 17.17	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	10.18.19 17.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	10.18.19 17.17	
o-Terphenyl	84-15-1	88	%	70-135	10.18.19 17.17	

Certificate of Analytical Results 640361

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**FS11**	Matrix:	Soil	Date Received:	10.17.19 16.05
Lab Sample Id:	640361-011	Date Collected:	10.16.19 11.50	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 17.10	Basis:	Wet Weight
Seq Number:	3104727				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00100	0.00100	mg/kg	10.18.19 03.58	U	1
Toluene	108-88-3	<0.00100	0.00100	mg/kg	10.18.19 03.58	U	1
Ethylbenzene	100-41-4	<0.00100	0.00100	mg/kg	10.18.19 03.58	U	1
m,p-Xylenes	179601-23-1	<0.00200	0.00200	mg/kg	10.18.19 03.58	U	1
o-Xylene	95-47-6	<0.00100	0.00100	mg/kg	10.18.19 03.58	U	1
Total Xylenes	1330-20-7	<0.00100	0.00100	mg/kg	10.18.19 03.58	U	1
Total BTEX		<0.00100	0.00100	mg/kg	10.18.19 03.58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	98	%	70-130	10.18.19 03.58	
4-Bromofluorobenzene	460-00-4	130	%	70-130	10.18.19 03.58	

Certificate of Analytical Results 640361

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**FS12**	Matrix:	Soil	Date Received:	10.17.19 16.05
Lab Sample Id:	640361-012	Date Collected:	10.16.19 11.55	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 17.30	Basis:	Wet Weight
Seq Number:	3104735				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**70.9**	9.94	mg/kg	10.18.19 13.58		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.18.19 13.10	Basis:	Wet Weight
Seq Number:	3104794				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	10.18.19 17.17	U	1
Diesel Range Organics (DRO)	C10C28DRO	**767**	50.1	mg/kg	10.18.19 17.17		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**77.1**	50.1	mg/kg	10.18.19 17.17		1
Total GRO-DRO	PHC628	**767**	50.1	mg/kg	10.18.19 17.17		1
Total TPH	PHC635	**844**	50.1	mg/kg	10.18.19 17.17		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	10.18.19 17.17	
o-Terphenyl	84-15-1	101	%	70-135	10.18.19 17.17	

Certificate of Analytical Results 640361

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**FS12**	Matrix:	Soil	Date Received:	10.17.19 16.05
Lab Sample Id:	640361-012	Date Collected:	10.16.19 11.55	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 17.10	Basis:	Wet Weight
Seq Number:	3104727				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00101	0.00101	mg/kg	10.18.19 04.17	U	1
Toluene	108-88-3	**0.00115**	0.00101	mg/kg	10.18.19 04.17		1
Ethylbenzene	100-41-4	**0.00712**	0.00101	mg/kg	10.18.19 04.17		1
m,p-Xylenes	179601-23-1	**0.0211**	0.00201	mg/kg	10.18.19 04.17		1
o-Xylene	95-47-6	**0.0214**	0.00101	mg/kg	10.18.19 04.17		1
Total Xylenes	1330-20-7	**0.0425**	0.00101	mg/kg	10.18.19 04.17		1
Total BTEX		**0.0508**	0.00101	mg/kg	10.18.19 04.17		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	119	%	70-130	10.18.19 04.17	
1,4-Difluorobenzene	540-36-3	105	%	70-130	10.18.19 04.17	

Certificate of Analytical Results 640361

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**FS13**	Matrix:	Soil	Date Received:	10.17.19 16.05
Lab Sample Id:	640361-013	Date Collected:	10.16.19 14.55	Sample Depth:	5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 17.30	Basis:	Wet Weight
Seq Number:	3104735				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**47.6**	10.1	mg/kg	10.17.19 21.45		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.18.19 13.10	Basis:	Wet Weight
Seq Number:	3104794				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	10.18.19 17.36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	10.18.19 17.36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	10.18.19 17.36	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	10.18.19 17.36	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	10.18.19 17.36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	10.18.19 17.36	
o-Terphenyl	84-15-1	96	%	70-135	10.18.19 17.36	

Certificate of Analytical Results 640361

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**FS13**	Matrix:	Soil	Date Received:	10.17.19 16.05
Lab Sample Id:	640361-013	Date Collected:	10.16.19 14.55	Sample Depth:	5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 17.10	Basis:	Wet Weight
Seq Number:	3104727				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00100	0.00100	mg/kg	10.18.19 04.36	U	1
Toluene	108-88-3	<0.00100	0.00100	mg/kg	10.18.19 04.36	U	1
Ethylbenzene	100-41-4	<0.00100	0.00100	mg/kg	10.18.19 04.36	U	1
m,p-Xylenes	179601-23-1	<0.00200	0.00200	mg/kg	10.18.19 04.36	U	1
o-Xylene	95-47-6	<0.00100	0.00100	mg/kg	10.18.19 04.36	U	1
Total Xylenes	1330-20-7	<0.00100	0.00100	mg/kg	10.18.19 04.36	U	1
Total BTEX		<0.00100	0.00100	mg/kg	10.18.19 04.36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	128	%	70-130	10.18.19 04.36	
1,4-Difluorobenzene	540-36-3	103	%	70-130	10.18.19 04.36	

Certificate of Analytical Results 640361

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**FS14**	Matrix:	Soil	Date Received:	10.17.19 16.05
Lab Sample Id:	640361-014	Date Collected:	10.16.19 15.00	Sample Depth:	7 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 17.30	Basis:	Wet Weight
Seq Number:	3104735				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**96.3**	10.0	mg/kg	10.18.19 13.52		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.18.19 13.10	Basis:	Wet Weight
Seq Number:	3104794				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	10.18.19 17.36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.18.19 17.36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.18.19 17.36	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	10.18.19 17.36	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.18.19 17.36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	10.18.19 17.36	
o-Terphenyl	84-15-1	98	%	70-135	10.18.19 17.36	

Certificate of Analytical Results 640361

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**FS14**	Matrix:	Soil	Date Received:	10.17.19 16.05
Lab Sample Id:	640361-014	Date Collected:	10.16.19 15.00	Sample Depth:	7 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 17.10	Basis:	Wet Weight
Seq Number:	3104727				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000998	0.000998	mg/kg	10.18.19 04.55	U	1
Toluene	108-88-3	<0.000998	0.000998	mg/kg	10.18.19 04.55	U	1
Ethylbenzene	100-41-4	<0.000998	0.000998	mg/kg	10.18.19 04.55	U	1
m,p-Xylenes	179601-23-1	<0.00200	0.00200	mg/kg	10.18.19 04.55	U	1
o-Xylene	95-47-6	<0.000998	0.000998	mg/kg	10.18.19 04.55	U	1
Total Xylenes	1330-20-7	<0.000998	0.000998	mg/kg	10.18.19 04.55	U	1
Total BTEX		<0.000998	0.000998	mg/kg	10.18.19 04.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	104	%	70-130	10.18.19 04.55	
4-Bromofluorobenzene	460-00-4	134	%	70-130	10.18.19 04.55	**

Certificate of Analytical Results 640361

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**SW01**	Matrix:	Soil	Date Received:	10.17.19 16.05
Lab Sample Id:	640361-015	Date Collected:	10.16.19 12.30	Sample Depth:	0 - 7 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 17.10	Basis:	Wet Weight
Seq Number:	3104711				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**55.7**	10.0	mg/kg	10.17.19 22.48		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.18.19 13.10	Basis:	Wet Weight
Seq Number:	3104794				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	10.18.19 17.56	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	10.18.19 17.56	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	10.18.19 17.56	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	10.18.19 17.56	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	10.18.19 17.56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	10.18.19 17.56	
o-Terphenyl	84-15-1	94	%	70-135	10.18.19 17.56	

Certificate of Analytical Results 640361

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**SW01**	Matrix:	Soil	Date Received:	10.17.19 16.05
Lab Sample Id:	640361-015	Date Collected:	10.16.19 12.30	Sample Depth:	0 - 7 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 17.10	Basis:	Wet Weight
Seq Number:	3104727				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000994	0.000994	mg/kg	10.18.19 05.14	U	1
Toluene	108-88-3	<0.000994	0.000994	mg/kg	10.18.19 05.14	U	1
Ethylbenzene	100-41-4	<0.000994	0.000994	mg/kg	10.18.19 05.14	U	1
m,p-Xylenes	179601-23-1	<0.00199	0.00199	mg/kg	10.18.19 05.14	U	1
o-Xylene	95-47-6	<0.000994	0.000994	mg/kg	10.18.19 05.14	U	1
Total Xylenes	1330-20-7	<0.000994	0.000994	mg/kg	10.18.19 05.14	U	1
Total BTEX		<0.000994	0.000994	mg/kg	10.18.19 05.14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	136	%	70-130	10.18.19 05.14	**
1,4-Difluorobenzene	540-36-3	105	%	70-130	10.18.19 05.14	

Certificate of Analytical Results 640361

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**SW02**	Matrix:	Soil	Date Received:	10.17.19 16.05
Lab Sample Id:	640361-016	Date Collected:	10.16.19 12.35	Sample Depth:	0 - 3.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 17.10	Basis:	Wet Weight
Seq Number:	3104711				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**16.7**	9.84	mg/kg	10.17.19 23.06		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.17.19 16.30	Basis:	Wet Weight
Seq Number:	3104747				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	10.18.19 02.50	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	10.18.19 02.50	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	10.18.19 02.50	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	10.18.19 02.50	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	10.18.19 02.50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	10.18.19 02.50	
o-Terphenyl	84-15-1	89	%	70-135	10.18.19 02.50	

Certificate of Analytical Results 640361

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**SW02**	Matrix:	Soil	Date Received:	10.17.19 16.05
Lab Sample Id:	640361-016	Date Collected:	10.16.19 12.35	Sample Depth:	0 - 3.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 17.10	Basis:	Wet Weight
Seq Number:	3104782				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000986	0.000986	mg/kg	10.18.19 08.19	U	1
Toluene	108-88-3	<0.000986	0.000986	mg/kg	10.18.19 08.19	U	1
Ethylbenzene	100-41-4	<0.000986	0.000986	mg/kg	10.18.19 08.19	U	1
m,p-Xylenes	179601-23-1	<0.00197	0.00197	mg/kg	10.18.19 08.19	U	1
o-Xylene	95-47-6	<0.000986	0.000986	mg/kg	10.18.19 08.19	U	1
Total Xylenes	1330-20-7	<0.000986	0.000986	mg/kg	10.18.19 08.19	U	1
Total BTEX		<0.000986	0.000986	mg/kg	10.18.19 08.19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	104	%	70-130	10.18.19 08.19	
4-Bromofluorobenzene	460-00-4	118	%	70-130	10.18.19 08.19	

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LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**SW03**	Matrix:	Soil	Date Received:	10.17.19 16.05
Lab Sample Id:	640361-017	Date Collected:	10.16.19 12.40	Sample Depth:	0 - 4.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 17.10	Basis:	Wet Weight
Seq Number:	3104711				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**226**	49.4	mg/kg	10.17.19 23.13		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.17.19 16.30	Basis:	Wet Weight
Seq Number:	3104747				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	10.18.19 03.49	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	10.18.19 03.49	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	10.18.19 03.49	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	10.18.19 03.49	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	10.18.19 03.49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	10.18.19 03.49	
o-Terphenyl	84-15-1	99	%	70-135	10.18.19 03.49	

Certificate of Analytical Results 640361

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**SW03**	Matrix:	Soil	Date Received:	10.17.19 16.05
Lab Sample Id:	640361-017	Date Collected:	10.16.19 12.40	Sample Depth:	0 - 4.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 17.10	Basis:	Wet Weight
Seq Number:	3104782				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00100	0.00100	mg/kg	10.18.19 08.38	U	1
Toluene	108-88-3	<0.00100	0.00100	mg/kg	10.18.19 08.38	U	1
Ethylbenzene	100-41-4	<0.00100	0.00100	mg/kg	10.18.19 08.38	U	1
m,p-Xylenes	179601-23-1	<0.00200	0.00200	mg/kg	10.18.19 08.38	U	1
o-Xylene	95-47-6	<0.00100	0.00100	mg/kg	10.18.19 08.38	U	1
Total Xylenes	1330-20-7	<0.00100	0.00100	mg/kg	10.18.19 08.38	U	1
Total BTEX		<0.00100	0.00100	mg/kg	10.18.19 08.38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	133	%	70-130	10.18.19 08.38	**
1,4-Difluorobenzene	540-36-3	104	%	70-130	10.18.19 08.38	

Certificate of Analytical Results 640361

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**SW04**	Matrix:	Soil	Date Received:	10.17.19 16.05
Lab Sample Id:	640361-018	Date Collected:	10.16.19 12.45	Sample Depth:	0 - 3 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 17.10	Basis:	Wet Weight
Seq Number:	3104711				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**194**	98.8	mg/kg	10.17.19 23.19		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.17.19 16.30	Basis:	Wet Weight
Seq Number:	3104747				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.7	49.7	mg/kg	10.18.19 04.08	U	1
Diesel Range Organics (DRO)	C10C28DRO	**224**	49.7	mg/kg	10.18.19 04.08		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.7	49.7	mg/kg	10.18.19 04.08	U	1
Total GRO-DRO	PHC628	**224**	49.7	mg/kg	10.18.19 04.08		1
Total TPH	PHC635	**224**	49.7	mg/kg	10.18.19 04.08		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	10.18.19 04.08	
o-Terphenyl	84-15-1	98	%	70-135	10.18.19 04.08	

Certificate of Analytical Results 640361

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**SW04**	Matrix:	Soil	Date Received:	10.17.19 16.05
Lab Sample Id:	640361-018	Date Collected:	10.16.19 12.45	Sample Depth:	0 - 3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 17.10	Basis:	Wet Weight
Seq Number:	3104782				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000998	0.000998	mg/kg	10.18.19 08.57	U	1
Toluene	108-88-3	<0.000998	0.000998	mg/kg	10.18.19 08.57	U	1
Ethylbenzene	100-41-4	<0.000998	0.000998	mg/kg	10.18.19 08.57	U	1
m,p-Xylenes	179601-23-1	**0.00221**	0.00200	mg/kg	10.18.19 08.57		1
o-Xylene	95-47-6	**0.00191**	0.000998	mg/kg	10.18.19 08.57		1
Total Xylenes	1330-20-7	**0.00412**	0.000998	mg/kg	10.18.19 08.57		1
Total BTEX		**0.00412**	0.000998	mg/kg	10.18.19 08.57		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	104	%	70-130	10.18.19 08.57	
4-Bromofluorobenzene	460-00-4	119	%	70-130	10.18.19 08.57	

Certificate of Analytical Results 640361

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**SW05**	Matrix:	Soil	Date Received:	10.17.19 16.05
Lab Sample Id:	640361-019	Date Collected:	10.16.19 12.50	Sample Depth:	0 - 6 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 17.10	Basis:	Wet Weight
Seq Number:	3104711				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**70.5**	9.90	mg/kg	10.18.19 14.10	D	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.17.19 16.30	Basis:	Wet Weight
Seq Number:	3104747				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	10.18.19 04.28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.18.19 04.28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.18.19 04.28	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	10.18.19 04.28	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.18.19 04.28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	10.18.19 04.28	
o-Terphenyl	84-15-1	92	%	70-135	10.18.19 04.28	

Certificate of Analytical Results 640361

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**SW05**	Matrix:	Soil	Date Received:	10.17.19 16.05
Lab Sample Id:	640361-019	Date Collected:	10.16.19 12.50	Sample Depth:	0 - 6 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 17.10	Basis:	Wet Weight
Seq Number:	3104782				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000988	0.000988	mg/kg	10.18.19 09.19	U	1
Toluene	108-88-3	<0.000988	0.000988	mg/kg	10.18.19 09.19	U	1
Ethylbenzene	100-41-4	<0.000988	0.000988	mg/kg	10.18.19 09.19	U	1
m,p-Xylenes	179601-23-1	<0.00198	0.00198	mg/kg	10.18.19 09.19	U	1
o-Xylene	95-47-6	<0.000988	0.000988	mg/kg	10.18.19 09.19	U	1
Total Xylenes	1330-20-7	<0.000988	0.000988	mg/kg	10.18.19 09.19	U	1
Total BTEX		<0.000988	0.000988	mg/kg	10.18.19 09.19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	120	%	70-130	10.18.19 09.19	
1,4-Difluorobenzene	540-36-3	108	%	70-130	10.18.19 09.19	

Certificate of Analytical Results 640361

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**SW06**	Matrix:	Soil	Date Received:	10.17.19 16.05
Lab Sample Id:	640361-020	Date Collected:	10.16.19 15.05	Sample Depth:	0 - 5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 17.10	Basis:	Wet Weight
Seq Number:	3104711				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**431**	9.84	mg/kg	10.18.19 14.17	D	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.17.19 16.30	Basis:	Wet Weight
Seq Number:	3104747				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	10.18.19 04.47	U	1
Diesel Range Organics (DRO)	C10C28DRO	**234**	49.8	mg/kg	10.18.19 04.47		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	10.18.19 04.47	U	1
Total GRO-DRO	PHC628	**234**	49.8	mg/kg	10.18.19 04.47		1
Total TPH	PHC635	**234**	49.8	mg/kg	10.18.19 04.47		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	10.18.19 04.47	
o-Terphenyl	84-15-1	109	%	70-135	10.18.19 04.47	

Certificate of Analytical Results 640361

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**SW06**	Matrix:	Soil	Date Received:	10.17.19 16.05
Lab Sample Id:	640361-020	Date Collected:	10.16.19 15.05	Sample Depth:	0 - 5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 17.10	Basis:	Wet Weight
Seq Number:	3104782				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000998	0.000998	mg/kg	10.18.19 09.38	U	1
Toluene	108-88-3	<0.000998	0.000998	mg/kg	10.18.19 09.38	U	1
Ethylbenzene	100-41-4	**0.00261**	0.000998	mg/kg	10.18.19 09.38		1
m,p-Xylenes	179601-23-1	**0.0131**	0.00200	mg/kg	10.18.19 09.38		1
o-Xylene	95-47-6	**0.00804**	0.000998	mg/kg	10.18.19 09.38		1
Total Xylenes	1330-20-7	**0.0211**	0.000998	mg/kg	10.18.19 09.38		1
Total BTEX		**0.0238**	0.000998	mg/kg	10.18.19 09.38		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	118	%	70-130	10.18.19 09.38	
1,4-Difluorobenzene	540-36-3	105	%	70-130	10.18.19 09.38	

Certificate of Analytical Results 640361

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**SW07**	Matrix:	Soil	Date Received:	10.17.19 16.05
Lab Sample Id:	640361-021	Date Collected:	10.16.19 15.10	Sample Depth:	0 - 7 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 17.10	Basis:	Wet Weight
Seq Number:	3104711				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**550**	100	mg/kg	10.18.19 14.04	D	10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.17.19 16.30	Basis:	Wet Weight
Seq Number:	3104747				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	10.18.19 05.07	U	1
Diesel Range Organics (DRO)	C10C28DRO	**50.5**	50.1	mg/kg	10.18.19 05.07		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	10.18.19 05.07	U	1
Total GRO-DRO	PHC628	**50.5**	50.1	mg/kg	10.18.19 05.07		1
Total TPH	PHC635	**50.5**	50.1	mg/kg	10.18.19 05.07		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	10.18.19 05.07	
o-Terphenyl	84-15-1	109	%	70-135	10.18.19 05.07	

Certificate of Analytical Results 640361

LT Environmental, Inc., Arvada, CO

Remuda 100 Battery

Sample Id:	**SW07**	Matrix:	Soil	Date Received:	10.17.19 16.05
Lab Sample Id:	640361-021	Date Collected:	10.16.19 15.10	Sample Depth:	0 - 7 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.17.19 17.10	Basis:	Wet Weight
Seq Number:	3104782				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000998	0.000998	mg/kg	10.18.19 09.57	U	1
Toluene	108-88-3	<0.000998	0.000998	mg/kg	10.18.19 09.57	U	1
Ethylbenzene	100-41-4	<0.000998	0.000998	mg/kg	10.18.19 09.57	U	1
m,p-Xylenes	179601-23-1	<0.00200	0.00200	mg/kg	10.18.19 09.57	U	1
o-Xylene	95-47-6	<0.000998	0.000998	mg/kg	10.18.19 09.57	U	1
Total Xylenes	1330-20-7	<0.000998	0.000998	mg/kg	10.18.19 09.57	U	1
Total BTEX		<0.000998	0.000998	mg/kg	10.18.19 09.57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	125	%	70-130	10.18.19 09.57	
1,4-Difluorobenzene	540-36-3	110	%	70-130	10.18.19 09.57	

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

QC Summary 640361

LT Environmental, Inc.

Remuda 100 Battery

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3104711 — Matrix: Solid — Date Prep: 10.17.19
MB Sample Id: 7688379-1-BLK — LCS Sample Id: 7688379-1-BKS — LCSD Sample Id: 7688379-1-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	256	102	255	102	90-110	0	20	mg/kg	10.17.19 22:35	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3104735 — Matrix: Solid — Date Prep: 10.17.19
MB Sample Id: 7688378-1-BLK — LCS Sample Id: 7688378-1-BKS

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	Limits	Units	Analysis Date	Flag
Chloride	<10.0	250	252	101	90-110	mg/kg	10.17.19 19:08	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3104711 — Matrix: Soil — Date Prep: 10.17.19
Parent Sample Id: 640361-015 — MS Sample Id: 640361-015 S — MSD Sample Id: 640361-015 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	55.7	200	263	104	263	104	90-110	0	20	mg/kg	10.17.19 22:54	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3104735 — Matrix: Soil — Date Prep: 10.17.19
Parent Sample Id: 640360-001 — MS Sample Id: 640360-001 S — MSD Sample Id: 640360-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	378	199	682	153	683	153	90-110	0	20	mg/kg	10.17.19 19:27	X

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3104735 — Matrix: Solid — Date Prep: 10.17.19
Parent Sample Id: 640361-014 — MS Sample Id: 640361-014 S — MSD Sample Id: 640361-014 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	96.3	2000	2030	97	2040	97	90-110	0	20	mg/kg	10.17.19 21:58	

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 640361

LT Environmental, Inc.

Remuda 100 Battery

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3104747 — Matrix: Solid — Date Prep: 10.17.19
MB Sample Id: 7688441-1-BLK — LCS Sample Id: 7688441-1-BKS — LCSD Sample Id: 7688441-1-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	1010	101	970	97	70-135	4	35	mg/kg	10.18.19 02:11	
Diesel Range Organics (DRO)	<50.0	1000	920	92	861	86	70-135	7	35	mg/kg	10.18.19 02:11	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	98		117		109		70-135	%	10.18.19 02:11
o-Terphenyl	101		112		109		70-135	%	10.18.19 02:11

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3104794 — Matrix: Solid — Date Prep: 10.18.19
MB Sample Id: 7688468-1-BLK — LCS Sample Id: 7688468-1-BKS — LCSD Sample Id: 7688468-1-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	886	89	901	90	70-135	2	35	mg/kg	10.18.19 13:57	
Diesel Range Organics (DRO)	<50.0	1000	793	79	810	81	70-135	2	35	mg/kg	10.18.19 13:57	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	100		100		104		70-135	%	10.18.19 13:57
o-Terphenyl	102		98		101		70-135	%	10.18.19 13:57

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3104747 — Matrix: Solid — Date Prep: 10.17.19
MB Sample Id: 7688441-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	10.18.19 01:52	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3104794 — Matrix: Solid — Date Prep: 10.18.19
MB Sample Id: 7688468-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	10.18.19 13:37	

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 640361

LT Environmental, Inc.

Remuda 100 Battery

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3104747 — Matrix: Soil — Date Prep: 10.17.19
Parent Sample Id: 640361-016 — MS Sample Id: 640361-016 S — MSD Sample Id: 640361-016 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.1	1000	894	89	882	89	70-135	1	35	mg/kg	10.18.19 03:10	
Diesel Range Organics (DRO)	<50.1	1000	817	82	811	82	70-135	1	35	mg/kg	10.18.19 03:10	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	108		113		70-135	%	10.18.19 03:10
o-Terphenyl	107		116		70-135	%	10.18.19 03:10

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3104794 — Matrix: Soil — Date Prep: 10.18.19
Parent Sample Id: 640360-001 — MS Sample Id: 640360-001 S — MSD Sample Id: 640360-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.2	1000	1010	101	874	87	70-135	14	35	mg/kg	10.18.19 14:17	
Diesel Range Organics (DRO)	<50.2	1000	989	99	802	80	70-135	21	35	mg/kg	10.18.19 14:17	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	122		100		70-135	%	10.18.19 14:17
o-Terphenyl	121		99		70-135	%	10.18.19 14:17

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3104727 — Matrix: Solid — Date Prep: 10.17.19
MB Sample Id: 7688429-1-BLK — LCS Sample Id: 7688429-1-BKS — LCSD Sample Id: 7688429-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00100	0.100	0.0982	98	0.0972	97	70-130	1	35	mg/kg	10.17.19 20:19	
Toluene	<0.00100	0.100	0.0974	97	0.0978	98	70-130	0	35	mg/kg	10.17.19 20:19	
Ethylbenzene	<0.00100	0.100	0.0991	99	0.0998	100	71-129	1	35	mg/kg	10.17.19 20:19	
m,p-Xylenes	<0.00200	0.200	0.216	108	0.217	109	70-135	0	35	mg/kg	10.17.19 20:19	
o-Xylene	<0.00100	0.100	0.108	108	0.108	108	71-133	0	35	mg/kg	10.17.19 20:19	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		105		104		70-130	%	10.17.19 20:19
4-Bromofluorobenzene	118		122		127		70-130	%	10.17.19 20:19

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 640361

LT Environmental, Inc.

Remuda 100 Battery

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3104782 — Matrix: Solid — Date Prep: 10.17.19
MB Sample Id: 7688433-1-BLK — LCS Sample Id: 7688433-1-BKS — LCSD Sample Id: 7688433-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00100	0.100	0.0939	94	0.0966	97	70-130	3	35	mg/kg	10.18.19 06:37	
Toluene	<0.00100	0.100	0.0927	93	0.0955	96	70-130	3	35	mg/kg	10.18.19 06:37	
Ethylbenzene	<0.00100	0.100	0.0930	93	0.0960	96	71-129	3	35	mg/kg	10.18.19 06:37	
m,p-Xylenes	<0.00200	0.200	0.202	101	0.209	105	70-135	3	35	mg/kg	10.18.19 06:37	
o-Xylene	<0.00100	0.100	0.102	102	0.106	106	71-133	4	35	mg/kg	10.18.19 06:37	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		105		105		70-130	%	10.18.19 06:37
4-Bromofluorobenzene	120		123		123		70-130	%	10.18.19 06:37

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3104727 — Matrix: Soil — Date Prep: 10.17.19
Parent Sample Id: 640360-001 — MS Sample Id: 640360-001 S — MSD Sample Id: 640360-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000992	0.0992	0.0778	78	0.0611	62	70-130	24	35	mg/kg	10.17.19 20:57	X
Toluene	<0.000992	0.0992	0.0764	77	0.0563	57	70-130	30	35	mg/kg	10.17.19 20:57	X
Ethylbenzene	<0.000992	0.0992	0.0741	75	0.0482	49	71-129	42	35	mg/kg	10.17.19 20:57	XF
m,p-Xylenes	<0.00198	0.198	0.159	80	0.101	51	70-135	45	35	mg/kg	10.17.19 20:57	XF
o-Xylene	<0.000992	0.0992	0.0790	80	0.0508	51	71-133	43	35	mg/kg	10.17.19 20:57	XF

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	107		102		70-130	%	10.17.19 20:57
4-Bromofluorobenzene	125		132	**	70-130	%	10.17.19 20:57

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3104782 — Matrix: Soil — Date Prep: 10.17.19
Parent Sample Id: 640361-021 — MS Sample Id: 640361-021 S — MSD Sample Id: 640361-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000982	0.0982	0.0837	85	0.0880	89	70-130	5	35	mg/kg	10.18.19 07:15	
Toluene	<0.000982	0.0982	0.0799	81	0.0841	85	70-130	5	35	mg/kg	10.18.19 07:15	
Ethylbenzene	<0.000982	0.0982	0.0775	79	0.0831	84	71-129	7	35	mg/kg	10.18.19 07:15	
m,p-Xylenes	<0.00196	0.196	0.162	83	0.176	89	70-135	8	35	mg/kg	10.18.19 07:15	
o-Xylene	<0.000982	0.0982	0.0845	86	0.0945	96	71-133	11	35	mg/kg	10.18.19 07:15	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		107		70-130	%	10.18.19 07:15
4-Bromofluorobenzene	123		125		70-130	%	10.18.19 07:15

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

XENCO LABORATORIES

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) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)

Work Order No: ~~1e40637~~ 640361 (CW 10/18)

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Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littrel
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:	Carlsbad, NM
Phone:	432.704.5178	Email:	dmoir@ltenv.com rmcafee@ltenv.com

Work Order Comments

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

Project Name:	Remuda 100 Battery	Turn Around	
Project Number:		Routine ☐	
P.O. Number:	2RP-5589	Rush: 24hr.	
Sampler's Name:	Robert McAfee	Due Date:	

SAMPLE RECEIPT

Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):	2.2	Thermometer ID	T-NM-007
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2
Sample Custody Seals:	~~Yes~~ (No) N/A	Total Containers:	21

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	Sample Comments
FS01	S	10/16/19	1020	1'	1	X	X	X	Composite
FS02	↓	↓	1025	1'	↓	X	X	X	↓
FS03			1030	7'		X	X	X	
FS04			1040	3'		X	X	X	
FS05			1050	2'		X	X	X	
FS06			1055	4'		X	X	X	
FS07			1100	6'		X	X	X	
FS08			1120	5'		X	X	X	
FS09			1130	4'		X	X	X	
FS10			1145	3.5'		X	X	X	

Work Order Notes

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

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 Robert McAfee	[signature]	10/17/19 16:05	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

Chain of Custody

Work Order No: 640361 / 640631

XENCO LABORATORIES

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

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Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littrel
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:	Carlsbad, NM
Phone:	432.704.5178 Email:		dmoir@ltenv.com rmcafee@ltenv.com

Work Order Comments

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

Project Name:	Remuda 100 Battery	Turn Around	
Project Number:		Routine ☐	
P.O. Number:	2RP - 5589	Rush: 24hr	
Sampler's Name:	Robert McAfee	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):	2.2	Thermometer ID	
Received Intact:	(Yes) No	TNM007	
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes (No) N/A	Total Containers:	21

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	Sample Comments
FS11	S	10/16/19	1150	2.5'	1	X	X	X	composite
FS12			1155	1'		X	X	X	
FS13			1455	5'		X	X	X	
FS14			1500	7'		X	X	X	
SW01			1230	0-7'		X	X	X	
SW02			1235	0-3.5'		X	X	X	
SW03			1240	0-4.5'		X	X	X	
SW04			1245	0-3'		X	X	X	
SW05			1250	0-6'		X	X	X	
SW06			1505	0-5'		X	X	X	

Work Order Notes

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

ANALYSIS REQUEST

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 Robert McAfee	Courtney	10/17/19 16:05	2		
3			4		
5			6		

Rev 051418 Rev. 2018 1

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) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)
www.xenco.com

Work Order No: 640361 ~~640631~~

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littrel
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:	Carlsbad, NM
Phone:	432.704.5178 Email:		dmoir@ltenv.com rmcafee@ltenv.com

Work Order Comments

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

Project Name:	Remuda 100 Battery	Turn Around	
Project Number:		Routine ☐	
P.O. Number:	2RP-5589	Rush: 24 hr	
Sampler's Name:	Robert McAfee	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)	Sample Comments
SW07	S	10/16/19	1510	0-7'	1	X	X	X	Composite

ANALYSIS REQUEST

Work Order Notes

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

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
Robert McAfee	Courtney	10/17/19 16:05	2		
			4		
			6		

Revised 51418 Rev. 2018.1

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 10/17/2019 04:05:00 PM

Work Order #: 640361

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

Temperature Measuring device used : T-NM-007

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	2.2
#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?	**Yes**
#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: 10/18/2019

Checklist reviewed by: Jessica Kramer Date: 10/18/2019

Jessica Kramer

ATTACHMENT 3: SOIL SAMPLE LOGS

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

Identifier: BH01	Date: 10/15/19
Project Name: Remuda 100 Battery	RP Number: 2RP-5589
Logged By: Robert M	Method: Hand Auger
Hole Diameter: 3"	Total Depth: 2.5'

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
1125	D	480	1.1	N		1	1'	S	SP-SM light Brown
1130	D	200	1.7	N		2	2'	S	SP-SM light Brown
1135	D	580	1.3	N		3	2.5'	S	SP-SM lgt Brown trace grey Gypsum ~~SP-SC Brown fine~~
						4			
						5			Hand Auger Refusal
						6			
						7			
						8			
						9			
						10			
						11			
						12			

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Identifier: BH02	Date: 10/15/19
Project Name: Remuda 100 Battery	RP Number: 2RP-5589
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Robert M / Method: Hand Auger
Lat/Long: / Field Screening:	Hole Diameter: 3" / Total Depth: 5'
Comments:	

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
1205 M	<124	453	Y		1	1'	S	SP-SM Brown trace Caliche
1210 M	200	119	Y		2	2'	S	SP-SC Brown / Red
1215 M	<124	218	Y		3	3'	S	
1220 M	200	42.2	N		4	4'	S	
1225 M	<124	40.0	N		5	5'	S	
					6			
					7			
					8			
					9			
					10			
					11			
					12			

BMR

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Identifier: BH03	Date: 10/15/19
Project Name: Remuda 100 Battery	RP Number: 2RP-5589
Logged By: Robert M.	Method: Hand Auger
Hole Diameter: 3"	Total Depth: 4'

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
1140	M	<128	1.9	N		1	1'	S	SP-SC Brown
1145	M	<128	1.7	N		2	2'	S	
1150	M	<128	1.2	N		3	3'	S	
1155	M	<128	1.4	N		4	4'	S	
						5			
						6			
						7			
						8			
						9			
						10			
						11			
						12			

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Identifier: BH04	Date: 10/15/19
Project Name: Remuda 100 Battery	RP Number: 2RP-5589
Logged By: Robert M	Method: Hand Auger
Hole Diameter: 3"	Total Depth: 4'
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
1250	M	<128	0.7	N		1	1'	S	SP-SC Brown
1255	M	<128	1.4	N		2	2'	S	SP-SC Brown
1300	M	<128	2.2	N		3	3'	S	SP-SC Brown/Red
1305	M	<128	2.0	N		4	4'	S	SC Brown/Red nonplastic
						5			
						6			
						7			
						8			
						9			
						10			
						11			
						12			

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Identifier: BH05	Date: 10/15/19
Project Name: Remuda 100 Battery	RP Number: 2RP-5589
Logged By: Robert M.	Method: Hand Auger
Lat/Long:	Field Screening:
Hole Diameter: 3"	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
1310 M	<128	0.8	N		1	1'	S	SP-SC Brown
1315 M	<128	1.0	N		2	2'	S	
1320 M	<128	0.5	N		3	3'	S	
1325 M	380	0.4	N		4	4'	S	SP-SC Brown/Red
					5			
					6			
					7			
					8			
					9			
					10			
					11			
					12			

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Identifier: BH06	Date: 10/15/19
Project Name: Remuda 100 Battery	RP Number: 2RP-5589
Logged By: Robert M.	Method: Hand Auger
Lat/Long:	Field Screening:
Hole Diameter: 3"	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
1330 M	<124	1.3	N		1	1'	S	SP-SC Brown
1335 M	<124	0.9	N		2	2'	S	
1340 M	<124	0.9	N		3	3'	S	
1345 M	<124	1.0	N		4	4'	S	SP-SC Brown/Red
					5			
					6			
					7			
					8			
					9			
					10			
					11			
					12			

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Identifier: BH07	Date: 10/16/19
Project Name: Remuda 100 Battery	RP Number: 2RP-5589
Logged By: Robert M.	Method: Hand Auger
Hole Diameter: 3"	Total Depth: 4'
Lat/Long:	Field Screening:
Comments:	

LITHOLOGIC / SOIL SAMPLING LOG

	Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
0930	M	200	1.8	N		1	1'	S	SP-SC Brown Red
0935	M	200	2.5	N		2	2'	S	SP-SC Brown Red
0940	M	200	2.1	N		3	3'	S	SC Brown Red Poor Grade non plastic
0945	M	200	2.1	N		4	4'	S	SC Brown Red Poor Grade non Plastic
						5			
						6			
						7			
						8			
						9			
						10			
						11			
						12			

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Identifier: BH08	Date: 10/16/19
Project Name: Remuda 100 Battery	RP Number: 2RP-5589
Logged By: Robert M.	Method: Hand Auger
Lat/Long:	Field Screening:
Hole Diameter: 3"	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
1000 M	2128	0.9	N		0–1	1'	S	SP-SM Brown
1005 M	<128	2.1	N		1–2	2'	S	
1010 M	<128	1.8	N		2–3	3'	S	
1015 M	2128	1.5	N		3–4	4'	S	SP-SC Brown slight red hue
					4–5			
					5–6			
					6–7			
					7–8			
					8–9			
					9–10			
					10–11			
					11–12			

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Identifier: BH09	Date: 10/16/19
Project Name: Remuda 100 Battery	RP Number: 2RP-5589
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Robert M. / Method: Hand Auger
Lat/Long: / Field Screening:	Hole Diameter: 3" / Total Depth: 4'
Comments:	

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
1320 M	124	0.7	N		0–1	1'	S	SP-SM Brown
1325 M	200	1.8	N		1–2	2'	S	SP-SM Brown Red
1330 M	360	2.3	N		2–3	3'	S	SP-SC Brown Red
1335 M	380	2.4	N		3–4	4'	S	SP-SC Brown Red
					4–5			
					5–6			
					6–7			
					7–8			
					8–9			
					9–10			
					10–11			
					11–12			

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Identifier: BH10	Date: 10/16/19
Project Name: Remuda 100 Battery	RP Number: 2RP-5589
Logged By: Robert M.	Method: Hand Auger
Hole Diameter: 3"	Total Depth: 4'

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
1335 M	580	1.8	N		0–1	1'	S	SP-SM Brown / Red
1340 M	580	2.5	N		1–2	2'	S	SP-SM
1345 M	200	4.0	N		2–3	3'	S	SP-SM
1350 M	480	3.9	N		3–4	4'	S	SP-SC

BM

ATTACHMENT 4: PHOTOGRAPHIC LOG

Hydro-excavation conducted around active production equipment at the Site.

Project: 012919174	XTO Energy, Inc. Remuda 100 Battery	LTE Advancing Opportunity
October 3, 2019	Photographic Log	

Extent of excavation limited due to active production equipment. Facing west.

Project: 012919174	XTO Energy, Inc. Remuda 100 Battery	LTE Advancing Opportunity
October 16, 2019	Photographic Log	

Extent of excavation limited due to active production equipment. Facing south.

Project: 012919174	XTO Energy, Inc. Remuda 100 Battery	Advancing Opportunity
October 15, 2019	Photographic Log	

Extent of excavation facing north west.

Project: 012919174	XTO Energy, Inc. Remuda 100 Battery	LTE Advancing Opportunity
October 16, 2019	Photographic Log	