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	NAB1928842829
District RP	2RP-5667
Facility ID	
Application ID	pAB1928839220

Release Notification

IFMBA-190930-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)* NAB1928842829
Contact mailing address 522 W. Mermod, Carlsbad, NM 88220	

Location of Release Source

Latitude 32.019293 Longitude -103.944616
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Ross Draw 25-36 Federal 161H	Site Type Well
Date Release Discovered 09/15/2019	API# *(if applicable)* *30-015-45591 (Ross Draw 25 36 Fed Com #161H)*

Unit Letter	Section	Township	Range	County
D	25	26S	29E	EDDY

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

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☒ Other (describe) Treated water	Volume/Weight Released (provide units) 50 bbls and 20 gals	Volume/Weight Recovered (provide units) 50 bbls

Cause of Release: Frac tank overflowed due to valve being open on manifold. 50 bbls of treated water was recovered from containment and returned to tank. Additional third party resources have been retained to assist in the remediation.

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Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NAB1928842829
District RP	2RP-5667
Facility ID	
Application ID	pAB1928839220

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 Kyle Littrell to Mike Bratcher, Rob Hamlet, Victoria Venegas, and Jim Griswold (NMOCD), and Jim Amos and Deborah McKinney (BLM) on 9/16/19 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: Kyle Littrell Title: SH&E Supervisor

Signature: Date: 9/30/19

email: Kyle_Littrell@xtoenergy.com Telephone:

OCD Only

Received by: *Amalia Bustamante* Date: *10/15/2019*

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Page 3

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	2RP-5667
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	2RP-5667
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Application ID	

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

Printed Name: _____Kyle Littrell_____ Title: _____SH&E Coordinator_____

Signature:_____ _____ Date: ___12-12-19___

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

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	2RP-5667
Facility ID	
Application ID	

Closure

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

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

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

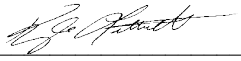
☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

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

☒ Description of remediation activities

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

Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature:  Date: 12-12-19

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

OCD Only

Received by: Date:

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

Closure Approved by: Date:

Printed Name: Title:

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

December 12, 2019

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

RE: Closure Request
Ross Draw 25-36 Federal 161H
Remediation Permit Number 2RP-5667
Eddy County, New Mexico

Dear Mr. Bratcher:

LT Environmental, Inc. (LTE), on behalf of XTO Energy, Inc. (XTO), presents the following report detailing the site assessment and delineation soil sampling activities at the Ross Draw 25-36 Federal 161H (Site) in Unit D, Section 25, Township 26 South, Range 29 East, in Eddy County, New Mexico (Figure 1). The purpose of the site assessment and soil sampling activities was to confirm the presence or absence of impacts to soil following a release of treated water at the Site. Based on field observations, field screening, and laboratory analytical results from soil sampling activities, XTO is submitting this Closure Request and requesting No Further Action (NFA) for Remediation Permit (RP) Number 2RP-5667.

RELEASE BACKGROUND

On September 15, 2019, one of the on-site frac tanks overflowed due to a valve being left open on the manifold which caused approximately 50.5 barrels (bbls) of treated water to be released within the poly-lined secondary containment area. Fifty bbls of treated water were recovered from within the secondary containment area and returned to the frac tank. There were no injuries and no damage to equipment or surrounding property. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) via an email on September 16, 2019, and a Release Notification and Corrective Action Form C-141 (Form C-141) was submitted to the NMOCD on September 30, 2019. The release was assigned RP Number 2RP-5667.

SITE CHARACTERIZATION

LTE characterized the Site according to Table 1, *Closure Criteria for Soils Impacted by a Release*, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Depth to groundwater at the Site is estimated to be between 51 and 100 feet below ground surface (bgs) based on the nearest water well data. The closest permitted water well with depth to water data is United States Geological Survey (USGS) well 320154103562301, located

approximately 4,748 feet northeast of the Site. The water well has a depth to groundwater of approximately 63 feet bgs and a total depth of 200 feet bgs. The closest continuously flowing water or significant watercourse to the Site is an unnamed dry wash, located approximately 589 feet southwest of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake, and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is located in a medium potential karst area.

CLOSURE CRITERIA

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

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

SITE ASSESSMENT AND SOIL SAMPLING ACTIVITIES

On October 10, 2019 LTE evaluated the release extent based on information provided on the Form C-141 and visual observations. The release extent was contained within the secondary containment for the frac tanks. LTE personnel collected two discrete soil samples (SS01 and SS02) at a depth of 0.5 feet bgs (Figure 2) for preliminary assessment. No soil staining was observed during the Site visit.

On October 23, 2019, LTE personnel advanced four boreholes via hand auger equipment to vertically delineate potentially impacted soil. Preliminary soil samples SS01 and SS02 were further advanced to a depth of 4 feet bgs and delineation boreholes BH01 and BH02 were advanced to a depth of 4.5 feet bgs. A total of three discrete soil samples were collected from each sample location. Soil from the four boreholes was field screened for volatile aromatic hydrocarbons utilizing a photo-ionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. Field screening results and observations for each borehole were logged on lithologic/soil sampling logs, presented on Attachment 1. All boreholes were backfilled with the removed soil. The boreholes and delineation soil sample locations are depicted on Figure 2.

The soil samples from the preliminary and delineation sampling events were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were shipped at, or below, 4 degrees Celsius (°C) under strict chain-of-custody (COC) procedures to Xenco Laboratories (Xenco) in Midland, Texas, for analysis of BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

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

ANALYTICAL RESULTS

Laboratory analytical results indicated benzene, BTEX, GRO and DRO, TPH, and chloride concentrations were compliant with the Closure Criteria in preliminary and delineation soil samples SS01, SS02, BH01, and BH02, collected at depths ranging from 0.5 feet to 4.5 feet bgs. Laboratory analytical results are presented on Figure 2 and summarized in Table 1. The complete laboratory analytical reports are included as Attachment 3.

CONCLUSIONS

Preliminary soil samples SS01 and SS02 were collected adjacent to the frac tank secondary containment. Delineation boreholes BH01, and BH02 were collected from within the footprint of the secondary containment after its removal. Soil samples were collected for laboratory analysis from three discrete depth intervals at each sample location to assess for the presence or absence of soil impacts as a result of the September 15, 2019 release. Laboratory analytical results for all soil samples indicated benzene, BTEX, GRO and DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Additionally, field screening of soil indicated volatile aromatic hydrocarbons and chloride concentrations were not elevated and soil staining and petroleum hydrocarbon odors were not identified within the release area.

Based on initial response efforts, absence of elevated field screening results, and soil sample laboratory analytical results compliant with the Closure Criteria, no impacted soil was identified and no soil excavation was required as a result of the release of the treated water. XTO requests NFA for RP Number 2RP-5667.

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

Sincerely,

LT ENVIRONMENTAL, INC.

Kevin M. Axe, P.G.
Senior Geologist

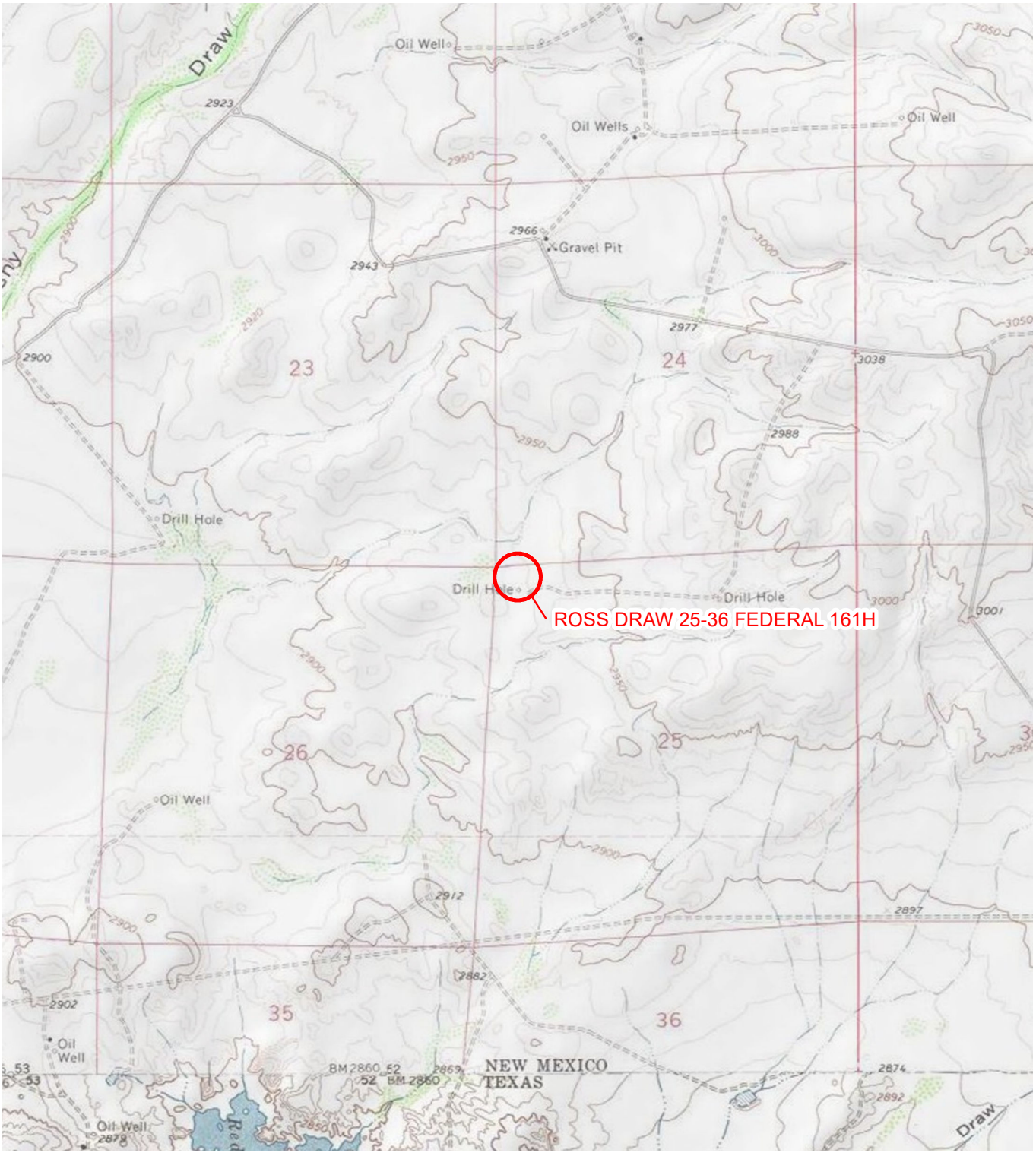
Ashley L. Ager, P.G.
Senior Geologist

cc: Kyle Littrell, XTO
United States Bureau of Land Management – New Mexico
Robert Hamlet, NMOCD
Victoria Venegas, NMOCD

Appendices:

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

FIGURES



LEGEND

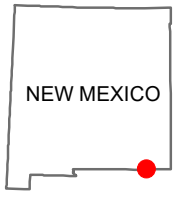
IMAGE COURTESY OF ESRI/USGS

SITE LOCATION

0 2,000 4,000

Feet

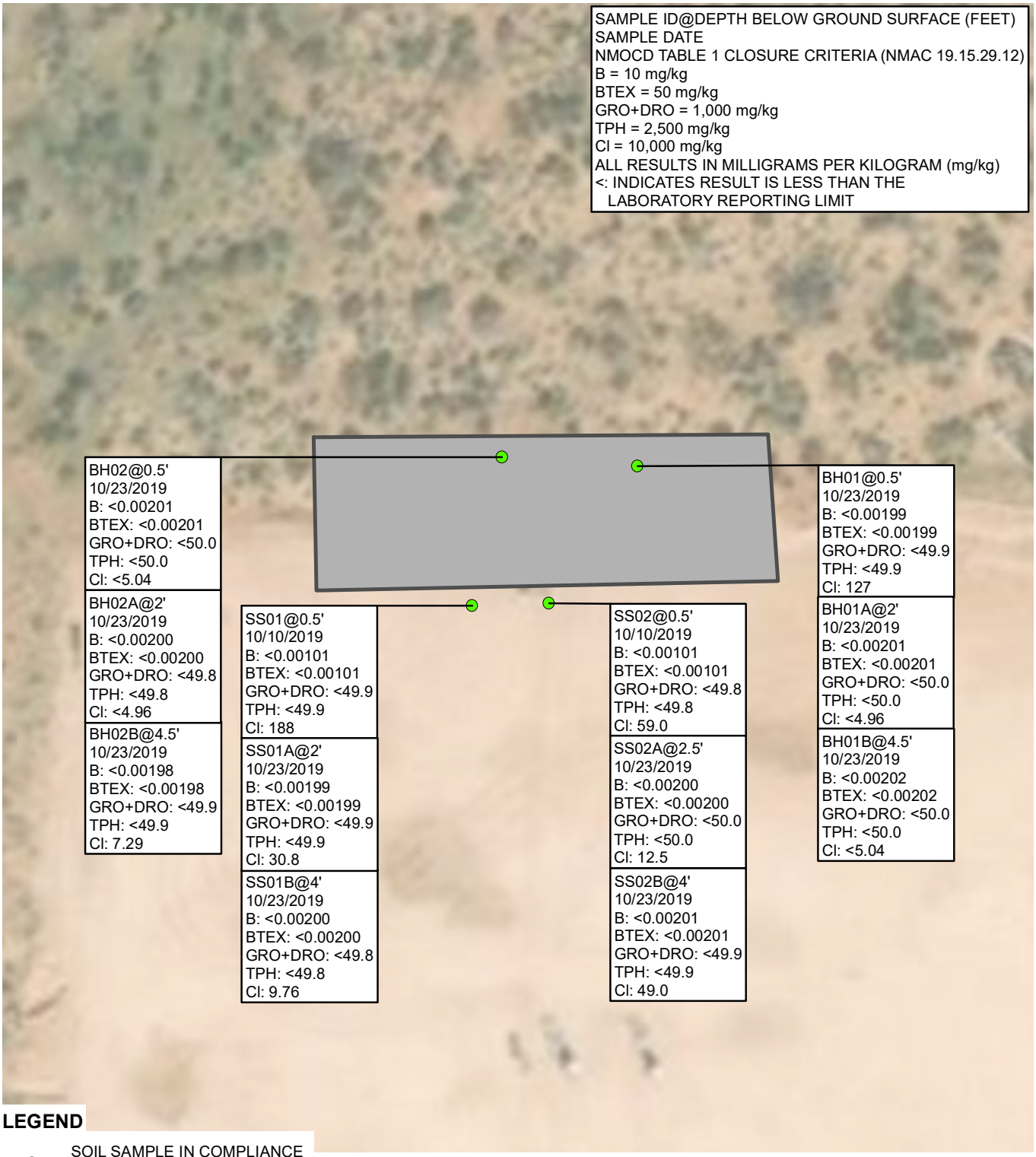
N



NOTE: REMEDIATION PERMIT NUMBER 2RP-5667

FIGURE 1
SITE LOCATION MAP
ROSS DRAW 25-36 FEDERAL 161H
UNIT D SEC 25 T26S R29E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012919234_ROSS DRAW 25-36 FEDERAL 161H\012919234_FIG01_SL_2019.mxd



B: BENZENE
BTEX: TOTAL BENZENE, TOLUENE, ETHYLBENZENE, AND TOTAL XYLENES
GRO: GASOLINE RANGE ORGANICS
DRO: DIESEL RANGE ORGANICS
TPH: TOTAL PETROLEUM HYDROCARBONS
Cl: CHLORIDE
NMAC: NEW MEXICO ADMINISTRATIVE CODE
NMOCD: NEW MEXICO OIL CONSERVATION DIVISION
NOTE: REMEDIATION PERMIT NUMBER 2RP-5667

FIGURE 2
SOIL SAMPLE LOCATIONS
ROSS DRAW 25-36 FEDERAL 161H
UNIT D SEC 25 T26S R29E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012919234_ROSS DRAW 25-36 FEDERAL 161H\012919234_FIG02_SS LOC_2019.mxd

TABLE

TABLE 1
SOIL ANALYTICAL RESULTS

ROSS DRAW 25-36 FEDERAL 161H
REMEDIATION PERMIT NUMBER 2RP-5667
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	10/10/2019	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	<49.9	<49.9	<49.9	<49.9	<49.9	188
SS01A	2	10/23/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	30.8
SS01B	4	10/23/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	9.76
SS02	0.5	10/10/2019	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	<49.8	<49.8	<49.8	<49.8	<49.8	59.0
SS02A	2.5	10/23/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	12.5
SS02B	4	10/23/2019	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<49.9	<49.9	<49.9	<49.9	<49.9	49.0
BH01	0.5	10/23/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	127
BH01A	2	10/23/2019	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	<4.96
BH01B	4.5	10/23/2019	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	<50.0	<5.04
BH02	0.5	10/23/2019	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	87.3
BH02A	2	10/23/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	<4.96
BH02B	4.5	10/23/2019	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	<49.9	7.29
NMOCD Table 1 Closure Criteria			**10**	NE	NE	NE	**50**	NE	NE	NE	**1,000**	**2,500**	**10,000**

Notes:

bgs - below ground surface
BTEX - benzene, toluene, ethylbenzene, and total xylenes
DRO - diesel range organics
GRO - gasoline range organics
mg/kg - milligrams per kilogram
MRO - motor oil range organics
NMAC - New Mexico Administrative Code
NMOCD - New Mexico Oil Conservation Division
NE - not established
TPH - total petroleum hydrocarbons
Bold - indicates result exceeds the applicable regulatory standard
< - indicates result is below laboratory reporting limits
Table 1 - closure criteria for soils impacted by a release per NMAC 19.15.29 August 2018

ATTACHMENT 1: LITHOLOGIC/SOIL SAMPLING LOGS

LT Environmental, Inc. *508 West Stevens Street* *Carlsbad, New Mexico 88220* *Compliance · Engineering · Remediation*		Identifier: SS01	Date: 10/23/19
		Project Name: Ross Draw 25-36 Federal 161H	RP Number: 2RP-5667
LITHOLOGIC / SOIL SAMPLING LOG		Logged By: Anna Byers	Method: Hand Auger
Lat/Long: Refer to Collector	Field Screening: PID and Hach Chloride Strips (LR)	Hole Diameter: 2.5"	Total Depth: 4 ft

Comments: Chloride tests performed with 1 part soil and 4 parts distilled water dilution
ND Not detected - Below detection level on Chloride Low Range (LR) test strips

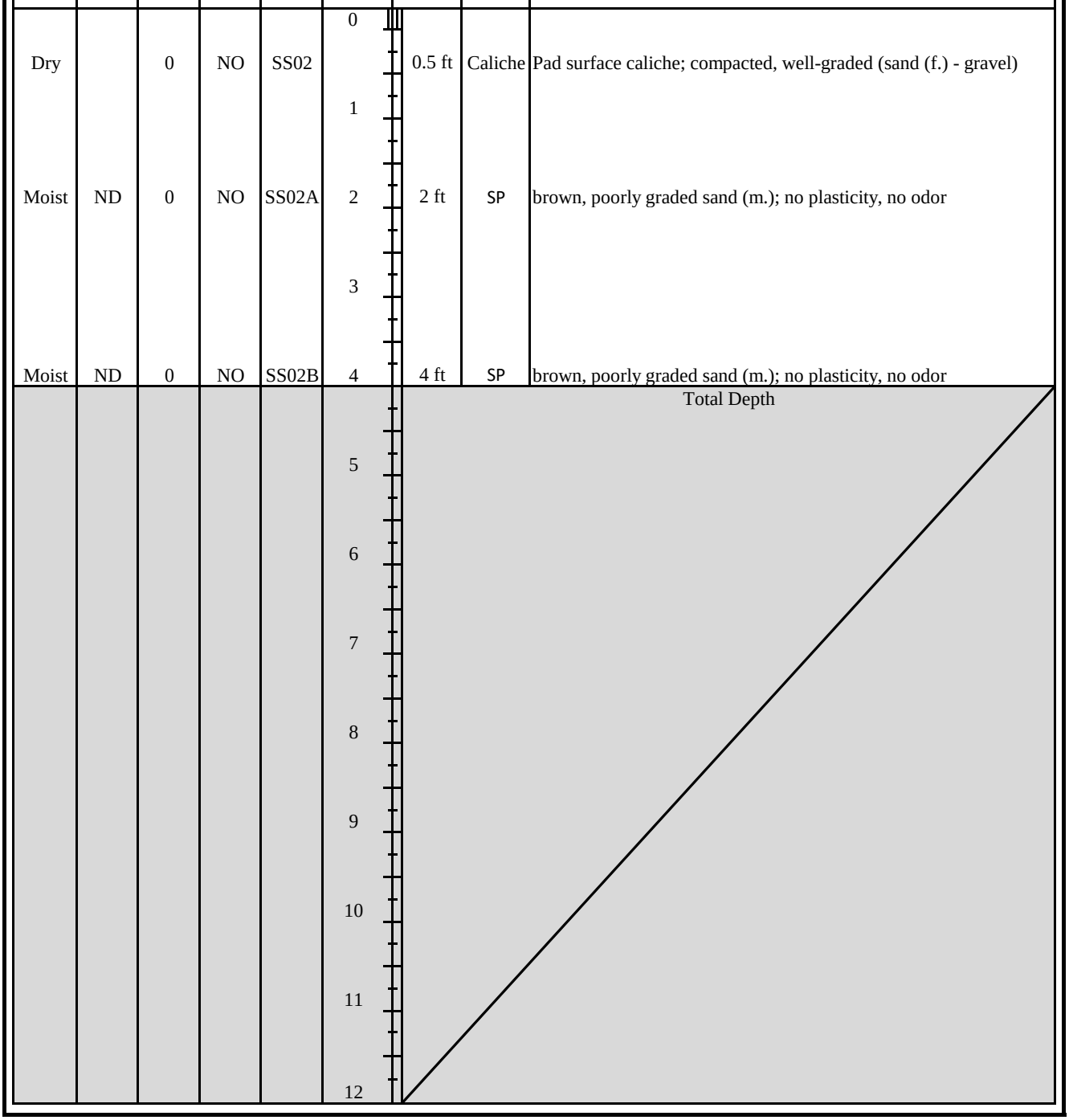
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
Dry		0	NO	SS01	0	0.5 ft	Caliche	Pad surface caliche; compacted, well-graded (sand (f.) - gravel)
Moist	ND	0	NO	SS01A	2	2.5 ft	SP	brown, poorly graded sand (m.); no plasticity, no odor
Moist	ND	0	NO	SS01B	4	4 ft	SP	brown, poorly graded sand (m.); no plasticity, no odor
								Total Depth

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

Identifier: SS02	Date: 10/23/19	
Project Name: Ross Draw 25-36 Federal 161H	RP Number: 2RP-5667	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Anna Byers	Method: Hand Auger
Lat/Long: Refer to Collector	Field Screening: PID and Hach Chloride Strips (LR)	Hole Diameter: 2.5" / Total Depth: 4 ft

Comments: Chloride tests performed with 1 part soil and 4 parts distilled water dilution
ND Not detected - Below detection level on Chloride Low Range (LR) test strips

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
Dry		0	NO	SS02	0	0.5 ft	Caliche	Pad surface caliche; compacted, well-graded (sand (f.) - gravel)
Moist	ND	0	NO	SS02A	2	2 ft	SP	brown, poorly graded sand (m.); no plasticity, no odor
Moist	ND	0	NO	SS02B	4	4 ft	SP	brown, poorly graded sand (m.); no plasticity, no odor
								Total Depth



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

	Identifier: BH01	Date: 10/23/19
	Project Name: Ross Draw 25-36 Federal 161H	RP Number: 2RP-5667
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Anna Byers	Method: Hand Auger
Lat/Long: Refer to Collector Field Screening: PID and Hach Chloride Strips (LR)	Hole Diameter: 2.5"	Total Depth: 4.5 ft

Comments: Chloride tests performed with 1 part soil and 4 parts distilled water dilution
ND Not detected - Below detection level on Chloride Low Range (LR) test strips

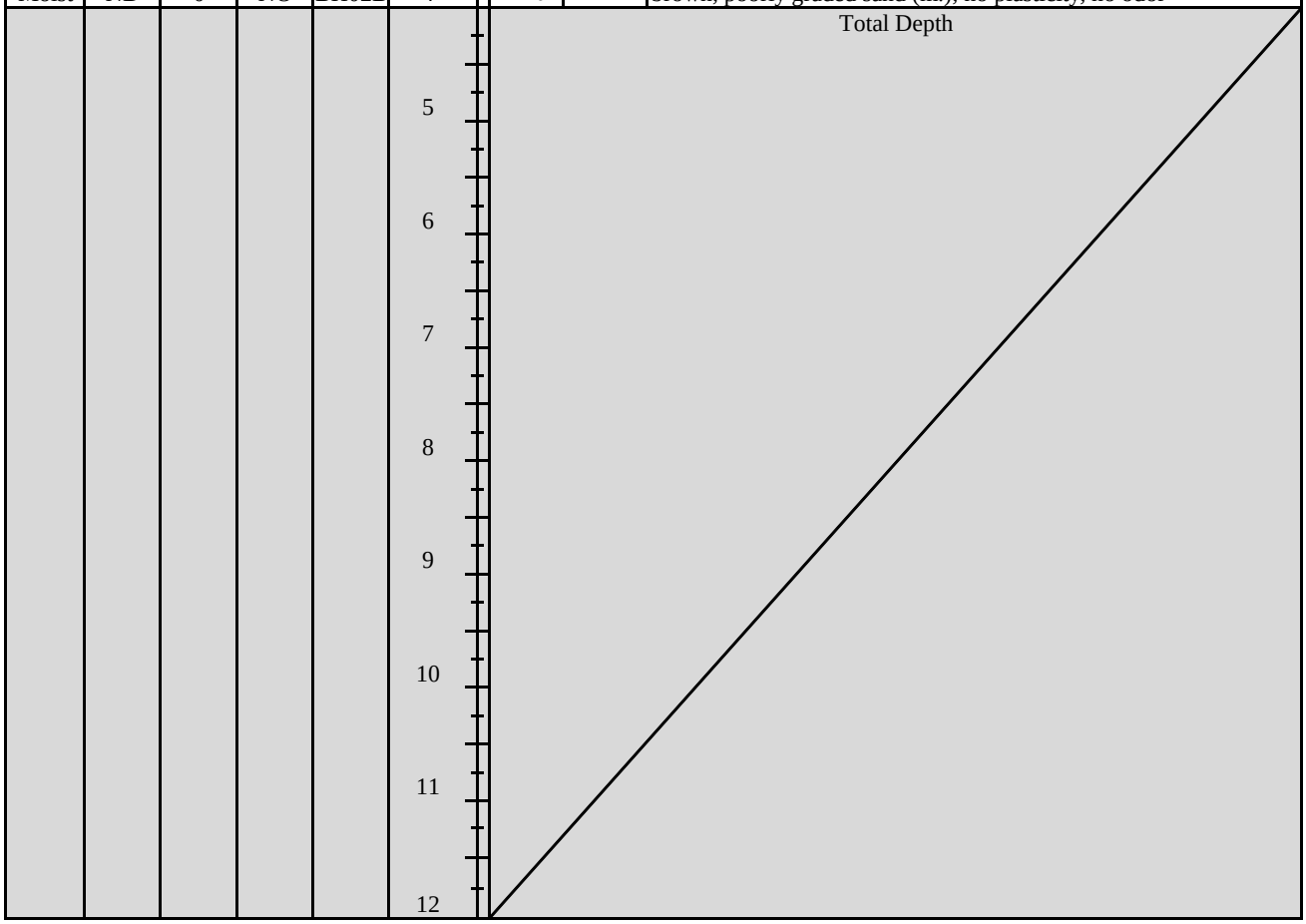
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
Dry	120	0	NO	BH01	0	0.5 ft	Caliche	Pad surface caliche; compacted, well-graded (sand (f.) - gravel)
Moist	ND	0	NO	BH01A	2	2 ft	SP	brown, poorly graded sand (m.); no plasticity, no odor
Moist	ND	0	NO	BH01B	4	4.5 ft	SP	brown, poorly graded sand (m.); no plasticity, no odor
					5			Total Depth
					6			
					7			
					8			
					9			
					10			
					11			
					12			

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

	Identifier: BH02	Date: 10/23/19
	Project Name: Ross Draw 25-36 Federal 161H	RP Number: 2RP-5667
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Anna Byers	Method: Hand Auger
Lat/Long: Refer to Collector	Field Screening: PID and Hach Chloride Strips (LR)	Hole Diameter: 2.5" / Total Depth: 4 ft

Comments: Chloride tests performed with 1 part soil and 4 parts distilled water dilution
ND Not detected - Below detection level on Chloride Low Range (LR) test strips

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
Dry	ND	0	NO	BH02	0	0.5 ft	Caliche	Pad surface caliche; compacted, well-graded (sand (f.) - gravel)
Moist	ND	0	NO	BH02A	2	2 ft	SP	brown, poorly graded sand (m.); no plasticity, no odor
Moist	ND	0	NO	BH02B	4	4 ft	SP	brown, poorly graded sand (m.); no plasticity, no odor
								Total Depth



ATTACHMENT 2: PHOTOGRAPHIC LOG

PHOTOGRAPHIC LOG

Photograph 1: Northeast view of frac tanks with secondary lined containment.

Photograph 2: Southeast view of frac tanks with secondary lined containment.

Photograph 3: Northwest view of former frac tanks location.

Ross Draw 25-36 Federal 161H
Eddy County, New Mexico
Photographs Taken: October 10, 2019 – December 5, 2019

ATTACHMENT 3: LABORATORY ANALYTICAL REPORTS

Analytical Report 639785

for

LT Environmental, Inc.

Project Manager: Dan Moir

Ross Draw 25-36 Federal 161H

012919234

16-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)

16-OCT-19

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

Reference: XENCO Report No(s): **639785**
Ross Draw 25-36 Federal 161H
Project Address: Eddy County

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) 639785. 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. 639785 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 639785

LT Environmental, Inc., Arvada, CO

Ross Draw 25-36 Federal 161H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS01	S	10-10-19 10:00	0.5 ft	639785-001
SS02	S	10-10-19 10:15	0.5 ft	639785-002

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: Ross Draw 25-36 Federal 161H

Project ID:	*012919234*	Report Date:	*16-OCT-19*
Work Order Number(s):	*639785*	Date Received:	*10/11/2019*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3104433 BTEX by EPA 8021B

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

Certificate of Analysis Summary 639785

LT Environmental, Inc., Arvada, CO

Project Name: Ross Draw 25-36 Federal 161H

Project Id: 012919234
Contact: Dan Moir
Project Location: Eddy County

Date Received in Lab: Fri Oct-11-19 10:35 am
Report Date: 16-OCT-19
Project Manager: Jessica Kramer

Analysis Requested									
	Lab Id:	639785-001		639785-002					
	Field Id:	SS01		SS02					
	Depth:	0.5- ft		0.5- ft					
	Matrix:	SOIL		SOIL					
	Sampled:	Oct-10-19 10:00		Oct-10-19 10:15					
BTEX by EPA 8021B	***Extracted:***	Oct-14-19 16:10		Oct-14-19 16:10					
	Analyzed:	Oct-14-19 21:25		Oct-14-19 21:44					
	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	<0.00201	0.00201				
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-14-19 12:00		Oct-14-19 12:00					
	Analyzed:	Oct-14-19 15:09		Oct-14-19 15:17					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Chloride		188	10.0	59.0	50.4				
TPH by SW8015 Mod	***Extracted:***	Oct-14-19 11:00		Oct-14-19 11:00					
	Analyzed:	Oct-14-19 22:50		Oct-14-19 23:10					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<49.9	49.9	<49.8	49.8				
Diesel Range Organics (DRO)		<49.9	49.9	<49.8	49.8				
Motor Oil Range Hydrocarbons (MRO)		<49.9	49.9	<49.8	49.8				
Total GRO-DRO		<49.9	49.9	<49.8	49.8				
Total TPH		<49.9	49.9	<49.8	49.8				

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

Jessica Kramer
Project Assistant

Certificate of Analytical Results 639785

LT Environmental, Inc., Arvada, CO

Ross Draw 25-36 Federal 161H

Sample Id:	**SS01**	Matrix:	Soil	Date Received:	10.11.19 10.35
Lab Sample Id:	639785-001	Date Collected:	10.10.19 10.00	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.14.19 12.00	Basis:	Wet Weight
Seq Number:	3104254				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**188**	10.0	mg/kg	10.14.19 15.09		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.14.19 11.00	Basis:	Wet Weight
Seq Number:	3104378				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	10.14.19 22.50	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.14.19 22.50	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.14.19 22.50	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	10.14.19 22.50	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.14.19 22.50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	10.14.19 22.50	
o-Terphenyl	84-15-1	92	%	70-135	10.14.19 22.50	

Certificate of Analytical Results 639785

LT Environmental, Inc., Arvada, CO

Ross Draw 25-36 Federal 161H

Sample Id:	**SS01**	Matrix:	Soil	Date Received:	10.11.19 10.35
Lab Sample Id:	639785-001	Date Collected:	10.10.19 10.00	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.14.19 16.10	Basis:	Wet Weight
Seq Number:	3104433				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00101	0.00101	mg/kg	10.14.19 21.25	U	1
Toluene	108-88-3	<0.00101	0.00101	mg/kg	10.14.19 21.25	U	1
Ethylbenzene	100-41-4	<0.00101	0.00101	mg/kg	10.14.19 21.25	U	1
m,p-Xylenes	179601-23-1	<0.00202	0.00202	mg/kg	10.14.19 21.25	U	1
o-Xylene	95-47-6	<0.00101	0.00101	mg/kg	10.14.19 21.25	U	1
Total Xylenes	1330-20-7	<0.00101	0.00101	mg/kg	10.14.19 21.25	U	1
Total BTEX		<0.00101	0.00101	mg/kg	10.14.19 21.25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	70-130	10.14.19 21.25	
4-Bromofluorobenzene	460-00-4	112	%	70-130	10.14.19 21.25	

Certificate of Analytical Results 639785

LT Environmental, Inc., Arvada, CO

Ross Draw 25-36 Federal 161H

Sample Id:	**SS02**	Matrix:	Soil	Date Received:	10.11.19 10.35
Lab Sample Id:	639785-002	Date Collected:	10.10.19 10.15	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.14.19 12.00	Basis:	Wet Weight
Seq Number:	3104254				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**59.0**	50.4	mg/kg	10.14.19 15.17		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	10.14.19 11.00	Basis:	Wet Weight
Seq Number:	3104378				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	10.14.19 23.10	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	10.14.19 23.10	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	10.14.19 23.10	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	10.14.19 23.10	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	10.14.19 23.10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	10.14.19 23.10	
o-Terphenyl	84-15-1	99	%	70-135	10.14.19 23.10	

Certificate of Analytical Results 639785

LT Environmental, Inc., Arvada, CO

Ross Draw 25-36 Federal 161H

Sample Id:	**SS02**	Matrix:	Soil	Date Received:	10.11.19 10.35
Lab Sample Id:	639785-002	Date Collected:	10.10.19 10.15	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	10.14.19 16.10	Basis:	Wet Weight
Seq Number:	3104433				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00101	0.00101	mg/kg	10.14.19 21.44	U	1
Toluene	108-88-3	<0.00101	0.00101	mg/kg	10.14.19 21.44	U	1
Ethylbenzene	100-41-4	<0.00101	0.00101	mg/kg	10.14.19 21.44	U	1
m,p-Xylenes	179601-23-1	<0.00201	0.00201	mg/kg	10.14.19 21.44	U	1
o-Xylene	95-47-6	<0.00101	0.00101	mg/kg	10.14.19 21.44	U	1
Total Xylenes	1330-20-7	<0.00101	0.00101	mg/kg	10.14.19 21.44	U	1
Total BTEX		<0.00101	0.00101	mg/kg	10.14.19 21.44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	122	%	70-130	10.14.19 21.44	
1,4-Difluorobenzene	540-36-3	109	%	70-130	10.14.19 21.44	

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

QC Summary 639785

LT Environmental, Inc.

Ross Draw 25-36 Federal 161H

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3104254 — Matrix: Solid — Date Prep: 10.14.19
MB Sample Id: 7688096-1-BLK — LCS Sample Id: 7688096-1-BKS — LCSD Sample Id: 7688096-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	3.19	300	299	100	302	101	90-110	1	20	mg/kg	10.14.19 14:32	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3104254 — Matrix: Soil — Date Prep: 10.14.19
Parent Sample Id: 639781-001 — MS Sample Id: 639781-001 S — MSD Sample Id: 639781-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	12.0	198	242	116	265	128	90-110	9	20	mg/kg	10.14.19 14:54	X

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3104254 — Matrix: Soil — Date Prep: 10.14.19
Parent Sample Id: 639787-008 — MS Sample Id: 639787-008 S — MSD Sample Id: 639787-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	5.51	199	239	117	242	119	90-110	1	20	mg/kg	10.14.19 16:41	X

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3104378 — Matrix: Solid — Date Prep: 10.14.19
MB Sample Id: 7688111-1-BLK — LCS Sample Id: 7688111-1-BKS — LCSD Sample Id: 7688111-1-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	818	82	829	83	70-135	1	35	mg/kg	10.14.19 20:50	
Diesel Range Organics (DRO)	<50.0	1000	739	74	760	76	70-135	3	35	mg/kg	10.14.19 20:50	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	82		104		96		70-135	%	10.14.19 20:50
o-Terphenyl	85		93		94		70-135	%	10.14.19 20:50

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3104378 — Matrix: Solid — Date Prep: 10.14.19
MB Sample Id: 7688111-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	10.14.19 20:30	

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 639785

LT Environmental, Inc.

Ross Draw 25-36 Federal 161H

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3104378 — Matrix: Soil — Date Prep: 10.14.19
Parent Sample Id: 639765-001 — MS Sample Id: 639765-001 S — MSD Sample Id: 639765-001 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)	<50.1	1000	990	99	978	98	70-135	1	35	mg/kg	10.14.19 21:50	
Diesel Range Organics (DRO)	<50.1	1000	854	85	822	83	70-135	4	35	mg/kg	10.14.19 21:50	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	113		110		70-135	%	10.14.19 21:50
o-Terphenyl	100		96		70-135	%	10.14.19 21:50

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3104433 — Matrix: Solid — Date Prep: 10.14.19
MB Sample Id: 7688180-1-BLK — LCS Sample Id: 7688180-1-BKS — LCSD Sample Id: 7688180-1-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	0.0972	97	0.0934	93	70-130	4	35	mg/kg	10.14.19 19:43	
Toluene	<0.00100	0.100	0.0942	94	0.0933	93	70-130	1	35	mg/kg	10.14.19 19:43	
Ethylbenzene	<0.00100	0.100	0.0940	94	0.0941	94	71-129	0	35	mg/kg	10.14.19 19:43	
m,p-Xylenes	<0.00200	0.200	0.199	100	0.199	100	70-135	0	35	mg/kg	10.14.19 19:43	
o-Xylene	<0.00100	0.100	0.0965	97	0.0968	97	71-133	0	35	mg/kg	10.14.19 19:43	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		103		100		70-130	%	10.14.19 19:43
4-Bromofluorobenzene	98		104		108		70-130	%	10.14.19 19:43

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3104433 — Matrix: Soil — Date Prep: 10.14.19
Parent Sample Id: 639785-001 — MS Sample Id: 639785-001 S — MSD Sample Id: 639785-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00100	0.100	0.0971	97	0.0863	86	70-130	12	35	mg/kg	10.14.19 20:21	
Toluene	<0.00100	0.100	0.0942	94	0.0835	84	70-130	12	35	mg/kg	10.14.19 20:21	
Ethylbenzene	<0.00100	0.100	0.0940	94	0.0820	82	71-129	14	35	mg/kg	10.14.19 20:21	
m,p-Xylenes	<0.00200	0.200	0.199	100	0.173	87	70-135	14	35	mg/kg	10.14.19 20:21	
o-Xylene	<0.00100	0.100	0.0996	100	0.0864	86	71-133	14	35	mg/kg	10.14.19 20:21	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		107		70-130	%	10.14.19 20:21
4-Bromofluorobenzene	120		119		70-130	%	10.14.19 20:21

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: 439789

XENCO LABORATORIES

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

www.xenco.com Page 1 of 1

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

Work Order Comments

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

Project Name:	Ross Draw 25-36 Federal 161H	Turn Around	
Project Number:	01291234	Routine	X
P.O. Number:	Eddy County (Task #2)	Rush:	
Sampler's Name:	Lynda Laumbach	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Temperature (°C):	1.2	Thermometer ID	
Received Intact:	Yes No	T-NM-007	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Total Containers:	2

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
SS01	S	10/10/2019	10:00	0.5'	1	X	X	X
SS02	S	10/10/2019	10:15	0.5'	1	X	X	X

ANALYSIS REQUEST

Work Order Notes

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

Sample Comments

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

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		Anna Byers	10/10/2019 10:05	2 Anna Byers		10/11- 1035
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: 10/11/2019 10:35:00 AM

Work Order #: 639785

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

Temperature Measuring device used : T-NM-007

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	1.2
#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: 10/11/2019

Checklist reviewed by: Jessica Kramer Date: 10/13/2019

Analytical Report 640835

for

LT Environmental, Inc.

Project Manager: Tacoma Morrissey

Ross Draw 25-36 Federal 161H

012919234

28-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)

28-OCT-19

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

Reference: XENCO Report No(s): **640835**
Ross Draw 25-36 Federal 161H
Project Address: Rural Eddy County

Tacoma Morrissey:

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) 640835. 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. 640835 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 640835

LT Environmental, Inc., Arvada, CO

Ross Draw 25-36 Federal 161H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS01A	S	10-23-19 07:55	2 ft	640835-001
SS01B	S	10-23-19 08:00	4 ft	640835-002
SS02A	S	10-23-19 07:30	2.5 ft	640835-003
SS02B	S	10-23-19 07:35	4 ft	640835-004
BH01	S	10-23-19 08:40	0.5 ft	640835-005
BH01A	S	10-23-19 08:45	2 ft	640835-006
BH01B	S	10-23-19 08:50	4.5 ft	640835-007
BH02	S	10-23-19 08:15	0.5 ft	640835-008
BH02A	S	10-23-19 08:20	2 ft	640835-009
BH02B	S	10-23-19 08:25	4.5 ft	640835-010

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: Ross Draw 25-36 Federal 161H

Project ID:	*012919234*	Report Date:	*28-OCT-19*
Work Order Number(s):	*640835*	Date Received:	*10/23/2019*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3105379 Chloride by EPA 300

Lab Sample ID 640835-010 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered above QC limits in the Matrix Spike. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 640835-001, -002, -003, -004, -005, -006, -007, -008, -009, -010. The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3105532 BTEX by EPA 8021B

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

Certificate of Analysis Summary 640835

LT Environmental, Inc., Arvada, CO

Project Name: Ross Draw 25-36 Federal 161H

Project Id: 012919234
Contact: Tacoma Morrissey
Project Location: Rural Eddy County

Date Received in Lab: Wed Oct-23-19 12:25 pm
Report Date: 28-OCT-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	640835-001		640835-002		640835-003		640835-004		640835-005		640835-006	
	Field Id:	SS01A		SS01B		SS02A		SS02B		BH01		BH01A	
	Depth:	2- ft		4- ft		2.5- ft		4- ft		0.5- ft		2- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-23-19 07:55		Oct-23-19 08:00		Oct-23-19 07:30		Oct-23-19 07:35		Oct-23-19 08:40		Oct-23-19 08:45	
BTEX by EPA 8021B SUB: T104704400-19-19	***Extracted:***	Oct-27-19 11:00		Oct-27-19 11:00		Oct-27-19 11:00		Oct-27-19 11:00		Oct-27-19 11:00		Oct-27-19 11:00	
	Analyzed:	Oct-28-19 03:02		Oct-28-19 04:20		Oct-28-19 04:40		Oct-28-19 05:00		Oct-28-19 05:20		Oct-28-19 05:41	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00201	0.00201
Toluene		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00201	0.00201
Ethylbenzene		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00201	0.00201
m,p-Xylenes		<0.00398	0.00398	<0.00400	0.00400	<0.00400	0.00400	<0.00402	0.00402	<0.00398	0.00398	<0.00402	0.00402
o-Xylene		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00201	0.00201
Total Xylenes		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00201	0.00201
Total BTEX		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00201	0.00201
Chloride by EPA 300 SUB: T104704400-19-19	***Extracted:***	Oct-24-19 16:45		Oct-24-19 16:45		Oct-24-19 16:45		Oct-24-19 16:45		Oct-24-19 16:45		Oct-24-19 16:45	
	Analyzed:	Oct-24-19 23:30		Oct-24-19 17:48		Oct-24-19 17:54		Oct-24-19 18:00		Oct-24-19 18:17		Oct-24-19 18:23	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		30.8	5.05	9.76	4.96	12.5	5.02	49.0	5.00	127	4.99	<4.96	4.96
TPH by SW8015 Mod SUB: T104704400-19-19	***Extracted:***	Oct-24-19 11:00		Oct-24-19 11:00		Oct-24-19 11:00		Oct-24-19 11:00		Oct-24-19 11:00		Oct-24-19 11:00	
	Analyzed:	Oct-24-19 16:56		Oct-24-19 17:16		Oct-24-19 17:58		Oct-24-19 18:19		Oct-24-19 18:41		Oct-24-19 19:02	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<49.9	49.9	<49.8	49.8	<50.0	50.0	<49.9	49.9	<49.9	49.9	<50.0	50.0
Diesel Range Organics (DRO)		<49.9	49.9	<49.8	49.8	<50.0	50.0	<49.9	49.9	<49.9	49.9	<50.0	50.0
Motor Oil Range Hydrocarbons (MRO)		<49.9	49.9	<49.8	49.8	<50.0	50.0	<49.9	49.9	<49.9	49.9	<50.0	50.0
Total GRO-DRO		<49.9	49.9	<49.8	49.8	<50.0	50.0	<49.9	49.9	<49.9	49.9	<50.0	50.0
Total TPH		<49.9	49.9	<49.8	49.8	<50.0	50.0	<49.9	49.9	<49.9	49.9	<50.0	50.0

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 640835

LT Environmental, Inc., Arvada, CO

Project Name: Ross Draw 25-36 Federal 161H

Project Id: 012919234
Contact: Tacoma Morrissey
Project Location: Rural Eddy County

Date Received in Lab: Wed Oct-23-19 12:25 pm
Report Date: 28-OCT-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	640835-007		640835-008		640835-009		640835-010					
	Field Id:	BH01B		BH02		BH02A		BH02B					
	Depth:	4.5- ft		0.5- ft		2- ft		4.5- ft					
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	Oct-23-19 08:50		Oct-23-19 08:15		Oct-23-19 08:20		Oct-23-19 08:25					
BTEX by EPA 8021B	***Extracted:***	Oct-27-19 11:00		Oct-27-19 11:00		Oct-27-19 11:00		Oct-27-19 11:00					
SUB: T104704400-19-19	***Analyzed:***	Oct-28-19 06:01		Oct-28-19 06:21		Oct-28-19 06:41		Oct-28-19 07:01					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		<0.00202	0.00202	<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198				
Toluene		<0.00202	0.00202	<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198				
Ethylbenzene		<0.00202	0.00202	<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198				
m,p-Xylenes		<0.00403	0.00403	<0.00402	0.00402	<0.00399	0.00399	<0.00397	0.00397				
o-Xylene		<0.00202	0.00202	<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198				
Total Xylenes		<0.00202	0.00202	<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198				
Total BTEX		<0.00202	0.00202	<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198				
Chloride by EPA 300	***Extracted:***	Oct-24-19 16:45		Oct-24-19 16:45		Oct-24-19 16:45		Oct-24-19 16:45					
SUB: T104704400-19-19	***Analyzed:***	Oct-24-19 18:29		Oct-24-19 18:35		Oct-24-19 18:41		Oct-24-19 18:46					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		<5.04	5.04	87.3	4.98	<4.96	4.96	7.29	5.00				
TPH by SW8015 Mod	***Extracted:***	Oct-24-19 11:00		Oct-24-19 11:00		Oct-24-19 11:00		Oct-24-19 11:00					
SUB: T104704400-19-19	***Analyzed:***	Oct-24-19 19:22		Oct-24-19 19:43		Oct-24-19 20:04		Oct-24-19 20:25					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	<50.0	50.0	<49.8	49.8	<49.9	49.9				
Diesel Range Organics (DRO)		<50.0	50.0	<50.0	50.0	<49.8	49.8	<49.9	49.9				
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<50.0	50.0	<49.8	49.8	<49.9	49.9				
Total GRO-DRO		<50.0	50.0	<50.0	50.0	<49.8	49.8	<49.9	49.9				
Total TPH		<50.0	50.0	<50.0	50.0	<49.8	49.8	<49.9	49.9				

Jessica Kramer
Project Assistant

Certificate of Analytical Results 640835

LT Environmental, Inc., Arvada, CO

Ross Draw 25-36 Federal 161H

Sample Id:	**SS01A**	Matrix:	Soil	Date Received:	10.23.19 12.25
Lab Sample Id:	640835-001	Date Collected:	10.23.19 07.55	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.24.19 16.45	Basis:	Wet Weight
Seq Number:	3105379			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**30.8**	5.05	mg/kg	10.24.19 23.30		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.24.19 11.00	Basis:	Wet Weight
Seq Number:	3105466			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	10.24.19 16.56	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.24.19 16.56	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.24.19 16.56	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	10.24.19 16.56	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.24.19 16.56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	81	%	70-135	10.24.19 16.56	
o-Terphenyl	84-15-1	84	%	70-135	10.24.19 16.56	

Certificate of Analytical Results 640835

LT Environmental, Inc., Arvada, CO

Ross Draw 25-36 Federal 161H

Sample Id:	**SS01A**	Matrix:	Soil	Date Received:	10.23.19 12.25
Lab Sample Id:	640835-001	Date Collected:	10.23.19 07.55	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.27.19 11.00	Basis:	Wet Weight
Seq Number:	3105532			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.28.19 03.02	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.28.19 03.02	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.28.19 03.02	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.28.19 03.02	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.28.19 03.02	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.28.19 03.02	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.28.19 03.02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	115	%	70-130	10.28.19 03.02	
1,4-Difluorobenzene	540-36-3	100	%	70-130	10.28.19 03.02	

Certificate of Analytical Results 640835

LT Environmental, Inc., Arvada, CO

Ross Draw 25-36 Federal 161H

Sample Id:	**SS01B**	Matrix:	Soil	Date Received:	10.23.19 12.25
Lab Sample Id:	640835-002	Date Collected:	10.23.19 08.00	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.24.19 16.45	Basis:	Wet Weight
Seq Number:	3105379			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**9.76**	4.96	mg/kg	10.24.19 17.48		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.24.19 11.00	Basis:	Wet Weight
Seq Number:	3105466			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	10.24.19 17.16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	10.24.19 17.16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	10.24.19 17.16	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	10.24.19 17.16	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	10.24.19 17.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	81	%	70-135	10.24.19 17.16	
o-Terphenyl	84-15-1	85	%	70-135	10.24.19 17.16	

Certificate of Analytical Results 640835

LT Environmental, Inc., Arvada, CO

Ross Draw 25-36 Federal 161H

Sample Id:	**SS01B**	Matrix:	Soil	Date Received:	10.23.19 12.25
Lab Sample Id:	640835-002	Date Collected:	10.23.19 08.00	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.27.19 11.00	Basis:	Wet Weight
Seq Number:	3105532			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.28.19 04.20	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.28.19 04.20	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.28.19 04.20	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	10.28.19 04.20	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.28.19 04.20	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.28.19 04.20	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.28.19 04.20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	10.28.19 04.20	
4-Bromofluorobenzene	460-00-4	93	%	70-130	10.28.19 04.20	

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LT Environmental, Inc., Arvada, CO

Ross Draw 25-36 Federal 161H

Sample Id:	**SS02A**	Matrix:	Soil	Date Received:	10.23.19 12.25
Lab Sample Id:	640835-003	Date Collected:	10.23.19 07.30	Sample Depth:	2.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.24.19 16.45	Basis:	Wet Weight
Seq Number:	3105379			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**12.5**	5.02	mg/kg	10.24.19 17.54		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.24.19 11.00	Basis:	Wet Weight
Seq Number:	3105466			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.24.19 17.58	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.24.19 17.58	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.24.19 17.58	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.24.19 17.58	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.24.19 17.58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	84	%	70-135	10.24.19 17.58	
o-Terphenyl	84-15-1	87	%	70-135	10.24.19 17.58	

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LT Environmental, Inc., Arvada, CO

Ross Draw 25-36 Federal 161H

Sample Id:	**SS02A**	Matrix:	Soil	Date Received:	10.23.19 12.25
Lab Sample Id:	640835-003	Date Collected:	10.23.19 07.30	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.27.19 11.00	Basis:	Wet Weight
Seq Number:	3105532			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.28.19 04.40	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.28.19 04.40	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.28.19 04.40	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	10.28.19 04.40	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.28.19 04.40	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.28.19 04.40	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.28.19 04.40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	102	%	70-130	10.28.19 04.40	
1,4-Difluorobenzene	540-36-3	99	%	70-130	10.28.19 04.40	

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Ross Draw 25-36 Federal 161H

Sample Id:	**SS02B**	Matrix:	Soil	Date Received:	10.23.19 12.25
Lab Sample Id:	640835-004	Date Collected:	10.23.19 07.35	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.24.19 16.45	Basis:	Wet Weight
Seq Number:	3105379			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**49.0**	5.00	mg/kg	10.24.19 18.00		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.24.19 11.00	Basis:	Wet Weight
Seq Number:	3105466			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	10.24.19 18.19	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.24.19 18.19	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.24.19 18.19	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	10.24.19 18.19	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.24.19 18.19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-135	10.24.19 18.19	
o-Terphenyl	84-15-1	87	%	70-135	10.24.19 18.19	

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LT Environmental, Inc., Arvada, CO

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Sample Id:	**SS02B**	Matrix:	Soil	Date Received:	10.23.19 12.25
Lab Sample Id:	640835-004	Date Collected:	10.23.19 07.35	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.27.19 11.00	Basis:	Wet Weight
Seq Number:	3105532			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	10.28.19 05.00	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	10.28.19 05.00	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	10.28.19 05.00	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	10.28.19 05.00	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	10.28.19 05.00	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	10.28.19 05.00	U	1
Total BTEX		<0.00201	0.00201	mg/kg	10.28.19 05.00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	101	%	70-130	10.28.19 05.00	
1,4-Difluorobenzene	540-36-3	104	%	70-130	10.28.19 05.00	

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Sample Id:	**BH01**	Matrix:	Soil	Date Received:	10.23.19 12.25
Lab Sample Id:	640835-005	Date Collected:	10.23.19 08.40	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.24.19 16.45	Basis:	Wet Weight
Seq Number:	3105379			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**127**	4.99	mg/kg	10.24.19 18.17		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.24.19 11.00	Basis:	Wet Weight
Seq Number:	3105466			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	10.24.19 18.41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.24.19 18.41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.24.19 18.41	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	10.24.19 18.41	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.24.19 18.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-135	10.24.19 18.41	
o-Terphenyl	84-15-1	88	%	70-135	10.24.19 18.41	

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Sample Id:	**BH01**	Matrix:	Soil	Date Received:	10.23.19 12.25
Lab Sample Id:	640835-005	Date Collected:	10.23.19 08.40	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.27.19 11.00	Basis:	Wet Weight
Seq Number:	3105532			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.28.19 05.20	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.28.19 05.20	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.28.19 05.20	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.28.19 05.20	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.28.19 05.20	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.28.19 05.20	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.28.19 05.20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	10.28.19 05.20	
1,4-Difluorobenzene	540-36-3	100	%	70-130	10.28.19 05.20	

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Sample Id:	**BH01A**	Matrix:	Soil	Date Received:	10.23.19 12.25
Lab Sample Id:	640835-006	Date Collected:	10.23.19 08.45	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.24.19 16.45	Basis:	Wet Weight
Seq Number:	3105379			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.96	4.96	mg/kg	10.24.19 18.23	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.24.19 11.00	Basis:	Wet Weight
Seq Number:	3105466			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.24.19 19.02	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.24.19 19.02	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.24.19 19.02	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.24.19 19.02	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.24.19 19.02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-135	10.24.19 19.02	
o-Terphenyl	84-15-1	89	%	70-135	10.24.19 19.02	

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Sample Id:	**BH01A**	Matrix:	Soil	Date Received:	10.23.19 12.25
Lab Sample Id:	640835-006	Date Collected:	10.23.19 08.45	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.27.19 11.00	Basis:	Wet Weight
Seq Number:	3105532			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	10.28.19 05.41	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	10.28.19 05.41	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	10.28.19 05.41	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	10.28.19 05.41	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	10.28.19 05.41	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	10.28.19 05.41	U	1
Total BTEX		<0.00201	0.00201	mg/kg	10.28.19 05.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	10.28.19 05.41	
1,4-Difluorobenzene	540-36-3	99	%	70-130	10.28.19 05.41	

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Sample Id:	**BH01B**	Matrix:	Soil	Date Received:	10.23.19 12.25
Lab Sample Id:	640835-007	Date Collected:	10.23.19 08.50	Sample Depth:	4.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.24.19 16.45	Basis:	Wet Weight
Seq Number:	3105379			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.04	5.04	mg/kg	10.24.19 18.29	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.24.19 11.00	Basis:	Wet Weight
Seq Number:	3105466			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.24.19 19.22	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.24.19 19.22	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.24.19 19.22	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.24.19 19.22	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.24.19 19.22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	84	%	70-135	10.24.19 19.22	
o-Terphenyl	84-15-1	88	%	70-135	10.24.19 19.22	

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Sample Id:	**BH01B**	Matrix:	Soil	Date Received:	10.23.19 12.25
Lab Sample Id:	640835-007	Date Collected:	10.23.19 08.50	Sample Depth:	4.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.27.19 11.00	Basis:	Wet Weight
Seq Number:	3105532			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	10.28.19 06.01	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	10.28.19 06.01	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	10.28.19 06.01	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	10.28.19 06.01	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	10.28.19 06.01	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	10.28.19 06.01	U	1
Total BTEX		<0.00202	0.00202	mg/kg	10.28.19 06.01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	10.28.19 06.01	
1,4-Difluorobenzene	540-36-3	96	%	70-130	10.28.19 06.01	

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Sample Id:	**BH02**	Matrix:	Soil	Date Received:	10.23.19 12.25
Lab Sample Id:	640835-008	Date Collected:	10.23.19 08.15	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.24.19 16.45	Basis:	Wet Weight
Seq Number:	3105379			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**87.3**	4.98	mg/kg	10.24.19 18.35		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.24.19 11.00	Basis:	Wet Weight
Seq Number:	3105466			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.24.19 19.43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.24.19 19.43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.24.19 19.43	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.24.19 19.43	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.24.19 19.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	10.24.19 19.43	
o-Terphenyl	84-15-1	103	%	70-135	10.24.19 19.43	

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Sample Id:	**BH02**	Matrix:	Soil	Date Received:	10.23.19 12.25
Lab Sample Id:	640835-008	Date Collected:	10.23.19 08.15	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.27.19 11.00	Basis:	Wet Weight
Seq Number:	3105532			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	10.28.19 06.21	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	10.28.19 06.21	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	10.28.19 06.21	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	10.28.19 06.21	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	10.28.19 06.21	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	10.28.19 06.21	U	1
Total BTEX		<0.00201	0.00201	mg/kg	10.28.19 06.21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	98	%	70-130	10.28.19 06.21	
4-Bromofluorobenzene	460-00-4	109	%	70-130	10.28.19 06.21	

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Ross Draw 25-36 Federal 161H

Sample Id:	**BH02A**	Matrix:	Soil	Date Received:	10.23.19 12.25
Lab Sample Id:	640835-009	Date Collected:	10.23.19 08.20	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.24.19 16.45	Basis:	Wet Weight
Seq Number:	3105379			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.96	4.96	mg/kg	10.24.19 18.41	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.24.19 11.00	Basis:	Wet Weight
Seq Number:	3105466			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	10.24.19 20.04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	10.24.19 20.04	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	10.24.19 20.04	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	10.24.19 20.04	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	10.24.19 20.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	81	%	70-135	10.24.19 20.04	
o-Terphenyl	84-15-1	84	%	70-135	10.24.19 20.04	

Certificate of Analytical Results 640835

LT Environmental, Inc., Arvada, CO

Ross Draw 25-36 Federal 161H

Sample Id:	**BH02A**	Matrix:	Soil	Date Received:	10.23.19 12.25
Lab Sample Id:	640835-009	Date Collected:	10.23.19 08.20	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.27.19 11.00	Basis:	Wet Weight
Seq Number:	3105532			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.28.19 06.41	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.28.19 06.41	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.28.19 06.41	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	10.28.19 06.41	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.28.19 06.41	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.28.19 06.41	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.28.19 06.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	10.28.19 06.41	
1,4-Difluorobenzene	540-36-3	96	%	70-130	10.28.19 06.41	

Certificate of Analytical Results 640835

LT Environmental, Inc., Arvada, CO

Ross Draw 25-36 Federal 161H

Sample Id:	**BH02B**	Matrix:	Soil	Date Received:	10.23.19 12.25
Lab Sample Id:	640835-010	Date Collected:	10.23.19 08.25	Sample Depth:	4.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.24.19 16.45	Basis:	Wet Weight
Seq Number:	3105379			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**7.29**	5.00	mg/kg	10.24.19 18.46		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.24.19 11.00	Basis:	Wet Weight
Seq Number:	3105466			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	10.24.19 20.25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.24.19 20.25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.24.19 20.25	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	10.24.19 20.25	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.24.19 20.25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	82	%	70-135	10.24.19 20.25	
o-Terphenyl	84-15-1	85	%	70-135	10.24.19 20.25	

Certificate of Analytical Results 640835

LT Environmental, Inc., Arvada, CO

Ross Draw 25-36 Federal 161H

Sample Id:	**BH02B**	Matrix:	Soil	Date Received:	10.23.19 12.25
Lab Sample Id:	640835-010	Date Collected:	10.23.19 08.25	Sample Depth:	4.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	10.27.19 11.00	Basis:	Wet Weight
Seq Number:	3105532			SUB:	T104704400-19-19

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	10.28.19 07.01	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	10.28.19 07.01	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	10.28.19 07.01	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	10.28.19 07.01	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	10.28.19 07.01	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	10.28.19 07.01	U	1
Total BTEX		<0.00198	0.00198	mg/kg	10.28.19 07.01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	97	%	70-130	10.28.19 07.01	
4-Bromofluorobenzene	460-00-4	106	%	70-130	10.28.19 07.01	

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 640835

LT Environmental, Inc.

Ross Draw 25-36 Federal 161H

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3105379 — Matrix: Solid — Date Prep: 10.24.19
MB Sample Id: 7688864-1-BLK — LCS Sample Id: 7688864-1-BKS — LCSD Sample Id: 7688864-1-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	254	102	248	99	90-110	2	20	mg/kg	10.24.19 17:15	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3105379 — Matrix: Soil — Date Prep: 10.24.19
Parent Sample Id: 640835-001 — MS Sample Id: 640835-001 S — MSD Sample Id: 640835-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	30.8	253	312	111	309	110	90-110	1	20	mg/kg	10.24.19 23:37	X

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3105379 — Matrix: Soil — Date Prep: 10.24.19
Parent Sample Id: 640835-010 — MS Sample Id: 640835-010 S — MSD Sample Id: 640835-010 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	7.29	250	278	108	276	107	90-110	1	20	mg/kg	10.24.19 18:52	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3105466 — Matrix: Solid — Date Prep: 10.24.19
MB Sample Id: 7688841-1-BLK — LCS Sample Id: 7688841-1-BKS — LCSD Sample Id: 7688841-1-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	983	98	981	98	70-135	0	20	mg/kg	10.24.19 12:32	
Diesel Range Organics (DRO)	<50.0	1000	927	93	1040	104	70-135	11	20	mg/kg	10.24.19 12:32	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	94		101		102		70-135	%	10.24.19 12:32
o-Terphenyl	99		101		100		70-135	%	10.24.19 12:32

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3105466 — Matrix: Solid — Date Prep: 10.24.19
MB Sample Id: 7688841-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	10.24.19 12:11	

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 640835

LT Environmental, Inc.

Ross Draw 25-36 Federal 161H

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3105466 — Matrix: Soil — Date Prep: 10.24.19
Parent Sample Id: 640827-001 — MS Sample Id: 640827-001 S — MSD Sample Id: 640827-001 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)	<15.0	997	975	98	965	97	70-135	1	20	mg/kg	10.24.19 13:34	
Diesel Range Organics (DRO)	22.3	997	924	90	899	88	70-135	3	20	mg/kg	10.24.19 13:34	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	91		89		70-135	%	10.24.19 13:34
o-Terphenyl	86		84		70-135	%	10.24.19 13:34

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3105532 — Matrix: Solid — Date Prep: 10.27.19
MB Sample Id: 7688950-1-BLK — LCS Sample Id: 7688950-1-BKS — LCSD Sample Id: 7688950-1-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	0.108	108	0.108	108	70-130	0	35	mg/kg	10.27.19 22:41	
Toluene	<0.00200	0.100	0.102	102	0.100	100	70-130	2	35	mg/kg	10.27.19 22:41	
Ethylbenzene	<0.00200	0.100	0.103	103	0.0998	100	70-130	3	35	mg/kg	10.27.19 22:41	
m,p-Xylenes	<0.00400	0.200	0.207	104	0.200	100	70-130	3	35	mg/kg	10.27.19 22:41	
o-Xylene	<0.00200	0.100	0.103	103	0.100	100	70-130	3	35	mg/kg	10.27.19 22:41	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	94		97		98		70-130	%	10.27.19 22:41
4-Bromofluorobenzene	95		104		98		70-130	%	10.27.19 22:41

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3105532 — Matrix: Soil — Date Prep: 10.27.19
Parent Sample Id: 640781-021 — MS Sample Id: 640781-021 S — MSD Sample Id: 640781-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0940	94	0.0880	87	70-130	7	35	mg/kg	10.27.19 23:22	
Toluene	<0.00200	0.100	0.0852	85	0.0782	77	70-130	9	35	mg/kg	10.27.19 23:22	
Ethylbenzene	<0.00200	0.100	0.0871	87	0.0778	77	70-130	11	35	mg/kg	10.27.19 23:22	
m,p-Xylenes	<0.00401	0.200	0.174	87	0.154	76	70-130	12	35	mg/kg	10.27.19 23:22	
o-Xylene	<0.00200	0.100	0.0910	91	0.0804	80	70-130	12	35	mg/kg	10.27.19 23:22	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		101		70-130	%	10.27.19 23:22
4-Bromofluorobenzene	110		98		70-130	%	10.27.19 23:22

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

Chain of Custody

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

Work Order No: 640835

Page 1 of 1

Project Manager:	Tacoma Morrisey	Bill to: (if different)	KYLE LITTRELL
Company Name:	LT Environmental	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 E. Greene Street
City, State ZIP:	Midland TX 79705	City, State ZIP:	Carlsbad NM 88220
Phone:	(432) 556-3617	Email:	tmorrisey@ltenv.com + abyers@ltenv.com

Work Order Comments

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

Project Name:	Ross Drow 25-36 Federal 161H	Turn Around	
Project Number:	012919234	Routine	☒
Project Location	Rural Eddy County	Rush:	
Sampler's Name:	Anna Byers	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Temperature (°C):	1.0		
Received Intact:	Yes No	Thermometer ID	T-NM-007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Total Containers:	10

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)
	SS01A	S	10/23/19	0755	2'	1			
	SS01B	S		0800	4'	1			
	SS02A	S		0730	2.5'	1			
	SS02B	S		0735	4'	1			
	BH01	S		0840	0.5'	1			
	BH01A	S		0845	2'	1			
	BH01B	S		0850	4.5'	1			
	BH02	S		0815	0.5'	1			
	BH02A	S		0820	2'	1			
	BH02B	S	↓	0825	4.5'	1			

ANALYSIS REQUEST

Preservative Codes

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

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

Sample Comments

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

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time		Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	Anna Byers		10/23/19 12:25	2			
3				4			
5				6			

Revised Date 022619 Rev. 2019.1

Inter-Office Shipment

IOS Number **50716**

Date/Time: 10/23/19 14:32
Lab# From: **Carlsbad**
Lab# To: **Midland**

Created by: Elizabeth Mcclellan
Delivery Priority:
Air Bill No.: 776797683616

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
640835-001	S	SS01A	10/23/19 07:55	SW8021B	BTEX by EPA 8021B	10/29/19	11/06/19	JKR	BR4FBZ BZ BZME EBZ X	
640835-001	S	SS01A	10/23/19 07:55	E300_CL	Chloride by EPA 300	10/29/19	04/20/20	JKR	CL	
640835-001	S	SS01A	10/23/19 07:55	SW8015MOD_NM	TPH by SW8015 Mod	10/29/19	11/06/19	JKR	GRO-DRO PHCC10C28 PH	
640835-002	S	SS01B	10/23/19 08:00	E300_CL	Chloride by EPA 300	10/29/19	04/20/20	JKR	CL	
640835-002	S	SS01B	10/23/19 08:00	SW8021B	BTEX by EPA 8021B	10/29/19	11/06/19	JKR	BR4FBZ BZ BZME EBZ X	
640835-002	S	SS01B	10/23/19 08:00	SW8015MOD_NM	TPH by SW8015 Mod	10/29/19	11/06/19	JKR	GRO-DRO PHCC10C28 PH	
640835-003	S	SS02A	10/23/19 07:30	E300_CL	Chloride by EPA 300	10/29/19	04/20/20	JKR	CL	
640835-003	S	SS02A	10/23/19 07:30	SW8021B	BTEX by EPA 8021B	10/29/19	11/06/19	JKR	BR4FBZ BZ BZME EBZ X	
640835-003	S	SS02A	10/23/19 07:30	SW8015MOD_NM	TPH by SW8015 Mod	10/29/19	11/06/19	JKR	GRO-DRO PHCC10C28 PH	
640835-004	S	SS02B	10/23/19 07:35	SW8015MOD_NM	TPH by SW8015 Mod	10/29/19	11/06/19	JKR	GRO-DRO PHCC10C28 PH	
640835-004	S	SS02B	10/23/19 07:35	SW8021B	BTEX by EPA 8021B	10/29/19	11/06/19	JKR	BR4FBZ BZ BZME EBZ X	
640835-004	S	SS02B	10/23/19 07:35	E300_CL	Chloride by EPA 300	10/29/19	04/20/20	JKR	CL	
640835-005	S	BH01	10/23/19 08:40	SW8015MOD_NM	TPH by SW8015 Mod	10/29/19	11/06/19	JKR	GRO-DRO PHCC10C28 PH	
640835-005	S	BH01	10/23/19 08:40	SW8021B	BTEX by EPA 8021B	10/29/19	11/06/19	JKR	BR4FBZ BZ BZME EBZ X	
640835-005	S	BH01	10/23/19 08:40	E300_CL	Chloride by EPA 300	10/29/19	04/20/20	JKR	CL	
640835-006	S	BH01A	10/23/19 08:45	SW8021B	BTEX by EPA 8021B	10/29/19	11/06/19	JKR	BR4FBZ BZ BZME EBZ X	
640835-006	S	BH01A	10/23/19 08:45	SW8015MOD_NM	TPH by SW8015 Mod	10/29/19	11/06/19	JKR	GRO-DRO PHCC10C28 PH	
640835-006	S	BH01A	10/23/19 08:45	E300_CL	Chloride by EPA 300	10/29/19	04/20/20	JKR	CL	
640835-007	S	BH01B	10/23/19 08:50	E300_CL	Chloride by EPA 300	10/29/19	04/20/20	JKR	CL	
640835-007	S	BH01B	10/23/19 08:50	SW8015MOD_NM	TPH by SW8015 Mod	10/29/19	11/06/19	JKR	GRO-DRO PHCC10C28 PH	
640835-007	S	BH01B	10/23/19 08:50	SW8021B	BTEX by EPA 8021B	10/29/19	11/06/19	JKR	BR4FBZ BZ BZME EBZ X	
640835-008	S	BH02	10/23/19 08:15	SW8021B	BTEX by EPA 8021B	10/29/19	11/06/19	JKR	BR4FBZ BZ BZME EBZ X	
640835-008	S	BH02	10/23/19 08:15	E300_CL	Chloride by EPA 300	10/29/19	04/20/20	JKR	CL	
640835-008	S	BH02	10/23/19 08:15	SW8015MOD_NM	TPH by SW8015 Mod	10/29/19	11/06/19	JKR	GRO-DRO PHCC10C28 PH	
640835-009	S	BH02A	10/23/19 08:20	SW8021B	BTEX by EPA 8021B	10/29/19	11/06/19	JKR	BR4FBZ BZ BZME EBZ X	

Inter-Office Shipment

IOS Number **50716**

Date/Time: 10/23/19 14:32
Lab# From: **Carlsbad**
Lab# To: **Midland**

Created by: Elizabeth Mcclellan
Delivery Priority:
Air Bill No.: 776797683616

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
640835-009	S	BH02A	10/23/19 08:20	SW8015MOD_NM	TPH by SW8015 Mod	10/29/19	11/06/19	JKR	GRO-DRO PHCC10C28 PH	
640835-009	S	BH02A	10/23/19 08:20	E300_CL	Chloride by EPA 300	10/29/19	04/20/20	JKR	CL	
640835-010	S	BH02B	10/23/19 08:25	SW8015MOD_NM	TPH by SW8015 Mod	10/29/19	11/06/19	JKR	GRO-DRO PHCC10C28 PH	
640835-010	S	BH02B	10/23/19 08:25	SW8021B	BTEX by EPA 8021B	10/29/19	11/06/19	JKR	BR4FBZ BZ BZME EBZ X	
640835-010	S	BH02B	10/23/19 08:25	E300_CL	Chloride by EPA 300	10/29/19	04/20/20	JKR	CL	

Inter Office Shipment or Sample Comments:

Relinquished By: Elizabeth McClellan

Date Relinquished: 10/23/2019

Received By: Brianna Teel

Date Received: 10/24/2019 11:18

Cooler Temperature: 0.6

XENCO Laboratories

Inter Office Report- Sample Receipt Checklist

Sent To: Midland

IOS #: 50716

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

Sent By: Elizabeth McClellan **Date Sent:** 10/23/2019 02:32 PM

Received By: Brianna Teel **Date Received:** 10/24/2019 11:18 AM

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	.6
#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: 10/24/2019

Brianna Teel

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 10/23/2019 12:25:00 PM

Work Order #: 640835

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

Temperature Measuring device used : T-NM-007

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	1	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 Custody Seals intact on sample bottles?	**Yes**	
#6*Custody Seals Signed and dated?	**Yes**	
#7 *Chain of Custody present?	**Yes**	
#8 Any missing/extra samples?	**No**	
#9 Chain of Custody signed when relinquished/ received?	**Yes**	
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**	
#11 Container label(s) legible and intact?	**Yes**	
#12 Samples in proper container/ bottle?	**Yes**	
#13 Samples properly preserved?	**Yes**	
#14 Sample container(s) intact?	**Yes**	
#15 Sufficient sample amount for indicated test(s)?	**Yes**	
#16 All samples received within hold time?	**Yes**	
#17 Subcontract of sample(s)?	**Yes**	Subbed to 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: 10/23/2019

Checklist reviewed by: Jessica Kramer Date: 10/24/2019