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

B0PAR-191125-C-1410

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	NCE2002458592
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

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

Location of Release Source

Latitude	32.019604

Longitude <u>-103.938731</u> (NAD 83 in decimal degrees to 5 decimal places)

Site Name Ross Draw 25-36 Federal Com 103H	Site Type Well Location
Date Release Discovered 11/12/2019	API# (if applicable) 30-015-45595 (Ross Draw 25-36 Federal Com 103H)

Unit Letter	Section	Township	Range	County
С	25	268	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) 0.0	Volume Recovered (bbls) 0.0	
Produced Water	Volume Released (bbls) 0.0	Volume Recovered (bbls) 0.0	
	Is the concentration of dissolved chloride in the	Yes No	
	produced water >10,000 mg/l?		
Condensate	Volume Released (bbls)	Volume Recovered (bbls)	
Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)	
Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)	
Treated Water w/scale 10390A 0.01%	10 bbls	10 bbls	
Bioc 16779A(PAA) 0.005%			
Bioc 16952A 0.005%			
Cause of Release: High pressure caused fluid to leak from iron coming off of a lateral on the main treating line. Approximately 10 bbls			

Cause of Release: High pressure caused fluid to leak from iron coming off of a lateral on the main treating line. Approximately 10 bbls of fresh water mixed with scale inhibitor and biocide was released into the containment and was recovered by vacuum trailer. A 48-hour advance notice of liner inspection was provided by email to NMOCD District 2. The liner was visually inspected and the inspector located one hole. Additional delineation for deferral will be completed by a third party contractor.

Recei

orm C-141	State of New Mexico	T II IT	NOF2002450502
Page 7	Oil Conservation Division	Incident ID	NCE2002458592
ugo 2	on conservation Division	District RP	
		Application ID	
		Application ID	
Was this a major release as defined by 19 15 29 7(A) NMAC2	If YES, for what reason(s) does the responsible par	rty consider this a major release	?
\square Yes \square No			
If YES, was immediate no	otice given to the OCD? By whom? To whom? Wh	hen and by what means (phone,	email, etc)?
N/A			
13	Initial Response	50	
	initial Respons	30	
The responsible j	party must undertake the following actions immediately unless the	ey could create a safety hazard that wou	ld result in injury
\square The source of the relation	asse has been stonned		
\square The impacted area ha	as been secured to protect human health and the envir	ronmont	
Released materials he	is been contained via the use of horms or dikes, and	romment.	nt douisso
All free liquids and re	ecoverable materials have been removed and manage	ed annronriately	in devices.
If all the actions describe	d shows have not how and station surpline when		
If all the actions described	a above have <u>not</u> been undertaken, explain why:		
N/A			
Per 19.15.29.8 B. (4) NM	AC the responsible party may commence remediation	on immediately after discovery	of a release. If remediation
within a lined containmer	a narrative of actions to date. If remediat efforts has a tarea (see $19.15.29.11(A)(5)(a)$ NMAC), please attained at the set of th	ave been successfully complete ach all information needed for c	losure evaluation.
	rmation given above is true and complete to the best of my required to report and/or file certain release notifications a	y knowledge and understand that pu and perform corrective actions for re-	rsuant to OCD rules and eleases which may endanger
I hereby certify that the info regulations all operators are public health or the environr failed to adequately investige addition, OCD acceptance of and/or regulations.	ment. The acceptance of a C-141 report by the OCD does ate and remediate contamination that pose a threat to group f a C-141 report does not relieve the operator of responsible	not relieve the operator of liability and water, surface water, human heal oility for compliance with any other	should their operations have th or the environment. In federal, state, or local laws

Signature	Date:11/25/2019
email:Kyle_Littrell@xtoenergy.com	Telephone:
OCD Only	
Received by:Cristina Eads	Date:01/24/2020

Oil Conservation Division

Incident ID	NCE2002458592
District RP	
Facility ID	
Application ID	

Page 3 of 50

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?		
Did this release impact groundwater or surface water?		
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
- \square Depth to water determination
- Determination of water sources and significant watercourses within ¹/₂-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.

Received by OCD: 6/30/2	2020 11:35:46 AM	avico		Page 4 of 5
1'01111 ()-141			Incident ID	NCE2002458592
Page 4	Oil Conservation L	Division	District RP	
			Facility ID	
			Application ID	
I hereby certify that the in regulations all operators a public health or the enviro failed to adequately inves addition, OCD acceptance and/or regulations. Printed Name: Signature: Kyle_Li	formation given above is true and com re required to report and/or file certain onment. The acceptance of a C-141 rep tigate and remediate contamination that of a C-141 report does not relieve the <u>Kyle Littrell</u> <u>A</u> Aaaad ttrell@xtoenergy.com	plete to the best of my knowledge release notifications and perform bort by the OCD does not relieve t t pose a threat to groundwater, sur operator of responsibility for com Title: <u>SH&H</u> Date: <u>06/30/2</u> Telephone:	e and understand that pur corrective actions for rel he operator of liability sl face water, human health pliance with any other for <u>E Supervisor</u> 020 (432)-221-7331	rsuant to OCD rules and leases which may endanger hould their operations have h or the environment. In rederal, state, or local laws
OCD Only Received by: Cristi	na Eads	Date:0	<u>6/30/2</u> 020	_

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	g)		
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 and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for rele may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of 1 should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surf- human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substa restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.	to OCD rules ases which iability ace water, for ntially in		
Printed Name: Kyle Littrell Title: SH&E Supervisor			
Signature: Date: Date:06/30/2020			
email: <u>Kyle_Littrell@xtoenergy.com</u> Telephone: <u>432-221-7331</u>			
OCD Only			
Received by: Cristina Eads Date: 06/30/2020			
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.			
Closure Approved by: Juntur 2 Date: 09/02/2020			
Printed Name: Cristina Eads Title: Environmental Specialist			



3300 North "A" Street Building 1, Unit 222 Midland, Texas 79705 432.704.5178



June 30, 2020

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

RE: Closure Request Ross Draw 25-36 Federal Com 103H Incident Number NCE200245892 Eddy County, New Mexico

Dear Mr. Bratcher:

LT Environmental, Inc. (LTE), on behalf of XTO Energy, Inc. (XTO), presents the following Closure Request detailing site assessment and soil sampling activities at the Ross Draw 25-36 Federal Com 103H (Site) in Unit C, 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 assess for the presence or absence of impacted to soil following the 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 Incident Number NCE200245892.

RELEASE BACKGROUND

On November 12, 2019, high pressure caused fluid to leak from iron coming off a lateral on the main treating line. Approximately 10 barrels (bbls) of fresh water mixed with scale inhibitor and biocide was released into the temporary lined containment. A vacuum truck was dispatched to the Site to recover the freestanding fluids; approximately 10 bbls of fluid were recovered from the containment. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form C-141 (Form C-141) on November 25, 2019, and subsequently assigned Incident Number NCE200245892.

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 50 and 100 feet below ground surface (bgs) based on the nearest groundwater well data. The nearest permitted groundwater well with depth to groundwater data is United States Geological Survey (USGS) well 320154103562301, located approximately 4,391 feet north of the Site. The groundwater well has a reported depth to groundwater of 66 feet bgs, and the total depth is 200 feet bgs. Ground



Bratcher, M. Page 2

surface elevation at the groundwater well location is 2,985 feet above mean sea level (amsl), which is approximately 21 feet higher in elevation than the Site. The referenced well records are in Attachment 1. The closest continuously flowing water or significant watercourse to the Site is a dry wash, located approximately 933 feet south-southeast of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is potentially underlain by unstable geology (high potential karst designation area). The Site receptors are identified on Figure 1.

CLOSURE CRITERIA

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

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

SITE ASSESSMENT, DELINEATION, AND EXCAVATION SOIL SAMPLING ACTIVITIES

On December 18, 2019, LTE personnel inspected the Site to evaluate the release extent based on information provided on the Form C-141 and visual observations. LTE personnel advanced one borehole (BH01) via stainless steel hand-auger within the release extent. Three soil samples were collected from the borehole at depths of approximately 0.5 feet, 2 feet, and 2.5 feet bgs to assess for the presence or absence of impacted surface soil. Soil from the soil samples was field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photoionization detector (PID) and Hach[®] chloride QuanTab[®] test strips, respectively. The release extent, boreholes, and soil sample locations were mapped utilizing a handheld Global Positing System (GPS) unit and are depicted on Figure 2. Photo documentation of the release was conducted, and a photographic log of the Site is included as Attachment 2. Field screening results and observations for the borehole were logged on lithologic/soil sampling logs, which are included in Attachment 3.

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



Bratcher, M. Page 3

Laboratory analytical results for soil samples BH01A and BH01B indicated that benzene, BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria at 2.5 feet bgs. The TPH concentrations in BH01 exceeded Closure Criteria. Chloride concentrations exceeded Closure Criteria in BH01 and BH01A. Laboratory analytical results for the soil samples are presented on Figure 2 and summarized in Table 1. The laboratory analytical report is included in Attachment 4.

On May 4, 2020, LTE personnel returned to the Site to oversee excavation activities to remediate impacted soil. Excavation activities were performed using track-mounted backhoe and transport vehicle. The excavation extent totaled approximately 156 square feet and averaged 0.5 feet in depth with the deepest portions in the center of the excavation. A total of approximately 3 cubic yards of impacted soil were removed during the excavation activities.

Following removal of impacted soil, LTE collected one 5-point composite soil sample from the floor of the excavation. The 5-point composite sample was collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. The excavation soil sample was collected, handled, and analyzed as described above. The excavation extent and confirmation sample are presented on Figure 3.

The impacted soil was transported and properly disposed of at the R360 Facility located in Hobbs, New Mexico. After completion of confirmation sampling, the excavation was secured with fencing.

ANALYTICAL RESULTS

Laboratory analytical results from soil samples collected in BH01 indicated impacted soil existed above 2.5 feet bgs. Following excavation of the impacted material, soil sample FS01 was collected from within the release extent. Laboratory analytical results indicated benzene, BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria in soil sample FS01. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Attachment 4.

CONCLUSIONS

Initial and follow-up response efforts as a result of the release of freshwater mixed with scale inhibitor and biocide included removal of freestanding fluid via vacuum truck, site assessment, excavation, and confirmation soil sampling. Soil samples from the center of the release at borehole BH01 indicated that soil containing elevated TPH and chloride concentrations existed in shallow soils. Based on the analytical results, LTE returned to the Site and excavated approximately 3 cubic yards of impacted soil and collected a confirmation soil sample. Laboratory analytical results from excavation soil sample FS01 indicated benzene, BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria. XTO respectfully requests NFA for Incident Number NCE200245892.



Bratcher, M. Page 4

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

Sincerely,

LT ENVIRONMENTAL, INC.

rol Aun Whaley

Carol Ann Whaley Staff Geoscientist

Ashley L. Ager

Ashley L. Ager, P.G. Senior Geologist

cc: Kyle Littrell, XTO U.S. Bureau of Land Management – New Mexico Robert Hamlet, NMOCD Cristina Eads, NMOCD Victoria Venegas, NMOCD

Appendices:

- Figure 1 Site Location Map
- Figure 2 Delineation Soil Sample Locations
- Figure 3 Excavation Soil Sample Locations
- Table 1Soil Analytical Results
- Attachment 1 Referenced Well Records
- Attachment 2 Photographic Logs
- Attachment 3 Lithologic/Soil Sampling Logs
- Attachment 4 Laboratory Analytical Reports

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FIGURES









P:XTO Energy/GIS/MXD/012919287_ROSS DRAW 25-36 FED 103H/012919287_FIG02_DELINEATION_2020.mxd





P:\XTO Energy\GIS\MXD\012919287_ROSS DRAW 25-36 FED 103H\012919287_FIG03_EXCAVATION_ND_2020.mxd

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TABLES



TABLE 1 SOIL ANALYTICAL RESULTS

ROSS DRAW 25-36 FEDERAL COM 103H INCIDENT NUMBER NCE2002458592 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)
NMOCD Table	e 1 Closure Crit	eria	10	NE	NE	NE	50	NE	NE	NE	NE	100	600
BH01	0.5	12/18/2019	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.3	1,500	<50.3	1,500	1,500	942
BH01A	2.0	12/18/2019	<0.00197	<0.00197	<0.00197	<0.00197	<0.00197	<50.0	<50.0	<50.0	<50.0	<50.0	983
BH01B	2.5	12/18/2019	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<49.9	<49.9	<49.9	<49.9	<49.9	443
FS01	0.5	05/04/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	202

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



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USGS Home Contact USGS Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category: Site Information Geographic Area: United States

GO

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- Full News 🔊

USGS 320154103562301 26S.29E.22.23341

Available data for this site SUMMARY OF ALL AVAILABLE DATA GO

Well Site

DESCRIPTION:

Latitude 32°01'54", Longitude 103°56'23" NAD27 Eddy County, New Mexico , Hydrologic Unit 13070001 Well depth: 200 feet Land surface altitude: 2,974 feet above NAVD88. Well completed in "Rustler Formation" (312RSLR) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1975-12-09	1998-01-22	8
<u>Revisions</u>	Unavailable (site:0) (timese	eries:0)

OPERATION:

Record for this site is maintained by the USGS New Mexico Water Science Center Email questions about this site to <u>New Mexico Water Science Center Water-Data</u> <u>Inquiries</u>

Questions about sites/data? Feedback on this web site Automated retrievals Help Data Tips Explanation of terms Subscribe for system changes News



6/26/2020, 5:29 PM

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ATTACHMENT 2: PHOTOGRAPHIC LOG

PHOTOGRAPHIC LOG



Photograph 1: Eastern view of BH01 and release extent on the caliche well pad.



Photograph 2: View of excavation on the caliche well pad.



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LT Environm LT Environm Marcine W	Pental, Inc.		L 5 Car Comp	.T Envir 108 West 1sbad, N liance · El	onmenta Stevens ew Mexic	I, Inc. Street :0 88220 · Remedi	ation		Identifier: BHU Project Name: HoSS Drz.W 25-3 (#/12/19)	Date: 12/18/19 6 RP Number:
		LITHO	LOGIC	C / SOIL	IL SAMPLING LOG				Logged By: Ellie	Method: Hund Auger
Lat/Long					Field Scree	ning:			Hole Diameter:	Total Depth:
Commen	ts:									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type		Lithology/	Remarks
D	648	97.6	Ν	BH01	1	0.58	S	calic	he , truce sand	, light brown
a	891	107,2	N	BH01A	2	287	S	Ţ		h. ten
0	395	20,2	N	DII01D	-	2.587	5	calic	he Isand, brown	, to tur
					3 _					
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	Lat/Long Commen 0	Lat/Long: Comments: Comments: P 891 0 891 0 395	LITHO Lat/Long: Comments:	Competence of the second secon	LT Envir 508 West Carlsbad, N Compliance - En LITHOLOGIC / SOII Lat/Long: Comments:	LT Environmenta 508 West Stevens Carlsbad, New Mexic Compliance \cdot Engineering LITHOLOGIC / SOIL SAMPI Lat/Long: Comments: $\begin{array}{c c c c c c c c c c c c c c c c c c c $	LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance - Engineering - Remedia LITHOLOGIC / SOIL SAMPLING LC LutLong: Field Screening: Comments: $\begin{array}{c} 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 $	LT Environmental, Inc. 508 West Stevens Street Carisbad, New Mexico 88220 Compliance · Engineering · Remediation LITHOLOGIC / SOIL SAMPLING LOG Lat/Long: Comments: $\begin{array}{c ccccccccccccccccccccccccccccccccccc$	LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance - Engineering - Remediation LITHOLOGIC / SOIL SAMPLING LOG Lat Long: Comments: $\begin{array}{c} 100 \\ 10$	LT Environmental, Inc. SOB West Stevens Street Cartobad, New Mexico 8820 Compliance : Engineering : Remediation LITHOLOGIC / SOIL SAMPLING LOG Lattong: Comments: $\frac{10}{100} \frac{10}{100} \frac{10}$

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for LT Environmental, Inc.

Project Manager: Dan Moir

Ross Draw 25-36 Fed 103H

012919287

19-DEC-19

Collected By: Elizabeth Naka



1089 N Canal Street Carlsbad, NM 88220

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

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

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



19-DEC-19

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

Reference: XENCO Report No(s): 646839 Ross Draw 25-36 Fed 103H 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) 646839. 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. 646839 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 Vramer

Jessica Kramer Project Assistant

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Ross Draw 25-36 Fed 103H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH01	S	12-18-19 00:00	0.5 ft	646839-001
BH01A	S	12-18-19 00:00	2.0 ft	646839-002
BH01B	S	12-18-19 00:00	2.5 ft	646839-003

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CASE NARRATIVE

Client Name: LT Environmental, Inc. Project Name: Ross Draw 25-36 Fed 103H

 Project ID:
 012919287

 Work Order Number(s):
 646839

 Report Date:
 19-DEC-19

 Date Received:
 12/18/2019

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments: Batch: LBA-3111020 BTEX by EPA 8021B Soil samples were not received in Terracore kits and therefore were prepared by method 5030.





Project Id: 012919287 **Contact:** Dan Moir **Project Location:** Eddy County

Certificate of Analysis Summary 646839

LT Environmental, Inc., Arvada, CO Project Name: Ross Draw 25-36 Fed 103H

Date Received in Lab: Wed Dec-18-19 12:58 pm Report Date: 19-DEC-19 Project Manager: Jessica Kramer

	Lab Id:	646839-0	01	646839-0	002	646839-0	003		
Analysis Requested	Field Id:	BH01		BH01A	4	BH011	3		
Anutysis Requested	Depth:	0.5- ft		2.0- ft		2.5- ft	t		
	Matrix:	SOIL		SOIL		SOIL			
	Sampled:	Dec-18-19 (00:00	Dec-18-19	00:00	Dec-18-19	00:00		
BTEX by EPA 8021B	Extracted:	Dec-18-19 1	14:00	Dec-18-19	14:00	** ** **	**		
	Analyzed:	Dec-18-19 1	17:02	Dec-18-19	17:21	Dec-18-19	17:40		
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Benzene		< 0.00201	0.00201	< 0.00197	0.00197	< 0.00201	0.00201		
Toluene		< 0.00201	0.00201	< 0.00197	0.00197	< 0.00201	0.00201		
Ethylbenzene		< 0.00201	0.00201	< 0.00197	0.00197	< 0.00201	0.00201		
m,p-Xylenes		< 0.00402	0.00402	< 0.00394	0.00394	< 0.00402	0.00402		
o-Xylene		< 0.00201	0.00201	< 0.00197	0.00197	< 0.00201	0.00201		
Total Xylenes		< 0.00201	0.00201	< 0.00197	0.00197	< 0.00201	0.00201		
Total BTEX		< 0.00201	0.00201	< 0.00197	0.00197	< 0.00201	0.00201		
Chloride by EPA 300	Extracted:	Dec-18-19 1	15:00	Dec-18-19	15:00	Dec-18-19	15:00		
	Analyzed:	Dec-18-19 2	20:33	Dec-18-192	20:52	Dec-18-19	20:59		
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Chloride		942	10.0	983	9.98	443	10.0		
TPH by SW8015 Mod	Extracted:	Dec-18-19 1	14:20	Dec-18-19	14:20	Dec-18-19	14:20		
	Analyzed:	** ** ** :	**	Dec-18-19	14:22	Dec-18-19	14:22		
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Gasoline Range Hydrocarbons (GRO)		<50.3	50.3	<50.0	50.0	<49.9	49.9		
Diesel Range Organics (DRO)		1500	50.3	<50.0	50.0	<49.9	49.9		
Motor Oil Range Hydrocarbons (MRO)		<50.3	50.3	<50.0	50.0	<49.9	49.9		
Total GRO-DRO		1500	50.3	<50.0	50.0	<49.9	49.9		
Total TPH		1500	50.3	<50.0	50.0	<49.9	49.9		

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Version: 1.%

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Final 1.001



Certificate of Analytical Results 646839

LT Environmental, Inc., Arvada, CO

Ross Draw 25-36 Fed 103H

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	Date Prep:	12.18.19 15.00		Prep Method: E3 % Moisture: Basis: Weight of the second	00P et Weight	
Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
5887-00-6	942	10.0	mg/kg	12.18.19 20.33		1
					100155	
	Cas Number 5887-00-6	Cas Number Result 5887-00-6 942	Cas Number Result RL 5887-00-6 942 10.0	Cas NumberResultRLUnits5887-00-694210.0mg/kg	Cas NumberResultRLUnitsAnalysis Date5887-00-694210.0mg/kg12.18.1920.33	Cas Number Result RL Units Analysis Date Flag 5887-00-6 942 10.0 mg/kg 12.18.19 20.33

Tech:	DTH					9	6 Moisture:		
Analyst:	DTH		Date Prep	p: 12.1	8.19 14.20	E	Basis: We	t Weight	
Seq Number:	3111041								
Parameter		Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range H	Hydrocarbons (GRO)	PHC610	<50.3	50.3		mg/kg	12.18.19 14.02	U	1
Diesel Range Or	ganics (DRO)	C10C28DRO	1500	50.3		mg/kg	12.18.19 14.02		1
Motor Oil Range H	ydrocarbons (MRO)	PHCG2835	<50.3	50.3		mg/kg	12.18.19 14.02	U	1
Total GRO-DRO	0	PHC628	1500	50.3		mg/kg	12.18.19 14.02		1
Total TPH		PHC635	1500	50.3		mg/kg	12.18.19 14.02		1
Surrogate			Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooct	tane		111-85-3	125	%	70-135	12.18.19 14.02		
o-Terpheny	1		84-15-1	88	%	70-135	12.18.19 14.02		

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Certificate of Analytical Results 646839

LT Environmental, Inc., Arvada, CO

Ross Draw 25-36 Fed 103H

Sample Id:	BH01	Matrix:	Soil	Date Received	1:12.18.19 12.58	
Lab Sample Id	: 646839-001	Date Collected	: 12.18.19 00.00	Sample Depth: 0.5 ft		
Analytical Me	thod: BTEX by EPA 8021B			Prep Method:	SW5030B	
Tech:	MAB			% Moisture:		
Analyst:	MAB	Date Prep:	12.18.19 14.00	Basis:	Wet Weight	
Seq Number:	3111020					

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00201	0.00201		mg/kg	12.18.19 17.02	U	1
Toluene	108-88-3	< 0.00201	0.00201		mg/kg	12.18.19 17.02	U	1
Ethylbenzene	100-41-4	< 0.00201	0.00201		mg/kg	12.18.19 17.02	U	1
m,p-Xylenes	179601-23-1	< 0.00402	0.00402		mg/kg	12.18.19 17.02	U	1
o-Xylene	95-47-6	< 0.00201	0.00201		mg/kg	12.18.19 17.02	U	1
Total Xylenes	1330-20-7	< 0.00201	0.00201		mg/kg	12.18.19 17.02	U	1
Total BTEX		< 0.00201	0.00201		mg/kg	12.18.19 17.02	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	122	%	70-130	12.18.19 17.02		
1,4-Difluorobenzene		540-36-3	88	%	70-130	12.18.19 17.02		



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Certificate of Analytical Results 646839

LT Environmental, Inc., Arvada, CO

Ross Draw 25-36 Fed 103H

Sample Id:	BH01A		Matrix:	Soil		Date Received:12.	18.19 12.58	:
Lab Sample Io	l: 646839-002		Date Collec	cted: 12.18.19 00.00		Sample Depth: 2.0	ft	
Analytical Me	ethod: Chloride by EPA	300				Prep Method: E30	00P	
Tech:	MAB					% Moisture:		
Analyst:	MAB		Date Prep:	12.18.19 15.00		Basis: We	t Weight	
Seq Number:	3111033							
Parameter		Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride		16887-00-6	983	9.98	mg/kg	12.18.19 20.52		1

Analytical Method: TPH by SW801	5 Mod				Р	rep Method: SV	/8015P	
Tech: DTH					%	Moisture:		
Analyst: DTH		Date Pre	p: 12.18	.19 14.20	Е	asis: We	et Weight	
Seq Number: 3111041								
Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0		mg/kg	12.18.19 14.22	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0		mg/kg	12.18.19 14.22	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	< 50.0	50.0		mg/kg	12.18.19 14.22	U	1
Total GRO-DRO	PHC628	< 50.0	50.0		mg/kg	12.18.19 14.22	U	1
Total TPH	PHC635	< 50.0	50.0		mg/kg	12.18.19 14.22	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	86	%	70-135	12.18.19 14.22		
o-Terphenyl		84-15-1	91	%	70-135	12.18.19 14.22		

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Certificate of Analytical Results 646839

LT Environmental, Inc., Arvada, CO

Ross Draw 25-36 Fed 103H

Sample Id:	BH01A	Matrix:	Soil	Date Received	1:12.18.19 12.58	
Lab Sample Id	l: 646839-002	Date Collected	: 12.18.19 00.00	Sample Depth: 2.0 ft		
Analytical Me	thod: BTEX by EPA 8021B			Prep Method:	SW5030B	
Tech:	MAB			% Moisture:		
Analyst:	MAB	Date Prep:	12.18.19 14.00	Basis:	Wet Weight	
Seq Number:	3111020					

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00197	0.00197		mg/kg	12.18.19 17.21	U	1
Toluene	108-88-3	< 0.00197	0.00197		mg/kg	12.18.19 17.21	U	1
Ethylbenzene	100-41-4	< 0.00197	0.00197		mg/kg	12.18.19 17.21	U	1
m,p-Xylenes	179601-23-1	< 0.00394	0.00394		mg/kg	12.18.19 17.21	U	1
o-Xylene	95-47-6	< 0.00197	0.00197		mg/kg	12.18.19 17.21	U	1
Total Xylenes	1330-20-7	< 0.00197	0.00197		mg/kg	12.18.19 17.21	U	1
Total BTEX		< 0.00197	0.00197		mg/kg	12.18.19 17.21	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	119	%	70-130	12.18.19 17.21		
1,4-Difluorobenzene		540-36-3	102	%	70-130	12.18.19 17.21		



o-Terphenyl

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Certificate of Analytical Results 646839

LT Environmental, Inc., Arvada, CO

Ross Draw 25-36 Fed 103H

Sample Id:	BH01B		Matrix:	Soil		Date Received	:12.18.19 12.:	58
Lab Sample Id	b Sample Id: 646839-003			cted: 12.18.19 00.00		Sample Depth	: 2.5 ft	
Analytical Me	thod: Chloride by EPA	300				Prep Method:	E300P	
Tech:	MAB					% Moisture:		
Analyst:	MAB		Date Prep:	12.18.19 15.00		Basis:	Wet Weight	
Seq Number:	3111033							
Parameter		Cas Number	Result	RL	Units	Analysis Da	ate Flag	Dil
Chloride		16887-00-6	443	10.0	mg/kg	12.18.19 20.	59	1

Analytical Method: TPH by SW801	5 Mod				Р	rep Method: SV	/8015P	
Tech: DTH					%	Moisture:		
Analyst: DTH		Date Prep	b: 12.18	19 14.20	В	asis: We	et Weight	
Seq Number: 3111041								
Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9		mg/kg	12.18.19 14.22	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9		mg/kg	12.18.19 14.22	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9		mg/kg	12.18.19 14.22	U	1
Total GRO-DRO	PHC628	<49.9	49.9		mg/kg	12.18.19 14.22	U	1
Total TPH	PHC635	<49.9	49.9		mg/kg	12.18.19 14.22	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	94	%	70-135	12.18.19 14.22		

95

%

70-135

84-15-1

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12.18.19 14.22



Certificate of Analytical Results 646839

LT Environmental, Inc., Arvada, CO

Ross Draw 25-36 Fed 103H

Sample Id:	BH01B	Matrix:	Soil	Date Received	1:12.18.19 12.58			
Lab Sample Id	: 646839-003	Date Collected	: 12.18.19 00.00	.00 Sample Depth: 2.5 ft				
Analytical Me	thod: BTEX by EPA 8021B			Prep Method:	SW5030B			
Tech:	MAB			% Moisture:				
Analyst:	MAB	Date Prep:	12.18.19 11.00	Basis:	Wet Weight			
Seq Number:	3111020							

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00201	0.00201		mg/kg	12.18.19 17.40	U	1
Toluene	108-88-3	< 0.00201	0.00201		mg/kg	12.18.19 17.40	U	1
Ethylbenzene	100-41-4	< 0.00201	0.00201		mg/kg	12.18.19 17.40	U	1
m,p-Xylenes	179601-23-1	< 0.00402	0.00402		mg/kg	12.18.19 17.40	U	1
o-Xylene	95-47-6	< 0.00201	0.00201		mg/kg	12.18.19 17.40	U	1
Total Xylenes	1330-20-7	< 0.00201	0.00201		mg/kg	12.18.19 17.40	U	1
Total BTEX		< 0.00201	0.00201		mg/kg	12.18.19 17.40	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	111	%	70-130	12.18.19 17.40		
1,4-Difluorobenzene		540-36-3	101	%	70-130	12.18.19 17.40		

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- **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 LimitSDLSample Detection LimitLOD Limit of Detection
- PQL Practical Quantitation Limit MQL Method Quantitation Limit LOQ Limit of Quantitation
- DL Method Detection Limit
- NC Non-Calculable

SMP Clier	nt Sample	BLK	Method Blank	
BKS/LCS	Blank Spike/Laboratory Control Sample	BKSD/LCSD	Blank Spike Duplicate/Labor	atory 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





LT Environmental, Inc.

Ross Draw 25-36 Fed 103H

Analytical Method:	Chloride b	y EPA 30)0						Р	rep Meth	od: E300)P	
Seq Number:	3111033	3111033 Matrix: Sol						Solid Date Prep: 12.18.19					
MB Sample Id:	7692767-1-	BLK		LCS Sar	nple Id:	7692767-	1-BKS		LCSD Sample Id: 7692767-1-BSD				
Parameter		MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Lim	it Units	Analysis Date	Flag
Chloride		0.647	250	255	102	255	102	90-110	0	20	mg/kg	12.18.19 19:45	
Analytical Method:	Chloride b	y EPA 30)0						Р	rep Meth	od: E300)P	
Seq Number:	3111033				Matrix:	Soil				Date Pr	ep: 12.1	8.19	
Parent Sample Id:	646843-015	5		MS Sar	nple Id:	646843-0	15 S		MS	D Sample	e Id: 6468	343-015 SD	
		Parent	Snike	MS	MS	MSD	MSD	Limits	%RPD	RPD Lim	it Units	Analysis	

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Lim	it Units	Analysis Date	Flag
Chloride	123	200	353	115	354	114	90-110	0	20	mg/kg	12.18.19 20:03	Х

Analytical Method:	Chloride by EPA 300							Р	rep Meth	od: E30	0P	
Seq Number:	3111033			Matrix:	Soil				Date Pr	ep: 12.1	8.19	
Parent Sample Id:	646846-007		MS San	nple Id:	646846-00	07 S		MS	D Sample	e Id: 646	846-007 SD	
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Lim	it Units	Analysis Date	Flag
Chloride	4070	200	4150	40	4140	35	90-110	0	20	mg/kg	12.18.19 21:59	Х

Analytical Method:	TPH by SV	V8015 M	od						F	rep Method	l: SW	8015P	
Seq Number:	3111041			Matrix: Solid					Date Prep: 12.18.19				
MB Sample Id:	7692768-1-	BLK		LCS Sar	nple Id:	7692768-	1-BKS	LCSD Sample Id: 7692768-1-BSD					
Parameter		MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbo	ons (GRO)	< 50.0	1000	941	94	921	92	70-135	2	35	mg/kg	12.18.19 12:10	
Diesel Range Organics ((DRO)	<50.0	1000	820	82	791	79	70-135	4	35	mg/kg	12.18.19 12:10	
Surrogate		MB %Rec	MB Flag	L %	CS Rec	LCS Flag	LCSI %Re) LCS c Flag	D I g	limits	Units	Analysis Date	
1-Chlorooctane		85		9	94		106		7	0-135	%	12.18.19 12:10	
o-Terphenyl		87		9	9 3		91		7	0-135	%	12.18.19 12:10	

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW80	15P	
Seq Number:	3111041	Matrix:	Solid	Date Prep:	12.18	.19	
		MB Sample Id:	7692768-1-BLK				
Parameter		MB Result		τ	J nits	Analysis Date	Flag
Motor Oil Range Hydrocarb	ons (MRO)	<50.0		m	ng/kg	12.18.19 11:51	

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

LCS = Laboratory Control Sample A = Parent Result C = MS/LCS Result E = MSD/LCSD Result MS = Matrix Spike B = Spike Added D = MSD/LCSD % Rec

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Final 1.001



QC Summary 646839

LT Environmental, Inc.

Ross Draw 25-36 Fed 103H

Analytical Method:	nalytical Method: TPH by SW8015 Mod								P	rep Method	l: SW	8015P	
Seq Number:	3111041			Matrix: Water			Date Prep: 12.18.19						
Parent Sample Id:	646770-001			MS San	nple Id:	646770-00	01 S		MS	D Sample l	d: 646	770-001 SD	
Parameter		Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbo	ons (GRO)	<49.8	995	903	91	1000	100	70-135	10	35	mg/kg	12.18.19 12:30	
Diesel Range Organics (DRO)	<49.8	995	777	78	885	89	70-135	13	35	mg/kg	12.18.19 12:30	
Surrogate				N %]	1S Rec	MS Flag	MSD %Ree	o MSD c Flag		imits	Units	Analysis Date	
1-Chlorooctane				1	13		111		7	0-135	%	12.18.19 12:30	
o-Terphenyl				1	00		111		7	0-135	%	12.18.19 12:30	

Analytical Method: Seq Number: MB Sample Id:	BTEX by EPA 8021 3111020 7692736-1-BLK] LCS San	Matrix: nple Id:	Solid 7692736-	1-BKS] LC	Prep Method:SW5030BDate Prep:12.18.19LCSD Sample Id:7692736-1-BSD					
Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPI) RPD Limit	Units	Analysis Date	Flag
Benzene	< 0.00200	0.100	0.0939	94	0.0936	94	70-130	0	35	mg/kg	12.18.19 13:06	
Toluene	< 0.00200	0.100	0.0973	97	0.0972	97	70-130	0	35	mg/kg	12.18.19 13:06	
Ethylbenzene	< 0.00200	0.100	0.0969	97	0.0968	97	71-129	0	35	mg/kg	12.18.19 13:06	
m,p-Xylenes	< 0.00400	0.200	0.207	104	0.206	103	70-135	0	35	mg/kg	12.18.19 13:06	
o-Xylene	< 0.00200	0.100	0.104	104	0.104	104	71-133	0	35	mg/kg	12.18.19 13:06	
Surrogate	MB %Rec	MB Flag	L(%]	CS Rec	LCS Flag	LCSD %Rec) LCSI : Flag	D] ;	Limits	Units	Analysis Date	
1,4-Difluorobenzene	103		1	02		102			70-130	%	12.18.19 13:06	
4-Bromofluorobenzene	116		1	18		117		-	70-130	%	12.18.19 13:06	

Analytical Method: Seq Number: Parent Sample Id:	BTEX by EPA 802 3111020 646770-001	1B	I MS Sam	Matrix: ple Id:	Soil 646770-00)1 S		Prep Method: SW5030B Date Prep: 12.18.19 MSD Sample Id: 646770-001 SD				
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	< 0.00200	0.100	0.0808	81	0.0991	99	70-130	20	35	mg/kg	12.18.19 13:44	
Toluene	< 0.00200	0.100	0.0832	83	0.103	103	70-130	21	35	mg/kg	12.18.19 13:44	
Ethylbenzene	< 0.00200	0.100	0.0822	82	0.102	102	71-129	21	35	mg/kg	12.18.19 13:44	
m,p-Xylenes	< 0.00400	0.200	0.174	87	0.217	109	70-135	22	35	mg/kg	12.18.19 13:44	
o-Xylene	< 0.00200	0.100	0.0874	87	0.110	110	71-133	23	35	mg/kg	12.18.19 13:44	
Surrogate			M %I	IS Rec	MS Flag	MSD %Rec	MSI Flag) I g	Limits	Units	Analysis Date	
1,4-Difluorobenzene			10)4		103		7	0-130	%	12.18.19 13:44	
4-Bromofluorobenzene			12	20		125		7	0-130	%	12.18.19 13:44	

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

LCS = Laboratory Control Sample A = Parent Result C = MS/LCS Result E = MSD/LCSD Result MS = Matrix Spike B = Spike Added D = MSD/LCSD % Rec

Recei	ved	by	<u>0</u> C	D: 6/30)/2020 1 ZUU	1:3	5:40	6 A)	M	_	-	_			_	_															Page 38
		Urshuth "	Relinquished by: (Service. Xenco will be lia Xenco. A minimum charg	Circle Method(s)							/	SHOLIS	AI DHG	10Ha	Sample Ident	Sample Custody Sea	Cooler Custody Seals	Received Intact:	Temperature (°C):	SAMPLE RECE	Sampler's Name:	P.O. Number:	Project Number:	Project Name:	Phone:	City, State ZIP:	Address:	Company Name:	Project Manager:	X
		or (Signature)	the only for the cost of the second s	10 200.8 / 602 and Metal(s) to 1											tification	ls: Yes (No	S: Yes Wa	(Yes	, Qx	IPT Temp	Eliz	E	1201051	Ross Draw	(432) 236-3849	Midland, Tx 797	3300 North A St	LT Environmen	Dan Moir	
	(XX	Rec	f samples and plied to each p	0: be analyze		-			1			e	-	5 121	Matrix Sa	N/A	NA	No		Blank: Ye	abeth Naka	ldy County	7	22-36		05	treet	tal, Inc., Pe		60
		XX	eived by: (S	es constitutes a shall not assum roject and a cha	8RCR/ d TCLF				/						18/19	mpled Sar	Total Con	Correction	1-1	Therr	No No				Fed 1034	_			rmian office		Hobbs, NN
		\langle	ignature)	valid purchase e any responsil rge of \$5 for ea	13PPM			-	U	Col			2	2	0	npled	tainers:	Factor: 1	00-W0	nometer ID	Net Ice:	Due Date	Rush: 24	Routine	Turn A	Email: ena	City	Ado	Co	Bill	Houston,TX Midland,T; // (575-392-75)
-		12		order from clie bility for any lo ch sample subr	Texas 11 10: 8RCR/				1 Marca	1 Min			.5' 1	. 0 '	.51	Depth		07			No	×	thour		vround	ka@ltenv.cc	/, State ZIP:	dress:	mpany Name	to: (if different)	(281) 240-42 X (432-704-54 50) Phoenix,A
		18/10	Date	ent compa sses or ex nitted to)	AI Sb			$\left \right $	0	Color			4	-	X	TPH (EPA 80	015)	nta	iner	;					ım, dmo			≌ Xī	Ky	Ch 00 Dalla: 40) EL F 12 (480-3
		12:	/Time	ny to Xenc (penses in (enco, but	As Ba As Ba I								e	-	×	BTEX	(EPA ()=80)21)					-		ir@ltenv			O Energ	le Littrell	ain s,TX (214) ⁹ aso,TX (9
თ	4	20		curred by not analy:	Be B (Be Cd								e	-	×	Chlori	de (EP	A 3	00.0)						.com			<		of C 902-030 915)585-3 Atlanta, C
			Relinq	lates and a the client zed. These	Cr Co		\parallel			_				-	_		_							_							USto 0 San Ar 443 Lubl
			uished t	subcontra if such los terms wil	Cr Co Cu Pb		T							-				-	_				-	-	ANAL						dy Itonio,TX bock,TX (
			by: (Sig	ctors. It a sses are d Il be enfor	Cu Fe Mn M														-						YSIS R					the distribution of the second se	(210) 50 (806)794- Tampa
			nature)	ue to circu ced unles	o Ni S	L																			EOUES						9-3334 -1296 FI (813-6
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Final 1.001

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XENCO Laboratories



Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc. Acceptable Temperature Range: 0 - 6 degC Air and Metal samples Acceptable Range: Ambient Date/ Time Received: 12/18/2019 12:58:00 PM Temperature Measuring device used : T-NM-007 Work Order #: 646839 Sample Receipt Checklist 2 #1 *Temperature of cooler(s)? #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: 12/18/2019

Comments

Checklist reviewed by: fession Veramer

Jessica Kramer

Date: 12/19/2019



Project Id: 012919287 Dan Moir

Contact:

Project Location:

Certificate of Analysis Summary 660565

LT Environmental, Inc., Arvada, CO

Project Name: Ross Draw 25-36 Fed Com 103H

Date Received in Lab: Tue 05.05.2020 09:33 **Report Date:** 05.07.2020 11:39 Project Manager: Jessica Kramer

	Lab Id:	660565-001			
Analysis Requested	Field Id:	FS01			
Analysis Requested	Depth:	0.5- ft			
	Matrix:	SOIL			
	Sampled:	05.04.2020 14:25			
BTEX by EPA 8021B	Extracted:	05.05.2020 20:00			
	Analyzed:	05.06.2020 12:01			
	Units/RL:	mg/kg RL			
Benzene		<0.00200 0.00200			
Toluene		<0.00200 0.00200			
Ethylbenzene		<0.00200 0.00200			
m,p-Xylenes		< 0.00400 0.00400			
o-Xylene		<0.00200 0.00200			
Total Xylenes		<0.00200 0.00200			
Total BTEX		<0.00200 0.00200			
Chloride by EPA 300	Extracted:	05.05.2020 10:09			
	Analyzed:	05.05.2020 14:57			
	Units/RL:	mg/kg RL			
Chloride		202 9.92			
TPH by SW8015 Mod	Extracted:	05.05.2020 17:30			
	Analyzed:	05.06.2020 13:20			
	Units/RL:	mg/kg RL			
Gasoline Range Hydrocarbons (GRO)		<50.1 50.1			
Diesel Range Organics (DRO)		<50.1 50.1			
Motor Oil Range Hydrocarbons (MRO)		<50.1 50.1			
Total GRO-DRO		<50.1 50.1			
Total TPH		<50.1 50.1			

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This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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

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Jessica Kramer Project Manager

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Analytical Report 660565

for

LT Environmental, Inc.

Project Manager: Dan Moir

Ross Draw 25-36 Fed Com 103H

012919287

05.07.2020

Collected By: Client

1089 N Canal Street Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-20-32), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054) Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (TX104704295-19-23), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-22) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19) Xenco-Carlsbad (LELAP): Louisiana (05092) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5) Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757) Xenco-Tampa: Florida (E87429), North Carolina (483)



05.07.2020

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

Reference: XENCO Report No(s): 660565 Ross Draw 25-36 Fed Com 103H Project Address:

Dan Moir:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 660565. 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. 660565 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,

Jession Vermer

Jessica Kramer Project Manager

A Small Business and Minority Company

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



FS01

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LT Environmental, Inc., Arvada, CO

Ross Draw 25-36 Fed Com 103H

Matrix	Date Collected	Sample Depth	Lab Sample Id
S	05.04.2020 14:25	0.5 ft	660565-001

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CASE NARRATIVE

Client Name: LT Environmental, Inc. Project Name: Ross Draw 25-36 Fed Com 103H

 Project ID:
 012919287

 Work Order Number(s):
 660565

 Report Date:
 05.07.2020

 Date Received:
 05.05.2020

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None



1-Chlorooctane

o-Terphenyl

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Certificate of Analytical Results 660565

LT Environmental, Inc., Arvada, CO

Ross Draw 25-36 Fed Com 103H

Sample Id:	FS01		Matrix:	Soil		Date Received	1:05.05.2020 ()9:33			
Lab Sample Io	d: 660565-001		Date Coll	ected: 05.04.2020 14:25	5	Sample Depth: 0.5 ft					
Analytical Me	ethod: Chloride by EPA	300				Prep Method:	E300P				
Tech:	MAB					% Moisture:					
Analyst:	MAB		Date Prep	: 05.05.2020 10:09)	Basis:	Wet Weight				
Seq Number:	3125106										
Parameter		Cas Number	Result	RL	Units	Analysis D	ate Flag	Dil			
Chloride		16887-00-6	202	9.92	mg/kg	05.05.2020 14	4:57	1			

Analytical Method: TPH by SW801	5 Mod					Prep Method: S	W8015P	
Tech: DTH						% Moisture:		
Analyst: DTH		Date Pr	rep: 05.	05.2020 17:30		Basis: W	Vet Weight	
Seq Number: 3125169								
Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1		mg/kg	05.06.2020 13:2	0 U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1		mg/kg	05.06.2020 13:2	0 U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1		mg/kg	05.06.2020 13:2	0 U	1
Total GRO-DRO	PHC628	<50.1	50.1		mg/kg	05.06.2020 13:2	0 U	1
Total TPH	PHC635	< 50.1	50.1		mg/kg	05.06.2020 13:2	0 U	1
Surrogate	(Cas Number	% Recovery	Units	Limits	s Analysis Da	te Flag	

114

122

111-85-3

84-15-1

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70-135

70-135

%

%

05.06.2020 13:20

05.06.2020 13:20



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Certificate of Analytical Results 660565

LT Environmental, Inc., Arvada, CO

Ross Draw 25-36 Fed Com 103H

Sample Id: FS	S01	Matrix:	Soil	Date Received:05.05.2020 09:33				
Lab Sample Id: 66	50565-001	Date Collected	: 05.04.2020 14:25	Sample Depth: 0.5 ft				
Analytical MethodTech:MAAnalyst:MASeq Number:312	l: BTEX by EPA 8021B AB AB 25198	Date Prep:	05.05.2020 20:00	Prep Method: % Moisture: Basis:	SW5035A Wet Weight			

Parameter	Cas Numbe	r Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200		mg/kg	05.06.2020 12:01	U	1
Toluene	108-88-3	< 0.00200	0.00200		mg/kg	05.06.2020 12:01	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200		mg/kg	05.06.2020 12:01	U	1
m,p-Xylenes	179601-23-1	< 0.00400	0.00400		mg/kg	05.06.2020 12:01	U	1
o-Xylene	95-47-6	< 0.00200	0.00200		mg/kg	05.06.2020 12:01	U	1
Total Xylenes	1330-20-7	< 0.00200	0.00200		mg/kg	05.06.2020 12:01	U	1
Total BTEX		< 0.00200	0.00200		mg/kg	05.06.2020 12:01	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	112	%	70-130	05.06.2020 12:01		
4-Bromofluorobenzene		460-00-4	105	%	70-130	05.06.2020 12:01		

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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.	Below Reporting Limit. ND Not Detected.										
RL	Reporting Limit											
MDL	Method Detection Limit	SDL Sample Det	ection Limit	LOD Limit of Detection								
PQL	Practical Quantitation Limit	MQL Method Qua	ntitation Limit	LOQ Limit of Quantitation	n							
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/Labor	ratory Control Sample Duplicate							
MD/S	D Method Duplicate/Samp	le Duplicate	MS	Matrix Spike	MSD: Matrix Spike Duplicate							
+ NE	ELAC certification not offered	for this compound.										

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



QC Summary 660565

LT Environmental, Inc.

Ross Draw 25-36 Fed Com 103H

Analytical Method: Seq Number:	Chloride by 3125106	y EPA 30	0		Matrix:	Solid			Pr	ep Metho Date Pro	od: E30 ep: 05.0	00P 05.2020	
MB Sample Id:	7702708-1-1	BLK		LCS Sar	nple Id:	7702708-1	-BKS		LCSI	D Sample	Id: 770	2708-1-BSD	
Parameter		MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride		<10.0	250	251	100	250	100	90-110	0	20	mg/kg	05.05.2020 12:15	
Analytical Method:	Chloride by	y EPA 30	0			0.1.1			Pr	ep Metho	od: E30	0P	
Seq Number: Parant Sample Id:	5125100			MS Sar	matrix:	50110 660561-00	1 5		MSI	Date Pre	ep: 05.0	5.2020 561-001 SD	
Parameter	000501-001	Parent	Spike	MS Sar MS Bacult	MS	MSD	MSD	Limits	%RPD	RPD	Units	Analysis	Flag
Chloride		70.9	Amount 199	259	% кес 95	Result 257	%Rec 94	90-110	1	20	mg/kg	05.05.2020 12:33	
Analytical Method:	Chloride by	y EPA 30	0		M. / *	0.11.1			Pr	ep Metho	od: E30	00P	
Seq Number:	3125106			MS Sor	Matrix:	Solid	15		MSI	Date Pre	ep: 05.0	5.2020	
Parent Sample Id:	000301-011	_	<i>a</i>	WIS Sal		000501-01	15		NISI		. 10. 000	501-011 5D	
Parameter		Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride		141	200	331	95	326	93	90-110	2	20	mg/kg	05.05.2020 14:18	
Analytical Method: Seq Number:	TPH by SW 3125169	78015 M	od		Matrix:	Solid			Pr	ep Metho Date Pro	od: SW ep: 05.0	8015P)5.2020	
MB Sample Id:	7702799-1-1	BLK		LCS Sar	nple Id:	7702799-1	-BKS		LCSI	D Sample	Id: 770	2799-1-BSD	
Parameter		MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbo	ons (GRO)	<50.0	1000	1120	112	1040	104	70-135	7	35	mg/kg	05.06.2020 04:12	
Diesel Range Organics (DRO)	<50.0	1000	1150	115	1200	120	70-135	4	35	mg/kg	05.06.2020 04:12	
Surrogate		MB %Rec	MB Flag	L %	CS Rec	LCS Flag	LCSI %Re) LCSI c Flag	D Li g	mits	Units	Analysis Date	
1-Chlorooctane o-Terphenyl		111 124		1 1	31 28		128 131		70 70	-135 -135	% %	05.06.2020 04:12 05.06.2020 04:12	
Analytical Method: Sea Number:	TPH by SW 3125169	78015 M	od		Matrix:	Solid			Pr	ep Metho Date Pre	od: SW	8015P)5.2020	
				MB San	nple Id:	7702799-1	-BLK			2 1 1	r. 05.0		
Parameter				MB Result							Units	Analysis Date	Flag
Motor Oil Range Hydrocart	oons (MRO)			<50.0							mg/kg	05.06.2020 03:52	

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

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

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

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Final 1.000



QC Summary 660565

LT Environmental, Inc.

Ross Draw 25-36 Fed Com 103H

Analytical Method: Seq Number: Parent Sample Id:	l MS San	Matrix: ple Id:	Soil 660475-00	01 S	Prep Method: SW8015P Date Prep: 05.05.2020 MSD Sample Id: 660475-001 SD									
Parameter		Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag	
Gasoline Range Hydrocarbo	ons (GRO)	<50.3	1010	964	95	922	91	70-135	4	35	mg/kg	05.06.2020 05:14		
Diesel Range Organics (DRO)		<50.3	1010	1110 11		1050	104	70-135	6	35	mg/kg	05.06.2020 05:14		
Surrogate				M %I	IS Rec	MS Flag	MSD %Red	MSD c Flag	Li	mits	Units	Analysis Date		
1-Chlorooctane				118		1			70-	-135	%	05.06.2020 05:14		
o-Terphenyl				12	24		121		70-	-135	%	05.06.2020 05:14		

BTEX by EPA 8021	В						Prep Method: SW5035A										
3125198			Matrix:	Solid				Date Pr	ep: 05.0	5.2020							
7702756-1-BLK		LCS San	nple Id:	7702756-2		LCS	2756-1-BSD										
MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag						
< 0.00200	0.100	0.113	113	0.107	107	70-130	5	35	mg/kg	05.06.2020 01:53							
< 0.00200	0.100	0.101	101	0.0945	95	70-130	7	35	mg/kg	05.06.2020 01:53							
< 0.00200	0.100	0.0937	94	0.0860	86	71-129	9	35	mg/kg	05.06.2020 01:53							
< 0.00400	0.200	0.180	90	0.164	82	70-135	9	35	mg/kg	05.06.2020 01:53							
< 0.00200	0.100	0.0943	94	0.0878	88	71-133	7	35	mg/kg	05.06.2020 01:53							
MB %Rec	MB Flag	L/ %]	CS Rec	LCS Flag	LCSI %Re) LCSI c Flag	D Li	imits	Units	Analysis Date							
116		1	09		109	109		-130 %		05.06.2020 01:53							
105		ç	99		98		70	-130	%	05.06.2020 01:53							
	BTEX by EPA 8021 3125198 7702756-1-BLK MB Result <0.00200 <0.00200 <0.00200 <0.00400 <0.00200 MB %Rec 116 105	BTEX by EPA 8021B 3125198 7702756-1-BLK MB Spike Result Amount <0.00200	BTEX by EPA 8021B 3125198 LCS Sam 7702756-1-BLK LCS Sam MB Spike LCS <0.00200	BTEX by EPA 8021B 3125198 Matrix: 7702756-1-BLK LCS S= e ld: MB Spike LCS LCS MB Spike LCS Kesult 0.00200 0.100 0.113 113 <0.00200	BTEX by EPA 8021B 3125198 Matrix: Solid 7702756-1-BLK LCS Sample Id: 7702756-1 MB Spike LCS LCS <thls< th=""> LCS LCS<td>MB LCS LCS LCS LCS LCSD <thlcsd< th=""> <thlcsd< th=""> <thlcsd< td="" th<=""><td>BTEX by EPA 8021B 3125198 Matrix: Solid 7702756-1-BLK LCS Sample Id: 7702756-1-BKS MB Spike LCS LCS LCSD LCSD LCSD LISD <0.00200</td> 0.100 0.113 113 0.107 107 70-130 <0.00200</thlcsd<></thlcsd<></thlcsd<></td> 0.100 0.101 101 0.0945 95 70-130 <0.00200</thls<>	MB LCS LCS LCS LCS LCSD LCSD <thlcsd< th=""> <thlcsd< th=""> <thlcsd< td="" th<=""><td>BTEX by EPA 8021B 3125198 Matrix: Solid 7702756-1-BLK LCS Sample Id: 7702756-1-BKS MB Spike LCS LCS LCSD LCSD LCSD LISD <0.00200</td> 0.100 0.113 113 0.107 107 70-130 <0.00200</thlcsd<></thlcsd<></thlcsd<>	BTEX by EPA 8021B 3125198 Matrix: Solid 7702756-1-BLK LCS Sample Id: 7702756-1-BKS MB Spike LCS LCS LCSD LCSD LCSD LISD <0.00200	BTEX by EPA 8021B PA 3125198 Matrix: Solid 3125198 LCS Sample Id: 7702756-1-BLK LCS Sample Id: 101 101 0.0020 LCS Sample Id: %Rec LCS Sample Id: 101 101 0.0020 101 5 0.00200 0.100 0.113 113 0.107 107 70-130 5 0.00200 0.100 0.0937 94 0.0860 86 71-129 9 0<	BTEX by EPA 8021B Prep Meth 3125198 Matrix: Solid Date Pr 7702756-1-BLK LCS Sample Id 7702756-1-BKS LCSD Sample Id MB Spike LCS LCS LCSD LCSD LCSD LCSD Sample Id <0.00200	Prep Method: SW STEX by EPA 8021B Prep Method: SW 3125198 Matrix: Solid Date Prep: 05.0 7702756-1-BLK LCS Sample Id: 7702756-1-BKS LCSD Sample Id: 7702756-1-BKS LCSD Repp Repp Vinits MB Spike LCS LCS LCS LCSD LCSD LCSD LCSD Repp LDists Colspan="2">Colspan="2">Of 05.0 MB Spike LCS LCS LCSD LCSD LCSD LCSD Repp LDists Colspan="2">Of 05.0 MB Spike LCS LCS MCSD Result %Rep RPD Limit Colspan="2">Of 05.00 0.00200 0.100 0.011 101 0.0945 95 70-130 7 35 mg/kg 0.00200 0.100 0.0937 94 0.0860 86 71-129 9 35 mg/kg 0.00400 0.200 0.108 90 0.164 82 70-133 7 35 mg/kg	BTEX by EPA 8021B Prep Method: SW5035A 3125198 Prep Method: SW5035A Date Prep: $05.05.2020$ 7702756-1-BLK LCS Sample Id: 7702756-1-BKS LCSD Sample Id: $7702756-1-BSD$ MB Spike LCS LCSD klcS LCSD Result $7702756-1-BSD$ MB Spike LCS LCSD klcSD klcSD Analysis Result $9702756-1$ BKB LCSD klcSD Analysis Amount LCS klcS Result $970-130$ S S0:06:2020 01:53 CO00200 0.100 0.00660 86 71:129 9 35 mg/kg S0:06:2020 01:53 S CO00200 0.000						

Analytical Method: Seq Number:	BTEX by EPA 8021 3125198	В]	Matrix:	Solid			P	rep Meth Date Pr	od: SW	5035A)5.2020	
Parent Sample Id:	660561-001		MS San	nple Id:	660561-00	01 S		MS	D Sampl	e Id: 660	561-001 SD	
Parameter	Parent Result	Spike Amount	MS MS Result %Rec		MSD Result	MSD %Rec	MSD Limits %Rec		RPD Limit	Units	Analysis Date	Flag
Benzene	< 0.00199	0.0996	0.127	128	0.129	128	70-130	2	35	mg/kg	05.06.2020 02:35	
Toluene	< 0.00199	0.0996	0.128	129	0.124	123	70-130	3	35	mg/kg	05.06.2020 02:35	
Ethylbenzene	< 0.00199	0.0996	0.128	129	0.119	118	71-129	7	35	mg/kg	05.06.2020 02:35	
m,p-Xylenes	< 0.00398	0.199	0.246	124	0.258	128	70-135	5	35	mg/kg	05.06.2020 02:35	
o-Xylene	< 0.00199	0.0996	0.128	129	0.133	132	71-133	4	35	mg/kg	05.06.2020 02:35	
Surrogate			N %1	IS Rec	MS Flag	MSD %Re) MSI c Flag	D Li g	imits	Units	Analysis Date	

Surrogate	%Rec	Flag	%Rec F	lag		Date
1,4-Difluorobenzene	109		108	70-130	%	05.06.2020 02:35
4-Bromofluorobenzene	102		101	70-130	%	05.06.2020 02:35

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

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

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

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Final 1.000

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	to All we	1 mari	gnature) Receiv	only for the cost of samples and shall \$75.00 will be applied to each projec	200.8 / 6020: Ind Metal(s) to be analyzed					S 5/4/2	ation Matrix Samp	Yes No N/A	Yes No N/A	Yes No	1.40	T Temp Blank:	obert McAfee		23616210 -1826LG	Ross Draw 25-36 Fed Co	32) 701-2610	idland, TX 79705	300 North A St. Bldg 1, Unit 2	T Environmental, Inc., Permi	an Moir		
		(ed by: (Signature)	I not assume any responsibility for a t and a charge of \$5 for each sample	8RCRA 13PPM Texas TCLP / SPLP 6010: 8F					2020 14:25 0.5'	led Sampled Depth	Total Containers:	Correction Factor: - 0-2	T-NM-OOT	Thermometer ID	No Wet Ice: Yes. No	Due Date:	Rush:	Routine X	om 103H Turn Around	Email: dmoir@lt	City, State	222 Address:	an office Company	Bill to: (If d	Hobbs,NM (575-392-7550) Phot	Houston,TX (281) 24 Midland,TX (432-7
	8800 00K	Dater IIIIe	Date/Time	m client company to Xenco, its a ny losses or expenses incurred submitted to Xenco, but not an:	RCRA Sb As Ba Be I					1 X X X	Numi TPH (BTEX Chlori	ber of EPA 80 (EPA 8	Co 015) 802 ⁻ PA 3) nta 1)	iners	3					env.com rmcafee@ltenv	ZIP: Carlsbad, NM	3104 E Greene	Name: XTO Energy	fferent) Kyle Littrell	enix,AZ (480-355-0900) Atlant	Chain of (10-4200 Dallas,TX (214) 902-0 94-5440) EL Paso.TX (915)58
σ	2 Nor Dall	Neilliquisited by: (Signature	Relinquished by /Cianotur	affiliates and subcontractors. It assigns st by the client if such losses are due to circ alyzed. These terms will be enforced unles	B Cd Ca Cr Co Cu Fe Pb N Cd Cr Co Cu Pb Mn Mo Ni															ANALYSIS REQUE	r.com		St			ta,GA (770-449-8800) Tampa,FL (813-	Custody 0300 San Antonio,TX (210) 509-3334 15-2443 1 Libbook TX (806)704.1296
	CILLA	Received by: (Signature)		indard terms and conditions imstances beyond the control s previously negotiated.	lg Mn Mo Ni K Se Ag SiO2 Na Se Ag Ti U 1631															IS	Deliverables: EDD ADaPT	Reporting:Level II evel III ST/	State of Project: NM	Program: UST/PST PRP Brownf	Work Order C	320-2000) WWW.xenco.com	Work Order N
	510/20 033	Date/Time			Sr TI Sn U V Zn /245.1/7470 /7471 : Hg					composite	Sample Comments	AT starts the day received by the lab, if received by 4:30pm								Work Order Notes	Other:			ielde Pr lunafund	omments	Page 1 of 1	o: lele 05 los

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