NRM2015454866

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	NRM2015454866
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 32.12424 Longitude -103.89604

(NAD 83 in decimal degrees to 5 decimal places)

Site Name Pierce Canyon 17 TB	Site Type Tank Battery
Date Release Discovered 5-17-2020	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
P	17	25S	30E	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) 35	Volume Recovered (bbls) 35
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release: Water tanks overflowed through top of the thief hatches on the PC 17 TB. A vac truck was dispatched and recovered 35 bbl PW from inside impermeable containment. Liner inspection determined the liner was insufficient. A third-party contractor has been retained for remediation activities.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NRM2015454866
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Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? Release was over 25 barrels
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Yes, by Amy Ruth to Mike Bratcher; Rob Hamlet; Victoria Venegas; blm_nm_cfo_spill@blm.gov; Crisha Morgan; 'Griswold, Jim, EMNRD' via email on Monday, May 18, 2020 1:51 PM.	

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: 5-29-20

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

OCD Only

Received by: Ramona Marcus
Date: 6/2/2020

NRM2015454866

Location:	Pierce Canyon 17 TB	
Spill Date:	5/17/2020	
Area 1		
Approximate Area =	196.51	cu. ft.
VOLUME RECOVERED		
Total Produced Water =	35.00	bbls

TOTAL VOLUME OF LEAK		
Total Produced Water =	**35.00**	**bbls**
TOTAL VOLUME RECOVERED		
Total Produced Water =	**35.00**	**bbls**

Incident ID	NRM2015454866
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	NRM2015454866
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Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature: Date: 02/10/2021

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

OCD Only

Received by: Date:

Incident ID	NRM2015454866
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Remediation Plan

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

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

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

☒ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.

☒ Extents of contamination must be fully delineated.

☒ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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

Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature: Date: 02/10/2021

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

OCD Only

Received by: Date:

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

Signature: Date:

State of New Mexico
Oil Conservation Division

Incident ID	NRM2015454866
District RP	
Facility ID	
Application ID	

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Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature: Date: 02/10/2021

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

OCD Only

Received by: Robert Hamlet Date: 6/30/2021

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

Signature: Robert Hamlet Date: 6/30/2021

NRM2015454866

District I
1625 N. French Dr., Hobbs, NM 88240
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State of New Mexico
Energy Minerals and Natural Resources Department

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Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	NRM2015454866
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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 32.12424 Longitude -103.89604
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Pierce Canyon 17 TB	Site Type Tank Battery
Date Release Discovered 5-17-2020	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
P	17	25S	30E	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) 35	Volume Recovered (bbls) 35
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release: Water tanks overflowed through top of the thief hatches on the PC 17 TB. A vac truck was dispatched and recovered 35 bbl PW from inside impermeable containment. Liner inspection determined the liner was insufficient. A third-party contractor has been retained for remediation activities.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

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If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Yes, by Amy Ruth to Mike Bratcher; Rob Hamlet; Victoria Venegas; blm_nm_cfo_spill@blm.gov; Crisha Morgan; 'Griswold, Jim, EMNRD' via email on Monday, May 18, 2020 1:51 PM.	

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Printed Name: Kyle Littrell
Title: SH&E Supervisor

Signature:
Date: 5-29-20

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

OCD Only

Received by: Ramona Marcus
Date: 6/2/2020

NRM2015454866

Location:	Pierce Canyon 17 TB	
Spill Date:	5/17/2020	
Area 1		
Approximate Area =	196.51	cu. ft.
VOLUME RECOVERED		
Total Produced Water =	35.00	bbls

TOTAL VOLUME OF LEAK		
Total Produced Water =	**35.00**	**bbls**
TOTAL VOLUME RECOVERED		
Total Produced Water =	**35.00**	**bbls**

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Oil Conservation Division

Incident ID	NRM2015454866
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Site Assessment/Characterization

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Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☑ No
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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.***

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- ☑ Laboratory data including chain of custody

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Oil Conservation Division

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Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature: Date: 02/10/2021

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

OCD Only

Received by: Date:

Incident ID	NRM2015454866
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Remediation Plan

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

- ☐ Detailed description of proposed remediation technique
- ☐ Scaled sitemap with GPS coordinates showing delineation points
- ☐ Estimated volume of material to be remediated
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- ☐ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

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☒ Extents of contamination must be fully delineated.

☒ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature: Date: 02/10/2021

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

OCD Only

Received by: Date:

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

Signature: Date:

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

February 10, 2021

District II
New Mexico Oil Conservation Division
811 South First Street
Artesia, New Mexico 88210

RE: Closure Request Addendum
XTO Energy, Inc.
Pierce Canyon 17 TB
Incident Number NRM2015454866
Eddy County, New Mexico

To Whom it May Concern:

WSP USA Inc. (formerly LT Environmental, Inc.), on behalf of XTO Energy, Inc. (XTO), is pleased to present the following addendum to an original Deferral Request submitted August 5, 2020. This Addendum provides an update to the delineation efforts at Pierce Canyon 17 Tank Battery (TB) (Site) in Unit P, Section 17, Township 25 South, Range 30 East, in Eddy County, New Mexico (Figure 1). XTO was notified by the New Mexico Oil Conservation Division (NMOCD) on December 7, 2020 of the denial of the original Deferral Request. In the denial, NMOCD expressed concern that residual impacts to soil were not vertically delineated at the deepest sample point location (BH03). Based on the additional delineation activities described below, XTO is requesting no further action (NFA) for Incident Number NRM2015454866.

REVISIONS

The revised report addresses the following updates:

- Residual soil impacts below the lined secondary containment were not vertically delineated due to equipment refusal during the initial attempt and safety concerns prohibiting mechanical excavation within the containment. WSP returned to the Site to advance a soil boring at the original BH03 borehole location to 4 feet below ground surface (bgs), and subsequently collected delineation soil sample BH03C. The description of the supplemental delineation event, including photographic evidence, the respective lithologic/soil sampling log, and laboratory analytical report, are presented in this Addendum.
- This Addendum only includes field summaries relevant to fulfilling the condition issued by the NMOCD on December 7, 2020. NMOCD requested vertical delineation of the deepest sample inside the secondary lined containment to the applicable Table 1 Closure Criteria. All previous data can be referenced in the original report.

BACKGROUND

On May 17, 2020, the water tanks overflowed through the top of the thief hatches, resulting in 35 barrels (bbls) of produced water being released into the lined secondary containment. A vacuum truck was immediately dispatched to the Site to recover freestanding fluids, of which approximately 35 bbls of produced were recovered. A liner integrity inspection was immediately conducted by XTO personnel following the recovery. A 48-hour advance notice of liner inspection was provided via email to the NMOCD District II office and upon inspection, the liner was determined to be compromised. XTO reported the release to the NMOCD via email on May 18, 2020 and submitted a Release Notification and Corrective Action Form C-141 (Form C-141) on May 29, 2020 that was subsequently assigned Incident Number NRM2015454866.

SITE CHARACTERIZATION

As stated in the original report, WSP 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). Results from the characterization desktop review are presented on Form C-141, Site Assessment/Characterization Form. Potential site receptors are identified on Figure 1. The following Closure Criteria were applied:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH)-gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg
- TPH: 2,500 mg/kg
- Chloride: 20,000 mg/kg

DELINEATION ACTIVITIES

On January 7, 2021, WSP utilized a Shaw Tool, Ltd Portable Core Drill to advance the area associated with soil sample BH03 to determine the vertical extent of impact. Soil sample BH03C was collected at 4 feet bgs. Due to the location of the release, a Hot Work Permit was necessary to conduct investigative motor or electric powered drilling methods within 35 feet of any hydrocarbon sources. In coordination with XTO, an XTO safety representative was retained to conduct air monitoring as part of the permit process for investigative core drilling activities.

The borehole soil sample was field screened for volatile aromatic hydrocarbons and chloride utilizing a photo-ionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. Field screening results and observations for the continuation of BH03 were logged on a lithologic/soil sampling log, which is included in Attachment 1. The delineation soil sample location is depicted on Figure 2. Photographic evidence is included in Attachment 2.

The delineation soil sample was placed directly into a pre-cleaned glass jar, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil sample was transported at or below 4 degrees Celsius (°C) under strict chain-of-custody (COC) procedures to Eurofins Laboratories (Eurofins) in Carlsbad, New Mexico, 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.

ANALYTICAL RESULTS

Laboratory analytical results from the delineation soil sample indicates compliance with Closure Criteria and defines the vertical extent of residual subsurface impacts. Laboratory analytical results are summarized in Table 1. The complete laboratory analytical report is included in Attachment 3.

DEFERRAL REQUEST

Due to the advancement of soil sample BH03C, WSP achieved vertical delineation at sample location BH03 in accordance with the Closure Criteria at approximately 4 feet bgs within the lined secondary containment and addressed NMOCD's reason for denial of the original Deferral Request. Based on the laboratory analytical results, WSP estimates approximately 637 cubic yards of impacted soil is left in place below the 4,302 square foot lined secondary containment. WSP requests NMOCD to review the supplemental delineation data and reconsider the denial associated with the original Deferral Request. As such, XTO respectfully requests to defer final remediation of soil impacts for Incident Number NRM2015454866 until well plugging and abandonment.

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

Sincerely,

WSP USA

Anna Byers
Consultant, Geologist

Ashley L. Ager, P.G.
Managing Director, Geologist

cc: Kyle Littrell, XTO
Robert Hamlet, NMOCD
Victoria Venegas, NMOCD
Bureau of Land Management

Attachments:

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

FIGURES

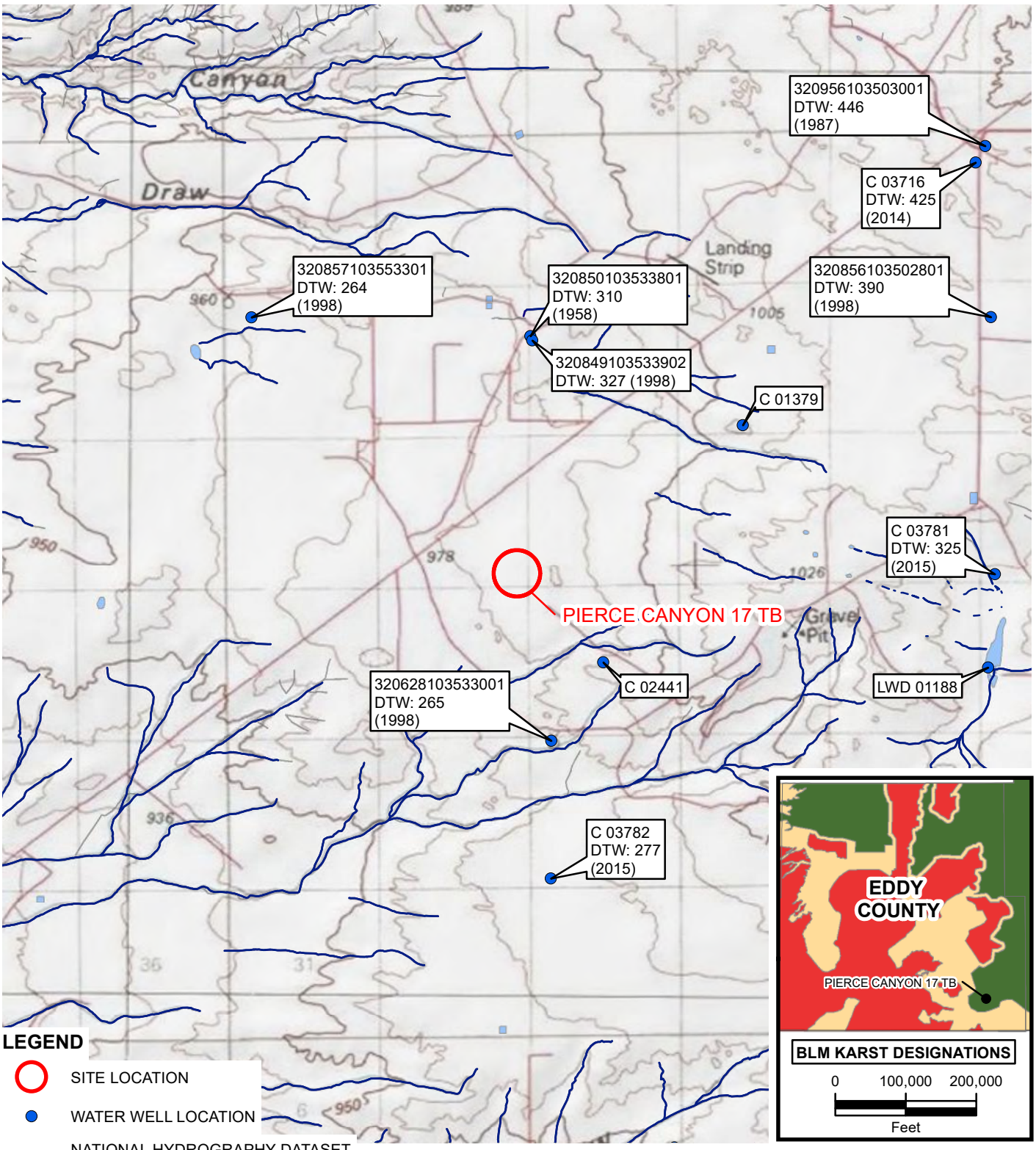


IMAGE COURTESY OF ESRI/USGS

LEGEND

- SITE LOCATION
- WATER WELL LOCATION
- NATIONAL HYDROGRAPHY DATASET SURFACE WATER FEATURE
- NATIONAL WETLANDS INVENTORY SURFACE WATER FEATURE
- LOW KARST
- MEDIUM KARST
- HIGH KARST

NOTE: INCIDENT NUMBER NRM2015454866
DTW: DEPTH TO WATER IN FEET
BLM: BUREAU OF LAND MANAGEMENT

0 5,000 10,000
Feet

N

FIGURE 1
SITE LOCATION MAP
PIERCE CANYON 17 TB
UNIT P SEC 17 T25S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012920085_PIERCE CANYON 17 TB\012920085_FIG01_SL_RECEPTOR_2020_1.mxd

LEGEND

- DELINEATION SOIL SAMPLE WITH CONCENTRATIONS EXCEEDING APPLICABLE CLOSURE CRITERIA
- DELINEATION SOIL SAMPLE WITH CONCENTRATIONS PREVIOUSLY EXCEEDING APPLICABLE CLOSURE CRITERIA
- DELINEATION SOIL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- RELEASE EXTENT

IMAGE COURTESY OF ESRI

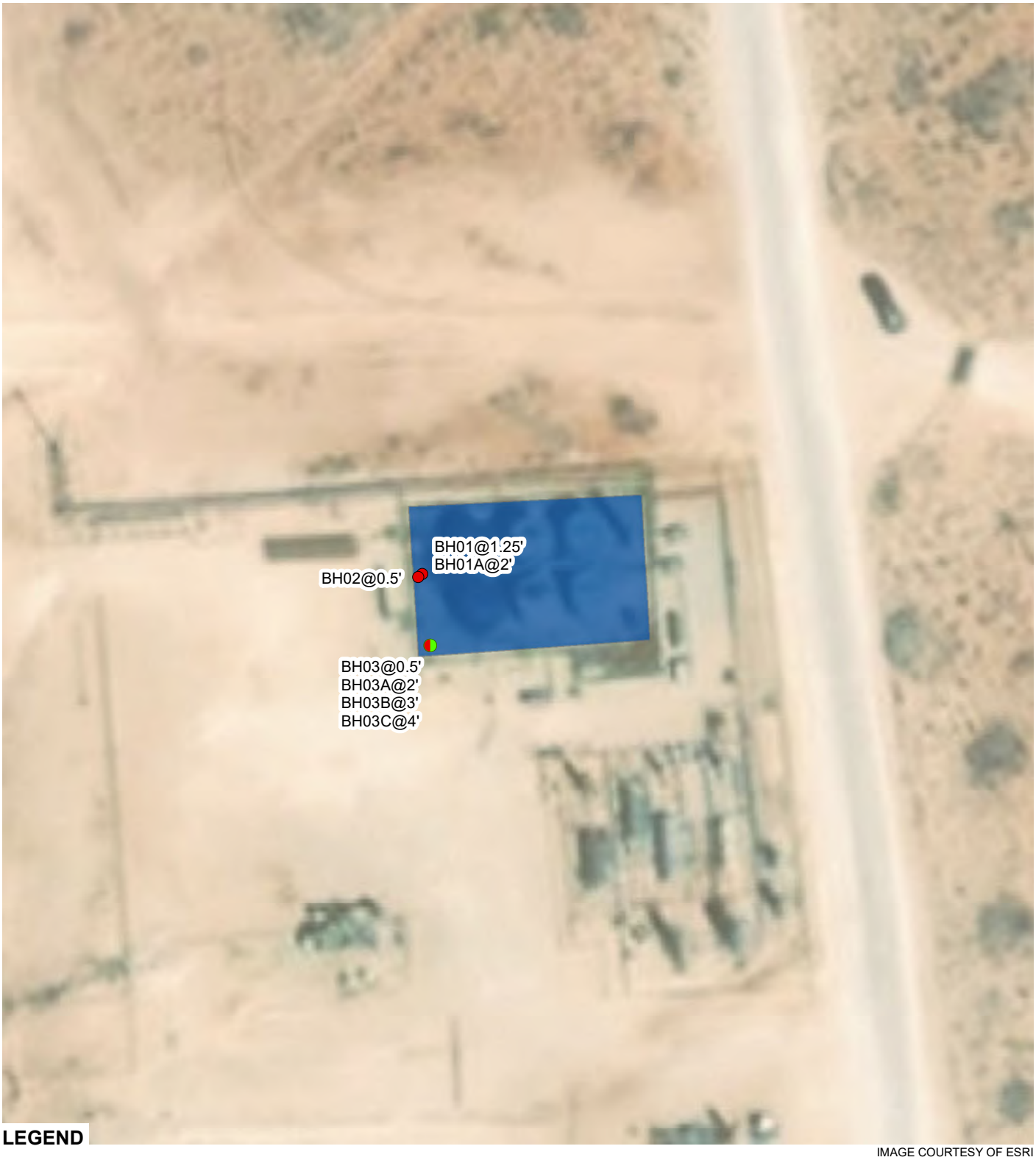
0 50 100
Feet

N

NOTE: INCIDENT NUMBER NRM2015454866
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

FIGURE 2
DELINEATION SOIL SAMPLE LOCATIONS
PIERCE CANYON 17 TB
UNIT P SEC 17 T25S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012920085_PIERCE CANYON 17 TB\012920085_FIG02_DELINEATION_2020_1.mxd



LEGEND

IMAGE COURTESY OF ESRI

DELINEATION SOIL SAMPLE WITH CONCENTRATIONS EXCEEDING APPLICABLE CLOSURE CRITERIA

DELINEATION SOIL SAMPLE WITH CONCENTRATIONS PREVIOUSLY EXCEEDING APPLICABLE CLOSURE CRITERIA

DEFERRAL AREA

0 50 100

Feet

N

NOTE: INCIDENT NUMBER NRM2015454866
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)
DEFERRAL AREA: 4,302 SQUARE FEET
DEFERRAL DEPTH: 4 FEET
DEFERRAL VOLUME: 637 CUBIC YARDS

FIGURE 3
DEFERRAL AREA
PIERCE CANYON 17 TB
UNIT P SEC 17 T25S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012920085_PIERCE CANYON 17 TB\012920085_FIG03_DEFERRAL_2020_1.mxd

TABLES

Table 1

Soil Analytical Results
Pierce Canyon 17 TB
Incident Number NRM2015454866
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	TPH-ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			10	**50**	NE	NE	NE	**1,000**	**2,500**	**20,000**
Delineation Samples										
BH03	07/16/2020	0.5	<0.0998	15.9	6,600	901	417	**7,500**	**7,920**	126
BH03A	07/16/2020	2	<0.0996	**80.8**	6,880	1,200	434	**8,080**	**8,510**	467
BH03B	07/17/2020	3	<0.00500	8.78	4,250	571	228	**4,820**	**5,050**	462
BH03C	01/07/2021	4	0.0123	2.88	<49.8	575	63.7	575	639	85.6

Notes:

ft - feet/foot
mg/kg - milligrams per kilograms
BTEX - benzene, toluene, ethylbenzene, and total xylenes
TPH - total petroleum hydrocarbons
DRO - diesel range organics
GRO - gasoline range organics
ORO - oil range organics
NMOCD - New Mexico Oil Conservation Division
NMAC - New Mexico Administrative Code
< - indicates result is less than the stated laboratory method practical quantitation limit
NE - Not Established
BOLD - indicates results exceed the higher of the background sample result or applicable regulatory standard
Greyed data represents samples that were excavated

ATTACHMENT 1: LITHOLOGIC/SOIL SAMPLING LOG

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name:	Date:
BH03	7/16 - 7/17/2020, 1/7/2021

Site Name: PLU PC 17 TB
RP or Incident Number: NRM2015454866
LTE Job Number: TE012920085

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: FS and TC	Method: HVAC, Hammer Drill and Core Drill
Hole Diameter: 2.5 inches	Total Depth: 4 ft bgs

Lat/Long: 32.124233, -103.895873
Field Screening: Hach chloride strips, PID

Comments: Chloride screenings were conducted with a 1:4 dilution factor of soil to distilled water. Reported values include a 40% correction factor.
SAA: Same as above

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	SP	SAND, dry, tan-light brown, poorly graded, fine-very fine, abundant caliche gravel, tan-off white, poorly consolidated
M	436	1,042	Y	BH03	0.5			SAA
D	436	1,530	N			1	SM	SILTY sand, dry, light brown-brown, cohesive, low plasticity
D	436	883.5	N	BH03A	2	2	CCHE	CALICHE, dry, tan-off white, well-consolidated, some silt
D	868	1,204	N	BH03B	3	3	CCHE	SAA
D	683	32.3	N	BH03C	4	4	CCHE	SAA

TD @ 4 ft bgs

ATTACHMENT 2: PHOTOGRAPHIC LOG

PHOTOGRAPHIC LOG		
XTO ENERGY, Inc.	Pierce Canyon 17 TB Eddy County, New Mexico	TE012920085

Photo No.	Date
1	January 7, 2021

Southwestern corner of the tank battery containment where BH03 was advanced.

Photo No.	Date
2	January 7, 2021

Tank battery containment liner opening for subsurface access to advance BH03.

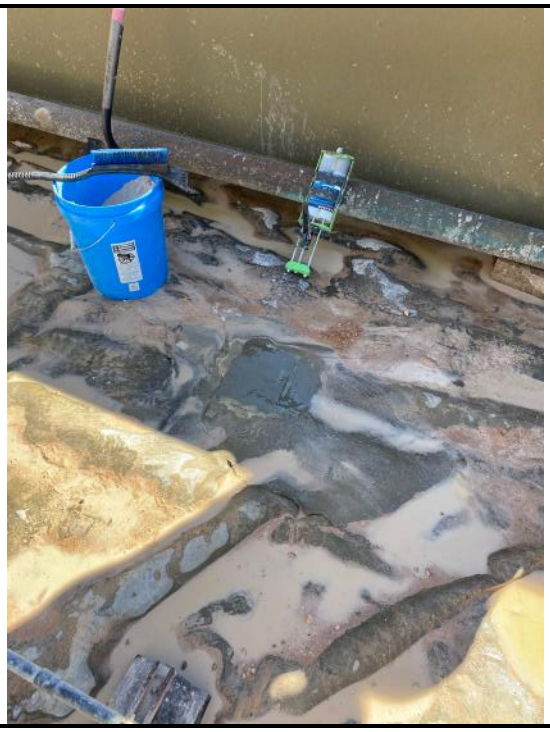
PHOTOGRAPHIC LOG		
XTO ENERGY, Inc.	Pierce Canyon 17 TB Eddy County, New Mexico	TE012920085

Photo No.	Date
3	January 7, 2021

Drilling advancement at BH03.

Photo No.	Date
4	January 7, 2021

Liner repair of cut opening at BH03.



ATTACHMENT 3: LABORATORY ANALYTICAL REPORTS

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Certificate of Analysis Summary 667503

LT Environmental, Inc., Arvada, CO

Project Name: PLU PC 17 TB

Project Id: 012920085
Contact: Dan Moir
Project Location: Eddy County

Date Received in Lab: Thu 07.16.2020 17:25
Report Date: 07.17.2020 19:13
Project Manager: Jessica Kramer

Analysis Requested									
	Lab Id:	667503-001		667503-002					
	Field Id:	BH03		BH03A					
	Depth:	0.5- ft		2- ft					
	Matrix:	SOIL		SOIL					
	Sampled:	07.16.2020 09:23		07.16.2020 09:37					
BTEX by EPA 8021B	***Extracted:***	07.17.2020 10:42		07.17.2020 10:42					
	Analyzed:	07.17.2020 15:58		07.17.2020 16:20					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Benzene		<0.0998	0.0998	<0.0996	0.0996				
Toluene		0.467	0.399	3.00	0.398				
Ethylbenzene		1.25	0.399	5.98	0.398				
m,p-Xylenes		8.95	0.798	56.1	0.797				
o-Xylene		5.22	0.399	15.7	0.398				
Total Xylenes		14.2	0.399	71.8	0.398				
Total BTEX		15.9	0.0998	80.8	0.0996				
Chloride by EPA 300	***Extracted:***	07.17.2020 13:00		07.17.2020 13:00					
	Analyzed:	07.17.2020 14:57		07.17.2020 15:14					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Chloride		126	9.94	467	10.1				
TPH by SW8015 Mod	***Extracted:***	07.17.2020 14:30		07.17.2020 14:30					
	Analyzed:	07.17.2020 16:40		07.17.2020 16:40					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		901	249	1200	249				
Diesel Range Organics (DRO)		6600	249	6880	249				
Motor Oil Range Hydrocarbons (MRO)		417	249	434	249				
Total GRO-DRO		7500	249	8080	249				
Total TPH		7920	249	8510	249				

BRL - Below Reporting Limit

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

Jessica Kramer

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Analytical Report 667503

for

LT Environmental, Inc.

Project Manager: Dan Moir

PLU PC 17 TB

012920085

07.17.2020

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-36), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-25), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-17)
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 (T104704534-20-7)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)

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07.17.2020

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

Reference: Eurofins Xenco, LLC Report No(s): **667503**
PLU PC 17 TB
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 Eurofins Xenco, LLC Report Number(s) 667503. 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 Eurofins Xenco, LLC. 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. 667503 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 Eurofins Xenco, LLC 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 Manager

A Small Business and Minority Company

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

Sample Cross Reference 667503

LT Environmental, Inc., Arvada, CO

PLU PC 17 TB

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH03	S	07.16.2020 09:23	0.5 ft	667503-001
BH03A	S	07.16.2020 09:37	2 ft	667503-002

CASE NARRATIVE

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Client Name: LT Environmental, Inc.

Project Name: PLU PC 17 TB

Project ID: *012920085*
Work Order Number(s): *667503*

Report Date: *07.17.2020*
Date Received: *07.16.2020*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

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Certificate of Analytical Results 667503

LT Environmental, Inc., Arvada, CO

PLU PC 17 TB

Sample Id:	**BH03**	Matrix:	Soil	Date Received:	07.16.2020 17:25
Lab Sample Id:	667503-001	Date Collected:	07.16.2020 09:23	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	07.17.2020 13:00	Basis:	Wet Weight
Seq Number:	3132011				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**126**	9.94	mg/kg	07.17.2020 14:57		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	07.17.2020 14:30	Basis:	Wet Weight
Seq Number:	3132010				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**901**	249	mg/kg	07.17.2020 16:40		5
Diesel Range Organics (DRO)	C10C28DRO	**6600**	249	mg/kg	07.17.2020 16:40		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**417**	249	mg/kg	07.17.2020 16:40		5
Total GRO-DRO	PHC628	**7500**	249	mg/kg	07.17.2020 16:40		5
Total TPH	PHC635	**7920**	249	mg/kg	07.17.2020 16:40		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	135	%	70-135	07.17.2020 16:40	
o-Terphenyl	84-15-1	105	%	70-135	07.17.2020 16:40	

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Certificate of Analytical Results 667503

LT Environmental, Inc., Arvada, CO

PLU PC 17 TB

Sample Id:	**BH03**	Matrix:	Soil	Date Received:	07.16.2020 17:25
Lab Sample Id:	667503-001	Date Collected:	07.16.2020 09:23	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	07.17.2020 10:42	Basis:	Wet Weight
Seq Number:	3132013				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0998	0.0998	mg/kg	07.17.2020 15:58	U	200
Toluene	108-88-3	**0.467**	0.399	mg/kg	07.17.2020 15:58		200
Ethylbenzene	100-41-4	**1.25**	0.399	mg/kg	07.17.2020 15:58		200
m,p-Xylenes	179601-23-1	**8.95**	0.798	mg/kg	07.17.2020 15:58		200
o-Xylene	95-47-6	**5.22**	0.399	mg/kg	07.17.2020 15:58		200
Total Xylenes	1330-20-7	**14.2**	0.399	mg/kg	07.17.2020 15:58		200
Total BTEX		**15.9**	0.0998	mg/kg	07.17.2020 15:58		200

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	95	%	70-130	07.17.2020 15:58	
4-Bromofluorobenzene	460-00-4	105	%	70-130	07.17.2020 15:58	

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Certificate of Analytical Results 667503

LT Environmental, Inc., Arvada, CO

PLU PC 17 TB

Sample Id:	**BH03A**	Matrix:	Soil	Date Received:	07.16.2020 17:25
Lab Sample Id:	667503-002	Date Collected:	07.16.2020 09:37	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	07.17.2020 13:00	Basis:	Wet Weight
Seq Number:	3132011				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**467**	10.1	mg/kg	07.17.2020 15:14		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	07.17.2020 14:30	Basis:	Wet Weight
Seq Number:	3132010				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**1200**	249	mg/kg	07.17.2020 16:40		5
Diesel Range Organics (DRO)	C10C28DRO	**6880**	249	mg/kg	07.17.2020 16:40		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**434**	249	mg/kg	07.17.2020 16:40		5
Total GRO-DRO	PHC628	**8080**	249	mg/kg	07.17.2020 16:40		5
Total TPH	PHC635	**8510**	249	mg/kg	07.17.2020 16:40		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	132	%	70-135	07.17.2020 16:40	
o-Terphenyl	84-15-1	103	%	70-135	07.17.2020 16:40	

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Certificate of Analytical Results 667503

LT Environmental, Inc., Arvada, CO

PLU PC 17 TB

Sample Id:	**BH03A**	Matrix:	Soil	Date Received:	07.16.2020 17:25
Lab Sample Id:	667503-002	Date Collected:	07.16.2020 09:37	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	07.17.2020 10:42	Basis:	Wet Weight
Seq Number:	3132013				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0996	0.0996	mg/kg	07.17.2020 16:20	U	200
Toluene	108-88-3	**3.00**	0.398	mg/kg	07.17.2020 16:20		200
Ethylbenzene	100-41-4	**5.98**	0.398	mg/kg	07.17.2020 16:20		200
m,p-Xylenes	179601-23-1	**56.1**	0.797	mg/kg	07.17.2020 16:20		200
o-Xylene	95-47-6	**15.7**	0.398	mg/kg	07.17.2020 16:20		200
Total Xylenes	1330-20-7	**71.8**	0.398	mg/kg	07.17.2020 16:20		200
Total BTEX		**80.8**	0.0996	mg/kg	07.17.2020 16:20		200

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	117	%	70-130	07.17.2020 16:20	
1,4-Difluorobenzene	540-36-3	96	%	70-130	07.17.2020 16:20	

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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. **ND** Not Detected.

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

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QC Summary 667503

LT Environmental, Inc.

PLU PC 17 TB

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3132011 — Matrix: Solid — Date Prep: 07.17.2020
MB Sample Id: 7707602-1-BLK — LCS Sample Id: 7707602-1-BKS — LCSD Sample Id: 7707602-1-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	255	102	266	106	90-110	4	20	mg/kg	07.17.2020 14:46	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3132011 — Matrix: Soil — Date Prep: 07.17.2020
Parent Sample Id: 667503-001 — MS Sample Id: 667503-001 S — MSD Sample Id: 667503-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	126	200	335	105	330	102	90-110	2	20	mg/kg	07.17.2020 15:03	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3132010 — Matrix: Solid — Date Prep: 07.17.2020
MB Sample Id: 7707598-1-BLK — LCS Sample Id: 7707598-1-BKS — LCSD Sample Id: 7707598-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1010	101	1000	100	70-135	1	35	mg/kg	07.17.2020 14:31	
Diesel Range Organics (DRO)	<50.0	1000	1150	115	1130	113	70-135	2	35	mg/kg	07.17.2020 14:31	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	114		124		125		70-135	%	07.17.2020 14:31
o-Terphenyl	112		117		118		70-135	%	07.17.2020 14:31

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3132010 — Matrix: Solid — Date Prep: 07.17.2020
MB Sample Id: 7707598-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	07.17.2020 14:10	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3132010 — Matrix: Soil — Date Prep: 07.17.2020
Parent Sample Id: 667506-001 — MS Sample Id: 667506-001 S — MSD Sample Id: 667506-001 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)	<50.0	999	915	92	940	94	70-135	3	35	mg/kg	07.17.2020 15:34	
Diesel Range Organics (DRO)	<50.0	999	1020	102	1050	105	70-135	3	35	mg/kg	07.17.2020 15:34	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	118		122		70-135	%	07.17.2020 15:34
o-Terphenyl	108		110		70-135	%	07.17.2020 15:34

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

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

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

Final 1.000

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QC Summary 667503

LT Environmental, Inc.

PLU PC 17 TB

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3132013 Matrix: Solid Date Prep: 07.17.2020
MB Sample Id: 7707605-1-BLK LCS Sample Id: 7707605-1-BKS LCSD Sample Id: 7707605-1-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	0.112	112	0.118	118	70-130	5	35	mg/kg	07.17.2020 11:38	
Toluene	<0.00200	0.100	0.108	108	0.114	114	70-130	5	35	mg/kg	07.17.2020 11:38	
Ethylbenzene	<0.00200	0.100	0.103	103	0.109	109	71-129	6	35	mg/kg	07.17.2020 11:38	
m,p-Xylenes	<0.00400	0.200	0.209	105	0.220	110	70-135	5	35	mg/kg	07.17.2020 11:38	
o-Xylene	<0.00200	0.100	0.101	101	0.107	107	71-133	6	35	mg/kg	07.17.2020 11:38	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	98		99		100		70-130	%	07.17.2020 11:38
4-Bromofluorobenzene	99		98		102		70-130	%	07.17.2020 11:38

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3132013 Matrix: Soil Date Prep: 07.17.2020
Parent Sample Id: 667506-001 MS Sample Id: 667506-001 S MSD Sample Id: 667506-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.125	125	0.121	121	70-130	3	35	mg/kg	07.17.2020 12:21	
Toluene	<0.00200	0.0998	0.118	118	0.113	113	70-130	4	35	mg/kg	07.17.2020 12:21	
Ethylbenzene	<0.00200	0.0998	0.110	110	0.105	105	71-129	5	35	mg/kg	07.17.2020 12:21	
m,p-Xylenes	<0.00399	0.200	0.222	111	0.212	106	70-135	5	35	mg/kg	07.17.2020 12:21	
o-Xylene	<0.00200	0.0998	0.108	108	0.103	103	71-133	5	35	mg/kg	07.17.2020 12:21	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		99		70-130	%	07.17.2020 12:21
4-Bromofluorobenzene	103		98		70-130	%	07.17.2020 12:21

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

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

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

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: 467503

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, Inc
Address:	3300 North A Street	Address:	3104 E Greene St
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad NM 88220
Phone:	(432) 236-3849	Email:	fsmith@ltenv.com, dmoir@ltenv.com

Work Order Comments

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

Project Name:	PLU PC 17TB	Turn Around	
Project Number:	012920085	Routine ☐	
Project Location	Eddy county	Rush: 24hrs	
Sampler's Name:	Fatima Smith	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):	2.0/1.8	Thermometer ID	THM007
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes (No) N/A	Total Containers:	2

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Pres. Code	BTEX	TPH	Chloride (EPA 300.0)
	BH03	S	7/16/20	0923	0.5'	1		X	X	X
	BH03A	S	7/16/20	0937	2'	1		X	X	X

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		7/16/20 17:25	2		
			4		
			6		

Revised Date 022619 Rev. 2019.1

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Certificate of Analysis Summary 667955

LT Environmental, Inc., Arvada, CO

Project Name: PLU PC 17 TB

Project Id: 012920085
Contact: Dan Moir
Project Location: Eddy County

Date Received in Lab: Wed 07.22.2020 16:32
Report Date: 07.23.2020 13:24
Project Manager: Jessica Kramer

Analysis Requested								
	Lab Id:	667955-001						
	Field Id:	BH03B						
	Depth:	3- ft						
	Matrix:	SOIL						
	Sampled:	07.17.2020 08:36						
BTEX by EPA 8021B	***Extracted:***	07.22.2020 17:00						
	Analyzed:	07.22.2020 22:17						
	Units/RL:	mg/kg	RL					
Benzene		<0.00500	0.00500					
Toluene		0.441	0.0200					
Ethylbenzene		0.432	0.0200					
m,p-Xylenes		6.12	0.0400					
o-Xylene		1.79	0.0200					
Total Xylenes		7.91	0.0200					
Total BTEX		8.78	0.00500					
Chloride by EPA 300	***Extracted:***	07.22.2020 17:54						
	Analyzed:	07.23.2020 05:29						
	Units/RL:	mg/kg	RL					
Chloride		462	9.96					
TPH by SW8015 Mod	***Extracted:***	07.22.2020 16:50						
	Analyzed:	07.22.2020 19:20						
	Units/RL:	mg/kg	RL					
Gasoline Range Hydrocarbons (GRO)		571	50.2					
Diesel Range Organics (DRO)		4250	50.2					
Motor Oil Range Hydrocarbons (MRO)		228	50.2					
Total GRO-DRO		4820	50.2					
Total TPH		5050	50.2					

BRL - Below Reporting Limit

Jessica Kramer

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Analytical Report 667955

for

LT Environmental, Inc.

Project Manager: Dan Moir

PLU PC 17 TB

012920085

07.23.2020

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-36), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-25), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-17)
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 (T104704534-20-7)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)

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07.23.2020

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

Reference: Eurofins Xenco, LLC Report No(s): **667955**
PLU PC 17 TB
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 Eurofins Xenco, LLC Report Number(s) 667955. 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 Eurofins Xenco, LLC. 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. 667955 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 Eurofins Xenco, LLC 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 Manager

A Small Business and Minority Company

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

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Sample Cross Reference 667955

LT Environmental, Inc., Arvada, CO

PLU PC 17 TB

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH03B	S	07.17.2020 08:36	3 ft	667955-001

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CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: PLU PC 17 TB

Project ID: *012920085*
Work Order Number(s): *667955*

Report Date: *07.23.2020*
Date Received: *07.22.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

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Certificate of Analytical Results 667955

LT Environmental, Inc., Arvada, CO

PLU PC 17 TB

Sample Id:	**BH03B**	Matrix:	Soil	Date Received:	07.22.2020 16:32
Lab Sample Id:	667955-001	Date Collected:	07.17.2020 08:36	Sample Depth:	3 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	07.22.2020 17:54	Basis:	Wet Weight
Seq Number:	3132399				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**462**	9.96	mg/kg	07.23.2020 05:29		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	07.22.2020 16:50	Basis:	Wet Weight
Seq Number:	3132405				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**571**	50.2	mg/kg	07.22.2020 19:20		1
Diesel Range Organics (DRO)	C10C28DRO	**4250**	50.2	mg/kg	07.22.2020 19:20		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**228**	50.2	mg/kg	07.22.2020 19:20		1
Total GRO-DRO	PHC628	**4820**	50.2	mg/kg	07.22.2020 19:20		1
Total TPH	PHC635	**5050**	50.2	mg/kg	07.22.2020 19:20		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	125	%	70-135	07.22.2020 19:20	
o-Terphenyl	84-15-1	112	%	70-135	07.22.2020 19:20	

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Certificate of Analytical Results 667955

LT Environmental, Inc., Arvada, CO

PLU PC 17 TB

Sample Id:	**BH03B**	Matrix:	Soil	Date Received:	07.22.2020 16:32
Lab Sample Id:	667955-001	Date Collected:	07.17.2020 08:36	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	07.22.2020 17:00	Basis:	Wet Weight
Seq Number:	3132403				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00500	0.00500	mg/kg	07.22.2020 22:17	U	1
Toluene	108-88-3	**0.441**	0.0200	mg/kg	07.22.2020 22:17		1
Ethylbenzene	100-41-4	**0.432**	0.0200	mg/kg	07.22.2020 22:17		1
m,p-Xylenes	179601-23-1	**6.12**	0.0400	mg/kg	07.22.2020 22:17		1
o-Xylene	95-47-6	**1.79**	0.0200	mg/kg	07.22.2020 22:17		1
Total Xylenes	1330-20-7	**7.91**	0.0200	mg/kg	07.22.2020 22:17		1
Total BTEX		**8.78**	0.00500	mg/kg	07.22.2020 22:17		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	130	%	70-130	07.22.2020 22:17	
1,4-Difluorobenzene	540-36-3	96	%	70-130	07.22.2020 22:17	

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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. **ND** Not Detected.

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

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QC Summary 667955

LT Environmental, Inc.

PLU PC 17 TB

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3132399 — Matrix: Solid — Date Prep: 07.22.2020
MB Sample Id: 7707895-1-BLK — LCS Sample Id: 7707895-1-BKS — LCSD Sample Id: 7707895-1-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	261	104	269	108	90-110	3	20	mg/kg	07.23.2020 02:58	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3132399 — Matrix: Soil — Date Prep: 07.22.2020
Parent Sample Id: 667904-050 — MS Sample Id: 667904-050 S — MSD Sample Id: 667904-050 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	7470	201	7680	104	7670	101	90-110	0	20	mg/kg	07.23.2020 03:15	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3132399 — Matrix: Soil — Date Prep: 07.22.2020
Parent Sample Id: 667904-060 — MS Sample Id: 667904-060 S — MSD Sample Id: 667904-060 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	129	200	338	105	338	105	90-110	0	20	mg/kg	07.23.2020 04:33	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3132405 — Matrix: Solid — Date Prep: 07.22.2020
MB Sample Id: 7707899-1-BLK — LCS Sample Id: 7707899-1-BKS — LCSD Sample Id: 7707899-1-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	935	94	1010	101	70-135	8	35	mg/kg	07.22.2020 10:11	
Diesel Range Organics (DRO)	<50.0	1000	1040	104	1120	112	70-135	7	35	mg/kg	07.22.2020 10:11	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	108		122		126		70-135	%	07.22.2020 10:11
o-Terphenyl	109		110		118		70-135	%	07.22.2020 10:11

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3132405 — Matrix: Solid — Date Prep: 07.22.2020
MB Sample Id: 7707899-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	07.22.2020 09:50	

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

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QC Summary 667955

LT Environmental, Inc.

PLU PC 17 TB

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3132405 Matrix: Soil Date Prep: 07.22.2020
Parent Sample Id: 667902-007 MS Sample Id: 667902-007 S MSD Sample Id: 667902-007 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)	<50.0	1000	863	86	878	88	70-135	2	35	mg/kg	07.22.2020 14:42	
Diesel Range Organics (DRO)	<50.0	1000	978	98	959	96	70-135	2	35	mg/kg	07.22.2020 14:42	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	115		117		70-135	%	07.22.2020 14:42
o-Terphenyl	110		105		70-135	%	07.22.2020 14:42

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3132403 Matrix: Solid Date Prep: 07.22.2020
MB Sample Id: 7707875-1-BLK LCS Sample Id: 7707875-1-BKS LCSD Sample Id: 7707875-1-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	0.115	115	0.122	122	70-130	6	35	mg/kg	07.22.2020 15:28	
Toluene	<0.00200	0.100	0.110	110	0.116	116	70-130	5	35	mg/kg	07.22.2020 15:28	
Ethylbenzene	<0.00200	0.100	0.102	102	0.108	108	71-129	6	35	mg/kg	07.22.2020 15:28	
m,p-Xylenes	<0.00400	0.200	0.206	103	0.218	109	70-135	6	35	mg/kg	07.22.2020 15:28	
o-Xylene	<0.00200	0.100	0.102	102	0.108	108	71-133	6	35	mg/kg	07.22.2020 15:28	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		100		100		70-130	%	07.22.2020 15:28
4-Bromofluorobenzene	103		102		102		70-130	%	07.22.2020 15:28

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3132403 Matrix: Soil Date Prep: 07.22.2020
Parent Sample Id: 667902-007 MS Sample Id: 667902-007 S MSD Sample Id: 667902-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.125	126	0.113	113	70-130	10	35	mg/kg	07.22.2020 16:32	
Toluene	<0.00199	0.0996	0.117	117	0.106	106	70-130	10	35	mg/kg	07.22.2020 16:32	
Ethylbenzene	<0.00199	0.0996	0.110	110	0.0989	99	71-129	11	35	mg/kg	07.22.2020 16:32	
m,p-Xylenes	<0.00398	0.199	0.224	113	0.200	101	70-135	11	35	mg/kg	07.22.2020 16:32	
o-Xylene	<0.00199	0.0996	0.110	110	0.0985	99	71-133	11	35	mg/kg	07.22.2020 16:32	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		98		70-130	%	07.22.2020 16:32
4-Bromofluorobenzene	103		100		70-130	%	07.22.2020 16:32

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

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

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

Chain of Custody

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432) 704-5440 EL Paso,TX (915) 585-3443 Lubbock,TX (806) 794-1296 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

Work Order No: 467955

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, Inc.
Address:	3300 North A Street	Address:	3104 E Greene St
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(432)236-3849	Email:	fsmith@ltenv.com, dmoir@ltenv.com

Work Order Comments

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

Project Name:	PLU PC 17TB	Turn Around	
Project Number:	012920085	Routine ☐	
Project Location	Eddy county	Rush: 24 hrs	
Sampler's Name:	Fatima Smith	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT			
Temperature (°C):	1.2/1.4	Temp Blank:	Yes No
Received Intact:	Yes No	Wet Ice:	Yes No
Cooler Custody Seals:	Yes No N/A	Thermometer ID	T-NM-007
Sample Custody Seals:	Yes No N/A	Correction Factor:	-0.2
		Total Containers:	1

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Pres. Code	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)
	BH03B	S	7/17/20	0836	3'	1		X	X	X

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		7/22/20 10:32	2		
			4		
			6		

Revised Date 022619 Rev. 2019.1

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 07.22.2020 04.32.00 PM

Work Order #: 667955

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)?	1.4	
#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**	Samples received in bulk containers.
#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: 07.22.2020

Checklist reviewed by: Jessica Kramer Date: 07.23.2020

Jessica Kramer

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Certificate of Analysis Summary 683873

WSP USA, Dallas, TX

Project Name: PLU PC 17

Project Id: TE012920085
Contact: Joseph Hernandez
Project Location:

Date Received in Lab: Thu 01.07.2021 16:48
Report Date: 02.05.2021 10:16
Project Manager: Jessica Kramer

Analysis Requested								
	Lab Id:	683873-001						
	Field Id:	BH03C						
	Depth:	4- ft						
	Matrix:	SOIL						
	Sampled:	01.07.2021 10:30						
BTEX by EPA 8021B	***Extracted:***	01.07.2021 17:30						
	Analyzed:	01.08.2021 04:43						
	Units/RL:	mg/kg	RL					
Benzene		0.0123	0.00990					
Toluene		0.289	0.00990					
Ethylbenzene		0.158	0.00990					
m,p-Xylenes		1.91	0.0198					
o-Xylene		0.514	0.00990					
Total Xylenes		2.42	0.00990					
Total BTEX		2.88	0.00990					
Chloride by EPA 300	***Extracted:***	01.07.2021 18:10						
	Analyzed:	01.08.2021 08:15						
	Units/RL:	mg/kg	RL					
Chloride		85.6	10.0					
TPH by SW8015 Mod	***Extracted:***	01.07.2021 17:00						
	Analyzed:	01.08.2021 02:14						
	Units/RL:	mg/kg	RL					
Gasoline Range Hydrocarbons (GRO)		<49.8	49.8					
Diesel Range Organics (DRO)		575	49.8					
Motor Oil Range Hydrocarbons (MRO)		63.7	49.8					
Total GRO-DRO		575	49.8					
Total TPH		639	49.8					

BRL - Below Reporting Limit

Jessica Kramer

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

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Analytical Report 683873

for

WSP USA

Project Manager: Joseph Hernandez

PLU PC 17

TE012920085

02.05.2021

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-24)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)

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02.05.2021

Project Manager: **Joseph Hernandez**
WSP USA
2777 N. Stemmons Freeway, Suite 1600
Dallas, TX 75207

Reference: Eurofins Xenco, LLC Report No(s): **683873**
PLU PC 17
Project Address:

Joseph Hernandez:

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 Eurofins Xenco, LLC Report Number(s) 683873. 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 Eurofins Xenco, LLC. 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. 683873 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 Eurofins Xenco, LLC 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 Manager

A Small Business and Minority Company

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

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Sample Cross Reference 683873

WSP USA, Dallas, TX

PLU PC 17

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH03C	S	01.07.2021 10:30	4 ft	683873-001

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CASE NARRATIVE

Client Name: WSP USA

Project Name: PLU PC 17

Project ID: *TE012920085*
Work Order Number(s): *683873*

Report Date: *02.05.2021*
Date Received: *01.07.2021*

Sample receipt non conformances and comments:

V1.001 Revision (client email) Changed sample ID from SS03C to BH03C

Sample receipt non conformances and comments per sample:

None

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Certificate of Analytical Results 683873

WSP USA, Dallas, TX

PLU PC 17

Sample Id: **BH03C** Matrix: Soil Date Received:01.07.2021 16:48

Lab Sample Id: 683873-001 Date Collected: 01.07.2021 10:30 Sample Depth: 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

Analyst: MAB Date Prep: 01.07.2021 18:10 % Moisture:

Seq Number: 3147128 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**85.6**	10.0	mg/kg	01.08.2021 08:15		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: MAB

Analyst: CAC Date Prep: 01.07.2021 17:00 % Moisture:

Seq Number: 3147117 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.08.2021 02:14	U	1
Diesel Range Organics (DRO)	C10C28DRO	**575**	49.8	mg/kg	01.08.2021 02:14		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**63.7**	49.8	mg/kg	01.08.2021 02:14		1
Total GRO-DRO	PHC628	**575**	49.8	mg/kg	01.08.2021 02:14		1
Total TPH	PHC635	**639**	49.8	mg/kg	01.08.2021 02:14		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	01.08.2021 02:14	
o-Terphenyl	84-15-1	104	%	70-135	01.08.2021 02:14	

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Certificate of Analytical Results 683873

WSP USA, Dallas, TX

PLU PC 17

Sample Id:	**BH03C**	Matrix:	Soil	Date Received:	01.07.2021 16:48
Lab Sample Id:	683873-001	Date Collected:	01.07.2021 10:30	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.07.2021 17:30	% Moisture:	
Seq Number:	3147110			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	**0.0123**	0.00990	mg/kg	01.08.2021 04:43		1
Toluene	108-88-3	**0.289**	0.00990	mg/kg	01.08.2021 04:43		1
Ethylbenzene	100-41-4	**0.158**	0.00990	mg/kg	01.08.2021 04:43		1
m,p-Xylenes	179601-23-1	**1.91**	0.0198	mg/kg	01.08.2021 04:43		1
o-Xylene	95-47-6	**0.514**	0.00990	mg/kg	01.08.2021 04:43		1
Total Xylenes	1330-20-7	**2.42**	0.00990	mg/kg	01.08.2021 04:43		1
Total BTEX		**2.88**	0.00990	mg/kg	01.08.2021 04:43		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	90	%	70-130	01.08.2021 04:43	
1,4-Difluorobenzene	540-36-3	87	%	70-130	01.08.2021 04:43	

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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. **ND** Not Detected.

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

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QC Summary 683873

WSP USA

PLU PC 17

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3147128 — Matrix: Solid — Date Prep: 01.07.2021
MB Sample Id: 7718710-1-BLK — LCS Sample Id: 7718710-1-BKS — LCSD Sample Id: 7718710-1-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	247	99	246	98	90-110	0	20	mg/kg	01.08.2021 07:45	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3147128 — Matrix: Soil — Date Prep: 01.07.2021
Parent Sample Id: 683825-004 — MS Sample Id: 683825-004 S — MSD Sample Id: 683825-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	19.9	200	213	97	212	96	90-110	0	20	mg/kg	01.08.2021 08:03	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3147128 — Matrix: Soil — Date Prep: 01.07.2021
Parent Sample Id: 683825-014 — MS Sample Id: 683825-014 S — MSD Sample Id: 683825-014 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<9.94	199	193	97	192	97	90-110	1	20	mg/kg	01.08.2021 09:32	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3147117 — Matrix: Solid — Date Prep: 01.07.2021
MB Sample Id: 7718698-1-BLK — LCS Sample Id: 7718698-1-BKS — LCSD Sample Id: 7718698-1-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	1040	104	1080	108	70-135	4	35	mg/kg	01.07.2021 23:13	
Diesel Range Organics (DRO)	<50.0	1000	990	99	1090	109	70-135	10	35	mg/kg	01.07.2021 23:13	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	101		116		115		70-135	%	01.07.2021 23:13
o-Terphenyl	103		104		110		70-135	%	01.07.2021 23:13

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3147117 — Matrix: Solid — Date Prep: 01.07.2021
MB Sample Id: 7718698-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	01.07.2021 22:53	

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

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

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

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QC Summary 683873

WSP USA

PLU PC 17

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3147117 Matrix: Soil Date Prep: 01.07.2021
Parent Sample Id: 683730-061 MS Sample Id: 683730-061 S MSD Sample Id: 683730-061 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)	<50.0	999	1160	116	1050	105	70-135	10	35	mg/kg	01.08.2021 00:14	
Diesel Range Organics (DRO)	<50.0	999	1050	105	1140	114	70-135	8	35	mg/kg	01.08.2021 00:14	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	112		107		70-135	%	01.08.2021 00:14
o-Terphenyl	106		118		70-135	%	01.08.2021 00:14

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3147110 Matrix: Solid Date Prep: 01.07.2021
MB Sample Id: 7718714-1-BLK LCS Sample Id: 7718714-1-BKS LCSD Sample Id: 7718714-1-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	0.0965	97	0.0993	99	70-130	3	35	mg/kg	01.08.2021 00:49	
Toluene	<0.00200	0.100	0.0931	93	0.0963	96	70-130	3	35	mg/kg	01.08.2021 00:49	
Ethylbenzene	<0.00200	0.100	0.0862	86	0.0886	89	71-129	3	35	mg/kg	01.08.2021 00:49	
m,p-Xylenes	<0.00400	0.200	0.176	88	0.180	90	70-135	2	35	mg/kg	01.08.2021 00:49	
o-Xylene	<0.00200	0.100	0.0878	88	0.0902	90	71-133	3	35	mg/kg	01.08.2021 00:49	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	98		94		94		70-130	%	01.08.2021 00:49
4-Bromofluorobenzene	88		87		86		70-130	%	01.08.2021 00:49

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3147110 Matrix: Soil Date Prep: 01.07.2021
Parent Sample Id: 683730-061 MS Sample Id: 683730-061 S MSD Sample Id: 683730-061 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	0.114	114	0.106	106	70-130	7	35	mg/kg	01.08.2021 01:34	
Toluene	<0.00200	0.100	0.110	110	0.100	100	70-130	10	35	mg/kg	01.08.2021 01:34	
Ethylbenzene	<0.00200	0.100	0.102	102	0.0915	92	71-129	11	35	mg/kg	01.08.2021 01:34	
m,p-Xylenes	<0.00401	0.200	0.209	105	0.188	94	70-135	11	35	mg/kg	01.08.2021 01:34	
o-Xylene	<0.00200	0.100	0.105	105	0.0928	93	71-133	12	35	mg/kg	01.08.2021 01:34	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	94		93		70-130	%	01.08.2021 01:34
4-Bromofluorobenzene	91		86		70-130	%	01.08.2021 01:34

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

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

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

Chain of Custody

Work Order No: 683873

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

Project Manager:	Joseph Hernandez	Bill to: (if different)	Kyle Littrell
Company Name:	WSP USA Inc.	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 E Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	432.236.3849	Email:	luis.delval@wsp.com; joe.hernandez@wsp.com

Work Order Comments

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

Project Name:	PLU PC 17	Turn Around	
Project Number:	TEC12920085	Routine ☐	
P.O. Number:	NRM2015454866	Rush: 24 hr	
Sampler's Name:	Luis Del Val	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Temperature (°C):	2.6/0.4	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:	1	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
~~SS03D~~ SS03C	S	1/7/2021	1030	4'	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

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

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time		Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			1-7-21 1648	2			
3				4			
5				6			

Revised Date 051418 Rev. 2018.1

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: WSP USA

Date/ Time Received: 01.07.2021 04.48.00 PM

Work Order #: 683873

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)?	.4	
#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**	Samples received in bulk containers.
#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: Cloe Clifton Date: 01.07.2021

Checklist reviewed by: Jessica Kramer Date: 01.08.2021

Jessica Kramer

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

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

CONDITIONS

Action 17910

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 17910
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	XTO's deferral requests to complete final remediation during any future major construction/alteration or final plugging and abandonment, whichever occurs first. WSP and XTO do not believe deferment will result in imminent risk to human health, the environment, or groundwater. The areas requested for deferral are identified on the site map as "BH01", "BH02", and "BH03". The areas have been delineated and documented in the report. At this time, OCD approves this request. The Deferral Request and C-141 will be accepted for record and marked accordingly. The release will remain open in OCD database files and reflect an open environmental issue. This is a Federal site and will require like approval from BLM.	6/30/2021