

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	NRM2010541885
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 32.109158 Longitude -103.910228
(NAD 83 in decimal degrees to 5 decimal places)

Site Name PLU 20 BD 102H	Site Type Well Pad
Date Release Discovered 3/30/2020	API# (if applicable) 30-015-45468

Unit Letter	Section	Township	Range	County
M	20	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)

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input checked="" type="checkbox"/> Other (describe) Recycled Produced Water	Volume/Weight Released (provide units) 255.47 bbls	Volume/Weight Recovered (provide units) 200 bbls

Cause of Release During frac operations a lay-flat line with recycled produced water was going into a working tank manifold and separated at the head. A third party contractor will be retained to complete remediation activities.

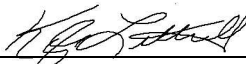
State of New Mexico
Oil Conservation Division

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Was this a major release as defined by 19.15.29.7(A) NMAC? <input type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release? An unauthorized release greater than 25 barrels.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? By Amy Ruth to Mike Bratcher; Rob Hamlet; Victoria Venegas; 'Griswold, Jim, EMNRD'; blm_nm_cfo_spill@blm.gov; Crisha Morgan on Tuesday, March 31, 2020 9:36 AM.	

Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> 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: <u>Kyle Littrell</u>	Title: <u>SH&E Supervisor</u>
Signature: <u></u>	Date: <u>4-13-20</u>
email: <u>Kyle_Littrell@xtoenergy.com</u>	Telephone: <u>432-221-7331</u>
<u>OCD Only</u>	
Received by: <u>Ramona Marcus</u>	Date: <u>4/14/2020</u>

NRM2010541885

Location:	PLU 20 BD 102H	
Spill Date:	3/30/2020	
Area 1		
Approximate Area =	36262.00	sq. ft.
Average Saturation (or depth) of spill =	0.25	inches
Average Porosity Factor =	0.03	
VOLUME OF LEAK		
Total Crude Oil =	0.00	bbls
Total Produced Water =	204.04	bbls
Area 2		
Approximate Area =	1064.00	sq. ft.
Average Saturation (or depth) of spill =	3.00	inches
Average Porosity Factor =	0.15	
VOLUME OF LEAK		
Total Crude Oil =	0.00	bbls
Total Produced Water =	7.11	bbls
Area 3		
Approximate Area =	4977.00	sq. ft.
Average Saturation (or depth) of spill =	4.00	inches
Average Porosity Factor =	0.15	
VOLUME OF LEAK		
Total Crude Oil =	0.00	bbls
Total Produced Water =	44.32	bbls
TOTAL VOLUME OF LEAK		
Total Crude Oil =	0.00	bbls
Total Produced Water =	255.47	bbls
TOTAL VOLUME RECOVERED		
Total Crude Oil =	0.00	bbls
Total Produced Water =	200.00	bbls

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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?	<u>>100</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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

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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 SupervisorSignature:  Date: 09/15/2020email: Kyle_Littrell@xtoenergy.com Telephone: (432)-221-7331**OCD Only**Received by: Cristina Eads Date: 09/25/2020

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Closure

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

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

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

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

Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature:  Date: 09/15/2020

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

OCD Only

Received by: Cristina Eads Date: 09/25/2020

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

Closure Approved by:  Date: 12/22/2020

Printed Name: Cristina Eads Title: Environmental Specialist



LT Environmental, Inc.

3300 North "A" Street
Building 1, Unit 103
Midland, Texas 79705
432.704.5178

September 21, 2020

New Mexico Oil Conservation Division
District 2
811 South First Street
Artesia, New Mexico 88210

**RE: Closure Request
Poker Lake Unit 20 Brushy Draw 102H
Incident Number NRM2010541885
Eddy County, New Mexico**

To Whom It May Concern:

LT Environmental, Inc. (LTE), on behalf of XTO Energy, Inc. (XTO), presents the following Closure Request detailing site assessment and soil sampling activities at the Poker Lake Unit (PLU) 20 Brushy Draw 102H (Site) in Unit M, Section 20, Township 25 South, Range 30 East, in Eddy County, New Mexico (Figure 1). The purpose of the site assessment and soil sampling activities was to assess for the presence or absence of impacts to soil following the release of recycled produced water at the Site. Based on field observations, field screening activities, and soil sample laboratory analytical results, XTO is submitting this Closure Request and requesting no further action (NFA) for Incident Number NRM2010541885.

RELEASE BACKGROUND

On March 30, 2020 during frac operations, a lay-flat line separated at the head resulting in the release of approximately 255.47 barrels (bbls) of recycled produced water onto the caliche well pad. A vacuum truck was dispatched to the Site to recover free-standing fluids; approximately 200 bbls of recycled produced water were recovered. No released fluids escaped the well pad. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form C-141 (Form C-141) on April 13, 2020 and was assigned Incident Number NRM2010541885.

SITE CHARACTERIZATION

LTE characterized the Site according to Table 1, *Closure Criteria for Soils Impacted by a Release*, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted water well with depth to groundwater data is United States Geological Survey (USGS) well 320628103533001, located approximately 1.1 miles east of the Site. The groundwater well has a reported depth to



groundwater of approximately 264 feet bgs and a total depth of 288 feet bgs. There are six groundwater wells within a 3-mile radius that all indicate regional depth to groundwater is greater than 100 feet bgs. New Mexico Office of the State Engineer (NMOSE) well C-03782, located 1.45 miles southeast of the Site, was most recently measured in January 2015 and had a reported depth to groundwater of approximately 277 feet bgs. The referenced well records are in Attachment 1. The closest continuously flowing water or significant watercourse to the Site is a dry wash located approximately 405 feet east of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area). The Site receptors are depicted on Figure 1.

During February 2020, in an effort to confirm depth to water in the area, a borehole (BH01) was advanced to a depth of 110 feet bgs via truck-mounted sonic drill rig. The borehole was located approximately 1,420 feet northwest of the Site. The location of borehole BH01 is provided on Figure 1. An LTE geologist logged and described soils continuously. The borehole lithologic/soil sampling log is included in Attachment 2. The borehole was left open for over 72 hours to allow for potential slow infill of groundwater. After the 72-hour waiting period without observing groundwater, it was confirmed that groundwater beneath the Site is greater than 110 feet bgs. The borehole was properly abandoned utilizing hydrated bentonite chips.

CLOSURE CRITERIA

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

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

SITE ASSESSMENT ACTIVITIES AND SOIL SAMPLING ACTIVITIES

On April 23, 2020, LTE personnel visited the Site to evaluate the release extent based on information provided on the Form C-141 and visual observations. LTE personnel collected five preliminary soil samples (SS01 through SS05) within the release extent from a depth of approximately 0.3 feet bgs to assess for the presence or absence of soil impacts at ground



surface. Soil was field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photoionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. The release extent and preliminary soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are presented on Figure 2.

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

Laboratory analytical results indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria in preliminary soil samples SS01 through SS05. To further evaluate for the presence or absence of impacted soil, additional lateral and vertical assessment activities were scheduled. Photographic documentation was conducted during the site visit. Photographs are included in Attachment 3.

On July 23, 2020, LTE personnel returned to the Site to oversee additional soil assessment activities. Eight potholes (PH01 through PH08) were advanced using a track-mounted backhoe to a maximum depth of approximately 2 feet bgs within the release extent. Potholes PH04 through PH08 were advanced at the SS01 through SS05 preliminary soil sample locations. Delineation soil samples were collected at approximately 1-foot bgs (PH01 through PH03, and PH07) and 2 feet bgs (PH01A, PH02A, PH03A, PH04 through PH06, and PH08). Soil from the potholes was field screened for volatile aromatic hydrocarbons and chloride utilizing a PID and Hach® chloride QuanTab® test strips, respectively. Field screening results and observations for each pothole were logged on lithologic/soil sampling logs, which are included in Attachment 2. The locations of delineation potholes (PH01 through PH08) are presented on Figure 3. The delineation soil samples were collected, handled, and analyzed as described above at Xenco in Carlsbad, New Mexico. All potholes were backfilled with soil removed.

ANALYTICAL RESULTS

Laboratory analytical results for preliminary soil samples SS01 through SS05 and delineation soil samples PH01/PH01A through PH03/PH03A, and PH04 through PH08 indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Attachment 4.

District 2
Page 4**CLOSURE REQUEST**

Preliminary soil samples SS01 through SS05 and delineation samples PH01/PH01A through PH03/PH03A, and PH04 through PH08 were collected from within the release extent from depths ranging from 0.3 feet to 2 feet bgs to assess for the presence or absence of soil impacts as a result of the March 30, 2020, recycled produced water release. Laboratory analytical results for the preliminary and delineation soil samples indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria.

Based on initial response efforts, soil sample laboratory analytical results compliant with the Closure Criteria, and confirmed depth to groundwater greater than 100 feet bgs, no soil excavation was warranted as a result of the recycled produced water release. XTO respectfully requests NFA for Incident Number NRM2010541885.

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

Sincerely,

LT ENVIRONMENTAL, INC.

Fatima Smith
Staff Geologist

Ashley L. Ager, P.G.
Senior Geologist

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

Attachments:

Figure 1	Site Location Map
Figure 2	Preliminary Soil Sample Locations
Figure 3	Delineation Soil Sample Locations
Table 1	Soil Analytical Reports



District 2
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- Attachment 1 Referenced Well Records
- Attachment 2 Lithologic / Soil Sample Logs
- Attachment 3 Photographic Log
- Attachment 4 Laboratory Analytical Reports

FIGURES



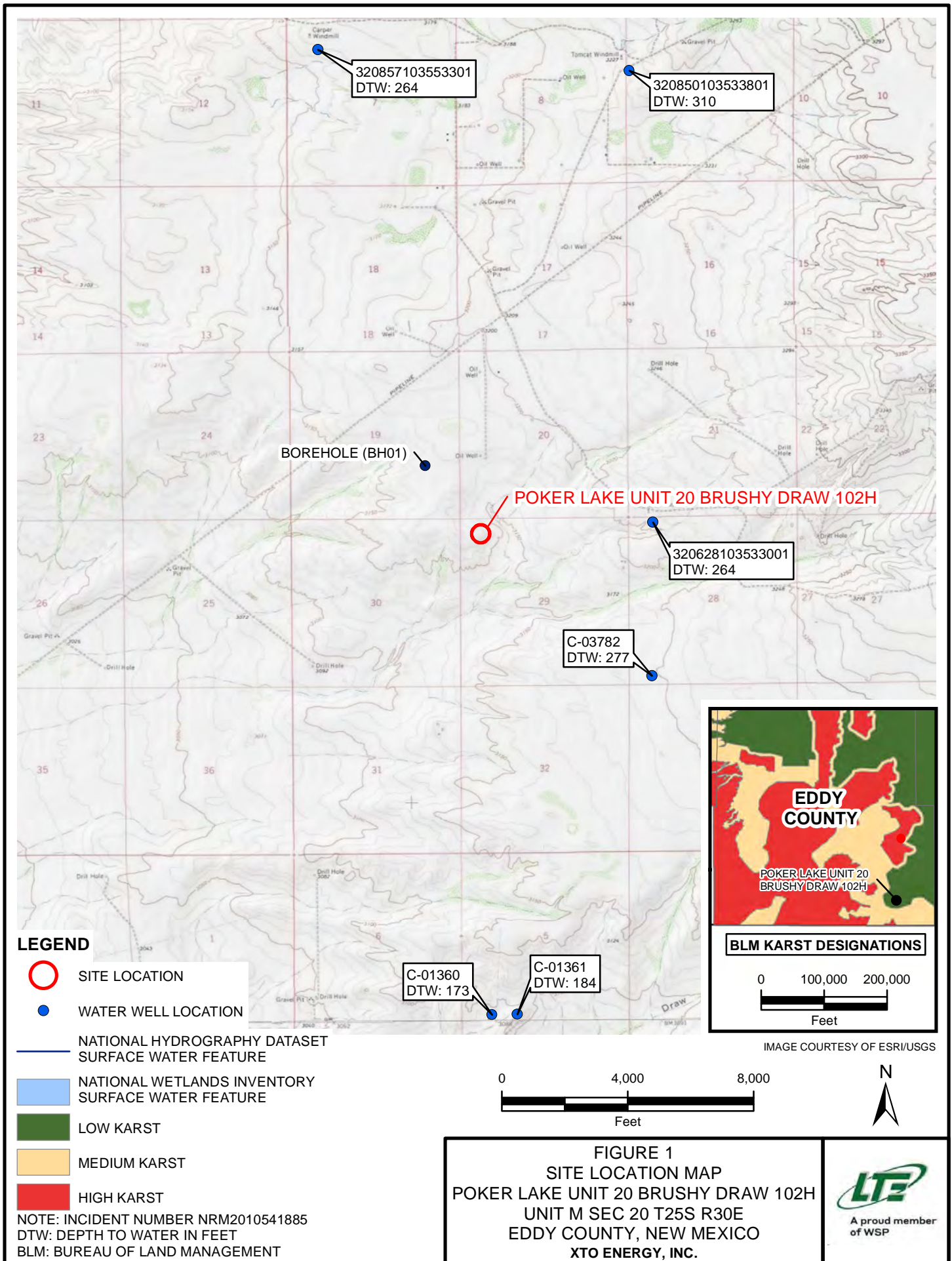




IMAGE COURTESY OF ESRI

LEGEND

RELEASE LOCATION

PRELIMINARY SOIL SAMPLE IN COMPLIANCE
WITH APPLICABLE CLOSURE CRITERIA

RELEASE EXTENT

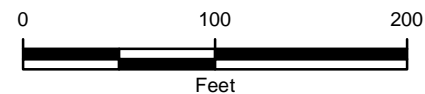


FIGURE 2
PRELIMINARY SOIL SAMPLE LOCATIONS
POKER LAKE UNIT 20 BRUSHY DRAW 102H
UNIT M SEC 20 T25S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.



NOTE: INCIDENT NUMBER NRM2010541885
 SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)



IMAGE COURTESY OF ESRI

LEGEND

- X** RELEASE LOCATION
- DELINEATION SOIL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- RELEASE EXTENT

NOTE: INCIDENT NUMBER NRM2010541885
 SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

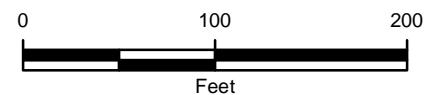


FIGURE 3
 DELINEATION SOIL SAMPLE LOCATIONS
 POKER LAKE UNIT 20 BRUSHY DRAW 102H
 UNIT M SEC 20 T25S R30E
 EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.



TABLES



TABLE 1
SOIL ANALYTICAL RESULTS

POKER LAKE UNIT 20 BRUSHY DRAW 102H
INCIDENT NUMBER NRM2010541885
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

Sample Name	Sample Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria			10	NE	NE	NE	50	NE	NE	NE	1,000	2,500	20,000
SS01	0 - 0.3	04/23/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	3,490
SS02	0 - 0.3	04/23/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.1	317	74.1	317	391	15,800
SS03	0 - 0.3	04/23/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.1	<50.1	<50.1	<50.1	<50.1	11,800
SS04	0 - 0.3	04/23/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	11,900
SS05	0 - 0.3	04/23/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	64.0	<50.2	64.0	64.0	13,600
PH01	1	07/23/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	348
PH01A	2	07/23/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.2	<50.2	<50.2	<50.2	<50.2	130
PH02	1	07/23/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	3,110
PH02A	2	07/23/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	41.9
PH03	1	07/23/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.2	<50.2	<50.2	<50.2	<50.2	734
PH03A	2	07/23/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	108
PH04	2	07/23/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	23.9
PH05	2	07/23/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.1	<50.1	<50.1	<50.1	<50.1	18.0
PH06	2	07/23/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	2,350
PH07	1	07/23/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	78.3
PH08	2	07/23/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.2	<50.2	<50.2	<50.2	<50.2	484

Notes:

bgs - below ground surface

BTEX - benzene, toluene, ethylbenzene, and total xylenes

DRO - diesel range organics

GRO - gasoline range organics

mg/kg - milligrams per kilogram

MRO - motor oil range organics

NMAC - New Mexico Administrative Code

NMOCD - New Mexico Oil Conservation Division

NE - not established

TPH - total petroleum hydrocarbons

Bold - indicates result exceeds the applicable regulatory standard

< - indicates result is below laboratory reporting limits

Table 1 - closure criteria for soils impacted by a release per NMAC 19.15.29 August 2018

ATTACHMENT 1: REFERENCED WELL RECORDS





USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category:

Site Information ▼

Geographic Area:

United States ▼

GO

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- [Full News](#) 

USGS 320628103533001 25S.30E.21.333424

Available data for this site

SUMMARY OF ALL AVAILABLE DATA ▼

GO

Well Site

DESCRIPTION:

Latitude 32°06'28", Longitude 103°53'30" NAD27

Eddy County, New Mexico , Hydrologic Unit 13060011

Well depth: 288 feet

Land surface altitude: 3,207 feet above NAVD88.

Well completed in "Alluvium, Bolson Deposits and Other Surface Deposits" (110AVMB) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1958-08-21	1998-01-28	4
Revisions	Unavailable (site:0) (timeseries:0)		

OPERATION:

Record for this site is maintained by the USGS New Mexico Water Science Center

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Title: NWIS Site Information for USA: Site Inventory

URL: [https://waterdata.usgs.gov/nwis/inventory?](https://waterdata.usgs.gov/nwis/inventory?agency_code=USGS&site_no=320628103533001)

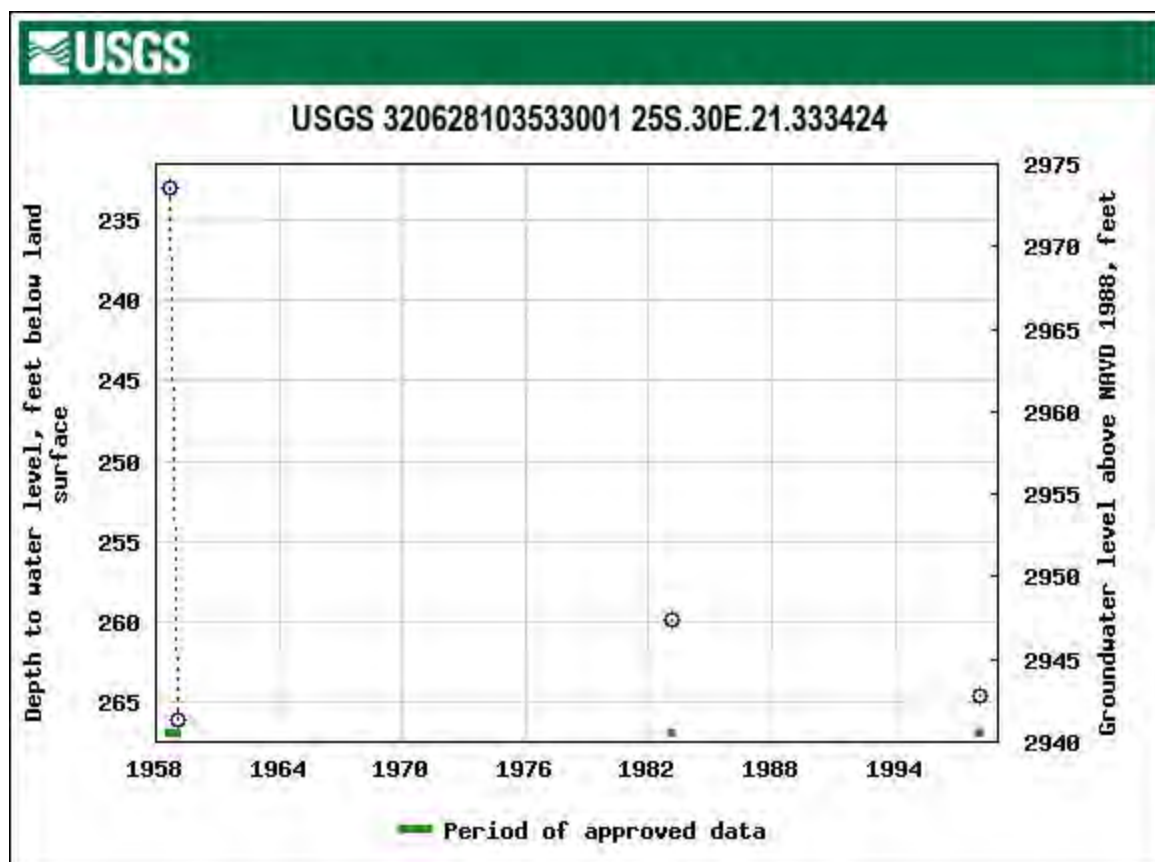
[agency_code=USGS&site_no=320628103533001](https://waterdata.usgs.gov/nwis/inventory?agency_code=USGS&site_no=320628103533001)



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Page Last Modified: 2020-08-17 12:21:22 EDT

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New Mexico Office of the State Engineer

Water Right Summary


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WR File Number: C 03782 **Subbasin:** CUB **Cross Reference:** -
Primary Purpose: EXP EXPLORATION
Primary Status: PMT PERMIT
Total Acres: **Subfile:** - **Header:** -
Total Diversion: 0 **Cause/Case:** -
Agent: ATKINS ENGR ASSOC INC
Contact: CHRIS CORTEZ
Owner: BOPCO, L.P.
Contact: BRIAN PREGGER

Documents on File

	Trn #	Doc	File/Act	Status		Transaction Desc.	From/		Acres	Diversion	Consumptive
				1	2		To				
get images	555125	EXPL	2014-11-14	PMT	LOG	C 03782	T		0	0	

Current Points of Diversion

(NAD83 UTM in meters)

POD Number	Well Tag	Source	Q	64Q16Q4Sec	Tws	Rng	X	Y	Other Location Desc
C 03782 POD1		Artesian	4	3	3	28 25S 30E	604526	3551444	2/3 MILE SW OF HEDGEHOG ROAD

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8/17/20 10:22 AM

WATER RIGHT SUMMARY



New Mexico Office of the State Engineer

Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest)						(NAD83 UTM in meters)	
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
C	03782	POD1	4	3	3	28	25S	30E	604526 3551444 
<hr/>									
Driller License:	331	Driller Company:				SBQ2, LLC DBA STEWART BROTHERS DRILLING CO.			
Driller Name:									
Drill Start Date:	01/16/2015	Drill Finish Date:				01/17/2015		Plug Date:	
Log File Date:	02/19/2015	PCW Rev Date:						Source:	Artesian
Pump Type:		Pipe Discharge Size:						Estimated Yield:	
Casing Size:	8.63	Depth Well:				805 feet		Depth Water:	277 feet

Water Bearing Stratifications:	Top	Bottom	Description
	260	320	Sandstone/Gravel/Conglomerate
	320	380	Sandstone/Gravel/Conglomerate
	380	410	Sandstone/Gravel/Conglomerate
	410	530	Shale/Mudstone/Siltstone
	530	590	Shale/Mudstone/Siltstone
	590	600	Shale/Mudstone/Siltstone
	600	630	Shale/Mudstone/Siltstone
	630	650	Shale/Mudstone/Siltstone
	650	700	Shale/Mudstone/Siltstone
	700	710	Shale/Mudstone/Siltstone
	710	760	Shale/Mudstone/Siltstone
	760	770	Shale/Mudstone/Siltstone
	770	780	Shale/Mudstone/Siltstone
	780	790	Shale/Mudstone/Siltstone
	790	805	Shale/Mudstone/Siltstone

Casing Perforations:	Top	Bottom
	270	805

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POINT OF DIVERSION SUMMARY



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USGS Water Resources

Data Category:


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Geographic Area:

United States ▼

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USGS 320850103533801 25S.30E.08.224444

Available data for this site

SUMMARY OF ALL AVAILABLE DATA ▼

GO

Well Site

DESCRIPTION:

Latitude 32°08'50", Longitude 103°53'38" NAD27

Eddy County, New Mexico , Hydrologic Unit 13060011

Well depth: not determined.

Land surface altitude: 3,232 feet above NAVD88.

Well completed in "Alluvium, Bolson Deposits and Other Surface Deposits" (110AVMB) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1958-08-19	1958-08-19	1
Revisions	Unavailable (site:0) (timeseries:0)		

OPERATION:

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Title: NWIS Site Information for USA: Site Inventory

URL: [https://waterdata.usgs.gov/nwis/inventory?](https://waterdata.usgs.gov/nwis/inventory?agency_code=USGS&site_no=320850103533801)

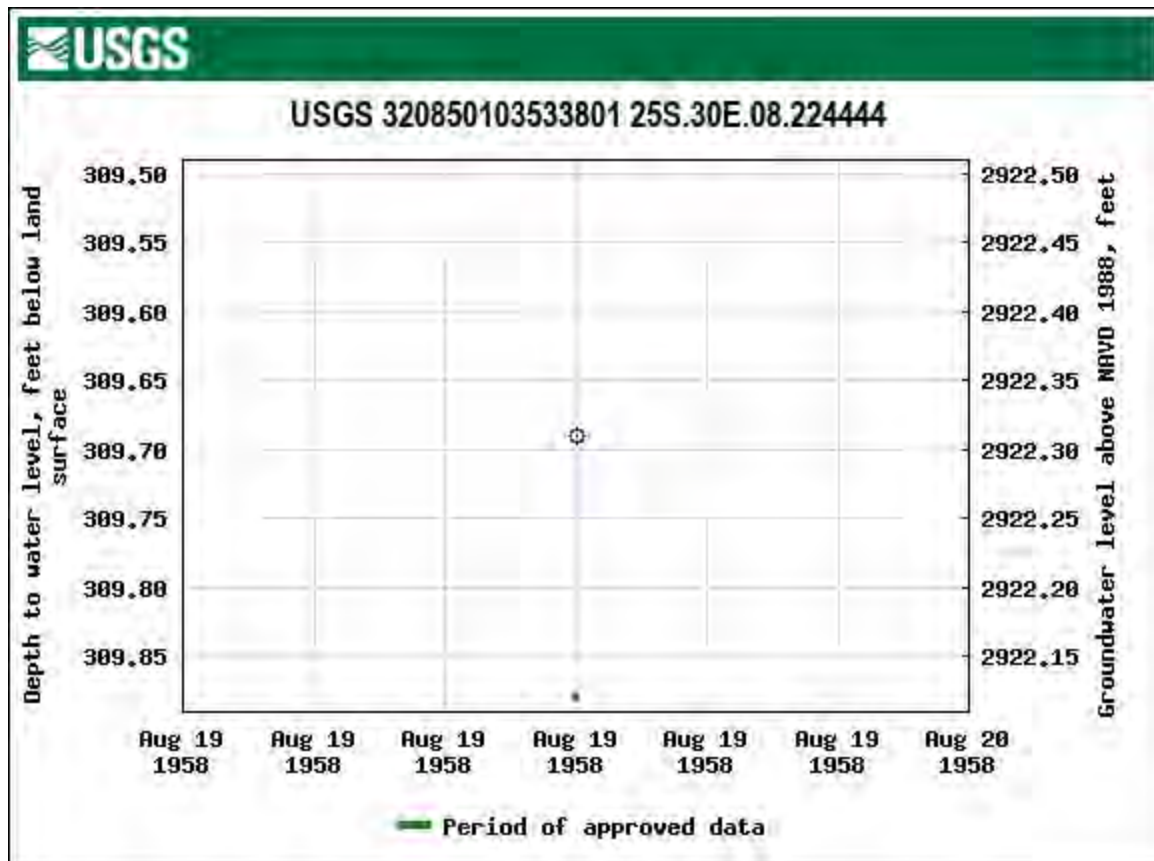
[agency_code=USGS&site_no=320850103533801](https://waterdata.usgs.gov/nwis/inventory?agency_code=USGS&site_no=320850103533801)



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Data Category:

Site Information ▼

Geographic Area:

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USGS 320857103553301 25S.30E.07.112331

Available data for this site

SUMMARY OF ALL AVAILABLE DATA ▼

GO

Well Site

DESCRIPTION:

Latitude 32°08'57", Longitude 103°55'33" NAD27

Eddy County, New Mexico , Hydrologic Unit 13060011

Well depth: 385 feet

Land surface altitude: 3,169 feet above NAVD88.

Well completed in "Alluvium, Bolson Deposits and Other Surface Deposits" (110AVMB) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1959-02-05	1998-01-28	5
Revisions	Unavailable (site:0) (timeseries:0)		

OPERATION:

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Title: NWIS Site Information for USA: Site Inventory

URL: [https://waterdata.usgs.gov/nwis/inventory?](https://waterdata.usgs.gov/nwis/inventory?agency_code=USGS&site_no=320857103553301)

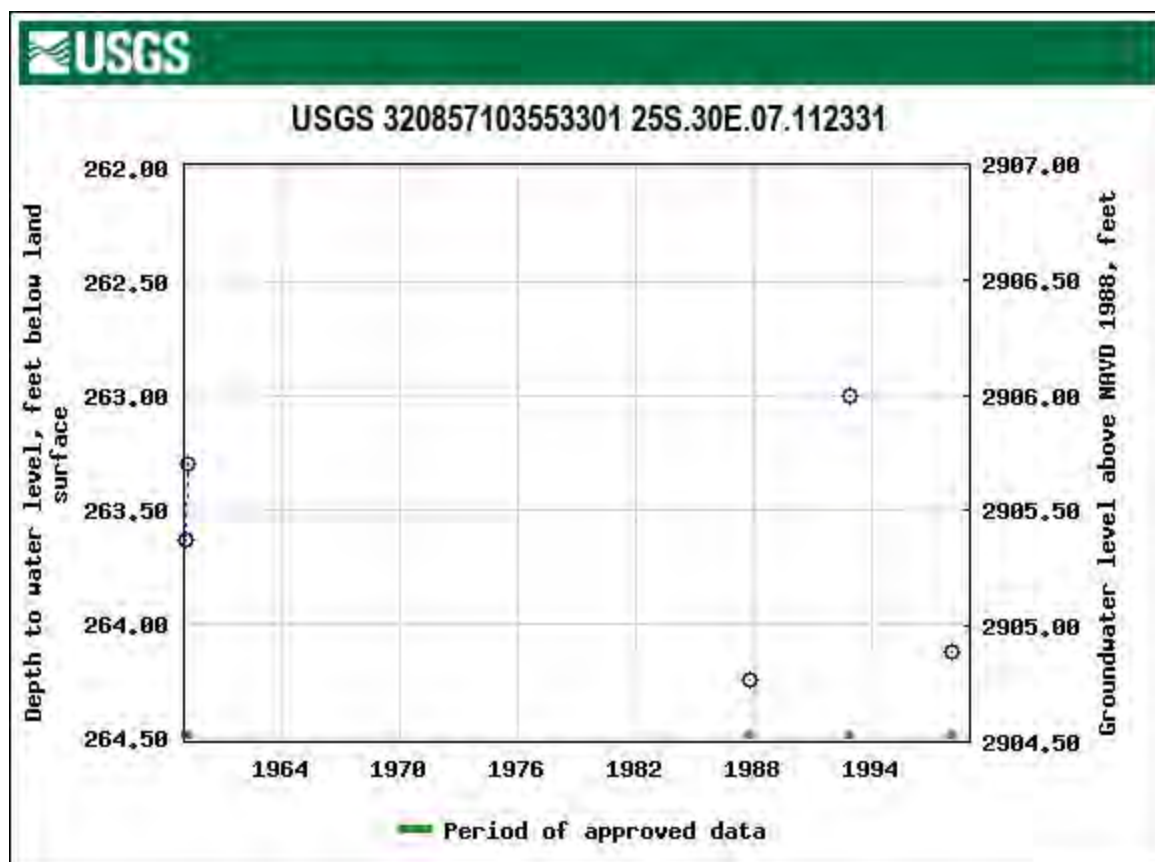
[agency_code=USGS&site_no=320857103553301](https://waterdata.usgs.gov/nwis/inventory?agency_code=USGS&site_no=320857103553301)



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Page Last Modified: 2020-08-17 12:25:20 EDT

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New Mexico Office of the State Engineer

Water Right Summary

WR File Number: C 01361 **Subbasin:** CUB **Cross Reference:** -
Primary Purpose: IND INDUSTRIAL
Primary Status: DCL DECLARATION
Total Acres: 0 **Subfile:** - **Header:** -
Total Diversion: 0 **Cause/Case:** -
Owner: EL PASO NATURAL GAS
Contact: PAULA JOY

Documents on File

Trn #	Doc	File/Act	Status		Transaction Desc.	From/ To	Acres	Diversion	Consumptive
			1	2					
460129	COWNF	2010-05-26	CHG	PRC	C 01361	T	0	0	
203463	DCL	1953-11-17	DCL	PRC	C 01361	T	0	0	

Current Points of Diversion

(NAD83 UTM in meters)

POD Number	Well Tag	Source	Q	Q16	Q4	Sec	Tws	Rng	X	Y	Other Location Desc
C 01361		Shallow	3	4	3	05	26S	30E	603240	3548157	

Place of Use

Q	Q	Q16	Q4	Sec	Tws	Rng	Acres	Diversion	CU	Use	Priority	Status	Other Location Desc
256	64	Q16	Q4	Sec	Tws	Rng	0	0	IND			DCL	NO PLACE OF USE GIVEN.

Source

Acres	Diversion	CU	Use	Priority	Source	Description
0	0		IND		GW	

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 WATER RIGHT
SUMMARY



New Mexico Office of the State Engineer

Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
C	01361	3	4	3	05	26S	30E	603240	3548157

**Driller License:** 95**Driller Company:** FOLK DRILLING CO.**Driller Name:****Drill Start Date:** 05/16/1952**Drill Finish Date:** 06/01/1952**Plug Date:****Log File Date:** 11/17/1953**PCW Rcv Date:****Source:** Shallow**Pump Type:****Pipe Discharge Size:****Estimated Yield:****Casing Size:** 12.75**Depth Well:** 775 feet**Depth Water:** 184 feet**Water Bearing Stratifications:**

Top	Bottom	Description
195	230	Sandstone/Gravel/Conglomerate
255	295	Sandstone/Gravel/Conglomerate
535	570	Sandstone/Gravel/Conglomerate
695	735	Sandstone/Gravel/Conglomerate
740	750	Sandstone/Gravel/Conglomerate

Casing Perforations:

Top	Bottom
145	353
418	555
530	755

Meter Number: 16559**Meter Make:** SIEMENS**Meter Serial Number:** L1254817**Meter Multiplier:** 100.0000**Number of Dials:** 8**Meter Type:** Diversion**Unit of Measure:** Gallons**Return Flow Percent:****Usage Multiplier:****Reading Frequency:** Quarterly**Meter Readings (in Acre-Feet)**

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount Online
07/01/2014	2014	432977	A	RPT		0
09/30/2014	2014	542020	A	RPT		33.464
11/20/2014	2014	71523	A	RPT		0
12/31/2014	2014	10869200	A	RPT		33.137
04/01/2015	2015	20528000	A	RPT		29.642
07/01/2015	2015	32166600	A	RPT		35.718
10/02/2019	2019	41391130	A	RPT		2830.904
01/02/2020	2020	44360000	A	RPT		911.113

**YTD Meter Amounts:	Year	Amount
	2014	66.601
	2015	65.360
	2019	2830.904
	2020	911.113

Meter Number: 16560**Meter Make:** MASTERMETER**Meter Serial Number:** 425026402**Meter Multiplier:** 1.0000

Number of Dials: 9 **Meter Type:** Diversion
Unit of Measure: Gallons **Return Flow Percent:**
Usage Multiplier: **Reading Frequency:** Monthly

Meter Readings (in Acre-Feet)

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount Online
01/03/2012	2012	796624	A	RPT		0
04/01/2014	2014	322335	R	RPT	Meter Rollover	161.335
07/01/2014	2014	422977	A	RPT		30.886
10/01/2014	2014	542008	A	RPT		36.529
11/20/2014	2014	597747	A	RPT		17.106
11/21/2014	2014	71523	A	RPT		0
12/31/2014	2014	108692	A	RPT		11.407
02/01/2015	2015	144071	A	RPT		10.857
03/02/2015	2015	177073	A	RPT		10.128
04/01/2015	2015	204100	A	RPT		8.294
04/30/2015	2015	246672	A	RPT		13.065
05/31/2015	2015	286863	A	RPT		12.334
07/01/2015	2015	329411	A	RPT		13.058
08/01/2015	2015	350757	A	RPT		6.551
08/31/2015	2015	384122	A	RPT		10.239
10/01/2015	2015	413202	A	RPT		8.924
10/01/2015	2015	0	A	RPT	Meter Change	0
10/31/2015	2015	2767800	A	RPT		8.494
11/30/2015	2015	5636900	A	RPT		8.805
12/31/2015	2015	7565000	A	RPT		5.917
01/31/2016	2016	9247200	A	RPT		5.162
02/29/2016	2016	12569900	A	RPT		10.197
03/31/2016	2016	14698800	A	RPT		6.533
04/30/2016	2016	16601309	A	RPT		5.839
05/30/2016	2016	19235300	A	RPT		8.083
06/30/2016	2016	22955800	A	RPT		11.418
07/31/2016	2016	26437114	A	RPT		10.684
08/30/2016	2016	30077563	A	RPT		11.172
09/30/2016	2016	32631836	A	RPT		7.839
10/31/2016	2016	35193200	A	RPT		7.861
11/30/2016	2016	37896100	A	RPT		8.295
12/31/2016	2016	41023100	A	RPT		9.596
04/04/2019	2019	99357190	A	RPT		179.021

**YTD Meter Amounts:	Year	Amount
	2012	0
	2014	257.263
	2015	116.666
	2016	102.679
	2019	179.021

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POINT OF DIVERSION SUMMARY



New Mexico Office of the State Engineer

Water Right Summary

WR File Number: C 01360 **Subbasin:** CUB **Cross Reference:** -
Primary Purpose: IND INDUSTRIAL
Primary Status: DCL DECLARATION
Total Acres: 0 **Subfile:** - **Header:** -
Total Diversion: 0 **Cause/Case:** -
Owner: EL PASO NATURAL GAS
Contact: PAULA JOY

Documents on File

Trn #	Doc	File/Act	Status		Transaction Desc.	From/ To	Acres	Diversion	Consumptive
			1	2					
460091	COWNF	2010-05-26	CHG	PRC	C 01360	T	0	0	
203459	DCL	1953-11-17	DCL	PRC	C 01360	T	0	0	

Current Points of Diversion

(NAD83 UTM in meters)

POD Number	Well Tag	Source	Q	Q16Q4Sec	Tws	Rng	X	Y	Other Location Desc
C 01360		Shallow	4	3	3	05 26S 30E	602997	3548152	

Place of Use

Q	Q	Q16Q4Sec	Tws	Rng	Acres	Diversion	CU	Use	Priority	Status	Other Location Desc
256	64	Q16Q4Sec			0	0		IND		DCL	NO PLACE OF USE GIVEN.

Source

Acres	Diversion	CU	Use	Priority	Source	Description
0	0		IND		GW	

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WATER RIGHT
SUMMARY



New Mexico Office of the State Engineer Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
C	01360	4	3	3	05	26S	30E	602997	3548152

Driller License: 95

Driller Company: FOLK DRILLING CO.

Driller Name:

Drill Start Date: 04/26/1952

Drill Finish Date: 05/15/1952

Plug Date:

Log File Date: 11/17/1953

PCW Rcv Date:

Source: Shallow

Pump Type:

Pipe Discharge Size:

Estimated Yield:

Casing Size: 12.75

Depth Well: 770 feet

Depth Water: 173 feet

Water Bearing Stratifications:

Top	Bottom	Description
210	220	Sandstone/Gravel/Conglomerate
580	585	Sandstone/Gravel/Conglomerate
665	710	Sandstone/Gravel/Conglomerate
725	770	Sandstone/Gravel/Conglomerate

Casing Perforations:

Top	Bottom
180	289
538	770

Meter Number: 16557

Meter Make: SIEMENS

Meter Serial Number: L1254823

Meter Multiplier: 100.0000

Number of Dials: 8

Meter Type: Diversion

Unit of Measure: Gallons

Return Flow Percent:

Usage Multiplier:

Reading Frequency: Quarterly

Meter Readings (in Acre-Feet)

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount Online
07/01/2014	2014	234997	A	RPT		0
09/30/2014	2014	354169	A	RPT		36.573
11/20/2014	2014	7281000	A	RPT		0
12/31/2014	2014	11430100	A	RPT		12.733
04/01/2015	2015	22535200	A	RPT		34.080
07/01/2015	2015	35821800	A	RPT		40.775
10/05/2015	2015	46631200	A	RPT		33.173
12/31/2015	2015	55653200	A	RPT		27.688
01/31/2016	2016	58047600	A	RPT		7.348
02/29/2016	2016	61081100	A	RPT		9.309
03/31/2016	2016	62593100	A	RPT		4.640
06/30/2016	2016	71642600	A	RPT		27.772
10/03/2016	2016	81998399	A	RPT		31.781
12/31/2016	2016	90558600	A	RPT		26.270
04/04/2019	2019	164290087	A	RPT		226.274
10/02/2019	2019	790380	A	RPT	METER CHANGE OUT 07/2019	0
01/02/2020	2020	1733720	A	RPT		289.500

**YTD Meter Amounts:	Year	Amount
	2014	49.306
	2015	135.716
	2016	107.120
	2019	226.274
	2020	289.500

Meter Number:	16558	Meter Make:	MASTERMETER
Meter Serial Number:	32530403	Meter Multiplier:	100.0000
Number of Dials:	6	Meter Type:	Diversion
Unit of Measure:	Gallons	Return Flow Percent:	
Usage Multiplier:		Reading Frequency:	

Meter Readings (in Acre-Feet)

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount Online
10/01/2014	2014	354169	A	RPT		0
11/20/2014	2014	415555	A	RPT		18.839
11/21/2014	2014	72810	A	RPT		0
12/31/2014	2014	112178	A	RPT		12.082
02/01/2015	2015	147039	A	RPT		10.698
03/02/2015	2015	188133	A	RPT		12.611
04/01/2015	2015	224102	A	RPT		11.038
04/30/2015	2015	270723	A	RPT		14.307
05/31/2015	2015	315628	A	tw		13.781
07/01/2015	2015	369075	A	tw		16.402
08/01/2015	2015	395528	A	tw		8.118
08/31/2015	2015	455361	A	tw		18.362
10/01/2015	2015	466312	A	RPT		3.361

**YTD Meter Amounts:	Year	Amount
	2014	30.921
	2015	108.678


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POINT OF DIVERSION SUMMARY


ATTACHMENT 2: LITHOLOGIC SOIL SAMPLE LOGS





 LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 A proud member of WSP Compliance · Engineering · Remediation		BH or PH Name:		Date:				
		BH01		2/4/2020-2/5/2020				
		Site Name: PLU-CVX-JV-RR 003H						
		RP or Incident Number: 2RP-3790						
LTE Job Number:								
LITHOLOGIC / SOIL SAMPLING LOG								
Lat/Long:		Field Screening:		Hole Diameter:				
		N/A		4"/6"				
Comments:								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
					0	0		Open Excavation
						2.5'	SW-S	SAND, dry, light brown-tan, well graded, coarse-fine grain, no stain, no odor.
					10	6'	SP	SAND, dry, poorly graded, light brown-brown, fine-very fine grain, no stain, no odor.
					20			
					30	27.5'	SP	SAND, dry, poorly graded, light brown-tan, fine-very fine grain, no stain, no odor.
					40			
					50	44.5'	SP-SM	SILTY sand, light brown-tan, no plasticity, non cohesive, trace high plasticity clay nodules (reddish brown), no stain, no odor.
					60	59.5'	SM	SILTY sand, moist, light brown-brown, no plasticity, non-cohesive, no stain, no odor.
					70			
					80	82'	CL-S	CLAY, moist, brown-greenish grey, low plasticity, cohesive, no stain, no odor.
					90	85'	SM	SILTY sand, dry, light brown-brown, no plasticity, non-cohesive, no stain, no odor.
					100	95'	CH	CLAY, moist, brown-dark brown, high plasticity, cohesive, few tan laminations, no stain, no odor.
						101'	SP-S	SANDSTONE, dry, tan-light brown, moderately consolidated, poorly graded, no stain, no odor.
					110	105'	CH	CLAY, moist, dark brown-brown, high plasticity, cohesive, trace sand laminations, no stain, no odor.
								Total depth 110 feet bgs


 <p>LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220</p> <p>A proud member of WSP</p> <p>Compliance · Engineering · Remediation</p>		BH or PH Name:		Date:				
		PH01		7/23/2020				
		Site Name: PLU 20 BD102H						
		RP or Incident Number: NRM2010541885						
LTE Job Number: 012920062								
LITHOLOGIC / SOIL SAMPLING LOG								
Lat/Long: 32.109158, -103.910228			Field Screening:		Logged By: FS			
			Hatch chloride strips, PID		Method: Backhoe			
Hole Diameter:								
Total Depth: 2'								
Comments: All chloride screenings done with a 40% correction factor.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CCHE	CALICHE, dry, tan-off white, poorly consolidated, no stain, no odor
D	728	0.1	N	PH01	1'	1		SAA
D	386	0.1	N	PH01A	2'	2		SAA
Total depth 2 feet bgs								


 <p>LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220</p> <p>A proud member of WSP</p>		BH or PH Name: PH02		Date: 7/23/2020				
		Site Name: PLU 20 BD102H						
		RP or Incident Number: NRM2010541885						
		LTE Job Number: 012920062						
LITHOLOGIC / SOIL SAMPLING LOG								
Lat/Long: 32.109158, -103.910228		Field Screening: Hatch chloride strips, PID		Logged By: FS				
				Method: Backhoe				
Comments: All chloride screenings done with a 40% correction factor.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CCHE	CALICHE, dry, tan-off white, poorly consolidated, no stain, no odor
D	2,486	0.0	N	PH02	1'	1		SAA
D	296	0.1	N	PH02A	2'	2	SP	SAND, dry, reddish brown, poorly graded, fine-very fine, no stain, no
								Total depth 2 feet bgs

 <p>LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220</p> <p>A proud member of WSP</p>		BH or PH Name: PH03		Date: 7/23/2020				
		Site Name: PLU 20 BD102H						
		RP or Incident Number: NRM2010541885						
		LTE Job Number: 012920062						
LITHOLOGIC / SOIL SAMPLING LOG								
Lat/Long: 32.109158, -103.910228			Field Screening: Hatch chloride strips, PID		Logged By: FS			
					Method: Backhoe			
Comments: All chloride screenings done with a 40% correction factor.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CCHE	CALICHE, dry, tan-off white, poorly consolidated, no stain, no odor
D	946	0.0	N	PH03	1'	1		SAA
D	341	0.0	N	PH03A	2'	2	SP	SAND, dry, reddish brown, poorly graded, fine-very fine, no stain, no
								Total depth 2 feet bgs

 <p>LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220</p> <p>A proud member of WSP</p> <p>Compliance · Engineering · Remediation</p>		BH or PH Name:		Date:				
		PH04		7/23/2020				
		Site Name: PLU 20 BD102H						
		RP or Incident Number: NRM2010541885						
LTE Job Number: 012920062								
LITHOLOGIC / SOIL SAMPLING LOG								
Lat/Long: 32.109158, -103.910228			Field Screening:		Logged By: FS			
			Hatch chloride strips, PID		Method: Backhoe			
			Hole Diameter:		Total Depth: 2'			
Comments: All chloride screenings done with a 40% correction factor.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D	257	0.0	N	PH04	2'	0	CCHE	CALICHE, dry, tan-off white, poorly consolidated, no stain, no odor
						1		SAA
						2		SAA
						Total depth 2 feet bgs		

 <p>LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220</p> <p>A proud member of WSP</p> <p>Compliance · Engineering · Remediation</p>		BH or PH Name:		Date:				
		PH05		7/23/2020				
		Site Name: PLU 20 BD102H						
		RP or Incident Number: NRM2010541885						
LTE Job Number: 012920062								
LITHOLOGIC / SOIL SAMPLING LOG								
Lat/Long: 32.109158, -103.910228			Field Screening:		Logged By: FS			
			Hatch chloride strips, PID		Method: Backhoe			
			Hole Diameter:		Total Depth: 2'			
Comments: All chloride screenings done with a 40% correction factor.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D	246	0.0	N	PH05	2'	0	CCHE	CALICHE, dry, tan-off white, poorly consolidated, no stain, no odor
						1		SAA
						2		SAA
						Total depth 2 feet bgs		

 <p>LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220</p> <p>A proud member of WSP</p> <p>Compliance · Engineering · Remediation</p>		BH or PH Name:		Date:				
		PH06		7/23/2020				
		Site Name: PLU 20 BD102H						
		RP or Incident Number: NRM2010541885						
LTE Job Number: 012920062								
LITHOLOGIC / SOIL SAMPLING LOG								
Lat/Long: 32.109158, -103.910228			Field Screening:		Logged By: FS			
			Hatch chloride strips, PID		Method: Backhoe			
			Hole Diameter:		Total Depth: 2'			
Comments: All chloride screenings done with a 40% correction factor.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D	2,156	0.1	N	PH06	2'	0	CCHE	CALICHE, dry, tan-off white, poorly consolidated, no stain, no odor
						1		SAA
						2		SAA
						Total depth 2 feet bgs		

 <p>LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220</p> <p>A proud member of WSP</p> <p>Compliance · Engineering · Remediation</p>		BH or PH Name:		Date:				
		PH08		7/23/2020				
		Site Name: PLU 20 BD102H						
		RP or Incident Number: NRM2010541885						
LTE Job Number: 012920062								
LITHOLOGIC / SOIL SAMPLING LOG								
Lat/Long: 32.109158, -103.910228			Field Screening:		Logged By: FS			
			Hatch chloride strips, PID		Method: Backhoe			
			Hole Diameter:		Total Depth: 2'			
Comments: All chloride screenings done with a 40% correction factor.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D	728	0.1	N	PH08	2'	0	CCHE	CALICHE, dry, tan-off white, poorly consolidated, no stain, no odor
						2		SAA
								SAA
Total depth 2 feet bgs								

ATTACHMENT 3: PHOTOGRAPHIC LOG

PHOTOGRAPHIC LOG



Photograph 1: Initial on pad release facing East



Photograph 2: Initial on pad release facing West



Photograph 3: Southwest view of SS04 and SS05



Photograph 4: Far Eastern corner of release, North of SS03, facing West

PHOTOGRAPHIC LOG



Photograph 5: Delineation in vicinity of SS04 facing East



Photograph 6: Delineation of PH02 facing South

ATTACHMENT 4: LABORATORY ANALYTICAL RESULTS





Analytical Report 659667

for

LT Environmental, Inc.

Project Manager: Dan Moir

PLU 20 BD 102H

012920062

04.28.2020

Collected By: Client

**1089 N Canal Street
Carlsbad, NM 88220**

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

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

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



04.28.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: XENCO Report No(s): **659667**

PLU 20 BD 102H

Project Address:

Dan Moir:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 659667. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 659667 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads '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 659667****LT Environmental, Inc., Arvada, CO**

PLU 20 BD 102H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS01	S	04.23.2020 10:02	0 - 0.3 ft	659667-001
SS02	S	04.23.2020 10:05	0 - 0.3 ft	659667-002
SS03	S	04.23.2020 10:07	0 - 0.3 ft	659667-003
SS04	S	04.23.2020 10:10	0 - 0.3 ft	659667-004
SS05	S	04.23.2020 10:14	0 - 0.3 ft	659667-005



CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: PLU 20 BD 102H

Project ID: 012920062
Work Order Number(s): 659667

Report Date: 04.28.2020
Date Received: 04.23.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analysis Summary 659667

LT Environmental, Inc., Arvada, CO

Project Name: PLU 20 BD 102H

Project Id: 012920062

Contact: Dan Moir

Project Location:

Date Received in Lab: Thu 04.23.2020 13:36

Report Date: 04.28.2020 11:22

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	659667-001	659667-002	659667-003	659667-004	659667-005	
	<i>Field Id:</i>	SS01	SS02	SS03	SS04	SS05	
	<i>Depth:</i>	0-0.3 ft	0-0.3 ft	0-0.3 ft	0-0.3 ft	0-0.3 ft	
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	
	<i>Sampled:</i>	04.23.2020 10:02	04.23.2020 10:05	04.23.2020 10:07	04.23.2020 10:10	04.23.2020 10:14	
BTEX by EPA 8021B	<i>Extracted:</i>	04.23.2020 16:00	04.23.2020 16:00	04.23.2020 16:00	04.23.2020 16:00	04.23.2020 16:00	
	<i>Analyzed:</i>	04.23.2020 20:24	04.23.2020 21:25	04.23.2020 21:45	04.23.2020 22:06	04.23.2020 22:26	
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Benzene		<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	
Toluene		<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	
Ethylbenzene		<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	
m,p-Xylenes		<0.00395 0.00395	<0.00399 0.00399	<0.00398 0.00398	<0.00399 0.00399	<0.00401 0.00401	
o-Xylene		<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	
Total Xylenes		<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	
Total BTEX		<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	
Chloride by EPA 300	<i>Extracted:</i>	04.23.2020 15:00	04.23.2020 15:00	04.23.2020 15:00	04.23.2020 15:00	04.23.2020 15:00	
	<i>Analyzed:</i>	04.23.2020 16:25	04.23.2020 16:31	04.23.2020 16:36	04.23.2020 16:42	04.23.2020 16:47	
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Chloride		3490 99.6	15800 499	11800 501	11900 504	13600 501	
TPH by SW8015 Mod	<i>Extracted:</i>	04.23.2020 17:00	04.23.2020 17:00	04.23.2020 17:00	04.23.2020 17:00	04.23.2020 17:00	
	<i>Analyzed:</i>	04.23.2020 22:03	04.23.2020 22:24	04.23.2020 22:44	04.24.2020 17:27	04.24.2020 17:47	
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<50.1 50.1	<50.1 50.1	<50.2 50.2	<50.2 50.2	
Diesel Range Organics (DRO)		<50.0 50.0	317 50.1	<50.1 50.1	<50.2 50.2	64.0 50.2	
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	74.1 50.1	<50.1 50.1	<50.2 50.2	<50.2 50.2	
Total GRO-DRO		<50.0 50.0	317 50.1	<50.1 50.1	<50.2 50.2	64.0 50.2	
Total TPH		<50.0 50.0	391 50.1	<50.1 50.1	<50.2 50.2	64.0 50.2	

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

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

Jessica Kramer
Project Manager



Certificate of Analytical Results 659667

LT Environmental, Inc., Arvada, CO

PLU 20 BD 102H

Sample Id: **SS01**
Lab Sample Id: 659667-001

Matrix: Soil
Date Collected: 04.23.2020 10:02

Date Received: 04.23.2020 13:36
Sample Depth: 0 - 0.3 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3124031

Date Prep: 04.23.2020 15:00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3490	99.6	mg/kg	04.23.2020 16:25		10

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3124046

Date Prep: 04.23.2020 17:00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.23.2020 22:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.23.2020 22:03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.23.2020 22:03	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	04.23.2020 22:03	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	04.23.2020 22:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	04.23.2020 22:03	
o-Terphenyl	84-15-1	120	%	70-135	04.23.2020 22:03	



Certificate of Analytical Results 659667

LT Environmental, Inc., Arvada, CO

PLU 20 BD 102H

Sample Id: **SS01**
Lab Sample Id: 659667-001

Matrix: Soil
Date Collected: 04.23.2020 10:02

Date Received: 04.23.2020 13:36
Sample Depth: 0 - 0.3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.23.2020 16:00

Basis: Wet Weight

Seq Number: 3124024

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	04.23.2020 20:24	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	04.23.2020 20:24	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	04.23.2020 20:24	U	1
m,p-Xylenes	179601-23-1	<0.00395	0.00395	mg/kg	04.23.2020 20:24	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	04.23.2020 20:24	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	04.23.2020 20:24	U	1
Total BTEX		<0.00198	0.00198	mg/kg	04.23.2020 20:24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	96	%	70-130	04.23.2020 20:24	
1,4-Difluorobenzene	540-36-3	107	%	70-130	04.23.2020 20:24	



Certificate of Analytical Results 659667

LT Environmental, Inc., Arvada, CO

PLU 20 BD 102H

Sample Id: **SS02**
Lab Sample Id: 659667-002

Matrix: Soil
Date Collected: 04.23.2020 10:05

Date Received: 04.23.2020 13:36
Sample Depth: 0 - 0.3 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3124031

Date Prep: 04.23.2020 15:00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	15800	499	mg/kg	04.23.2020 16:31		50

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3124046

Date Prep: 04.23.2020 17:00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	04.23.2020 22:24	U	1
Diesel Range Organics (DRO)	C10C28DRO	317	50.1	mg/kg	04.23.2020 22:24		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	74.1	50.1	mg/kg	04.23.2020 22:24		1
Total GRO-DRO	PHC628	317	50.1	mg/kg	04.23.2020 22:24		1
Total TPH	PHC635	391	50.1	mg/kg	04.23.2020 22:24		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	04.23.2020 22:24	
o-Terphenyl	84-15-1	126	%	70-135	04.23.2020 22:24	



Certificate of Analytical Results 659667

LT Environmental, Inc., Arvada, CO

PLU 20 BD 102H

Sample Id: **SS02**
Lab Sample Id: 659667-002

Matrix: Soil
Date Collected: 04.23.2020 10:05

Date Received: 04.23.2020 13:36
Sample Depth: 0 - 0.3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.23.2020 16:00

Basis: Wet Weight

Seq Number: 3124024

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.23.2020 21:25	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.23.2020 21:25	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.23.2020 21:25	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	04.23.2020 21:25	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.23.2020 21:25	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	04.23.2020 21:25	U	1
Total BTEX		<0.00200	0.00200	mg/kg	04.23.2020 21:25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	92	%	70-130	04.23.2020 21:25	
1,4-Difluorobenzene	540-36-3	108	%	70-130	04.23.2020 21:25	



Certificate of Analytical Results 659667

LT Environmental, Inc., Arvada, CO

PLU 20 BD 102H

Sample Id: **SS03** Matrix: Soil Date Received: 04.23.2020 13:36
 Lab Sample Id: 659667-003 Date Collected: 04.23.2020 10:07 Sample Depth: 0 - 0.3 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 04.23.2020 15:00 Basis: Wet Weight
 Seq Number: 3124031

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11800	501	mg/kg	04.23.2020 16:36		50

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 04.23.2020 17:00 Basis: Wet Weight
 Seq Number: 3124046

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	04.23.2020 22:44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	04.23.2020 22:44	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	04.23.2020 22:44	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	04.23.2020 22:44	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	04.23.2020 22:44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	04.23.2020 22:44	
o-Terphenyl	84-15-1	125	%	70-135	04.23.2020 22:44	



Certificate of Analytical Results 659667

LT Environmental, Inc., Arvada, CO

PLU 20 BD 102H

Sample Id: **SS03**
Lab Sample Id: 659667-003

Matrix: Soil
Date Collected: 04.23.2020 10:07

Date Received: 04.23.2020 13:36
Sample Depth: 0 - 0.3 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3124024

Date Prep: 04.23.2020 16:00

Prep Method: SW5035A

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	04.23.2020 21:45	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	04.23.2020 21:45	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	04.23.2020 21:45	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	04.23.2020 21:45	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	04.23.2020 21:45	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	04.23.2020 21:45	U	1
Total BTEX		<0.00199	0.00199	mg/kg	04.23.2020 21:45	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	04.23.2020 21:45		
1,4-Difluorobenzene	540-36-3	107	%	70-130	04.23.2020 21:45		



Certificate of Analytical Results 659667

LT Environmental, Inc., Arvada, CO

PLU 20 BD 102H

Sample Id: **SS04**
Lab Sample Id: 659667-004

Matrix: Soil
Date Collected: 04.23.2020 10:10

Date Received: 04.23.2020 13:36
Sample Depth: 0 - 0.3 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3124031

Date Prep: 04.23.2020 15:00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11900	504	mg/kg	04.23.2020 16:42		50

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3124187

Date Prep: 04.23.2020 17:00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	04.24.2020 17:27	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	04.24.2020 17:27	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	04.24.2020 17:27	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	04.24.2020 17:27	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	04.24.2020 17:27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	04.24.2020 17:27	
o-Terphenyl	84-15-1	105	%	70-135	04.24.2020 17:27	



Certificate of Analytical Results 659667

LT Environmental, Inc., Arvada, CO

PLU 20 BD 102H

Sample Id: **SS04**
Lab Sample Id: 659667-004

Matrix: Soil
Date Collected: 04.23.2020 10:10

Date Received: 04.23.2020 13:36
Sample Depth: 0 - 0.3 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3124024

Prep Method: SW5035A

% Moisture:

Date Prep: 04.23.2020 16:00

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.23.2020 22:06	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.23.2020 22:06	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.23.2020 22:06	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	04.23.2020 22:06	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.23.2020 22:06	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	04.23.2020 22:06	U	1
Total BTEX		<0.00200	0.00200	mg/kg	04.23.2020 22:06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	108	%	70-130	04.23.2020 22:06	
4-Bromofluorobenzene	460-00-4	98	%	70-130	04.23.2020 22:06	



Certificate of Analytical Results 659667

LT Environmental, Inc., Arvada, CO

PLU 20 BD 102H

Sample Id: **SS05**
Lab Sample Id: 659667-005

Matrix: Soil
Date Collected: 04.23.2020 10:14

Date Received: 04.23.2020 13:36
Sample Depth: 0 - 0.3 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3124031

Date Prep: 04.23.2020 15:00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	13600	501	mg/kg	04.23.2020 16:47		50

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3124187

Date Prep: 04.23.2020 17:00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	04.24.2020 17:47	U	1
Diesel Range Organics (DRO)	C10C28DRO	64.0	50.2	mg/kg	04.24.2020 17:47		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	04.24.2020 17:47	U	1
Total GRO-DRO	PHC628	64.0	50.2	mg/kg	04.24.2020 17:47		1
Total TPH	PHC635	64.0	50.2	mg/kg	04.24.2020 17:47		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	04.24.2020 17:47	
o-Terphenyl	84-15-1	98	%	70-135	04.24.2020 17:47	



Certificate of Analytical Results 659667

LT Environmental, Inc., Arvada, CO

PLU 20 BD 102H

Sample Id: **SS05**
Lab Sample Id: 659667-005

Matrix: Soil
Date Collected: 04.23.2020 10:14

Date Received: 04.23.2020 13:36
Sample Depth: 0 - 0.3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.23.2020 16:00

Basis: Wet Weight

Seq Number: 3124024

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.23.2020 22:26	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.23.2020 22:26	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.23.2020 22:26	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	04.23.2020 22:26	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.23.2020 22:26	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	04.23.2020 22:26	U	1
Total BTEX		<0.00200	0.00200	mg/kg	04.23.2020 22:26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	108	%	70-130	04.23.2020 22:26	
4-Bromofluorobenzene	460-00-4	91	%	70-130	04.23.2020 22:26	



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



LT Environmental, Inc.

PLU 20 BD 102H

Analytical Method: Chloride by EPA 300

Seq Number: 3124031

MB Sample Id: 7701931-1-BLK

Matrix: Solid

LCS Sample Id: 7701931-1-BKS

Prep Method: E300P

Date Prep: 04.23.2020

LCSD Sample Id: 7701931-1-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	254	102	256	102	90-110	1	20	mg/kg	04.23.2020 15:19	

Analytical Method: Chloride by EPA 300

Seq Number: 3124031

Parent Sample Id: 659618-001

Matrix: Soil

MS Sample Id: 659618-001 S

Prep Method: E300P

Date Prep: 04.23.2020

MSD Sample Id: 659618-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	14100	250	14400	120	14400	120	90-110	0	20	mg/kg	04.23.2020 15:41	X

Analytical Method: Chloride by EPA 300

Seq Number: 3124031

Parent Sample Id: 659681-001

Matrix: Soil

MS Sample Id: 659681-001 S

Prep Method: E300P

Date Prep: 04.23.2020

MSD Sample Id: 659681-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	287	200	469	91	469	91	90-110	0	20	mg/kg	04.23.2020 16:58	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3124046

MB Sample Id: 7701997-1-BLK

Matrix: Solid

LCS Sample Id: 7701997-1-BKS

Prep Method: SW8015P

Date Prep: 04.23.2020

LCSD Sample Id: 7701997-1-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	838	84	889	89	70-135	6	35	mg/kg	04.23.2020 19:20	
Diesel Range Organics (DRO)	<50.0	1000	925	93	978	98	70-135	6	35	mg/kg	04.23.2020 19:20	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	99		107		131		70-135	%	04.23.2020 19:20
o-Terphenyl	108		106		118		70-135	%	04.23.2020 19:20

Analytical Method: TPH by SW8015 Mod

Seq Number: 3124187

MB Sample Id: 7701983-1-BLK

Matrix: Solid

LCS Sample Id: 7701983-1-BKS

Prep Method: SW8015P

Date Prep: 04.23.2020

LCSD Sample Id: 7701983-1-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	876	88	723	72	70-135	19	35	mg/kg	04.24.2020 20:30	
Diesel Range Organics (DRO)	<50.0	1000	985	99	785	79	70-135	23	35	mg/kg	04.24.2020 20:30	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	108		116		94		70-135	%	04.24.2020 20:30
o-Terphenyl	120		117		93		70-135	%	04.24.2020 20:30

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



LT Environmental, Inc.

PLU 20 BD 102H

Analytical Method: TPH by SW8015 Mod

Seq Number: 3124046

Matrix: Solid

Prep Method: SW8015P

Date Prep: 04.23.2020

MB Sample Id: 7701997-1-BLK

Parameter

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	04.23.2020 18:59	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3124187

Matrix: Solid

Prep Method: SW8015P

Date Prep: 04.23.2020

MB Sample Id: 7701983-1-BLK

Parameter

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	04.24.2020 14:03	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3124046

Matrix: Soil

Prep Method: SW8015P

Date Prep: 04.23.2020

Parent Sample Id: 659618-002

MS Sample Id: 659618-002 S

MSD Sample Id: 659618-002 SD

Parameter

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	813	81	1050	105	70-135	25	35	mg/kg	04.23.2020 20:21	
Diesel Range Organics (DRO)	<50.0	1000	879	88	1200	120	70-135	31	35	mg/kg	04.23.2020 20:21	

Surrogate

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	122		134		70-135	%	04.23.2020 20:21
o-Terphenyl	110		125		70-135	%	04.23.2020 20:21

Analytical Method: TPH by SW8015 Mod

Seq Number: 3124187

Matrix: Soil

Prep Method: SW8015P

Date Prep: 04.23.2020

Parent Sample Id: 659618-001

MS Sample Id: 659618-001 S

MSD Sample Id: 659618-001 SD

Parameter

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.1	1000	985	99	810	81	70-135	19	35	mg/kg	04.24.2020 20:50	
Diesel Range Organics (DRO)	<50.1	1000	1110	111	871	87	70-135	24	35	mg/kg	04.24.2020 20:50	

Surrogate

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	124		113		70-135	%	04.24.2020 20:50
o-Terphenyl	122		97		70-135	%	04.24.2020 20:50

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



LT Environmental, Inc.

PLU 20 BD 102H

Analytical Method: BTEX by EPA 8021B

Seq Number: 3124024

MB Sample Id: 7701922-1-BLK

Matrix: Solid

LCS Sample Id: 7701922-1-BKS

Prep Method: SW5035A

Date Prep: 04.23.2020

LCSD Sample Id: 7701922-1-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	0.106	106	0.110	110	70-130	4	35	mg/kg	04.23.2020 15:38	
Toluene	<0.00200	0.100	0.101	101	0.105	105	70-130	4	35	mg/kg	04.23.2020 15:38	
Ethylbenzene	<0.00200	0.100	0.0949	95	0.0980	98	71-129	3	35	mg/kg	04.23.2020 15:38	
m,p-Xylenes	<0.00400	0.200	0.197	99	0.203	102	70-135	3	35	mg/kg	04.23.2020 15:38	
o-Xylene	<0.00200	0.100	0.0996	100	0.102	102	71-133	2	35	mg/kg	04.23.2020 15:38	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		103		106		70-130	%	04.23.2020 15:38
4-Bromofluorobenzene	98		93		93		70-130	%	04.23.2020 15:38

Analytical Method: BTEX by EPA 8021B

Seq Number: 3124024

Parent Sample Id: 659586-001

Matrix: Soil

MS Sample Id: 659586-001 S

Prep Method: SW5035A

Date Prep: 04.23.2020

MSD Sample Id: 659586-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.117	117	0.114	114	70-130	3	35	mg/kg	04.23.2020 16:19	
Toluene	<0.00200	0.100	0.110	110	0.109	109	70-130	1	35	mg/kg	04.23.2020 16:19	
Ethylbenzene	<0.00200	0.100	0.105	105	0.102	102	71-129	3	35	mg/kg	04.23.2020 16:19	
m,p-Xylenes	<0.00401	0.200	0.216	108	0.210	105	70-135	3	35	mg/kg	04.23.2020 16:19	
o-Xylene	<0.00200	0.100	0.108	108	0.105	105	71-133	3	35	mg/kg	04.23.2020 16:19	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		104		70-130	%	04.23.2020 16:19
4-Bromofluorobenzene	93		94		70-130	%	04.23.2020 16:19

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



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) 555-3443 Lubbock, TX (806) 94-1296
Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-392-7550)
Albuquerque, NM (505-392-7550)

Chain of Custody

Work Order No.:

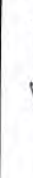

105910607

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littrell
Company Name:	LT Environmental, Inc., Permian office	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	522 W. Mermod St.
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(432) 236-3849	Email:	jhlrl@ltenv.com, dmoir@ltenv.com

Work Order Comments			
Program: UST/PST	<input type="checkbox"/> RP	<input type="checkbox"/> Growfields	<input checked="" type="checkbox"/> RC <input type="checkbox"/> perfund
State of Project:			
Reporting: Level II	<input type="checkbox"/> Level III	<input type="checkbox"/> PST/UST	<input type="checkbox"/> RP <input type="checkbox"/> Level IV
Deliverables: EDD	<input type="checkbox"/> ADAPT		Other: <input type="checkbox"/>

[illegible]

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xencio, its affiliates and subcontractors. It assigns standard terms and conditions service. Xencio 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 Xencio. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xencio, but not analyzed. Those terms will be enforced unless previously negotiated.

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 Ti 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 Ti U															
1631 / 245.1 / 7470 / 7471 : Hg																			
<p>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 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 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.</p>																			
Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time														
		4/23/2013 3:00			2														
					4														
					6														

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 04.23.2020 01.36.00 PM

Work Order #: 659667

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : T-NM-007

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	1.2
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 Custody Seals intact on sample bottles?	Yes
#6 *Custody Seals Signed and dated?	Yes
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	No
#18 Water VOC samples have zero headspace?	N/A

Samples received in bulk containers.

* 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: 04.23.2020

Checklist reviewed by:



Jessica Kramer

Date: 04.27.2020

Certificate of Analysis Summary 668056



LT Environmental, Inc., Arvada, CO

Project Name: PLU 20 BD 102H

Project Id: 012920062

Date Received in Lab: Thu 07.23.2020 14:07

Contact: Dan Moir

Report Date: 09.10.2020 12:47

Project Location: Eddy County

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	668056-001	668056-002	668056-003	668056-004	668056-005	668056-006
	<i>Field Id:</i>	PH07	PH04	PH05	PH08	PH06	PH01
	<i>Depth:</i>	1- ft	2- ft	2- ft	2- ft	2- ft	1- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	07.23.2020 09:54	07.23.2020 10:10	07.23.2020 10:22	07.23.2020 10:31	07.23.2020 10:45	07.23.2020 10:50
BTEX by EPA 8021B	<i>Extracted:</i>	07.23.2020 16:44	07.23.2020 16:44	07.23.2020 16:44	07.23.2020 16:44	07.23.2020 16:44	07.23.2020 16:44
	<i>Analyzed:</i>	07.24.2020 16:10	07.24.2020 16:32	07.24.2020 16:55	07.24.2020 17:17	07.24.2020 17:40	07.24.2020 13:17
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
Toluene		<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
Ethylbenzene		<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
m,p-Xylenes		<0.00401 0.00401	<0.00399 0.00399	<0.00402 0.00402	<0.00403 0.00403	<0.00400 0.00400	<0.00401 0.00401
o-Xylene		<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
Total Xylenes		<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
Total BTEX		<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
Chloride by EPA 300	<i>Extracted:</i>	07.23.2020 16:37	07.23.2020 16:37	07.23.2020 16:37	07.23.2020 16:37	07.23.2020 16:37	07.23.2020 16:37
	<i>Analyzed:</i>	07.23.2020 23:02	07.23.2020 23:19	07.23.2020 23:24	07.23.2020 23:30	07.23.2020 23:35	07.23.2020 23:52
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		78.3 10.0	23.9 9.90	18.0 10.0	484 10.0	2350 50.3	348 49.9
TPH by SW8015 Mod	<i>Extracted:</i>	07.23.2020 17:10	07.23.2020 17:10	07.23.2020 17:10	07.23.2020 17:10	07.23.2020 17:10	07.23.2020 17:10
	<i>Analyzed:</i>	07.24.2020 02:00	07.24.2020 02:21	07.24.2020 03:01	07.24.2020 03:21	07.24.2020 03:41	07.24.2020 04:02
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<50.2 50.2	<50.1 50.1	<50.2 50.2	<50.2 50.2	<49.8 49.8
Diesel Range Organics (DRO)		<49.9 49.9	<50.2 50.2	<50.1 50.1	<50.2 50.2	<50.2 50.2	<49.8 49.8
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<50.2 50.2	<50.1 50.1	<50.2 50.2	<50.2 50.2	<49.8 49.8
Total GRO-DRO		<49.9 49.9	<50.2 50.2	<50.1 50.1	<50.2 50.2	<50.2 50.2	<49.8 49.8
Total TPH		<49.9 49.9	<50.2 50.2	<50.1 50.1	<50.2 50.2	<50.2 50.2	<49.8 49.8

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 668056



LT Environmental, Inc., Arvada, CO

Project Name: PLU 20 BD 102H

Project Id: 012920062

Contact: Dan Moir

Project Location: Eddy County

Date Received in Lab: Thu 07.23.2020 14:07

Report Date: 09.10.2020 12:47

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	668056-007	668056-008	668056-009	668056-010	668056-011	
	<i>Field Id:</i>	PH01A	PH02	PH02A	PH03	PH03A	
	<i>Depth:</i>	2- ft	1- ft	2- ft	1- ft	2- ft	
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	
	<i>Sampled:</i>	07.23.2020 10:53	07.23.2020 11:00	07.23.2020 11:03	07.23.2020 11:11	07.23.2020 11:15	
BTEX by EPA 8021B	<i>Extracted:</i>	07.23.2020 16:44	07.23.2020 16:44	07.23.2020 16:44	07.23.2020 16:44	07.24.2020 09:35	
	<i>Analyzed:</i>	07.24.2020 13:40	07.24.2020 14:02	07.24.2020 14:25	07.24.2020 14:47	07.24.2020 14:23	
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Benzene		<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00200 0.00200	
Toluene		<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00200 0.00200	
Ethylbenzene		<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00200 0.00200	
m,p-Xylenes		<0.00403 0.00403	<0.00399 0.00399	<0.00398 0.00398	<0.00402 0.00402	<0.00400 0.00400	
o-Xylene		<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00200 0.00200	
Total Xylenes		<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00200 0.00200	
Total BTEX		<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00200 0.00200	
Chloride by EPA 300	<i>Extracted:</i>	07.23.2020 16:37	07.23.2020 16:37	07.23.2020 16:37	07.23.2020 16:37	07.24.2020 12:28	
	<i>Analyzed:</i>	07.23.2020 23:58	07.24.2020 00:03	07.24.2020 00:09	07.24.2020 00:14	07.24.2020 14:20	
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Chloride		130 49.9	3110 49.6	41.9 10.1	734 50.1	108 10.1	
TPH by SW8015 Mod	<i>Extracted:</i>	07.23.2020 17:10	07.23.2020 17:10	07.23.2020 17:10	07.23.2020 17:10	07.23.2020 17:10	
	<i>Analyzed:</i>	07.24.2020 04:22	07.24.2020 04:43	07.24.2020 05:04	07.24.2020 05:24	07.24.2020 05:44	
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Gasoline Range Hydrocarbons (GRO)		<50.2 50.2	<50.2 50.2	<50.0 50.0	<50.2 50.2	<50.1 50.1	
Diesel Range Organics (DRO)		<50.2 50.2	<50.2 50.2	<50.0 50.0	<50.2 50.2	<50.1 50.1	
Motor Oil Range Hydrocarbons (MRO)		<50.2 50.2	<50.2 50.2	<50.0 50.0	<50.2 50.2	<50.1 50.1	
Total GRO-DRO		<50.2 50.2	<50.2 50.2	<50.0 50.0	<50.2 50.2	<50.1 50.1	
Total TPH		<50.2 50.2	<50.2 50.2	<50.0 50.0	<50.2 50.2	<50.1 50.1	

BRL - Below Reporting Limit

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



Analytical Report 668056

for

LT Environmental, Inc.

Project Manager: Dan Moir

PLU 20 BD 102H

012920062

09.10.2020

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 (2019-058), 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 (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



09.10.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): **668056**

PLU 20 BD 102H

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) 668056. 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. 668056 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,

A handwritten signature in black ink that reads "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 668056****LT Environmental, Inc., Arvada, CO**

PLU 20 BD 102H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH07	S	07.23.2020 09:54	1 ft	668056-001
PH04	S	07.23.2020 10:10	2 ft	668056-002
PH05	S	07.23.2020 10:22	2 ft	668056-003
PH08	S	07.23.2020 10:31	2 ft	668056-004
PH06	S	07.23.2020 10:45	2 ft	668056-005
PH01	S	07.23.2020 10:50	1 ft	668056-006
PH01A	S	07.23.2020 10:53	2 ft	668056-007
PH02	S	07.23.2020 11:00	1 ft	668056-008
PH02A	S	07.23.2020 11:03	2 ft	668056-009
PH03	S	07.23.2020 11:11	1 ft	668056-010
PH03A	S	07.23.2020 11:15	2 ft	668056-011



CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: PLU 20 BD 102H

Project ID: 012920062
Work Order Number(s): 668056

Report Date: 09.10.2020
Date Received: 07.23.2020

Sample receipt non conformances and comments:

V1.001 revision (client email) Corrected sample IDs

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 668056

LT Environmental, Inc., Arvada, CO

PLU 20 BD 102H

Sample Id: **PH07** Matrix: Soil Date Received: 07.23.2020 14:07
 Lab Sample Id: 668056-001 Date Collected: 07.23.2020 09:54 Sample Depth: 1 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.23.2020 16:37 Basis: Wet Weight
 Seq Number: 3132527

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	78.3	10.0	mg/kg	07.23.2020 23:02		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 07.23.2020 17:10 Basis: Wet Weight
 Seq Number: 3132505

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	07.24.2020 02:00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	07.24.2020 02:00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	07.24.2020 02:00	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	07.24.2020 02:00	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	07.24.2020 02:00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	07.24.2020 02:00	
o-Terphenyl	84-15-1	117	%	70-135	07.24.2020 02:00	



Certificate of Analytical Results 668056

LT Environmental, Inc., Arvada, CO

PLU 20 BD 102H

Sample Id: **PH07**
Lab Sample Id: 668056-001

Matrix: Soil
Date Collected: 07.23.2020 09:54

Date Received: 07.23.2020 14:07
Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 07.23.2020 16:44

Basis: Wet Weight

Seq Number: 3132550

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.24.2020 16:10	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.24.2020 16:10	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.24.2020 16:10	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	07.24.2020 16:10	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.24.2020 16:10	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.24.2020 16:10	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.24.2020 16:10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	07.24.2020 16:10	
4-Bromofluorobenzene	460-00-4	97	%	70-130	07.24.2020 16:10	



Certificate of Analytical Results 668056

LT Environmental, Inc., Arvada, CO

PLU 20 BD 102H

Sample Id: **PH04** Matrix: Soil Date Received: 07.23.2020 14:07
 Lab Sample Id: 668056-002 Date Collected: 07.23.2020 10:10 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.23.2020 16:37 Basis: Wet Weight
 Seq Number: 3132527

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	23.9	9.90	mg/kg	07.23.2020 23:19		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 07.23.2020 17:10 Basis: Wet Weight
 Seq Number: 3132505

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	07.24.2020 02:21	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	07.24.2020 02:21	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	07.24.2020 02:21	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	07.24.2020 02:21	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	07.24.2020 02:21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	07.24.2020 02:21	
o-Terphenyl	84-15-1	116	%	70-135	07.24.2020 02:21	



Certificate of Analytical Results 668056

LT Environmental, Inc., Arvada, CO

PLU 20 BD 102H

Sample Id: **PH04**
Lab Sample Id: 668056-002

Matrix: Soil
Date Collected: 07.23.2020 10:10

Date Received: 07.23.2020 14:07
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 07.23.2020 16:44

Basis: Wet Weight

Seq Number: 3132550

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.24.2020 16:32	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.24.2020 16:32	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.24.2020 16:32	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	07.24.2020 16:32	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.24.2020 16:32	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.24.2020 16:32	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.24.2020 16:32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	70-130	07.24.2020 16:32	
1,4-Difluorobenzene	540-36-3	100	%	70-130	07.24.2020 16:32	



Certificate of Analytical Results 668056

LT Environmental, Inc., Arvada, CO

PLU 20 BD 102H

Sample Id: **PH05** Matrix: Soil Date Received: 07.23.2020 14:07
 Lab Sample Id: 668056-003 Date Collected: 07.23.2020 10:22 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.23.2020 16:37 Basis: Wet Weight
 Seq Number: 3132527

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	18.0	10.0	mg/kg	07.23.2020 23:24		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 07.23.2020 17:10 Basis: Wet Weight
 Seq Number: 3132505

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	07.24.2020 03:01	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	07.24.2020 03:01	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	07.24.2020 03:01	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	07.24.2020 03:01	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	07.24.2020 03:01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	07.24.2020 03:01	
o-Terphenyl	84-15-1	118	%	70-135	07.24.2020 03:01	



Certificate of Analytical Results 668056

LT Environmental, Inc., Arvada, CO

PLU 20 BD 102H

Sample Id: **PH05**
Lab Sample Id: 668056-003

Matrix: Soil
Date Collected: 07.23.2020 10:22

Date Received: 07.23.2020 14:07
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 07.23.2020 16:44

Basis: Wet Weight

Seq Number: 3132550

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	07.24.2020 16:55	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	07.24.2020 16:55	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	07.24.2020 16:55	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	07.24.2020 16:55	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	07.24.2020 16:55	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	07.24.2020 16:55	U	1
Total BTEX		<0.00201	0.00201	mg/kg	07.24.2020 16:55	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	101	%	70-130	07.24.2020 16:55		
4-Bromofluorobenzene	460-00-4	105	%	70-130	07.24.2020 16:55		



Certificate of Analytical Results 668056

LT Environmental, Inc., Arvada, CO

PLU 20 BD 102H

Sample Id: **PH08** Matrix: Soil Date Received: 07.23.2020 14:07
 Lab Sample Id: 668056-004 Date Collected: 07.23.2020 10:31 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.23.2020 16:37 Basis: Wet Weight
 Seq Number: 3132527

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	484	10.0	mg/kg	07.23.2020 23:30		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 07.23.2020 17:10 Basis: Wet Weight
 Seq Number: 3132505

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	07.24.2020 03:21	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	07.24.2020 03:21	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	07.24.2020 03:21	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	07.24.2020 03:21	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	07.24.2020 03:21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	07.24.2020 03:21	
o-Terphenyl	84-15-1	119	%	70-135	07.24.2020 03:21	



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LT Environmental, Inc., Arvada, CO

PLU 20 BD 102H

Sample Id: **PH08**
Lab Sample Id: 668056-004

Matrix: Soil
Date Collected: 07.23.2020 10:31

Date Received: 07.23.2020 14:07
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3132550

Prep Method: SW5035A

% Moisture:

Date Prep: 07.23.2020 16:44

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	07.24.2020 17:17	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	07.24.2020 17:17	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	07.24.2020 17:17	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	07.24.2020 17:17	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	07.24.2020 17:17	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	07.24.2020 17:17	U	1
Total BTEX		<0.00202	0.00202	mg/kg	07.24.2020 17:17	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	104	%	70-130	07.24.2020 17:17		
1,4-Difluorobenzene	540-36-3	100	%	70-130	07.24.2020 17:17		



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LT Environmental, Inc., Arvada, CO

PLU 20 BD 102H

Sample Id: **PH06** Matrix: Soil Date Received: 07.23.2020 14:07
 Lab Sample Id: 668056-005 Date Collected: 07.23.2020 10:45 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.23.2020 16:37 Basis: Wet Weight
 Seq Number: 3132527

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2350	50.3	mg/kg	07.23.2020 23:35		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 07.23.2020 17:10 Basis: Wet Weight
 Seq Number: 3132505

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	07.24.2020 03:41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	07.24.2020 03:41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	07.24.2020 03:41	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	07.24.2020 03:41	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	07.24.2020 03:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	07.24.2020 03:41	
o-Terphenyl	84-15-1	109	%	70-135	07.24.2020 03:41	



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LT Environmental, Inc., Arvada, CO

PLU 20 BD 102H

Sample Id: **PH06**
Lab Sample Id: 668056-005

Matrix: Soil
Date Collected: 07.23.2020 10:45

Date Received: 07.23.2020 14:07
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 07.23.2020 16:44

Basis: Wet Weight

Seq Number: 3132550

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.24.2020 17:40	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.24.2020 17:40	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.24.2020 17:40	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	07.24.2020 17:40	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.24.2020 17:40	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.24.2020 17:40	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.24.2020 17:40	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	100	%	70-130	07.24.2020 17:40		
4-Bromofluorobenzene	460-00-4	103	%	70-130	07.24.2020 17:40		



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LT Environmental, Inc., Arvada, CO

PLU 20 BD 102H

Sample Id: **PH01** Matrix: Soil Date Received: 07.23.2020 14:07
 Lab Sample Id: 668056-006 Date Collected: 07.23.2020 10:50 Sample Depth: 1 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.23.2020 16:37 Basis: Wet Weight
 Seq Number: 3132527

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	348	49.9	mg/kg	07.23.2020 23:52		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 07.23.2020 17:10 Basis: Wet Weight
 Seq Number: 3132505

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	07.24.2020 04:02	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	07.24.2020 04:02	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	07.24.2020 04:02	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	07.24.2020 04:02	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	07.24.2020 04:02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	07.24.2020 04:02	
o-Terphenyl	84-15-1	121	%	70-135	07.24.2020 04:02	



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LT Environmental, Inc., Arvada, CO

PLU 20 BD 102H

Sample Id: **PH01**
Lab Sample Id: 668056-006

Matrix: Soil
Date Collected: 07.23.2020 10:50

Date Received: 07.23.2020 14:07
Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 07.23.2020 16:44

Basis: Wet Weight

Seq Number: 3132550

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.24.2020 13:17	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.24.2020 13:17	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.24.2020 13:17	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	07.24.2020 13:17	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.24.2020 13:17	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.24.2020 13:17	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.24.2020 13:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	70-130	07.24.2020 13:17	
1,4-Difluorobenzene	540-36-3	99	%	70-130	07.24.2020 13:17	



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LT Environmental, Inc., Arvada, CO

PLU 20 BD 102H

Sample Id: **PH01A** Matrix: Soil Date Received: 07.23.2020 14:07
 Lab Sample Id: 668056-007 Date Collected: 07.23.2020 10:53 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.23.2020 16:37 Basis: Wet Weight
 Seq Number: 3132527

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	130	49.9	mg/kg	07.23.2020 23:58		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 07.23.2020 17:10 Basis: Wet Weight
 Seq Number: 3132505

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	07.24.2020 04:22	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	07.24.2020 04:22	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	07.24.2020 04:22	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	07.24.2020 04:22	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	07.24.2020 04:22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	07.24.2020 04:22	
o-Terphenyl	84-15-1	123	%	70-135	07.24.2020 04:22	



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LT Environmental, Inc., Arvada, CO

PLU 20 BD 102H

Sample Id: **PH01A**
Lab Sample Id: 668056-007

Matrix: Soil
Date Collected: 07.23.2020 10:53

Date Received: 07.23.2020 14:07
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 07.23.2020 16:44

Basis: Wet Weight

Seq Number: 3132550

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	07.24.2020 13:40	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	07.24.2020 13:40	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	07.24.2020 13:40	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	07.24.2020 13:40	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	07.24.2020 13:40	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	07.24.2020 13:40	U	1
Total BTEX		<0.00202	0.00202	mg/kg	07.24.2020 13:40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	07.24.2020 13:40	
4-Bromofluorobenzene	460-00-4	106	%	70-130	07.24.2020 13:40	



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LT Environmental, Inc., Arvada, CO

PLU 20 BD 102H

Sample Id: **PH02** Matrix: Soil Date Received: 07.23.2020 14:07
 Lab Sample Id: 668056-008 Date Collected: 07.23.2020 11:00 Sample Depth: 1 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.23.2020 16:37 Basis: Wet Weight
 Seq Number: 3132527

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3110	49.6	mg/kg	07.24.2020 00:03		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 07.23.2020 17:10 Basis: Wet Weight
 Seq Number: 3132505

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	07.24.2020 04:43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	07.24.2020 04:43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	07.24.2020 04:43	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	07.24.2020 04:43	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	07.24.2020 04:43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	07.24.2020 04:43	
o-Terphenyl	84-15-1	119	%	70-135	07.24.2020 04:43	



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LT Environmental, Inc., Arvada, CO

PLU 20 BD 102H

Sample Id: **PH02**
Lab Sample Id: 668056-008

Matrix: Soil
Date Collected: 07.23.2020 11:00

Date Received: 07.23.2020 14:07
Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 07.23.2020 16:44

Basis: Wet Weight

Seq Number: 3132550

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.24.2020 14:02	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.24.2020 14:02	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.24.2020 14:02	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	07.24.2020 14:02	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.24.2020 14:02	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.24.2020 14:02	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.24.2020 14:02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	07.24.2020 14:02	
4-Bromofluorobenzene	460-00-4	105	%	70-130	07.24.2020 14:02	



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LT Environmental, Inc., Arvada, CO

PLU 20 BD 102H

Sample Id: **PH02A** Matrix: Soil Date Received: 07.23.2020 14:07
 Lab Sample Id: 668056-009 Date Collected: 07.23.2020 11:03 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.23.2020 16:37 Basis: Wet Weight
 Seq Number: 3132527

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	41.9	10.1	mg/kg	07.24.2020 00:09		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 07.23.2020 17:10 Basis: Wet Weight
 Seq Number: 3132505

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	07.24.2020 05:04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	07.24.2020 05:04	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.24.2020 05:04	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	07.24.2020 05:04	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	07.24.2020 05:04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	07.24.2020 05:04	
o-Terphenyl	84-15-1	114	%	70-135	07.24.2020 05:04	



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LT Environmental, Inc., Arvada, CO

PLU 20 BD 102H

Sample Id: **PH02A**
Lab Sample Id: 668056-009

Matrix: Soil
Date Collected: 07.23.2020 11:03

Date Received: 07.23.2020 14:07
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 07.23.2020 16:44

Basis: Wet Weight

Seq Number: 3132550

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	07.24.2020 14:25	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	07.24.2020 14:25	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	07.24.2020 14:25	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	07.24.2020 14:25	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	07.24.2020 14:25	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	07.24.2020 14:25	U	1
Total BTEX		<0.00199	0.00199	mg/kg	07.24.2020 14:25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	07.24.2020 14:25	
4-Bromofluorobenzene	460-00-4	104	%	70-130	07.24.2020 14:25	



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LT Environmental, Inc., Arvada, CO

PLU 20 BD 102H

Sample Id: **PH03** Matrix: Soil Date Received: 07.23.2020 14:07
 Lab Sample Id: 668056-010 Date Collected: 07.23.2020 11:11 Sample Depth: 1 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.23.2020 16:37 Basis: Wet Weight
 Seq Number: 3132527

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	734	50.1	mg/kg	07.24.2020 00:14		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 07.23.2020 17:10 Basis: Wet Weight
 Seq Number: 3132505

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	07.24.2020 05:24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	07.24.2020 05:24	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	07.24.2020 05:24	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	07.24.2020 05:24	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	07.24.2020 05:24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	07.24.2020 05:24	
o-Terphenyl	84-15-1	112	%	70-135	07.24.2020 05:24	



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LT Environmental, Inc., Arvada, CO

PLU 20 BD 102H

Sample Id: **PH03**
Lab Sample Id: 668056-010

Matrix: Soil
Date Collected: 07.23.2020 11:11

Date Received: 07.23.2020 14:07
Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 07.23.2020 16:44

Basis: Wet Weight

Seq Number: 3132550

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	07.24.2020 14:47	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	07.24.2020 14:47	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	07.24.2020 14:47	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	07.24.2020 14:47	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	07.24.2020 14:47	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	07.24.2020 14:47	U	1
Total BTEX		<0.00201	0.00201	mg/kg	07.24.2020 14:47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	07.24.2020 14:47	
1,4-Difluorobenzene	540-36-3	101	%	70-130	07.24.2020 14:47	



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LT Environmental, Inc., Arvada, CO

PLU 20 BD 102H

Sample Id: **PH03A** Matrix: Soil Date Received: 07.23.2020 14:07
 Lab Sample Id: 668056-011 Date Collected: 07.23.2020 11:15 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.24.2020 12:28 Basis: Wet Weight
 Seq Number: 3132658

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	108	10.1	mg/kg	07.24.2020 14:20		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 07.23.2020 17:10 Basis: Wet Weight
 Seq Number: 3132505

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	07.24.2020 05:44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	07.24.2020 05:44	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	07.24.2020 05:44	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	07.24.2020 05:44	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	07.24.2020 05:44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	07.24.2020 05:44	
o-Terphenyl	84-15-1	120	%	70-135	07.24.2020 05:44	



Certificate of Analytical Results 668056

LT Environmental, Inc., Arvada, CO

PLU 20 BD 102H

Sample Id: **PH03A**
Lab Sample Id: 668056-011

Matrix: Soil
Date Collected: 07.23.2020 11:15

Date Received: 07.23.2020 14:07
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 07.24.2020 09:35

Basis: Wet Weight

Seq Number: 3132662

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.24.2020 14:23	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.24.2020 14:23	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.24.2020 14:23	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	07.24.2020 14:23	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.24.2020 14:23	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.24.2020 14:23	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.24.2020 14:23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	07.24.2020 14:23	
4-Bromofluorobenzene	460-00-4	102	%	70-130	07.24.2020 14:23	

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



LT Environmental, Inc.

PLU 20 BD 102H

Analytical Method: Chloride by EPA 300

Seq Number: 3132527

MB Sample Id: 7707993-1-BLK

Matrix: Solid

LCS Sample Id: 7707993-1-BKS

Prep Method: E300P

Date Prep: 07.23.2020

LCSD Sample Id: 7707993-1-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	264	106	273	109	90-110	3	20	mg/kg	07.23.2020 21:33	

Analytical Method: Chloride by EPA 300

Seq Number: 3132658

MB Sample Id: 7708057-1-BLK

Matrix: Solid

LCS Sample Id: 7708057-1-BKS

Prep Method: E300P

Date Prep: 07.24.2020

LCSD Sample Id: 7708057-1-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	265	106	274	110	90-110	3	20	mg/kg	07.24.2020 13:40	

Analytical Method: Chloride by EPA 300

Seq Number: 3132527

Parent Sample Id: 668043-021

Matrix: Soil

MS Sample Id: 668043-021 S

Prep Method: E300P

Date Prep: 07.23.2020

MSD Sample Id: 668043-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	228	199	437	105	432	103	90-110	1	20	mg/kg	07.23.2020 21:50	

Analytical Method: Chloride by EPA 300

Seq Number: 3132527

Parent Sample Id: 668056-001

Matrix: Soil

MS Sample Id: 668056-001 S

Prep Method: E300P

Date Prep: 07.23.2020

MSD Sample Id: 668056-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	78.3	201	289	105	289	105	90-110	0	20	mg/kg	07.23.2020 23:08	

Analytical Method: Chloride by EPA 300

Seq Number: 3132658

Parent Sample Id: 668098-001

Matrix: Soil

MS Sample Id: 668098-001 S

Prep Method: E300P

Date Prep: 07.24.2020

MSD Sample Id: 668098-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	310	200	518	104	517	104	90-110	0	20	mg/kg	07.24.2020 13:57	

Analytical Method: Chloride by EPA 300

Seq Number: 3132658

Parent Sample Id: 668154-005

Matrix: Soil

MS Sample Id: 668154-005 S

Prep Method: E300P

Date Prep: 07.24.2020

MSD Sample Id: 668154-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	136	199	339	102	342	104	90-110	1	20	mg/kg	07.24.2020 15:27	

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * | (C - E) / (C + E) |$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



LT Environmental, Inc.
PLU 20 BD 102H

Analytical Method: TPH by SW8015 Mod

Seq Number: 3132505

MB Sample Id: 7707984-1-BLK

Matrix: Solid

LCS Sample Id: 7707984-1-BKS

Prep Method: SW8015P

Date Prep: 07.23.2020

LCSD Sample Id: 7707984-1-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	950	95	988	99	70-135	4	35	mg/kg	07.23.2020 21:55	
Diesel Range Organics (DRO)	<50.0	1000	1120	112	1160	116	70-135	4	35	mg/kg	07.23.2020 21:55	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	113		127		126		70-135	%	07.23.2020 21:55
o-Terphenyl	121		119		126		70-135	%	07.23.2020 21:55

Analytical Method: TPH by SW8015 Mod

Seq Number: 3132505

Matrix: Solid

Prep Method: SW8015P

Date Prep: 07.23.2020

MB Sample Id: 7707984-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	07.23.2020 21:35	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3132505

Matrix: Soil

Prep Method: SW8015P

Date Prep: 07.23.2020

Parent Sample Id: 668043-023

MS Sample Id: 668043-023 S

MSD Sample Id: 668043-023 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.1	1000	1090	109	977	97	70-135	11	35	mg/kg	07.23.2020 22:57	
Diesel Range Organics (DRO)	<50.1	1000	1140	114	1140	113	70-135	0	35	mg/kg	07.23.2020 22:57	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	131		129		70-135	%	07.23.2020 22:57
o-Terphenyl	122		114		70-135	%	07.23.2020 22:57

Analytical Method: BTEX by EPA 8021B

Seq Number: 3132550

Matrix: Solid

Prep Method: SW5035A

Date Prep: 07.23.2020

MB Sample Id: 7707995-1-BLK

LCS Sample Id: 7707995-1-BKS

LCSD Sample Id: 7707995-1-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	0.103	103	0.107	107	70-130	4	35	mg/kg	07.24.2020 03:55	
Toluene	<0.00200	0.100	0.0964	96	0.101	101	70-130	5	35	mg/kg	07.24.2020 03:55	
Ethylbenzene	<0.00200	0.100	0.0893	89	0.0934	93	71-129	4	35	mg/kg	07.24.2020 03:55	
m,p-Xylenes	<0.00400	0.200	0.179	90	0.189	95	70-135	5	35	mg/kg	07.24.2020 03:55	
o-Xylene	<0.00200	0.100	0.0878	88	0.0943	94	71-133	7	35	mg/kg	07.24.2020 03:55	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	97		97		99		70-130	%	07.24.2020 03:55
4-Bromofluorobenzene	89		95		102		70-130	%	07.24.2020 03:55

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



LT Environmental, Inc.
PLU 20 BD 102H

Analytical Method: BTEX by EPA 8021B

Seq Number: 3132662

Matrix: Solid

Prep Method: SW5035A

Date Prep: 07.24.2020

MB Sample Id: 7708007-1-BLK

LCS Sample Id: 7708007-1-BKS

LCSD Sample Id: 7708007-1-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	0.103	103	0.100	100	70-130	3	35	mg/kg	07.24.2020 11:45	
Toluene	<0.00200	0.100	0.0978	98	0.0947	95	70-130	3	35	mg/kg	07.24.2020 11:45	
Ethylbenzene	<0.00200	0.100	0.100	100	0.0978	98	71-129	2	35	mg/kg	07.24.2020 11:45	
m,p-Xylenes	<0.00400	0.200	0.202	101	0.197	99	70-135	3	35	mg/kg	07.24.2020 11:45	
o-Xylene	<0.00200	0.100	0.102	102	0.0994	99	71-133	3	35	mg/kg	07.24.2020 11:45	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		98		99		70-130	%	07.24.2020 11:45
4-Bromofluorobenzene	104		99		100		70-130	%	07.24.2020 11:45

Analytical Method: BTEX by EPA 8021B

Seq Number: 3132550

Matrix: Soil

Prep Method: SW5035A

Date Prep: 07.23.2020

Parent Sample Id: 668043-021

MS Sample Id: 668043-021 S

MSD Sample Id: 668043-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.100	0.0956	96	0.103	102	70-130	7	35	mg/kg	07.24.2020 04:37	
Toluene	<0.00201	0.100	0.0894	89	0.0982	97	70-130	9	35	mg/kg	07.24.2020 04:37	
Ethylbenzene	<0.00201	0.100	0.0837	84	0.0930	92	71-129	11	35	mg/kg	07.24.2020 04:37	
m,p-Xylenes	<0.00402	0.201	0.170	85	0.191	95	70-135	12	35	mg/kg	07.24.2020 04:37	
o-Xylene	<0.00201	0.100	0.0822	82	0.0912	90	71-133	10	35	mg/kg	07.24.2020 04:37	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		100		70-130	%	07.24.2020 04:37
4-Bromofluorobenzene	104		106		70-130	%	07.24.2020 04:37

Analytical Method: BTEX by EPA 8021B

Seq Number: 3132662

Matrix: Soil

Prep Method: SW5035A

Date Prep: 07.24.2020

Parent Sample Id: 668056-011

MS Sample Id: 668056-011 S

MSD Sample Id: 668056-011 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	0.100	100	0.0990	99	70-130	1	35	mg/kg	07.24.2020 13:42	
Toluene	<0.00200	0.0998	0.0944	95	0.0930	93	70-130	1	35	mg/kg	07.24.2020 13:42	
Ethylbenzene	<0.00200	0.0998	0.0984	99	0.0934	93	71-129	5	35	mg/kg	07.24.2020 13:42	
m,p-Xylenes	<0.00399	0.200	0.197	99	0.190	95	70-135	4	35	mg/kg	07.24.2020 13:42	
o-Xylene	<0.00200	0.0998	0.0983	98	0.0946	95	71-133	4	35	mg/kg	07.24.2020 13:42	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	96		98		70-130	%	07.24.2020 13:42
4-Bromofluorobenzene	103		102		70-130	%	07.24.2020 13:42

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



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 Corsicana, TX (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: 158056
12/22/20
11:04:56 AM

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Project Manager:	Dan Mair	Bill to: (if different)	Kyle Little
Company Name:	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:	Corsicana, NM 88220
Phone:	(432) 236-3849	Email:	fmair@xenco.com, dmair@xenco.com

Program: <input type="checkbox"/> UST/ST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>
State of Project:
Reporting Level: <input type="checkbox"/> Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRAP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:

Project Name:	PLU 20 BD 102H	Turn Around	<input checked="" type="checkbox"/>
Project Number:	012920062	Routine	<input checked="" type="checkbox"/>
Project Location:	Eddy County	Rush:	
Sampler's Name:	Fatima Smith	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT	Temp Blank:	Yes	No	Wet Ice:	Yes	No
Temperature (°C):	24.32					
Received Intact:	Yes	No		Thermometer ID	TNMB07	
Cooler Custody Seals:	Yes	No		Correction Factor:	-0.2	
Sample Custody Seals:	Yes	No		Total Containers:	11	

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Pres. Code	ANALYSIS REQUEST	Preservative Codes
5604A	S	7/23/20	0954	1'	1	X	TPH (EPA 8015)		MeOH: Me
5601A			1010	2'		X	BTEX (EPA 0-8021)		None: NO
5602A			1022	2'		X	Chloride (EPA 300.0)		HNO3: HN
5605A			1031	2'					H2SO4: H2
5603A			1045	2'					HCL: HL
PH01			1050	1'					NaOH: Na
PH01A			1053	2'					Zn Acetate+ NaOH: Zn
PH02			1100	1'					
PH02A			1103	2'					
PH03			1111	1'					

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 Ti 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 Ti 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
<i>[Signature]</i>	<i>[Signature]</i>	7/23/20 14:07			



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 Crashpad, NM (432) 704-5440
 Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-8900 Tampa, FL (813) 620-2000 West Palm Beach, FL (561) 689-6701

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Work Order No. 1058056

12/22/2020

Project Manager:	Dan Mar	Bill to: (if different)	Kyle Little
Company Name:	LT Environmental, Inc. Remond Office	Company Name:	XTO Energy, Inc.
Address:	3300 North A Street	Address:	3104 E Greber St
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Crashpad, NM 88220
Phone:	(432) 236-3849	Email:	femith@xenco.com, dmar@xenco.com

ANALYSIS REQUEST

Program: UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>
State of Project:
Reporting Level I <input type="checkbox"/> Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:

Preservative Codes

MeOH: Me
 None: NO
 HNO3: HN
 H2SO4: H2
 HCL: HL
 NaOH: Na
 Zn Acetate + NaOH: Zn

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

Sample Comments

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0-8021)	Chloride (EPA 300.0)	Preservative Codes	Sample Comments
	PH03A	S	7/23/20	1115	2'	1	X	X	X		

Total 200.7 / 6010 200.8 / 6020:

Circle Method(s) and Metal(s) to be analyzed

8RCRA 13PPM Texas T1 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn

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
<i>[Signature]</i>	<i>[Signature]</i>	7/23/20 14:07			

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 07.23.2020 02:07.00 PM

Work Order #: 668056

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : T-NM-007

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	2.2
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 Custody Seals intact on sample bottles?	Yes
#6 *Custody Seals Signed and dated?	Yes
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	No
#18 Water VOC samples have zero headspace?	N/A

Samples received in bulk containers.

* 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: 07.23.2020

Checklist reviewed by:



Jessica Kramer

Date: 07.24.2020

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 10361

CONDITIONS OF APPROVAL

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Building #5 Midland, TX79707	OGRID: 5380	Action Number: 10361	Action Type: C-141
OCD Reviewer ceads	Condition None		