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	NRM2012229921
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 32.24287 Longitude -103.88607
(NAD 83 in decimal degrees to 5 decimal places)

Site Name PLU 320 Battery	Site Type Battery
Date Release Discovered 4/22/2020	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
O	04	24S	30E	Eddy

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

Nature and Volume of Release

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

☒ Crude Oil	Volume Released (bbls) .99	Volume Recovered (bbls) .90
☒ Produced Water	Volume Released (bbls) 15.53	Volume Recovered (bbls) 14.10
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release: Fluids were released from a broken sight glass on a two phase separator. A third-party contractor has been retained for remediation activities.

State of New Mexico
Oil Conservation Division

Incident ID	NRM2012229921
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? N/A

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
N/A

Initial Response

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

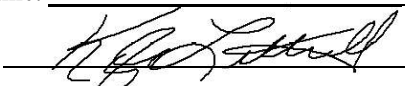
- ☒ The source of the release has been stopped.
- ☒ The impacted area has been secured to protect human health and the environment.
- ☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
- ☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

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

Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature:  Date: 4-29-20

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

OCD Only

Received by: Ramona Marcus Date: 5/1/2020

NRM2012229921

Location:	PLU 320 BTTY	
Spill Date:	4/22/2020	

Area 1		
Approximate Area =	661.00	sq. ft.
Average Saturation (or depth) of spill =	2.00	inches
Average Porosity Factor =	0.03	
VOLUME OF LEAK		
Total Crude Oil =	0.94	bbls
Total Produced Water =	14.65	bbls

Area 2		
Approximate Area =	1266.00	sq. ft.
Average Saturation (or depth) of spill =	1.00	inches
Average Porosity Factor =	0.03	
VOLUME OF LEAK		
Total Crude Oil =	0.03	bbls
Total Produced Water =	0.53	bbls

Area 3		
Approximate Area =	1353.00	sq. ft.
Average Saturation (or depth) of spill =	0.25	inches
Average Porosity Factor =	0.03	
VOLUME OF LEAK		
Total Crude Oil =	0.01	bbls
Total Produced Water =	0.14	bbls

Area 4		
Approximate Area =	3982.00	sq. ft.
Average Saturation (or depth) of spill =	0.13	inches
Average Porosity Factor =	0.03	
VOLUME OF LEAK		
Total Crude Oil =	0.01	bbls
Total Produced Water =	0.21	bbls

TOTAL VOLUME OF LEAK		
Total Crude Oil =	**0.99**	**bbls**
Total Produced Water =	**15.53**	**bbls**
TOTAL VOLUME RECOVERED		
Total Crude Oil =	**0.90**	**bbls**
Total Produced Water =	**14.10**	**bbls**

State of New Mexico
Oil Conservation Division

Incident ID	NRM2012229921
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

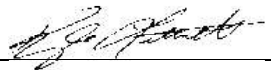
If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods,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

State of New Mexico
Oil Conservation Division

Incident ID	NRM2012229921
District RP	
Facility ID	
Application ID	

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

Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature:  Date: 7/20/2020

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

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	NRM2012229921
District RP	
Facility ID	
Application ID	

Remediation Plan

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

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

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

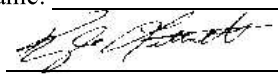
☒ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.

☒ Extents of contamination must be fully delineated.

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

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

Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature:  Date: 7/20/2020

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

OCD Only

Received by: _____ Date: _____

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

Signature: _____ Date: _____

A proud member of WSP

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

July 17, 2020

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

RE: Deferral Request
XTO Energy, Inc.
Poker Lake Unit 320 Battery
Incident Number NRM2012229921
Eddy County, New Mexico

Dear Mr. Bratcher:

LT Environmental, Inc. (LTE), on behalf of XTO Energy, Inc. (XTO), presents the following Deferral Request detailing site assessment, soil sampling, and remediation activities at the Poker Lake Unit (PLU) 320 Battery (Site) in Unit O, Section 4, Township 24 South, Range 30 East, in Eddy County, New Mexico (Figure 1). The purpose of the site assessment, soil sampling, and remediation activities was to address impacts to soil resulting from a release of produced water and crude oil at the Site. Based on field observations, field screening, and laboratory analytical results from soil sampling activities, XTO is submitting this Deferral Request, describing remediation that has occurred and requesting deferral of final remediation for Incident Number NRM2012229921 until the Site is reconstructed, and/or the well pad is abandoned.

RELEASE BACKGROUND

On April 22, 2020, a sight glass on a two-phase separator failed, resulting in the release of approximately 0.99 barrels (bbls) of crude oil and 15.53 bbls of produced water. The release occurred in the process equipment area of the well pad and was contained by an earthen containment berm. A vacuum truck was immediately dispatched to the Site to recover freestanding fluids; approximately 0.90 bbls of crude oil and 14.10 bbls of produced water were recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form (Form C-141) on April 29, 2020 and was subsequently assigned Incident Number NRM2012229921.

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 groundwater

well with depth to groundwater data is New Mexico Office of the State Engineer (NMOSE) well C-02095, located approximately 1.15 miles northeast of the Site. The groundwater well has a reported depth to groundwater of 440 feet bgs and a total depth of 554 feet bgs. There are 10 groundwater wells within a 2.3-mile radius that indicate regional depth to groundwater is greater than 100 feet bgs. United States Geologic Survey (USGS) well 321321103544101 located 2.3 miles southwest of the Site, was most recently measured in January 1998 and had a recorded depth to groundwater of 168 feet bgs. The referenced well records are included in Attachment 1.

The closest continuously flowing or significant watercourse to the Site is an unnamed dry wash, located approximately 1.03 miles northwest 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 identified on Figure 1.

CLOSURE CRITERIA

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

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

On May 13, 2020, LTE evaluated the release extent based on information provided on the Form C-141 and visual observations. The release occurred within the earthen berm surrounding active process equipment in the southeast area of the caliche well pad. LTE personnel collected four preliminary soil samples (SS01 through SS04) within the release extent from a depth of 0.5 feet bgs. The release extent and preliminary soil sample locations were mapped utilizing a handheld Global Positing System (GPS) unit and are depicted on Figure 2.

Soil from the preliminary soil samples was field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photoionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. The 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 TPH-GRO/TPH-DRO and TPH concentrations exceeded the Closure Criteria in preliminary soil samples SS01 through SS04. Based on visual observations and laboratory analytical results, delineation and excavation activities were conducted.

EXCAVATION AND DELINEATION SOIL SAMPLING ACTIVITIES

The following is a summary of the excavation and delineation activities conducted at the Site.

Excavation Activities

Between May 28, 2020 and June 15, 2020, LTE oversaw excavation of impacted soil. Excavation activities were performed using a track-mounted backhoe, hydro-vacuum, and transport vehicle. Due to the presence of active production equipment and pipelines within the release area, four separate excavations were completed. Impacted soil was excavated to depths ranging from 0.5 feet to 1.5 feet bgs. Photographic documentation was conducted during excavation activities and a photographic log is included in Attachment 2.

Following removal of impacted soil to the extent possible, LTE collected 5-point composite soil samples on a 200 square foot frequency from the floor of the excavations. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Floor soil samples FS01 through FS16 were collected within the release footprint. The composite floor samples were collected at depths ranging from 0.5 feet to 1.5 feet bgs. Due to the shallow depth of the excavation, the floor samples were also representative of the excavation sidewalls. The excavation soil samples were collected, handled, and analyzed as described above and submitted for analysis at Xenco in Carlsbad, New Mexico.

Floor samples FS10, FS11, and FS13 collected on June 9-10, 2020, exceeded the Closure Criteria for TPH and/or TPH-GRO/TPH-DRO. On June 15, 2020, LTE returned the site to collect additional floor samples from the FS10 and FS13 soil sample locations. No subsequent soil sample was collected from the FS11 sample location; visually impacted soil was observed around and beneath the active equipment adjacent to sample FS11; however, this area could not be accessed for additional excavation. The final excavation extents and final excavation soil sample locations are presented on Figure 3.

The combined excavation extents measured approximately 2,470 square feet in area. A total of approximately 90 cubic yards of impacted soil were removed during the excavation activities. The impacted soil was transported and properly disposed of at the R360 Facility located in Hobbs, New Mexico. After completion of confirmation sampling, the excavation was secured with fencing.

Delineation Activities

On June 15, 2020, one borehole (BH01) was advanced via stainless steel hand-auger to a depth of 4 feet bgs to vertically delineate the extent of impacted soil remaining in place around floor sample FS11. Two discrete soil samples (BH01 and BH01A) were collected from borehole BH01 at depths of 1.5 feet and 4 feet bgs, respectively. The delineation soil samples were field screened for volatile aromatic hydrocarbons and chloride utilizing a PID and Hach© chloride QuanTab© test strips, respectively. Field screening results and observations for the borehole were logged on lithologic/soil sampling logs, which are included in Attachment 3. The delineation soil samples and location borehole BH01 are presented on Figure 4. The delineation soil samples were collected, handled, and analyzed as described above at Xenco in Carlsbad, New Mexico.

ANALYTICAL RESULTS

Laboratory analytical results for preliminary soil samples SS01 through SS04 indicated that TPH-GRO/TPH-DRO and TPH concentrations exceeded the Closure Criteria. Impacted soil was excavated to the maximum extent possible. Laboratory analytical results indicated benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria in excavation floor soil samples FS01 through FS10 and FS12 through FS16. Laboratory analytical results indicated TPH-GRO/TPH-DRO and TPH concentrations exceeded the Closure Criteria in floor sample FS11.

Borehole BH01 was advanced to vertically delineate the impacted soil left in place around floor sample FS11. Laboratory analytical results for delineation soil samples BH01 and BH01A indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Additionally, a chloride concentration of 124 mg/kg was reported in delineation soil sample BH01A collected at 4 feet bgs, which provided vertical delineation of chloride to below 600 mg/kg.

Although hydro-excavation and hand shoveling was conducted, further exaction of impacted soil near FS11 was limited by the presence of active production equipment and pipelines. The laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are provided in Attachment 4.

DEFERRAL REQUEST

A total of approximately 90 cubic yards of impacted soil were excavated from the Site; however, TPH-impacted soil immediately surrounding the infrastructure near floor sample FS11 was left in place for compliance with the XTO safety policy regarding earth-moving activities within 2 feet of active production equipment and/or pipelines and could not be accessed due to space limitations.

Residual impacted soil beneath or adjacent to the active production equipment is delineated laterally by excavation soil samples FS08 to the north, FS05 and FS06 to the west, FS01, FS04, and FS12 to the south, FS09, FS15, and FS16 to the east, and vertically by borehole samples BH01 and BH01A that were compliant with the Closure Criteria. Excavation soil samples FS01 through FS10 immediately surrounding the point of release, and excavation soil samples FS12 through FS16 located in accessible areas, confirm no impacted soil remains in other areas of the release footprint.

An estimated 2.9 cubic yards of residual impacted soil remains in-place assuming a maximum depth of 1.5 feet bgs in the area immediately surrounding the infrastructure around FS11. The requested deferral area and active production equipment is shown on Figure 4. Due to the presence of equipment and lines, attempts at hand shoveling and hydro-excavation in this limited area were unsuccessful. Therefore, XTO requests permission to backfill the onsite excavations and complete remediation of the remaining impacted soil during any future major construction or final abandonment, whichever occurs first. LTE and XTO do not believe deferment will result in an imminent risk to human health, the environment, or groundwater.

XTO requests deferral of final remediation for Incident Number NRM2012229921. Upon approval of this Deferral Request, XTO will backfill the on-pad excavations with material purchased locally and recontour the Site to match pre-existing Site conditions.

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

Sincerely,

LT ENVIRONMENTAL, INC.

William Mather
Staff Environmental Scientist

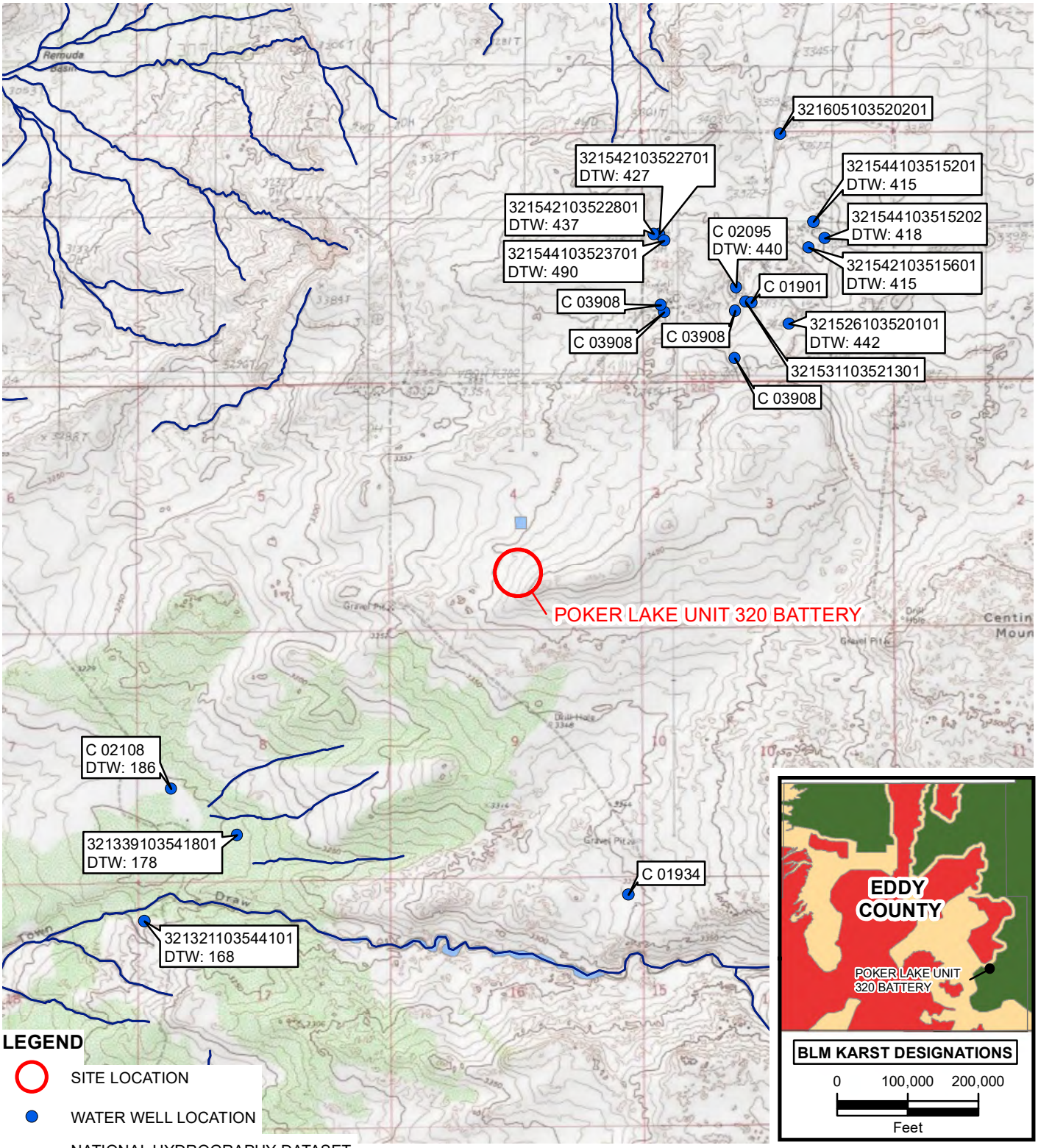
Ashley L. Ager, P.G.
Senior Geologist

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

Attachments:

Figure 1	Site Location Map
Figure 2	Preliminary Soil Sample Locations
Figure 3	Excavation Soil Sample Locations
Figure 4	Deferral Area
Table 1	Soil Analytical Results
Attachment 1	Referenced Well Records
Attachment 2	Photographic Log
Attachment 3	Lithologic /Soil Sampling Log
Attachment 4	Laboratory Analytical Results

FIGURES



NOTE: INCIDENT NUMBER NRM2012229921
DTW: DEPTH TO WATER IN FEET
BLM: BUREAU OF LAND MANAGEMENT

FIGURE 1
SITE LOCATION MAP
POKER LAKE UNIT 320 BATTERY
UNIT O SEC 4 T24S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012920077_PLU 320 BATTERY 4-22-2020\012920077_FIG01_SL_RECEPTOR_2020.mxd

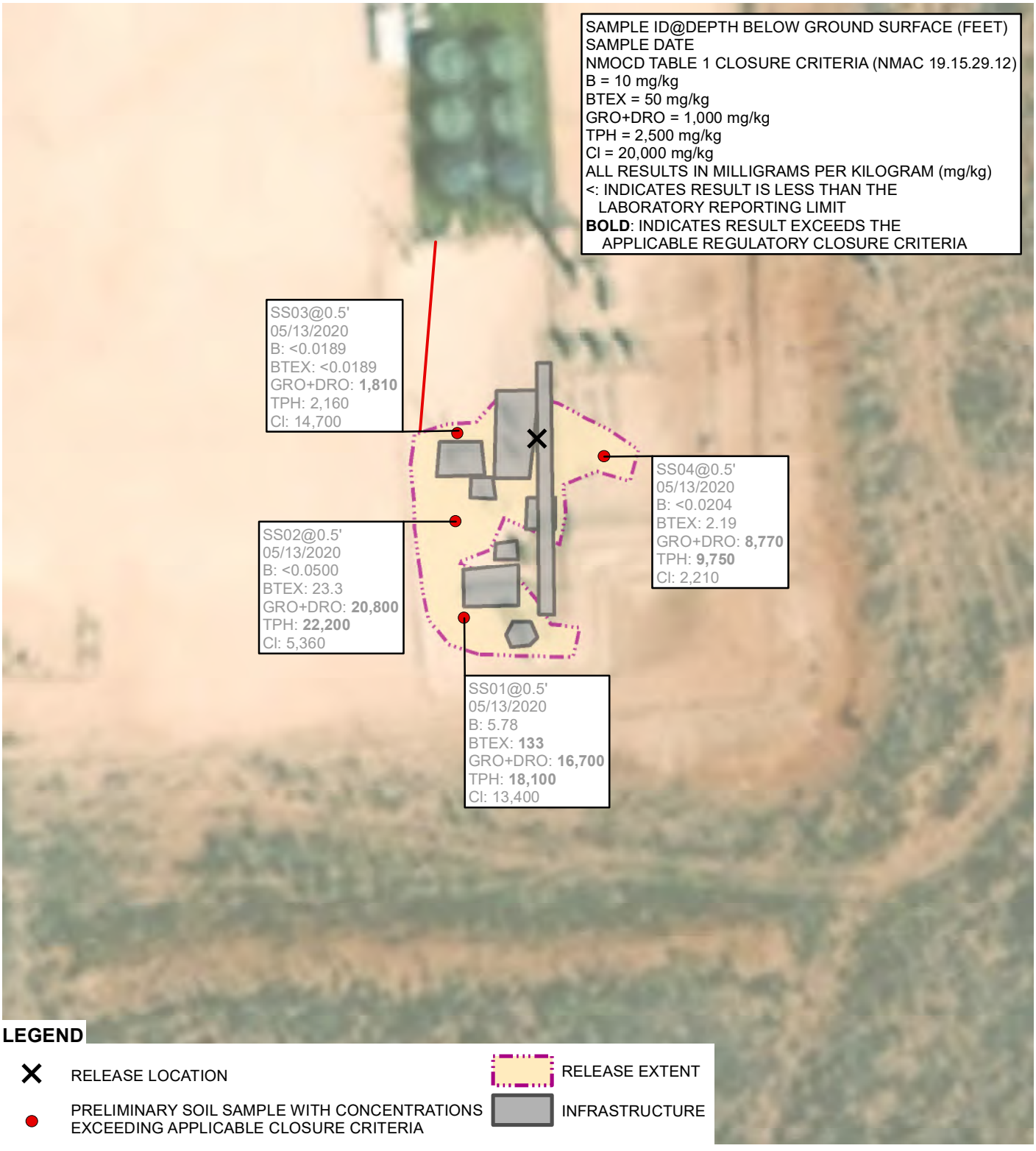
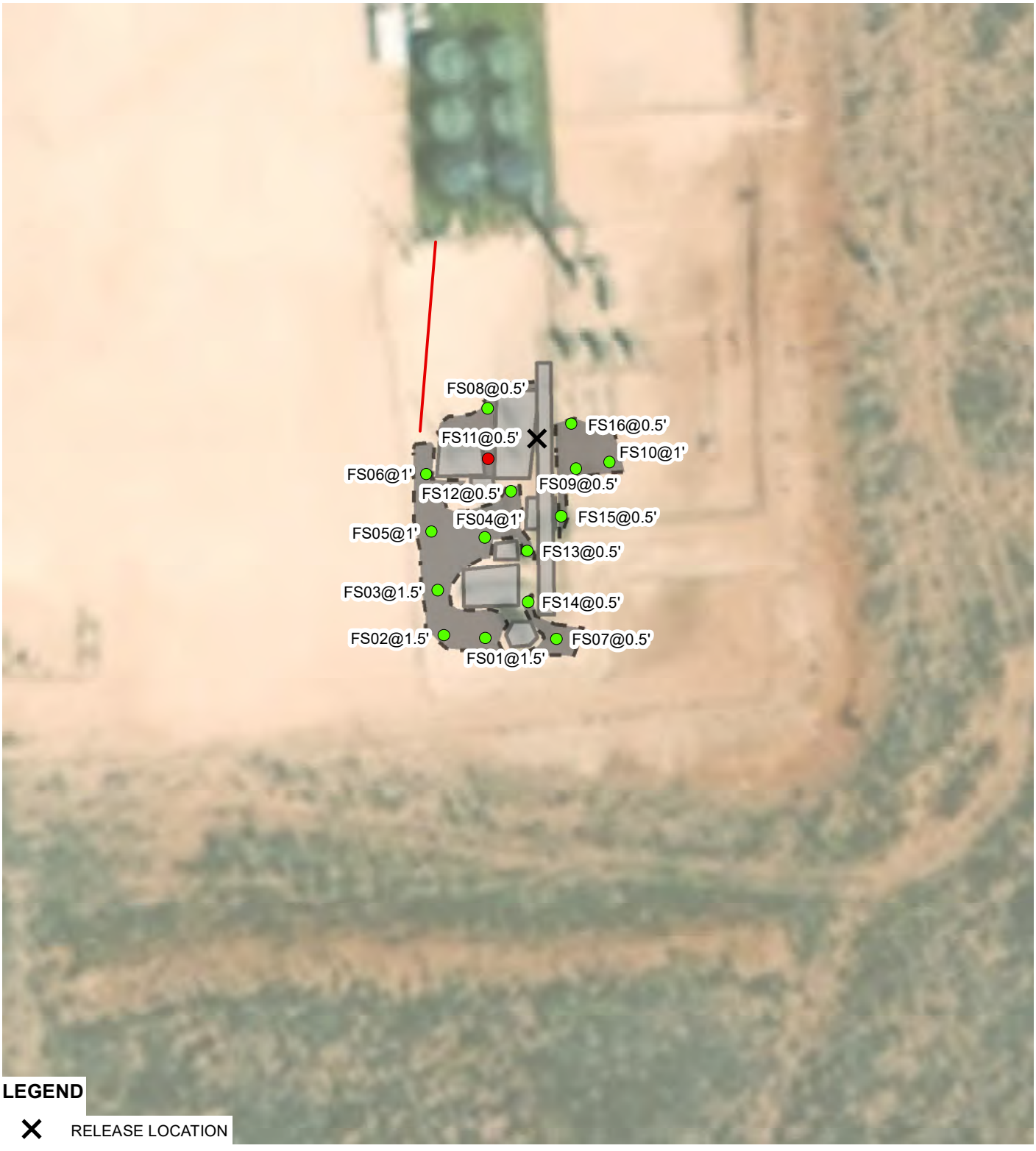


FIGURE 2
PRELIMINARY SOIL SAMPLE LOCATIONS
POKER LAKE UNIT 320 BATTERY
UNIT O SEC 4 T24S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012920077_PLU 320 BATTERY 4-22-2020\012920077_FIG02_PRELIMINARY_2020.mxd



LEGEND

- RELEASE LOCATION
- FLOOR SAMPLE WITH CONCENTRATIONS EXCEEDING APPLICABLE CLOSURE CRITERIA
- FLOOR SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- ELECTRIC LINE
- EXCAVATION EXTENT
- INFRASTRUCTURE

NOTE: INCIDENT NUMBER NRM2012229921
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

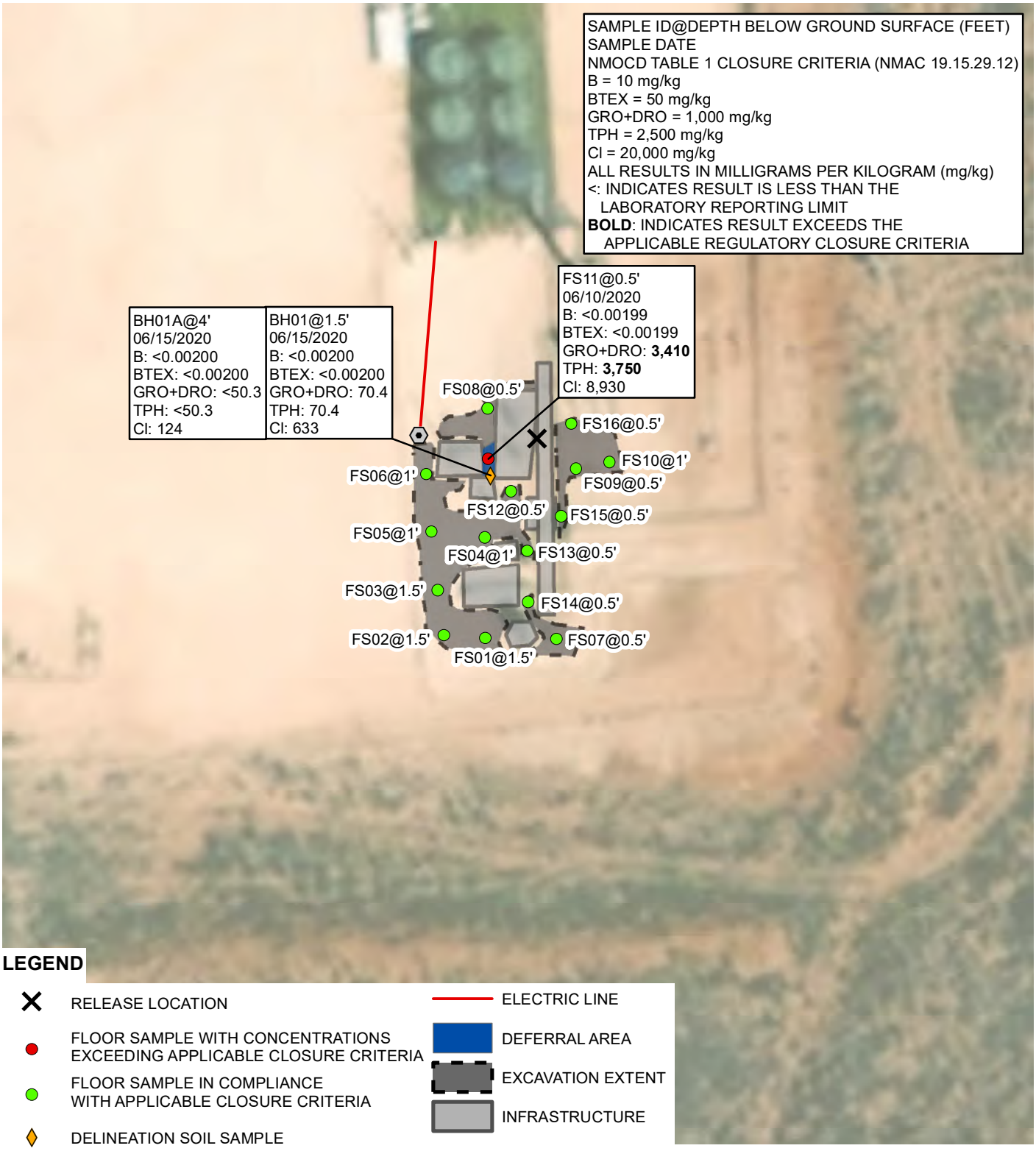
IMAGE COURTESY OF ESRI

0 50 100
Feet

N

FIGURE 3
EXCAVATION SOIL SAMPLE LOCATIONS
POKER LAKE UNIT 320 BATTERY
UNIT O SEC 4 T24S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012920077_PLU 320 BATTERY 4-22-2020\012920077_FIG03_EXCAVATION_2020.mxd



LEGEND

- RELEASE LOCATION
- FLOOR SAMPLE WITH CONCENTRATIONS EXCEEDING APPLICABLE CLOSURE CRITERIA
- FLOOR SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- DELINEATION SOIL SAMPLE
- ELECTRICAL POLE
- ELECTRIC LINE
- DEFERRAL AREA
- EXCAVATION EXTENT
- INFRASTRUCTURE

IMAGE COURTESY OF ESRI

0 50 100
Feet

N

B: BENZENE
BTEX: TOTAL BENZENE, TOLUENE, ETHYLBENZENE, AND TOTAL XYLENES
GRO: GASOLINE RANGE ORGANICS
DRO: DIESEL RANGE ORGANICS
TPH: TOTAL PETROLEUM HYDROCARBONS
Cl: CHLORIDE
NMAC: NEW MEXICO ADMINISTRATIVE CODE
NMOCD: NEW MEXICO OIL CONSERVATION DIVISION
NOTE: INCIDENT NUMBER NRM2012229921
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

FIGURE 4
DEFERRAL AREA
POKER LAKE UNIT 320 BATTERY
UNIT O SEC 4 T24S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012920077_PLU 320 BATTERY 4-22-2020\012920077_FIG04_DEFERRAL_2020.mxd

TABLES

TABLE 1
SOIL ANALYTICAL RESULTS

POKER LAKE UNIT 320 BATTERY
INCIDENT NUMBER NRM2012229921
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	0.5	05/13/2020	5.78	38.7	13.4	74.8	**133**	1,560	15,100	1,450	**16,700**	**18,100**	13,400
SS02	0.5	05/13/2020	<0.0500	1.30	3.49	18.5	23.3	3,570	17,200	1,430	**20,800**	**22,200**	5,360
SS03	0.5	05/13/2020	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<74.9	1,810	350	**1,810**	2,160	14,700
SS04	0.5	05/13/2020	<0.0204	<0.0204	0.350	1.84	2.19	319	8,450	976	**8,770**	**9,750**	2,210
FS01	1.5	06/09/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.2	121	<50.2	121	121	3,130
FS02	1.5	06/09/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.3	109	<50.3	109	109	3,640
FS03	1.5	06/10/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<49.8	117	<49.8	117	117	2,980
FS04	1	06/09/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.1	797	98.8	797	896	13,200
FS05	1	06/09/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.9	97.7	<49.9	97.7	97.7	8,290
FS06	1	06/09/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.0	411	54.9	411	466	8,940
FS07	0.5	06/09/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.1	358	54.8	358	413	2,650
FS08	0.5	06/10/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.1	75.4	<50.1	75.4	75.4	3,500
FS09	0.5	06/09/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.2	80.6	<50.2	80.6	80.6	331
FS10	1	06/09/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.1	1,140	119	**1,140**	1,260	363
FS10	1	06/15/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.1	928	129	928	1,060	1,020
FS11	0.5	06/10/2020	<0.00199	<0.00199	0.0181	0.105	0.123	<251	3,410	342	**3,410**	**3,750**	8,930
FS12	0.5	06/10/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<49.8	410	95.1	410	505	5,960
FS13	0.5	06/10/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	1,150	244	**1,150**	1,390	7,270
FS13	0.5	06/15/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.2	271	75.6	271	347	715
FS14	0.5	06/10/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.0	844	213	844	1,060	6,060
FS15	0.5	06/10/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	205	<50.2	205	205	356
BH01	1.5	06/15/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.1	70.4	<50.1	70.4	70.4	633
BH01A	4	06/15/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.3	<50.3	<50.3	<50.3	<50.3	124

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TABLE 1
SOIL ANALYTICAL RESULTS

POKER LAKE UNIT 320 BATTERY
INCIDENT NUMBER NRM2012229921
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**
FS16	0.5	06/10/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	266	<50.0	266	266	250

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
TEXT -indicates sample was removed during excavation

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ATTACHMENT 1: REFERENCED WELL RECORDS

New Mexico Office of the State Engineer

Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) Q64	Q16	Q4	Sec	Tws	Rng	(NAD83 UTM in meters) X	Y
	C 02095		2	3	34	23S	30E	606337	3569759*

Driller License:		**Driller Company:**			
Driller Name:	DEPT. OF ENGERY				
Drill Start Date:		**Drill Finish Date:**	08/31/1960	**Plug Date:**	
Log File Date:		**PCW Rcv Date:**		**Source:**	
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	100 GPM
Casing Size:	12.75	**Depth Well:**	554 feet	**Depth Water:**	440 feet

***UTM location was derived from PLSS - see Help**

New Mexico Office of the State Engineer

Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) Q64	Q16	Q4	Sec	Tws	Rng	(NAD83 UTM in meters) X	Y
	C 02108		1	3	08	24S	30E	602702	3566487*

Driller License:		**Driller Company:**			
Driller Name:	UNKNOWN				
Drill Start Date:		**Drill Finish Date:**	12/31/1963	**Plug Date:**	
Log File Date:		**PCW Rcv Date:**		**Source:**	
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	16 GPM
Casing Size:	7.00	**Depth Well:**	200 feet	**Depth Water:**	186 feet

***UTM location was derived from PLSS - see Help**

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site_no list =

- 321321103544101

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

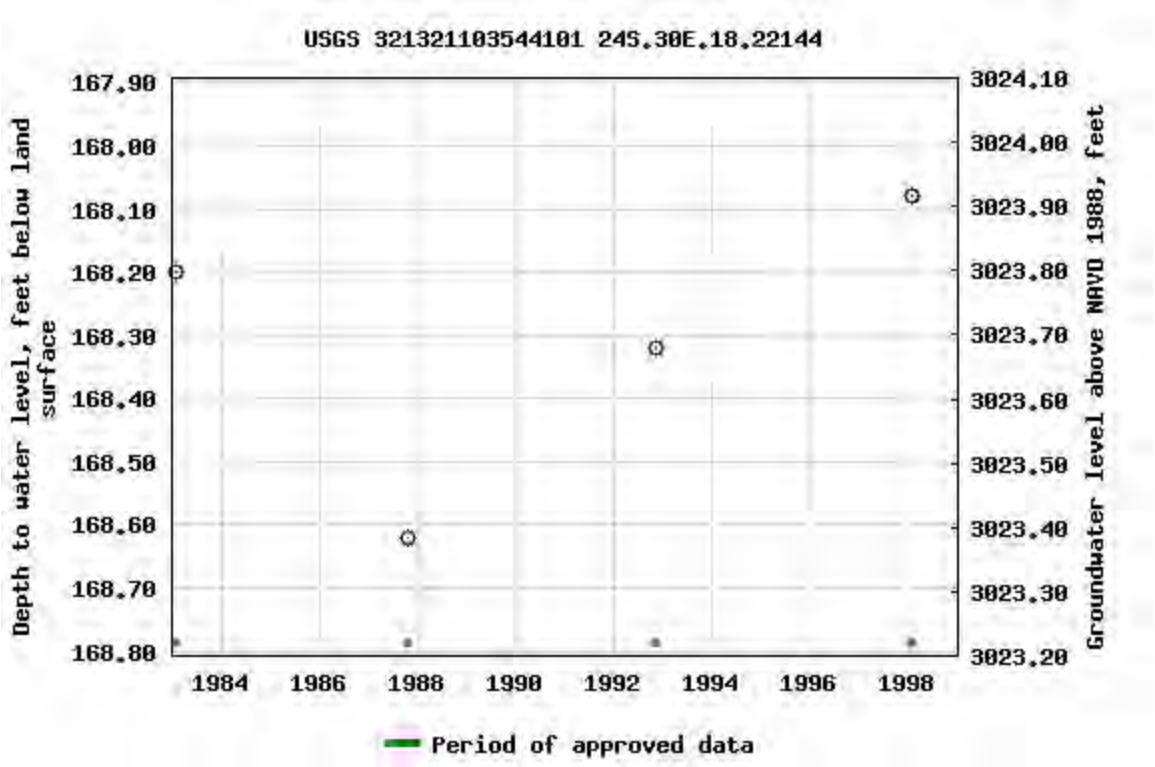
USGS 321321103544101 24S.30E.18.22144

Available data for this site Groundwater: Field measurements | GO

Eddy County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°13'21", Longitude 103°54'41" NAD27
Land-surface elevation 3,192 feet above NAVD88

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period



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site_no list =

- 321339103541801

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

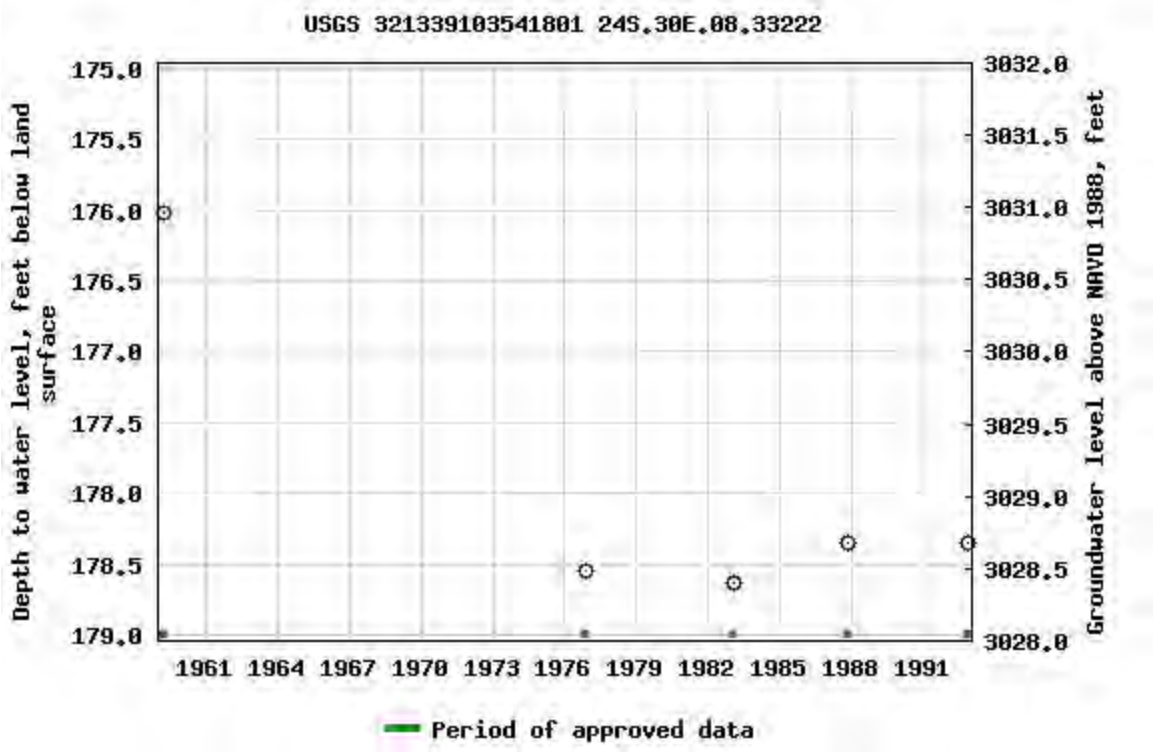
USGS 321339103541801 24S.30E.08.33222

Available data for this site Groundwater: Field measurements | GO

Eddy County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°13'39", Longitude 103°54'18" NAD27
Land-surface elevation 3,207 feet above NAVD88
The depth of the well is 192 feet below land surface.
This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period



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site_no list =

- 321526103520101

Minimum number of levels = 1

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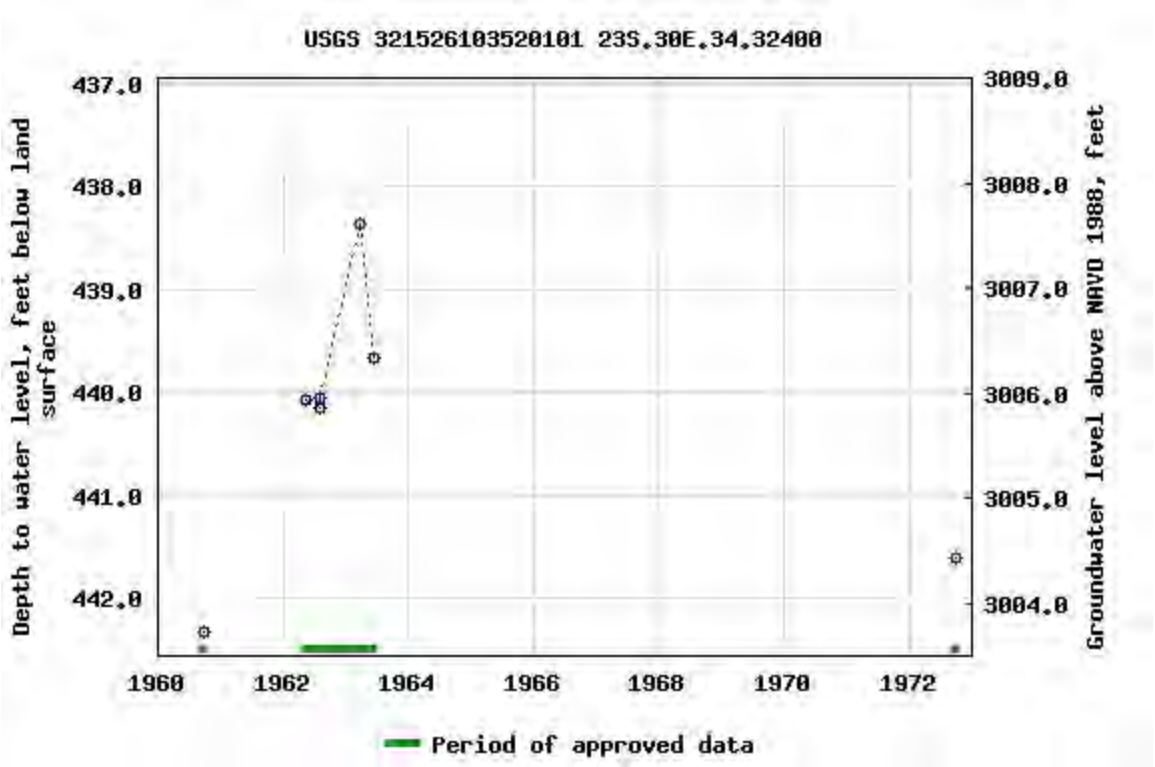
USGS 321526103520101 23S.30E.34.32400

Available data for this site Groundwater: Field measurements | GO

Eddy County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°15'26", Longitude 103°52'01" NAD27
Land-surface elevation 3,446 feet above NAVD88
The depth of the well is 567 feet below land surface.
This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period



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site_no list =

- 321542103515601

Minimum number of levels = 1

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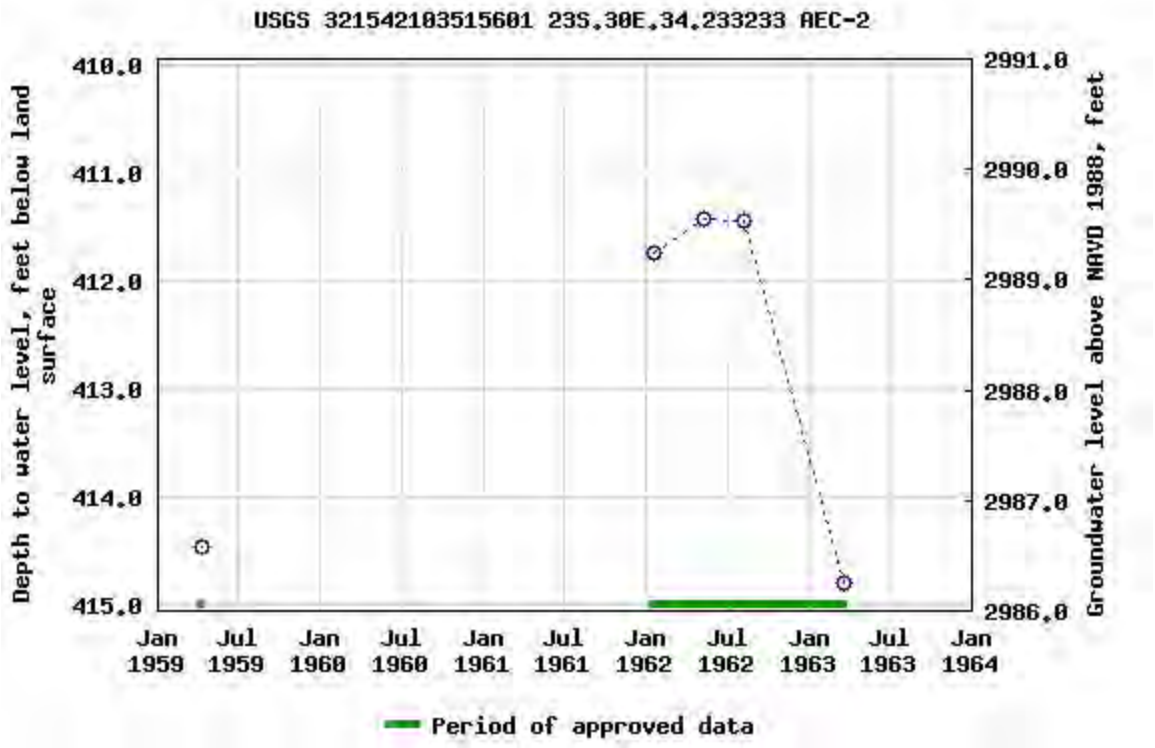
USGS 321542103515601 23S.30E.34.233233 AEC-2

Available data for this site Groundwater: Field measurements | GO

Eddy County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°15'42", Longitude 103°51'56" NAD27
Land-surface elevation 3,401 feet above NAVD88
This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period



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site_no list =

- 321542103522701

Minimum number of levels = 1

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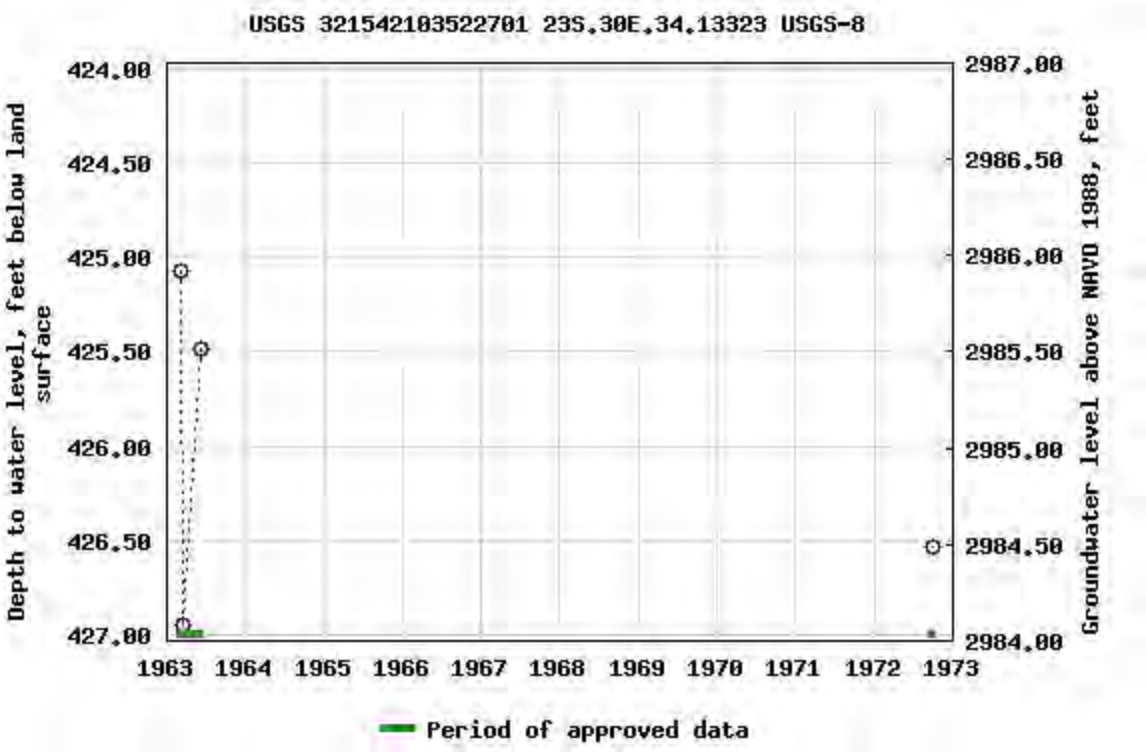
USGS 321542103522701 23S.30E.34.13323 USGS-8

Available data for this site Groundwater: Field measurements | GO

Eddy County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°15'45.4", Longitude 103°52'34.64" NAD83
Land-surface elevation 3,411 feet above NAVD88
This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period



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site_no list =

- 321542103522801

Minimum number of levels = 1

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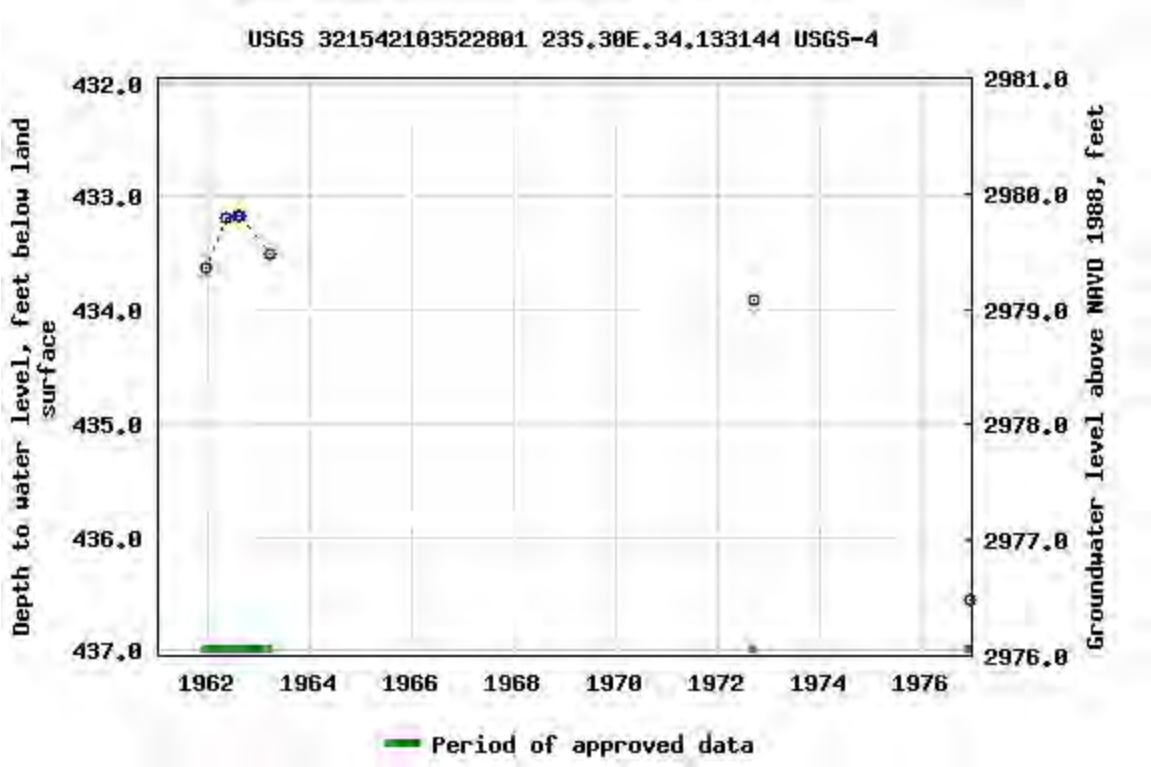
USGS 321542103522801 23S.30E.34.133144 USGS-4

Available data for this site Groundwater: Field measurements | GO

Eddy County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°15'45.42", Longitude 103°52'36.09" NAD83
Land-surface elevation 3,413 feet above NAVD88
The depth of the well is 518 feet below land surface.
This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period



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9.93 0.58 nadww01

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site_no list =

- 321544103515201

Minimum number of levels = 1

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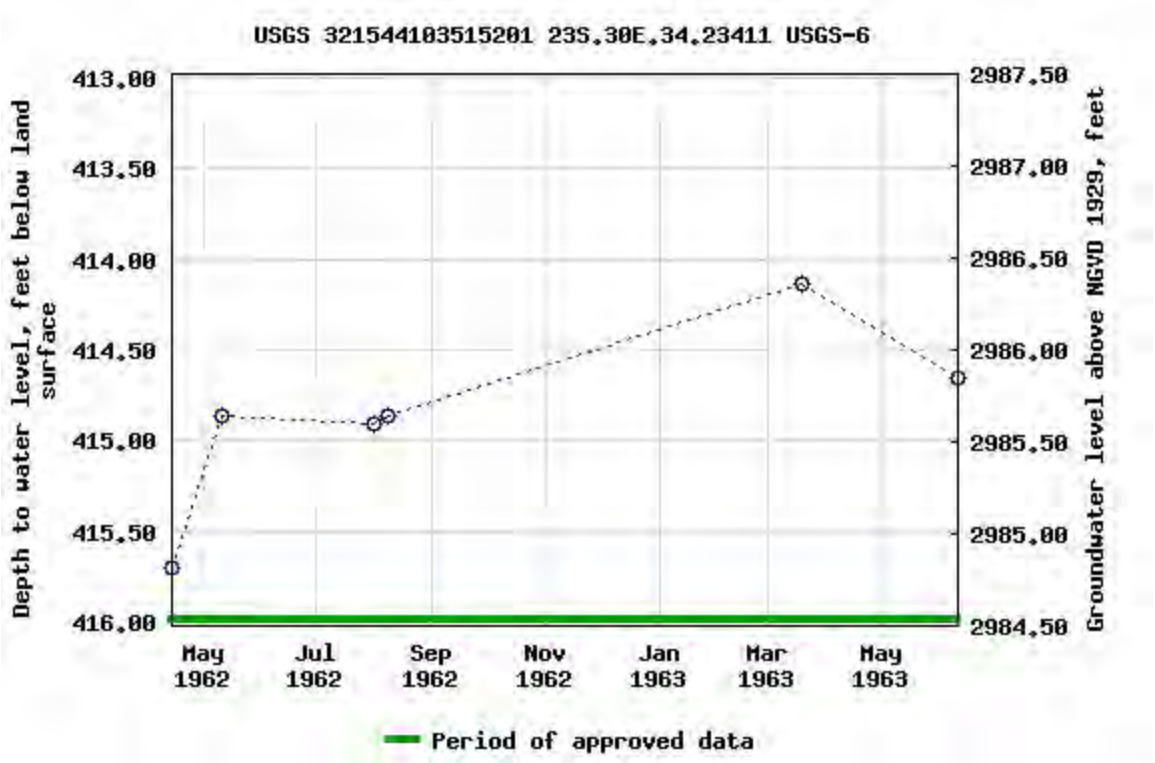
USGS 321544103515201 23S.30E.34.23411 USGS-6

Available data for this site Groundwater: Field measurements | GO

Eddy County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°15'47.9", Longitude 103°51'56.6" NAD83
Land-surface elevation 3,400.50 feet above NGVD29
The depth of the well is 567 feet below land surface.
This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period



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site_no list =

- 321544103515202

Minimum number of levels = 1

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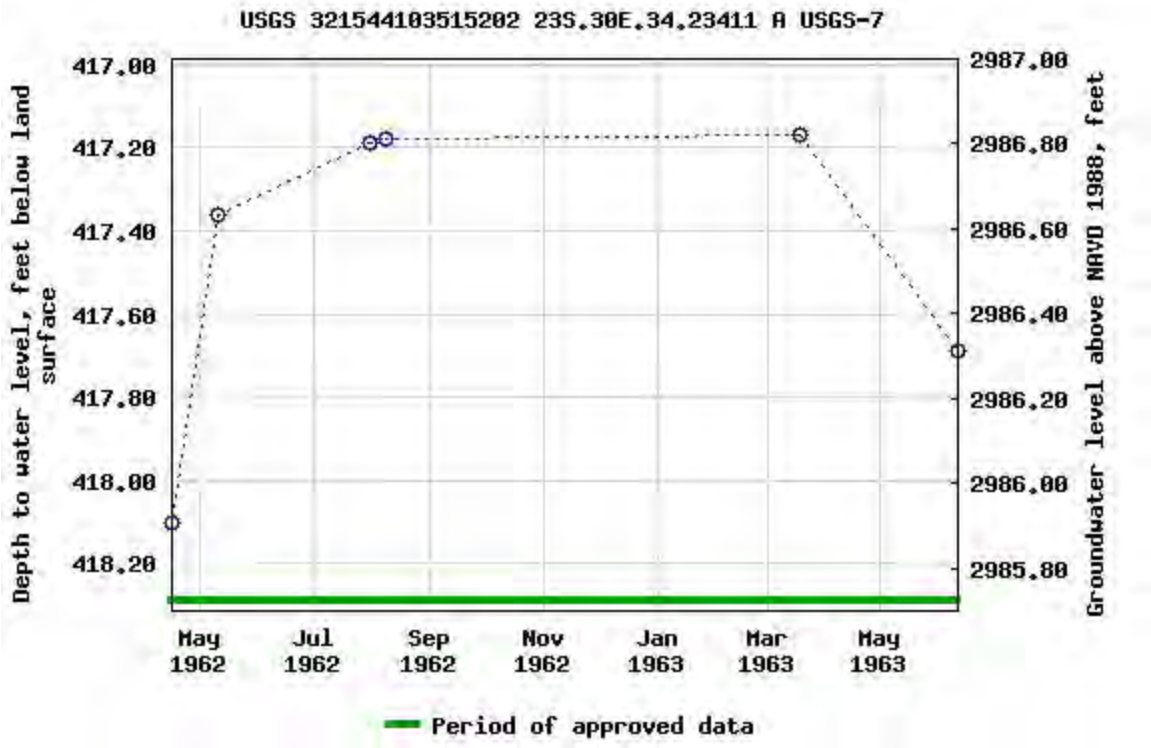
USGS 321544103515202 23S.30E.34.23411 A USGS-7

Available data for this site Groundwater: Field measurements | GO

Eddy County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°15'44", Longitude 103°51'52" NAD27
Land-surface elevation 3,404 feet above NAVD88
The depth of the well is 563 feet below land surface.
This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period



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site_no list =

- 321544103523701

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

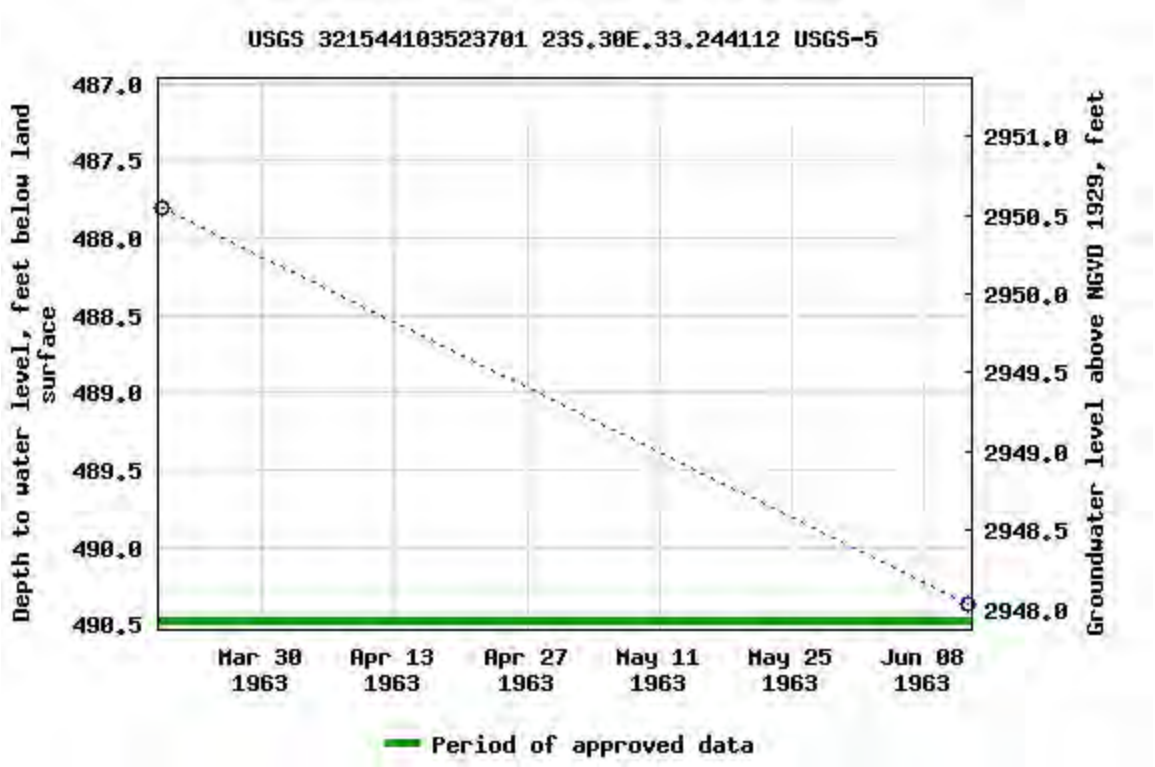
USGS 321544103523701 23S.30E.33.244112 USGS-5

Available data for this site Groundwater: Field measurements | GO

Eddy County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°15'44.1", Longitude 103°52'33.5" NAD83
Land-surface elevation 3,438.37 feet above NGVD29
The depth of the well is 696 feet below land surface.
This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period



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ATTACHMENT 2: PHOTOGRAPHIC LOG

PHOTOGRAPHIC LOG

Photograph 1: View of release around equipment facing northeast.

Photograph 2: View of staining inside earthen berm facing northeast.

Photograph 3: View of excavation facing east.

Photograph 4: View of excavation facing south east.

PLU 320
Incident Number NRM2012229921
Photographs Taken: April 22 through June 10, 2020

PHOTOGRAPHIC LOG

Photograph 5: View of the northwest excavation facing west.

Photograph 6: View of hand shovel and hydrovac excavation around lines in the northwest portion of release extent facing north.

Photograph 7: View of hand shoveling/hydrovac around lines and equipment in the north portion of the release extent facing northeast.

Photograph 8: View of hand shoveling/hydrovac excavation around lines and equipment in the southern portion of the release extent facing south.

ATTACHMENT 3: LITHOLOGIC/SOIL SAMPLING LOGS

LT Environmental, Inc.
508 West Stevens Street
Carlsbad, New Mexico 88220
A proud member of WSP
Compliance · Engineering · Remediation

BH or PH Name: BH01	Date: 6/15/2020
Site Name: PLU 320	
RP or Incident Number: NRM2012229921	
LTE Job Number: 12920077	

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: Will Mather	Method: Hand Auger		
Lat/Long:	Field Screening: Chloride, PID	Hole Diameter: 4"	Total Depth: 4'

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
D	1,286	5.4	N			0.5	CCHE	Caliche, medium-large grain sand, poorly graded, tan, dry, no stain, odor,
D	1,286	28.1	N			1	CCHE	
M	934	4.5	N	BH01		1.5	SW	
M	934	2.6	N			2	SW	SAND, medium grain, well graded, few caliche gravel, moist, no stain, odo
M	780	3.0	N			3	SW	
M	294	0.6	N	BH01A		4	SW	SAND, medium grain, well graded, few caliche gravel, moist, no stain, no odor

ATTACHMENT 4: LABORATORY ANALYTICAL RESULTS

Certificate of Analysis Summary 664463

LT Environmental, Inc., Arvada, CO

Project Name: PLU 320

Project Id: 012920077
Contact: Dan Moir
Project Location: Eddy]

Date Received in Lab: Mon 06.15.2020 14:05
Report Date: 06.19.2020 12:29
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	664463-001		664463-002		664463-003		664463-004					
	Field Id:	FS10		FS13		BH01		BH01A					
	Depth:	1- ft		0.5- ft		1.5- ft		4- ft					
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	06.15.2020 09:18		06.15.2020 09:22		06.15.2020 09:50		06.15.2020 10:48					
BTEX by EPA 8021B	***Extracted:***	06.15.2020 14:47		06.15.2020 14:47		06.15.2020 14:47		06.15.2020 14:47					
	Analyzed:	06.15.2020 17:14		06.15.2020 19:37		06.15.2020 19:57		06.15.2020 20:18					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		<0.00201	0.00201	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200				
Toluene		<0.00201	0.00201	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200				
Ethylbenzene		<0.00201	0.00201	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200				
m,p-Xylenes		<0.00402	0.00402	<0.00402	0.00402	<0.00399	0.00399	<0.00400	0.00400				
o-Xylene		<0.00201	0.00201	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200				
Total Xylenes		<0.00201	0.00201	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200				
Total BTEX		<0.00201	0.00201	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200				
Chloride by EPA 300	***Extracted:***	06.15.2020 14:50		06.15.2020 14:50		06.15.2020 14:50		06.15.2020 14:50					
	Analyzed:	06.15.2020 15:19		06.15.2020 15:26		06.15.2020 15:33		06.15.2020 15:40					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		1020	50.3	715	10.0	633	50.1	124	9.92				
TPH by SW8015 Mod	***Extracted:***	06.15.2020 14:15		06.15.2020 14:15		06.15.2020 14:15		06.15.2020 14:15					
	Analyzed:	06.15.2020 17:22		06.15.2020 17:42		06.15.2020 18:03		06.15.2020 18:23					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<50.1	50.1	<50.2	50.2	<50.1	50.1	<50.3	50.3				
Diesel Range Organics (DRO)		928	50.1	271	50.2	70.4	50.1	<50.3	50.3				
Motor Oil Range Hydrocarbons (MRO)		129	50.1	75.6	50.2	<50.1	50.1	<50.3	50.3				
Total GRO-DRO		928	50.1	271	50.2	70.4	50.1	<50.3	50.3				
Total TPH		1060	50.1	347	50.2	70.4	50.1	<50.3	50.3				

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

Jessica Kramer
Project Manager

Analytical Report 664463

for

LT Environmental, Inc.

Project Manager: Dan Moir

PLU 320

012920077

06.19.2020

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-34), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-17)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-22)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-7)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)

06.19.2020

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

Reference: XENCO Report No(s): **664463**
PLU 320
Project Address: Eddy]

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) 664463. 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. 664463 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jessica Kramer

Jessica Kramer
Project Manager

A Small Business and Minority Company

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

Sample Cross Reference 664463

LT Environmental, Inc., Arvada, CO

PLU 320

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS10	S	06.15.2020 09:18	1 ft	664463-001
FS13	S	06.15.2020 09:22	0.5 ft	664463-002
BH01	S	06.15.2020 09:50	1.5 ft	664463-003
BH01A	S	06.15.2020 10:48	4 ft	664463-004

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: PLU 320

Project ID: *012920077*
Work Order Number(s): *664463*

Report Date: *06.19.2020*
Date Received: *06.15.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analytical Results 664463

LT Environmental, Inc., Arvada, CO

PLU 320

Sample Id:	**FS10**	Matrix:	Soil	Date Received:	06.15.2020 14:05
Lab Sample Id:	664463-001	Date Collected:	06.15.2020 09:18	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.15.2020 14:50	Basis:	Wet Weight
Seq Number:	3129015				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1020**	50.3	mg/kg	06.15.2020 15:19		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB			% Moisture:	
Analyst:	DTH	Date Prep:	06.15.2020 14:15	Basis:	Wet Weight
Seq Number:	3129093				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	06.15.2020 17:22	U	1
Diesel Range Organics (DRO)	C10C28DRO	**928**	50.1	mg/kg	06.15.2020 17:22		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**129**	50.1	mg/kg	06.15.2020 17:22		1
Total GRO-DRO	PHC628	**928**	50.1	mg/kg	06.15.2020 17:22		1
Total TPH	PHC635	**1060**	50.1	mg/kg	06.15.2020 17:22		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	06.15.2020 17:22	
o-Terphenyl	84-15-1	82	%	70-135	06.15.2020 17:22	

Certificate of Analytical Results 664463

LT Environmental, Inc., Arvada, CO

PLU 320

Sample Id:	**FS10**	Matrix:	Soil	Date Received:	06.15.2020 14:05
Lab Sample Id:	664463-001	Date Collected:	06.15.2020 09:18	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.15.2020 14:47	Basis:	Wet Weight
Seq Number:	3129096				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.15.2020 17:14	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	06.15.2020 17:14	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.15.2020 17:14	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.15.2020 17:14	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.15.2020 17:14	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.15.2020 17:14	U	1
Total BTEX		<0.00201	0.00201	mg/kg	06.15.2020 17:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	70-130	06.15.2020 17:14	
1,4-Difluorobenzene	540-36-3	109	%	70-130	06.15.2020 17:14	

Certificate of Analytical Results 664463

LT Environmental, Inc., Arvada, CO

PLU 320

Sample Id:	**FS13**	Matrix:	Soil	Date Received:	06.15.2020 14:05
Lab Sample Id:	664463-002	Date Collected:	06.15.2020 09:22	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.15.2020 14:50	Basis:	Wet Weight
Seq Number:	3129015				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**715**	10.0	mg/kg	06.15.2020 15:26		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB			% Moisture:	
Analyst:	DTH	Date Prep:	06.15.2020 14:15	Basis:	Wet Weight
Seq Number:	3129093				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	06.15.2020 17:42	U	1
Diesel Range Organics (DRO)	C10C28DRO	**271**	50.2	mg/kg	06.15.2020 17:42		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**75.6**	50.2	mg/kg	06.15.2020 17:42		1
Total GRO-DRO	PHC628	**271**	50.2	mg/kg	06.15.2020 17:42		1
Total TPH	PHC635	**347**	50.2	mg/kg	06.15.2020 17:42		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-135	06.15.2020 17:42	
o-Terphenyl	84-15-1	73	%	70-135	06.15.2020 17:42	

Certificate of Analytical Results 664463

LT Environmental, Inc., Arvada, CO

PLU 320

Sample Id:	**FS13**	Matrix:	Soil	Date Received:	06.15.2020 14:05
Lab Sample Id:	664463-002	Date Collected:	06.15.2020 09:22	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.15.2020 14:47	Basis:	Wet Weight
Seq Number:	3129096				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.15.2020 19:37	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	06.15.2020 19:37	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.15.2020 19:37	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.15.2020 19:37	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.15.2020 19:37	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.15.2020 19:37	U	1
Total BTEX		<0.00201	0.00201	mg/kg	06.15.2020 19:37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	108	%	70-130	06.15.2020 19:37	
4-Bromofluorobenzene	460-00-4	96	%	70-130	06.15.2020 19:37	

Certificate of Analytical Results 664463

LT Environmental, Inc., Arvada, CO

PLU 320

Sample Id:	**BH01**	Matrix:	Soil	Date Received:	06.15.2020 14:05
Lab Sample Id:	664463-003	Date Collected:	06.15.2020 09:50	Sample Depth:	1.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.15.2020 14:50	Basis:	Wet Weight
Seq Number:	3129015				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**633**	50.1	mg/kg	06.15.2020 15:33		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB			% Moisture:	
Analyst:	DTH	Date Prep:	06.15.2020 14:15	Basis:	Wet Weight
Seq Number:	3129093				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	06.15.2020 18:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	**70.4**	50.1	mg/kg	06.15.2020 18:03		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	06.15.2020 18:03	U	1
Total GRO-DRO	PHC628	**70.4**	50.1	mg/kg	06.15.2020 18:03		1
Total TPH	PHC635	**70.4**	50.1	mg/kg	06.15.2020 18:03		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-135	06.15.2020 18:03	
o-Terphenyl	84-15-1	76	%	70-135	06.15.2020 18:03	

Certificate of Analytical Results 664463

LT Environmental, Inc., Arvada, CO

PLU 320

Sample Id:	**BH01**	Matrix:	Soil	Date Received:	06.15.2020 14:05
Lab Sample Id:	664463-003	Date Collected:	06.15.2020 09:50	Sample Depth:	1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.15.2020 14:47	Basis:	Wet Weight
Seq Number:	3129096				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.15.2020 19:57	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.15.2020 19:57	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.15.2020 19:57	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	06.15.2020 19:57	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.15.2020 19:57	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.15.2020 19:57	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.15.2020 19:57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	99	%	70-130	06.15.2020 19:57	
1,4-Difluorobenzene	540-36-3	110	%	70-130	06.15.2020 19:57	

Certificate of Analytical Results 664463

LT Environmental, Inc., Arvada, CO

PLU 320

Sample Id:	**BH01A**	Matrix:	Soil	Date Received:	06.15.2020 14:05
Lab Sample Id:	664463-004	Date Collected:	06.15.2020 10:48	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.15.2020 14:50	Basis:	Wet Weight
Seq Number:	3129015				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**124**	9.92	mg/kg	06.15.2020 15:40		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB			% Moisture:	
Analyst:	DTH	Date Prep:	06.15.2020 14:15	Basis:	Wet Weight
Seq Number:	3129093				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	06.15.2020 18:23	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	06.15.2020 18:23	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	06.15.2020 18:23	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	06.15.2020 18:23	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	06.15.2020 18:23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	82	%	70-135	06.15.2020 18:23	
o-Terphenyl	84-15-1	77	%	70-135	06.15.2020 18:23	

Certificate of Analytical Results 664463

LT Environmental, Inc., Arvada, CO

PLU 320

Sample Id:	**BH01A**	Matrix:	Soil	Date Received:	06.15.2020 14:05
Lab Sample Id:	664463-004	Date Collected:	06.15.2020 10:48	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.15.2020 14:47	Basis:	Wet Weight
Seq Number:	3129096				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.15.2020 20:18	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.15.2020 20:18	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.15.2020 20:18	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	06.15.2020 20:18	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.15.2020 20:18	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.15.2020 20:18	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.15.2020 20:18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	70-130	06.15.2020 20:18	
1,4-Difluorobenzene	540-36-3	111	%	70-130	06.15.2020 20:18	

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

QC Summary 664463

LT Environmental, Inc.

PLU 320

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3129015 — Matrix: Solid — Date Prep: 06.15.2020
MB Sample Id: 7705472-1-BLK — LCS Sample Id: 7705472-1-BKS — LCSD Sample Id: 7705472-1-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	246	98	254	102	90-110	3	20	mg/kg	06.15.2020 14:51	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3129015 — Matrix: Soil — Date Prep: 06.15.2020
Parent Sample Id: 664446-001 — MS Sample Id: 664446-001 S — MSD Sample Id: 664446-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	163	199	374	106	374	106	90-110	0	20	mg/kg	06.15.2020 15:12	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3129093 — Matrix: Solid — Date Prep: 06.15.2020
MB Sample Id: 7705525-1-BLK — LCS Sample Id: 7705525-1-BKS — LCSD Sample Id: 7705525-1-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	939	94	964	96	70-135	3	35	mg/kg	06.15.2020 11:32	
Diesel Range Organics (DRO)	<50.0	1000	982	98	990	99	70-135	1	35	mg/kg	06.15.2020 11:32	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	78		103		103		70-135	%	06.15.2020 11:32
o-Terphenyl	72		94		90		70-135	%	06.15.2020 11:32

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3129093 — Matrix: Solid — Date Prep: 06.15.2020
MB Sample Id: 7705525-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	06.15.2020 11:12	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3129093 — Matrix: Soil — Date Prep: 06.15.2020
Parent Sample Id: 664451-001 — MS Sample Id: 664451-001 S — MSD Sample Id: 664451-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	99.9	995	1100	101	1090	100	70-135	1	35	mg/kg	06.15.2020 14:43	
Diesel Range Organics (DRO)	1710	995	2040	33	2150	44	70-135	5	35	mg/kg	06.15.2020 14:43	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	89		97		70-135	%	06.15.2020 14:43
o-Terphenyl	77		86		70-135	%	06.15.2020 14:43

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

QC Summary 664463

LT Environmental, Inc.

PLU 320

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3129096 Matrix: Solid Date Prep: 06.15.2020
MB Sample Id: 7705501-1-BLK LCS Sample Id: 7705501-1-BKS LCSD Sample Id: 7705501-1-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	0.110	110	0.107	107	70-130	3	35	mg/kg	06.15.2020 15:32	
Toluene	<0.00200	0.100	0.105	105	0.103	103	70-130	2	35	mg/kg	06.15.2020 15:32	
Ethylbenzene	<0.00200	0.100	0.101	101	0.0993	99	71-129	2	35	mg/kg	06.15.2020 15:32	
m,p-Xylenes	<0.00400	0.200	0.209	105	0.204	102	70-135	2	35	mg/kg	06.15.2020 15:32	
o-Xylene	<0.00200	0.100	0.105	105	0.102	102	71-133	3	35	mg/kg	06.15.2020 15:32	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	109		107		107		70-130	%	06.15.2020 15:32
4-Bromofluorobenzene	97		94		93		70-130	%	06.15.2020 15:32

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3129096 Matrix: Soil Date Prep: 06.15.2020
Parent Sample Id: 664463-001 MS Sample Id: 664463-001 S MSD Sample Id: 664463-001 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	0.105	105	0.114	113	70-130	8	35	mg/kg	06.15.2020 20:38	
Toluene	<0.00200	0.100	0.100	100	0.0988	98	70-130	1	35	mg/kg	06.15.2020 20:38	
Ethylbenzene	<0.00200	0.100	0.0947	95	0.0789	78	71-129	18	35	mg/kg	06.15.2020 20:38	
m,p-Xylenes	<0.00401	0.200	0.193	97	0.158	79	70-135	20	35	mg/kg	06.15.2020 20:38	
o-Xylene	<0.00200	0.100	0.0974	97	0.0790	78	71-133	21	35	mg/kg	06.15.2020 20:38	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	107		107		70-130	%	06.15.2020 20:38
4-Bromofluorobenzene	90		93		70-130	%	06.15.2020 20:38

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

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

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

Chain of Custody

Work Order No: 6l644l63

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

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

Work Order Comments

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

Project Name:	PLU 320	Turn Around	
Project Number:	12920077	Routine	☑
P.O. Number:	Eddy	Rush:	
Sampler's Name:	William Mather	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):	3.2/3.0	Thermometer ID	
Received Intact:	(Yes) No	TNM007	
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes (No) N/A	Total Containers:	4

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	Work Order Notes / Sample Comments
FS10	s	6/15/2020	9:18	1'	1	x	x	x	Composite
FS13	s	6/15/2020	9:22	0.5'	1	x	x	x	Composite
BH01	s	6/15/2020	9:50	1.5'	1	x	x	x	Discrete
BH01A	s	6/15/2020	10:48	4'	1	x	x	x	Discrete

ANALYSIS REQUEST

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		6/15/20 14:05	2		
			4		
			6		

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 06.15.2020 02.05.00 PM

Work Order #: 664463

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

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

Analyst: PH Device/Lot#:

Checklist completed by: Elizabeth McClellan Date: 06.15.2020

Checklist reviewed by: Jessica Kramer Date: 06.15.2020

Jessica Kramer

Certificate of Analysis Summary 664083

LT Environmental, Inc., Arvada, CO

Project Name: PLU 320

Project Id: 012920077
Contact: Dan Moir
Project Location: Eddy

Date Received in Lab: Wed 06.10.2020 14:35
Report Date: 06.12.2020 08:37
Project Manager: Jessica Kramer

Analysis Requested	*Lab Id:*	664083-001		664083-002		664083-003		664083-004		664083-005		664083-006	
	Field Id:	FS01		FS02		FS03		FS04		FS05		FS06	
	Depth:	1.5- ft		1.5- ft		1.5- ft		1- ft		1- ft		1- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	06.09.2020 12:30		06.09.2020 12:31		06.10.2020 09:19		06.09.2020 10:55		06.09.2020 10:56		06.09.2020 13:31	
BTEX by EPA 8021B	*Extracted:*	06.10.2020 17:10		06.10.2020 17:10		06.10.2020 17:10		06.10.2020 17:10		06.10.2020 17:10		06.10.2020 17:10	
	Analyzed:	06.11.2020 01:28		06.11.2020 01:48		06.11.2020 02:09		06.11.2020 02:29		06.11.2020 02:50		06.11.2020 03:10	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00202	0.00202	<0.00200	0.00200	<0.00202	0.00202	<0.00201	0.00201	<0.00199	0.00199	<0.00202	0.00202
Toluene		<0.00202	0.00202	<0.00200	0.00200	<0.00202	0.00202	<0.00201	0.00201	<0.00199	0.00199	<0.00202	0.00202
Ethylbenzene		<0.00202	0.00202	<0.00200	0.00200	<0.00202	0.00202	<0.00201	0.00201	<0.00199	0.00199	<0.00202	0.00202
m,p-Xylenes		<0.00403	0.00403	<0.00401	0.00401	<0.00403	0.00403	<0.00402	0.00402	<0.00398	0.00398	<0.00403	0.00403
o-Xylene		<0.00202	0.00202	<0.00200	0.00200	<0.00202	0.00202	<0.00201	0.00201	<0.00199	0.00199	<0.00202	0.00202
Total Xylenes		<0.00202	0.00202	<0.00200	0.00200	<0.00202	0.00202	<0.00201	0.00201	<0.00199	0.00199	<0.00202	0.00202
Total BTEX		<0.00202	0.00202	<0.00200	0.00200	<0.00202	0.00202	<0.00201	0.00201	<0.00199	0.00199	<0.00202	0.00202
Chloride by EPA 300	*Extracted:*	06.10.2020 16:44		06.10.2020 16:44		06.10.2020 16:44		06.10.2020 16:44		06.10.2020 16:44		06.10.2020 16:44	
	Analyzed:	06.10.2020 17:55		06.10.2020 18:02		06.10.2020 18:09		06.10.2020 18:16		06.10.2020 18:23		06.10.2020 18:30	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		3130	49.9	3640	49.9	2980	50.1	13200	50.0	8290 D	100	8940	50.4
TPH by SW8015 Mod	*Extracted:*	06.10.2020 17:00		06.10.2020 17:00		06.10.2020 17:00		06.10.2020 17:00		06.10.2020 17:00		06.10.2020 17:00	
	Analyzed:	06.10.2020 18:21		06.10.2020 18:41		06.10.2020 19:01		06.10.2020 21:04		06.10.2020 19:22		06.10.2020 19:43	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.2	50.2	<50.3	50.3	<49.8	49.8	<50.1	50.1	<49.9	49.9	<50.0	50.0
Diesel Range Organics (DRO)		121	50.2	109	50.3	117	49.8	797	50.1	97.7	49.9	411	50.0
Motor Oil Range Hydrocarbons (MRO)		<50.2	50.2	<50.3	50.3	<49.8	49.8	98.8	50.1	<49.9	49.9	54.9	50.0
Total GRO-DRO		121	50.2	109	50.3	117	49.8	797	50.1	97.7	49.9	411	50.0
Total TPH		121	50.2	109	50.3	117	49.8	896	50.1	97.7	49.9	466	50.0

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Jessica Kramer
Project Manager

Certificate of Analysis Summary 664083

LT Environmental, Inc., Arvada, CO

Project Name: PLU 320

Project Id: 012920077
Contact: Dan Moir
Project Location: Eddy

Date Received in Lab: Wed 06.10.2020 14:35
Report Date: 06.12.2020 08:37
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	664083-007		664083-008		664083-009		664083-010		664083-011		664083-012	
	Field Id:	FS07		FS08		FS09		FS10		FS11		FS12	
	Depth:	0.5- ft		0.5- ft		0.5- ft		1- ft		0.5- ft		0.5- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	06.09.2020 12:10		06.10.2020 09:30		06.09.2020 13:05		06.09.2020 13:06		06.10.2020 09:57		06.10.2020 10:00	
BTEX by EPA 8021B	***Extracted:***	06.10.2020 17:10		06.10.2020 17:10		06.10.2020 17:10		06.10.2020 17:10		06.10.2020 17:10		06.10.2020 17:10	
	Analyzed:	06.11.2020 03:31		06.11.2020 04:32		06.11.2020 04:52		06.11.2020 05:13		06.11.2020 05:33		06.11.2020 05:53	
	Units/RL:	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	<0.00202	0.00202	<0.00201	0.00201	<0.00199	0.00199	<0.00201	0.00201
Toluene		<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00201	0.00201	<0.00199	0.00199	<0.00201	0.00201
Ethylbenzene		<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00201	0.00201	0.0181	0.00199	<0.00201	0.00201
m,p-Xylenes		<0.00399	0.00399	<0.00399	0.00399	<0.00403	0.00403	<0.00402	0.00402	0.0251	0.00398	<0.00402	0.00402
o-Xylene		<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00201	0.00201	0.0795	0.00199	<0.00201	0.00201
Total Xylenes		<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00201	0.00201	0.105	0.00199	<0.00201	0.00201
Total BTEX		<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00201	0.00201	0.123	0.00199	<0.00201	0.00201
Chloride by EPA 300	***Extracted:***	06.10.2020 16:44		06.10.2020 16:44		06.10.2020 16:44		06.10.2020 16:44		06.10.2020 16:44		06.10.2020 16:44	
	Analyzed:	06.10.2020 18:37		06.10.2020 18:58		06.10.2020 19:05		06.10.2020 19:25		06.10.2020 19:32		06.10.2020 19:39	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		2650	49.5	3500	49.9	331	49.9	363	49.8	8930	49.7	5960	50.4
TPH by SW8015 Mod	***Extracted:***	06.10.2020 17:00		06.10.2020 17:00		06.10.2020 17:00		06.10.2020 17:00		06.10.2020 17:00		06.10.2020 17:00	
	Analyzed:	06.10.2020 20:44		06.10.2020 20:03		06.10.2020 20:24		06.10.2020 19:01		06.10.2020 20:24		06.10.2020 19:22	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.1	50.1	<50.1	50.1	<50.2	50.2	<50.1	50.1	<251	251	<49.8	49.8
Diesel Range Organics (DRO)		358	50.1	75.4	50.1	80.6	50.2	1140	50.1	3410	251	410	49.8
Motor Oil Range Hydrocarbons (MRO)		54.8	50.1	<50.1	50.1	<50.2	50.2	119	50.1	342	251	95.1	49.8
Total GRO-DRO		358	50.1	75.4	50.1	80.6	50.2	1140	50.1	3410	251	410	49.8
Total TPH		413	50.1	75.4	50.1	80.6	50.2	1260	50.1	3750	251	505	49.8

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Jessica Kramer
Project Manager

Certificate of Analysis Summary 664083

LT Environmental, Inc., Arvada, CO

Project Name: PLU 320

Project Id: 012920077
Contact: Dan Moir
Project Location: Eddy

Date Received in Lab: Wed 06.10.2020 14:35
Report Date: 06.12.2020 08:37
Project Manager: Jessica Kramer

Analysis Requested															
	Lab Id:	664083-013		664083-014		664083-015		664083-016							
	Field Id:	FS13		FS14		FS15		FS16							
	Depth:	0.5- ft		0.5- ft		0.5- ft		0.5- ft							
	Matrix:	SOIL		SOIL		SOIL		SOIL							
	Sampled:	06.10.2020 10:15		06.10.2020 10:17		06.10.2020 10:37		06.10.2020 10:40							
BTEX by EPA 8021B	***Extracted:***	06.10.2020 17:10		06.10.2020 17:10		06.10.2020 17:10		06.10.2020 17:10							
	Analyzed:	06.11.2020 06:14		06.11.2020 06:34		06.11.2020 06:55		06.11.2020 07:15							
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL						
Benzene		<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200						
Toluene		<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200						
Ethylbenzene		<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200						
m,p-Xylenes		<0.00401	0.00401	<0.00404	0.00404	<0.00401	0.00401	<0.00399	0.00399						
o-Xylene		<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200						
Total Xylenes		<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200						
Total BTEX		<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200						
Chloride by EPA 300	***Extracted:***	06.10.2020 16:44		06.10.2020 16:44		06.10.2020 16:44		06.10.2020 16:44							
	Analyzed:	06.10.2020 19:46		06.10.2020 19:53		06.10.2020 20:00		06.10.2020 20:07							
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL						
Chloride		7270	50.3	6060	50.1	356	50.4	250	49.7						
TPH by SW8015 Mod	***Extracted:***	06.10.2020 17:00		06.10.2020 17:00		06.10.2020 17:00		06.10.2020 17:00							
	Analyzed:	06.10.2020 20:44		06.10.2020 21:04		06.10.2020 19:43		06.10.2020 20:03							
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL						
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	<50.0	50.0	<50.2	50.2	<50.0	50.0						
Diesel Range Organics (DRO)		1150	50.0	844	50.0	205	50.2	266	50.0						
Motor Oil Range Hydrocarbons (MRO)		244	50.0	213	50.0	<50.2	50.2	<50.0	50.0						
Total GRO-DRO		1150	50.0	844	50.0	205	50.2	266	50.0						
Total TPH		1390	50.0	1060	50.0	205	50.2	266	50.0						

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

Jessica Kramer
Project Manager

Analytical Report 664083

for

LT Environmental, Inc.

Project Manager: Dan Moir

PLU 320

012920077

06.12.2020

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-32), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-17)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-22)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-7)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)

06.12.2020

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

Reference: XENCO Report No(s): **664083**
PLU 320
Project Address: Eddy

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) 664083. 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. 664083 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jessica Kramer

Jessica Kramer
Project Manager

A Small Business and Minority Company

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

Sample Cross Reference 664083

LT Environmental, Inc., Arvada, CO

PLU 320

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS01	S	06.09.2020 12:30	1.5 ft	664083-001
FS02	S	06.09.2020 12:31	1.5 ft	664083-002
FS03	S	06.10.2020 09:19	1.5 ft	664083-003
FS04	S	06.09.2020 10:55	1 ft	664083-004
FS05	S	06.09.2020 10:56	1 ft	664083-005
FS06	S	06.09.2020 13:31	1 ft	664083-006
FS07	S	06.09.2020 12:10	0.5 ft	664083-007
FS08	S	06.10.2020 09:30	0.5 ft	664083-008
FS09	S	06.09.2020 13:05	0.5 ft	664083-009
FS10	S	06.09.2020 13:06	1 ft	664083-010
FS11	S	06.10.2020 09:57	0.5 ft	664083-011
FS12	S	06.10.2020 10:00	0.5 ft	664083-012
FS13	S	06.10.2020 10:15	0.5 ft	664083-013
FS14	S	06.10.2020 10:17	0.5 ft	664083-014
FS15	S	06.10.2020 10:37	0.5 ft	664083-015
FS16	S	06.10.2020 10:40	0.5 ft	664083-016

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: PLU 320

Project ID: *012920077*
Work Order Number(s): *664083*

Report Date: *06.12.2020*
Date Received: *06.10.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analytical Results 664083

LT Environmental, Inc., Arvada, CO

PLU 320

Sample Id:	**FS01**	Matrix:	Soil	Date Received:	06.10.2020 14:35
Lab Sample Id:	664083-001	Date Collected:	06.09.2020 12:30	Sample Depth:	1.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.10.2020 16:44	Basis:	Wet Weight
Seq Number:	3128567				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3130**	49.9	mg/kg	06.10.2020 17:55		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	06.10.2020 17:00	Basis:	Wet Weight
Seq Number:	3128604				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	06.10.2020 18:21	U	1
Diesel Range Organics (DRO)	C10C28DRO	**121**	50.2	mg/kg	06.10.2020 18:21		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	06.10.2020 18:21	U	1
Total GRO-DRO	PHC628	**121**	50.2	mg/kg	06.10.2020 18:21		1
Total TPH	PHC635	**121**	50.2	mg/kg	06.10.2020 18:21		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-135	06.10.2020 18:21	
o-Terphenyl	84-15-1	75	%	70-135	06.10.2020 18:21	

Certificate of Analytical Results 664083

LT Environmental, Inc., Arvada, CO

PLU 320

Sample Id:	**FS01**	Matrix:	Soil	Date Received:	06.10.2020 14:35
Lab Sample Id:	664083-001	Date Collected:	06.09.2020 12:30	Sample Depth:	1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.10.2020 17:10	Basis:	Wet Weight
Seq Number:	3128596				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	06.11.2020 01:28	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	06.11.2020 01:28	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	06.11.2020 01:28	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	06.11.2020 01:28	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	06.11.2020 01:28	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	06.11.2020 01:28	U	1
Total BTEX		<0.00202	0.00202	mg/kg	06.11.2020 01:28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	98	%	70-130	06.11.2020 01:28	
1,4-Difluorobenzene	540-36-3	107	%	70-130	06.11.2020 01:28	

Certificate of Analytical Results 664083

LT Environmental, Inc., Arvada, CO

PLU 320

Sample Id:	**FS02**	Matrix:	Soil	Date Received:	06.10.2020 14:35
Lab Sample Id:	664083-002	Date Collected:	06.09.2020 12:31	Sample Depth:	1.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.10.2020 16:44	Basis:	Wet Weight
Seq Number:	3128567				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3640**	49.9	mg/kg	06.10.2020 18:02		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	06.10.2020 17:00	Basis:	Wet Weight
Seq Number:	3128604				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	06.10.2020 18:41	U	1
Diesel Range Organics (DRO)	C10C28DRO	**109**	50.3	mg/kg	06.10.2020 18:41		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	06.10.2020 18:41	U	1
Total GRO-DRO	PHC628	**109**	50.3	mg/kg	06.10.2020 18:41		1
Total TPH	PHC635	**109**	50.3	mg/kg	06.10.2020 18:41		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-135	06.10.2020 18:41	
o-Terphenyl	84-15-1	77	%	70-135	06.10.2020 18:41	

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LT Environmental, Inc., Arvada, CO

PLU 320

Sample Id:	**FS02**	Matrix:	Soil	Date Received:	06.10.2020 14:35
Lab Sample Id:	664083-002	Date Collected:	06.09.2020 12:31	Sample Depth:	1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.10.2020 17:10	Basis:	Wet Weight
Seq Number:	3128596				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.11.2020 01:48	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.11.2020 01:48	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.11.2020 01:48	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	06.11.2020 01:48	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.11.2020 01:48	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.11.2020 01:48	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.11.2020 01:48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	70-130	06.11.2020 01:48	
1,4-Difluorobenzene	540-36-3	107	%	70-130	06.11.2020 01:48	

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LT Environmental, Inc., Arvada, CO

PLU 320

Sample Id:	**FS03**	Matrix:	Soil	Date Received:	06.10.2020 14:35
Lab Sample Id:	664083-003	Date Collected:	06.10.2020 09:19	Sample Depth:	1.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.10.2020 16:44	Basis:	Wet Weight
Seq Number:	3128567				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2980**	50.1	mg/kg	06.10.2020 18:09		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	06.10.2020 17:00	Basis:	Wet Weight
Seq Number:	3128604				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	06.10.2020 19:01	U	1
Diesel Range Organics (DRO)	C10C28DRO	**117**	49.8	mg/kg	06.10.2020 19:01		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	06.10.2020 19:01	U	1
Total GRO-DRO	PHC628	**117**	49.8	mg/kg	06.10.2020 19:01		1
Total TPH	PHC635	**117**	49.8	mg/kg	06.10.2020 19:01		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-135	06.10.2020 19:01	
o-Terphenyl	84-15-1	74	%	70-135	06.10.2020 19:01	

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LT Environmental, Inc., Arvada, CO

PLU 320

Sample Id:	**FS03**	Matrix:	Soil	Date Received:	06.10.2020 14:35
Lab Sample Id:	664083-003	Date Collected:	06.10.2020 09:19	Sample Depth:	1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.10.2020 17:10	Basis:	Wet Weight
Seq Number:	3128596				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	06.11.2020 02:09	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	06.11.2020 02:09	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	06.11.2020 02:09	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	06.11.2020 02:09	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	06.11.2020 02:09	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	06.11.2020 02:09	U	1
Total BTEX		<0.00202	0.00202	mg/kg	06.11.2020 02:09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	98	%	70-130	06.11.2020 02:09	
1,4-Difluorobenzene	540-36-3	110	%	70-130	06.11.2020 02:09	

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LT Environmental, Inc., Arvada, CO

PLU 320

Sample Id:	**FS04**	Matrix:	Soil	Date Received:	06.10.2020 14:35
Lab Sample Id:	664083-004	Date Collected:	06.09.2020 10:55	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.10.2020 16:44	Basis:	Wet Weight
Seq Number:	3128567				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**13200**	50.0	mg/kg	06.10.2020 18:16		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	06.10.2020 17:00	Basis:	Wet Weight
Seq Number:	3128604				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	06.10.2020 21:04	U	1
Diesel Range Organics (DRO)	C10C28DRO	**797**	50.1	mg/kg	06.10.2020 21:04		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**98.8**	50.1	mg/kg	06.10.2020 21:04		1
Total GRO-DRO	PHC628	**797**	50.1	mg/kg	06.10.2020 21:04		1
Total TPH	PHC635	**896**	50.1	mg/kg	06.10.2020 21:04		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	82	%	70-135	06.10.2020 21:04	
o-Terphenyl	84-15-1	75	%	70-135	06.10.2020 21:04	

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LT Environmental, Inc., Arvada, CO

PLU 320

Sample Id:	**FS04**	Matrix:	Soil	Date Received:	06.10.2020 14:35
Lab Sample Id:	664083-004	Date Collected:	06.09.2020 10:55	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.10.2020 17:10	Basis:	Wet Weight
Seq Number:	3128596				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.11.2020 02:29	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	06.11.2020 02:29	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.11.2020 02:29	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.11.2020 02:29	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.11.2020 02:29	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.11.2020 02:29	U	1
Total BTEX		<0.00201	0.00201	mg/kg	06.11.2020 02:29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	92	%	70-130	06.11.2020 02:29	
1,4-Difluorobenzene	540-36-3	107	%	70-130	06.11.2020 02:29	

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LT Environmental, Inc., Arvada, CO

PLU 320

Sample Id:	**FS05**	Matrix:	Soil	Date Received:	06.10.2020 14:35
Lab Sample Id:	664083-005	Date Collected:	06.09.2020 10:56	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.10.2020 16:44	Basis:	Wet Weight
Seq Number:	3128567				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**8290**	100	mg/kg	06.11.2020 10:50	D	10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	06.10.2020 17:00	Basis:	Wet Weight
Seq Number:	3128604				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	06.10.2020 19:22	U	1
Diesel Range Organics (DRO)	C10C28DRO	**97.7**	49.9	mg/kg	06.10.2020 19:22		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	06.10.2020 19:22	U	1
Total GRO-DRO	PHC628	**97.7**	49.9	mg/kg	06.10.2020 19:22		1
Total TPH	PHC635	**97.7**	49.9	mg/kg	06.10.2020 19:22		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-135	06.10.2020 19:22	
o-Terphenyl	84-15-1	76	%	70-135	06.10.2020 19:22	

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LT Environmental, Inc., Arvada, CO

PLU 320

Sample Id:	**FS05**	Matrix:	Soil	Date Received:	06.10.2020 14:35
Lab Sample Id:	664083-005	Date Collected:	06.09.2020 10:56	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.10.2020 17:10	Basis:	Wet Weight
Seq Number:	3128596				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.11.2020 02:50	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.11.2020 02:50	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.11.2020 02:50	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.11.2020 02:50	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.11.2020 02:50	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.11.2020 02:50	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.11.2020 02:50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	106	%	70-130	06.11.2020 02:50	
4-Bromofluorobenzene	460-00-4	97	%	70-130	06.11.2020 02:50	

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LT Environmental, Inc., Arvada, CO

PLU 320

Sample Id:	**FS06**	Matrix:	Soil	Date Received:	06.10.2020 14:35
Lab Sample Id:	664083-006	Date Collected:	06.09.2020 13:31	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.10.2020 16:44	Basis:	Wet Weight
Seq Number:	3128567				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**8940**	50.4	mg/kg	06.10.2020 18:30		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	06.10.2020 17:00	Basis:	Wet Weight
Seq Number:	3128604				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	06.10.2020 19:43	U	1
Diesel Range Organics (DRO)	C10C28DRO	**411**	50.0	mg/kg	06.10.2020 19:43		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**54.9**	50.0	mg/kg	06.10.2020 19:43		1
Total GRO-DRO	PHC628	**411**	50.0	mg/kg	06.10.2020 19:43		1
Total TPH	PHC635	**466**	50.0	mg/kg	06.10.2020 19:43		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-135	06.10.2020 19:43	
o-Terphenyl	84-15-1	74	%	70-135	06.10.2020 19:43	

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LT Environmental, Inc., Arvada, CO

PLU 320

Sample Id:	**FS06**	Matrix:	Soil	Date Received:	06.10.2020 14:35
Lab Sample Id:	664083-006	Date Collected:	06.09.2020 13:31	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.10.2020 17:10	Basis:	Wet Weight
Seq Number:	3128596				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	06.11.2020 03:10	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	06.11.2020 03:10	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	06.11.2020 03:10	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	06.11.2020 03:10	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	06.11.2020 03:10	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	06.11.2020 03:10	U	1
Total BTEX		<0.00202	0.00202	mg/kg	06.11.2020 03:10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	70-130	06.11.2020 03:10	
1,4-Difluorobenzene	540-36-3	106	%	70-130	06.11.2020 03:10	

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LT Environmental, Inc., Arvada, CO

PLU 320

Sample Id:	**FS07**	Matrix:	Soil	Date Received:	06.10.2020 14:35
Lab Sample Id:	664083-007	Date Collected:	06.09.2020 12:10	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.10.2020 16:44	Basis:	Wet Weight
Seq Number:	3128567				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2650**	49.5	mg/kg	06.10.2020 18:37		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	06.10.2020 17:00	Basis:	Wet Weight
Seq Number:	3128604				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	06.10.2020 20:44	U	1
Diesel Range Organics (DRO)	C10C28DRO	**358**	50.1	mg/kg	06.10.2020 20:44		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**54.8**	50.1	mg/kg	06.10.2020 20:44		1
Total GRO-DRO	PHC628	**358**	50.1	mg/kg	06.10.2020 20:44		1
Total TPH	PHC635	**413**	50.1	mg/kg	06.10.2020 20:44		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-135	06.10.2020 20:44	
o-Terphenyl	84-15-1	73	%	70-135	06.10.2020 20:44	

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Sample Id:	**FS07**	Matrix:	Soil	Date Received:	06.10.2020 14:35
Lab Sample Id:	664083-007	Date Collected:	06.09.2020 12:10	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.10.2020 17:10	Basis:	Wet Weight
Seq Number:	3128596				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.11.2020 03:31	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.11.2020 03:31	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.11.2020 03:31	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	06.11.2020 03:31	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.11.2020 03:31	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.11.2020 03:31	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.11.2020 03:31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	06.11.2020 03:31	
4-Bromofluorobenzene	460-00-4	93	%	70-130	06.11.2020 03:31	

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Sample Id:	**FS08**	Matrix:	Soil	Date Received:	06.10.2020 14:35
Lab Sample Id:	664083-008	Date Collected:	06.10.2020 09:30	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.10.2020 16:44	Basis:	Wet Weight
Seq Number:	3128567				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3500**	49.9	mg/kg	06.10.2020 18:58		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	06.10.2020 17:00	Basis:	Wet Weight
Seq Number:	3128604				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	06.10.2020 20:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	**75.4**	50.1	mg/kg	06.10.2020 20:03		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	06.10.2020 20:03	U	1
Total GRO-DRO	PHC628	**75.4**	50.1	mg/kg	06.10.2020 20:03		1
Total TPH	PHC635	**75.4**	50.1	mg/kg	06.10.2020 20:03		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	80	%	70-135	06.10.2020 20:03	
o-Terphenyl	84-15-1	74	%	70-135	06.10.2020 20:03	

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Sample Id:	**FS08**	Matrix:	Soil	Date Received:	06.10.2020 14:35
Lab Sample Id:	664083-008	Date Collected:	06.10.2020 09:30	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.10.2020 17:10	Basis:	Wet Weight
Seq Number:	3128596				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.11.2020 04:32	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.11.2020 04:32	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.11.2020 04:32	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	06.11.2020 04:32	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.11.2020 04:32	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.11.2020 04:32	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.11.2020 04:32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	112	%	70-130	06.11.2020 04:32	
4-Bromofluorobenzene	460-00-4	100	%	70-130	06.11.2020 04:32	

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Sample Id:	**FS09**	Matrix:	Soil	Date Received:	06.10.2020 14:35
Lab Sample Id:	664083-009	Date Collected:	06.09.2020 13:05	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.10.2020 16:44	Basis:	Wet Weight
Seq Number:	3128567				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**331**	49.9	mg/kg	06.10.2020 19:05		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	06.10.2020 17:00	Basis:	Wet Weight
Seq Number:	3128604				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	06.10.2020 20:24	U	1
Diesel Range Organics (DRO)	C10C28DRO	**80.6**	50.2	mg/kg	06.10.2020 20:24		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	06.10.2020 20:24	U	1
Total GRO-DRO	PHC628	**80.6**	50.2	mg/kg	06.10.2020 20:24		1
Total TPH	PHC635	**80.6**	50.2	mg/kg	06.10.2020 20:24		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	78	%	70-135	06.10.2020 20:24	
o-Terphenyl	84-15-1	75	%	70-135	06.10.2020 20:24	

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Sample Id:	**FS09**	Matrix:	Soil	Date Received:	06.10.2020 14:35
Lab Sample Id:	664083-009	Date Collected:	06.09.2020 13:05	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.10.2020 17:10	Basis:	Wet Weight
Seq Number:	3128596				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	06.11.2020 04:52	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	06.11.2020 04:52	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	06.11.2020 04:52	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	06.11.2020 04:52	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	06.11.2020 04:52	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	06.11.2020 04:52	U	1
Total BTEX		<0.00202	0.00202	mg/kg	06.11.2020 04:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	111	%	70-130	06.11.2020 04:52	
4-Bromofluorobenzene	460-00-4	96	%	70-130	06.11.2020 04:52	

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Sample Id:	**FS10**	Matrix:	Soil	Date Received:	06.10.2020 14:35
Lab Sample Id:	664083-010	Date Collected:	06.09.2020 13:06	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.10.2020 16:44	Basis:	Wet Weight
Seq Number:	3128567				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**363**	49.8	mg/kg	06.10.2020 19:25		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	06.10.2020 17:00	Basis:	Wet Weight
Seq Number:	3128592				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	06.10.2020 19:01	U	1
Diesel Range Organics (DRO)	C10C28DRO	**1140**	50.1	mg/kg	06.10.2020 19:01		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**119**	50.1	mg/kg	06.10.2020 19:01		1
Total GRO-DRO	PHC628	**1140**	50.1	mg/kg	06.10.2020 19:01		1
Total TPH	PHC635	**1260**	50.1	mg/kg	06.10.2020 19:01		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	06.10.2020 19:01	
o-Terphenyl	84-15-1	97	%	70-135	06.10.2020 19:01	

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Sample Id:	**FS10**	Matrix:	Soil	Date Received:	06.10.2020 14:35
Lab Sample Id:	664083-010	Date Collected:	06.09.2020 13:06	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.10.2020 17:10	Basis:	Wet Weight
Seq Number:	3128596				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.11.2020 05:13	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	06.11.2020 05:13	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.11.2020 05:13	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.11.2020 05:13	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.11.2020 05:13	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.11.2020 05:13	U	1
Total BTEX		<0.00201	0.00201	mg/kg	06.11.2020 05:13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	92	%	70-130	06.11.2020 05:13	
1,4-Difluorobenzene	540-36-3	104	%	70-130	06.11.2020 05:13	

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Sample Id:	**FS11**	Matrix:	Soil	Date Received:	06.10.2020 14:35
Lab Sample Id:	664083-011	Date Collected:	06.10.2020 09:57	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.10.2020 16:44	Basis:	Wet Weight
Seq Number:	3128567				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**8930**	49.7	mg/kg	06.10.2020 19:32		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	06.10.2020 17:00	Basis:	Wet Weight
Seq Number:	3128592				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<251	251	mg/kg	06.10.2020 20:24	U	5
Diesel Range Organics (DRO)	C10C28DRO	**3410**	251	mg/kg	06.10.2020 20:24		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**342**	251	mg/kg	06.10.2020 20:24		5
Total GRO-DRO	PHC628	**3410**	251	mg/kg	06.10.2020 20:24		5
Total TPH	PHC635	**3750**	251	mg/kg	06.10.2020 20:24		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	06.10.2020 20:24	
o-Terphenyl	84-15-1	101	%	70-135	06.10.2020 20:24	

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Sample Id:	**FS11**	Matrix:	Soil	Date Received:	06.10.2020 14:35
Lab Sample Id:	664083-011	Date Collected:	06.10.2020 09:57	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.10.2020 17:10	Basis:	Wet Weight
Seq Number:	3128596				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.11.2020 05:33	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.11.2020 05:33	U	1
Ethylbenzene	100-41-4	**0.0181**	0.00199	mg/kg	06.11.2020 05:33		1
m,p-Xylenes	179601-23-1	**0.0251**	0.00398	mg/kg	06.11.2020 05:33		1
o-Xylene	95-47-6	**0.0795**	0.00199	mg/kg	06.11.2020 05:33		1
Total Xylenes	1330-20-7	**0.105**	0.00199	mg/kg	06.11.2020 05:33		1
Total BTEX		**0.123**	0.00199	mg/kg	06.11.2020 05:33		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	99	%	70-130	06.11.2020 05:33	
1,4-Difluorobenzene	540-36-3	101	%	70-130	06.11.2020 05:33	

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Sample Id:	**FS12**	Matrix:	Soil	Date Received:	06.10.2020 14:35
Lab Sample Id:	664083-012	Date Collected:	06.10.2020 10:00	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.10.2020 16:44	Basis:	Wet Weight
Seq Number:	3128567				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**5960**	50.4	mg/kg	06.10.2020 19:39		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	06.10.2020 17:00	Basis:	Wet Weight
Seq Number:	3128592				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	06.10.2020 19:22	U	1
Diesel Range Organics (DRO)	C10C28DRO	**410**	49.8	mg/kg	06.10.2020 19:22		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**95.1**	49.8	mg/kg	06.10.2020 19:22		1
Total GRO-DRO	PHC628	**410**	49.8	mg/kg	06.10.2020 19:22		1
Total TPH	PHC635	**505**	49.8	mg/kg	06.10.2020 19:22		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	06.10.2020 19:22	
o-Terphenyl	84-15-1	95	%	70-135	06.10.2020 19:22	

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Sample Id:	**FS12**	Matrix:	Soil	Date Received:	06.10.2020 14:35
Lab Sample Id:	664083-012	Date Collected:	06.10.2020 10:00	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.10.2020 17:10	Basis:	Wet Weight
Seq Number:	3128596				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.11.2020 05:53	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	06.11.2020 05:53	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.11.2020 05:53	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.11.2020 05:53	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.11.2020 05:53	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.11.2020 05:53	U	1
Total BTEX		<0.00201	0.00201	mg/kg	06.11.2020 05:53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	06.11.2020 05:53	
4-Bromofluorobenzene	460-00-4	101	%	70-130	06.11.2020 05:53	

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Sample Id:	**FS13**	Matrix:	Soil	Date Received:	06.10.2020 14:35
Lab Sample Id:	664083-013	Date Collected:	06.10.2020 10:15	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.10.2020 16:44	Basis:	Wet Weight
Seq Number:	3128567				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**7270**	50.3	mg/kg	06.10.2020 19:46		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	06.10.2020 17:00	Basis:	Wet Weight
Seq Number:	3128592				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	06.10.2020 20:44	U	1
Diesel Range Organics (DRO)	C10C28DRO	**1150**	50.0	mg/kg	06.10.2020 20:44		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**244**	50.0	mg/kg	06.10.2020 20:44		1
Total GRO-DRO	PHC628	**1150**	50.0	mg/kg	06.10.2020 20:44		1
Total TPH	PHC635	**1390**	50.0	mg/kg	06.10.2020 20:44		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	06.10.2020 20:44	
o-Terphenyl	84-15-1	100	%	70-135	06.10.2020 20:44	

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Sample Id:	**FS13**	Matrix:	Soil	Date Received:	06.10.2020 14:35
Lab Sample Id:	664083-013	Date Collected:	06.10.2020 10:15	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.10.2020 17:10	Basis:	Wet Weight
Seq Number:	3128596				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.11.2020 06:14	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.11.2020 06:14	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.11.2020 06:14	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	06.11.2020 06:14	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.11.2020 06:14	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.11.2020 06:14	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.11.2020 06:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	81	%	70-130	06.11.2020 06:14	
1,4-Difluorobenzene	540-36-3	106	%	70-130	06.11.2020 06:14	

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Sample Id:	**FS14**	Matrix:	Soil	Date Received:	06.10.2020 14:35
Lab Sample Id:	664083-014	Date Collected:	06.10.2020 10:17	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.10.2020 16:44	Basis:	Wet Weight
Seq Number:	3128567				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**6060**	50.1	mg/kg	06.10.2020 19:53		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	06.10.2020 17:00	Basis:	Wet Weight
Seq Number:	3128592				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	06.10.2020 21:04	U	1
Diesel Range Organics (DRO)	C10C28DRO	**844**	50.0	mg/kg	06.10.2020 21:04		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**213**	50.0	mg/kg	06.10.2020 21:04		1
Total GRO-DRO	PHC628	**844**	50.0	mg/kg	06.10.2020 21:04		1
Total TPH	PHC635	**1060**	50.0	mg/kg	06.10.2020 21:04		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	06.10.2020 21:04	
o-Terphenyl	84-15-1	95	%	70-135	06.10.2020 21:04	

Certificate of Analytical Results 664083

LT Environmental, Inc., Arvada, CO

PLU 320

Sample Id:	**FS14**	Matrix:	Soil	Date Received:	06.10.2020 14:35
Lab Sample Id:	664083-014	Date Collected:	06.10.2020 10:17	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.10.2020 17:10	Basis:	Wet Weight
Seq Number:	3128596				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	06.11.2020 06:34	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	06.11.2020 06:34	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	06.11.2020 06:34	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	06.11.2020 06:34	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	06.11.2020 06:34	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	06.11.2020 06:34	U	1
Total BTEX		<0.00202	0.00202	mg/kg	06.11.2020 06:34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	112	%	70-130	06.11.2020 06:34	
4-Bromofluorobenzene	460-00-4	89	%	70-130	06.11.2020 06:34	

Certificate of Analytical Results 664083

LT Environmental, Inc., Arvada, CO

PLU 320

Sample Id:	**FS15**	Matrix:	Soil	Date Received:	06.10.2020 14:35
Lab Sample Id:	664083-015	Date Collected:	06.10.2020 10:37	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.10.2020 16:44	Basis:	Wet Weight
Seq Number:	3128567				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**356**	50.4	mg/kg	06.10.2020 20:00		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	06.10.2020 17:00	Basis:	Wet Weight
Seq Number:	3128592				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	06.10.2020 19:43	U	1
Diesel Range Organics (DRO)	C10C28DRO	**205**	50.2	mg/kg	06.10.2020 19:43		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	06.10.2020 19:43	U	1
Total GRO-DRO	PHC628	**205**	50.2	mg/kg	06.10.2020 19:43		1
Total TPH	PHC635	**205**	50.2	mg/kg	06.10.2020 19:43		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	06.10.2020 19:43	
o-Terphenyl	84-15-1	95	%	70-135	06.10.2020 19:43	

Certificate of Analytical Results 664083

LT Environmental, Inc., Arvada, CO

PLU 320

Sample Id:	**FS15**	Matrix:	Soil	Date Received:	06.10.2020 14:35
Lab Sample Id:	664083-015	Date Collected:	06.10.2020 10:37	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.10.2020 17:10	Basis:	Wet Weight
Seq Number:	3128596				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.11.2020 06:55	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.11.2020 06:55	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.11.2020 06:55	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	06.11.2020 06:55	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.11.2020 06:55	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.11.2020 06:55	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.11.2020 06:55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	06.11.2020 06:55	
4-Bromofluorobenzene	460-00-4	97	%	70-130	06.11.2020 06:55	

Certificate of Analytical Results 664083

LT Environmental, Inc., Arvada, CO

PLU 320

Sample Id:	**FS16**	Matrix:	Soil	Date Received:	06.10.2020 14:35
Lab Sample Id:	664083-016	Date Collected:	06.10.2020 10:40	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.10.2020 16:44	Basis:	Wet Weight
Seq Number:	3128567				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**250**	49.7	mg/kg	06.10.2020 20:07		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	06.10.2020 17:00	Basis:	Wet Weight
Seq Number:	3128592				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	06.10.2020 20:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	**266**	50.0	mg/kg	06.10.2020 20:03		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	06.10.2020 20:03	U	1
Total GRO-DRO	PHC628	**266**	50.0	mg/kg	06.10.2020 20:03		1
Total TPH	PHC635	**266**	50.0	mg/kg	06.10.2020 20:03		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	06.10.2020 20:03	
o-Terphenyl	84-15-1	96	%	70-135	06.10.2020 20:03	

Certificate of Analytical Results 664083

LT Environmental, Inc., Arvada, CO

PLU 320

Sample Id:	**FS16**	Matrix:	Soil	Date Received:	06.10.2020 14:35
Lab Sample Id:	664083-016	Date Collected:	06.10.2020 10:40	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.10.2020 17:10	Basis:	Wet Weight
Seq Number:	3128596				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.11.2020 07:15	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.11.2020 07:15	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.11.2020 07:15	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	06.11.2020 07:15	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.11.2020 07:15	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.11.2020 07:15	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.11.2020 07:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	93	%	70-130	06.11.2020 07:15	
1,4-Difluorobenzene	540-36-3	102	%	70-130	06.11.2020 07:15	

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

QC Summary 664083

LT Environmental, Inc.

PLU 320

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3128567 — Matrix: Solid — Date Prep: 06.10.2020
MB Sample Id: 7705194-1-BLK — LCS Sample Id: 7705194-1-BKS — LCSD Sample Id: 7705194-1-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	252	101	254	102	90-110	1	20	mg/kg	06.10.2020 15:23	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3128567 — Matrix: Soil — Date Prep: 06.10.2020
Parent Sample Id: 663990-001 — MS Sample Id: 663990-001 S — MSD Sample Id: 663990-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	2020	201	2200	90	2200	89	90-110	0	20	mg/kg	06.10.2020 15:45	X

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3128567 — Matrix: Soil — Date Prep: 06.10.2020
Parent Sample Id: 664083-007 — MS Sample Id: 664083-007 S — MSD Sample Id: 664083-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	2650	202	2840	94	2840	94	90-110	0	20	mg/kg	06.10.2020 18:44	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3128592 — Matrix: Solid — Date Prep: 06.10.2020
MB Sample Id: 7705214-1-BLK — LCS Sample Id: 7705214-1-BKS — LCSD Sample Id: 7705214-1-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	1070	107	1070	107	70-135	0	35	mg/kg	06.10.2020 12:50	
Diesel Range Organics (DRO)	<50.0	1000	1140	114	1140	114	70-135	0	35	mg/kg	06.10.2020 12:50	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	122		130		128		70-135	%	06.10.2020 12:50
o-Terphenyl	122		123		122		70-135	%	06.10.2020 12:50

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3128604 — Matrix: Solid — Date Prep: 06.10.2020
MB Sample Id: 7705215-1-BLK — LCS Sample Id: 7705215-1-BKS — LCSD Sample Id: 7705215-1-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	969	97	963	96	70-135	1	35	mg/kg	06.10.2020 12:50	
Diesel Range Organics (DRO)	<50.0	1000	1020	102	1040	104	70-135	2	35	mg/kg	06.10.2020 12:50	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	91		106		103		70-135	%	06.10.2020 12:50
o-Terphenyl	93		97		97		70-135	%	06.10.2020 12:50

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

QC Summary 664083

LT Environmental, Inc.

PLU 320

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3128592 — Matrix: Solid — Date Prep: 06.10.2020
MB Sample Id: 7705214-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	06.10.2020 12:30	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3128604 — Matrix: Solid — Date Prep: 06.10.2020
MB Sample Id: 7705215-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	06.10.2020 12:30	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3128592 — Matrix: Soil — Date Prep: 06.10.2020
Parent Sample Id: 664078-001 — MS Sample Id: 664078-001 S — MSD Sample Id: 664078-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.3	1010	1060	105	974	97	70-135	8	35	mg/kg	06.10.2020 17:40	
Diesel Range Organics (DRO)	<50.3	1010	1170	116	1080	108	70-135	8	35	mg/kg	06.10.2020 17:40	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	123		114		70-135	%	06.10.2020 17:40
o-Terphenyl	106		102		70-135	%	06.10.2020 17:40

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3128604 — Matrix: Soil — Date Prep: 06.10.2020
Parent Sample Id: 664082-001 — MS Sample Id: 664082-001 S — MSD Sample Id: 664082-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.1	1000	923	92	950	95	70-135	3	35	mg/kg	06.10.2020 17:40	
Diesel Range Organics (DRO)	<50.1	1000	993	99	1030	103	70-135	4	35	mg/kg	06.10.2020 17:40	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	92		95		70-135	%	06.10.2020 17:40
o-Terphenyl	80		83		70-135	%	06.10.2020 17:40

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

QC Summary 664083

LT Environmental, Inc.

PLU 320

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3128596 Matrix: Solid Date Prep: 06.10.2020
MB Sample Id: 7705213-1-BLK LCS Sample Id: 7705213-1-BKS LCSD Sample Id: 7705213-1-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	0.102	102	0.106	106	70-130	4	35	mg/kg	06.11.2020 07:56	
Toluene	<0.00200	0.100	0.0962	96	0.102	102	70-130	6	35	mg/kg	06.11.2020 07:56	
Ethylbenzene	<0.00200	0.100	0.0906	91	0.0958	96	71-129	6	35	mg/kg	06.11.2020 07:56	
m,p-Xylenes	<0.00400	0.200	0.185	93	0.198	99	70-135	7	35	mg/kg	06.11.2020 07:56	
o-Xylene	<0.00200	0.100	0.0954	95	0.101	101	71-133	6	35	mg/kg	06.11.2020 07:56	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	112		107		107		70-130	%	06.11.2020 07:56
4-Bromofluorobenzene	99		94		91		70-130	%	06.11.2020 07:56

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3128596 Matrix: Soil Date Prep: 06.10.2020
Parent Sample Id: 664078-001 MS Sample Id: 664078-001 S MSD Sample Id: 664078-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.112	112	0.117	116	70-130	4	35	mg/kg	06.10.2020 23:26	
Toluene	<0.00199	0.0996	0.103	103	0.109	108	70-130	6	35	mg/kg	06.10.2020 23:26	
Ethylbenzene	<0.00199	0.0996	0.0943	95	0.102	101	71-129	8	35	mg/kg	06.10.2020 23:26	
m,p-Xylenes	<0.00398	0.199	0.193	97	0.209	104	70-135	8	35	mg/kg	06.10.2020 23:26	
o-Xylene	<0.00199	0.0996	0.0992	100	0.107	106	71-133	8	35	mg/kg	06.10.2020 23:26	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	105		108		70-130	%	06.10.2020 23:26
4-Bromofluorobenzene	94		94		70-130	%	06.10.2020 23:26

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

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

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

Chain of Custody

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

Work Order No: 6064083

Page 1 of 2

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

Work Order Comments

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

Project Name:	PLU 320	Turn Around	
Project Number:	12920077	Routine	☑
P.O. Number:	Eddy	Rush:	
Sampler's Name:	William Mather	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes / No	Wet Ice:	Yes / No
Temperature (°C):	4.2 / 4.0	Thermometer ID	TNM007
Received Intact:	Yes / No		
Cooler Custody Seals:	Yes / No / N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes / No / N/A	Total Containers:	16

ANALYSIS REQUEST

Work Order Notes

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	Sample Comments
FS01	s	6/9/2020	12:30	1.5'	1	x	x	x	Composite
FS02	s	6/9/2020	12:31	1.5'	1	x	x	x	Composite
FS03	s	6/10/2020	9:19	1.5'	1	x	x	x	Composite
FS04	s	6/9/2020	10:55	1'	1	x	x	x	Composite
FS05	s	6/9/2020	10:56	1'	1	x	x	x	Composite
FS06	s	6/9/2020	13:31	1'	1	x	x	x	Composite
FS07	s	6/9/2020	12:10	0.5'	1	x	x	x	Composite
FS08	s	6/10/2020	9:30	0.5'	1	x	x	x	Composite
FS09	s	6/9/2020	13:05	0.5'	1	x	x	x	Composite
FS10	s	6/9/2020	13:06	1'	1	x	x	x	Composite

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

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

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			6/10/20 14:35	2		
3				4		
5				6		

Revised Date 051418 Rev. 2018.1

Chain of Custody

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

Work Order No: 664083

Page 2 of 2

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

Work Order Comments

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

Project Name:	PLU 320	Turn Around	
Project Number:	12920077	Routine	☑
P.O. Number:	Eddy	Rush:	
Sampler's Name:	William Mather	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Temperature (°C):	0.9	Thermometer ID	IR1	
Received Intact:	Yes No			
Cooler Custody Seals:	Yes No N/A	Correction Factor:		
Sample Custody Seals:	Yes No N/A	Total Containers:		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	Sample Comments
FS11	s	6/10/2020	9:57	0.5'	1	x	x	x	Composite
FS12	s	6/10/2020	10:00	0.5'	1	x	x	x	Composite
FS13	s	6/10/2020	10:15	0.5'	1	x	x	x	Composite
FS14	s	6/10/2020	10:17	0.5'	1	x	x	x	Composite
FS15	s	6/10/2020	10:37	0.5'	1	x	x	x	Composite
FS16	s	6/10/2020	10:40	0.5'	1	x	x	x	Composite

ANALYSIS REQUEST

Work Order Notes

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

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		6/10/20 14:35	2		
			4		
			6		

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 06.10.2020 02.35.00 PM

Work Order #: 664083

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

Temperature Measuring device used : T-NM-007

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

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

Analyst: PH Device/Lot#:

Checklist completed by: Elizabeth McClellan Date: 06.10.2020

Checklist reviewed by: Jessica Kramer Date: 06.11.2020

Jessica Kramer

Certificate of Analysis Summary 661666

LT Environmental, Inc., Arvada, CO

Project Name: PLU 320 Battery

Project Id: 012920077
Contact: Dan Moir
Project Location:

Date Received in Lab: Thu 05.14.2020 15:26
Report Date: 05.18.2020 13:43
Project Manager: Jessica Kramer

Analysis Requested											
	Lab Id:	661666-001		661666-002		661666-003		661666-004			
	Field Id:	SS01		SS02		SS03		SS04			
	Depth:	0.5- ft		0.5- ft		0.5- ft		0.5- ft			
	Matrix:	SOIL		SOIL		SOIL		SOIL			
	Sampled:	05.13.2020 13:04		05.13.2020 13:10		05.13.2020 13:15		05.13.2020 13:20			
BTEX by EPA 8021B	***Extracted:***	05.14.2020 17:00		05.14.2020 17:00		05.14.2020 16:00		05.14.2020 16:00			
	Analyzed:	05.15.2020 02:47		05.15.2020 03:08		05.14.2020 22:52		05.14.2020 23:12			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Benzene		5.78	0.200	<0.0500	0.0500	<0.0189	0.0189	<0.0204	0.0204		
Toluene		38.7	0.200	1.30	0.200	<0.0189	0.0189	<0.0204	0.0204		
Ethylbenzene		13.4	0.200	3.49	0.200	<0.0189	0.0189	0.350	0.0204		
m,p-Xylenes		59.0	0.399	12.8	0.400	<0.0377	0.0377	0.423	0.0408		
o-Xylene		15.8	0.200	5.66	0.200	<0.0189	0.0189	1.42	0.0204		
Total Xylenes		74.8	0.200	18.5	0.200	<0.0189	0.0189	1.84	0.0204		
Total BTEX		133	0.200	23.3	0.0500	<0.0189	0.0189	2.19	0.0204		
Chloride by EPA 300	***Extracted:***	05.14.2020 17:43		05.14.2020 17:43		05.14.2020 17:43		05.14.2020 17:43			
	Analyzed:	05.14.2020 20:54		05.14.2020 21:00		05.14.2020 21:06		05.14.2020 21:12			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Chloride		13400	498	5360	200	14700	498	2210	198		
TPH by SW8015 Mod	***Extracted:***	05.14.2020 17:30		05.14.2020 17:30		05.14.2020 17:30		05.14.2020 17:30			
	Analyzed:	05.15.2020 17:39		05.15.2020 18:00		05.15.2020 16:37		05.15.2020 16:57			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Gasoline Range Hydrocarbons (GRO)		1560	251	3570	249	<74.9	74.9	319	250		
Diesel Range Organics (DRO)		15100	251	17200	249	1810	250	8450	250		
Motor Oil Range Hydrocarbons (MRO)		1450	251	1430	249	350	250	976	250		
Total GRO-DRO		16700	251	20800	249	1810	74.9	8770	250		
Total TPH		18100	251	22200	249	2160	74.9	9750	250		

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

Jessica Kramer
Project Manager

Analytical Report 661666

for

LT Environmental, Inc.

Project Manager: Dan Moir

PLU 320 Battery

012920077

05.18.2020

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

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

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

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

05.18.2020

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

Reference: XENCO Report No(s): **661666**
PLU 320 Battery
Project Address:

Dan Moir:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 661666. 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. 661666 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jessica Kramer

Jessica Kramer
Project Manager

A Small Business and Minority Company

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

Sample Cross Reference 661666

LT Environmental, Inc., Arvada, CO

PLU 320 Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS01	S	05.13.2020 13:04	0.5 ft	661666-001
SS02	S	05.13.2020 13:10	0.5 ft	661666-002
SS03	S	05.13.2020 13:15	0.5 ft	661666-003
SS04	S	05.13.2020 13:20	0.5 ft	661666-004

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: PLU 320 Battery

Project ID: *012920077*
Work Order Number(s): *661666*

Report Date: *05.18.2020*
Date Received: *05.14.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analytical Results 661666

LT Environmental, Inc., Arvada, CO

PLU 320 Battery

Sample Id:	**SS01**	Matrix:	Soil	Date Received:	05.14.2020 15:26
Lab Sample Id:	661666-001	Date Collected:	05.13.2020 13:04	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	05.14.2020 17:43	Basis:	Wet Weight
Seq Number:	3126031				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**13400**	498	mg/kg	05.14.2020 20:54		50

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	05.14.2020 17:30	Basis:	Wet Weight
Seq Number:	3126199				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**1560**	251	mg/kg	05.15.2020 17:39		5
Diesel Range Organics (DRO)	C10C28DRO	**15100**	251	mg/kg	05.15.2020 17:39		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**1450**	251	mg/kg	05.15.2020 17:39		5
Total GRO-DRO	PHC628	**16700**	251	mg/kg	05.15.2020 17:39		5
Total TPH	PHC635	**18100**	251	mg/kg	05.15.2020 17:39		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	05.15.2020 17:39	
o-Terphenyl	84-15-1	123	%	70-135	05.15.2020 17:39	

Certificate of Analytical Results 661666

LT Environmental, Inc., Arvada, CO

PLU 320 Battery

Sample Id:	**SS01**	Matrix:	Soil	Date Received:	05.14.2020 15:26
Lab Sample Id:	661666-001	Date Collected:	05.13.2020 13:04	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	05.14.2020 17:00	Basis:	Wet Weight
Seq Number:	3126048				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	**5.78**	0.200	mg/kg	05.15.2020 02:47		100
Toluene	108-88-3	**38.7**	0.200	mg/kg	05.15.2020 02:47		100
Ethylbenzene	100-41-4	**13.4**	0.200	mg/kg	05.15.2020 02:47		100
m,p-Xylenes	179601-23-1	**59.0**	0.399	mg/kg	05.15.2020 02:47		100
o-Xylene	95-47-6	**15.8**	0.200	mg/kg	05.15.2020 02:47		100
Total Xylenes	1330-20-7	**74.8**	0.200	mg/kg	05.15.2020 02:47		100
Total BTEX		**133**	0.200	mg/kg	05.15.2020 02:47		100

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	80	%	70-130	05.15.2020 02:47	
1,4-Difluorobenzene	540-36-3	86	%	70-130	05.15.2020 02:47	

Certificate of Analytical Results 661666

LT Environmental, Inc., Arvada, CO

PLU 320 Battery

Sample Id:	**SS02**	Matrix:	Soil	Date Received:	05.14.2020 15:26
Lab Sample Id:	661666-002	Date Collected:	05.13.2020 13:10	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	05.14.2020 17:43	Basis:	Wet Weight
Seq Number:	3126031				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**5360**	200	mg/kg	05.14.2020 21:00		20

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	05.14.2020 17:30	Basis:	Wet Weight
Seq Number:	3126199				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**3570**	249	mg/kg	05.15.2020 18:00		5
Diesel Range Organics (DRO)	C10C28DRO	**17200**	249	mg/kg	05.15.2020 18:00		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**1430**	249	mg/kg	05.15.2020 18:00		5
Total GRO-DRO	PHC628	**20800**	249	mg/kg	05.15.2020 18:00		5
Total TPH	PHC635	**22200**	249	mg/kg	05.15.2020 18:00		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	05.15.2020 18:00	
o-Terphenyl	84-15-1	113	%	70-135	05.15.2020 18:00	

Certificate of Analytical Results 661666

LT Environmental, Inc., Arvada, CO

PLU 320 Battery

Sample Id:	**SS02**	Matrix:	Soil	Date Received:	05.14.2020 15:26
Lab Sample Id:	661666-002	Date Collected:	05.13.2020 13:10	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	05.14.2020 17:00	Basis:	Wet Weight
Seq Number:	3126048				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0500	0.0500	mg/kg	05.15.2020 03:08	U	100
Toluene	108-88-3	**1.30**	0.200	mg/kg	05.15.2020 03:08		100
Ethylbenzene	100-41-4	**3.49**	0.200	mg/kg	05.15.2020 03:08		100
m,p-Xylenes	179601-23-1	**12.8**	0.400	mg/kg	05.15.2020 03:08		100
o-Xylene	95-47-6	**5.66**	0.200	mg/kg	05.15.2020 03:08		100
Total Xylenes	1330-20-7	**18.5**	0.200	mg/kg	05.15.2020 03:08		100
Total BTEX		**23.3**	0.0500	mg/kg	05.15.2020 03:08		100

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	105	%	70-130	05.15.2020 03:08	
4-Bromofluorobenzene	460-00-4	104	%	70-130	05.15.2020 03:08	

Certificate of Analytical Results 661666

LT Environmental, Inc., Arvada, CO

PLU 320 Battery

Sample Id:	**SS03**	Matrix:	Soil	Date Received:	05.14.2020 15:26
Lab Sample Id:	661666-003	Date Collected:	05.13.2020 13:15	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	05.14.2020 17:43	Basis:	Wet Weight
Seq Number:	3126031				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**14700**	498	mg/kg	05.14.2020 21:06		50

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	05.14.2020 17:30	Basis:	Wet Weight
Seq Number:	3126199				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<74.9	74.9	mg/kg	05.15.2020 16:37	U	5
Diesel Range Organics (DRO)	C10C28DRO	**1810**	250	mg/kg	05.15.2020 16:37		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**350**	250	mg/kg	05.15.2020 16:37		5
Total GRO-DRO	PHC628	**1810**	74.9	mg/kg	05.15.2020 16:37		5
Total TPH	PHC635	**2160**	74.9	mg/kg	05.15.2020 16:37		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	05.15.2020 16:37	
o-Terphenyl	84-15-1	118	%	70-135	05.15.2020 16:37	

Certificate of Analytical Results 661666

LT Environmental, Inc., Arvada, CO

PLU 320 Battery

Sample Id:	**SS03**	Matrix:	Soil	Date Received:	05.14.2020 15:26
Lab Sample Id:	661666-003	Date Collected:	05.13.2020 13:15	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	05.14.2020 16:00	Basis:	Wet Weight
Seq Number:	3126047				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0189	0.0189	mg/kg	05.14.2020 22:52	U	1
Toluene	108-88-3	<0.0189	0.0189	mg/kg	05.14.2020 22:52	U	1
Ethylbenzene	100-41-4	<0.0189	0.0189	mg/kg	05.14.2020 22:52	U	1
m,p-Xylenes	179601-23-1	<0.0377	0.0377	mg/kg	05.14.2020 22:52	U	1
o-Xylene	95-47-6	<0.0189	0.0189	mg/kg	05.14.2020 22:52	U	1
Total Xylenes	1330-20-7	<0.0189	0.0189	mg/kg	05.14.2020 22:52	U	1
Total BTEX		<0.0189	0.0189	mg/kg	05.14.2020 22:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	93	%	70-130	05.14.2020 22:52	
1,4-Difluorobenzene	540-36-3	101	%	70-130	05.14.2020 22:52	

Certificate of Analytical Results 661666

LT Environmental, Inc., Arvada, CO

PLU 320 Battery

Sample Id:	**SS04**	Matrix:	Soil	Date Received:	05.14.2020 15:26
Lab Sample Id:	661666-004	Date Collected:	05.13.2020 13:20	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	05.14.2020 17:43	Basis:	Wet Weight
Seq Number:	3126031				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2210**	198	mg/kg	05.14.2020 21:12		20

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	05.14.2020 17:30	Basis:	Wet Weight
Seq Number:	3126199				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**319**	250	mg/kg	05.15.2020 16:57		5
Diesel Range Organics (DRO)	C10C28DRO	**8450**	250	mg/kg	05.15.2020 16:57		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**976**	250	mg/kg	05.15.2020 16:57		5
Total GRO-DRO	PHC628	**8770**	250	mg/kg	05.15.2020 16:57		5
Total TPH	PHC635	**9750**	250	mg/kg	05.15.2020 16:57		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	129	%	70-135	05.15.2020 16:57	
o-Terphenyl	84-15-1	120	%	70-135	05.15.2020 16:57	

Certificate of Analytical Results 661666

LT Environmental, Inc., Arvada, CO

PLU 320 Battery

Sample Id:	**SS04**	Matrix:	Soil	Date Received:	05.14.2020 15:26
Lab Sample Id:	661666-004	Date Collected:	05.13.2020 13:20	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	05.14.2020 16:00	Basis:	Wet Weight
Seq Number:	3126047				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0204	0.0204	mg/kg	05.14.2020 23:12	U	1
Toluene	108-88-3	<0.0204	0.0204	mg/kg	05.14.2020 23:12	U	1
Ethylbenzene	100-41-4	**0.350**	0.0204	mg/kg	05.14.2020 23:12		1
m,p-Xylenes	179601-23-1	**0.423**	0.0408	mg/kg	05.14.2020 23:12		1
o-Xylene	95-47-6	**1.42**	0.0204	mg/kg	05.14.2020 23:12		1
Total Xylenes	1330-20-7	**1.84**	0.0204	mg/kg	05.14.2020 23:12		1
Total BTEX		**2.19**	0.0204	mg/kg	05.14.2020 23:12		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	112	%	70-130	05.14.2020 23:12	
1,4-Difluorobenzene	540-36-3	93	%	70-130	05.14.2020 23:12	

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

QC Summary 661666

LT Environmental, Inc.

PLU 320 Battery

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3126031 — Matrix: Solid — Date Prep: 05.14.2020
MB Sample Id: 7703403-1-BLK — LCS Sample Id: 7703403-1-BKS — LCSD Sample Id: 7703403-1-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	250	100	249	100	90-110	0	20	mg/kg	05.14.2020 19:43	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3126031 — Matrix: Soil — Date Prep: 05.14.2020
Parent Sample Id: 661663-001 — MS Sample Id: 661663-001 S — MSD Sample Id: 661663-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	184	200	372	94	403	110	90-110	8	20	mg/kg	05.14.2020 20:01	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3126031 — Matrix: Soil — Date Prep: 05.14.2020
Parent Sample Id: 661667-001 — MS Sample Id: 661667-001 S — MSD Sample Id: 661667-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	73.8	200	269	98	269	98	90-110	0	20	mg/kg	05.14.2020 21:23	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3126199 — Matrix: Solid — Date Prep: 05.14.2020
MB Sample Id: 7703409-1-BLK — LCS Sample Id: 7703409-1-BKS — LCSD Sample Id: 7703409-1-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	1070	107	933	93	70-135	14	35	mg/kg	05.15.2020 09:41	
Diesel Range Organics (DRO)	<50.0	1000	1120	112	1070	107	70-135	5	35	mg/kg	05.15.2020 09:41	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	101		135		122		70-135	%	05.15.2020 09:41
o-Terphenyl	111		117		122		70-135	%	05.15.2020 09:41

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3126199 — Matrix: Solid — Date Prep: 05.14.2020
MB Sample Id: 7703409-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	05.15.2020 09:20	

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

QC Summary 661666

LT Environmental, Inc.

PLU 320 Battery

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3126199 Matrix: Soil Date Prep: 05.14.2020
Parent Sample Id: 661663-001 MS Sample Id: 661663-001 S MSD Sample Id: 661663-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.3	1010	1010	100	967	97	70-135	4	35	mg/kg	05.15.2020 10:44	
Diesel Range Organics (DRO)	<50.3	1010	1170	116	1150	116	70-135	2	35	mg/kg	05.15.2020 10:44	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	124		119		70-135	%	05.15.2020 10:44
o-Terphenyl	124		123		70-135	%	05.15.2020 10:44

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3126047 Matrix: Solid Date Prep: 05.14.2020
MB Sample Id: 7703381-1-BLK LCS Sample Id: 7703381-1-BKS LCSD Sample Id: 7703381-1-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	0.107	107	0.101	101	70-130	6	35	mg/kg	05.14.2020 16:04	
Toluene	<0.00200	0.100	0.103	103	0.0974	97	70-130	6	35	mg/kg	05.14.2020 16:04	
Ethylbenzene	<0.00200	0.100	0.0974	97	0.0926	93	71-129	5	35	mg/kg	05.14.2020 16:04	
m,p-Xylenes	<0.00400	0.200	0.201	101	0.192	96	70-135	5	35	mg/kg	05.14.2020 16:04	
o-Xylene	<0.00200	0.100	0.101	101	0.0971	97	71-133	4	35	mg/kg	05.14.2020 16:04	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	107		104		100		70-130	%	05.14.2020 16:04
4-Bromofluorobenzene	97		93		91		70-130	%	05.14.2020 16:04

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3126048 Matrix: Solid Date Prep: 05.14.2020
MB Sample Id: 7703384-1-BLK LCS Sample Id: 7703384-1-BKS LCSD Sample Id: 7703384-1-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	0.119	119	0.117	117	70-130	2	35	mg/kg	05.14.2020 17:31	
Toluene	<0.00200	0.100	0.110	110	0.109	109	70-130	1	35	mg/kg	05.14.2020 17:31	
Ethylbenzene	<0.00200	0.100	0.105	105	0.102	102	71-129	3	35	mg/kg	05.14.2020 17:31	
m,p-Xylenes	<0.00400	0.200	0.203	102	0.198	99	70-135	2	35	mg/kg	05.14.2020 17:31	
o-Xylene	<0.00200	0.100	0.104	104	0.102	102	71-133	2	35	mg/kg	05.14.2020 17:31	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	115		108		109		70-130	%	05.14.2020 17:31
4-Bromofluorobenzene	102		94		97		70-130	%	05.14.2020 17:31

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

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

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

QC Summary 661666

LT Environmental, Inc.

PLU 320 Battery

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3126047 Matrix: Soil Date Prep: 05.14.2020
Parent Sample Id: 661635-001 MS Sample Id: 661635-001 S MSD Sample Id: 661635-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00198	0.0992	0.107	108	0.0992	100	70-130	8	35	mg/kg	05.14.2020 16:45	
Toluene	0.00986	0.0992	0.106	97	0.0955	87	70-130	10	35	mg/kg	05.14.2020 16:45	
Ethylbenzene	0.0147	0.0992	0.0911	77	0.0894	75	71-129	2	35	mg/kg	05.14.2020 16:45	
m,p-Xylenes	0.0337	0.198	0.191	79	0.183	75	70-135	4	35	mg/kg	05.14.2020 16:45	
o-Xylene	0.0207	0.0992	0.0979	78	0.0939	74	71-133	4	35	mg/kg	05.14.2020 16:45	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		105		70-130	%	05.14.2020 16:45
4-Bromofluorobenzene	95		94		70-130	%	05.14.2020 16:45

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3126048 Matrix: Soil Date Prep: 05.14.2020
Parent Sample Id: 661668-004 MS Sample Id: 661668-004 S MSD Sample Id: 661668-004 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	0.122	122	0.111	111	70-130	9	35	mg/kg	05.14.2020 18:56	
Toluene	<0.00200	0.0998	0.112	112	0.101	101	70-130	10	35	mg/kg	05.14.2020 18:56	
Ethylbenzene	<0.00200	0.0998	0.107	107	0.0948	95	71-129	12	35	mg/kg	05.14.2020 18:56	
m,p-Xylenes	<0.00399	0.200	0.207	104	0.183	92	70-135	12	35	mg/kg	05.14.2020 18:56	
o-Xylene	<0.00200	0.0998	0.106	106	0.0945	95	71-133	11	35	mg/kg	05.14.2020 18:56	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	110		110		70-130	%	05.14.2020 18:56
4-Bromofluorobenzene	96		91		70-130	%	05.14.2020 18:56

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

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

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

Chain of Custody

Work Order No: [illegible]

XENCO LABORATORIES

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

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Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littrell
Company Name:	LT Environmental, Inc., Permian office	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 E Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	432.236.3849	Email:	emoreno@ltenv.com, dmoir@ltenv.com

Work Order Comments

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

Project Name:	PLU 320 Battery	Turn Around	
Project Number:	01292007 7	Routine	☒
P.O. Number:		Rush:	
Sampler's Name:	Ezequiel Moreno	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No	
Temperature (°C):	4.8	Thermometer ID		
Received Intact:	(Yes) No	T-NM-007		
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes (No) N/A	Total Containers:	4	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
SS01	S	5/13/20	1304	0.5'	1	X	X	X
SS02			1310					
SS03			1315					
SS04	↓	↓	1320	↓	↓	↓	↓	↓

Work Order Notes

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

Sample Comments

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		5/14/20 15:26	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 05.14.2020 03.26.00 PM

Work Order #: 661666

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

Temperature Measuring device used : T-NM-007

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	4.8	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 Custody Seals intact on sample bottles?	**Yes**	
#6*Custody Seals Signed and dated?	**Yes**	
#7 *Chain of Custody present?	**Yes**	
#8 Any missing/extra samples?	**No**	
#9 Chain of Custody signed when relinquished/ received?	**Yes**	
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**	
#11 Container label(s) legible and intact?	**Yes**	
#12 Samples in proper container/ bottle?	**Yes**	Samples received in bulk containers.
#13 Samples properly preserved?	**Yes**	
#14 Sample container(s) intact?	**Yes**	
#15 Sufficient sample amount for indicated test(s)?	**Yes**	
#16 All samples received within hold time?	**Yes**	
#17 Subcontract of sample(s)?	**No**	
#18 Water VOC samples have zero headspace?	**N/A**	

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

Analyst: PH Device/Lot#:

Checklist completed by: Elizabeth McClellan Date: 05.14.2020

Checklist reviewed by: Jessica Kramer Date: 05.15.2020

Jessica Kramer