LT Environmental, Inc.
3300 North "A" Street
Building 1, Unit 103
Midland, Texas 79705
432.704.5178

February 8, 2019

Ms. Christina Hernandez
New Mexico Oil Conservation Division
1625 North French Drive
Hobbs, New Mexico 88240

RE: Closure Request
Perla Negra Central Tank Battery
Remediation Permit Number 1RP-5275
Lea County, New Mexico

Dear Ms. Hernandez:

LT Environmental, Inc. (LTE), on behalf of XTO Energy, Inc. (XTO), presents the following report detailing excavation and soil sampling activities at the Perla Negra Central Tank Battery (Site) in Unit M, Section 24, Township 19 South, Range 34 East, in Lea County, New Mexico (Figure 1). The purpose of the soil sampling and excavation activities was to address impacts to soil after a frozen air supply line caused the dump controller to fail, resulting in a release from the free water knock-out pop-off valve. The release was discovered on November 13, 2018. Approximately 0.8 barrels (bbls) of crude oil and 7.2 bbls of produced water were released onto the surface of the pad. A vacuum truck was used to recover the standing fluid; approximately 0.4 bbls of crude oil and 3.6 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 C-141 on November 16, 2018, and was assigned Remediation Permit (RP) Number 1RP-5275 (Attachment 1). Based on the excavation activities and results of the confirmation soil sampling events, XTO is requesting no further action for this release.

BACKGROUND

The release occurred after August 14, 2018; therefore, LTE characterized the Site and applied Table 1, *Closure Criteria for Soils Impacted by a Release*, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Depth to groundwater at the Site is estimated to be between 50 feet and 100 feet below ground surface (bgs) based on the nearest water well data. The nearest permitted water well with depth to water data is C 00683, located approximately 1.1 miles southeast of the Site. The water well has a depth to groundwater of 28 feet and a total depth of 120 feet bgs. Ground surface elevation at the water well location is 3,741 feet, which is 40 feet lower in elevation than the Site. The closest significant watercourse to the Site is an unnamed dry wash located approximately 5,038 feet east of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a

subsurface mine. Based on these criteria, the following NMOCD Table 1 closure criteria apply: 10 milligrams per kilogram (mg/kg) benzene; 50 mg/kg total benzene, toluene, ethylbenzene, and total xylenes (BTEX); 2,500 mg/kg total petroleum hydrocarbons (TPH); 1,000 mg/kg TPH-gasoline range organics (GRO) and TPH-diesel range organics (DRO); and 10,000 mg/kg chloride.

SOIL SAMPLING

On November 13, 2018, LTE personnel inspected the Site to evaluate the release extent. Surface petroleum hydrocarbon staining was observed in the release area. The release extent was mapped using a handheld Global Positing System (GPS) unit and is depicted on Figure 2. LTE personnel collected three preliminary soil samples (SS01 through SS03) within the release area from depths of 0.3 feet to 0.5 feet bgs. The soil samples were screened for volatile aromatic hydrocarbons and chlorides using a photo-ionization detector (PID) and Hach® chloride QuanTab® test strips. The soil samples were collected and placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler, method of analysis, and immediately placed on ice. The soil samples were shipped at 4 degrees Celsius (°C) under strict chain-of-custody procedures to Xenco Laboratories (Xenco) in Midland, Texas, for analysis of BTEX by United States Environmental Protection Agency (USEPA) Method 8021B, TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) by USEPA Method 8015M/D, and chloride by USEPA Method 300.0.

Laboratory analytical results for soil sample SS03 indicated that BTEX, TPH, and chloride concentrations were compliant with the NMOCD Table 1 closure criteria. Laboratory analytical results for soil samples SS01 and SS02 indicated that BTEX and TPH concentrations exceeded the NMOCD Table 1 closure criteria. Laboratory analytical results are presented on Figure 2 and summarized in Table 1, and the laboratory analytical report is included in Attachment 2. Based on the SS01 and SS02 soil sample laboratory analytical results, excavation of impacted soil was required.

EXCAVATION ACTIVITIES

During November 2018 and December 2018, LTE personnel returned to the Site to oversee excavation of impacted soil as indicated by laboratory analytical results, field screening activities, and the documented release area. To delineate petroleum hydrocarbon and chloride impacts to soil and direct excavation activities, LTE screened soil using a PID and Hach® chloride QuanTab® test strips. An active flow line ran through the middle of the release area; therefore, two separate excavations were completed. One smaller excavation was completed on the east side of the flow line and a larger excavation was completed on the west side of the flow line. Excavation depths ranged from 0.5 feet bgs in the eastern excavation to 4 feet bgs in the western excavation. Following removal of impacted soil, LTE collected 5-point composite soil samples every 200 square feet from the sidewalls and floors of the excavations. The 5-point composite samples were collected by depositing 5 aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil samples FS01 through FS12 were collected

from the floor of the excavations from depths of 0.5 feet to 4 feet bgs. Composite soil samples SW01 through SW06 were collected from the sidewalls of the excavations from depths of 0.3 feet to 2 feet bgs. Due to the shallow 0.5-foot depth and small size of the eastern excavation, one composite sidewall sample (SW06) was collected and was a composite sample from the four sidewalls. The soil samples were collected, handled, and analyzed as described above and submitted to Xenco in Midland, Texas. The soil sample locations are presented on Figure 3.

The western excavation measured approximately 1,990 square feet and the eastern excavation measured approximately 365 square feet in area. The horizontal extent of each excavation is illustrated on Figure 3. Approximately 410 cubic yards of impacted soil were removed from the excavations. The impacted soil was stockpiled on site and is pending transportation and disposal.

BOREHOLE SOIL SAMPLING

On November 19, 2018, while on site for excavation activities, LTE advanced two boreholes (BH01 and BH02) within the release area to vertically delineate the depth of impacted soil. Boreholes BH01 and BH02 were advanced using a hand auger to depths of 2 feet and 5 feet bgs, respectively. Soil was field screened in each borehole using a PID and Hach® chloride QuanTab® test strips. Discrete soil samples were collected from borehole BH01 at depths of 0.5 feet, 1.0 foot, 2.0 feet, 3.0 feet, and 5.0 feet bgs. Discrete soil samples were collected from borehole BH02 at depths of 0.5 feet and 2.0 feet bgs.

On January 23, 2019, LTE returned to the Site to collect additional soil samples from the release area. LTE advanced three boreholes (BH03 through BH05) within the release area to depths of 0.5 feet to 1 foot bgs using a hand auger. Soil was field screened in each borehole using a PID and Hach® chloride QuanTab® test strips. Discrete soil samples were collected from borehole BH03 at depths of 0.5 feet and 1.0 foot bgs; from borehole BH04 at depths of 0.3 feet and 0.5 feet bgs; and from borehole BH05 at depths of 0.5 feet and 1 foot bgs. Additionally, one discrete surface soil sample (SS04) was collected within the release area at a depth of 0.3 feet bgs to confirm the lateral extent of the release. The soil samples were collected, handled, and analyzed as described above and submitted to Xenco in Midland, Texas. The soil sample locations are presented on Figure 3 and soil sample logs are included as Attachment 3.

ANALYTICAL RESULTS

Laboratory analytical results indicated that two preliminary soil samples (SS01 and SS02) exceeded the NMOCD Table 1 closure criteria for BTEX and TPH. The impacted soil was excavated, and laboratory analytical results for the confirmation soil samples (SW01 through SW06, and FS01 through FS12) collected from the final excavation extents indicated that BTEX, TPH, and chloride were compliant with the NMOCD Table 1 closure criteria. Additionally, laboratory analytical results for the delineation soil samples collected from five boreholes (BH01 through BH05) and one discrete surface soil sample (SS04) indicated that BTEX, TPH, and chloride were

compliant with the NMOCD Table 1 closure criteria. Based on the soil sample analytical results, no further excavation was required. Laboratory analytical results are summarized in Table 1, and the complete laboratory analytical reports are included as Attachment 2.

CONCLUSIONS

The impacted soil was excavated from the release area and laboratory analytical results for the confirmation samples collected from the final excavation extent and the borehole delineation soil samples collected within the release area indicated that BTEX, TPH, and chloride concentrations were compliant with the NMOCD Table 1 closure criteria. Initial response efforts and excavation of impacted soil have mitigated impacts at the Site. XTO requests no further action for this release. Upon approval of the no further action request, XTO will backfill the excavation with material purchased locally and recontour the Site to match pre-existing conditions. An updated NMOCD Form C-141 is included as Attachment 1. A photographic log of the Site is included as Attachment 4.

If you have any questions or comments, please do not hesitate to contact Ms. Adrian Baker at (432) 887-1255 or abaker@ltenv.com.

Sincerely,

LT ENVIRONMENTAL, INC.

Adrian Baker
Project Geologist

Ashley L. Ager, P.G.
Senior Geologist

cc: Kyle Littrell, XTO
Jim Amos, BLM
Deborah McKinney, BLM

Attachments:

Figure 1	Site Location Map
Figure 2	Preliminary Soil Sample Locations
Figure 3	Final Soil Sample Locations
Table 1	Soil Analytical Results
Attachment 1	Initial/Final NMOCD Form C-141 (2RP-5275)
Attachment 2	Laboratory Analytical Reports
Attachment 3	Soil Sample Logs
Attachment 4	Photographic Log

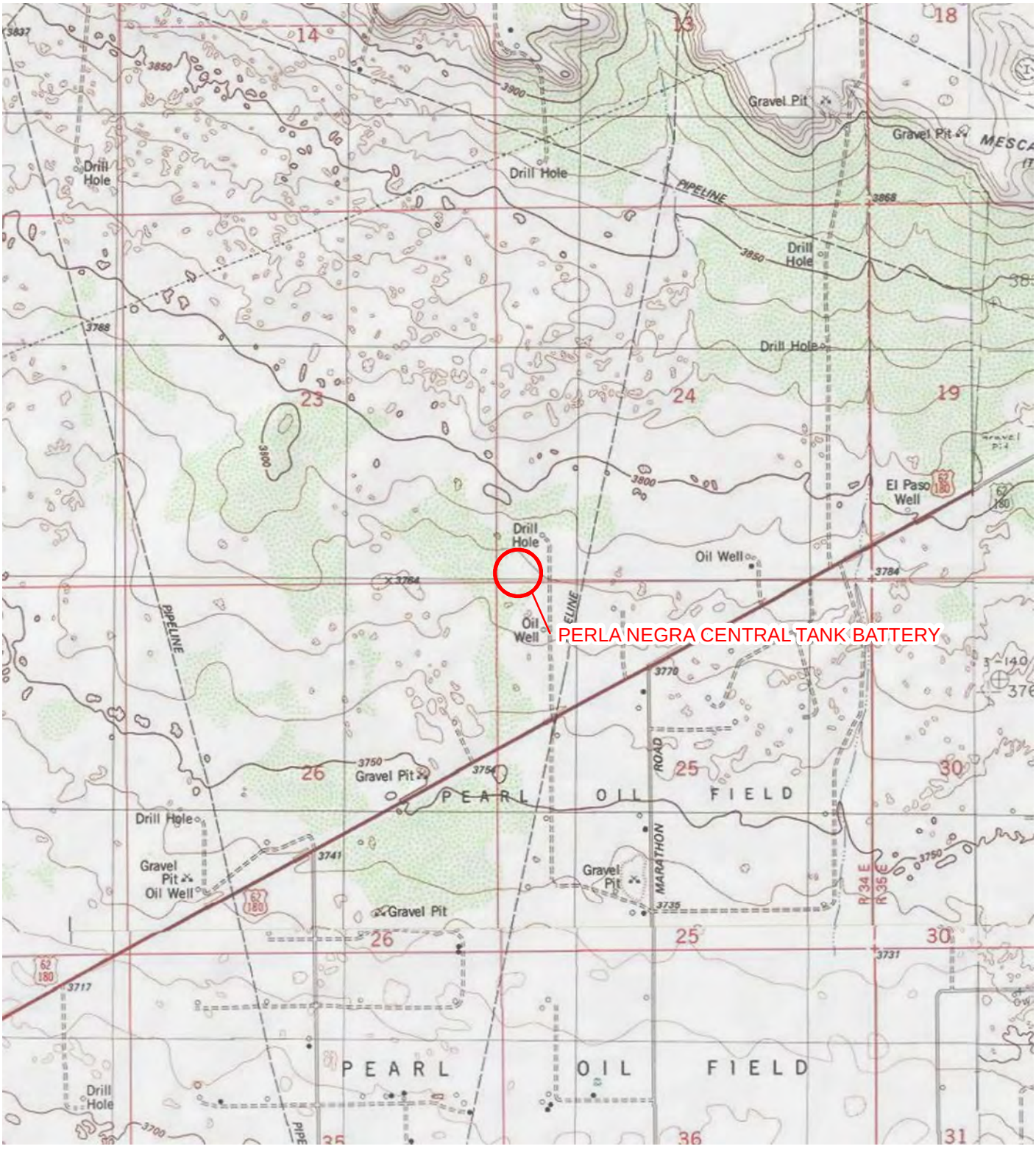

IMAGE COURTESY OF ESRI/USGS

LEGEND

SITE LOCATION

0 2,000 4,000

Feet

N

NEW MEXICO

NOTE: REMEDIATION PERMIT NUMBER 1RP-5275

FIGURE 1
SITE LOCATION MAP
PERLA NEGRA CENTRAL TANK BATTERY
UNIT M SEC 24 T19S R34E
LEA COUNTY, NEW MEXICO
XTO ENERGY, INC.

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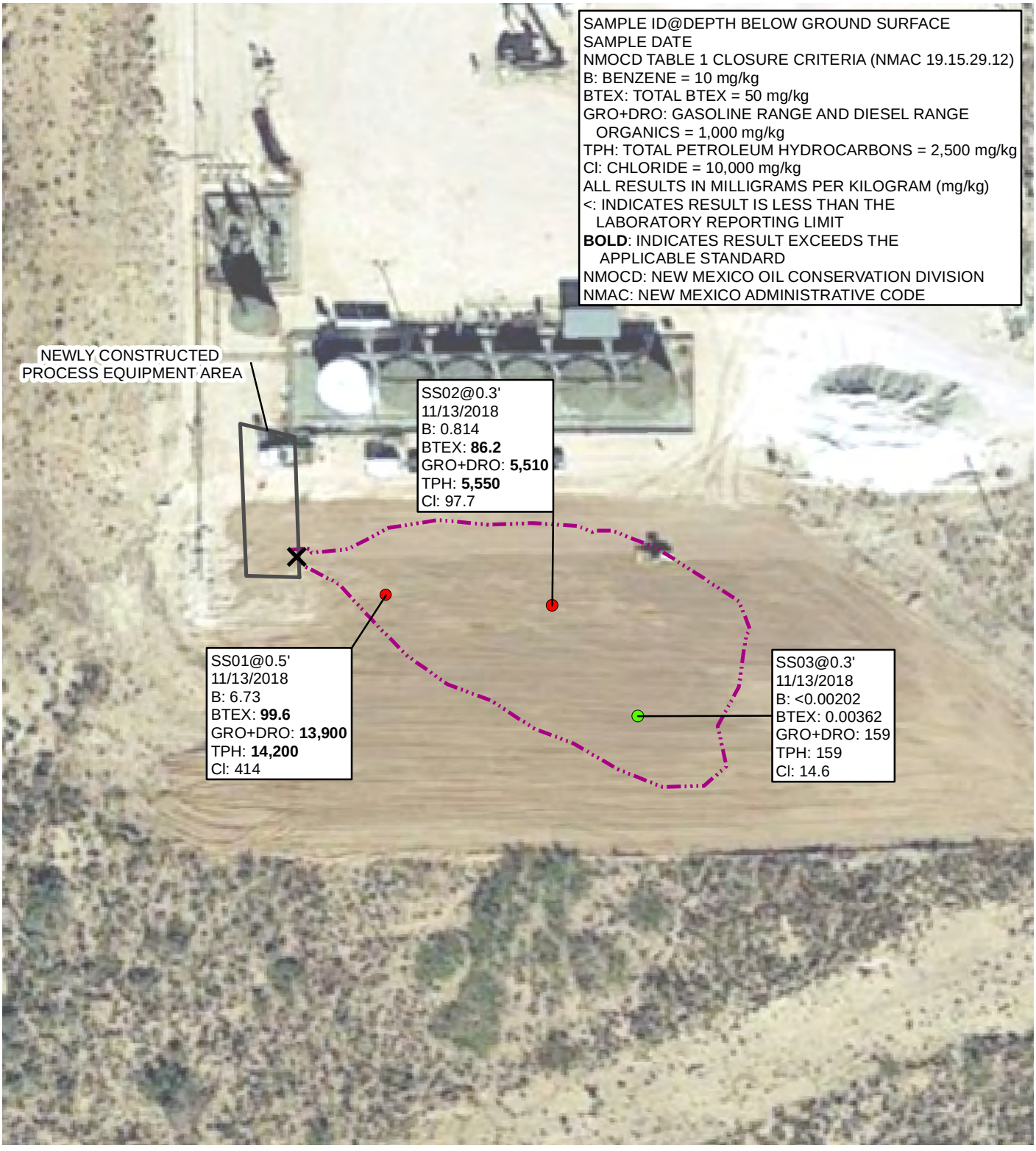


IMAGE COURTESY OF GOOGLE EARTH 2017

LEGEND

- RELEASE LOCATION
- PRELIMINARY SOIL SAMPLE WITH CONCENTRATIONS EXCEEDING APPLICABLE STANDARDS
- PRELIMINARY SOIL SAMPLE IN COMPLIANCE WITH APPLICABLE STANDARDS
- RELEASE EXTENT

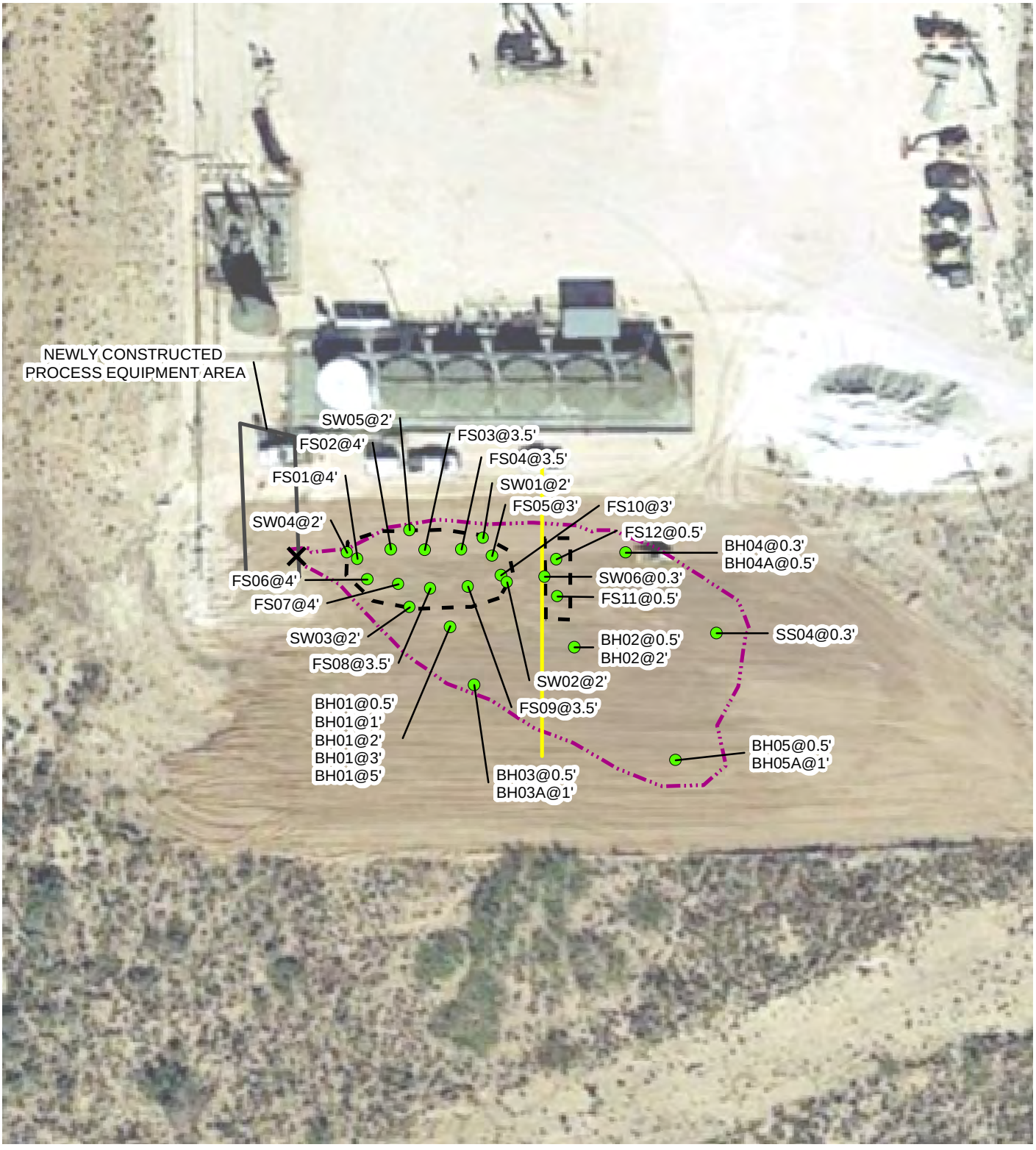
0 60 120
Feet

N

NOTE: REMEDIATION PERMIT NUMBER 1RP-5275

FIGURE 2
PRELIMINARY SOIL SAMPLE LOCATIONS
PERLA NEGRA CENTRAL TANK BATTERY
UNIT M SEC 24 T19S R34E
LEA COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012918183_PERLA NEGRA\012918183_FIG02_SITE_2018_5275_NOV ONLY.mxd



LEGEND

- RELEASE LOCATION
- FINAL SOIL SAMPLE
- SURFACE GAS LINE
- RELEASE EXTENT
- EXCAVATION EXTENT

NOTE: REMEDIATION PERMIT NUMBER 1RP-5275

IMAGE COURTESY OF GOOGLE EARTH 2017

0 60 120
Feet

N

FIGURE 3
FINAL SOIL SAMPLE LOCATIONS
PERLA NEGRA CENTRAL TANK BATTERY
UNIT M SEC 24 T19S R34E
LEA COUNTY, NEW MEXICO
XTO ENERGY, INC.

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TABLE 1
SOIL ANALYTICAL RESULTS

PERLA NEGRA CENTRAL TANK BATTERY
REMEDIATION PERMIT NUMBER 1RP-5275
LEA COUNTY, NEW MEXICO
XTO ENERGY, INC.

Sample Name	Sample Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	C6-C10 GRO (mg/kg)	C10-C28 DRO (mg/kg)	C28-C40 ORO (mg/kg)	GRO and DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
SS01	0.5	11/13/2018	6.73	33.5	21.5	37.9	**99.6**	5,220	8,700	298	**13,900**	**14,200**	414
SS02	0.3	11/13/2018	0.814	18.9	23.7	42.8	**86.2**	1,470	4,040	41.9	**5,510**	**5,550**	97.7
SS03	0.3	11/13/2018	<0.00202	<0.00202	<0.00202	0.00362	0.00362	<15.0	159	<15.0	159	159	14.6
BH01	0.5	11/19/2018	<0.00199	<0.00199	0.00568	0.0144	0.0201	<15.0	360	<15.0	360	360	169
BH01	1	11/19/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<14.9	<14.9	<14.9	<14.9	<14.9	34.0
BH01	2	11/19/2018	<0.00200	<0.00200	0.00297	0.00599	0.00896	<15.0	<15.0	<15.0	<15.0	<15.0	<4.99
BH01	3	11/19/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	<15.0	<5.00
BH01	5	11/19/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	<15.0	<4.99
BH02	0.5	11/19/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	211
BH02	2	11/19/2018	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<15.0	<15.0	<15.0	<15.0	<15.0	<5.00
FS01	4	12/20/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	34.8
FS02	4	12/20/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	15.9
FS03	3.5	12/20/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.5	<49.5	<49.5	<49.5	<49.5	22.4
FS04	3.5	12/20/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	<5.00
FS05	3	12/20/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	<4.99
FS06	4	12/20/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	<4.95
FS07	4	12/20/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.7	<49.7	<49.7	<49.7	<49.7	21.4
FS08	3.5	12/20/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	<4.95
FS09	3.5	12/20/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	14.9
FS10	3	12/20/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	<5.01
FS11	0.5	12/20/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.7	<49.7	<49.7	<49.7	<49.7	173
FS12	0.5	12/20/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.6	<49.6	<49.6	<49.6	<49.6	112
SW01	2	12/20/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.6	<49.6	<49.6	<49.6	<49.6	36.0
SW02	2	12/20/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	33.3
SW03	2	12/20/2018	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<49.9	<49.9	<49.9	<49.9	<49.9	87.6
SW04	2	12/20/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	55.1
SW05	2	12/20/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.8	<49.8	<49.8	<49.8	<49.8	43.0

TABLE 1 (Continued)
SOIL ANALYTICAL RESULTS

PERLA NEGRA CENTRAL TANK BATTERY
REMEDIATION PERMIT NUMBER 1RP-5275
LEA COUNTY, NEW MEXICO
XTO ENERGY, INC.

Sample Name	Sample Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	C6-C10 GRO (mg/kg)	C10-C28 DRO (mg/kg)	C28-C40 ORO (mg/kg)	GRO and DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
SW06	0.3	12/20/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	212
BH03	0.5	01/23/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	34.8	<15.0	34.8	34.8	211
BH03A	1	01/23/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	17.8	<15.0	17.8	17.8	139
BH04	0.3	01/23/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<14.9	26.0	<14.9	26.0	26.0	212
BH04A	0.5	01/23/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<14.9	19.2	<14.9	19.2	19.2	152
BH05	0.5	01/23/2019	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	28.5	<15.0	28.5	28.5	106
BH05A	1	01/23/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	<15.0	124
SS04	0.3	01/23/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	298	72.2	298	370	691
NMOCD Table 1 Closure Criteria			10	NE	NE	NE	50	NE	NE	NE	1,000	2,500	10,000

Notes:
bgs - below ground surface
BTEX - benzene, toluene, ethylbenzene, and total xylenes
mg/kg - milligrams per kilogram
NE - not established
NMOCD - New Mexico Oil Conservation Division
DRO - diesel range organics
GRO - gasoline range organics
ORO - oil range organics
TPH - total petroleum hydrocarbons
< - indicates result is below laboratory reporting limits
Bold - indicates result exceeds the applicable regulatory standard
* - indicates sample was collected in area to be reclaimed after remediation is complete; closure criteria for chloride concentration in the top 4 feet of soil is 600 mg/kg
Table 1 - closure criteria for soils impacted by a release per NMAC 19.15.29 August 2018
NMAC - New Mexico Administrative Code

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	NCH1835138161
District RP	1RP-5275
Facility ID	
Application ID	pCH1835139191

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 # NCH1835138161 PERLA NEGRA CTB @ 30-025-41131
Contact mailing address 522 W. Mermod, Carlsbad, NM 88220	

Location of Release Source

Latitude 32.638858° Longitude -103.521472°
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Perla Negra Central Tank Battery	Site Type Bulk Storage and Separation Facility
Date Release Discovered 11/13/2018	API# *(if applicable)* 30-025-41131 (Perla Negra Federal Com 001H)

Unit Letter	Section	Township	Range	County
M	24	19S	34E	Lea

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) 0.8	Volume Recovered (bbls) 0.4
☒ Produced Water	Volume Released (bbls) 7.2	Volume Recovered (bbls) 3.6
	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 to the well pad via the pop-off valve on the free water knock-out. The release was due to a freeze in the air supply line to the dump controllers causing the dump to fail. A vacuum truck recovered and removed free standing fluids. An environmental contractor has been retained to assist with remediation efforts.

Oil Conservation Division

Incident ID	NCH1835136161
District RP	1RP-5275
Facility ID	
Application ID	pCH1835139191

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 Coordinator

Signature: Date: 11-16-18

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

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	1RP-5275
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	1RP-5275
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 Coordinator

Signature: Date: 2/8/2019

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

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	1RP-5275
Facility ID	
Application ID	

Closure

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

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

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

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

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

☒ Description of remediation activities

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

Printed Name: Kyle Littrell Title: SH&E Coordinator

Signature: Date: 2/8/2019

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

OCD Only

Received by: Date:

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

Closure Approved by: Date:

Printed Name: Title:

ATTACHMENT 2: LABORATORY ANALYTICAL REPORTS

Analytical Report 605665

for

LT Environmental, Inc.

Project Manager: Adrian Baker

Perla Negra

10-DEC-18

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-18-28), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-18-17), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-18)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Phoenix Mobile (EPA Lab Code: AZ00901): Arizona (AZM757)
Xenco-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429)
Xenco-Lakeland: Florida (E84098)

10-DEC-18

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

Reference: XENCO Report No(s): **605665**
Perla Negra
Project Address: Lee, NM 2RP

Adrian Baker:

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) 605665. 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. 605665 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jessica Kramer

Jessica Kramer
Project Assistant

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America

Sample Cross Reference 605665

LT Environmental, Inc., Arvada, CO

Perla Negra

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS01	S	11-13-18 17:35	6 In	605665-001
SS02	S	11-13-18 17:25	3 In	605665-002
SS03	S	11-13-18 17:10	3 In	605665-003

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3069890 TPH by SW8015 Mod
Surrogate o-Terphenyl recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.
Samples affected are: 605665-002,605665-001.

Batch: LBA-3069902 Inorganic Anions by EPA 300
Lab Sample ID 605665-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD).
Chloride recovered above QC limits in the Matrix Spike. Outlier/s are due to possible matrix interference.
Samples in the analytical batch are: 605665-001, -002, -003.
The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3069968 BTEX by EPA 8021B
Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.
Samples affected are: 605665-003,605665-001,605665-002.
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analysis Summary 605665

LT Environmental, Inc., Arvada, CO

Project Name: Perla Negra

Project Id:
Contact: Adrian Baker
Project Location: Lee, NM 2RP

Date Received in Lab: Thu Nov-15-18 03:05 pm
Report Date: 10-DEC-18
Project Manager: Jessica Kramer

Analysis Requested									
	Lab Id:	605665-001		605665-002		605665-003			
	Field Id:	SS01		SS02		SS03			
	Depth:	6- In		3- In		3- In			
	Matrix:	SOIL		SOIL		SOIL			
	Sampled:	Nov-13-18 17:35		Nov-13-18 17:25		Nov-13-18 17:10			
BTEX by EPA 8021B	***Extracted:***	Nov-17-18 10:00		Nov-17-18 10:00		Nov-17-18 10:00			
	Analyzed:	Nov-18-18 17:18		Nov-17-18 21:12		Nov-17-18 20:33			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Benzene		6.73	2.00	0.814	0.498	<0.00202	0.00202		
Toluene		33.5	2.00	18.9	0.498	<0.00202	0.00202		
Ethylbenzene		21.5	2.00	23.7	0.498	<0.00202	0.00202		
m,p-Xylenes		27.2	4.01	30.2	0.996	<0.00403	0.00403		
o-Xylene		10.7	2.00	12.6	0.498	0.00362	0.00202		
Total Xylenes		37.9	2.00	42.8	0.498	0.00362	0.00202		
Total BTEX		99.6	2.00	86.2	0.498	0.00362	0.00202		
Inorganic Anions by EPA 300	***Extracted:***	Nov-15-18 16:15		Nov-15-18 16:15		Nov-15-18 16:15			
	Analyzed:	Nov-15-18 23:02		Nov-15-18 23:20		Nov-15-18 23:26			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Chloride		414	5.00	97.7	2.00	14.6	1.99		
TPH by SW8015 Mod	***Extracted:***	Nov-15-18 17:00		Nov-15-18 17:00		Nov-15-18 17:00			
	Analyzed:	Nov-16-18 04:56		Nov-16-18 05:14		Nov-16-18 05:33			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Gasoline Range Hydrocarbons (GRO)		5220	75.0	1470	15.0	<15.0	15.0		
Diesel Range Organics (DRO)		8700	75.0	4040	15.0	159	15.0		
Motor Oil Range Hydrocarbons (MRO)		298	75.0	41.9	15.0	<15.0	15.0		
Total TPH		14200	75.0	5550	15.0	159	15.0		

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

LT Environmental, Inc., Arvada, CO

Perla Negra

Sample Id:	**SS01**	Matrix:	Soil	Date Received:	11.15.18 15.05
Lab Sample Id:	605665-001	Date Collected:	11.13.18 17.35	Sample Depth:	6 In

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.15.18 16.15	Basis:	Wet Weight
Seq Number:	3069902				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**414**	5.00	mg/kg	11.15.18 23.02		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.15.18 17.00	Basis:	Wet Weight
Seq Number:	3069890				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**5220**	75.0	mg/kg	11.16.18 04.56		5
Diesel Range Organics (DRO)	C10C28DRO	**8700**	75.0	mg/kg	11.16.18 04.56		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**298**	75.0	mg/kg	11.16.18 04.56		5
Total TPH	PHC635	**14200**	75.0	mg/kg	11.16.18 04.56		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	119	%	70-135	11.16.18 04.56	
o-Terphenyl	84-15-1	222	%	70-135	11.16.18 04.56	**

Certificate of Analytical Results 605665

LT Environmental, Inc., Arvada, CO

Perla Negra

Sample Id:	**SS01**	Matrix:	Soil	Date Received:	11.15.18 15.05
Lab Sample Id:	605665-001	Date Collected:	11.13.18 17.35	Sample Depth:	6 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	11.17.18 10.00	Basis:	Wet Weight
Seq Number:	3069968				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	**6.73**	2.00	mg/kg	11.18.18 17.18		1000
Toluene	108-88-3	**33.5**	2.00	mg/kg	11.18.18 17.18		1000
Ethylbenzene	100-41-4	**21.5**	2.00	mg/kg	11.18.18 17.18		1000
m,p-Xylenes	179601-23-1	**27.2**	4.01	mg/kg	11.18.18 17.18		1000
o-Xylene	95-47-6	**10.7**	2.00	mg/kg	11.18.18 17.18		1000
Total Xylenes	1330-20-7	**37.9**	2.00	mg/kg	11.18.18 17.18		1000
Total BTEX		**99.6**	2.00	mg/kg	11.18.18 17.18		1000

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	166	%	70-130	11.18.18 17.18	**
1,4-Difluorobenzene	540-36-3	104	%	70-130	11.18.18 17.18	

Certificate of Analytical Results 605665

LT Environmental, Inc., Arvada, CO

Perla Negra

Sample Id:	**SS02**	Matrix:	Soil	Date Received:	11.15.18 15.05
Lab Sample Id:	605665-002	Date Collected:	11.13.18 17.25	Sample Depth:	3 In

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.15.18 16.15	Basis:	Wet Weight
Seq Number:	3069902				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**97.7**	2.00	mg/kg	11.15.18 23.20		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.15.18 17.00	Basis:	Wet Weight
Seq Number:	3069890				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**1470**	15.0	mg/kg	11.16.18 05.14		1
Diesel Range Organics (DRO)	C10C28DRO	**4040**	15.0	mg/kg	11.16.18 05.14		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**41.9**	15.0	mg/kg	11.16.18 05.14		1
Total TPH	PHC635	**5550**	15.0	mg/kg	11.16.18 05.14		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	126	%	70-135	11.16.18 05.14	
o-Terphenyl	84-15-1	165	%	70-135	11.16.18 05.14	**

Certificate of Analytical Results 605665

LT Environmental, Inc., Arvada, CO

Perla Negra

Sample Id:	**SS02**	Matrix:	Soil	Date Received:	11.15.18 15.05
Lab Sample Id:	605665-002	Date Collected:	11.13.18 17.25	Sample Depth:	3 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	11.17.18 10.00	Basis:	Wet Weight
Seq Number:	3069968				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	**0.814**	0.498	mg/kg	11.17.18 21.12		250
Toluene	108-88-3	**18.9**	0.498	mg/kg	11.17.18 21.12		250
Ethylbenzene	100-41-4	**23.7**	0.498	mg/kg	11.17.18 21.12		250
m,p-Xylenes	179601-23-1	**30.2**	0.996	mg/kg	11.17.18 21.12		250
o-Xylene	95-47-6	**12.6**	0.498	mg/kg	11.17.18 21.12		250
Total Xylenes	1330-20-7	**42.8**	0.498	mg/kg	11.17.18 21.12		250
Total BTEX		**86.2**	0.498	mg/kg	11.17.18 21.12		250

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	103	%	70-130	11.17.18 21.12	
4-Bromofluorobenzene	460-00-4	160	%	70-130	11.17.18 21.12	**

LT Environmental, Inc., Arvada, CO

Perla Negra

Sample Id: **SS03** Matrix: Soil Date Received: 11.15.18 15.05
Lab Sample Id: 605665-003 Date Collected: 11.13.18 17.10 Sample Depth: 3 In

Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
Tech: CHE % Moisture:
Analyst: CHE Date Prep: 11.15.18 16.15 Basis: Wet Weight
Seq Number: 3069902

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**14.6**	1.99	mg/kg	11.15.18 23.26		1

Analytical Method: TPH by SW8015 Mod Prep Method: TX1005P
Tech: ARM % Moisture:
Analyst: ARM Date Prep: 11.15.18 17.00 Basis: Wet Weight
Seq Number: 3069890

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.16.18 05.33	U	1
Diesel Range Organics (DRO)	C10C28DRO	**159**	15.0	mg/kg	11.16.18 05.33		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.16.18 05.33	U	1
Total TPH	PHC635	**159**	15.0	mg/kg	11.16.18 05.33		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	11.16.18 05.33	
o-Terphenyl	84-15-1	97	%	70-135	11.16.18 05.33	

Certificate of Analytical Results 605665

LT Environmental, Inc., Arvada, CO

Perla Negra

Sample Id:	**SS03**	Matrix:	Soil	Date Received:	11.15.18 15.05
Lab Sample Id:	605665-003	Date Collected:	11.13.18 17.10	Sample Depth:	3 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	11.17.18 10.00	Basis:	Wet Weight
Seq Number:	3069968				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	11.17.18 20.33	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	11.17.18 20.33	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	11.17.18 20.33	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	11.17.18 20.33	U	1
o-Xylene	95-47-6	**0.00362**	0.00202	mg/kg	11.17.18 20.33		1
Total Xylenes	1330-20-7	**0.00362**	0.00202	mg/kg	11.17.18 20.33		1
Total BTEX		**0.00362**	0.00202	mg/kg	11.17.18 20.33		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	131	%	70-130	11.17.18 20.33	**
1,4-Difluorobenzene	540-36-3	106	%	70-130	11.17.18 20.33	

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

QC Summary 605665

LT Environmental, Inc.

Perla Negra

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3069902 Matrix: Solid Date Prep: 11.15.18
MB Sample Id: 7666228-1-BLK LCS Sample Id: 7666228-1-BKS LCSD Sample Id: 7666228-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	270	108	274	110	90-110	1	20	mg/kg	11.16.18 10:55	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3069902 Matrix: Solid Date Prep: 11.15.18
Parent Sample Id: 605664-001 MS Sample Id: 605664-001 S MSD Sample Id: 605664-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1.75	250	289	115	285	113	90-110	1	20	mg/kg	11.16.18 11:14	X

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3069902 Matrix: Soil Date Prep: 11.15.18
Parent Sample Id: 605665-001 MS Sample Id: 605665-001 S MSD Sample Id: 605665-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	414	250	693	112	650	94	90-110	6	20	mg/kg	11.15.18 23:08	X

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3069890 Matrix: Solid Date Prep: 11.15.18
MB Sample Id: 7666236-1-BLK LCS Sample Id: 7666236-1-BKS LCSD Sample Id: 7666236-1-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)	<8.00	1000	1000	100	992	99	70-135	1	20	mg/kg	11.16.18 00:03	
Diesel Range Organics (DRO)	<8.13	1000	991	99	978	98	70-135	1	20	mg/kg	11.16.18 00:03	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	88		126		125		70-135	%	11.16.18 00:03
o-Terphenyl	94		99		102		70-135	%	11.16.18 00:03

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 605665

LT Environmental, Inc.

Perla Negra

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3069890 Matrix: Soil Date Prep: 11.15.18
Parent Sample Id: 605663-001 MS Sample Id: 605663-001 S MSD Sample Id: 605663-001 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)	<8.00	1000	981	98	962	96	70-135	2	20	mg/kg	11.16.18 00:57	
Diesel Range Organics (DRO)	<8.13	1000	974	97	948	95	70-135	3	20	mg/kg	11.16.18 00:57	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	129		125		70-135	%	11.16.18 00:57
o-Terphenyl	104		103		70-135	%	11.16.18 00:57

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3069968 Matrix: Solid Date Prep: 11.17.18
MB Sample Id: 7666368-1-BLK LCS Sample Id: 7666368-1-BKS LCSD Sample Id: 7666368-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0994	0.106	107	0.0981	98	70-130	8	35	mg/kg	11.17.18 12:39	
Toluene	<0.00199	0.0994	0.0936	94	0.0873	87	70-130	7	35	mg/kg	11.17.18 12:39	
Ethylbenzene	<0.00199	0.0994	0.101	102	0.0954	96	70-130	6	35	mg/kg	11.17.18 12:39	
m,p-Xylenes	<0.00398	0.199	0.195	98	0.185	93	70-130	5	35	mg/kg	11.17.18 12:39	
o-Xylene	<0.00199	0.0994	0.0981	99	0.0932	93	70-130	5	35	mg/kg	11.17.18 12:39	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		100		100		70-130	%	11.17.18 12:39
4-Bromofluorobenzene	107		115		116		70-130	%	11.17.18 12:39

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3069968 Matrix: Soil Date Prep: 11.17.18
Parent Sample Id: 605663-001 MS Sample Id: 605663-001 S MSD Sample Id: 605663-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00488	0.244	0.00910	4	0.00833	8	70-130	9	35	mg/kg	11.17.18 13:18	X
Toluene	<0.00488	0.244	0.00812	3	0.00674	7	70-130	19	35	mg/kg	11.17.18 13:18	X
Ethylbenzene	<0.00488	0.244	0.00910	4	0.00736	7	70-130	21	35	mg/kg	11.17.18 13:18	X
m,p-Xylenes	<0.00247	0.488	0.0196	4	0.0152	8	70-130	25	35	mg/kg	11.17.18 13:18	X
o-Xylene	<0.00488	0.244	0.0108	4	0.00815	8	70-130	28	35	mg/kg	11.17.18 13:18	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	109		109		70-130	%	11.17.18 13:18
4-Bromofluorobenzene	130		125		70-130	%	11.17.18 13:18

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

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

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

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

CHAIN OF CUSTODY

Page 1 of 1

XENCO LABORATORIES

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Dallas Texas (214-902-0300) | Midland, Texas (432-704-5251)

www.xenco.com

Xenco Quote # | Xenco Job # 660566

Client / Reporting Information

Company Name / Branch: LT Environmental, Inc. Permian Office

Company Address: 3300 N "A" St. Building 1 Unit 103 Midland, TX 79705

Email: abaker@ltenv.com Phone No: (432) 704-5178

Project Contact: Adrian Baker

Samplers's Name: Lynda Lowrance

Project Information

Project Name/Number: Perla Negra

Project Location: Lee, NM ERP

Invoice To: XTO Energy - Kyle Littrell

PO Number:

Analytical Information

BTEX (only BTEX) 8021

TPH (DRO/GRO) 8015

Chloride 300.0

Matrix Codes

W = Water
S = Soil/Sed/Solid
GW = Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
OW = Ocean/Sea Water
WI = Wipe
O = Oil
WW = Waste Water
A = Air

No.	Field ID / Point of Collection	Collection: Sample Depth	Date	Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	Field Comments
1	SS01	6"	11/13	17:35	S	1								X	
2	SS02	3"	↓	17:25	S	1								X	
3	SS03	3"		17:10	S	1								X	
4															
5															
6															
7															
8															
9															
10															

Turnaround Time (Business days)

- [X] Same Day TAT
- [ ] 5 Day TAT
- [ ] Next Day EMERGENCY
- [ ] 7 Day TAT
- [ ] 2 Day EMERGENCY
- [ ] Contract TAT
- [ ] 3 Day EMERGENCY

TAT Starts Day received by Lab, if received by 5:00 pm

Data Deliverable Information

- [ ] Level II Std QC
- [ ] Level III Std QC+ Forms
- [ ] Level 3 (CLP Forms)
- [ ] TRRP Checklist
- [ ] Level IV (Full Data Pkg /raw data)
- [ ] TRRP Level IV
- [ ] UST / RG -411

Notes:

FED-EX / UPS: Tracking # 773724915

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by Sampler:	Date/Time:	Received By:	Relinquished By:	Date/Time:	Received By:
1		11/13 19:30	1	2	11/14/16 10:47	2 Timothy P. Elliott
3	Relinquished by:	Date/Time:	Received By: 3	Relinquished By: 4	Date/Time:	Received By: 4
5	Relinquished by:	Date/Time:	Received By: 5	Custody Seal #	Preserved where applicable	On Ice: X

Cooler Temp. 0.5/0.8 | Thermo. Corr. Factor 1.0

Notice: Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the Client if such loses are due to circumstances beyond the control of Xenco. A minimum charge of $75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xenco but not analyzed will be invoiced at $5 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract.

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

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XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 11/15/2018 03:05:00 PM

Work Order #: 605665

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

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	.2
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**
#5 Custody Seals intact on sample bottles?	**Yes**
#6*Custody Seals Signed and dated?	**N/A**
#7 *Chain of Custody present?	**Yes**
#8 Any missing/extra samples?	**No**
#9 Chain of Custody signed when relinquished/ received?	**Yes**
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**
#11 Container label(s) legible and intact?	**Yes**
#12 Samples in proper container/ bottle?	**Yes**
#13 Samples properly preserved?	**Yes**
#14 Sample container(s) intact?	**Yes**
#15 Sufficient sample amount for indicated test(s)?	**Yes**
#16 All samples received within hold time?	**Yes**
#17 Subcontract of sample(s)?	**N/A**
#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: Brianna Teel Date: 11/15/2018

Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 11/16/2018

Jessica Kramer

Analytical Report 606284

for

LT Environmental, Inc.

Project Manager: Adrian Baker

Perla Negra

27-NOV-18

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-18-28), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-18-17), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-18)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Phoenix Mobile (EPA Lab Code: AZ00901): Arizona (AZM757)
Xenco-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429)
Xenco-Lakeland: Florida (E84098)

27-NOV-18

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

Reference: XENCO Report No(s): **606284**
Perla Negra
Project Address: Lea, NM

Adrian Baker:

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) 606284. 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. 606284 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jessica Kramer

Jessica Kramer
Project Assistant

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Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America

Sample Cross Reference 606284

LT Environmental, Inc., Arvada, CO

Perla Negra

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH01	S	11-19-18 15:20	6 In	606284-001
BH01	S	11-19-18 15:25	1 ft	606284-002
BH01	S	11-19-18 15:30	2 ft	606284-003
BH01	S	11-19-18 15:35	3 ft	606284-004
BH02	S	11-19-18 16:40	6 In	606284-005
BH02	S	11-19-18 16:50	2 ft	606284-006
BH01	S	11-19-18 15:40	5 ft	606284-007

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3070802 BTEX by EPA 8021B

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

Certificate of Analysis Summary 606284

LT Environmental, Inc., Arvada, CO

Project Name: Perla Negra

Project Id:
Contact: Adrian Baker
Project Location: Lea, NM

Date Received in Lab: Wed Nov-21-18 11:30 am
Report Date: 27-NOV-18
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	606284-001		606284-002		606284-003		606284-004		606284-005		606284-006	
	Field Id:	BH01		BH01		BH01		BH01		BH02		BH02	
	Depth:	6- In		1- ft		2- ft		3- ft		6- In		2- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Nov-19-18 15:20		Nov-19-18 15:25		Nov-19-18 15:30		Nov-19-18 15:35		Nov-19-18 16:40		Nov-19-18 16:50	
BTEX by EPA 8021B	***Extracted:***	Nov-26-18 16:00		Nov-26-18 16:00		Nov-26-18 16:00		Nov-26-18 16:00		Nov-26-18 16:00		Nov-26-18 16:00	
	Analyzed:	Nov-27-18 02:05		Nov-27-18 02:24		Nov-26-18 19:26		Nov-26-18 19:45		Nov-26-18 20:04		Nov-26-18 20:23	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00202	0.00202
Toluene		<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00202	0.00202
Ethylbenzene		0.00568	0.00199	<0.00199	0.00199	0.00297	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00202	0.00202
m,p-Xylenes		0.0112	0.00398	<0.00398	0.00398	0.00599	0.00400	<0.00402	0.00402	<0.00399	0.00399	<0.00403	0.00403
o-Xylene		0.00321	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00202	0.00202
Total Xylenes		0.0144	0.00199	<0.00199	0.00199	0.00599	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00202	0.00202
Total BTEX		0.0201	0.00199	<0.00199	0.00199	0.00896	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00202	0.00202
Inorganic Anions by EPA 300	***Extracted:***	Nov-26-18 08:15		Nov-26-18 08:15		Nov-26-18 08:15		Nov-26-18 08:15		Nov-26-18 08:15		Nov-26-18 08:15	
	Analyzed:	Nov-26-18 09:15		Nov-26-18 09:34		Nov-26-18 09:40		Nov-26-18 09:46		Nov-26-18 09:52		Nov-26-18 10:11	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		169	4.97	34.0	4.97	<4.99	4.99	<5.00	5.00	211	4.99	<5.00	5.00
TPH by SW8015 Mod	***Extracted:***	Nov-21-18 12:00		Nov-21-18 12:00		Nov-21-18 12:00		Nov-21-18 12:00		Nov-21-18 12:00		Nov-21-18 12:00	
	Analyzed:	Nov-21-18 22:12		Nov-21-18 23:06		Nov-21-18 23:25		Nov-21-18 23:43		Nov-22-18 00:01		Nov-22-18 00:19	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		360	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Motor Oil Range Hydrocarbons (MRO)		<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Total TPH		360	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0

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

Certificate of Analysis Summary 606284

LT Environmental, Inc., Arvada, CO

Project Name: Perla Negra

Project Id:
Contact: Adrian Baker
Project Location: Lea, NM

Date Received in Lab: Wed Nov-21-18 11:30 am
Report Date: 27-NOV-18
Project Manager: Jessica Kramer

Analysis Requested							
	Lab Id:	606284-007					
	Field Id:	BH01					
	Depth:	5- ft					
	Matrix:	SOIL					
	Sampled:	Nov-19-18 15:40					
BTEX by EPA 8021B	***Extracted:***	Nov-26-18 16:00					
	Analyzed:	Nov-26-18 20:42					
	Units/RL:	mg/kg RL					
Benzene		<0.00201 0.00201					
Toluene		<0.00201 0.00201					
Ethylbenzene		<0.00201 0.00201					
m,p-Xylenes		<0.00402 0.00402					
o-Xylene		<0.00201 0.00201					
Total Xylenes		<0.00201 0.00201					
Total BTEX		<0.00201 0.00201					
Inorganic Anions by EPA 300	***Extracted:***	Nov-26-18 08:15					
	Analyzed:	Nov-26-18 10:17					
	Units/RL:	mg/kg RL					
Chloride		<4.99 4.99					
TPH by SW8015 Mod	***Extracted:***	Nov-21-18 12:00					
	Analyzed:	Nov-22-18 00:37					
	Units/RL:	mg/kg RL					
Gasoline Range Hydrocarbons (GRO)		<15.0 15.0					
Diesel Range Organics (DRO)		<15.0 15.0					
Motor Oil Range Hydrocarbons (MRO)		<15.0 15.0					
Total TPH		<15.0 15.0					

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use.
The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories.
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Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Jessica Kramer
Project Assistant

Certificate of Analytical Results 606284

LT Environmental, Inc., Arvada, CO

Perla Negra

Sample Id:	**BH01**	Matrix:	Soil	Date Received:	11.21.18 11.30
Lab Sample Id:	606284-001	Date Collected:	11.19.18 15.20	Sample Depth:	6 In

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	CHE	Date Prep:	11.26.18 08.15	Basis:	Wet Weight
Seq Number:	3070608				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**169**	4.97	mg/kg	11.26.18 09.15		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.21.18 12.00	Basis:	Wet Weight
Seq Number:	3070632				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.21.18 22.12	U	1
Diesel Range Organics (DRO)	C10C28DRO	**360**	15.0	mg/kg	11.21.18 22.12		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.21.18 22.12	U	1
Total TPH	PHC635	**360**	15.0	mg/kg	11.21.18 22.12		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	11.21.18 22.12	
o-Terphenyl	84-15-1	99	%	70-135	11.21.18 22.12	

Certificate of Analytical Results 606284

LT Environmental, Inc., Arvada, CO

Perla Negra

Sample Id:	**BH01**	Matrix:	Soil	Date Received:	11.21.18 11.30
Lab Sample Id:	606284-001	Date Collected:	11.19.18 15.20	Sample Depth:	6 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	11.26.18 16.00	Basis:	Wet Weight
Seq Number:	3070802				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	11.27.18 02.05	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	11.27.18 02.05	U	1
Ethylbenzene	100-41-4	**0.00568**	0.00199	mg/kg	11.27.18 02.05		1
m,p-Xylenes	179601-23-1	**0.0112**	0.00398	mg/kg	11.27.18 02.05		1
o-Xylene	95-47-6	**0.00321**	0.00199	mg/kg	11.27.18 02.05		1
Total Xylenes	1330-20-7	**0.0144**	0.00199	mg/kg	11.27.18 02.05		1
Total BTEX		**0.0201**	0.00199	mg/kg	11.27.18 02.05		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	96	%	70-130	11.27.18 02.05	
4-Bromofluorobenzene	460-00-4	114	%	70-130	11.27.18 02.05	

Certificate of Analytical Results 606284

LT Environmental, Inc., Arvada, CO

Perla Negra

Sample Id:	**BH01**	Matrix:	Soil	Date Received:	11.21.18 11.30
Lab Sample Id:	606284-002	Date Collected:	11.19.18 15.25	Sample Depth:	1 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	CHE	Date Prep:	11.26.18 08.15	Basis:	Wet Weight
Seq Number:	3070608				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**34.0**	4.97	mg/kg	11.26.18 09.34		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.21.18 12.00	Basis:	Wet Weight
Seq Number:	3070632				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	11.21.18 23.06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	11.21.18 23.06	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	14.9	mg/kg	11.21.18 23.06	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	11.21.18 23.06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	11.21.18 23.06	
o-Terphenyl	84-15-1	93	%	70-135	11.21.18 23.06	

Certificate of Analytical Results 606284

LT Environmental, Inc., Arvada, CO

Perla Negra

Sample Id:	**BH01**	Matrix:	Soil	Date Received:	11.21.18 11.30
Lab Sample Id:	606284-002	Date Collected:	11.19.18 15.25	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	11.26.18 16.00	Basis:	Wet Weight
Seq Number:	3070802				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	11.27.18 02.24	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	11.27.18 02.24	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	11.27.18 02.24	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	11.27.18 02.24	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	11.27.18 02.24	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	11.27.18 02.24	U	1
Total BTEX		<0.00199	0.00199	mg/kg	11.27.18 02.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	88	%	70-130	11.27.18 02.24	
4-Bromofluorobenzene	460-00-4	106	%	70-130	11.27.18 02.24	

Certificate of Analytical Results 606284

LT Environmental, Inc., Arvada, CO

Perla Negra

Sample Id:	**BH01**	Matrix:	Soil	Date Received:	11.21.18 11.30
Lab Sample Id:	606284-003	Date Collected:	11.19.18 15.30	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	CHE	Date Prep:	11.26.18 08.15	Basis:	Wet Weight
Seq Number:	3070608				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.99	4.99	mg/kg	11.26.18 09.40	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.21.18 12.00	Basis:	Wet Weight
Seq Number:	3070632				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.21.18 23.25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	11.21.18 23.25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.21.18 23.25	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	11.21.18 23.25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	11.21.18 23.25	
o-Terphenyl	84-15-1	93	%	70-135	11.21.18 23.25	

Certificate of Analytical Results 606284

LT Environmental, Inc., Arvada, CO

Perla Negra

Sample Id:	**BH01**	Matrix:	Soil	Date Received:	11.21.18 11.30
Lab Sample Id:	606284-003	Date Collected:	11.19.18 15.30	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	11.26.18 16.00	Basis:	Wet Weight
Seq Number:	3070802				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	11.26.18 19.26	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	11.26.18 19.26	U	1
Ethylbenzene	100-41-4	**0.00297**	0.00200	mg/kg	11.26.18 19.26		1
m,p-Xylenes	179601-23-1	**0.00599**	0.00400	mg/kg	11.26.18 19.26		1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	11.26.18 19.26	U	1
Total Xylenes	1330-20-7	**0.00599**	0.00200	mg/kg	11.26.18 19.26		1
Total BTEX		**0.00896**	0.00200	mg/kg	11.26.18 19.26		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	70-130	11.26.18 19.26	
1,4-Difluorobenzene	540-36-3	92	%	70-130	11.26.18 19.26	

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LT Environmental, Inc., Arvada, CO

Perla Negra

Sample Id:	**BH01**	Matrix:	Soil	Date Received:	11.21.18 11.30
Lab Sample Id:	606284-004	Date Collected:	11.19.18 15.35	Sample Depth:	3 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	CHE	Date Prep:	11.26.18 08.15	Basis:	Wet Weight
Seq Number:	3070608				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.00	5.00	mg/kg	11.26.18 09.46	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.21.18 12.00	Basis:	Wet Weight
Seq Number:	3070632				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.21.18 23.43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	11.21.18 23.43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.21.18 23.43	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	11.21.18 23.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	81	%	70-135	11.21.18 23.43	
o-Terphenyl	84-15-1	81	%	70-135	11.21.18 23.43	

Certificate of Analytical Results 606284

LT Environmental, Inc., Arvada, CO

Perla Negra

Sample Id:	**BH01**	Matrix:	Soil	Date Received:	11.21.18 11.30
Lab Sample Id:	606284-004	Date Collected:	11.19.18 15.35	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	11.26.18 16.00	Basis:	Wet Weight
Seq Number:	3070802				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	11.26.18 19.45	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	11.26.18 19.45	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	11.26.18 19.45	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	11.26.18 19.45	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	11.26.18 19.45	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	11.26.18 19.45	U	1
Total BTEX		<0.00201	0.00201	mg/kg	11.26.18 19.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	11.26.18 19.45	
1,4-Difluorobenzene	540-36-3	102	%	70-130	11.26.18 19.45	

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LT Environmental, Inc., Arvada, CO

Perla Negra

Sample Id:	**BH02**	Matrix:	Soil	Date Received:	11.21.18 11.30
Lab Sample Id:	606284-005	Date Collected:	11.19.18 16.40	Sample Depth:	6 In

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	CHE	Date Prep:	11.26.18 08.15	Basis:	Wet Weight
Seq Number:	3070608				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**211**	4.99	mg/kg	11.26.18 09.52		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.21.18 12.00	Basis:	Wet Weight
Seq Number:	3070632				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.22.18 00.01	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	11.22.18 00.01	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.22.18 00.01	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	11.22.18 00.01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-135	11.22.18 00.01	
o-Terphenyl	84-15-1	89	%	70-135	11.22.18 00.01	

Certificate of Analytical Results 606284

LT Environmental, Inc., Arvada, CO

Perla Negra

Sample Id:	**BH02**	Matrix:	Soil	Date Received:	11.21.18 11.30
Lab Sample Id:	606284-005	Date Collected:	11.19.18 16.40	Sample Depth:	6 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	11.26.18 16.00	Basis:	Wet Weight
Seq Number:	3070802				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	11.26.18 20.04	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	11.26.18 20.04	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	11.26.18 20.04	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	11.26.18 20.04	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	11.26.18 20.04	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	11.26.18 20.04	U	1
Total BTEX		<0.00200	0.00200	mg/kg	11.26.18 20.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	109	%	70-130	11.26.18 20.04	
1,4-Difluorobenzene	540-36-3	99	%	70-130	11.26.18 20.04	

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LT Environmental, Inc., Arvada, CO

Perla Negra

Sample Id:	**BH02**	Matrix:	Soil	Date Received:	11.21.18 11.30
Lab Sample Id:	606284-006	Date Collected:	11.19.18 16.50	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	CHE	Date Prep:	11.26.18 08.15	Basis:	Wet Weight
Seq Number:	3070608				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.00	5.00	mg/kg	11.26.18 10.11	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.21.18 12.00	Basis:	Wet Weight
Seq Number:	3070632				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.22.18 00.19	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	11.22.18 00.19	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.22.18 00.19	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	11.22.18 00.19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	11.22.18 00.19	
o-Terphenyl	84-15-1	99	%	70-135	11.22.18 00.19	

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LT Environmental, Inc., Arvada, CO

Perla Negra

Sample Id:	**BH02**	Matrix:	Soil	Date Received:	11.21.18 11.30
Lab Sample Id:	606284-006	Date Collected:	11.19.18 16.50	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	11.26.18 16.00	Basis:	Wet Weight
Seq Number:	3070802				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	11.26.18 20.23	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	11.26.18 20.23	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	11.26.18 20.23	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	11.26.18 20.23	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	11.26.18 20.23	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	11.26.18 20.23	U	1
Total BTEX		<0.00202	0.00202	mg/kg	11.26.18 20.23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	11.26.18 20.23	
1,4-Difluorobenzene	540-36-3	98	%	70-130	11.26.18 20.23	

Certificate of Analytical Results 606284

LT Environmental, Inc., Arvada, CO

Perla Negra

Sample Id:	**BH01**	Matrix:	Soil	Date Received:	11.21.18 11.30
Lab Sample Id:	606284-007	Date Collected:	11.19.18 15.40	Sample Depth:	5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	CHE	Date Prep:	11.26.18 08.15	Basis:	Wet Weight
Seq Number:	3070608				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.99	4.99	mg/kg	11.26.18 10.17	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.21.18 12.00	Basis:	Wet Weight
Seq Number:	3070632				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.22.18 00.37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	11.22.18 00.37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.22.18 00.37	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	11.22.18 00.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	11.22.18 00.37	
o-Terphenyl	84-15-1	88	%	70-135	11.22.18 00.37	

Certificate of Analytical Results 606284

LT Environmental, Inc., Arvada, CO

Perla Negra

Sample Id:	**BH01**	Matrix:	Soil	Date Received:	11.21.18 11.30
Lab Sample Id:	606284-007	Date Collected:	11.19.18 15.40	Sample Depth:	5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	11.26.18 16.00	Basis:	Wet Weight
Seq Number:	3070802				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	11.26.18 20.42	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	11.26.18 20.42	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	11.26.18 20.42	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	11.26.18 20.42	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	11.26.18 20.42	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	11.26.18 20.42	U	1
Total BTEX		<0.00201	0.00201	mg/kg	11.26.18 20.42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	97	%	70-130	11.26.18 20.42	
4-Bromofluorobenzene	460-00-4	103	%	70-130	11.26.18 20.42	

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

QC Summary 606284

LT Environmental, Inc.

Perla Negra

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3070608 Matrix: Solid Date Prep: 11.26.18
MB Sample Id: 7666782-1-BLK LCS Sample Id: 7666782-1-BKS LCSD Sample Id: 7666782-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	268	107	268	107	90-110	0	20	mg/kg	11.26.18 09:03	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3070608 Matrix: Soil Date Prep: 11.26.18
Parent Sample Id: 606239-004 MS Sample Id: 606239-004 S MSD Sample Id: 606239-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	991	248	1210	88	1220	92	90-110	1	20	mg/kg	11.26.18 10:48	X

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3070608 Matrix: Soil Date Prep: 11.26.18
Parent Sample Id: 606284-001 MS Sample Id: 606284-001 S MSD Sample Id: 606284-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	169	249	428	104	424	102	90-110	1	20	mg/kg	11.26.18 09:21	

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3070632 Matrix: Solid Date Prep: 11.21.18
MB Sample Id: 7666733-1-BLK LCS Sample Id: 7666733-1-BKS LCSD Sample Id: 7666733-1-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)	<8.00	1000	1010	101	1060	106	70-135	5	20	mg/kg	11.21.18 21:36	
Diesel Range Organics (DRO)	<8.13	1000	1010	101	1060	106	70-135	5	20	mg/kg	11.21.18 21:36	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	87		115		118		70-135	%	11.21.18 21:36
o-Terphenyl	94		101		104		70-135	%	11.21.18 21:36

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 606284

LT Environmental, Inc.

Perla Negra

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3070632 Matrix: Soil Date Prep: 11.21.18
Parent Sample Id: 606284-001 MS Sample Id: 606284-001 S MSD Sample Id: 606284-001 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)	11.0	997	1020	101	1050	104	70-135	3	20	mg/kg	11.21.18 22:30	
Diesel Range Organics (DRO)	360	997	1350	99	1390	103	70-135	3	20	mg/kg	11.21.18 22:30	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	110		117		70-135	%	11.21.18 22:30
o-Terphenyl	100		101		70-135	%	11.21.18 22:30

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3070802 Matrix: Solid Date Prep: 11.26.18
MB Sample Id: 7666836-1-BLK LCS Sample Id: 7666836-1-BKS LCSD Sample Id: 7666836-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000386	0.100	0.112	112	0.117	116	70-130	4	35	mg/kg	11.26.18 17:32	
Toluene	<0.000457	0.100	0.110	110	0.116	115	70-130	5	35	mg/kg	11.26.18 17:32	
Ethylbenzene	<0.000566	0.100	0.119	119	0.124	123	70-130	4	35	mg/kg	11.26.18 17:32	
m,p-Xylenes	<0.00102	0.200	0.242	121	0.250	124	70-130	3	35	mg/kg	11.26.18 17:32	
o-Xylene	<0.000345	0.100	0.116	116	0.120	119	70-130	3	35	mg/kg	11.26.18 17:32	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	98		92		92		70-130	%	11.26.18 17:32
4-Bromofluorobenzene	96		99		98		70-130	%	11.26.18 17:32

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3070802 Matrix: Soil Date Prep: 11.26.18
Parent Sample Id: 606284-007 MS Sample Id: 606284-007 S MSD Sample Id: 606284-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000382	0.0992	0.0825	83	0.110	110	70-130	29	35	mg/kg	11.26.18 18:10	
Toluene	0.000724	0.0992	0.101	101	0.114	114	70-130	12	35	mg/kg	11.26.18 18:10	
Ethylbenzene	<0.000560	0.0992	0.109	110	0.120	120	70-130	10	35	mg/kg	11.26.18 18:10	
m,p-Xylenes	0.00217	0.198	0.208	104	0.241	120	70-130	15	35	mg/kg	11.26.18 18:10	
o-Xylene	<0.000342	0.0992	0.0955	96	0.116	116	70-130	19	35	mg/kg	11.26.18 18:10	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	86		90		70-130	%	11.26.18 18:10
4-Bromofluorobenzene	103		97		70-130	%	11.26.18 18:10

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

CHAIN OF CUSTODY

Page 1 Of 1

XENCO LABORATORIES

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www.xenco.com

Xenco Quote # | Xenco Job # 660284

Client / Reporting Information

Company Name / Branch: LT Environmental, Inc. Permian Office
Company Address: 3300 N A St. Building 1 Unit 103 Midland, TX 79705
Email: abaker@ltenv.com Phone No: (432) 704-5178
Project Contact: Adrian Baker
Sampler's Name

Project Information

Project Name/Number: Perla Negra
Project Location: Lea, NM
Invoice To: XTO Energy - Kyle Littrell
PO Number:

Analytical Information

Matrix Codes

W = Water
S = Soil/Sed/Solid
GW = Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
OW = Ocean/Sea Water
WI = Wipe
O = Oil
WW = Waste Water
A = Air

No.	Field ID / Point of Collection	Sample Depth	Date	Time	Matrix	# of bottles	HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	BTEX (only BTEX) 8021	TPH (DRO GRO MRO) 8015	Chloride (300.00)	Field Comments
1	BH01	6"	11/19	15:20	S	1								X	X	X	X	
2	BH01	1'		15:25	S	1												
3	BH01	2'		15:30	S	1												
4	BH01	3'		15:35	S	1												
5	BH02	6"		16:40	S	1												
6	BH02	2'		16:50	S	1												
7	BH01	5'		15:40	S	1												
8																		
9																		
10																		

Turnaround Time (Business days)

- [ ] Same Day TAT
- [ ] 5 Day TAT
- [ ] Next Day EMERGENCY
- [ ] 7 Day TAT
- [x] 2 Day EMERGENCY
- [ ] Contract TAT
- [ ] 3 Day EMERGENCY
- TAT Starts Day received by Lab, if received by 5:00 pm

Data Deliverable Information

- [ ] Level II Std QC
- [ ] Level IV (Full Data Pkg /raw data)
- [ ] Level III Std QC+ Forms
- [ ] TRRP Level IV
- [ ] Level 3 (CLP Forms)
- [ ] UST / RG -411
- [ ] TRRP Checklist

Notes:

FED-EX / UPS: Tracking #

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		11/20/2018 1100			11/21 1130	
2	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
3						
4	Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable	On Ice / Cooler Temp. / Thermo. Corr. Factor
5						X / 3 / 1.2

Notice: Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the Client if such loses are due to circumstances beyond the control of Xenco. A minimum charge of $75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xenco but not analyzed will be invoiced at $5 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract.

FOLD @ 1660,4438 HIT EXPD 09/19

41 MAFA

TRK# 4705 2519 3954
0201

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BILL RECIPIENT

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ACTWGT: 20.00 LB MAN
CAD: 9093328/CAFE3211
DIMS: 18x16x12 IN

551C3/C3B2/104C

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 11/21/2018 11:30:00 AM

Work Order #: 606284

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

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	.7
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**
#5 Custody Seals intact on sample bottles?	**N/A**
#6*Custody Seals Signed and dated?	**N/A**
#7 *Chain of Custody present?	**Yes**
#8 Any missing/extra samples?	**No**
#9 Chain of Custody signed when relinquished/ received?	**Yes**
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**
#11 Container label(s) legible and intact?	**Yes**
#12 Samples in proper container/ bottle?	**Yes**
#13 Samples properly preserved?	**Yes**
#14 Sample container(s) intact?	**Yes**
#15 Sufficient sample amount for indicated test(s)?	**Yes**
#16 All samples received within hold time?	**Yes**
#17 Subcontract of sample(s)?	**N/A**
#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: Brianna Teel Date: 11/21/2018

Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 11/21/2018

Jessica Kramer

Analytical Report 609809

for

LT Environmental, Inc.

Project Manager: Adrian Baker

Perla Negra Federal Com #001H

07-JAN-19

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-18-28), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-18-17), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-18)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Phoenix Mobile (EPA Lab Code: AZ00901): Arizona (AZM757)
Xenco-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429)
Xenco-Lakeland: Florida (E84098)

07-JAN-19

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

Reference: XENCO Report No(s): **609809**
Perla Negra Federal Com #001H
Project Address: Lea County

Adrian Baker:

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) 609809. 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. 609809 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jessica Kramer

Jessica Kramer
Project Assistant

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Sample Cross Reference 609809

LT Environmental, Inc., Arvada, CO

Perla Negra Federal Com #001H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS01	S	12-20-18 10:00	4 ft	609809-001
FS02	S	12-20-18 10:10	4 ft	609809-002
FS03	S	12-20-18 10:15	3.5 ft	609809-003
FS04	S	12-20-18 10:25	3.5 ft	609809-004
FS05	S	12-20-18 10:35	3.0 ft	609809-005
FS06	S	12-20-18 10:40	4 ft	609809-006
FS07	S	12-20-18 10:50	4 ft	609809-007
FS08	S	12-20-18 10:55	3.5 ft	609809-008
FS09	S	12-20-18 11:20	3.5 ft	609809-009
FS10	S	12-20-18 11:30	3.0 ft	609809-010
FS11	S	12-20-18 12:00	0.5 ft	609809-011
FS12	S	12-20-18 12:15	0.5 ft	609809-012
SW01	S	12-20-18 11:40	2 ft	609809-013
SW02	S	12-20-18 11:45	2 ft	609809-014
SW03	S	12-20-18 11:50	2 ft	609809-015
SW04	S	12-20-18 12:00	2 ft	609809-016
SW05	S	12-20-18 12:05	2 ft	609809-017
SW06	S	12-20-18 14:35	0.3 ft	609809-018

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3074596 TPH by SW8015 Mod
Surrogate o-Terphenyl recovered above QC limits. No target analytes were present in the sample at or above the respective limits of detection. No additional action is required.
Samples affected are: 609809-008,609809-013,609809-012,609809-009.

Batch: LBA-3074648 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3074729 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.
Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.
Samples affected are: 609809-008.

Batch: LBA-3074764 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analysis Summary 609809

LT Environmental, Inc., Arvada, CO

Project Name: Perla Negra Federal Com #001H

Project Id:
Contact: Adrian Baker
Project Location: Lea County

Date Received in Lab: Thu Dec-27-18 11:36 am
Report Date: 07-JAN-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	609809-001		609809-002		609809-003		609809-004		609809-005		609809-006	
	Field Id:	FS01		FS02		FS03		FS04		FS05		FS06	
	Depth:	4- ft		4- ft		3.5- ft		3.5- ft		3.0- ft		4- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Dec-20-18 10:00		Dec-20-18 10:10		Dec-20-18 10:15		Dec-20-18 10:25		Dec-20-18 10:35		Dec-20-18 10:40	
BTEX by EPA 8021B	***Extracted:***	Jan-02-19 13:00		Jan-02-19 13:00		Jan-02-19 13:00		Jan-02-19 13:00		Jan-02-19 13:00		Jan-02-19 13:00	
	Analyzed:	Jan-02-19 23:02		Jan-02-19 23:21		Jan-02-19 23:40		Jan-02-19 23:59		Jan-03-19 00:18		Jan-03-19 00:37	
	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	<0.00201	0.00201	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201
Toluene		<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201
Ethylbenzene		<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201
m,p-Xylenes		<0.00400	0.00400	<0.00402	0.00402	<0.00398	0.00398	<0.00398	0.00398	<0.00400	0.00400	<0.00402	0.00402
o-Xylene		<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201
Total Xylenes		<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201
Total BTEX		<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201
Inorganic Anions by EPA 300	***Extracted:***	Jan-03-19 15:45		Jan-03-19 15:45		Jan-03-19 15:45		Jan-03-19 15:45		Jan-03-19 15:45		Jan-03-19 15:45	
	Analyzed:	Jan-03-19 23:10		Jan-04-19 09:47		Jan-04-19 09:53		Jan-04-19 10:00		Jan-04-19 10:06		Jan-04-19 10:12	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		34.8	4.96	15.9	4.96	22.4	4.97	<5.00	5.00	<4.99	4.99	<4.95	4.95
TPH by SW8015 Mod SUB: T104704215-18-28	***Extracted:***	Dec-28-18 17:40		Dec-28-18 17:43		Dec-28-18 17:46		Dec-28-18 17:49		Dec-28-18 17:52		Dec-28-18 17:55	
	Analyzed:	Jan-02-19 23:26		Jan-02-19 23:48		Jan-03-19 00:10		Jan-03-19 00:31		Jan-03-19 00:53		Jan-03-19 01:15	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	<50.0	50.0	<49.5	49.5	<49.9	49.9	<50.0	50.0	<50.0	50.0
Diesel Range Organics (DRO)		<50.0	50.0	<50.0	50.0	<49.5	49.5	<49.9	49.9	<50.0	50.0	<50.0	50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<50.0	50.0	<49.5	49.5	<49.9	49.9	<50.0	50.0	<50.0	50.0
Total TPH		<50.0	50.0	<50.0	50.0	<49.5	49.5	<49.9	49.9	<50.0	50.0	<50.0	50.0

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

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 609809

LT Environmental, Inc., Arvada, CO

Project Name: Perla Negra Federal Com #001H

Project Id:
Contact: Adrian Baker
Project Location: Lea County

Date Received in Lab: Thu Dec-27-18 11:36 am
Report Date: 07-JAN-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	609809-007		609809-008		609809-009		609809-010		609809-011		609809-012	
	Field Id:	FS07		FS08		FS09		FS10		FS11		FS12	
	Depth:	4- ft		3.5- ft		3.5- ft		3.0- ft		0.5- ft		0.5- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Dec-20-18 10:50		Dec-20-18 10:55		Dec-20-18 11:20		Dec-20-18 11:30		Dec-20-18 12:00		Dec-20-18 12:15	
BTEX by EPA 8021B	***Extracted:***	Jan-03-19 12:00		Jan-03-19 08:15		Jan-03-19 08:15		Jan-03-19 08:15		Jan-03-19 12:00		Jan-03-19 08:15	
	Analyzed:	Jan-03-19 23:00		Jan-03-19 17:39		Jan-03-19 18:00		Jan-03-19 18:21		Jan-04-19 00:03		Jan-03-19 18:43	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200
Toluene		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200
Ethylbenzene		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200
m,p-Xylenes		<0.00398	0.00398	<0.00400	0.00400	<0.00401	0.00401	<0.00402	0.00402	<0.00400	0.00400	<0.00401	0.00401
o-Xylene		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200
Total Xylenes		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200
Total BTEX		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200
Inorganic Anions by EPA 300	***Extracted:***	Jan-03-19 15:45		Jan-03-19 15:45		Jan-03-19 15:45		Jan-03-19 15:45		Jan-03-19 15:45		Jan-03-19 15:45	
	Analyzed:	Jan-04-19 10:18		Jan-04-19 10:37		Jan-04-19 10:43		Jan-04-19 11:04		Jan-04-19 11:11		Jan-04-19 11:17	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		21.4	4.97	<4.95	4.95	14.9	4.95	<5.01	5.01	173	4.99	112	4.98
TPH by SW8015 Mod SUB: T104704215-18-28	***Extracted:***	Dec-28-18 17:58		Dec-28-18 18:01		Dec-28-18 18:04		Dec-28-18 18:07		Dec-28-18 18:10		Dec-28-18 18:13	
	Analyzed:	Jan-03-19 01:37		Jan-03-19 01:59		Jan-03-19 02:21		Jan-03-19 02:43		Jan-03-19 03:27		Jan-03-19 03:49	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<49.7	49.7	<50.0	50.0	<49.8	49.8	<50.0	50.0	<49.7	49.7	<49.6	49.6
Diesel Range Organics (DRO)		<49.7	49.7	<50.0	50.0	<49.8	49.8	<50.0	50.0	<49.7	49.7	<49.6	49.6
Motor Oil Range Hydrocarbons (MRO)		<49.7	49.7	<50.0	50.0	<49.8	49.8	<50.0	50.0	<49.7	49.7	<49.6	49.6
Total TPH		<49.7	49.7	<50.0	50.0	<49.8	49.8	<50.0	50.0	<49.7	49.7	<49.6	49.6

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Jessica Kramer
Project Assistant

Certificate of Analysis Summary 609809

LT Environmental, Inc., Arvada, CO

Project Name: Perla Negra Federal Com #001H

Project Id:
Contact: Adrian Baker
Project Location: Lea County

Date Received in Lab: Thu Dec-27-18 11:36 am
Report Date: 07-JAN-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	609809-013		609809-014		609809-015		609809-016		609809-017		609809-018	
	Field Id:	SW01		SW02		SW03		SW04		SW05		SW06	
	Depth:	2- ft		2- ft		2- ft		2- ft		2- ft		0.3- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Dec-20-18 11:40		Dec-20-18 11:45		Dec-20-18 11:50		Dec-20-18 12:00		Dec-20-18 12:05		Dec-20-18 14:35	
BTEX by EPA 8021B	***Extracted:***	Jan-03-19 08:15		Jan-03-19 08:15		Jan-03-19 12:00		Jan-03-19 12:00		Jan-03-19 08:15		Jan-03-19 08:15	
	Analyzed:	Jan-03-19 19:05		Jan-03-19 19:27		Jan-03-19 23:21		Jan-03-19 23:42		Jan-03-19 11:06		Jan-03-19 11:26	
	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	<0.00200	0.00200
Toluene		<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200
Ethylbenzene		<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200
m,p-Xylenes		<0.00399	0.00399	<0.00399	0.00399	<0.00403	0.00403	<0.00402	0.00402	<0.00398	0.00398	<0.00400	0.00400
o-Xylene		<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200
Total Xylenes		<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200
Total BTEX		<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200
Inorganic Anions by EPA 300	***Extracted:***	Jan-03-19 15:45		Jan-03-19 15:45		Jan-03-19 15:45		Jan-04-19 09:00		Jan-04-19 09:00		Jan-04-19 09:00	
	Analyzed:	Jan-04-19 11:23		Jan-04-19 11:29		Jan-04-19 11:35		Jan-04-19 13:48		Jan-04-19 14:06		Jan-04-19 14:12	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		36.0	4.96	33.3	4.99	87.6	4.99	55.1	4.97	43.0	5.01	212	5.01
TPH by SW8015 Mod SUB: T104704215-18-28	***Extracted:***	Dec-28-18 18:16		Dec-28-18 18:19		Dec-28-18 18:22		Dec-28-18 18:25		Dec-28-18 18:28		Dec-28-18 18:31	
	Analyzed:	Jan-03-19 04:11		Jan-03-19 04:33		Jan-04-19 15:30		Jan-04-19 15:51		Jan-04-19 17:17		Jan-04-19 14:24	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<49.6	49.6	<49.8	49.8	<49.9	49.9	<50.0	50.0	<49.8	49.8	<49.8	49.8
Diesel Range Organics (DRO)		<49.6	49.6	<49.8	49.8	<49.9	49.9	<50.0	50.0	<49.8	49.8	<49.8	49.8
Motor Oil Range Hydrocarbons (MRO)		<49.6	49.6	<49.8	49.8	<49.9	49.9	<50.0	50.0	<49.8	49.8	<49.8	49.8
Total TPH		<49.6	49.6	<49.8	49.8	<49.9	49.9	<50.0	50.0	<49.8	49.8	<49.8	49.8

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Jessica Kramer
Project Assistant

Certificate of Analytical Results 609809

LT Environmental, Inc., Arvada, CO

Perla Negra Federal Com #001H

Sample Id:	**FS01**	Matrix:	Soil	Date Received:	12.27.18 11.36
Lab Sample Id:	609809-001	Date Collected:	12.20.18 10.00	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.03.19 15.45	Basis:	Wet Weight
Seq Number:	3074721				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**34.8**	4.96	mg/kg	01.03.19 23.10		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	12.28.18 17.40	Basis:	Wet Weight
Seq Number:	3074596			SUB:	T104704215-18-28

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.02.19 23.26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.02.19 23.26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.02.19 23.26	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.02.19 23.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	82	%	70-135	01.02.19 23.26	
o-Terphenyl	84-15-1	109	%	70-135	01.02.19 23.26	

Certificate of Analytical Results 609809

LT Environmental, Inc., Arvada, CO

Perla Negra Federal Com #001H

Sample Id:	**FS01**	Matrix:	Soil	Date Received:	12.27.18 11.36
Lab Sample Id:	609809-001	Date Collected:	12.20.18 10.00	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	01.02.19 13.00	Basis:	Wet Weight
Seq Number:	3074648				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.02.19 23.02	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.02.19 23.02	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.02.19 23.02	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	01.02.19 23.02	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.02.19 23.02	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.02.19 23.02	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.02.19 23.02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	93	%	70-130	01.02.19 23.02	
1,4-Difluorobenzene	540-36-3	111	%	70-130	01.02.19 23.02	

Certificate of Analytical Results 609809

LT Environmental, Inc., Arvada, CO

Perla Negra Federal Com #001H

Sample Id:	**FS02**	Matrix:	Soil	Date Received:	12.27.18 11.36
Lab Sample Id:	609809-002	Date Collected:	12.20.18 10.10	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.03.19 15.45	Basis:	Wet Weight
Seq Number:	3074721				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**15.9**	4.96	mg/kg	01.04.19 09.47		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	12.28.18 17.43	Basis:	Wet Weight
Seq Number:	3074596			SUB:	T104704215-18-28

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.02.19 23.48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.02.19 23.48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.02.19 23.48	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.02.19 23.48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	01.02.19 23.48	
o-Terphenyl	84-15-1	129	%	70-135	01.02.19 23.48	

Certificate of Analytical Results 609809

LT Environmental, Inc., Arvada, CO

Perla Negra Federal Com #001H

Sample Id:	**FS02**	Matrix:	Soil	Date Received:	12.27.18 11.36
Lab Sample Id:	609809-002	Date Collected:	12.20.18 10.10	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	01.02.19 13.00	Basis:	Wet Weight
Seq Number:	3074648				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.02.19 23.21	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.02.19 23.21	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.02.19 23.21	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.02.19 23.21	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.02.19 23.21	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.02.19 23.21	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.02.19 23.21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	109	%	70-130	01.02.19 23.21	
4-Bromofluorobenzene	460-00-4	91	%	70-130	01.02.19 23.21	

Certificate of Analytical Results 609809

LT Environmental, Inc., Arvada, CO

Perla Negra Federal Com #001H

Sample Id:	**FS03**	Matrix:	Soil	Date Received:	12.27.18 11.36
Lab Sample Id:	609809-003	Date Collected:	12.20.18 10.15	Sample Depth:	3.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.03.19 15.45	Basis:	Wet Weight
Seq Number:	3074721				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**22.4**	4.97	mg/kg	01.04.19 09.53		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	12.28.18 17.46	Basis:	Wet Weight
Seq Number:	3074596			SUB:	T104704215-18-28

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.5	49.5	mg/kg	01.03.19 00.10	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.5	49.5	mg/kg	01.03.19 00.10	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.5	49.5	mg/kg	01.03.19 00.10	U	1
Total TPH	PHC635	<49.5	49.5	mg/kg	01.03.19 00.10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	01.03.19 00.10	
o-Terphenyl	84-15-1	126	%	70-135	01.03.19 00.10	

Certificate of Analytical Results 609809

LT Environmental, Inc., Arvada, CO

Perla Negra Federal Com #001H

Sample Id:	**FS03**	Matrix:	Soil	Date Received:	12.27.18 11.36
Lab Sample Id:	609809-003	Date Collected:	12.20.18 10.15	Sample Depth:	3.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	01.02.19 13.00	Basis:	Wet Weight
Seq Number:	3074648				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.02.19 23.40	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.02.19 23.40	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.02.19 23.40	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.02.19 23.40	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.02.19 23.40	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.02.19 23.40	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.02.19 23.40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	93	%	70-130	01.02.19 23.40	
1,4-Difluorobenzene	540-36-3	111	%	70-130	01.02.19 23.40	

Certificate of Analytical Results 609809

LT Environmental, Inc., Arvada, CO

Perla Negra Federal Com #001H

Sample Id:	**FS04**	Matrix:	Soil	Date Received:	12.27.18 11.36
Lab Sample Id:	609809-004	Date Collected:	12.20.18 10.25	Sample Depth:	3.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.03.19 15.45	Basis:	Wet Weight
Seq Number:	3074721				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.00	5.00	mg/kg	01.04.19 10.00	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	12.28.18 17.49	Basis:	Wet Weight
Seq Number:	3074596			SUB:	T104704215-18-28

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.03.19 00.31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.03.19 00.31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.03.19 00.31	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.03.19 00.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	01.03.19 00.31	
o-Terphenyl	84-15-1	115	%	70-135	01.03.19 00.31	

Certificate of Analytical Results 609809

LT Environmental, Inc., Arvada, CO

Perla Negra Federal Com #001H

Sample Id:	**FS04**	Matrix:	Soil	Date Received:	12.27.18 11.36
Lab Sample Id:	609809-004	Date Collected:	12.20.18 10.25	Sample Depth:	3.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	01.02.19 13.00	Basis:	Wet Weight
Seq Number:	3074648				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.02.19 23.59	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.02.19 23.59	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.02.19 23.59	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.02.19 23.59	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.02.19 23.59	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.02.19 23.59	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.02.19 23.59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	107	%	70-130	01.02.19 23.59	
4-Bromofluorobenzene	460-00-4	98	%	70-130	01.02.19 23.59	

Certificate of Analytical Results 609809

LT Environmental, Inc., Arvada, CO

Perla Negra Federal Com #001H

Sample Id:	**FS05**	Matrix:	Soil	Date Received:	12.27.18 11.36
Lab Sample Id:	609809-005	Date Collected:	12.20.18 10.35	Sample Depth:	3.0 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.03.19 15.45	Basis:	Wet Weight
Seq Number:	3074721				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.99	4.99	mg/kg	01.04.19 10.06	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	12.28.18 17.52	Basis:	Wet Weight
Seq Number:	3074596			SUB:	T104704215-18-28

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.03.19 00.53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.03.19 00.53	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.03.19 00.53	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.03.19 00.53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	01.03.19 00.53	
o-Terphenyl	84-15-1	125	%	70-135	01.03.19 00.53	

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Sample Id:	**FS05**	Matrix:	Soil	Date Received:	12.27.18 11.36
Lab Sample Id:	609809-005	Date Collected:	12.20.18 10.35	Sample Depth:	3.0 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	01.02.19 13.00	Basis:	Wet Weight
Seq Number:	3074648				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.03.19 00.18	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.03.19 00.18	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.03.19 00.18	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	01.03.19 00.18	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.03.19 00.18	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.03.19 00.18	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.03.19 00.18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	112	%	70-130	01.03.19 00.18	
4-Bromofluorobenzene	460-00-4	96	%	70-130	01.03.19 00.18	

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LT Environmental, Inc., Arvada, CO

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Sample Id:	**FS06**	Matrix:	Soil	Date Received:	12.27.18 11.36
Lab Sample Id:	609809-006	Date Collected:	12.20.18 10.40	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.03.19 15.45	Basis:	Wet Weight
Seq Number:	3074721				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.95	4.95	mg/kg	01.04.19 10.12	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	12.28.18 17.55	Basis:	Wet Weight
Seq Number:	3074596			SUB:	T104704215-18-28

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.03.19 01.15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.03.19 01.15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.03.19 01.15	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.03.19 01.15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	01.03.19 01.15	
o-Terphenyl	84-15-1	134	%	70-135	01.03.19 01.15	

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LT Environmental, Inc., Arvada, CO

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Sample Id:	**FS06**	Matrix:	Soil	Date Received:	12.27.18 11.36
Lab Sample Id:	609809-006	Date Collected:	12.20.18 10.40	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	01.02.19 13.00	Basis:	Wet Weight
Seq Number:	3074648				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.03.19 00.37	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.03.19 00.37	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.03.19 00.37	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.03.19 00.37	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.03.19 00.37	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.03.19 00.37	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.03.19 00.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	94	%	70-130	01.03.19 00.37	
1,4-Difluorobenzene	540-36-3	111	%	70-130	01.03.19 00.37	

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Sample Id:	**FS07**	Matrix:	Soil	Date Received:	12.27.18 11.36
Lab Sample Id:	609809-007	Date Collected:	12.20.18 10.50	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.03.19 15.45	Basis:	Wet Weight
Seq Number:	3074721				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**21.4**	4.97	mg/kg	01.04.19 10.18		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	12.28.18 17.58	Basis:	Wet Weight
Seq Number:	3074596			SUB:	T104704215-18-28

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.7	49.7	mg/kg	01.03.19 01.37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.7	49.7	mg/kg	01.03.19 01.37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.7	49.7	mg/kg	01.03.19 01.37	U	1
Total TPH	PHC635	<49.7	49.7	mg/kg	01.03.19 01.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	01.03.19 01.37	
o-Terphenyl	84-15-1	133	%	70-135	01.03.19 01.37	

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LT Environmental, Inc., Arvada, CO

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Sample Id:	**FS07**	Matrix:	Soil	Date Received:	12.27.18 11.36
Lab Sample Id:	609809-007	Date Collected:	12.20.18 10.50	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	01.03.19 12.00	Basis:	Wet Weight
Seq Number:	3074764				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.03.19 23.00	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.03.19 23.00	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.03.19 23.00	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.03.19 23.00	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.03.19 23.00	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.03.19 23.00	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.03.19 23.00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	85	%	70-130	01.03.19 23.00	
1,4-Difluorobenzene	540-36-3	88	%	70-130	01.03.19 23.00	

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Sample Id:	**FS08**	Matrix:	Soil	Date Received:	12.27.18 11.36
Lab Sample Id:	609809-008	Date Collected:	12.20.18 10.55	Sample Depth:	3.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.03.19 15.45	Basis:	Wet Weight
Seq Number:	3074721				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.95	4.95	mg/kg	01.04.19 10.37	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	12.28.18 18.01	Basis:	Wet Weight
Seq Number:	3074596			SUB:	T104704215-18-28

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.03.19 01.59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.03.19 01.59	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.03.19 01.59	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.03.19 01.59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	01.03.19 01.59	
o-Terphenyl	84-15-1	140	%	70-135	01.03.19 01.59	**

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LT Environmental, Inc., Arvada, CO

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Sample Id:	**FS08**	Matrix:	Soil	Date Received:	12.27.18 11.36
Lab Sample Id:	609809-008	Date Collected:	12.20.18 10.55	Sample Depth:	3.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	01.03.19 08.15	Basis:	Wet Weight
Seq Number:	3074729				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.03.19 17.39	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.03.19 17.39	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.03.19 17.39	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	01.03.19 17.39	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.03.19 17.39	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.03.19 17.39	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.03.19 17.39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	520	%	70-130	01.03.19 17.39	**
1,4-Difluorobenzene	540-36-3	83	%	70-130	01.03.19 17.39	

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LT Environmental, Inc., Arvada, CO

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Sample Id:	**FS09**	Matrix:	Soil	Date Received:	12.27.18 11.36
Lab Sample Id:	609809-009	Date Collected:	12.20.18 11.20	Sample Depth:	3.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.03.19 15.45	Basis:	Wet Weight
Seq Number:	3074721				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**14.9**	4.95	mg/kg	01.04.19 10.43		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	12.28.18 18.04	Basis:	Wet Weight
Seq Number:	3074596			SUB:	T104704215-18-28

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.03.19 02.21	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.03.19 02.21	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.03.19 02.21	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.03.19 02.21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	01.03.19 02.21	
o-Terphenyl	84-15-1	136	%	70-135	01.03.19 02.21	**

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Sample Id:	**FS09**	Matrix:	Soil	Date Received:	12.27.18 11.36
Lab Sample Id:	609809-009	Date Collected:	12.20.18 11.20	Sample Depth:	3.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	01.03.19 08.15	Basis:	Wet Weight
Seq Number:	3074729				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.03.19 18.00	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.03.19 18.00	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.03.19 18.00	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.03.19 18.00	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.03.19 18.00	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.03.19 18.00	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.03.19 18.00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	79	%	70-130	01.03.19 18.00	
1,4-Difluorobenzene	540-36-3	103	%	70-130	01.03.19 18.00	

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Sample Id:	**FS10**	Matrix:	Soil	Date Received:	12.27.18 11.36
Lab Sample Id:	609809-010	Date Collected:	12.20.18 11.30	Sample Depth:	3.0 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.03.19 15.45	Basis:	Wet Weight
Seq Number:	3074721				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.01	5.01	mg/kg	01.04.19 11.04	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	12.28.18 18.07	Basis:	Wet Weight
Seq Number:	3074596			SUB:	T104704215-18-28

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.03.19 02.43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.03.19 02.43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.03.19 02.43	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.03.19 02.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	01.03.19 02.43	
o-Terphenyl	84-15-1	131	%	70-135	01.03.19 02.43	

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Sample Id:	**FS10**	Matrix:	Soil	Date Received:	12.27.18 11.36
Lab Sample Id:	609809-010	Date Collected:	12.20.18 11.30	Sample Depth:	3.0 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	01.03.19 08.15	Basis:	Wet Weight
Seq Number:	3074729				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.03.19 18.21	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.03.19 18.21	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.03.19 18.21	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.03.19 18.21	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.03.19 18.21	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.03.19 18.21	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.03.19 18.21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	89	%	70-130	01.03.19 18.21	
1,4-Difluorobenzene	540-36-3	77	%	70-130	01.03.19 18.21	

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Sample Id:	**FS11**	Matrix:	Soil	Date Received:	12.27.18 11.36
Lab Sample Id:	609809-011	Date Collected:	12.20.18 12.00	Sample Depth:	0.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.03.19 15.45	Basis:	Wet Weight
Seq Number:	3074721				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**173**	4.99	mg/kg	01.04.19 11.11		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	12.28.18 18.10	Basis:	Wet Weight
Seq Number:	3074596			SUB:	T104704215-18-28

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.7	49.7	mg/kg	01.03.19 03.27	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.7	49.7	mg/kg	01.03.19 03.27	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.7	49.7	mg/kg	01.03.19 03.27	U	1
Total TPH	PHC635	<49.7	49.7	mg/kg	01.03.19 03.27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	01.03.19 03.27	
o-Terphenyl	84-15-1	125	%	70-135	01.03.19 03.27	

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Sample Id:	**FS11**	Matrix:	Soil	Date Received:	12.27.18 11.36
Lab Sample Id:	609809-011	Date Collected:	12.20.18 12.00	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	01.03.19 12.00	Basis:	Wet Weight
Seq Number:	3074764				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.04.19 00.03	UK	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.04.19 00.03	UK	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.04.19 00.03	UK	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	01.04.19 00.03	UK	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.04.19 00.03	UK	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.04.19 00.03	UK	1
Total BTEX		<0.00200	0.00200	mg/kg	01.04.19 00.03	UK	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	95	%	70-130	01.04.19 00.03	
4-Bromofluorobenzene	460-00-4	87	%	70-130	01.04.19 00.03	

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Perla Negra Federal Com #001H

Sample Id:	**FS12**	Matrix:	Soil	Date Received:	12.27.18 11.36
Lab Sample Id:	609809-012	Date Collected:	12.20.18 12.15	Sample Depth:	0.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.03.19 15.45	Basis:	Wet Weight
Seq Number:	3074721				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**112**	4.98	mg/kg	01.04.19 11.17		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	12.28.18 18.13	Basis:	Wet Weight
Seq Number:	3074596			SUB:	T104704215-18-28

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.6	49.6	mg/kg	01.03.19 03.49	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.6	49.6	mg/kg	01.03.19 03.49	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.6	49.6	mg/kg	01.03.19 03.49	U	1
Total TPH	PHC635	<49.6	49.6	mg/kg	01.03.19 03.49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	01.03.19 03.49	
o-Terphenyl	84-15-1	140	%	70-135	01.03.19 03.49	**

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LT Environmental, Inc., Arvada, CO

Perla Negra Federal Com #001H

Sample Id:	**FS12**	Matrix:	Soil	Date Received:	12.27.18 11.36
Lab Sample Id:	609809-012	Date Collected:	12.20.18 12.15	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	01.03.19 08.15	Basis:	Wet Weight
Seq Number:	3074729				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.03.19 18.43	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.03.19 18.43	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.03.19 18.43	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.03.19 18.43	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.03.19 18.43	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.03.19 18.43	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.03.19 18.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	83	%	70-130	01.03.19 18.43	
1,4-Difluorobenzene	540-36-3	94	%	70-130	01.03.19 18.43	

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LT Environmental, Inc., Arvada, CO

Perla Negra Federal Com #001H

Sample Id:	**SW01**	Matrix:	Soil	Date Received:	12.27.18 11.36
Lab Sample Id:	609809-013	Date Collected:	12.20.18 11.40	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.03.19 15.45	Basis:	Wet Weight
Seq Number:	3074721				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**36.0**	4.96	mg/kg	01.04.19 11.23		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	12.28.18 18.16	Basis:	Wet Weight
Seq Number:	3074596			SUB:	T104704215-18-28

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.6	49.6	mg/kg	01.03.19 04.11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.6	49.6	mg/kg	01.03.19 04.11	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.6	49.6	mg/kg	01.03.19 04.11	U	1
Total TPH	PHC635	<49.6	49.6	mg/kg	01.03.19 04.11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	01.03.19 04.11	
o-Terphenyl	84-15-1	142	%	70-135	01.03.19 04.11	**

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LT Environmental, Inc., Arvada, CO

Perla Negra Federal Com #001H

Sample Id:	**SW01**	Matrix:	Soil	Date Received:	12.27.18 11.36
Lab Sample Id:	609809-013	Date Collected:	12.20.18 11.40	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	01.03.19 08.15	Basis:	Wet Weight
Seq Number:	3074729				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.03.19 19.05	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.03.19 19.05	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.03.19 19.05	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.03.19 19.05	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.03.19 19.05	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.03.19 19.05	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.03.19 19.05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	76	%	70-130	01.03.19 19.05	
1,4-Difluorobenzene	540-36-3	103	%	70-130	01.03.19 19.05	

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LT Environmental, Inc., Arvada, CO

Perla Negra Federal Com #001H

Sample Id:	**SW02**	Matrix:	Soil	Date Received:	12.27.18 11.36
Lab Sample Id:	609809-014	Date Collected:	12.20.18 11.45	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.03.19 15.45	Basis:	Wet Weight
Seq Number:	3074721				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**33.3**	4.99	mg/kg	01.04.19 11.29		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	12.28.18 18.19	Basis:	Wet Weight
Seq Number:	3074596			SUB:	T104704215-18-28

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.03.19 04.33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.03.19 04.33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.03.19 04.33	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.03.19 04.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	01.03.19 04.33	
o-Terphenyl	84-15-1	127	%	70-135	01.03.19 04.33	

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LT Environmental, Inc., Arvada, CO

Perla Negra Federal Com #001H

Sample Id:	**SW02**	Matrix:	Soil	Date Received:	12.27.18 11.36
Lab Sample Id:	609809-014	Date Collected:	12.20.18 11.45	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	01.03.19 08.15	Basis:	Wet Weight
Seq Number:	3074729				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.03.19 19.27	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.03.19 19.27	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.03.19 19.27	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.03.19 19.27	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.03.19 19.27	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.03.19 19.27	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.03.19 19.27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	87	%	70-130	01.03.19 19.27	
1,4-Difluorobenzene	540-36-3	97	%	70-130	01.03.19 19.27	

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LT Environmental, Inc., Arvada, CO

Perla Negra Federal Com #001H

Sample Id:	**SW03**	Matrix:	Soil	Date Received:	12.27.18 11.36
Lab Sample Id:	609809-015	Date Collected:	12.20.18 11.50	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.03.19 15.45	Basis:	Wet Weight
Seq Number:	3074721				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**87.6**	4.99	mg/kg	01.04.19 11.35		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	12.28.18 18.22	Basis:	Wet Weight
Seq Number:	3074596			SUB:	T104704215-18-28

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.04.19 15.30	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.04.19 15.30	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.04.19 15.30	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.04.19 15.30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	82	%	70-135	01.04.19 15.30	
o-Terphenyl	84-15-1	95	%	70-135	01.04.19 15.30	

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LT Environmental, Inc., Arvada, CO

Perla Negra Federal Com #001H

Sample Id:	**SW03**	Matrix:	Soil	Date Received:	12.27.18 11.36
Lab Sample Id:	609809-015	Date Collected:	12.20.18 11.50	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	01.03.19 12.00	Basis:	Wet Weight
Seq Number:	3074764				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.03.19 23.21	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.03.19 23.21	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.03.19 23.21	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	01.03.19 23.21	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.03.19 23.21	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.03.19 23.21	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.03.19 23.21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	98	%	70-130	01.03.19 23.21	
4-Bromofluorobenzene	460-00-4	88	%	70-130	01.03.19 23.21	

LT Environmental, Inc., Arvada, CO

Perla Negra Federal Com #001H

Sample Id:	**SW04**	Matrix:	Soil	Date Received:	12.27.18 11.36
Lab Sample Id:	609809-016	Date Collected:	12.20.18 12.00	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.04.19 09.00	Basis:	Wet Weight
Seq Number:	3074818				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**55.1**	4.97	mg/kg	01.04.19 13.48		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	12.28.18 18.25	Basis:	Wet Weight
Seq Number:	3074596			SUB:	T104704215-18-28

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.04.19 15.51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.04.19 15.51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.04.19 15.51	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.04.19 15.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	01.04.19 15.51	
o-Terphenyl	84-15-1	99	%	70-135	01.04.19 15.51	

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LT Environmental, Inc., Arvada, CO

Perla Negra Federal Com #001H

Sample Id:	**SW04**	Matrix:	Soil	Date Received:	12.27.18 11.36
Lab Sample Id:	609809-016	Date Collected:	12.20.18 12.00	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	01.03.19 12.00	Basis:	Wet Weight
Seq Number:	3074764				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.03.19 23.42	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.03.19 23.42	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.03.19 23.42	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.03.19 23.42	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.03.19 23.42	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.03.19 23.42	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.03.19 23.42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	85	%	70-130	01.03.19 23.42	
1,4-Difluorobenzene	540-36-3	97	%	70-130	01.03.19 23.42	

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LT Environmental, Inc., Arvada, CO

Perla Negra Federal Com #001H

Sample Id:	**SW05**	Matrix:	Soil	Date Received:	12.27.18 11.36
Lab Sample Id:	609809-017	Date Collected:	12.20.18 12.05	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.04.19 09.00	Basis:	Wet Weight
Seq Number:	3074818				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**43.0**	5.01	mg/kg	01.04.19 14.06		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	12.28.18 18.28	Basis:	Wet Weight
Seq Number:	3074596			SUB:	T104704215-18-28

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.04.19 17.17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.04.19 17.17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.04.19 17.17	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.04.19 17.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	01.04.19 17.17	
o-Terphenyl	84-15-1	98	%	70-135	01.04.19 17.17	

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LT Environmental, Inc., Arvada, CO

Perla Negra Federal Com #001H

Sample Id:	**SW05**	Matrix:	Soil	Date Received:	12.27.18 11.36
Lab Sample Id:	609809-017	Date Collected:	12.20.18 12.05	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	01.03.19 08.15	Basis:	Wet Weight
Seq Number:	3074729				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.03.19 11.06	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.03.19 11.06	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.03.19 11.06	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.03.19 11.06	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.03.19 11.06	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.03.19 11.06	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.03.19 11.06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	119	%	70-130	01.03.19 11.06	
1,4-Difluorobenzene	540-36-3	86	%	70-130	01.03.19 11.06	

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LT Environmental, Inc., Arvada, CO

Perla Negra Federal Com #001H

Sample Id:	**SW06**	Matrix:	Soil	Date Received:	12.27.18 11.36
Lab Sample Id:	609809-018	Date Collected:	12.20.18 14.35	Sample Depth:	0.3 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.04.19 09.00	Basis:	Wet Weight
Seq Number:	3074818				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**212**	5.01	mg/kg	01.04.19 14.12		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	12.28.18 18.31	Basis:	Wet Weight
Seq Number:	3074596			SUB:	T104704215-18-28

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.04.19 14.24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.04.19 14.24	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.04.19 14.24	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.04.19 14.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	81	%	70-135	01.04.19 14.24	
o-Terphenyl	84-15-1	94	%	70-135	01.04.19 14.24	

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LT Environmental, Inc., Arvada, CO

Perla Negra Federal Com #001H

Sample Id:	**SW06**	Matrix:	Soil	Date Received:	12.27.18 11.36
Lab Sample Id:	609809-018	Date Collected:	12.20.18 14.35	Sample Depth:	0.3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	01.03.19 08.15	Basis:	Wet Weight
Seq Number:	3074729				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.03.19 11.26	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.03.19 11.26	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.03.19 11.26	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	01.03.19 11.26	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.03.19 11.26	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.03.19 11.26	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.03.19 11.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	88	%	70-130	01.03.19 11.26	
4-Bromofluorobenzene	460-00-4	122	%	70-130	01.03.19 11.26	

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

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 609809

LT Environmental, Inc.

Perla Negra Federal Com #001H

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3074721 Matrix: Solid Date Prep: 01.03.19
MB Sample Id: 7669155-1-BLK LCS Sample Id: 7669155-1-BKS LCSD Sample Id: 7669155-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	255	102	253	101	90-110	1	20	mg/kg	01.03.19 22:21	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3074818 Matrix: Solid Date Prep: 01.04.19
MB Sample Id: 7669175-1-BLK LCS Sample Id: 7669175-1-BKS LCSD Sample Id: 7669175-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	261	104	248	99	90-110	5	20	mg/kg	01.04.19 13:35	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3074721 Matrix: Soil Date Prep: 01.03.19
Parent Sample Id: 609806-008 MS Sample Id: 609806-008 S MSD Sample Id: 609806-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	505	249	711	83	756	101	90-110	6	20	mg/kg	01.03.19 22:39	X

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3074721 Matrix: Soil Date Prep: 01.03.19
Parent Sample Id: 609809-007 MS Sample Id: 609809-007 S MSD Sample Id: 609809-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	21.4	249	261	96	281	104	90-110	7	20	mg/kg	01.04.19 10:24	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3074818 Matrix: Soil Date Prep: 01.04.19
Parent Sample Id: 609809-016 MS Sample Id: 609809-016 S MSD Sample Id: 609809-016 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	55.1	249	304	100	311	103	90-110	2	20	mg/kg	01.04.19 13:54	

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

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

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

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

QC Summary 609809

LT Environmental, Inc.

Perla Negra Federal Com #001H

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3074818 Matrix: Soil Date Prep: 01.04.19
Parent Sample Id: 609906-005 MS Sample Id: 609906-005 S MSD Sample Id: 609906-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	145	250	408	105	420	110	90-110	3	20	mg/kg	01.04.19 15:23	

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3074596 Matrix: Solid Date Prep: 12.28.18
MB Sample Id: 7668912-1-BLK LCS Sample Id: 7668912-1-BKS LCSD Sample Id: 7668912-1-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	927	93	770	77	70-135	19	35	mg/kg	01.02.19 22:43	
Diesel Range Organics (DRO)	<50.0	1000	1200	120	944	94	70-135	24	35	mg/kg	01.02.19 22:43	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	99		107		89		70-135	%	01.02.19 22:43
o-Terphenyl	124		114		92		70-135	%	01.02.19 22:43

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3074596 Matrix: Soil Date Prep: 12.28.18
Parent Sample Id: 609809-018 MS Sample Id: 609809-018 S MSD Sample Id: 609809-018 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	703	70	901	90	70-135	25	35	mg/kg	01.04.19 14:47	
Diesel Range Organics (DRO)	11.3	1000	875	86	977	97	70-135	11	35	mg/kg	01.04.19 14:47	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	85		84		70-135	%	01.04.19 14:47
o-Terphenyl	86		85		70-135	%	01.04.19 14:47

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 609809

LT Environmental, Inc.

Perla Negra Federal Com #001H

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3074648 Matrix: Solid Date Prep: 01.02.19
MB Sample Id: 7669092-1-BLK LCS Sample Id: 7669092-1-BKS LCSD Sample Id: 7669092-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000386	0.100	0.105	105	0.106	106	70-130	1	35	mg/kg	01.02.19 19:53	
Toluene	<0.000457	0.100	0.0931	93	0.0947	95	70-130	2	35	mg/kg	01.02.19 19:53	
Ethylbenzene	<0.000566	0.100	0.101	101	0.102	102	70-130	1	35	mg/kg	01.02.19 19:53	
m,p-Xylenes	<0.00102	0.200	0.183	92	0.186	93	70-130	2	35	mg/kg	01.02.19 19:53	
o-Xylene	<0.000345	0.100	0.0895	90	0.0907	91	70-130	1	35	mg/kg	01.02.19 19:53	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	105		103		103		70-130	%	01.02.19 19:53
4-Bromofluorobenzene	81		83		84		70-130	%	01.02.19 19:53

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3074729 Matrix: Solid Date Prep: 01.03.19
MB Sample Id: 7669169-1-BLK LCS Sample Id: 7669169-1-BKS LCSD Sample Id: 7669169-1-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	0.0960	96	0.125	125	70-130	26	35	mg/kg	01.03.19 08:59	
Toluene	<0.00200	0.100	0.0896	90	0.105	105	70-130	16	35	mg/kg	01.03.19 08:59	
Ethylbenzene	<0.00200	0.100	0.100	100	0.128	128	70-130	25	35	mg/kg	01.03.19 08:59	
m,p-Xylenes	<0.00401	0.200	0.214	107	0.253	127	70-130	17	35	mg/kg	01.03.19 08:59	
o-Xylene	<0.00200	0.100	0.0982	98	0.122	122	70-130	22	35	mg/kg	01.03.19 08:59	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	84		84		98		70-130	%	01.03.19 08:59
4-Bromofluorobenzene	104		74		98		70-130	%	01.03.19 08:59

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3074764 Matrix: Solid Date Prep: 01.03.19
MB Sample Id: 7669193-1-BLK LCS Sample Id: 7669193-1-BKS LCSD Sample Id: 7669193-1-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	0.0998	0.104	104	0.0890	90	70-130	16	35	mg/kg	01.03.19 20:51	
Toluene	<0.00200	0.0998	0.0906	91	0.0764	77	70-130	17	35	mg/kg	01.03.19 20:51	
Ethylbenzene	<0.00200	0.0998	0.109	109	0.100	101	70-130	9	35	mg/kg	01.03.19 20:51	
m,p-Xylenes	<0.00399	0.200	0.217	109	0.202	102	70-130	7	35	mg/kg	01.03.19 20:51	
o-Xylene	<0.00200	0.0998	0.103	103	0.0956	96	70-130	7	35	mg/kg	01.03.19 20:51	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	93		121		124		70-130	%	01.03.19 20:51
4-Bromofluorobenzene	86		74		94		70-130	%	01.03.19 20:51

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 609809

LT Environmental, Inc.

Perla Negra Federal Com #001H

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3074648 — Matrix: Soil — Date Prep: 01.02.19
Parent Sample Id: 609803-001 — MS Sample Id: 609803-001 S — MSD Sample Id: 609803-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000388	0.101	0.106	105	0.106	106	70-130	0	35	mg/kg	01.02.19 20:31	
Toluene	<0.000459	0.101	0.0946	94	0.0912	91	70-130	4	35	mg/kg	01.02.19 20:31	
Ethylbenzene	<0.000569	0.101	0.102	101	0.0975	98	70-130	5	35	mg/kg	01.02.19 20:31	
m,p-Xylenes	<0.00102	0.202	0.185	92	0.176	88	70-130	5	35	mg/kg	01.02.19 20:31	
o-Xylene	<0.000347	0.101	0.0902	89	0.0859	86	70-130	5	35	mg/kg	01.02.19 20:31	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		106		70-130	%	01.02.19 20:31
4-Bromofluorobenzene	86		87		70-130	%	01.02.19 20:31

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3074729 — Matrix: Soil — Date Prep: 01.03.19
Parent Sample Id: 609809-017 — MS Sample Id: 609809-017 S — MSD Sample Id: 609809-017 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	0.102	102	0.107	108	70-130	5	35	mg/kg	01.03.19 09:41	
Toluene	<0.00200	0.100	0.0846	85	0.0818	82	70-130	3	35	mg/kg	01.03.19 09:41	
Ethylbenzene	<0.00200	0.100	0.0897	90	0.0779	78	70-130	14	35	mg/kg	01.03.19 09:41	
m,p-Xylenes	<0.00401	0.200	0.204	102	0.190	95	70-130	7	35	mg/kg	01.03.19 09:41	
o-Xylene	<0.00200	0.100	0.109	109	0.100	101	70-130	9	35	mg/kg	01.03.19 09:41	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	95		94		70-130	%	01.03.19 09:41
4-Bromofluorobenzene	108		89		70-130	%	01.03.19 09:41

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3074764 — Matrix: Soil — Date Prep: 01.03.19
Parent Sample Id: 609809-007 — MS Sample Id: 609809-007 S — MSD Sample Id: 609809-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.100	0.0963	96	0.0999	99	70-130	4	35	mg/kg	01.03.19 21:34	
Toluene	<0.00201	0.100	0.0794	79	0.0876	87	70-130	10	35	mg/kg	01.03.19 21:34	
Ethylbenzene	<0.00201	0.100	0.0940	94	0.107	106	70-130	13	35	mg/kg	01.03.19 21:34	
m,p-Xylenes	<0.00402	0.201	0.187	93	0.202	100	70-130	8	35	mg/kg	01.03.19 21:34	
o-Xylene	<0.00201	0.100	0.0902	90	0.103	102	70-130	13	35	mg/kg	01.03.19 21:34	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	121		120		70-130	%	01.03.19 21:34
4-Bromofluorobenzene	84		77		70-130	%	01.03.19 21:34

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

Chain of Custody

Work Order No: 1098009

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
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Project Manager:	Adrian Baker	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:	432.704.5178 Email:		abaker @ Henv.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:	Perla Negra Federal Com #001H	Turn Around	
Project Number:	Lea County	Routine	☒
P.O. Number:		Rush:	
Sampler's Name:	Anna Byers	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No	
Temperature (°C):	0.5 0.2	Thermometer ID	T8	
Received Intact:	(Yes) No			
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.1	
Sample Custody Seals:	Yes (No) N/A	Total Containers:		

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)
FS01	S	12/20	10:00	4'	1	X	X	X
FS02	S		10:10	4'	1	X	X	X
FS03	S		10:15	3.5'	1	X	X	X
FS04	S		10:25	3.5'	1	X	X	X
FS05	S		10:35	3.0'	1	X	X	X
FS06	S		10:40	4'	1	X	X	X
FS07	S		10:50	4'	1	X	X	X
FS08	S		10:55	3.5'	1	X	X	X
FS09	S		11:20	3.5'	1	X	X	X
FS10	S		11:30	3.0'	1	X	X	X

Work Order Notes

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

Sample Comments

Composite sample

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

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Anna Byers		11:30 12/21/18	2	12/27/1136	15:30
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

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Chain of Custody

Work Order No: 1099009

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:	Adrian Baker	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:	432.704.5178	Email:	abaker@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:	Perla Negra Federal Com #001H	Turn Around	
Project Number:	Lea County	Routine	☒
P.O. Number:		Rush:	
Sampler's Name:	Anna Byers	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	0.2	Thermometer ID	
Received Intact:	Yes No		
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.1
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 8021)	Chloride (EPA 300.0)	Work Order Notes
FS11	S	12/20	12:00	0.5'	1	X	X	X	composite sample
FS12	S		12:15	0.5'	1	X	X	X	
SW01	S		11:40	2'	1	X	X	X	average depth
SW02	S		11:45	2'	1	X	X	X	average depth
SW03	S		11:50	2'	1	X	X	X	average depth
SW04	S		12:00	2'	1	X	X	X	average depth
SW05	S		12:05	2'	1	X	X	X	average depth
SW06	S		14:35	0.3'	1	X	X	X	average depth

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

Sample Comments

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

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

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

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	Anna Byers		11:30 12/21/18	2		12/21/18 1566 15:58
3				4		
5				6		

Revised Date 051418 Rev. 2018.1

Final 1.000

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2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

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Inter-Office Shipment

IOS Number **119837**

Date/Time: 12/27/18 12:57
Lab# From: **Midland**
Lab# To: **Houston**

Created by: Brianna Teel
Delivery Priority:
Air Bill No.: 774072715561

Please send report to: Jessica Kramer
Address: 1211 W. Florida Ave, Midland TX 79701
E-Mail: jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
609809-001	S	FS01	12/20/18 10:00	SW8015MOD_NM	TPH by SW8015 Mod	01/04/19	01/03/19 10:00	JKR	PHCC10C28 PHCC28C35	
609809-002	S	FS02	12/20/18 10:10	SW8015MOD_NM	TPH by SW8015 Mod	01/04/19	01/03/19 10:10	JKR	PHCC10C28 PHCC28C35	
609809-003	S	FS03	12/20/18 10:15	SW8015MOD_NM	TPH by SW8015 Mod	01/04/19	01/03/19 10:15	JKR	PHCC10C28 PHCC28C35	
609809-004	S	FS04	12/20/18 10:25	SW8015MOD_NM	TPH by SW8015 Mod	01/04/19	01/03/19 10:25	JKR	PHCC10C28 PHCC28C35	
609809-005	S	FS05	12/20/18 10:35	SW8015MOD_NM	TPH by SW8015 Mod	01/04/19	01/03/19 10:35	JKR	PHCC10C28 PHCC28C35	
609809-006	S	FS06	12/20/18 10:40	SW8015MOD_NM	TPH by SW8015 Mod	01/04/19	01/03/19 10:40	JKR	PHCC10C28 PHCC28C35	
609809-007	S	FS07	12/20/18 10:50	SW8015MOD_NM	TPH by SW8015 Mod	01/04/19	01/03/19 10:50	JKR	PHCC10C28 PHCC28C35	
609809-008	S	FS08	12/20/18 10:55	SW8015MOD_NM	TPH by SW8015 Mod	01/04/19	01/03/19 10:55	JKR	PHCC10C28 PHCC28C35	
609809-009	S	FS09	12/20/18 11:20	SW8015MOD_NM	TPH by SW8015 Mod	01/04/19	01/03/19 11:20	JKR	PHCC10C28 PHCC28C35	
609809-010	S	FS10	12/20/18 11:30	SW8015MOD_NM	TPH by SW8015 Mod	01/04/19	01/03/19 11:30	JKR	PHCC10C28 PHCC28C35	
609809-011	S	FS11	12/20/18 12:00	SW8015MOD_NM	TPH by SW8015 Mod	01/04/19	01/03/19 12:00	JKR	PHCC10C28 PHCC28C35	
609809-012	S	FS12	12/20/18 12:15	SW8015MOD_NM	TPH by SW8015 Mod	01/04/19	01/03/19 12:15	JKR	PHCC10C28 PHCC28C35	
609809-013	S	SW01	12/20/18 11:40	SW8015MOD_NM	TPH by SW8015 Mod	01/04/19	01/03/19 11:40	JKR	PHCC10C28 PHCC28C35	
609809-014	S	SW02	12/20/18 11:45	SW8015MOD_NM	TPH by SW8015 Mod	01/04/19	01/03/19 11:45	JKR	PHCC10C28 PHCC28C35	
609809-015	S	SW03	12/20/18 11:50	SW8015MOD_NM	TPH by SW8015 Mod	01/04/19	01/03/19 11:50	JKR	PHCC10C28 PHCC28C35	
609809-016	S	SW04	12/20/18 12:00	SW8015MOD_NM	TPH by SW8015 Mod	01/04/19	01/03/19 12:00	JKR	PHCC10C28 PHCC28C35	
609809-017	S	SW05	12/20/18 12:05	SW8015MOD_NM	TPH by SW8015 Mod	01/04/19	01/03/19 12:05	JKR	PHCC10C28 PHCC28C35	
609809-018	S	SW06	12/20/18 14:35	SW8015MOD_NM	TPH by SW8015 Mod	01/04/19	01/03/19 14:35	JKR	PHCC10C28 PHCC28C35	

Inter Office Shipment or Sample Comments:

Relinquished By: Brianna Teel
Brianna Teel

Date Relinquished: 12/27/2018

Received By:
Taha Hedib

Date Received: 12/28/2018 09:30

Cooler Temperature: 0.6

XENCO Laboratories

Inter Office Report- Sample Receipt Checklist

Sent To: Houston

IOS #: 119837

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient
Temperature Measuring device used : hou-068

Sent By: Brianna Teel **Date Sent:** 12/27/2018 12:57 PM

Received By: Taha Hedib **Date Received:** 12/28/2018 09:30 AM

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	.6	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received with appropriate temperature?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 *Custody Seals Signed and dated for Containers/coolers	**Yes**	
#6 *IOS present?	**Yes**	
#7 Any missing/extra samples?	**No**	
#8 IOS agrees with sample label(s)/matrix?	**Yes**	
#9 Sample matrix/ properties agree with IOS?	**Yes**	
#10 Samples in proper container/ bottle?	**Yes**	
#11 Samples properly preserved?	**Yes**	
#12 Sample container(s) intact?	**Yes**	
#13 Sufficient sample amount for indicated test(s)?	**Yes**	
#14 All samples received within hold time?	**Yes**	

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ **Contacted by :** _____ **Date:** _____

Checklist reviewed by: _____ Date: 12/28/2018

Taha Hedib

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 12/27/2018 11:36:00 AM

Work Order #: 609809

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

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	.2
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**
#5 Custody Seals intact on sample bottles?	**N/A**
#6*Custody Seals Signed and dated?	**N/A**
#7 *Chain of Custody present?	**Yes**
#8 Any missing/extra samples?	**No**
#9 Chain of Custody signed when relinquished/ received?	**Yes**
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**
#11 Container label(s) legible and intact?	**Yes**
#12 Samples in proper container/ bottle?	**Yes**
#13 Samples properly preserved?	**Yes**
#14 Sample container(s) intact?	**Yes**
#15 Sufficient sample amount for indicated test(s)?	**Yes**
#16 All samples received within hold time?	**Yes**
#17 Subcontract of sample(s)?	**N/A**
#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: Brianna Teel Date: 12/27/2018

Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 12/27/2018

Jessica Kramer

Analytical Report 612381

for

LT Environmental, Inc.

Project Manager: Adrian Baker

Perla Negra

25-JAN-19

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-18-28), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-18-17), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-18)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Phoenix Mobile (EPA Lab Code: AZ00901): Arizona (AZM757)
Xenco-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429)
Xenco-Lakeland: Florida (E84098)

25-JAN-19

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

Reference: XENCO Report No(s): **612381**
Perla Negra
Project Address: Lea County

Adrian Baker:

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) 612381. 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. 612381 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jessica Kramer

Jessica Kramer
Project Assistant

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America

Sample Cross Reference 612381

LT Environmental, Inc., Arvada, CO

Perla Negra

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH03	S	01-23-19 08:50	0 - 5 ft	612381-001

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3076948 BTEX by EPA 8021B

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

Certificate of Analysis Summary 612381

LT Environmental, Inc., Arvada, CO

Project Name: Perla Negra

Project Id:
Contact: Adrian Baker
Project Location: Lea County

Date Received in Lab: Thu Jan-24-19 12:15 pm
Report Date: 25-JAN-19
Project Manager: Jessica Kramer

Analysis Requested							
	Lab Id:	612381-001					
	Field Id:	BH03					
	Depth:	0-5 ft					
	Matrix:	SOIL					
	Sampled:	Jan-23-19 08:50					
BTEX by EPA 8021B	***Extracted:***	Jan-24-19 12:30					
	Analyzed:	Jan-24-19 19:25					
	Units/RL:	mg/kg RL					
Benzene		<0.00200 0.00200					
Toluene		<0.00200 0.00200					
Ethylbenzene		<0.00200 0.00200					
m,p-Xylenes		<0.00401 0.00401					
o-Xylene		<0.00200 0.00200					
Total Xylenes		<0.00200 0.00200					
Total BTEX		<0.00200 0.00200					
Inorganic Anions by EPA 300	***Extracted:***	Jan-24-19 12:30					
	Analyzed:	Jan-24-19 18:08					
	Units/RL:	mg/kg RL					
Chloride		211 4.96					
TPH by SW8015 Mod	***Extracted:***	Jan-24-19 14:00					
	Analyzed:	Jan-24-19 21:31					
	Units/RL:	mg/kg RL					
Gasoline Range Hydrocarbons (GRO)		<15.0 15.0					
Diesel Range Organics (DRO)		34.8 15.0					
Motor Oil Range Hydrocarbons (MRO)		<15.0 15.0					
Total TPH		34.8 15.0					

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

Jessica Kramer
Project Assistant

Certificate of Analytical Results 612381

LT Environmental, Inc., Arvada, CO

Perla Negra

Sample Id:	**BH03**	Matrix:	Soil	Date Received:	01.24.19 12.15
Lab Sample Id:	612381-001	Date Collected:	01.23.19 08.50	Sample Depth:	0 - 5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.24.19 12.30	Basis:	Wet Weight
Seq Number:	3077011				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**211**	4.96	mg/kg	01.24.19 18.08		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.24.19 14.00	Basis:	Wet Weight
Seq Number:	3076974				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.24.19 21.31	U	1
Diesel Range Organics (DRO)	C10C28DRO	**34.8**	15.0	mg/kg	01.24.19 21.31		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	01.24.19 21.31	U	1
Total TPH	PHC635	**34.8**	15.0	mg/kg	01.24.19 21.31		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	01.24.19 21.31	
o-Terphenyl	84-15-1	107	%	70-135	01.24.19 21.31	

Certificate of Analytical Results 612381

LT Environmental, Inc., Arvada, CO

Perla Negra

Sample Id:	**BH03**	Matrix:	Soil	Date Received:	01.24.19 12.15
Lab Sample Id:	612381-001	Date Collected:	01.23.19 08.50	Sample Depth:	0 - 5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	01.24.19 12.30	Basis:	Wet Weight
Seq Number:	3076948				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.24.19 19.25	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.24.19 19.25	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.24.19 19.25	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.24.19 19.25	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.24.19 19.25	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.24.19 19.25	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.24.19 19.25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	93	%	70-130	01.24.19 19.25	
4-Bromofluorobenzene	460-00-4	98	%	70-130	01.24.19 19.25	

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

QC Summary 612381

LT Environmental, Inc.

Perla Negra

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3077011 Matrix: Solid Date Prep: 01.24.19
MB Sample Id: 7670433-1-BLK LCS Sample Id: 7670433-1-BKS LCSD Sample Id: 7670433-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	226	250	226	90	230	92	90-110	2	20	mg/kg	01.24.19 15:35	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3077011 Matrix: Soil Date Prep: 01.24.19
Parent Sample Id: 612382-001 MS Sample Id: 612382-001 S MSD Sample Id: 612382-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	139	250	409	108	385	98	90-110	6	20	mg/kg	01.24.19 18:20	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3077011 Matrix: Soil Date Prep: 01.24.19
Parent Sample Id: 612243-014 MS Sample Id: 612243-014 S

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Chloride	457	248	646	76	90-110	mg/kg	01.24.19 16:51	X

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3076974 Matrix: Solid Date Prep: 01.24.19
MB Sample Id: 7670421-1-BLK LCS Sample Id: 7670421-1-BKS LCSD Sample Id: 7670421-1-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)	<8.00	1000	950	95	898	90	70-135	6	20	mg/kg	01.24.19 14:14	
Diesel Range Organics (DRO)	<8.13	1000	1030	103	978	98	70-135	5	20	mg/kg	01.24.19 14:14	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	95		118		113		70-135	%	01.24.19 14:14
o-Terphenyl	98		111		111		70-135	%	01.24.19 14:14

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

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

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

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

Final 1.000

QC Summary 612381

LT Environmental, Inc.

Perla Negra

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3076974 Matrix: Soil Date Prep: 01.24.19
Parent Sample Id: 611651-001 MS Sample Id: 611651-001 S MSD Sample Id: 611651-001 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)	12.0	997	857	85	870	86	70-135	2	20	mg/kg	01.24.19 16:30	
Diesel Range Organics (DRO)	12.2	997	980	97	976	96	70-135	0	20	mg/kg	01.24.19 16:30	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	122		120		70-135	%	01.24.19 16:30
o-Terphenyl	111		109		70-135	%	01.24.19 16:30

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3076948 Matrix: Solid Date Prep: 01.24.19
MB Sample Id: 7670425-1-BLK LCS Sample Id: 7670425-1-BKS LCSD Sample Id: 7670425-1-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	0.118	118	0.112	112	70-130	5	35	mg/kg	01.24.19 15:07	
Toluene	<0.00200	0.100	0.103	103	0.0983	98	70-130	5	35	mg/kg	01.24.19 15:07	
Ethylbenzene	<0.00200	0.100	0.129	129	0.117	117	70-130	10	35	mg/kg	01.24.19 15:07	
m,p-Xylenes	<0.00401	0.200	0.241	121	0.235	118	70-130	3	35	mg/kg	01.24.19 15:07	
o-Xylene	<0.00200	0.100	0.125	125	0.110	110	70-130	13	35	mg/kg	01.24.19 15:07	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	97		116		128		70-130	%	01.24.19 15:07
4-Bromofluorobenzene	97		72		104		70-130	%	01.24.19 15:07

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3076948 Matrix: Soil Date Prep: 01.24.19
Parent Sample Id: 612242-001 MS Sample Id: 612242-001 S MSD Sample Id: 612242-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.103	102	0.125	125	70-130	19	35	mg/kg	01.24.19 15:49	
Toluene	<0.00202	0.101	0.0921	91	0.109	109	70-130	17	35	mg/kg	01.24.19 15:49	
Ethylbenzene	<0.00202	0.101	0.114	113	0.125	125	70-130	9	35	mg/kg	01.24.19 15:49	
m,p-Xylenes	<0.00403	0.202	0.226	112	0.249	125	70-130	10	35	mg/kg	01.24.19 15:49	
o-Xylene	<0.00202	0.101	0.107	106	0.118	118	70-130	10	35	mg/kg	01.24.19 15:49	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	120		124		70-130	%	01.24.19 15:49
4-Bromofluorobenzene	113		104		70-130	%	01.24.19 15:49

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

CHAIN OF CUSTODY

Page 1 of 1

XENCO LABORATORIES

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Xenco Quote # | Xenco Job # 612381

Client / Reporting Information

Company Name / Branch: Environmental, Inc. Permian Office Midland, TX

Company Address: 3300 N "A" St. Building 1 Unit 103 79705

Email: abyers@tenv.com & abaker@tenv.com | Phone No: (432) 704-5178

Project Contact: Adrian Baker

Samplers's Name: Anna Byers

Project Information

Project Name/Number: Perla Negra

Project Location: Lea County

Invoice To: Kyle Littrell : XTO Energy

PO Number:

Analytical Information

No.	Field ID / Point of Collection	Collection: Sample Depth	Collection: Date	Collection: Time	Matrix	# of bottles	Numbers of preserving bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MeOH	NONE	BTEX (only BTEX) 8021	TPH (DRO GRO MRO) 8015	Chloride (300.00)
1	BH03	0.5'	1/23	850	S	1								X	X	X	X
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

1/23/19

Matrix Codes

W = Water
S = Soil/Sed/Solid
GW = Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
OW = Ocean/Sea Water
WI = Wipe
O = Oil
WW = Waste Water
A = Air

Field Comments

Turnaround Time (Business days)

- [X] Same Day TAT
- [ ] Next Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 3 Day EMERGENCY
- [ ] 5 Day TAT
- [ ] 7 Day TAT
- [ ] Contract TAT

TAT Starts Day received by Lab, if received by 5:00 pm

Date Deliverable Information

- [ ] Level II Std QC
- [ ] Level III Std QC+ Forms
- [ ] Level 3 (CLP Forms)
- [ ] TRRP Checklist
- [ ] Level IV (Full Data Pkg /raw data)
- [ ] TRRP Level IV
- [ ] UST / RG -411

Notes:

FED-EX / UPS: Tracking #

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	Anna Byers	1/23/19 12:30	Esperanza Gonzalez	Esperanza Gonzalez	1-23-19 3:51	
2						1/24/19 1215
3	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
4						
5	Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable	On Ice / Cooler Temp. / Thermo. Corr. Factor
						✓ 0.1 -0.1 1.0

Notice: Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the Client if such loses are due to circumstances beyond the control of Xenco. A minimum charge of $75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xenco but not analyzed will be invoiced at $5 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract.

ORIGIN ID:HOBA (575) 392-7550
** MAIL SERVICES ETC, LLC
4000B N GRIMES
HOBBS, NM 88240
UNITED STATES US
TO XENCO LABORATORIES SHIP CENTER
FEDEX EXPRESS SHIP CENTER
3600 COUNTY RD 1276 S
MIDLAND TX 79711
(432) 563-1800
INV:
PO:
REF:
DEPT:
SHIP DATE: 23JAN19
ACTWGT: 32.00 LB
CAD: 0909328/CAFE3211
DIMS: 20x16x13 IN
BILL RECIPIENT
551C2/D74C/104C
FedEx Express
J18111908501uv
TRK# 0201 4705 2519 9941
41 MAFA
THU - 24 JAN HOLD
STANDARD OVERNIGHT
HLD
MAFA
LBB
TX-US

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 01/24/2019 12:15:00 PM

Work Order #: 612381

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

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	.1
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**
#5 Custody Seals intact on sample bottles?	**N/A**
#6*Custody Seals Signed and dated?	**N/A**
#7 *Chain of Custody present?	**Yes**
#8 Any missing/extra samples?	**No**
#9 Chain of Custody signed when relinquished/ received?	**Yes**
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**
#11 Container label(s) legible and intact?	**Yes**
#12 Samples in proper container/ bottle?	**Yes**
#13 Samples properly preserved?	**Yes**
#14 Sample container(s) intact?	**Yes**
#15 Sufficient sample amount for indicated test(s)?	**Yes**
#16 All samples received within hold time?	**Yes**
#17 Subcontract of sample(s)?	**N/A**
#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: Brianna Teel Date: 01/24/2019

Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 01/24/2019

Jessica Kramer

Analytical Report 612382

for

LT Environmental, Inc.

Project Manager: Adrian Baker

Perla Negra

25-JAN-19

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-18-28), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-18-17), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-18)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Phoenix Mobile (EPA Lab Code: AZ00901): Arizona (AZM757)
Xenco-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429)
Xenco-Lakeland: Florida (E84098)

25-JAN-19

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

Reference: XENCO Report No(s): **612382**
Perla Negra
Project Address: Lea County

Adrian Baker:

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) 612382. 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. 612382 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jessica Kramer

Jessica Kramer
Project Assistant

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America

Sample Cross Reference 612382

LT Environmental, Inc., Arvada, CO

Perla Negra

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH03 A	S	01-23-19 08:50	1.0 ft	612382-001
BH04	S	01-23-19 09:15	0.3 ft	612382-002
BH04A	S	01-23-19 09:15	0.5 ft	612382-003
BH05	S	01-23-19 09:40	0.5 ft	612382-004
BH05A	S	01-23-19 09:40	1.0 ft	612382-005
SS04	S	01-23-19 09:30	0.3 ft	612382-006

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3076948 BTEX by EPA 8021B

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

Certificate of Analysis Summary 612382

LT Environmental, Inc., Arvada, CO

Project Name: Perla Negra

Project Id:
Contact: Adrian Baker
Project Location: Lea County

Date Received in Lab: Thu Jan-24-19 12:15 pm
Report Date: 25-JAN-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	612382-001		612382-002		612382-003		612382-004		612382-005		612382-006	
	Field Id:	BH03 A		BH04		BH04A		BH05		BH05A		SS04	
	Depth:	1.0- ft		0.3- ft		0.5- ft		0.5- ft		1.0- ft		0.3- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-23-19 08:50		Jan-23-19 09:15		Jan-23-19 09:15		Jan-23-19 09:40		Jan-23-19 09:40		Jan-23-19 09:30	
BTEX by EPA 8021B	***Extracted:***	Jan-24-19 12:30		Jan-24-19 12:30		Jan-24-19 12:30		Jan-24-19 12:30		Jan-24-19 12:30		Jan-24-19 12:30	
	Analyzed:	Jan-24-19 17:15		Jan-24-19 17:37		Jan-24-19 17:58		Jan-24-19 18:20		Jan-24-19 18:41		Jan-24-19 19:03	
	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	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200
Toluene		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200
Ethylbenzene		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200
m,p-Xylenes		<0.00399	0.00399	<0.00398	0.00398	<0.00400	0.00400	<0.00402	0.00402	<0.00398	0.00398	<0.00401	0.00401
o-Xylene		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200
Total Xylenes		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200
Total BTEX		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200
Inorganic Anions by EPA 300	***Extracted:***	Jan-24-19 12:30		Jan-24-19 12:30		Jan-24-19 12:30		Jan-24-19 12:30		Jan-24-19 12:30		Jan-24-19 12:30	
	Analyzed:	Jan-24-19 18:14		Jan-24-19 18:33		Jan-24-19 18:39		Jan-24-19 19:00		Jan-24-19 19:07		Jan-24-19 19:13	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		139	5.00	212	5.00	152	5.00	106	5.00	124	4.98	691	4.97
TPH by SW8015 Mod	***Extracted:***	Jan-24-19 14:00		Jan-24-19 14:00		Jan-24-19 14:00		Jan-24-19 14:00		Jan-24-19 14:00		Jan-24-19 14:00	
	Analyzed:	Jan-24-19 21:51		Jan-24-19 22:11		Jan-24-19 22:31		Jan-24-19 22:51		Jan-24-19 23:11		Jan-24-19 23:31	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<14.9	14.9	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		17.8	15.0	26.0	14.9	19.2	14.9	28.5	15.0	<15.0	15.0	298	15.0
Motor Oil Range Hydrocarbons (MRO)		<15.0	15.0	<14.9	14.9	<14.9	14.9	<15.0	15.0	<15.0	15.0	72.2	15.0
Total TPH		17.8	15.0	26.0	14.9	19.2	14.9	28.5	15.0	<15.0	15.0	370	15.0

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

Jessica Kramer
Project Assistant

LT Environmental, Inc., Arvada, CO

Perla Negra

Sample Id:	**BH03 A**	Matrix:	Soil	Date Received:	01.24.19 12.15
Lab Sample Id:	612382-001	Date Collected:	01.23.19 08.50	Sample Depth:	1.0 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.24.19 12.30	Basis:	Wet Weight
Seq Number:	3077011				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**139**	5.00	mg/kg	01.24.19 18.14		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.24.19 14.00	Basis:	Wet Weight
Seq Number:	3076974				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.24.19 21.51	U	1
Diesel Range Organics (DRO)	C10C28DRO	**17.8**	15.0	mg/kg	01.24.19 21.51		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	01.24.19 21.51	U	1
Total TPH	PHC635	**17.8**	15.0	mg/kg	01.24.19 21.51		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	01.24.19 21.51	
o-Terphenyl	84-15-1	98	%	70-135	01.24.19 21.51	

Certificate of Analytical Results 612382

LT Environmental, Inc., Arvada, CO

Perla Negra

Sample Id:	**BH03 A**	Matrix:	Soil	Date Received:	01.24.19 12.15
Lab Sample Id:	612382-001	Date Collected:	01.23.19 08.50	Sample Depth:	1.0 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	01.24.19 12.30	Basis:	Wet Weight
Seq Number:	3076948				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.24.19 17.15	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.24.19 17.15	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.24.19 17.15	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.24.19 17.15	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.24.19 17.15	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.24.19 17.15	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.24.19 17.15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	94	%	70-130	01.24.19 17.15	
4-Bromofluorobenzene	460-00-4	98	%	70-130	01.24.19 17.15	

Certificate of Analytical Results 612382

LT Environmental, Inc., Arvada, CO

Perla Negra

Sample Id:	**BH04**	Matrix:	Soil	Date Received:	01.24.19 12.15
Lab Sample Id:	612382-002	Date Collected:	01.23.19 09.15	Sample Depth:	0.3 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.24.19 12.30	Basis:	Wet Weight
Seq Number:	3077011				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**212**	5.00	mg/kg	01.24.19 18.33		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.24.19 14.00	Basis:	Wet Weight
Seq Number:	3076974				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	01.24.19 22.11	U	1
Diesel Range Organics (DRO)	C10C28DRO	**26.0**	14.9	mg/kg	01.24.19 22.11		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	14.9	mg/kg	01.24.19 22.11	U	1
Total TPH	PHC635	**26.0**	14.9	mg/kg	01.24.19 22.11		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	01.24.19 22.11	
o-Terphenyl	84-15-1	97	%	70-135	01.24.19 22.11	

Certificate of Analytical Results 612382

LT Environmental, Inc., Arvada, CO

Perla Negra

Sample Id:	**BH04**	Matrix:	Soil	Date Received:	01.24.19 12.15
Lab Sample Id:	612382-002	Date Collected:	01.23.19 09.15	Sample Depth:	0.3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	01.24.19 12.30	Basis:	Wet Weight
Seq Number:	3076948				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.24.19 17.37	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.24.19 17.37	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.24.19 17.37	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.24.19 17.37	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.24.19 17.37	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.24.19 17.37	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.24.19 17.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	94	%	70-130	01.24.19 17.37	
4-Bromofluorobenzene	460-00-4	101	%	70-130	01.24.19 17.37	

Certificate of Analytical Results 612382

LT Environmental, Inc., Arvada, CO

Perla Negra

Sample Id:	**BH04A**	Matrix:	Soil	Date Received:	01.24.19 12.15
Lab Sample Id:	612382-003	Date Collected:	01.23.19 09.15	Sample Depth:	0.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.24.19 12.30	Basis:	Wet Weight
Seq Number:	3077011				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**152**	5.00	mg/kg	01.24.19 18.39		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.24.19 14.00	Basis:	Wet Weight
Seq Number:	3076974				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	01.24.19 22.31	U	1
Diesel Range Organics (DRO)	C10C28DRO	**19.2**	14.9	mg/kg	01.24.19 22.31		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	14.9	mg/kg	01.24.19 22.31	U	1
Total TPH	PHC635	**19.2**	14.9	mg/kg	01.24.19 22.31		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	01.24.19 22.31	
o-Terphenyl	84-15-1	97	%	70-135	01.24.19 22.31	

Certificate of Analytical Results 612382

LT Environmental, Inc., Arvada, CO

Perla Negra

Sample Id:	**BH04A**	Matrix:	Soil	Date Received:	01.24.19 12.15
Lab Sample Id:	612382-003	Date Collected:	01.23.19 09.15	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	01.24.19 12.30	Basis:	Wet Weight
Seq Number:	3076948				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.24.19 17.58	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.24.19 17.58	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.24.19 17.58	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	01.24.19 17.58	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.24.19 17.58	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.24.19 17.58	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.24.19 17.58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	01.24.19 17.58	
4-Bromofluorobenzene	460-00-4	107	%	70-130	01.24.19 17.58	

Certificate of Analytical Results 612382

LT Environmental, Inc., Arvada, CO

Perla Negra

Sample Id:	**BH05**	Matrix:	Soil	Date Received:	01.24.19 12.15
Lab Sample Id:	612382-004	Date Collected:	01.23.19 09.40	Sample Depth:	0.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.24.19 12.30	Basis:	Wet Weight
Seq Number:	3077011				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**106**	5.00	mg/kg	01.24.19 19.00		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.24.19 14.00	Basis:	Wet Weight
Seq Number:	3076974				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.24.19 22.51	U	1
Diesel Range Organics (DRO)	C10C28DRO	**28.5**	15.0	mg/kg	01.24.19 22.51		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	01.24.19 22.51	U	1
Total TPH	PHC635	**28.5**	15.0	mg/kg	01.24.19 22.51		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	01.24.19 22.51	
o-Terphenyl	84-15-1	100	%	70-135	01.24.19 22.51	

Certificate of Analytical Results 612382

LT Environmental, Inc., Arvada, CO

Perla Negra

Sample Id:	**BH05**	Matrix:	Soil	Date Received:	01.24.19 12.15
Lab Sample Id:	612382-004	Date Collected:	01.23.19 09.40	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	01.24.19 12.30	Basis:	Wet Weight
Seq Number:	3076948				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.24.19 18.20	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.24.19 18.20	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.24.19 18.20	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.24.19 18.20	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.24.19 18.20	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.24.19 18.20	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.24.19 18.20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	98	%	70-130	01.24.19 18.20	
4-Bromofluorobenzene	460-00-4	99	%	70-130	01.24.19 18.20	

Certificate of Analytical Results 612382

LT Environmental, Inc., Arvada, CO

Perla Negra

Sample Id:	**BH05A**	Matrix:	Soil	Date Received:	01.24.19 12.15
Lab Sample Id:	612382-005	Date Collected:	01.23.19 09.40	Sample Depth:	1.0 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.24.19 12.30	Basis:	Wet Weight
Seq Number:	3077011				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**124**	4.98	mg/kg	01.24.19 19.07		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.24.19 14.00	Basis:	Wet Weight
Seq Number:	3076974				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.24.19 23.11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.24.19 23.11	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	01.24.19 23.11	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.24.19 23.11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	01.24.19 23.11	
o-Terphenyl	84-15-1	97	%	70-135	01.24.19 23.11	

Certificate of Analytical Results 612382

LT Environmental, Inc., Arvada, CO

Perla Negra

Sample Id:	**BH05A**	Matrix:	Soil	Date Received:	01.24.19 12.15
Lab Sample Id:	612382-005	Date Collected:	01.23.19 09.40	Sample Depth:	1.0 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	01.24.19 12.30	Basis:	Wet Weight
Seq Number:	3076948				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.24.19 18.41	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.24.19 18.41	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.24.19 18.41	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.24.19 18.41	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.24.19 18.41	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.24.19 18.41	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.24.19 18.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	100	%	70-130	01.24.19 18.41	
1,4-Difluorobenzene	540-36-3	97	%	70-130	01.24.19 18.41	

Certificate of Analytical Results 612382

LT Environmental, Inc., Arvada, CO

Perla Negra

Sample Id:	**SS04**	Matrix:	Soil	Date Received:	01.24.19 12.15
Lab Sample Id:	612382-006	Date Collected:	01.23.19 09.30	Sample Depth:	0.3 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.24.19 12.30	Basis:	Wet Weight
Seq Number:	3077011				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**691**	4.97	mg/kg	01.24.19 19.13		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.24.19 14.00	Basis:	Wet Weight
Seq Number:	3076974				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.24.19 23.31	U	1
Diesel Range Organics (DRO)	C10C28DRO	**298**	15.0	mg/kg	01.24.19 23.31		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**72.2**	15.0	mg/kg	01.24.19 23.31		1
Total TPH	PHC635	**370**	15.0	mg/kg	01.24.19 23.31		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	01.24.19 23.31	
o-Terphenyl	84-15-1	109	%	70-135	01.24.19 23.31	

Certificate of Analytical Results 612382

LT Environmental, Inc., Arvada, CO

Perla Negra

Sample Id:	**SS04**	Matrix:	Soil	Date Received:	01.24.19 12.15
Lab Sample Id:	612382-006	Date Collected:	01.23.19 09.30	Sample Depth:	0.3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	01.24.19 12.30	Basis:	Wet Weight
Seq Number:	3076948				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.24.19 19.03	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.24.19 19.03	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.24.19 19.03	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.24.19 19.03	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.24.19 19.03	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.24.19 19.03	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.24.19 19.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	01.24.19 19.03	
1,4-Difluorobenzene	540-36-3	120	%	70-130	01.24.19 19.03	

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

QC Summary 612382

LT Environmental, Inc.

Perla Negra

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3077011 Matrix: Solid Date Prep: 01.24.19
MB Sample Id: 7670433-1-BLK LCS Sample Id: 7670433-1-BKS LCSD Sample Id: 7670433-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	226	250	226	90	230	92	90-110	2	20	mg/kg	01.24.19 15:35	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3077011 Matrix: Soil Date Prep: 01.24.19
Parent Sample Id: 612382-001 MS Sample Id: 612382-001 S MSD Sample Id: 612382-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	139	250	409	108	385	98	90-110	6	20	mg/kg	01.24.19 18:20	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3077011 Matrix: Soil Date Prep: 01.24.19
Parent Sample Id: 612243-014 MS Sample Id: 612243-014 S

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Chloride	457	248	646	76	90-110	mg/kg	01.24.19 16:51	X

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3076974 Matrix: Solid Date Prep: 01.24.19
MB Sample Id: 7670421-1-BLK LCS Sample Id: 7670421-1-BKS LCSD Sample Id: 7670421-1-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)	<8.00	1000	950	95	898	90	70-135	6	20	mg/kg	01.24.19 14:14	
Diesel Range Organics (DRO)	<8.13	1000	1030	103	978	98	70-135	5	20	mg/kg	01.24.19 14:14	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	95		118		113		70-135	%	01.24.19 14:14
o-Terphenyl	98		111		111		70-135	%	01.24.19 14:14

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 612382

LT Environmental, Inc.

Perla Negra

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3076974 Matrix: Soil Date Prep: 01.24.19
Parent Sample Id: 611651-001 MS Sample Id: 611651-001 S MSD Sample Id: 611651-001 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)	12.0	997	857	85	870	86	70-135	2	20	mg/kg	01.24.19 16:30	
Diesel Range Organics (DRO)	12.2	997	980	97	976	96	70-135	0	20	mg/kg	01.24.19 16:30	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	122		120		70-135	%	01.24.19 16:30
o-Terphenyl	111		109		70-135	%	01.24.19 16:30

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3076948 Matrix: Solid Date Prep: 01.24.19
MB Sample Id: 7670425-1-BLK LCS Sample Id: 7670425-1-BKS LCSD Sample Id: 7670425-1-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	0.118	118	0.112	112	70-130	5	35	mg/kg	01.24.19 15:07	
Toluene	<0.00200	0.100	0.103	103	0.0983	98	70-130	5	35	mg/kg	01.24.19 15:07	
Ethylbenzene	<0.00200	0.100	0.129	129	0.117	117	70-130	10	35	mg/kg	01.24.19 15:07	
m,p-Xylenes	<0.00401	0.200	0.241	121	0.235	118	70-130	3	35	mg/kg	01.24.19 15:07	
o-Xylene	<0.00200	0.100	0.125	125	0.110	110	70-130	13	35	mg/kg	01.24.19 15:07	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	97		116		128		70-130	%	01.24.19 15:07
4-Bromofluorobenzene	97		72		104		70-130	%	01.24.19 15:07

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3076948 Matrix: Soil Date Prep: 01.24.19
Parent Sample Id: 612242-001 MS Sample Id: 612242-001 S MSD Sample Id: 612242-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.103	102	0.125	125	70-130	19	35	mg/kg	01.24.19 15:49	
Toluene	<0.00202	0.101	0.0921	91	0.109	109	70-130	17	35	mg/kg	01.24.19 15:49	
Ethylbenzene	<0.00202	0.101	0.114	113	0.125	125	70-130	9	35	mg/kg	01.24.19 15:49	
m,p-Xylenes	<0.00403	0.202	0.226	112	0.249	125	70-130	10	35	mg/kg	01.24.19 15:49	
o-Xylene	<0.00202	0.101	0.107	106	0.118	118	70-130	10	35	mg/kg	01.24.19 15:49	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	120		124		70-130	%	01.24.19 15:49
4-Bromofluorobenzene	113		104		70-130	%	01.24.19 15:49

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

CHAIN OF CUSTODY

Page 1 Of 1

XENCO LABORATORIES

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Stafford, Texas (281-240-4200) | Dallas Texas (214-902-0300) | San Antonio, Texas (210-509-3334) | Midland, Texas (432-704-5251) | Phoenix, Arizona (480-355-0900)

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Xenco Quote # | Xenco Job # 612382

Client / Reporting Information

Company Name / Branch: LT Environmental, Inc. Permian Office
Company Address: 3300 N "A" St. Building 1 Unit 103 Midland, TX 79705
Email: abyers@ltenv.com; abaker@ltenv.com
Phone No: (432) 704-5178
Project Contact: Adrian Baker
Samplers's Name: Anna Byers

Project Information

Project Name/Number: Perla Negra
Project Location: Lea County
Invoice To: Kyle Littrell : XTO Energy
PO Number:

Analytical Information

Matrix Codes

W = Water
S = Soil/Sed/Solid
GW = Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
OW = Ocean/Sea Water
WI = Wipe
O = Oil
WW = Waste Water
A = Air

No.	Field ID / Point of Collection	Sample Depth	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preservative types: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	BTEX (only BTEX) 8021	TPH (DRO GRO ARO) 8015	Chloride (300.00)	Field Comments
1	BH03 A	1.0'	1/23	850	S	1								X	X	X	X	
2	BH04	0.3'		915	S	1								X	X	X	X	
3	BH04 A	0.5'		915	S	1								X	X	X	X	
4	BH05	0.5'		940	S	1								X	X	X	X	
5	BH05 A	1.0'		940	S	1								X	X	X	X	
6	SS04	0.3'	↓	930	S	1								X	X	X	X	
7																		
8																		
9																		
10																		

01/12/19

Final 1.000

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Turnaround Time (Business days)

- [X] Same Day TAT
- [ ] 5 Day TAT
- [ ] Next Day EMERGENCY
- [ ] 7 Day TAT
- [ ] 2 Day EMERGENCY
- [ ] Contract TAT
- [ ] 3 Day EMERGENCY

TAT Starts Day received by Lab, if received by 5:00 pm

Data Deliverable Information

- [ ] Level II Std QC
- [ ] Level IV (Full Data Pkg /raw data)
- [ ] Level III Std QC+ Forms
- [ ] TRRP Level IV
- [ ] Level 3 (CLP Forms)
- [ ] UST / RG -411
- [ ] TRRP Checklist

Notes:

FED-EX / UPS: Tracking #

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	Anna Byers	1/23/19 @12:30	1 Esperanza Gonzalez	2 Esperanza Gonzalez	1-23-19 3:51	2 [signature] 1/24/19 1715
3	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
5	Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable	On Ice ✓ Cooler Temp. 0.1 Thermo. Corr. Factor -0.1 / 1.0

Notice: Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the Client if such loses are due to circumstances beyond the control of Xenco. A minimum charge of $75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xenco but not analyzed will be invoiced at $5 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract.

ORIGIN ID:HOBA (575) 392-7550
** MIL SERVICES ETC, LLC
4008 N GRIMES
HOBBS NM 88240
UNITED STATES US
TO XENCO LABORATORIES SHIP CENTER
FEDEX EXPRESS SHIP CENTER
3600 COUNTY RD 1276 S
MIDLAND TX 79711
(432) 563-1800
INV:
PO:
REF:
DEPT:
SHIP DATE: 23JAN19
ACTWGT: 32.00 LB MAN
CAD: 0908328/CAFE3211
DIMS: 20x16x13 IN
BILL RECIPIENT
551C2/074C/104C
FedEx Express
J161118060501uv
TRK# 0201 4705 2519 9941
41 MAFA
THU - 24 JAN HOLD
STANDARD OVERNIGHT
HLD
MAFA
TX-US LBB

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 01/24/2019 12:15:00 PM

Work Order #: 612382

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

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	.1
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**
#5 Custody Seals intact on sample bottles?	**N/A**
#6*Custody Seals Signed and dated?	**N/A**
#7 *Chain of Custody present?	**Yes**
#8 Any missing/extra samples?	**No**
#9 Chain of Custody signed when relinquished/ received?	**Yes**
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**
#11 Container label(s) legible and intact?	**Yes**
#12 Samples in proper container/ bottle?	**Yes**
#13 Samples properly preserved?	**Yes**
#14 Sample container(s) intact?	**Yes**
#15 Sufficient sample amount for indicated test(s)?	**Yes**
#16 All samples received within hold time?	**Yes**
#17 Subcontract of sample(s)?	**N/A**
#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: Brianna Teel Date: 01/24/2019

Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 01/24/2019

Jessica Kramer

ATTACHMENT 3: SOIL SAMPLE LOGS

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

Identifier: BH01	Date: [redacted] 11/19/2018
Project Name: [redacted] Perla Negra	RP Number: IRP-5275
Logged By: Lynda Lambeth	Method: Hand Auger
Hole Diameter: 3"	Total Depth: 5'

LITHOLOGIC / SOIL SAMPLING LOG

Lat/Long: 32.6388 33473, -103.52126651
Field Screening: PID
Comments: Borehole on pad

	Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
15:20	D		750	Y	BH01	0.5'	0.5'	caliche	odor
15:25	D		128	Y	BH01	1	1'	caliche	
15:30	M		1178	N	BH01	2	2'	SP-SM	silty sand, fine, brown, N-odor, poorly graded
15:35	M		840	N	BH01	3	3'	SP-SM	recalibrated PID: 150, 100.0 ppm
15:40	M		80.5	N	BH01	5	5'	SPSM	silty sand, fine, brown, N-odor, poorly graded

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Identifier: BH02	Date: [redacted] 11/19/2018
Project Name: [redacted] Pecos Negra	RP Number: 1RP5275
Logged By: Lynden Tomlinson	Method: Hand Auger
Field Screening: PID	Hole Diameter: 3"
Lat/Long: 32.638808789, -103.52109484	Total Depth: 2'

LITHOLOGIC / SOIL SAMPLING LOG

Comments: Borehole on pad

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
D		7.2	N	BH02	0 0.5'	0.5'	Caliche	N odor light brown, well graded, cement, soft
D	—	—	—		1	·	Caliche	N odor, light brown, ↓ ↓ ↓
M	—	5.3	N	BH02	2	2'	SP-SM	silty sand, poorly graded, N odor, brown
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Identifier:	Date:
BH03	1/23/2019
Project Name:	**RP Number:**
Perla Negra	1RP-5275

LITHOLOGIC / SOIL SAMPLING LOG

Logged By:	Method:
Anna Byers	Hand Auger

Lat/Long:	Field Screening:	Hole Diameter:	Total Depth:
32.63876563, -103.52123380	Cl strips; PID	3.5"	1.0'

Comments: Borehole on pad

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
DRY	<205	754	no	BH03	0	0.5'	caliche	very soft, light grey, non plastic, well graded gravel to fine sand particles; (caliche) compact
DRY	<205	210	no	BH03A	1	1.0'		TOTAL DEPTH
					2			
					3			
					4			
					5			
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					12			

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Identifier:	Date:
BH04	1/23/19
Project Name:	**RP Number:**
Perla Negra	IRP-5275

LITHOLOGIC / SOIL SAMPLING LOG

Logged By:	Method:
Anna Byers	Hand Auger

Lat/Long:	Field Screening:	Hole Diameter:	Total Depth:
32.63891870, -103.52102346	PID & Cl⁻ test strips	3.5"	0.5'

Comments: Borehole on pad

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
DRY	<205	13.2	no	BH04	0	0.3'	caliche	very soft, light grey, non plastic, well graded gravel to fine sand particles, (caliche) compact
DRY	<205	53.5	no	BH04A	0.5'			TOTAL DEPTH
					1			
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Identifier:	Date:
BH05	1/23/2019
Project Name:	**RP Number:**
Perla Negra	1RP-5275

LITHOLOGIC / SOIL SAMPLING LOG

Logged By:	Method:
Anna Byers	Hand Auger

Lat/Long:	Field Screening:	Hole Diameter:	Total Depth:
32.63867585, -103.52095659	PID; Cl⁻ test strips	3.5"	1.0'

Comments: Borehole on pad

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
DRY	<205	144.2	no	BH05	0	0.5'	caliche	very soft, light brown, non plastic, well graded gravel to fine sand particles; (caliche) compact
DRY	<205	13.8	no	BH05A	1	1.0'	caliche	TOTAL DEPTH
					2			
					3			
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Northwest facing view of the excavation.

Project: 012918183	XTO Energy, Inc. Perla Negra Central Tank Battery	LTE Advancing Opportunity
December 20, 2018	Photographic Log	

West facing view facing of the excavation.

Project: 012918183	XTO Energy, Inc. Perla Negra Central Tank Battery	LTE Advancing Opportunity
December 20, 2018	Photographic Log	

Northwest facing view facing of the excavation.

Project: 012918183	XTO Energy, Inc. Perla Negra Central Tank Battery	LTE Advancing Opportunity
December 20, 2018	Photographic Log	