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

February 11, 2019

Mr. Bradford Billings
New Mexico Oil Conservation Division
1220 South St. Francis Drive, #3
Santa Fe, New Mexico 87505

RE: Closure Request
Horned Toad 36 State #002H
Remediation Permit Number 2RP-4850
Eddy County, New Mexico

Dear Mr. Billings:

LT Environmental, Inc. (LTE), on behalf of XTO Energy, Inc. (XTO), presents the following report detailing excavation of impacted soil and confirmation soil sampling activities at the Horned Toad 36 State #002H (Site) located in Unit Letter B, Section 36, Township 24 South, Range 29 East, in Eddy County, New Mexico (Figure 1). The latitude and longitude of the release are 32.180459 degrees (°), -103.937263°. The purpose of the excavation activities was to address impact to soil after a 1-inch valve on the well head was discovered to be open and caused the release of 9 barrels (bbls) of crude oil and 13 bbls of produced water. The release was mostly contained to the well pad, with a small amount of liquid flowing onto the south-adjacent pasture. The release was discovered on June 25, 2018 and XTO recovered 2 bbls of oil and 2.5 bbls of produced water. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form C-141 on July 9, 2018 and it was assigned Remediation Permit Number (RP) 2RP-4850 (Attachment 1).

The release is included in the *Compliance Agreement for Remediation for Historical Releases* (Compliance Agreement) between XTO and the NMOCD effective November 13, 2018. The purpose of the Compliance Agreement is to ensure reportable releases that occurred prior to August 14, 2018, where XTO is responsible for the corrective action, comply with Title 19, Chapter 15, Part 29 (19.15.29) of the New Mexico Administrative Code (NMAC) dated August 14, 2018. The release is categorized as a Tier II site in the Compliance Agreement, meaning remediation of the release began prior to August 14, 2018, the effective date of 19.15.29 NMAC, however the closure report is pending. Based on the excavation activities and results of the confirmation soil sampling events, XTO is requesting no further action for this release.

BACKGROUND

According to Section 12 of 19.15.29 NMAC, LTE applied Table 1, the *Closure Criteria for Soils Impacted by a Release*. Depth to groundwater at the Site is estimated to be greater than 100 feet

below ground surface (bgs) based on the nearest water well data. The nearest permitted water well with depth to water data is United States Geological Survey (USGS) well 320956103574301 25S.29E.02.11111, located approximately 1.79 miles southwest of the Site, with a depth to groundwater of 98.1 feet and a total depth of 140 feet. The water well is approximately 111 feet lower in elevation than the Site. Water well data for USGS 320956103574301 25S.29E.02.11111 was last updated in 1958. The closest significant watercourse to the Site is an unnamed second order tributary to Cedar Canyon located approximately 182 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); 100 mg/kg total petroleum hydrocarbons (TPH); and 600 mg/kg chloride.

SOIL SAMPLING

On June 26, 2018, an LTE scientist collected 5 soil samples (SS01 through SS05) to assess the lateral extent of soil impacts. The soil sample locations were selected based on information provided on the initial Form C-141 and field observations (Figure 2). Staining was observed in the areas sampled on the well pad. To eliminate the effects from weathering and natural degradation of contaminants at the ground surface, samples were collected at 0.5 feet bgs.

The soil samples were screened for volatile aromatic hydrocarbons using a photo-ionization detector (PID) equipped with a 10.6 electron volt lamp. The soil samples were placed directly into pre-cleaned glass jars, labeled with 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-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH oil range organics (ORO) by USEPA Method 8015M/D, and chloride by USEPA Method 300.0.

Laboratory analytical results for preliminary soil samples indicated that BTEX concentrations were compliant with NMOCD Table 1 Closure Criteria. TPH concentrations of 23,300 mg/kg in SS02 exceeded the NMOCD Table 1 Closure Criteria of 100 mg/kg. Soil sample results indicated that chloride concentrations of 2,400 mg/kg and 16,300 mg/kg exceeded the closure criteria of 600 mg/kg in SS01 and SS02, respectively. Soil samples collected south of the well pad (SS03 through SS05) were compliant with NMOCD Table 1 Closure Criteria for BTEX, TPH, and chloride. The laboratory analytical results are depicted on Figure 2, summarized in Table 1, and the complete reports are included as Attachment 2.

EXCAVATION ACTIVITIES

LTE personnel returned to the Site to oversee the excavation of impacted soil as indicated by field screening and laboratory analytical results exceeding the NMOCD Table 1 Closure Criteria for chloride in the vicinity of preliminary soil samples SS01 and SS02 and for TPH near SS02. To delineate hydrocarbon and chloride impacts to soil and to direct excavation activities, LTE screened soil using a PID and Hach® chloride QuanTab® test strips.

The excavation ultimately extended to all preliminary sampling locations and measured approximately 39,200 square feet in area with the depth ranging from approximately 2 feet to 8.5 feet bgs. The horizontal extent and final sample locations of the excavation are illustrated on Figure 3. Approximately 2,842 cubic yards of impacted soil were removed using a mini-excavator, loader, dump truck, and hydro-vacuum. Impacted soil was transported and properly disposed of at the Lea Land Landfill Facility, in Hobbs, New Mexico.

LTE collected 40 final excavation confirmation soil samples: 15 floor samples (FS01 through FS15), and 28 sidewall samples (SW01 through SW25). A total of 3 excavation confirmation samples (SW03, SW11 and SW11A) exceeded NMOCD Table 1 Closure Criteria and additional impacted soil was excavated from the Site.

Because the excavation was conducted prior to implementation of 19.15.29 NMAC and the Compliance Agreement, excavation confirmation samples were collected as discrete samples instead of composite samples. Because the area of impacted soil could be visually discerned, and the location of the release was well documented, LTE applied a judgmental sampling protocol, selecting sample locations based on visual observation to represent the floor and sidewalls of the excavation. The sampling protocol complied with *Guidance on Choosing a Sampling Design for Environmental Data Collection for Use in Developing a Quality Assurance Project Plan*, EPA QA/G-5S, December 2002. The confirmation soil samples were collected and handled as previously described and submitted to Xenco in Midland, Texas.

ANALYTICAL RESULTS

Excavation confirmation samples were collected as impacted soil was removed. Laboratory analytical results for confirmation soil samples SW03, SW11, and SW11A exceeded NMOCD Table 1 Closure Criteria; therefore, additional soil was removed from those locations and additional soil samples were collected from the new sidewalls to confirm removal of impacted soil. All final excavation confirmation soil samples were compliant with the NMOCD Table 1 Closure Criteria for BTEX, TPH, and chloride. Laboratory analytical results are depicted on Figure 2, summarized in Table 1, and the complete reports are included as Attachment 2. A photographic log is included as Attachment 3.

CONCLUSIONS

The impacted soil was excavated from the release area and laboratory analytical results for the confirmation soil samples collected from the final excavation extent indicate that BTEX, TPH, and chloride concentrations are compliant with NMOCD Table 1 Closure Criteria. XTO has successfully removed the impacted soil at the Site and 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 site conditions. An updated NMOCD Form C-141 is included as Attachment 1.

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

Sincerely,

LT ENVIRONMENTAL, INC.

Adrian Baker
Project Geologist

Ashley L. Ager, M.S., P.G.
Senior Geologist

cc: Kyle Littrell, XTO
Mike Bratcher, NMOCD
Ryan Mann, State Land Office

Attachments:

Figure 1	Site Location Map
Figure 2	Initial Soil Sample Locations
Figure 3	Final Soil Sample Locations
Table 1	Soil Analytical Results
Attachment 1	Initial/Final NMOCD Form C-141 (2RP-4850)
Attachment 2	Laboratory Analytical Reports
Attachment 3	Photographic Log

FIGURES

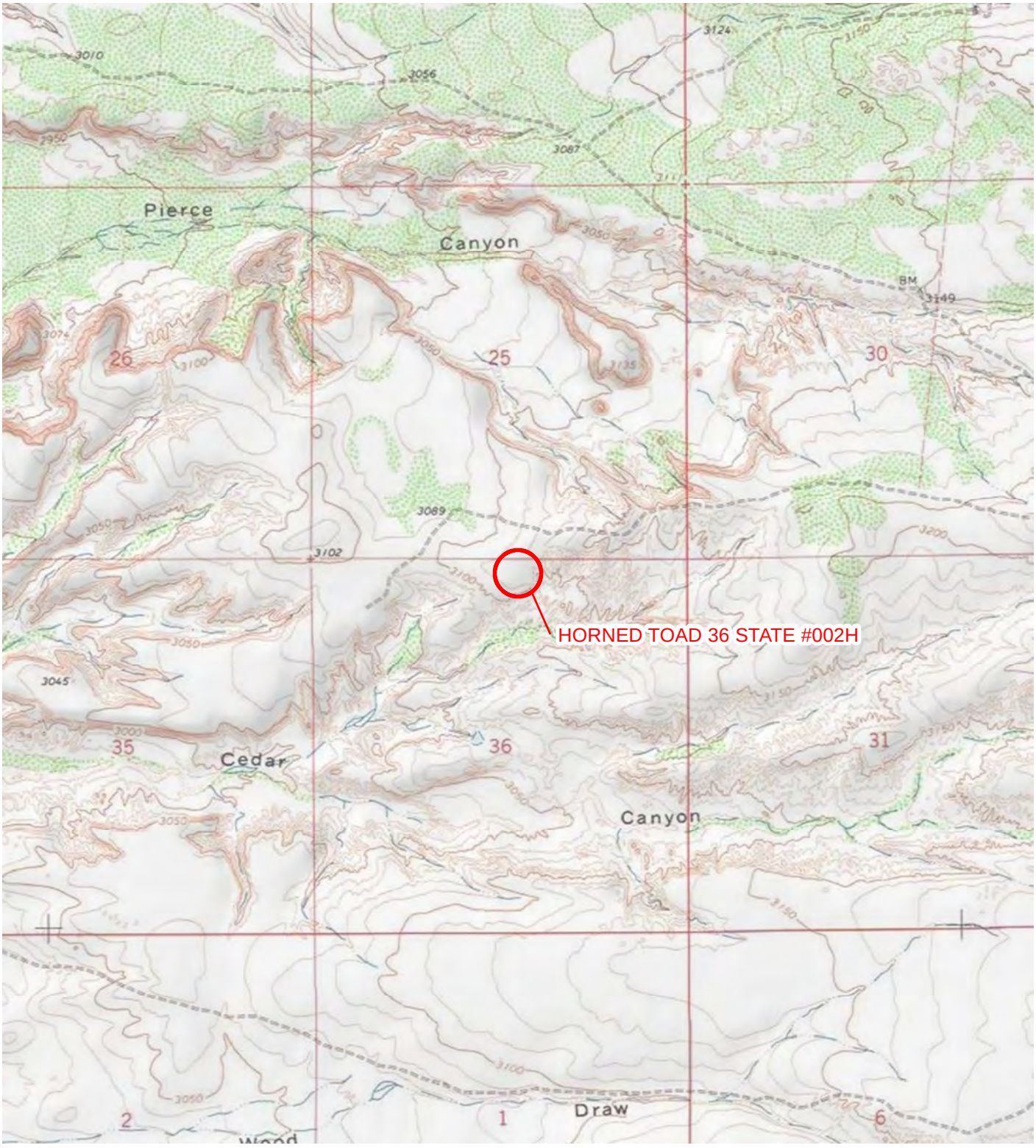


IMAGE COURTESY OF ESRI/USGS

LEGEND

SITE LOCATION

0 2,000 4,000

Feet

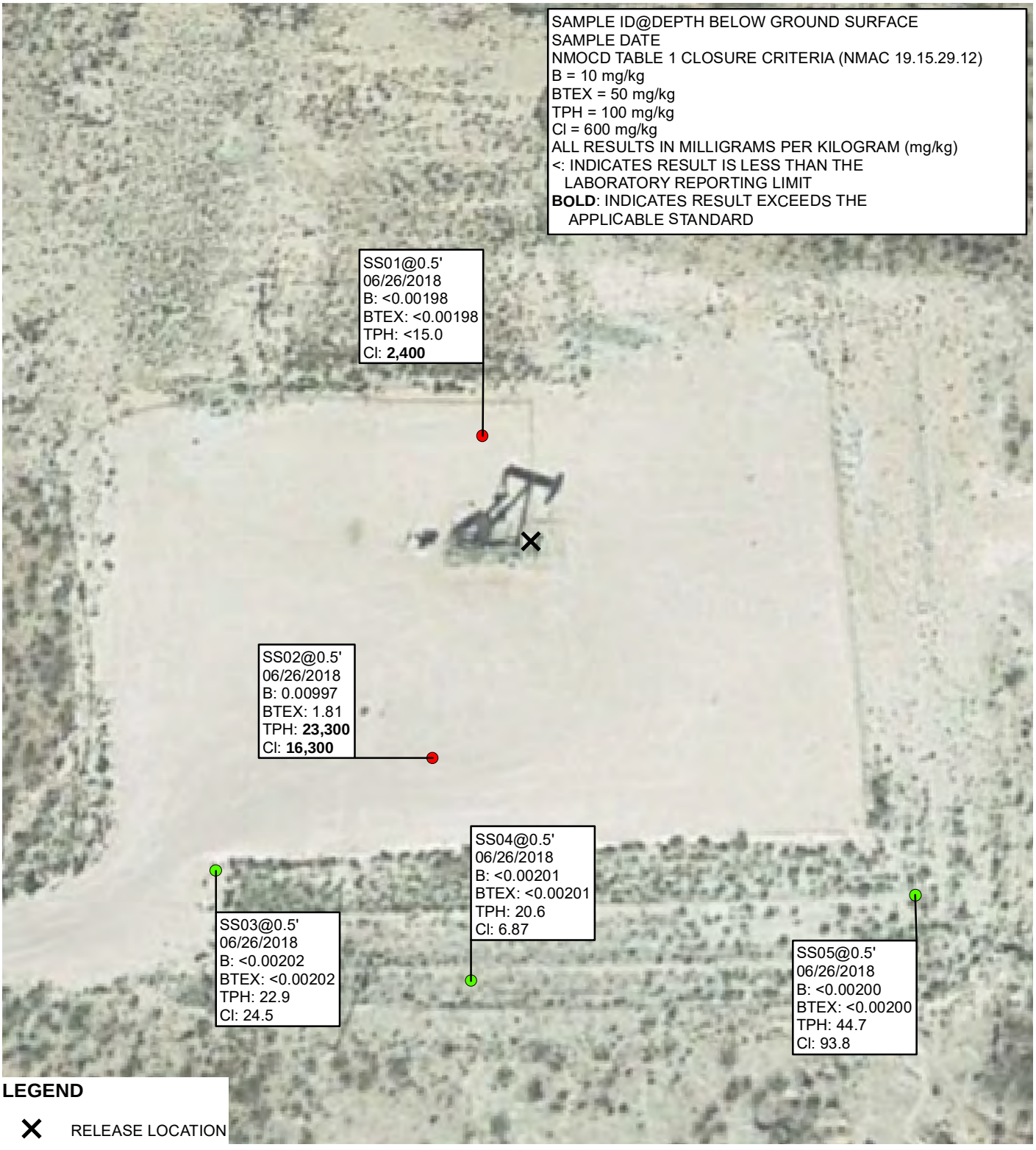
N

NEW MEXICO

NOTE: REMEDIATION PERMIT
NUMBER 2RP-4850

FIGURE 1
SITE LOCATION MAP
HORNED TOAD 36 STATE #002H
UNIT B SEC 36 T24S R29E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012918129_HORNED TOAD 36 STATE #002H\012918129_FIG01_SL_2018_4850.mxd



B: BENZENE
BTEX: TOTAL BENZENE, TOLUENE, ETHYLBENZENE, AND TOTAL XYLENES
TPH – TOTAL PETROLEUM HYDROCARBONS
Cl - CHLORIDE
NMAC – NEW MEXICO ADMINISTRATIVE CODE
NMOCD – NEW MEXICO OIL CONSERVATION DIVISION
NOTE: REMEDIATION PERMIT NUMBER 2RP-4850

FIGURE 2
PRELIMINARY SOIL SAMPLE LOCATIONS
HORNED TOAD 36 STATE #002H
UNIT B SEC 36 T24S R29E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012918129_HORNED TOAD 36 STATE #002H\012918129_FIG02_SITE_2018_4850_011019.mxd

LEGEND

IMAGE COURTESY OF GOOGLE EARTH 2017

- RELEASE LOCATION
- EXCAVATION CONFIRMATION SAMPLE
- FINAL EXCAVATION CONFIRMATION SAMPLE
- EXCAVATION EXTENT AS OF 11/05/2018

0 50 100
Feet

N

NOTE: REMEDIATION PERMIT NUMBER 2RP-4850

FIGURE 3
FINAL SOIL SAMPLE LOCATIONS
HORNED TOAD 36 STATE #002H
UNIT B SEC 36 T24S R29E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

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TABLES

TABLE 1
SOIL ANALYTICAL RESULTS

HORNED TOAD 36 STATE #002H
REMEDIATION PERMIT NUMBER 2RP-4850
EDDY 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	06/26/2018	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<15.0	<15.0	<15.0	<15.0	<15.0	**2,400**
SS02	0.5	06/26/2018	0.00997	0.280	0.323	1.20	1.81	2,650	20,400	268	23,100	**23,300**	**16,300**
SS03	0.5	06/26/2018	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	22.9	<15.0	<15.0	22.9	22.9	24.5
SS04	0.5	06/26/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	20.6	<15.0	<15.0	20.6	20.6	6.87
SS05	0.5	06/26/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	26.0	18.7	<15.0	44.7	44.7	93.8
FS01	4	08/03/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	<4.97
FS02	3	08/03/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	<15.0	232
FS03	3.5	08/03/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	<15.0	322
SW01	2	08/03/2018	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<15.0	<15.0	<15.0	<15.0	<15.0	6.82
SW02	2.5	08/03/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	493
SW03	2	08/03/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	182	<15.0	182	**182**	307
SW04	2	08/03/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	<15.0	16.2
FS04	4	08/06/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	16.3	<15.0	16.3	16.3	39.5
SW05	3	08/06/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	<15.0	77.6
SW06	3	08/06/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	18.9
SW07	3	08/06/2018	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<15.0	<15.0	<15.0	<15.0	<15.0	32.8
FS05	4	08/07/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	15.8	<15.0	15.8	15.8	12.6
FS06	3.5	08/07/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	54.6	<15.0	54.6	54.6	59.3
FS07	3.5	08/07/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	58.9	<15.0	58.9	58.9	40.5
SW08	2.5	08/07/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<14.9	<14.9	<14.9	<14.9	<14.9	12.4
FS08	3.5	08/08/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	23.3	<15.0	23.3	23.3	145
FS09	2	08/08/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	<15.0	25.6
SW09	2.5	08/08/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<14.9	24.4	<14.9	24.4	24.4	294
FS10	2	08/09/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<14.9	<14.9	<14.9	<14.9	<14.9	<4.97
FS11	3	08/09/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	47.8	<15.0	47.8	47.8	<4.95
SW10	2.5	08/09/2018	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<15.0	79.2	<15.0	79.2	79.2	259
SW11	1	08/09/2018	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<15.0	110	<15.0	110	**110**	45.4

TABLE 1 (Continued)
SOIL ANALYTICAL RESULTS

HORNED TOAD 36 STATE #002H
REMEDIATION PERMIT NUMBER 2RP-4850
EDDY 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)
SW12	1	08/09/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	<15.0	25.4
SW13	1	08/09/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	<15.0	21.3
SW14	2.5	08/09/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	<15.0	35.1
SW15	2.5	08/09/2018	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<15.0	<15.0	<15.0	<15.0	<15.0	34.2
FS12	8.5	08/10/2018	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<15.0	<15.0	<15.0	<15.0	<15.0	217
FS13	6	08/10/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	16.3	<15.0	16.3	16.3	216
SW16	4	08/10/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	<15.0	40.1
SW17	4	08/10/2018	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<14.9	<14.9	<14.9	<14.9	<14.9	102
SW18	4	08/10/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	<15.0	395
SW19	3	08/10/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	140
SW20	3	08/10/2018	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<15.0	<15.0	<15.0	<15.0	<15.0	164
FS14	7	08/13/2018	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<15.0	<15.0	<15.0	<15.0	<15.0	28.7
SW21	2.5	08/13/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	52.1
SW22	2	08/13/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	173
SW11A	1	10/22/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	146	18.0	146	**164**	225
SW03A	2	10/23/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	327
SW23	2	10/23/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	74.4
FS15	2	11/05/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	18.0	<15.0	18.0	18.0	<5.00
SW11B	1	11/05/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	7.47
SW24	1	11/05/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	18.9
SW25	0.5	11/05/2018	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<15.0	<15.0	<15.0	<15.0	<15.0	11.8
NMOCD Table 1 Closure Criteria			10	NE	NE	NE	50	NE	NE	NE	NE	100	600

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

ATTACHMENT 1: INITIAL/FINAL NMOCD FORM C-141 (2RP-4850)

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

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

JUL 09 2018
DISTRICT II-ARTESIA O.C.D.

Form C-141
Revised April 3, 2017

Submit Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

nAB1819187630 Please list BOPCO 2407137

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: XTO Energy, BOPCO	Contact: Kyle Littrell
Address: 522 W. Mermod, Suite 704 Carlsbad, N.M. 88220	Telephone No: 432-221-7331
Facility Name: Horned Toad 36 State #002H	Facility Type: Exploration and Production

Surface Owner: State	Mineral Owner: State	API No: 30-015-35837

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
B	36	24S	29E	220	North	2410	East	Eddy

Latitude 32.180459 Longitude -103.937263 NAD83

NATURE OF RELEASE

Type of Release Oil and produced water	Volume of Release 9bbl oil, 13bbl produced water	Volume Recovered 2bbl oil, 2.5bbl produced water
Source of Release 1" valve	Date and Hour of Occurrence 6/25/2018, AM	Date and Hour of Discovery 6/25/2018, 2:00 PM
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom? N/A	
By Whom? N/A	Date and Hour: N/A	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.*
N/A

Describe Cause of Problem and Remedial Action Taken.*
A 1" valve was discovered open on the well head. Valve was closed.

Describe Area Affected and Cleanup Action Taken.*
Fluid traveled south across the well pad, with a small amount impacting the pasture on the southern edge of the location. Vacuum trucks were dispatched and recovered 4.5 bbls of standing fluid. An environmental contractor has been retained to assist with delineation and remediation efforts.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature:

Printed Name: Kyle Littrell

Title: Environmental Coordinator

E-mail Address: Kyle_Littrell@xtoenergy.com

Date: 7/9/2018 Phone: 432-221-7331

OIL CONSERVATION DIVISION

Signed By Mike Bratcher

Approved by Environmental Specialist:

Approval Date: 7/10/18 Expiration Date: N/A

Conditions of Approval:
See attached

Attached nRP-4850

* Attach Additional Sheets If Necessary

Operator/Responsible Party,

The OCD has received the form C-141 you provided on 7/9/2018 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 2RP-4850 has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

> *The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC.* [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District 2 office in ARTESIA on or before 8/9/2018. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

- Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.

- Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.

- Nominal detection limits for field and laboratory analyses must be provided.

- Composite sampling is not generally allowed.

- Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

•Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

• If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

• Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

Jim Griswold
OCD Environmental Bureau Chief
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
505-476-3465
jim.griswold@state.nm.us

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	
District RP	2RP-4850
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: XTO Energy, Inc	OGRID: 5380
Contact Name: Kyle Littrell	Contact Telephone: (432)-221-7331
Contact email: Kyle_Littrell@xtoenergy.com	Incident #: 2RP-4850
Contact mailing address 522 W. Mermod, Suite 704 Carlsbad, NM 88220	

Location of Release Source

Latitude 32.180459 Longitude -103.937263

(NAD 83 in decimal degrees to 5 decimal places)

Site Name Horned Toad 36 State #002H	Site Type Production Bulk Storage Facility
Date Release Discovered 6/25/2018	API# *(if applicable)* 30-015-35837

Unit Letter	Section	Township	Range	County
B	36	24S	29E	Eddy

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

Nature and Volume of Release

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

☒ Crude Oil	Volume Released (bbls) 9 bbls	Volume Recovered (bbls) 2 bbls
☒ Produced Water	Volume Released (bbls) 13 bbls	Volume Recovered (bbls) 2.5 bbls
	Is the concentration of dissolved chloride 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

A 1" valve was discovered open on the well head. Valve was closed.

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	2RP-4850
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

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: 2/11/2019

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

OCD Only

Received by: Date:

Incident ID	
District RP	2RP-4850
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

- [X] Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- [X] Field data
- [X] Data table of soil contaminant concentration data
- [X] Depth to water determination
- [X] Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- [X] Boring or excavation logs
- [X] Photographs including date and GIS information
- [X] Topographic/Aerial maps
- [X] 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	2RP-4850
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: 02/11/2019

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	2RP-4850
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: 02/11/2019

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: Brittany Hall Date: 2/24/2023

Printed Name: Brittany Hall Title: Environmental Specialist

ATTACHMENT 2 LABORATORY ANALYTICAL REPORTS

Analytical Report 590699

for

LT Environmental, Inc.

Project Manager: Adrian Baker

Horned Toad 36 State #2H

06-JUL-18

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-18-26), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-17-16), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-17-12)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-17-16)
Xenco-Odessa (EPA Lab Code: TX00158): Texas (T104704400-18-15)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-17-3)
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)

06-JUL-18

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

Reference: XENCO Report No(s): **590699**
Horned Toad 36 State #2H
Project Address: Delaware Basin

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) 590699. 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. 590699 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 590699

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS01	S	06-26-18 14:38	6 In	590699-001
SS02	S	06-26-18 15:11	6 In	590699-002
SS03	S	06-26-18 14:53	6 In	590699-003
SS04	S	06-26-18 15:03	6 In	590699-004
SS05	S	06-26-18 15:04	6 In	590699-005

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: Horned Toad 36 State #2H

Project ID:
Work Order Number(s): *590699*

Report Date: *06-JUL-18*
Date Received: *06/28/2018*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3055410 BTEX by EPA 8021B

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

Certificate of Analysis Summary 590699

LT Environmental, Inc., Arvada, CO

Project Name: Horned Toad 36 State #2H

Project Id:
Contact: Adrian Baker
Project Location: Delaware Basin

Date Received in Lab: Thu Jun-28-18 10:10 am
Report Date: 06-JUL-18
Project Manager: Jessica Kramer

Analysis Requested											
	Lab Id:	590699-001		590699-002		590699-003		590699-004		590699-005	
	Field Id:	SS01		SS02		SS03		SS04		SS05	
	Depth:	6- In		6- In		6- In		6- In		6- In	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jun-26-18 14:38		Jun-26-18 15:11		Jun-26-18 14:53		Jun-26-18 15:03		Jun-26-18 15:04	
BTEX by EPA 8021B	***Extracted:***	Jul-03-18 09:00		Jul-03-18 09:00		Jul-03-18 09:00		Jul-03-18 09:00		Jul-03-18 09:00	
	Analyzed:	Jul-03-18 18:32		Jul-03-18 20:59		Jul-03-18 18:50		Jul-03-18 19:09		Jul-03-18 19:27	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00198	0.00198	0.00997	0.00201	<0.00202	0.00202	<0.00201	0.00201	<0.00200	0.00200
Toluene		<0.00198	0.00198	0.280	0.00201	<0.00202	0.00202	<0.00201	0.00201	<0.00200	0.00200
Ethylbenzene		<0.00198	0.00198	0.323	0.00201	<0.00202	0.00202	<0.00201	0.00201	<0.00200	0.00200
m,p-Xylenes		<0.00397	0.00397	0.800	0.00402	<0.00404	0.00404	<0.00402	0.00402	<0.00399	0.00399
o-Xylene		<0.00198	0.00198	0.399	0.00201	<0.00202	0.00202	<0.00201	0.00201	<0.00200	0.00200
Total Xylenes		<0.00198	0.00198	1.20	0.00201	<0.00202	0.00202	<0.00201	0.00201	<0.00200	0.00200
Total BTEX		<0.00198	0.00198	1.81	0.00201	<0.00202	0.00202	<0.00201	0.00201	<0.00200	0.00200
Inorganic Anions by EPA 300	***Extracted:***	Jul-02-18 10:00		Jul-02-18 10:00		Jul-02-18 10:00		Jul-02-18 10:00		Jul-02-18 10:00	
	Analyzed:	Jul-02-18 12:52		Jul-02-18 12:57		Jul-02-18 13:03		Jul-02-18 13:08		Jul-02-18 13:14	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		2400	49.9	16300	250	24.5	4.98	6.87	4.99	93.8	4.99
TPH by SW8015 Mod	***Extracted:***	Jun-29-18 17:00		Jun-29-18 08:00		Jun-29-18 08:00		Jun-29-18 08:00		Jun-29-18 08:00	
	Analyzed:	Jun-29-18 19:54		Jun-29-18 17:05		Jun-29-18 17:27		Jun-29-18 17:48		Jun-29-18 18:09	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	2650	150	22.9	15.0	20.6	15.0	26.0	15.0
Diesel Range Organics (DRO)		<15.0	15.0	20400	150	<15.0	15.0	<15.0	15.0	18.7	15.0
Oil Range Hydrocarbons (ORO)		<15.0	15.0	268	150	<15.0	15.0	<15.0	15.0	<15.0	15.0
Total TPH		<15.0	15.0	23300	150	22.9	15.0	20.6	15.0	44.7	15.0

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Jessica Kramer
Project Assistant

Final 1.000

Certificate of Analytical Results 590699

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SS01**	Matrix:	Soil	Date Received:	06.28.18 10.10
Lab Sample Id:	590699-001	Date Collected:	06.26.18 14.38	Sample Depth:	6 In

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	07.02.18 10.00	Basis:	Wet Weight
Seq Number:	3055266				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2400**	49.9	mg/kg	07.02.18 12.52		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	JUM			% Moisture:	
Analyst:	JUM	Date Prep:	06.29.18 17.00	Basis:	Wet Weight
Seq Number:	3055312				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.29.18 19.54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.29.18 19.54	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	06.29.18 19.54	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	06.29.18 19.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	74	%	70-135	06.29.18 19.54	
o-Terphenyl	84-15-1	70	%	70-135	06.29.18 19.54	

Certificate of Analytical Results 590699

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SS01**	Matrix:	Soil	Date Received:	06.28.18 10.10
Lab Sample Id:	590699-001	Date Collected:	06.26.18 14.38	Sample Depth:	6 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	07.03.18 09.00	Basis:	Wet Weight
Seq Number:	3055410				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	07.03.18 18.32	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	07.03.18 18.32	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	07.03.18 18.32	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	07.03.18 18.32	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	07.03.18 18.32	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	07.03.18 18.32	U	1
Total BTEX		<0.00198	0.00198	mg/kg	07.03.18 18.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	07.03.18 18.32	
1,4-Difluorobenzene	540-36-3	119	%	70-130	07.03.18 18.32	

Certificate of Analytical Results 590699

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SS02**	Matrix:	Soil	Date Received:	06.28.18 10.10
Lab Sample Id:	590699-002	Date Collected:	06.26.18 15.11	Sample Depth:	6 In

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	07.02.18 10.00	Basis:	Wet Weight
Seq Number:	3055266				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**16300**	250	mg/kg	07.02.18 12.57		50

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	JUM			% Moisture:	
Analyst:	JUM	Date Prep:	06.29.18 08.00	Basis:	Wet Weight
Seq Number:	3055311				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**2650**	150	mg/kg	06.29.18 17.05		10
Diesel Range Organics (DRO)	C10C28DRO	**20400**	150	mg/kg	06.29.18 17.05		10
Oil Range Hydrocarbons (ORO)	PHCG2835	**268**	150	mg/kg	06.29.18 17.05		10
Total TPH	PHC635	**23300**	150	mg/kg	06.29.18 17.05		10

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	06.29.18 17.05	
o-Terphenyl	84-15-1	77	%	70-135	06.29.18 17.05	

Certificate of Analytical Results 590699

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SS02**	Matrix:	Soil	Date Received:	06.28.18 10.10
Lab Sample Id:	590699-002	Date Collected:	06.26.18 15.11	Sample Depth:	6 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	07.03.18 09.00	Basis:	Wet Weight
Seq Number:	3055410				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	**0.00997**	0.00201	mg/kg	07.03.18 20.59		1
Toluene	108-88-3	**0.280**	0.00201	mg/kg	07.03.18 20.59		1
Ethylbenzene	100-41-4	**0.323**	0.00201	mg/kg	07.03.18 20.59		1
m,p-Xylenes	179601-23-1	**0.800**	0.00402	mg/kg	07.03.18 20.59		1
o-Xylene	95-47-6	**0.399**	0.00201	mg/kg	07.03.18 20.59		1
Total Xylenes	1330-20-7	**1.20**	0.00201	mg/kg	07.03.18 20.59		1
Total BTEX		**1.81**	0.00201	mg/kg	07.03.18 20.59		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	114	%	70-130	07.03.18 20.59	
1,4-Difluorobenzene	540-36-3	71	%	70-130	07.03.18 20.59	

Certificate of Analytical Results 590699

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SS03**	Matrix:	Soil	Date Received:	06.28.18 10.10
Lab Sample Id:	590699-003	Date Collected:	06.26.18 14.53	Sample Depth:	6 In

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	07.02.18 10.00	Basis:	Wet Weight
Seq Number:	3055266				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**24.5**	4.98	mg/kg	07.02.18 13.03		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	JUM			% Moisture:	
Analyst:	JUM	Date Prep:	06.29.18 08.00	Basis:	Wet Weight
Seq Number:	3055311				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**22.9**	15.0	mg/kg	06.29.18 17.27		1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.29.18 17.27	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	06.29.18 17.27	U	1
Total TPH	PHC635	**22.9**	15.0	mg/kg	06.29.18 17.27		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	82	%	70-135	06.29.18 17.27	
o-Terphenyl	84-15-1	79	%	70-135	06.29.18 17.27	

Certificate of Analytical Results 590699

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SS03**	Matrix:	Soil	Date Received:	06.28.18 10.10
Lab Sample Id:	590699-003	Date Collected:	06.26.18 14.53	Sample Depth:	6 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	07.03.18 09.00	Basis:	Wet Weight
Seq Number:	3055410				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	07.03.18 18.50	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	07.03.18 18.50	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	07.03.18 18.50	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	07.03.18 18.50	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	07.03.18 18.50	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	07.03.18 18.50	U	1
Total BTEX		<0.00202	0.00202	mg/kg	07.03.18 18.50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	125	%	70-130	07.03.18 18.50	
4-Bromofluorobenzene	460-00-4	110	%	70-130	07.03.18 18.50	

Certificate of Analytical Results 590699

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SS04**	Matrix:	Soil	Date Received:	06.28.18 10.10
Lab Sample Id:	590699-004	Date Collected:	06.26.18 15.03	Sample Depth:	6 In

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	07.02.18 10.00	Basis:	Wet Weight
Seq Number:	3055266				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**6.87**	4.99	mg/kg	07.02.18 13.08		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	JUM			% Moisture:	
Analyst:	JUM	Date Prep:	06.29.18 08.00	Basis:	Wet Weight
Seq Number:	3055311				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**20.6**	15.0	mg/kg	06.29.18 17.48		1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	06.29.18 17.48	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	06.29.18 17.48	U	1
Total TPH	PHC635	**20.6**	15.0	mg/kg	06.29.18 17.48		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-135	06.29.18 17.48	
o-Terphenyl	84-15-1	80	%	70-135	06.29.18 17.48	

Certificate of Analytical Results 590699

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SS04**	Matrix:	Soil	Date Received:	06.28.18 10.10
Lab Sample Id:	590699-004	Date Collected:	06.26.18 15.03	Sample Depth:	6 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	07.03.18 09.00	Basis:	Wet Weight
Seq Number:	3055410				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	07.03.18 19.09	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	07.03.18 19.09	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	07.03.18 19.09	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	07.03.18 19.09	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	07.03.18 19.09	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	07.03.18 19.09	U	1
Total BTEX		<0.00201	0.00201	mg/kg	07.03.18 19.09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	111	%	70-130	07.03.18 19.09	
1,4-Difluorobenzene	540-36-3	112	%	70-130	07.03.18 19.09	

Certificate of Analytical Results 590699

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SS05**	Matrix:	Soil	Date Received:	06.28.18 10.10
Lab Sample Id:	590699-005	Date Collected:	06.26.18 15.04	Sample Depth:	6 In

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	07.02.18 10.00	Basis:	Wet Weight
Seq Number:	3055266				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**93.8**	4.99	mg/kg	07.02.18 13.14		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	JUM			% Moisture:	
Analyst:	JUM	Date Prep:	06.29.18 08.00	Basis:	Wet Weight
Seq Number:	3055311				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**26.0**	15.0	mg/kg	06.29.18 18.09		1
Diesel Range Organics (DRO)	C10C28DRO	**18.7**	15.0	mg/kg	06.29.18 18.09		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	06.29.18 18.09	U	1
Total TPH	PHC635	**44.7**	15.0	mg/kg	06.29.18 18.09		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	84	%	70-135	06.29.18 18.09	
o-Terphenyl	84-15-1	78	%	70-135	06.29.18 18.09	

Certificate of Analytical Results 590699

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SS05**	Matrix:	Soil	Date Received:	06.28.18 10.10
Lab Sample Id:	590699-005	Date Collected:	06.26.18 15.04	Sample Depth:	6 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	07.03.18 09.00	Basis:	Wet Weight
Seq Number:	3055410				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.03.18 19.27	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.03.18 19.27	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.03.18 19.27	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	07.03.18 19.27	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.03.18 19.27	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.03.18 19.27	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.03.18 19.27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	77	%	70-130	07.03.18 19.27	
1,4-Difluorobenzene	540-36-3	100	%	70-130	07.03.18 19.27	

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 590699

LT Environmental, Inc.

Horned Toad 36 State #2H

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3055266 Matrix: Solid Date Prep: 07.02.18
MB Sample Id: 7657641-1-BLK LCS Sample Id: 7657641-1-BKS LCSD Sample Id: 7657641-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<4.99	250	247	99	247	99	90-110	0	20	mg/kg	07.02.18 10:48	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3055266 Matrix: Soil Date Prep: 07.02.18
Parent Sample Id: 590645-023 MS Sample Id: 590645-023 S MSD Sample Id: 590645-023 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	9.66	250	247	95	247	95	90-110	0	20	mg/kg	07.02.18 11:04	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3055266 Matrix: Soil Date Prep: 07.02.18
Parent Sample Id: 590645-024 MS Sample Id: 590645-024 S MSD Sample Id: 590645-024 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	10.6	250	252	97	251	96	90-110	0	20	mg/kg	07.02.18 12:20	

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3055311 Matrix: Solid Date Prep: 06.29.18
MB Sample Id: 7657729-1-BLK LCS Sample Id: 7657729-1-BKS LCSD Sample Id: 7657729-1-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)	<15.0	1000	1030	103	976	98	70-135	5	20	mg/kg	06.29.18 09:19	
Diesel Range Organics (DRO)	<15.0	1000	1110	111	1060	106	70-135	5	20	mg/kg	06.29.18 09:19	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	90		113		109		70-135	%	06.29.18 09:19
o-Terphenyl	94		122		116		70-135	%	06.29.18 09:19

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 590699

LT Environmental, Inc.

Horned Toad 36 State #2H

Analytical Method: TPH by SW8015 Mod — Prep Method: TX1005P
Seq Number: 3055312 — Matrix: Solid — Date Prep: 06.29.18
MB Sample Id: 7657730-1-BLK — LCS Sample Id: 7657730-1-BKS — LCSD Sample Id: 7657730-1-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)	<15.0	1000	1070	107	1220	122	70-135	13	20	mg/kg	06.29.18 19:12	
Diesel Range Organics (DRO)	<15.0	1000	1150	115	1290	129	70-135	11	20	mg/kg	06.29.18 19:12	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	99		119		81		70-135	%	06.29.18 19:12
o-Terphenyl	105		128		74		70-135	%	06.29.18 19:12

Analytical Method: TPH by SW8015 Mod — Prep Method: TX1005P
Seq Number: 3055311 — Matrix: Soil — Date Prep: 06.29.18
Parent Sample Id: 590435-001 — MS Sample Id: 590435-001 S — MSD Sample Id: 590435-001 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)	<15.0	1000	974	97	960	96	70-135	1	20	mg/kg	06.29.18 10:24	
Diesel Range Organics (DRO)	<15.0	1000	1050	105	1030	103	70-135	2	20	mg/kg	06.29.18 10:24	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	98		97		70-135	%	06.29.18 10:24
o-Terphenyl	106		104		70-135	%	06.29.18 10:24

Analytical Method: TPH by SW8015 Mod — Prep Method: TX1005P
Seq Number: 3055312 — Matrix: Soil — Date Prep: 06.29.18
Parent Sample Id: 590699-001 — MS Sample Id: 590699-001 S — MSD Sample Id: 590699-001 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)	<15.0	1000	1090	109	1070	107	70-135	2	20	mg/kg	06.29.18 20:15	
Diesel Range Organics (DRO)	<15.0	1000	1230	123	1200	120	70-135	2	20	mg/kg	06.29.18 20:15	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	102		118		70-135	%	06.29.18 20:15
o-Terphenyl	105		103		70-135	%	06.29.18 20:15

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 590699

LT Environmental, Inc.

Horned Toad 36 State #2H

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B

Seq Number: 3055410 Matrix: Solid Date Prep: 07.03.18

MB Sample Id: 7657777-1-BLK LCS Sample Id: 7657777-1-BKS LCSD Sample Id: 7657777-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.100	0.0963	96	0.106	105	70-130	10	35	mg/kg	07.03.18 12:27	
Toluene	<0.00201	0.100	0.101	101	0.108	107	70-130	7	35	mg/kg	07.03.18 12:27	
Ethylbenzene	<0.00201	0.100	0.101	101	0.110	109	70-130	9	35	mg/kg	07.03.18 12:27	
m,p-Xylenes	<0.00402	0.201	0.211	105	0.227	112	70-130	7	35	mg/kg	07.03.18 12:27	
o-Xylene	<0.00201	0.100	0.0978	98	0.103	102	70-130	5	35	mg/kg	07.03.18 12:27	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	75		94		116		70-130	%	07.03.18 12:27
4-Bromofluorobenzene	91		85		95		70-130	%	07.03.18 12:27

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B

Seq Number: 3055410 Matrix: Soil Date Prep: 07.03.18

Parent Sample Id: 590677-001 MS Sample Id: 590677-001 S MSD Sample Id: 590677-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.101	0.0625	62	0.0538	53	70-130	15	35	mg/kg	07.03.18 13:04	X
Toluene	<0.00201	0.101	0.0514	51	0.0497	49	70-130	3	35	mg/kg	07.03.18 13:04	X
Ethylbenzene	<0.00201	0.101	0.0390	39	0.0427	42	70-130	9	35	mg/kg	07.03.18 13:04	X
m,p-Xylenes	<0.00402	0.201	0.0840	42	0.0840	42	70-130	0	35	mg/kg	07.03.18 13:04	X
o-Xylene	<0.00201	0.101	0.0377	37	0.0387	38	70-130	3	35	mg/kg	07.03.18 13:04	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		85		70-130	%	07.03.18 13:04
4-Bromofluorobenzene	121		78		70-130	%	07.03.18 13:04

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

Revision 2016.1

XENCO LABORATORIES

Setting the Standard since 1990

Stafford, TX (281) 240-4200 | El Paso, TX (915) 585-3443 | Midland, TX (432) 704-5440 | Phoenix, AZ (480) 355-0900 | Service Center- Amarillo, TX (806)678-4514
Dallas, TX (214) 902-0300 | Lubbock, TX (806) 794-1296 | San Antonio, TX (210) 509-3334 | Service Center - Baton Rouge, LA (832) 712-8143 | Service Center- Hobbs, NM (575) 392-7550

www.xenco.com

Xenco Quote #

Xenco Job # 590699

Client / Reporting Information

Company Name / Branch: LT ENVIRONMENTAL, INC

Company Address: 3300 NORTH "A" STREET, BUILDING 1 UNIT #103, MIDLAND, TX 79705

Email: ABaker@LTENV.COM

Phone No:

Project Contact: ADRIAN BAKER

Samplers's Name: MARK GELBAND

Project Information

Project Name/Number: HORNED TOAD 36 STATE #2H

Project Location:

Invoice To: XTO ENERGY - KYLE LITTRELL

PO Number: 06/25/2018

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	Collection: Sample Depth	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	BTEX 8021 (ONLY BTEX)	TPH (MRO, C-30, DRO) 805	CHLORIDE (300.1)	Field Comments
1	SS01	6"	06/24/18	1438	S	1								X	X	X	X	
2	SS02			1511		1												
3	SS03			1453		1												
4	SS04			1503		1												
5	SS05			1504		1												
6																		
7																		
8																		
9																		
10																		

Turnaround Time (Business days)

- [ ] Same Day TAT
- [x] 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
- [ ] Level II Report with TRRP checklist

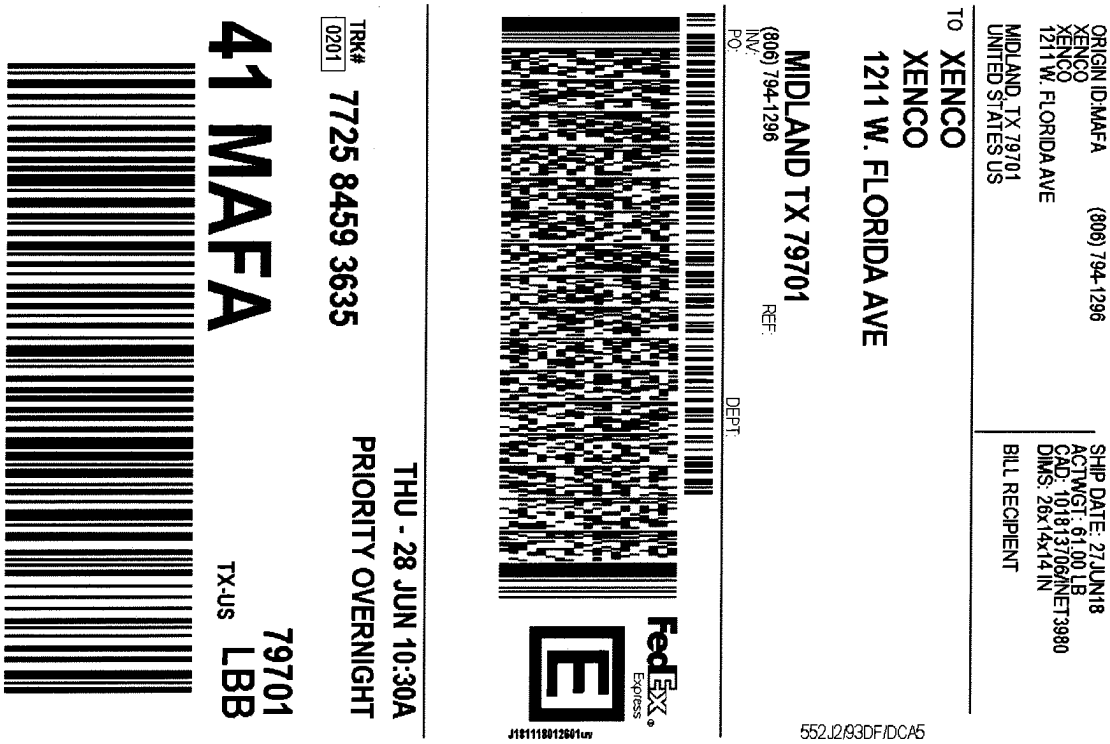
Notes:

FED-EX / UPS: Tracking # 772584593635

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	Mark Gelband	06/27/2018 1032	Timothy P. Elliott			
2					6/27 15:30	
3	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
4						6/28/18 1010
5	Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable	On Ice / Cooler Temp. / Thermo. Corr. Factor
						X 3.2 / 0.0

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 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.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

CUSTODY SEAL

Date 2/21/23

Signature

Thermo SCIENTIFIC

90006

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 06/28/2018 10:10:00 AM

Work Order #: 590699

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)?	3.2
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**
#5 Custody Seals intact on sample bottles?	**N/A**
#6*Custody Seals Signed and dated?	**Yes**
#7 *Chain of Custody present?	**Yes**
#8 Any missing/extra samples?	**No**
#9 Chain of Custody signed when relinquished/ received?	**Yes**
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**
#11 Container label(s) legible and intact?	**Yes**
#12 Samples in proper container/ bottle?	**Yes**
#13 Samples properly preserved?	**Yes**
#14 Sample container(s) intact?	**Yes**
#15 Sufficient sample amount for indicated test(s)?	**Yes**
#16 All samples received within hold time?	**Yes**
#17 Subcontract of sample(s)?	**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: 06/28/2018
Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 06/28/2018
Jessica Kramer

Analytical Report 594936

for

LT Environmental, Inc.

Project Manager: Adrian Baker

Horned Toad 36 State #2H

12-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)

12-NOV-18

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

Reference: XENCO Report No(s): **594936**
Horned Toad 36 State #2H
Project Address: Carlsbad, 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) 594936. 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. 594936 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 594936

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS01	S	08-03-18 11:00	4 ft	594936-001
FS02	S	08-03-18 11:25	3 ft	594936-002
SW01	S	08-03-18 11:50	2 ft	594936-003
FS03	S	08-03-18 12:10	3.5 ft	594936-004
SW02	S	08-03-18 13:40	2.5 ft	594936-005
SW03	S	08-03-18 15:10	2 ft	594936-006
SW04	S	08-03-18 15:30	2 ft	594936-007

Version: 1.%

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: Horned Toad 36 State #2H

Project ID:
Work Order Number(s): *594936*

Report Date: *12-NOV-18*
Date Received: *08/07/2018*

Sample receipt non conformances and comments:

Per clients email request, corrected sample depth to 4' on sample 001. JKR 11/12/18

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3059525 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3059755 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analysis Summary 594936

LT Environmental, Inc., Arvada, CO

Project Name: Horned Toad 36 State #2H

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

Date Received in Lab: Tue Aug-07-18 03:00 pm
Report Date: 12-NOV-18
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	594936-001		594936-002		594936-003		594936-004		594936-005		594936-006	
	Field Id:	FS01		FS02		SW01		FS03		SW02		SW03	
	Depth:	4- ft		3- ft		2- ft		3.5- ft		2.5- ft		2- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Aug-03-18 11:00		Aug-03-18 11:25		Aug-03-18 11:50		Aug-03-18 12:10		Aug-03-18 13:40		Aug-03-18 15:10	
BTEX by EPA 8021B	*Extracted:*	Aug-09-18 09:00		Aug-10-18 12:00		Aug-10-18 12:00		Aug-10-18 12:00		Aug-10-18 12:00		Aug-10-18 12:00	
	Analyzed:	Aug-09-18 20:58		Aug-10-18 19:00		Aug-10-18 23:10		Aug-10-18 23:31		Aug-10-18 19:41		Aug-10-18 20:02	
	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	<0.00202	0.00202	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200
Toluene		<0.00200	0.00200	<0.00201	0.00201	<0.00202	0.00202	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200
Ethylbenzene		<0.00200	0.00200	<0.00201	0.00201	<0.00202	0.00202	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200
m,p-Xylenes		<0.00401	0.00401	<0.00402	0.00402	<0.00404	0.00404	<0.00398	0.00398	<0.00399	0.00399	<0.00401	0.00401
o-Xylene		<0.00200	0.00200	<0.00201	0.00201	<0.00202	0.00202	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200
Total Xylenes		<0.00200	0.00200	<0.00201	0.00201	<0.00202	0.00202	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200
Total BTEX		<0.00200	0.00200	<0.00201	0.00201	<0.00202	0.00202	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200
Inorganic Anions by EPA 300	*Extracted:*	Aug-09-18 08:30		Aug-09-18 08:30		Aug-09-18 08:30		Aug-09-18 08:30		Aug-09-18 08:30		Aug-09-18 08:30	
	Analyzed:	Aug-09-18 11:17		Aug-09-18 14:46		Aug-09-18 15:06		Aug-09-18 15:12		Aug-09-18 15:19		Aug-09-18 15:26	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		<4.97	4.97	232	49.7	6.82	4.97	322	24.8	493	4.97	307	4.96
TPH by SW8015 Mod	*Extracted:*	Aug-07-18 16:00		Aug-07-18 16:00		Aug-07-18 16:00		Aug-07-18 16:00		Aug-07-18 16:00		Aug-08-18 13:00	
	Analyzed:	Aug-07-18 23:54		Aug-08-18 00:13		Aug-08-18 00:33		Aug-08-18 00:53		Aug-08-18 01:12		Aug-08-18 15:32	
	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	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	182	15.0
Oil Range Hydrocarbons (ORO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Total TPH		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	182	15.0

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 594936

LT Environmental, Inc., Arvada, CO

Project Name: Horned Toad 36 State #2H

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

Date Received in Lab: Tue Aug-07-18 03:00 pm
Report Date: 12-NOV-18
Project Manager: Jessica Kramer

Analysis Requested							
	Lab Id:	594936-007					
	Field Id:	SW04					
	Depth:	2- ft					
	Matrix:	SOIL					
	Sampled:	Aug-03-18 15:30					
BTEX by EPA 8021B	***Extracted:***	Aug-10-18 12:00					
	Analyzed:	Aug-10-18 20:23					
	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:***	Aug-09-18 08:30					
	Analyzed:	Aug-09-18 15:32					
	Units/RL:	mg/kg	RL				
Chloride		16.2	4.97				
TPH by SW8015 Mod	***Extracted:***	Aug-08-18 13:00					
	Analyzed:	Aug-08-18 16:30					
	Units/RL:	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0				
Diesel Range Organics (DRO)		<15.0	15.0				
Oil Range Hydrocarbons (ORO)		<15.0	15.0				
Total TPH		<15.0	15.0				

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analytical Results 594936

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**FS01**	Matrix:	Soil	Date Received:	08.07.18 15.00
Lab Sample Id:	594936-001	Date Collected:	08.03.18 11.00	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	08.09.18 08.30	Basis:	Wet Weight
Seq Number:	3059563				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.97	4.97	mg/kg	08.09.18 11.17	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.07.18 16.00	Basis:	Wet Weight
Seq Number:	3059210				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.07.18 23.54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.07.18 23.54	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.07.18 23.54	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.07.18 23.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	08.07.18 23.54	
o-Terphenyl	84-15-1	92	%	70-135	08.07.18 23.54	

Certificate of Analytical Results 594936

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**FS01**	Matrix:	Soil	Date Received:	08.07.18 15.00
Lab Sample Id:	594936-001	Date Collected:	08.03.18 11.00	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.09.18 09.00	Basis:	Wet Weight
Seq Number:	3059525				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.09.18 20.58	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.09.18 20.58	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.09.18 20.58	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.09.18 20.58	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.09.18 20.58	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.09.18 20.58	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.09.18 20.58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	104	%	70-130	08.09.18 20.58	
4-Bromofluorobenzene	460-00-4	99	%	70-130	08.09.18 20.58	

Certificate of Analytical Results 594936

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**FS02**	Matrix:	Soil	Date Received:	08.07.18 15.00
Lab Sample Id:	594936-002	Date Collected:	08.03.18 11.25	Sample Depth:	3 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	08.09.18 08.30	Basis:	Wet Weight
Seq Number:	3059563				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**232**	49.7	mg/kg	08.09.18 14.46		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.07.18 16.00	Basis:	Wet Weight
Seq Number:	3059210				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.08.18 00.13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.08.18 00.13	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.08.18 00.13	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.08.18 00.13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	08.08.18 00.13	
o-Terphenyl	84-15-1	91	%	70-135	08.08.18 00.13	

Certificate of Analytical Results 594936

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**FS02**	Matrix:	Soil	Date Received:	08.07.18 15.00
Lab Sample Id:	594936-002	Date Collected:	08.03.18 11.25	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.10.18 12.00	Basis:	Wet Weight
Seq Number:	3059755				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.10.18 19.00	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.10.18 19.00	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.10.18 19.00	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.10.18 19.00	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.10.18 19.00	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.10.18 19.00	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.10.18 19.00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	96	%	70-130	08.10.18 19.00	
1,4-Difluorobenzene	540-36-3	113	%	70-130	08.10.18 19.00	

Certificate of Analytical Results 594936

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SW01**	Matrix:	Soil	Date Received:	08.07.18 15.00
Lab Sample Id:	594936-003	Date Collected:	08.03.18 11.50	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	08.09.18 08.30	Basis:	Wet Weight
Seq Number:	3059563				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**6.82**	4.97	mg/kg	08.09.18 15.06		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.07.18 16.00	Basis:	Wet Weight
Seq Number:	3059210				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.08.18 00.33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.08.18 00.33	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.08.18 00.33	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.08.18 00.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	08.08.18 00.33	
o-Terphenyl	84-15-1	92	%	70-135	08.08.18 00.33	

Certificate of Analytical Results 594936

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SW01**	Matrix:	Soil	Date Received:	08.07.18 15.00
Lab Sample Id:	594936-003	Date Collected:	08.03.18 11.50	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.10.18 12.00	Basis:	Wet Weight
Seq Number:	3059755				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	08.10.18 23.10	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	08.10.18 23.10	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	08.10.18 23.10	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	08.10.18 23.10	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	08.10.18 23.10	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	08.10.18 23.10	U	1
Total BTEX		<0.00202	0.00202	mg/kg	08.10.18 23.10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	96	%	70-130	08.10.18 23.10	
1,4-Difluorobenzene	540-36-3	109	%	70-130	08.10.18 23.10	

Certificate of Analytical Results 594936

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**FS03**	Matrix:	Soil	Date Received:	08.07.18 15.00
Lab Sample Id:	594936-004	Date Collected:	08.03.18 12.10	Sample Depth:	3.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	08.09.18 08.30	Basis:	Wet Weight
Seq Number:	3059563				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**322**	24.8	mg/kg	08.09.18 15.12		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.07.18 16.00	Basis:	Wet Weight
Seq Number:	3059210				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.08.18 00.53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.08.18 00.53	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.08.18 00.53	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.08.18 00.53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	08.08.18 00.53	
o-Terphenyl	84-15-1	91	%	70-135	08.08.18 00.53	

Certificate of Analytical Results 594936

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**FS03**	Matrix:	Soil	Date Received:	08.07.18 15.00
Lab Sample Id:	594936-004	Date Collected:	08.03.18 12.10	Sample Depth:	3.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.10.18 12.00	Basis:	Wet Weight
Seq Number:	3059755				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.10.18 23.31	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.10.18 23.31	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.10.18 23.31	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.10.18 23.31	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.10.18 23.31	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.10.18 23.31	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.10.18 23.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	101	%	70-130	08.10.18 23.31	
1,4-Difluorobenzene	540-36-3	112	%	70-130	08.10.18 23.31	

Certificate of Analytical Results 594936

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SW02**	Matrix:	Soil	Date Received:	08.07.18 15.00
Lab Sample Id:	594936-005	Date Collected:	08.03.18 13.40	Sample Depth:	2.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	08.09.18 08.30	Basis:	Wet Weight
Seq Number:	3059563				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**493**	4.97	mg/kg	08.09.18 15.19		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.07.18 16.00	Basis:	Wet Weight
Seq Number:	3059210				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.08.18 01.12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.08.18 01.12	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.08.18 01.12	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.08.18 01.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-135	08.08.18 01.12	
o-Terphenyl	84-15-1	86	%	70-135	08.08.18 01.12	

Certificate of Analytical Results 594936

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SW02**	Matrix:	Soil	Date Received:	08.07.18 15.00
Lab Sample Id:	594936-005	Date Collected:	08.03.18 13.40	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.10.18 12.00	Basis:	Wet Weight
Seq Number:	3059755				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.10.18 19.41	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.10.18 19.41	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.10.18 19.41	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.10.18 19.41	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.10.18 19.41	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.10.18 19.41	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.10.18 19.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	112	%	70-130	08.10.18 19.41	
4-Bromofluorobenzene	460-00-4	96	%	70-130	08.10.18 19.41	

Certificate of Analytical Results 594936

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SW03**	Matrix:	Soil	Date Received:	08.07.18 15.00
Lab Sample Id:	594936-006	Date Collected:	08.03.18 15.10	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	08.09.18 08.30	Basis:	Wet Weight
Seq Number:	3059563				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**307**	4.96	mg/kg	08.09.18 15.26		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.08.18 13.00	Basis:	Wet Weight
Seq Number:	3059368				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.08.18 15.32	U	1
Diesel Range Organics (DRO)	C10C28DRO	**182**	15.0	mg/kg	08.08.18 15.32		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.08.18 15.32	U	1
Total TPH	PHC635	**182**	15.0	mg/kg	08.08.18 15.32		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	08.08.18 15.32	
o-Terphenyl	84-15-1	94	%	70-135	08.08.18 15.32	

Certificate of Analytical Results 594936

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SW03**	Matrix:	Soil	Date Received:	08.07.18 15.00
Lab Sample Id:	594936-006	Date Collected:	08.03.18 15.10	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.10.18 12.00	Basis:	Wet Weight
Seq Number:	3059755				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.10.18 20.02	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.10.18 20.02	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.10.18 20.02	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.10.18 20.02	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.10.18 20.02	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.10.18 20.02	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.10.18 20.02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	112	%	70-130	08.10.18 20.02	
4-Bromofluorobenzene	460-00-4	95	%	70-130	08.10.18 20.02	

Certificate of Analytical Results 594936

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SW04**	Matrix:	Soil	Date Received:	08.07.18 15.00
Lab Sample Id:	594936-007	Date Collected:	08.03.18 15.30	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	08.09.18 08.30	Basis:	Wet Weight
Seq Number:	3059563				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**16.2**	4.97	mg/kg	08.09.18 15.32		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.08.18 13.00	Basis:	Wet Weight
Seq Number:	3059368				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.08.18 16.30	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.08.18 16.30	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.08.18 16.30	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.08.18 16.30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	08.08.18 16.30	
o-Terphenyl	84-15-1	92	%	70-135	08.08.18 16.30	

Certificate of Analytical Results 594936

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SW04**	Matrix:	Soil	Date Received:	08.07.18 15.00
Lab Sample Id:	594936-007	Date Collected:	08.03.18 15.30	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.10.18 12.00	Basis:	Wet Weight
Seq Number:	3059755				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.10.18 20.23	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.10.18 20.23	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.10.18 20.23	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.10.18 20.23	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.10.18 20.23	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.10.18 20.23	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.10.18 20.23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	108	%	70-130	08.10.18 20.23	
1,4-Difluorobenzene	540-36-3	112	%	70-130	08.10.18 20.23	

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

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 594936

LT Environmental, Inc.

Horned Toad 36 State #2H

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3059563 — Matrix: Solid — Date Prep: 08.09.18
MB Sample Id: 7660043-1-BLK — LCS Sample Id: 7660043-1-BKS — LCSD Sample Id: 7660043-1-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	248	99	250	100	90-110	1	20	mg/kg	08.09.18 11:04	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3059563 — Matrix: Soil — Date Prep: 08.09.18
Parent Sample Id: 594750-002 — MS Sample Id: 594750-002 S — MSD Sample Id: 594750-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	107	248	369	106	370	106	90-110	0	20	mg/kg	08.09.18 14:26	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3059563 — Matrix: Soil — Date Prep: 08.09.18
Parent Sample Id: 594936-001 — MS Sample Id: 594936-001 S — MSD Sample Id: 594936-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<4.97	249	273	110	273	110	90-110	0	20	mg/kg	08.09.18 12:52	

Analytical Method: TPH by SW8015 Mod — Prep Method: TX1005P
Seq Number: 3059210 — Matrix: Solid — Date Prep: 08.07.18
MB Sample Id: 7659952-1-BLK — LCS Sample Id: 7659952-1-BKS — LCSD Sample Id: 7659952-1-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)	<15.0	1000	1020	102	930	93	70-135	9	20	mg/kg	08.07.18 17:04	
Diesel Range Organics (DRO)	<15.0	1000	1070	107	969	97	70-135	10	20	mg/kg	08.07.18 17:04	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	94		129		119		70-135	%	08.07.18 17:04
o-Terphenyl	101		116		108		70-135	%	08.07.18 17:04

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 594936

LT Environmental, Inc.

Horned Toad 36 State #2H

Analytical Method: TPH by SW8015 Mod — Prep Method: TX1005P
Seq Number: 3059368 — Matrix: Solid — Date Prep: 08.08.18
MB Sample Id: 7660053-1-BLK — LCS Sample Id: 7660053-1-BKS — LCSD Sample Id: 7660053-1-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)	<15.0	1000	887	89	907	91	70-135	2	20	mg/kg	08.08.18 14:52	
Diesel Range Organics (DRO)	<15.0	1000	936	94	956	96	70-135	2	20	mg/kg	08.08.18 14:52	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	88		122		127		70-135	%	08.08.18 14:52
o-Terphenyl	92		97		97		70-135	%	08.08.18 14:52

Analytical Method: TPH by SW8015 Mod — Prep Method: TX1005P
Seq Number: 3059210 — Matrix: Soil — Date Prep: 08.07.18
Parent Sample Id: 594846-001 — MS Sample Id: 594846-001 S — MSD Sample Id: 594846-001 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)	<15.0	999	914	91	961	96	70-135	5	20	mg/kg	08.07.18 18:02	
Diesel Range Organics (DRO)	<15.0	999	967	97	1020	102	70-135	5	20	mg/kg	08.07.18 18:02	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	124		129		70-135	%	08.07.18 18:02
o-Terphenyl	99		97		70-135	%	08.07.18 18:02

Analytical Method: TPH by SW8015 Mod — Prep Method: TX1005P
Seq Number: 3059368 — Matrix: Soil — Date Prep: 08.08.18
Parent Sample Id: 594936-006 — MS Sample Id: 594936-006 S — MSD Sample Id: 594936-006 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)	<15.0	999	864	86	906	91	70-135	5	20	mg/kg	08.08.18 15:51	
Diesel Range Organics (DRO)	182	999	1100	92	1210	103	70-135	10	20	mg/kg	08.08.18 15:51	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	113		117		70-135	%	08.08.18 15:51
o-Terphenyl	102		104		70-135	%	08.08.18 15:51

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 594936

LT Environmental, Inc.

Horned Toad 36 State #2H

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3059525 — Matrix: Solid — Date Prep: 08.09.18
MB Sample Id: 7660129-1-BLK — LCS Sample Id: 7660129-1-BKS — LCSD Sample Id: 7660129-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.110	109	0.117	117	70-130	6	35	mg/kg	08.09.18 11:58	
Toluene	<0.00202	0.101	0.102	101	0.110	110	70-130	8	35	mg/kg	08.09.18 11:58	
Ethylbenzene	<0.00202	0.101	0.109	108	0.117	117	70-130	7	35	mg/kg	08.09.18 11:58	
m,p-Xylenes	<0.00403	0.202	0.235	116	0.248	124	70-130	5	35	mg/kg	08.09.18 11:58	
o-Xylene	<0.00202	0.101	0.117	116	0.116	116	70-130	1	35	mg/kg	08.09.18 11:58	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	109		113		116		70-130	%	08.09.18 11:58
4-Bromofluorobenzene	97		106		106		70-130	%	08.09.18 11:58

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3059755 — Matrix: Solid — Date Prep: 08.10.18
MB Sample Id: 7660225-1-BLK — LCS Sample Id: 7660225-1-BKS — LCSD Sample Id: 7660225-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.100	0.101	101	0.0924	91	70-130	9	35	mg/kg	08.10.18 08:18	
Toluene	<0.00201	0.100	0.102	102	0.0938	93	70-130	8	35	mg/kg	08.10.18 08:18	
Ethylbenzene	<0.00201	0.100	0.112	112	0.103	102	70-130	8	35	mg/kg	08.10.18 08:18	
m,p-Xylenes	<0.00402	0.201	0.230	114	0.210	104	70-130	9	35	mg/kg	08.10.18 08:18	
o-Xylene	<0.00201	0.100	0.109	109	0.101	100	70-130	8	35	mg/kg	08.10.18 08:18	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	107		125		118		70-130	%	08.10.18 08:18
4-Bromofluorobenzene	105		115		114		70-130	%	08.10.18 08:18

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3059525 — Matrix: Soil — Date Prep: 08.09.18
Parent Sample Id: 594721-020 — MS Sample Id: 594721-020 S — MSD Sample Id: 594721-020 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.0829	83	0.0785	79	70-130	5	35	mg/kg	08.09.18 12:40	
Toluene	<0.00199	0.0996	0.0764	77	0.0711	71	70-130	7	35	mg/kg	08.09.18 12:40	
Ethylbenzene	<0.00199	0.0996	0.0804	81	0.0768	77	70-130	5	35	mg/kg	08.09.18 12:40	
m,p-Xylenes	<0.00398	0.199	0.173	87	0.166	83	70-130	4	35	mg/kg	08.09.18 12:40	
o-Xylene	<0.00199	0.0996	0.0838	84	0.0803	80	70-130	4	35	mg/kg	08.09.18 12:40	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	126		124		70-130	%	08.09.18 12:40
4-Bromofluorobenzene	108		112		70-130	%	08.09.18 12:40

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

QC Summary 594936

LT Environmental, Inc.

Horned Toad 36 State #2H

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B

Seq Number: 3059755 Matrix: Soil Date Prep: 08.10.18

Parent Sample Id: 594846-001 MS Sample Id: 594846-001 S MSD Sample Id: 594846-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00198	0.0992	0.0628	63	0.0870	87	70-130	32	35	mg/kg	08.10.18 09:41	X
Toluene	<0.00198	0.0992	0.0631	64	0.0860	86	70-130	31	35	mg/kg	08.10.18 09:41	X
Ethylbenzene	<0.00198	0.0992	0.0650	66	0.0888	89	70-130	31	35	mg/kg	08.10.18 09:41	X
m,p-Xylenes	<0.00397	0.198	0.131	66	0.179	90	70-130	31	35	mg/kg	08.10.18 09:41	X
o-Xylene	<0.00198	0.0992	0.0617	62	0.0867	87	70-130	34	35	mg/kg	08.10.18 09:41	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	126		116		70-130	%	08.10.18 09:41
4-Bromofluorobenzene	107		109		70-130	%	08.10.18 09:41

MS/MSD Percent Recovery [D] = 100*(C-A) / B LCS = Laboratory Control Sample MS = Matrix Spike

Relative Percent Difference RPD = 200* | (C-E) / (C+E) | A = Parent Result B = Spike Added

LCS/LCSD Recovery [D] = 100 * (C) / [B] C = MS/LCS Result D = MSD/LCSD % Rec

Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample) E = MSD/LCSD Result

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Midland, Texas (432-704-5251)

Phoenix, Arizona (480-355-0900)

www.xenco.com

CHAIN OF CUSTODY

Page 1 Of 1

Xenco Quote #

Xenco Job # 594936

Client / Reporting Information

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

Company Address: 3300 North "A" Street, Building 1, Unit #103, Midland, TX 79705

Email: Abaker@ltenv.com

Phone No: (432) 704-5178

Project Contact: Adrian Baker

Samplers's Name: Ben Belin

Project Information

Project Name/Number: Horned Toad 36 State #2H

Project Location: Carlsbad, NM

Invoice To: XTO Energy - Kyle Littrell

PO Number: ZRP-4850

Analytical Information

BTEX 8020 | TPH EPA 8015 | Chloride 300.1

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	BTEX 8020	TPH EPA 8015	Chloride 300.1	Field Comments
1	FS01	4'	8/3/18	1100	S	1								X	X	X	X	
2	FS02	3'		1125										X	X	X	X	
3	SW01	2'		1150										X	X	X	X	
4	FS03	3.5'		1210										X	X	X	X	
5	SW02	2.5'		1340										X	X	X	X	
6	SW03	2'		1510										X	X	X	X	
7	SW04	2'		1530										X	X	X	X	
8																		
9																		
10																		

Turnaround Time (Business days)

- [ ] Same Day TAT
- [x] 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 # 779493423391

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	Ben Belin	8/3/18 17:29				
2					8/6 15:30	Received 8/7/18 1500
3	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
4	Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable	On Ice / Cooler Temp. / Thermo. Corr. Factor
5						3.1 / 3.0

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.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 08/07/2018 03:00:00 PM

Work Order #: 594936

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)?	3.1
#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: 08/07/2018

Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 08/07/2018

Jessica Kramer

Analytical Report 595405

for

LT Environmental, Inc.

Project Manager: Adrian Baker

Horned Toad 36 State #2H

16-AUG-18

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-18-27), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-17-13)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-17-17)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-16)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-17-4)
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)

16-AUG-18

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

Reference: XENCO Report No(s): **595405**
Horned Toad 36 State #2H
Project Address: Carlsbad, 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) 595405. 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. 595405 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 595405

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SW05	S	08-06-18 11:50	3 ft	595405-001
SW06	S	08-06-18 12:15	3 ft	595405-002
FS04	S	08-06-18 14:50	4 ft	595405-003
SW07	S	08-06-18 16:00	3 ft	595405-004

Version: 1.%

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: Horned Toad 36 State #2H

Project ID:
Work Order Number(s): *595405*

Report Date: *16-AUG-18*
Date Received: *08/10/2018*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3060212 BTEX by EPA 8021B

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

Certificate of Analysis Summary 595405

LT Environmental, Inc., Arvada, CO

Project Name: Horned Toad 36 State #2H

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

Date Received in Lab: Fri Aug-10-18 11:50 am
Report Date: 16-AUG-18
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	595405-001		595405-002		595405-003		595405-004					
	Field Id:	SW05		SW06		FS04		SW07					
	Depth:	3- ft		3- ft		4- ft		3- ft					
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	Aug-06-18 11:50		Aug-06-18 12:15		Aug-06-18 14:50		Aug-06-18 16:00					
BTEX by EPA 8021B	***Extracted:***	Aug-15-18 16:30		Aug-15-18 16:30		Aug-15-18 16:30		Aug-15-18 16:30					
	Analyzed:	Aug-16-18 10:47		Aug-16-18 10:27		Aug-16-18 11:08		Aug-16-18 11:29					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00202	0.00202				
Toluene		<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00202	0.00202				
Ethylbenzene		<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00202	0.00202				
m,p-Xylenes		<0.00398	0.00398	<0.00399	0.00399	<0.00402	0.00402	<0.00403	0.00403				
o-Xylene		<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00202	0.00202				
Total Xylenes		<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00202	0.00202				
Total BTEX		<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00202	0.00202				
Inorganic Anions by EPA 300	***Extracted:***	Aug-13-18 10:00		Aug-13-18 10:00		Aug-13-18 10:00		Aug-13-18 10:00					
	Analyzed:	Aug-13-18 13:07		Aug-13-18 13:12		Aug-13-18 13:29		Aug-13-18 13:34					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		77.6	10.0	18.9	1.00	39.5	5.00	32.8	1.00				
TPH by SW8015 Mod	***Extracted:***	Aug-10-18 13:00		Aug-10-18 13:00		Aug-10-18 13:00		Aug-10-18 13:00					
	Analyzed:	Aug-10-18 19:44		Aug-10-18 20:04		Aug-10-18 20:24		Aug-10-18 20:43					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0				
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0	16.3	15.0	<15.0	15.0				
Oil Range Hydrocarbons (ORO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0				
Total TPH		<15.0	15.0	<15.0	15.0	16.3	15.0	<15.0	15.0				

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analytical Results 595405

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SW05**	Matrix:	Soil	Date Received:	08.10.18 11.50
Lab Sample Id:	595405-001	Date Collected:	08.06.18 11.50	Sample Depth:	3 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	08.13.18 10.00	Basis:	Wet Weight
Seq Number:	3059874				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**77.6**	10.0	mg/kg	08.13.18 13.07		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.10.18 13.00	Basis:	Wet Weight
Seq Number:	3059701				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.10.18 19.44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.10.18 19.44	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.10.18 19.44	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.10.18 19.44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	08.10.18 19.44	
o-Terphenyl	84-15-1	95	%	70-135	08.10.18 19.44	

Certificate of Analytical Results 595405

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SW05**	Matrix:	Soil	Date Received:	08.10.18 11.50
Lab Sample Id:	595405-001	Date Collected:	08.06.18 11.50	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.15.18 16.30	Basis:	Wet Weight
Seq Number:	3060212				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.16.18 10.47	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.16.18 10.47	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.16.18 10.47	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.16.18 10.47	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.16.18 10.47	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.16.18 10.47	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.16.18 10.47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	110	%	70-130	08.16.18 10.47	
1,4-Difluorobenzene	540-36-3	105	%	70-130	08.16.18 10.47	

Certificate of Analytical Results 595405

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SW06**	Matrix:	Soil	Date Received:	08.10.18 11.50
Lab Sample Id:	595405-002	Date Collected:	08.06.18 12.15	Sample Depth:	3 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	08.13.18 10.00	Basis:	Wet Weight
Seq Number:	3059874				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**18.9**	1.00	mg/kg	08.13.18 13.12		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.10.18 13.00	Basis:	Wet Weight
Seq Number:	3059701				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.10.18 20.04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.10.18 20.04	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.10.18 20.04	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.10.18 20.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	08.10.18 20.04	
o-Terphenyl	84-15-1	98	%	70-135	08.10.18 20.04	

Certificate of Analytical Results 595405

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SW06**	Matrix:	Soil	Date Received:	08.10.18 11.50
Lab Sample Id:	595405-002	Date Collected:	08.06.18 12.15	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.15.18 16.30	Basis:	Wet Weight
Seq Number:	3060212				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.16.18 10.27	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.16.18 10.27	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.16.18 10.27	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.16.18 10.27	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.16.18 10.27	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.16.18 10.27	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.16.18 10.27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	111	%	70-130	08.16.18 10.27	
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.16.18 10.27	

Certificate of Analytical Results 595405

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**FS04**	Matrix:	Soil	Date Received:	08.10.18 11.50
Lab Sample Id:	595405-003	Date Collected:	08.06.18 14.50	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	08.13.18 10.00	Basis:	Wet Weight
Seq Number:	3059874				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**39.5**	5.00	mg/kg	08.13.18 13.29		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.10.18 13.00	Basis:	Wet Weight
Seq Number:	3059701				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.10.18 20.24	U	1
Diesel Range Organics (DRO)	C10C28DRO	**16.3**	15.0	mg/kg	08.10.18 20.24		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.10.18 20.24	U	1
Total TPH	PHC635	**16.3**	15.0	mg/kg	08.10.18 20.24		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	08.10.18 20.24	
o-Terphenyl	84-15-1	94	%	70-135	08.10.18 20.24	

Certificate of Analytical Results 595405

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**FS04**	Matrix:	Soil	Date Received:	08.10.18 11.50
Lab Sample Id:	595405-003	Date Collected:	08.06.18 14.50	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.15.18 16.30	Basis:	Wet Weight
Seq Number:	3060212				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.16.18 11.08	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.16.18 11.08	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.16.18 11.08	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.16.18 11.08	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.16.18 11.08	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.16.18 11.08	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.16.18 11.08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	104	%	70-130	08.16.18 11.08	
4-Bromofluorobenzene	460-00-4	105	%	70-130	08.16.18 11.08	

Certificate of Analytical Results 595405

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SW07**	Matrix:	Soil	Date Received:	08.10.18 11.50
Lab Sample Id:	595405-004	Date Collected:	08.06.18 16.00	Sample Depth:	3 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	08.13.18 10.00	Basis:	Wet Weight
Seq Number:	3059874				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**32.8**	1.00	mg/kg	08.13.18 13.34		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.10.18 13.00	Basis:	Wet Weight
Seq Number:	3059701				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.10.18 20.43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.10.18 20.43	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.10.18 20.43	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.10.18 20.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	08.10.18 20.43	
o-Terphenyl	84-15-1	91	%	70-135	08.10.18 20.43	

Certificate of Analytical Results 595405

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SW07**	Matrix:	Soil	Date Received:	08.10.18 11.50
Lab Sample Id:	595405-004	Date Collected:	08.06.18 16.00	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.15.18 16.30	Basis:	Wet Weight
Seq Number:	3060212				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	08.16.18 11.29	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	08.16.18 11.29	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	08.16.18 11.29	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	08.16.18 11.29	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	08.16.18 11.29	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	08.16.18 11.29	U	1
Total BTEX		<0.00202	0.00202	mg/kg	08.16.18 11.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	70-130	08.16.18 11.29	
1,4-Difluorobenzene	540-36-3	110	%	70-130	08.16.18 11.29	

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 595405

LT Environmental, Inc.

Horned Toad 36 State #2H

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3059874 Matrix: Solid Date Prep: 08.13.18
MB Sample Id: 7660291-1-BLK LCS Sample Id: 7660291-1-BKS LCSD Sample Id: 7660291-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<1.00	50.0	50.2	100	50.2	100	90-110	0	20	mg/kg	08.13.18 12:23	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3059874 Matrix: Soil Date Prep: 08.13.18
Parent Sample Id: 595234-002 MS Sample Id: 595234-002 S MSD Sample Id: 595234-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<1.00	50.0	49.6	99	49.5	99	90-110	0	20	mg/kg	08.13.18 12:45	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3059874 Matrix: Soil Date Prep: 08.13.18
Parent Sample Id: 595406-004 MS Sample Id: 595406-004 S MSD Sample Id: 595406-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	40.5	50.0	89.1	97	89.3	98	90-110	0	20	mg/kg	08.13.18 14:01	

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3059701 Matrix: Solid Date Prep: 08.10.18
MB Sample Id: 7660204-1-BLK LCS Sample Id: 7660204-1-BKS LCSD Sample Id: 7660204-1-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)	<15.0	1000	898	90	877	88	70-135	2	20	mg/kg	08.10.18 14:32	
Diesel Range Organics (DRO)	<15.0	1000	948	95	1030	103	70-135	8	20	mg/kg	08.10.18 14:32	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	88		124		116		70-135	%	08.10.18 14:32
o-Terphenyl	92		104		103		70-135	%	08.10.18 14:32

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 595405

LT Environmental, Inc.

Horned Toad 36 State #2H

Analytical Method: TPH by SW8015 Mod | Prep Method: TX1005P
Seq Number: 3059701 | Matrix: Soil | Date Prep: 08.10.18
Parent Sample Id: 595257-021 | MS Sample Id: 595257-021 S | MSD Sample Id: 595257-021 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)	<15.0	999	877	88	890	89	70-135	1	20	mg/kg	08.10.18 15:30	
Diesel Range Organics (DRO)	<15.0	999	911	91	924	92	70-135	1	20	mg/kg	08.10.18 15:30	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	129		126		70-135	%	08.10.18 15:30
o-Terphenyl	106		107		70-135	%	08.10.18 15:30

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3060212 | Matrix: Solid | Date Prep: 08.15.18
MB Sample Id: 7660521-1-BLK | LCS Sample Id: 7660521-1-BKS | LCSD Sample Id: 7660521-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.100	0.0965	97	0.0964	95	70-130	0	35	mg/kg	08.16.18 03:12	
Toluene	<0.00201	0.100	0.0911	91	0.0901	89	70-130	1	35	mg/kg	08.16.18 03:12	
Ethylbenzene	<0.00201	0.100	0.102	102	0.101	100	70-130	1	35	mg/kg	08.16.18 03:12	
m,p-Xylenes	<0.00402	0.201	0.212	105	0.212	105	70-130	0	35	mg/kg	08.16.18 03:12	
o-Xylene	<0.00201	0.100	0.103	103	0.103	102	70-130	0	35	mg/kg	08.16.18 03:12	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		124		122		70-130	%	08.16.18 03:12
4-Bromofluorobenzene	98		107		102		70-130	%	08.16.18 03:12

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3060212 | Matrix: Soil | Date Prep: 08.15.18
Parent Sample Id: 595884-001 | MS Sample Id: 595884-001 S | MSD Sample Id: 595884-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	0.00397	0.0996	0.0547	51	0.0462	42	70-130	17	35	mg/kg	08.16.18 03:54	X
Toluene	0.110	0.0996	0.146	36	0.124	14	70-130	16	35	mg/kg	08.16.18 03:54	X
Ethylbenzene	0.00720	0.0996	0.0391	32	0.0237	17	70-130	49	35	mg/kg	08.16.18 03:54	XF
m,p-Xylenes	0.0671	0.199	0.144	39	0.102	17	70-130	34	35	mg/kg	08.16.18 03:54	X
o-Xylene	0.0224	0.0996	0.0542	32	0.0345	12	70-130	44	35	mg/kg	08.16.18 03:54	XF

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	78		93		70-130	%	08.16.18 03:54
4-Bromofluorobenzene	103		120		70-130	%	08.16.18 03:54

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

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CHAIN OF CUSTODY

Page 1 of 1

Xenco Quote #

Xenco Job # 595405

Client / Reporting Information

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

Company Address: 3300 North "A" Street, Building 1, Unit #103, Midland, TX 79705

Email: Abaker@ltenv.com

Phone No: (432) 704-5178

Project Contact: Adrian Baker

Samplers's Name: Ben Belt

Project Information

Project Name/Number: Horned Toad 36 State #2H

Project Location: Carlsbad, NM

Invoice To: XTO Energy - Kyle Littrell

PO Number: 2RP-4850

Analytical Information

BTEX 8021 | TPH EPA 8015 | Chlorides 300.1

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	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	BTEX 8021	TPH EPA 8015	Chlorides 300.1	Field Comments
1	SW05	3'	8/6/18	1150	S	1								X	X	X	X	
2	SW06	3'	↓	1245	↓	↓								X	X	X	X	
3	FS04	4'		1450										X	X	X	X	
4	SW07	3'	↓	1600	↓	↓								X	X	X	X	
5																		
6																		
7			8/6/18			BB												
8																		
9																		
10																		

Turnaround Time (Business days)

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

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 # 779421278244

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

	Relinquished by	Date Time	Received By	Relinquished By	Date Time	Received By
1	B. Belt	8/8/18 17:30	Chris Pulido			
2				Chris Pulido	8/9/18 15:30	
3	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
4						8/10/18 1150
5	Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable	On Ice: Y

Cooler Temp. 0.2 R2 Thermo. Corr. Factor 0.0

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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.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 08/10/2018 11:50:00 AM

Work Order #: 595405

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)?	**No**
#18 Water VOC samples have zero headspace?	**N/A**

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

Analyst: PH Device/Lot#:

Checklist completed by: Katie Lowe Date: 08/10/2018

Checklist reviewed by: Jessica Kramer Date: 08/10/2018

Analytical Report 595406

for

LT Environmental, Inc.

Project Manager: Adrian Baker

Horned Toad 36 State #2H

20-AUG-18

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-18-27), 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 (T104704221-18-13)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-17)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-16)
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)

20-AUG-18

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

Reference: XENCO Report No(s): **595406**
Horned Toad 36 State #2H
Project Address: Carlsbad, 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) 595406. 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. 595406 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 595406

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS05	S	08-07-18 11:00	4 ft	595406-001
FS06	S	08-07-18 12:00	3.5 ft	595406-002
SW08	S	08-07-18 14:10	2.5 ft	595406-003
FS07	S	08-07-18 14:30	3.5 ft	595406-004

Version: 1.%

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: Horned Toad 36 State #2H

Project ID:
Work Order Number(s): *595406*

Report Date: *20-AUG-18*
Date Received: *08/10/2018*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3060429 BTEX by EPA 8021B

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

Certificate of Analysis Summary 595406

LT Environmental, Inc., Arvada, CO

Project Name: Horned Toad 36 State #2H

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

Date Received in Lab: Fri Aug-10-18 12:17 pm
Report Date: 20-AUG-18
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	595406-001		595406-002		595406-003		595406-004					
	Field Id:	FS05		FS06		SW08		FS07					
	Depth:	4- ft		3.5- ft		2.5- ft		3.5- ft					
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	Aug-07-18 11:00		Aug-07-18 12:00		Aug-07-18 14:10		Aug-07-18 14:30					
BTEX by EPA 8021B	***Extracted:***	Aug-17-18 08:15		Aug-17-18 08:15		Aug-17-18 08:15		Aug-17-18 08:15					
	Analyzed:	Aug-17-18 17:09		Aug-17-18 21:02		Aug-17-18 18:15		Aug-17-18 18:35					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		<0.00201	0.00201	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200				
Toluene		<0.00201	0.00201	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200				
Ethylbenzene		<0.00201	0.00201	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200				
m,p-Xylenes		<0.00402	0.00402	<0.00402	0.00402	<0.00398	0.00398	<0.00399	0.00399				
o-Xylene		<0.00201	0.00201	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200				
Total Xylenes		<0.00201	0.00201	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200				
Total BTEX		<0.00201	0.00201	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200				
Inorganic Anions by EPA 300	***Extracted:***	Aug-13-18 10:00		Aug-13-18 10:00		Aug-13-18 10:00		Aug-13-18 10:00					
	Analyzed:	Aug-14-18 15:59		Aug-13-18 13:45		Aug-13-18 13:50		Aug-13-18 13:56					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		12.6	1.00	59.3	10.0	12.4	1.00	40.5	1.00				
TPH by SW8015 Mod	***Extracted:***	Aug-10-18 13:00		Aug-10-18 13:00		Aug-10-18 13:00		Aug-10-18 13:00					
	Analyzed:	Aug-10-18 21:03		Aug-10-18 21:23		Aug-10-18 21:43		Aug-10-18 22:02					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0				
Diesel Range Organics (DRO)		15.8	15.0	54.6	15.0	<14.9	14.9	58.9	15.0				
Oil Range Hydrocarbons (ORO)		<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0				
Total TPH		15.8	15.0	54.6	15.0	<14.9	14.9	58.9	15.0				

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Version: 1.%

Jessica Kramer
Project Assistant

Final 1.000

Certificate of Analytical Results 595406

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**FS05**	Matrix:	Soil	Date Received:	08.10.18 12.17
Lab Sample Id:	595406-001	Date Collected:	08.07.18 11.00	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	08.13.18 10.00	Basis:	Wet Weight
Seq Number:	3059874				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**12.6**	1.00	mg/kg	08.14.18 15.59		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.10.18 13.00	Basis:	Wet Weight
Seq Number:	3059701				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.10.18 21.03	U	1
Diesel Range Organics (DRO)	C10C28DRO	**15.8**	15.0	mg/kg	08.10.18 21.03		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.10.18 21.03	U	1
Total TPH	PHC635	**15.8**	15.0	mg/kg	08.10.18 21.03		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	08.10.18 21.03	
o-Terphenyl	84-15-1	94	%	70-135	08.10.18 21.03	

Certificate of Analytical Results 595406

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**FS05**	Matrix:	Soil	Date Received:	08.10.18 12.17
Lab Sample Id:	595406-001	Date Collected:	08.07.18 11.00	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.17.18 08.15	Basis:	Wet Weight
Seq Number:	3060429				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.17.18 17.09	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.17.18 17.09	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.17.18 17.09	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.17.18 17.09	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.17.18 17.09	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.17.18 17.09	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.17.18 17.09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	08.17.18 17.09	
1,4-Difluorobenzene	540-36-3	107	%	70-130	08.17.18 17.09	

Certificate of Analytical Results 595406

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**FS06**	Matrix:	Soil	Date Received:	08.10.18 12.17
Lab Sample Id:	595406-002	Date Collected:	08.07.18 12.00	Sample Depth:	3.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	08.13.18 10.00	Basis:	Wet Weight
Seq Number:	3059874				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**59.3**	10.0	mg/kg	08.13.18 13.45		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.10.18 13.00	Basis:	Wet Weight
Seq Number:	3059701				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.10.18 21.23	U	1
Diesel Range Organics (DRO)	C10C28DRO	**54.6**	15.0	mg/kg	08.10.18 21.23		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.10.18 21.23	U	1
Total TPH	PHC635	**54.6**	15.0	mg/kg	08.10.18 21.23		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	08.10.18 21.23	
o-Terphenyl	84-15-1	95	%	70-135	08.10.18 21.23	

Certificate of Analytical Results 595406

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**FS06**	Matrix:	Soil	Date Received:	08.10.18 12.17
Lab Sample Id:	595406-002	Date Collected:	08.07.18 12.00	Sample Depth:	3.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.17.18 08.15	Basis:	Wet Weight
Seq Number:	3060429				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.17.18 21.02	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.17.18 21.02	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.17.18 21.02	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.17.18 21.02	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.17.18 21.02	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.17.18 21.02	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.17.18 21.02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	08.17.18 21.02	
4-Bromofluorobenzene	460-00-4	101	%	70-130	08.17.18 21.02	

Certificate of Analytical Results 595406

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SW08**	Matrix:	Soil	Date Received:	08.10.18 12.17
Lab Sample Id:	595406-003	Date Collected:	08.07.18 14.10	Sample Depth:	2.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	08.13.18 10.00	Basis:	Wet Weight
Seq Number:	3059874				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**12.4**	1.00	mg/kg	08.13.18 13.50		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.10.18 13.00	Basis:	Wet Weight
Seq Number:	3059701				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	08.10.18 21.43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	08.10.18 21.43	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<14.9	14.9	mg/kg	08.10.18 21.43	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	08.10.18 21.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	08.10.18 21.43	
o-Terphenyl	84-15-1	95	%	70-135	08.10.18 21.43	

Certificate of Analytical Results 595406

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SW08**	Matrix:	Soil	Date Received:	08.10.18 12.17
Lab Sample Id:	595406-003	Date Collected:	08.07.18 14.10	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.17.18 08.15	Basis:	Wet Weight
Seq Number:	3060429				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.17.18 18.15	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.17.18 18.15	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.17.18 18.15	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.17.18 18.15	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.17.18 18.15	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.17.18 18.15	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.17.18 18.15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	100	%	70-130	08.17.18 18.15	
1,4-Difluorobenzene	540-36-3	107	%	70-130	08.17.18 18.15	

Certificate of Analytical Results 595406

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**FS07**	Matrix:	Soil	Date Received:	08.10.18 12.17
Lab Sample Id:	595406-004	Date Collected:	08.07.18 14.30	Sample Depth:	3.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	08.13.18 10.00	Basis:	Wet Weight
Seq Number:	3059874				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**40.5**	1.00	mg/kg	08.13.18 13.56		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.10.18 13.00	Basis:	Wet Weight
Seq Number:	3059701				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.10.18 22.02	U	1
Diesel Range Organics (DRO)	C10C28DRO	**58.9**	15.0	mg/kg	08.10.18 22.02		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.10.18 22.02	U	1
Total TPH	PHC635	**58.9**	15.0	mg/kg	08.10.18 22.02		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	08.10.18 22.02	
o-Terphenyl	84-15-1	94	%	70-135	08.10.18 22.02	

Certificate of Analytical Results 595406

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**FS07**	Matrix:	Soil	Date Received:	08.10.18 12.17
Lab Sample Id:	595406-004	Date Collected:	08.07.18 14.30	Sample Depth:	3.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.17.18 08.15	Basis:	Wet Weight
Seq Number:	3060429				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.17.18 18.35	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.17.18 18.35	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.17.18 18.35	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.17.18 18.35	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.17.18 18.35	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.17.18 18.35	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.17.18 18.35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	105	%	70-130	08.17.18 18.35	
4-Bromofluorobenzene	460-00-4	96	%	70-130	08.17.18 18.35	

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 595406

LT Environmental, Inc.

Horned Toad 36 State #2H

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3059874 Matrix: Solid Date Prep: 08.13.18
MB Sample Id: 7660291-1-BLK LCS Sample Id: 7660291-1-BKS LCSD Sample Id: 7660291-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<1.00	50.0	50.2	100	50.2	100	90-110	0	20	mg/kg	08.13.18 12:23	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3059874 Matrix: Soil Date Prep: 08.13.18
Parent Sample Id: 595234-002 MS Sample Id: 595234-002 S MSD Sample Id: 595234-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<1.00	50.0	49.6	99	49.5	99	90-110	0	20	mg/kg	08.13.18 12:45	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3059874 Matrix: Soil Date Prep: 08.13.18
Parent Sample Id: 595406-004 MS Sample Id: 595406-004 S MSD Sample Id: 595406-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	40.5	50.0	89.1	97	89.3	98	90-110	0	20	mg/kg	08.13.18 14:01	

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3059701 Matrix: Solid Date Prep: 08.10.18
MB Sample Id: 7660204-1-BLK LCS Sample Id: 7660204-1-BKS LCSD Sample Id: 7660204-1-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)	<15.0	1000	898	90	877	88	70-135	2	20	mg/kg	08.10.18 14:32	
Diesel Range Organics (DRO)	<15.0	1000	948	95	1030	103	70-135	8	20	mg/kg	08.10.18 14:32	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	88		124		116		70-135	%	08.10.18 14:32
o-Terphenyl	92		104		103		70-135	%	08.10.18 14:32

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 595406

LT Environmental, Inc.

Horned Toad 36 State #2H

Analytical Method: TPH by SW8015 Mod | Prep Method: TX1005P
Seq Number: 3059701 | Matrix: Soil | Date Prep: 08.10.18
Parent Sample Id: 595257-021 | MS Sample Id: 595257-021 S | MSD Sample Id: 595257-021 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)	<15.0	999	877	88	890	89	70-135	1	20	mg/kg	08.10.18 15:30	
Diesel Range Organics (DRO)	<15.0	999	911	91	924	92	70-135	1	20	mg/kg	08.10.18 15:30	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	129		126		70-135	%	08.10.18 15:30
o-Terphenyl	106		107		70-135	%	08.10.18 15:30

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3060429 | Matrix: Solid | Date Prep: 08.17.18
MB Sample Id: 7660650-1-BLK | LCS Sample Id: 7660650-1-BKS | LCSD Sample Id: 7660650-1-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	0.0989	99	0.0978	98	70-130	1	35	mg/kg	08.17.18 11:25	
Toluene	<0.00200	0.0998	0.0973	97	0.0959	96	70-130	1	35	mg/kg	08.17.18 11:25	
Ethylbenzene	<0.00200	0.0998	0.110	110	0.110	110	70-130	0	35	mg/kg	08.17.18 11:25	
m,p-Xylenes	<0.00399	0.200	0.233	117	0.232	115	70-130	0	35	mg/kg	08.17.18 11:25	
o-Xylene	<0.00200	0.0998	0.117	117	0.115	115	70-130	2	35	mg/kg	08.17.18 11:25	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		113		127		70-130	%	08.17.18 11:25
4-Bromofluorobenzene	96		117		115		70-130	%	08.17.18 11:25

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3060429 | Matrix: Soil | Date Prep: 08.17.18
Parent Sample Id: 594927-001 | MS Sample Id: 594927-001 S | MSD Sample Id: 594927-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.0191	19	0.0336	34	70-130	55	35	mg/kg	08.17.18 12:07	XF
Toluene	<0.00199	0.0996	0.0168	17	0.0299	30	70-130	56	35	mg/kg	08.17.18 12:07	XF
Ethylbenzene	<0.00199	0.0996	0.0137	14	0.0242	24	70-130	55	35	mg/kg	08.17.18 12:07	XF
m,p-Xylenes	<0.00398	0.199	0.0294	15	0.0487	24	70-130	49	35	mg/kg	08.17.18 12:07	XF
o-Xylene	<0.00199	0.0996	0.0131	13	0.0245	25	70-130	61	35	mg/kg	08.17.18 12:07	XF

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	109		122		70-130	%	08.17.18 12:07
4-Bromofluorobenzene	101		96		70-130	%	08.17.18 12:07

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

XENCO LABORATORIES

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Dallas Texas (214-902-0300)

San Antonio, Texas (210-509-3334)

Midland, Texas (432-704-5251)

Phoenix, Arizona (480-355-0900)

www.xenco.com

CHAIN OF CUSTODY

Page 1 of 1

Xenco Quote #

Xenco Job # 595406

Client / Reporting Information

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

Company Address: 3300 North "A" Street, Building 1, Unit #103, Midland, TX 79705

Email: Abaker@ltenv.com

Phone No: (432) 704-5178

Project Contact: Adrian Baker

Samplers's Name: Garrett

Project Information

Project Name/Number: Horned Toad 36 State #214

Project Location: Carlsbad, NM

Invoice To: XTO Energy - Kyle Littrell

PO Number: 2RP-4850

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	Collection: Sample Depth	Date	Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	BTEX EPA 8021	TPH EPA 8015	Chloride 300.1	Field Comments
1	FS05	4'	8/7/18	1100	S	1								X	X	X	X	
2	FS06	3.5'	"	1200	"	"								X	X	X	X	
3	SW08	2.5'	"	1410	"	"								X	X	X	X	
4	FS07	3.5'	"	1430	"	"								X	X	X	X	
5																		
6																		
7																		
8		8/7/18			BS													
9																		
10																		

Turnaround Time (Business days)

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

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 # 772041275224

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	Garrett	8/8/18 17:30	Chris Pulido	Chris Pulido	8/9/18 15:30	
2						Received By: 1150 8/10/18
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: Y — Cooler Temp. 0.7 — Thermo. Corr. Factor 0.0

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.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 08/10/2018 12:17:58 PM

Work Order #: 595406

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)?	**No**
#18 Water VOC samples have zero headspace?	**N/A**

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

Analyst: PH Device/Lot#:

Checklist completed by: Katie Lowe Date: 08/10/2018

Checklist reviewed by: Jessica Kramer Date: 08/10/2018

Analytical Report 595898

for

LT Environmental, Inc.

Project Manager: Adrian Baker

Horned Toad 36 State #2H

12-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)

12-NOV-18

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

Reference: XENCO Report No(s): **595898**
Horned Toad 36 State #2H
Project Address: Carlsbad, 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) 595898. 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. 595898 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.
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Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America

Sample Cross Reference 595898

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS12	S	08-10-18 13:45	8.5 ft	595898-001
SW16	S	08-10-18 14:30	4 ft	595898-002
SW17	S	08-10-18 16:15	4 ft	595898-003
SW18	S	08-10-18 16:20	4 ft	595898-004
SW19	S	08-10-18 17:00	3 ft	595898-005
FS13	S	08-10-18 17:10	6 ft	595898-006
SW20	S	08-10-18 17:20	3 ft	595898-007

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: Horned Toad 36 State #2H

Project ID:
Work Order Number(s): *595898*

Report Date: *12-NOV-18*
Date Received: *08/15/2018*

Sample receipt non conformances and comments:

Per clients email request, corrected sample depth to 3' on sample 007. JKR 11/12/18

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3060904 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3060988 BTEX by EPA 8021B
Lab Sample ID 595898-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene, Ethylbenzene, Toluene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 595898-001.
The Laboratory Control Sample for Toluene, Benzene, m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3061150 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analysis Summary 595898

LT Environmental, Inc., Arvada, CO

Project Name: Horned Toad 36 State #2H

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

Date Received in Lab: Wed Aug-15-18 04:15 pm
Report Date: 12-NOV-18
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	595898-001		595898-002		595898-003		595898-004		595898-005		595898-006	
	Field Id:	FS12		SW16		SW17		SW18		SW19		FS13	
	Depth:	8.5- ft		4- ft		4- ft		4- ft		3- ft		6- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Aug-10-18 13:45		Aug-10-18 14:30		Aug-10-18 16:15		Aug-10-18 16:20		Aug-10-18 17:00		Aug-10-18 17:10	
BTEX by EPA 8021B	***Extracted:***	Aug-23-18 08:00		Aug-22-18 15:00		Aug-24-18 08:00		Aug-24-18 08:00		Aug-24-18 08:00		Aug-24-18 08:00	
	Analyzed:	Aug-23-18 11:50		Aug-22-18 23:22		Aug-24-18 14:02		Aug-24-18 14:23		Aug-24-18 14:42		Aug-24-18 15:02	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00202	0.00202	<0.00199	0.00199	<0.00202	0.00202	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201
Toluene		<0.00202	0.00202	<0.00199	0.00199	<0.00202	0.00202	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201
Ethylbenzene		<0.00202	0.00202	<0.00199	0.00199	<0.00202	0.00202	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201
m,p-Xylenes		<0.00403	0.00403	<0.00398	0.00398	<0.00404	0.00404	<0.00398	0.00398	<0.00401	0.00401	<0.00402	0.00402
o-Xylene		<0.00202	0.00202	<0.00199	0.00199	<0.00202	0.00202	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201
Total Xylenes		<0.00202	0.00202	<0.00199	0.00199	<0.00202	0.00202	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201
Total BTEX		<0.00202	0.00202	<0.00199	0.00199	<0.00202	0.00202	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201
Inorganic Anions by EPA 300	***Extracted:***	Aug-16-18 14:00		Aug-16-18 14:00		Aug-16-18 14:00		Aug-16-18 14:00		Aug-16-18 14:00		Aug-16-18 14:00	
	Analyzed:	Aug-16-18 16:37		Aug-16-18 16:43		Aug-16-18 16:48		Aug-16-18 16:54		Aug-16-18 17:05		Aug-16-18 16:59	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		217	5.00	40.1	4.95	102	4.95	395	4.97	140	4.99	216	24.8
TPH by SW8015 Mod	***Extracted:***	Aug-16-18 09:00		Aug-16-18 09:00		Aug-16-18 09:00		Aug-16-18 09:00		Aug-16-18 09:00		Aug-16-18 09:00	
	Analyzed:	Aug-16-18 12:16		Aug-16-18 13:15		Aug-16-18 13:34		Aug-16-18 13:54		Aug-16-18 14:14		Aug-16-18 14:34	
	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	<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	16.3	15.0
Oil Range Hydrocarbons (ORO)		<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0
Total TPH		<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	16.3	15.0

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 595898

LT Environmental, Inc., Arvada, CO

Project Name: Horned Toad 36 State #2H

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

Date Received in Lab: Wed Aug-15-18 04:15 pm
Report Date: 12-NOV-18
Project Manager: Jessica Kramer

Analysis Requested							
	Lab Id:	595898-007					
	Field Id:	SW20					
	Depth:	3- ft					
	Matrix:	SOIL					
	Sampled:	Aug-10-18 17:20					
BTEX by EPA 8021B	***Extracted:***	Aug-24-18 08:00					
	Analyzed:	Aug-24-18 15:23					
	Units/RL:	mg/kg	RL				
Benzene		<0.00198	0.00198				
Toluene		<0.00198	0.00198				
Ethylbenzene		<0.00198	0.00198				
m,p-Xylenes		<0.00397	0.00397				
o-Xylene		<0.00198	0.00198				
Total Xylenes		<0.00198	0.00198				
Total BTEX		<0.00198	0.00198				
Inorganic Anions by EPA 300	***Extracted:***	Aug-16-18 14:00					
	Analyzed:	Aug-16-18 17:21					
	Units/RL:	mg/kg	RL				
Chloride		164	4.97				
TPH by SW8015 Mod	***Extracted:***	Aug-16-18 09:00					
	Analyzed:	Aug-16-18 14:53					
	Units/RL:	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0				
Diesel Range Organics (DRO)		<15.0	15.0				
Oil Range Hydrocarbons (ORO)		<15.0	15.0				
Total TPH		<15.0	15.0				

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Jessica Kramer
Project Assistant

Certificate of Analytical Results 595898

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**FS12**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595898-001	Date Collected:	08.10.18 13.45	Sample Depth:	8.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	08.16.18 14.00	Basis:	Wet Weight
Seq Number:	3060331				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**217**	5.00	mg/kg	08.16.18 16.37		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.16.18 09.00	Basis:	Wet Weight
Seq Number:	3060379				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.16.18 12.16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.16.18 12.16	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.16.18 12.16	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.16.18 12.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	08.16.18 12.16	
o-Terphenyl	84-15-1	94	%	70-135	08.16.18 12.16	

Certificate of Analytical Results 595898

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**FS12**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595898-001	Date Collected:	08.10.18 13.45	Sample Depth:	8.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.23.18 08.00	Basis:	Wet Weight
Seq Number:	3060988				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	08.23.18 11.50	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	08.23.18 11.50	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	08.23.18 11.50	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	08.23.18 11.50	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	08.23.18 11.50	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	08.23.18 11.50	U	1
Total BTEX		<0.00202	0.00202	mg/kg	08.23.18 11.50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	08.23.18 11.50	
1,4-Difluorobenzene	540-36-3	95	%	70-130	08.23.18 11.50	

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LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SW16**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595898-002	Date Collected:	08.10.18 14.30	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	08.16.18 14.00	Basis:	Wet Weight
Seq Number:	3060331				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**40.1**	4.95	mg/kg	08.16.18 16.43		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.16.18 09.00	Basis:	Wet Weight
Seq Number:	3060379				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.16.18 13.15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.16.18 13.15	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.16.18 13.15	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.16.18 13.15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	08.16.18 13.15	
o-Terphenyl	84-15-1	93	%	70-135	08.16.18 13.15	

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LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SW16**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595898-002	Date Collected:	08.10.18 14.30	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.22.18 15.00	Basis:	Wet Weight
Seq Number:	3060904				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.22.18 23.22	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.22.18 23.22	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.22.18 23.22	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.22.18 23.22	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.22.18 23.22	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.22.18 23.22	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.22.18 23.22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	107	%	70-130	08.22.18 23.22	
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.22.18 23.22	

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LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SW17**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595898-003	Date Collected:	08.10.18 16.15	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	08.16.18 14.00	Basis:	Wet Weight
Seq Number:	3060331				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**102**	4.95	mg/kg	08.16.18 16.48		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.16.18 09.00	Basis:	Wet Weight
Seq Number:	3060379				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	08.16.18 13.34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	08.16.18 13.34	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<14.9	14.9	mg/kg	08.16.18 13.34	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	08.16.18 13.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	08.16.18 13.34	
o-Terphenyl	84-15-1	89	%	70-135	08.16.18 13.34	

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LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SW17**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595898-003	Date Collected:	08.10.18 16.15	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.24.18 08.00	Basis:	Wet Weight
Seq Number:	3061150				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	08.24.18 14.02	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	08.24.18 14.02	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	08.24.18 14.02	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	08.24.18 14.02	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	08.24.18 14.02	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	08.24.18 14.02	U	1
Total BTEX		<0.00202	0.00202	mg/kg	08.24.18 14.02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	102	%	70-130	08.24.18 14.02	
1,4-Difluorobenzene	540-36-3	96	%	70-130	08.24.18 14.02	

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LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SW18**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595898-004	Date Collected:	08.10.18 16.20	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	08.16.18 14.00	Basis:	Wet Weight
Seq Number:	3060331				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**395**	4.97	mg/kg	08.16.18 16.54		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.16.18 09.00	Basis:	Wet Weight
Seq Number:	3060379				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.16.18 13.54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.16.18 13.54	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.16.18 13.54	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.16.18 13.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	08.16.18 13.54	
o-Terphenyl	84-15-1	89	%	70-135	08.16.18 13.54	

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LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SW18**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595898-004	Date Collected:	08.10.18 16.20	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.24.18 08.00	Basis:	Wet Weight
Seq Number:	3061150				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.24.18 14.23	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.24.18 14.23	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.24.18 14.23	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.24.18 14.23	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.24.18 14.23	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.24.18 14.23	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.24.18 14.23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	98	%	70-130	08.24.18 14.23	
1,4-Difluorobenzene	540-36-3	97	%	70-130	08.24.18 14.23	

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LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SW19**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595898-005	Date Collected:	08.10.18 17.00	Sample Depth:	3 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	08.16.18 14.00	Basis:	Wet Weight
Seq Number:	3060331				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**140**	4.99	mg/kg	08.16.18 17.05		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.16.18 09.00	Basis:	Wet Weight
Seq Number:	3060379				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.16.18 14.14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.16.18 14.14	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.16.18 14.14	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.16.18 14.14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	08.16.18 14.14	
o-Terphenyl	84-15-1	93	%	70-135	08.16.18 14.14	

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LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SW19**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595898-005	Date Collected:	08.10.18 17.00	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.24.18 08.00	Basis:	Wet Weight
Seq Number:	3061150				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.24.18 14.42	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.24.18 14.42	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.24.18 14.42	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.24.18 14.42	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.24.18 14.42	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.24.18 14.42	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.24.18 14.42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	101	%	70-130	08.24.18 14.42	
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.24.18 14.42	

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LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**FS13**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595898-006	Date Collected:	08.10.18 17.10	Sample Depth:	6 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	08.16.18 14.00	Basis:	Wet Weight
Seq Number:	3060331				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**216**	24.8	mg/kg	08.16.18 16.59		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.16.18 09.00	Basis:	Wet Weight
Seq Number:	3060379				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.16.18 14.34	U	1
Diesel Range Organics (DRO)	C10C28DRO	**16.3**	15.0	mg/kg	08.16.18 14.34		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.16.18 14.34	U	1
Total TPH	PHC635	**16.3**	15.0	mg/kg	08.16.18 14.34		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	08.16.18 14.34	
o-Terphenyl	84-15-1	98	%	70-135	08.16.18 14.34	

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LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**FS13**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595898-006	Date Collected:	08.10.18 17.10	Sample Depth:	6 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.24.18 08.00	Basis:	Wet Weight
Seq Number:	3061150				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.24.18 15.02	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.24.18 15.02	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.24.18 15.02	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.24.18 15.02	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.24.18 15.02	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.24.18 15.02	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.24.18 15.02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	97	%	70-130	08.24.18 15.02	
4-Bromofluorobenzene	460-00-4	98	%	70-130	08.24.18 15.02	

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LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SW20**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595898-007	Date Collected:	08.10.18 17.20	Sample Depth:	3 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	08.16.18 14.00	Basis:	Wet Weight
Seq Number:	3060331				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**164**	4.97	mg/kg	08.16.18 17.21		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.16.18 09.00	Basis:	Wet Weight
Seq Number:	3060379				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.16.18 14.53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.16.18 14.53	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.16.18 14.53	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.16.18 14.53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	08.16.18 14.53	
o-Terphenyl	84-15-1	92	%	70-135	08.16.18 14.53	

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LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SW20**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595898-007	Date Collected:	08.10.18 17.20	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.24.18 08.00	Basis:	Wet Weight
Seq Number:	3061150				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.24.18 15.23	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.24.18 15.23	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.24.18 15.23	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	08.24.18 15.23	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.24.18 15.23	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.24.18 15.23	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.24.18 15.23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	08.24.18 15.23	
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.24.18 15.23	

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

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 595898

LT Environmental, Inc.

Horned Toad 36 State #2H

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3060331 Matrix: Solid Date Prep: 08.16.18
MB Sample Id: 7660558-1-BLK LCS Sample Id: 7660558-1-BKS LCSD Sample Id: 7660558-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<4.99	250	247	99	246	98	90-110	0	20	mg/kg	08.16.18 15:25	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3060331 Matrix: Soil Date Prep: 08.16.18
Parent Sample Id: 595729-004 MS Sample Id: 595729-004 S MSD Sample Id: 595729-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	17.1	250	272	102	269	101	90-110	1	20	mg/kg	08.16.18 15:46	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3060331 Matrix: Soil Date Prep: 08.16.18
Parent Sample Id: 595898-005 MS Sample Id: 595898-005 S MSD Sample Id: 595898-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	140	250	388	99	405	106	90-110	4	20	mg/kg	08.16.18 17:10	

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3060379 Matrix: Solid Date Prep: 08.16.18
MB Sample Id: 7660590-1-BLK LCS Sample Id: 7660590-1-BKS LCSD Sample Id: 7660590-1-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)	<15.0	1000	897	90	980	98	70-135	9	20	mg/kg	08.16.18 11:37	
Diesel Range Organics (DRO)	<15.0	1000	957	96	1030	103	70-135	7	20	mg/kg	08.16.18 11:37	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	89		106		125		70-135	%	08.16.18 11:37
o-Terphenyl	92		95		115		70-135	%	08.16.18 11:37

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 595898

LT Environmental, Inc.

Horned Toad 36 State #2H

Analytical Method: TPH by SW8015 Mod | Prep Method: TX1005P
Seq Number: 3060379 | Matrix: Soil | Date Prep: 08.16.18
Parent Sample Id: 595898-001 | MS Sample Id: 595898-001 S | MSD Sample Id: 595898-001 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)	<15.0	1000	875	88	866	87	70-135	1	20	mg/kg	08.16.18 12:35	
Diesel Range Organics (DRO)	<15.0	1000	948	95	938	94	70-135	1	20	mg/kg	08.16.18 12:35	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	107		109		70-135	%	08.16.18 12:35
o-Terphenyl	93		92		70-135	%	08.16.18 12:35

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3060904 | Matrix: Solid | Date Prep: 08.22.18
MB Sample Id: 7660920-1-BLK | LCS Sample Id: 7660920-1-BKS | LCSD Sample Id: 7660920-1-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	0.0957	96	0.0970	97	70-130	1	35	mg/kg	08.22.18 10:36	
Toluene	<0.00200	0.0998	0.0911	91	0.0937	94	70-130	3	35	mg/kg	08.22.18 10:36	
Ethylbenzene	<0.00200	0.0998	0.100	100	0.104	104	70-130	4	35	mg/kg	08.22.18 10:36	
m,p-Xylenes	<0.00399	0.200	0.216	108	0.234	116	70-130	8	35	mg/kg	08.22.18 10:36	
o-Xylene	<0.00200	0.0998	0.103	103	0.112	112	70-130	8	35	mg/kg	08.22.18 10:36	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		104		112		70-130	%	08.22.18 10:36
4-Bromofluorobenzene	92		100		104		70-130	%	08.22.18 10:36

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3060988 | Matrix: Solid | Date Prep: 08.23.18
MB Sample Id: 7660978-1-BLK | LCS Sample Id: 7660978-1-BKS | LCSD Sample Id: 7660978-1-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	0.0996	0.100	100	0.0978	98	70-130	2	35	mg/kg	08.23.18 08:44	
Toluene	<0.00199	0.0996	0.0955	96	0.0944	94	70-130	1	35	mg/kg	08.23.18 08:44	
Ethylbenzene	<0.00199	0.0996	0.110	110	0.106	106	70-130	4	35	mg/kg	08.23.18 08:44	
m,p-Xylenes	<0.00398	0.199	0.235	118	0.229	115	70-130	3	35	mg/kg	08.23.18 08:44	
o-Xylene	<0.00199	0.0996	0.114	114	0.109	109	70-130	4	35	mg/kg	08.23.18 08:44	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		110		106		70-130	%	08.23.18 08:44
4-Bromofluorobenzene	96		119		110		70-130	%	08.23.18 08:44

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

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

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

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

QC Summary 595898

LT Environmental, Inc.

Horned Toad 36 State #2H

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3061150 — Matrix: Solid — Date Prep: 08.24.18
MB Sample Id: 7661091-1-BLK — LCS Sample Id: 7661091-1-BKS — LCSD Sample Id: 7661091-1-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	0.0996	0.0902	91	0.0900	90	70-130	0	35	mg/kg	08.24.18 07:57	
Toluene	<0.00199	0.0996	0.0861	86	0.0863	86	70-130	0	35	mg/kg	08.24.18 07:57	
Ethylbenzene	<0.00199	0.0996	0.0980	98	0.0991	99	70-130	1	35	mg/kg	08.24.18 07:57	
m,p-Xylenes	<0.00398	0.199	0.207	104	0.211	106	70-130	2	35	mg/kg	08.24.18 07:57	
o-Xylene	<0.00199	0.0996	0.101	101	0.104	104	70-130	3	35	mg/kg	08.24.18 07:57	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		104		103		70-130	%	08.24.18 07:57
4-Bromofluorobenzene	92		109		105		70-130	%	08.24.18 07:57

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3060904 — Matrix: Soil — Date Prep: 08.22.18
Parent Sample Id: 595901-001 — MS Sample Id: 595901-001 S — MSD Sample Id: 595901-001 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	0.0677	67	0.0655	66	70-130	3	35	mg/kg	08.22.18 12:08	X
Toluene	<0.00202	0.101	0.0655	65	0.0622	62	70-130	5	35	mg/kg	08.22.18 12:08	X
Ethylbenzene	<0.00202	0.101	0.0684	68	0.0647	65	70-130	6	35	mg/kg	08.22.18 12:08	X
m,p-Xylenes	<0.00403	0.202	0.143	71	0.137	69	70-130	4	35	mg/kg	08.22.18 12:08	X
o-Xylene	<0.00202	0.101	0.0673	67	0.0632	63	70-130	6	35	mg/kg	08.22.18 12:08	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		129		70-130	%	08.22.18 12:08
4-Bromofluorobenzene	106		110		70-130	%	08.22.18 12:08

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3060988 — Matrix: Soil — Date Prep: 08.23.18
Parent Sample Id: 595898-001 — MS Sample Id: 595898-001 S — MSD Sample Id: 595898-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.0593	59	0.0612	61	70-130	3	35	mg/kg	08.23.18 10:06	X
Toluene	<0.00200	0.0998	0.0610	61	0.0582	58	70-130	5	35	mg/kg	08.23.18 10:06	X
Ethylbenzene	<0.00200	0.0998	0.0677	68	0.0649	65	70-130	4	35	mg/kg	08.23.18 10:06	X
m,p-Xylenes	<0.00399	0.200	0.143	72	0.135	67	70-130	6	35	mg/kg	08.23.18 10:06	X
o-Xylene	<0.00200	0.0998	0.0708	71	0.0641	64	70-130	10	35	mg/kg	08.23.18 10:06	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		101		70-130	%	08.23.18 10:06
4-Bromofluorobenzene	117		110		70-130	%	08.23.18 10:06

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 595898

LT Environmental, Inc.

Horned Toad 36 State #2H

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B

Seq Number: 3061150 Matrix: Soil Date Prep: 08.24.18

Parent Sample Id: 596792-001 MS Sample Id: 596792-001 S

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Benzene	<0.00204	0.102	0.0761	75	70-130	mg/kg	08.24.18 08:40	
Toluene	<0.00204	0.102	0.0593	58	70-130	mg/kg	08.24.18 08:40	X
Ethylbenzene	<0.00204	0.102	0.0708	69	70-130	mg/kg	08.24.18 08:40	X
m,p-Xylenes	<0.00409	0.204	0.133	65	70-130	mg/kg	08.24.18 08:40	X
o-Xylene	<0.00204	0.102	0.0760	75	70-130	mg/kg	08.24.18 08:40	

Surrogate	MS %Rec	MS Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		70-130	%	08.24.18 08:40
4-Bromofluorobenzene	106		70-130	%	08.24.18 08:40

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

XENCO LABORATORIES
Setting the Standard since 1990
Stafford,Texas (281-240-4200)
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CHAIN OF CUSTODY

Page 1 Of 4

San Antonio, Texas (210-509-3334)
Midland, Texas (432-704-6251)
Phoenix, Arizona (480-355-0900)

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Xenco Quote #:
Xenco Job #: 595898

Client / Reporting Information

Company Name / Branch: LT Environmental, Inc. - Permian Office
Company Address: 3300 North "A" Street, Building 1, Unit #103, Midland, TX 79705
Email: Abaker@ltenv.com
Phone No: (432) 704-5178
Project Contact: Adrian Baker
Samplers's Name: Ben Belill

Project Information

Project Name/Number: Horned Toad 36 State #2H
Project Location: Carlsbad, NM
Invoice To: XTO Energy - Kyle Littrell
PO Number: 2RP-4850

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 EPA 8020	TPH EPA 8015	Chloride 300.1	Field Comments
1	FS12	8.5'	8/10/18	1345	S	1								X	X	X	X	
2	SW16	4'	↓	1430	↓	↓								X	X	X	X	
3	SW17	4'	↓	1615	↓	↓								X	X	X	X	
4	SW18	4'	↓	1620	↓	↓								X	X	X	X	
5	SW19	3'	↓	1700	↓	↓								X	X	X	X	
6	FS13	6'	↓	1710	↓	↓								X	X	X	X	
7	SW20	3'	↓	1720	↓	↓								X	X	X	X	
8																		
9		8/10/18 BB																
10																		

Turnaround Time (Business days)

- [ ] Same Day TAT
- [x] 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 # 772975735439

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

Relinquished by	Date Time	Received By	Relinquished By	Date Time	Received By
1 Relinquished by Sampler: B.T. Belill	8/13/18 15:35	1 [signature]	2 [signature]	8/14 15:30	2 [signature] 8/18/18
3 Relinquished by:	Date Time:	3 Received By:	4 Relinquished By:	Date Time:	4 Received By: 1615
5 Relinquished by:	Date Time:	5 Received By:	Custody Seal #	Preserved where applicable	On Ice: X; Cooler Temp.: 0.3; Thermo. Corr. Factor: [illegible] 0.0

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.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 08/15/2018 04:15:00 PM

Work Order #: 595898

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)?	.3
#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: 08/15/2018

Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 08/16/2018

Jessica Kramer

Analytical Report 595899

for

LT Environmental, Inc.

Project Manager: Adrian Baker

Horned Toad 36 State #2H

24-AUG-18

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-18-27), 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 (T104704221-18-13)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-17)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-16)
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)

24-AUG-18

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

Reference: XENCO Report No(s): **595899**
Horned Toad 36 State #2H
Project Address: Carlsbad, 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) 595899. 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. 595899 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.
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Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America

Sample Cross Reference 595899

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SW21	S	08-13-18 09:30	2.5 ft	595899-001
SW22	S	08-13-18 10:30	2 ft	595899-002
FS14	S	08-13-18 11:00	7 ft	595899-003

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: Horned Toad 36 State #2H

Project ID:
Work Order Number(s): *595899*

Report Date: *24-AUG-18*
Date Received: *08/15/2018*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3061150 BTEX by EPA 8021B

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

Certificate of Analysis Summary 595899

LT Environmental, Inc., Arvada, CO

Project Name: Horned Toad 36 State #2H

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

Date Received in Lab: Wed Aug-15-18 04:15 pm
Report Date: 24-AUG-18
Project Manager: Jessica Kramer

Analysis Requested									
	Lab Id:	595899-001		595899-002		595899-003			
	Field Id:	SW21		SW22		FS14			
	Depth:	2.5- ft		2- ft		7- ft			
	Matrix:	SOIL		SOIL		SOIL			
	Sampled:	Aug-13-18 09:30		Aug-13-18 10:30		Aug-13-18 11:00			
BTEX by EPA 8021B	***Extracted:***	Aug-24-18 08:00		Aug-24-18 08:00		Aug-24-18 08:00			
	Analyzed:	Aug-24-18 16:51		Aug-24-18 16:04		Aug-24-18 16:30			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Benzene		<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202		
Toluene		<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202		
Ethylbenzene		<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202		
m,p-Xylenes		<0.00399	0.00399	<0.00401	0.00401	<0.00403	0.00403		
o-Xylene		<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202		
Total Xylenes		<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202		
Total BTEX		<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202		
Inorganic Anions by EPA 300	***Extracted:***	Aug-16-18 14:00		Aug-16-18 14:00		Aug-16-18 14:00			
	Analyzed:	Aug-16-18 17:27		Aug-16-18 17:43		Aug-16-18 17:48			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Chloride		52.1	49.9	173	49.8	28.7	24.8		
TPH by SW8015 Mod	***Extracted:***	Aug-16-18 09:00		Aug-16-18 09:00		Aug-15-18 17:00			
	Analyzed:	Aug-16-18 15:13		Aug-16-18 15:33		Aug-16-18 07:33			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0		
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0		
Oil Range Hydrocarbons (ORO)		<15.0	15.0	<15.0	15.0	<15.0	15.0		
Total TPH		<15.0	15.0	<15.0	15.0	<15.0	15.0		

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Jessica Kramer
Project Assistant

Final 1.000

Certificate of Analytical Results 595899

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SW21**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595899-001	Date Collected:	08.13.18 09.30	Sample Depth:	2.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	08.16.18 14.00	Basis:	Wet Weight
Seq Number:	3060331				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**52.1**	49.9	mg/kg	08.16.18 17.27		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.16.18 09.00	Basis:	Wet Weight
Seq Number:	3060379				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.16.18 15.13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.16.18 15.13	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.16.18 15.13	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.16.18 15.13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	08.16.18 15.13	
o-Terphenyl	84-15-1	92	%	70-135	08.16.18 15.13	

Certificate of Analytical Results 595899

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SW21**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595899-001	Date Collected:	08.13.18 09.30	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.24.18 08.00	Basis:	Wet Weight
Seq Number:	3061150				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.24.18 16.51	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.24.18 16.51	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.24.18 16.51	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.24.18 16.51	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.24.18 16.51	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.24.18 16.51	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.24.18 16.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	103	%	70-130	08.24.18 16.51	
4-Bromofluorobenzene	460-00-4	101	%	70-130	08.24.18 16.51	

Certificate of Analytical Results 595899

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SW22**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595899-002	Date Collected:	08.13.18 10.30	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	08.16.18 14.00	Basis:	Wet Weight
Seq Number:	3060331				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**173**	49.8	mg/kg	08.16.18 17.43		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.16.18 09.00	Basis:	Wet Weight
Seq Number:	3060379				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.16.18 15.33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.16.18 15.33	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.16.18 15.33	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.16.18 15.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	08.16.18 15.33	
o-Terphenyl	84-15-1	93	%	70-135	08.16.18 15.33	

Certificate of Analytical Results 595899

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SW22**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595899-002	Date Collected:	08.13.18 10.30	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.24.18 08.00	Basis:	Wet Weight
Seq Number:	3061150				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.24.18 16.04	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.24.18 16.04	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.24.18 16.04	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.24.18 16.04	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.24.18 16.04	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.24.18 16.04	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.24.18 16.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	99	%	70-130	08.24.18 16.04	
1,4-Difluorobenzene	540-36-3	96	%	70-130	08.24.18 16.04	

Certificate of Analytical Results 595899

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**FS14**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595899-003	Date Collected:	08.13.18 11.00	Sample Depth:	7 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	08.16.18 14.00	Basis:	Wet Weight
Seq Number:	3060331				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**28.7**	24.8	mg/kg	08.16.18 17.48		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.15.18 17.00	Basis:	Wet Weight
Seq Number:	3060224				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.16.18 07.33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.16.18 07.33	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.16.18 07.33	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.16.18 07.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	08.16.18 07.33	
o-Terphenyl	84-15-1	91	%	70-135	08.16.18 07.33	

Certificate of Analytical Results 595899

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**FS14**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595899-003	Date Collected:	08.13.18 11.00	Sample Depth:	7 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.24.18 08.00	Basis:	Wet Weight
Seq Number:	3061150				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	08.24.18 16.30	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	08.24.18 16.30	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	08.24.18 16.30	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	08.24.18 16.30	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	08.24.18 16.30	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	08.24.18 16.30	U	1
Total BTEX		<0.00202	0.00202	mg/kg	08.24.18 16.30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.24.18 16.30	
4-Bromofluorobenzene	460-00-4	103	%	70-130	08.24.18 16.30	

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 595899

LT Environmental, Inc.

Horned Toad 36 State #2H

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3060331 — Matrix: Solid — Date Prep: 08.16.18
MB Sample Id: 7660558-1-BLK — LCS Sample Id: 7660558-1-BKS — LCSD Sample Id: 7660558-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<4.99	250	247	99	246	98	90-110	0	20	mg/kg	08.16.18 15:25	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3060331 — Matrix: Soil — Date Prep: 08.16.18
Parent Sample Id: 595729-004 — MS Sample Id: 595729-004 S — MSD Sample Id: 595729-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	17.1	250	272	102	269	101	90-110	1	20	mg/kg	08.16.18 15:46	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3060331 — Matrix: Soil — Date Prep: 08.16.18
Parent Sample Id: 595898-005 — MS Sample Id: 595898-005 S — MSD Sample Id: 595898-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	140	250	388	99	405	106	90-110	4	20	mg/kg	08.16.18 17:10	

Analytical Method: TPH by SW8015 Mod — Prep Method: TX1005P
Seq Number: 3060224 — Matrix: Solid — Date Prep: 08.15.18
MB Sample Id: 7660477-1-BLK — LCS Sample Id: 7660477-1-BKS — LCSD Sample Id: 7660477-1-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)	<15.0	1000	882	88	969	97	70-135	9	20	mg/kg	08.15.18 14:07	
Diesel Range Organics (DRO)	<15.0	1000	914	91	962	96	70-135	5	20	mg/kg	08.15.18 14:07	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	89		126		112		70-135	%	08.15.18 14:07
o-Terphenyl	90		98		93		70-135	%	08.15.18 14:07

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 595899

LT Environmental, Inc.

Horned Toad 36 State #2H

Analytical Method: TPH by SW8015 Mod — Prep Method: TX1005P
Seq Number: 3060379 — Matrix: Solid — Date Prep: 08.16.18
MB Sample Id: 7660590-1-BLK — LCS Sample Id: 7660590-1-BKS — LCSD Sample Id: 7660590-1-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)	<15.0	1000	897	90	980	98	70-135	9	20	mg/kg	08.16.18 11:37	
Diesel Range Organics (DRO)	<15.0	1000	957	96	1030	103	70-135	7	20	mg/kg	08.16.18 11:37	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	89		106		125		70-135	%	08.16.18 11:37
o-Terphenyl	92		95		115		70-135	%	08.16.18 11:37

Analytical Method: TPH by SW8015 Mod — Prep Method: TX1005P
Seq Number: 3060224 — Matrix: Soil — Date Prep: 08.15.18
Parent Sample Id: 595675-001 — MS Sample Id: 595675-001 S — MSD Sample Id: 595675-001 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)	37.3	1000	885	85	891	85	70-135	1	20	mg/kg	08.15.18 15:06	
Diesel Range Organics (DRO)	298	1000	1240	94	1230	93	70-135	1	20	mg/kg	08.15.18 15:06	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	101		108		70-135	%	08.15.18 15:06
o-Terphenyl	95		95		70-135	%	08.15.18 15:06

Analytical Method: TPH by SW8015 Mod — Prep Method: TX1005P
Seq Number: 3060379 — Matrix: Soil — Date Prep: 08.16.18
Parent Sample Id: 595898-001 — MS Sample Id: 595898-001 S — MSD Sample Id: 595898-001 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)	<15.0	1000	875	88	866	87	70-135	1	20	mg/kg	08.16.18 12:35	
Diesel Range Organics (DRO)	<15.0	1000	948	95	938	94	70-135	1	20	mg/kg	08.16.18 12:35	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	107		109		70-135	%	08.16.18 12:35
o-Terphenyl	93		92		70-135	%	08.16.18 12:35

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 595899

LT Environmental, Inc.

Horned Toad 36 State #2H

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B

Seq Number: 3061150 Matrix: Solid Date Prep: 08.24.18

MB Sample Id: 7661091-1-BLK LCS Sample Id: 7661091-1-BKS LCSD Sample Id: 7661091-1-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	0.0996	0.0902	91	0.0900	90	70-130	0	35	mg/kg	08.24.18 07:57	
Toluene	<0.00199	0.0996	0.0861	86	0.0863	86	70-130	0	35	mg/kg	08.24.18 07:57	
Ethylbenzene	<0.00199	0.0996	0.0980	98	0.0991	99	70-130	1	35	mg/kg	08.24.18 07:57	
m,p-Xylenes	<0.00398	0.199	0.207	104	0.211	106	70-130	2	35	mg/kg	08.24.18 07:57	
o-Xylene	<0.00199	0.0996	0.101	101	0.104	104	70-130	3	35	mg/kg	08.24.18 07:57	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		104		103		70-130	%	08.24.18 07:57
4-Bromofluorobenzene	92		109		105		70-130	%	08.24.18 07:57

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B

Seq Number: 3061150 Matrix: Soil Date Prep: 08.24.18

Parent Sample Id: 596792-001 MS Sample Id: 596792-001 S

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Benzene	<0.00204	0.102	0.0761	75	70-130	mg/kg	08.24.18 08:40	
Toluene	<0.00204	0.102	0.0593	58	70-130	mg/kg	08.24.18 08:40	X
Ethylbenzene	<0.00204	0.102	0.0708	69	70-130	mg/kg	08.24.18 08:40	X
m,p-Xylenes	<0.00409	0.204	0.133	65	70-130	mg/kg	08.24.18 08:40	X
o-Xylene	<0.00204	0.102	0.0760	75	70-130	mg/kg	08.24.18 08:40	

Surrogate	MS %Rec	MS Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		70-130	%	08.24.18 08:40
4-Bromofluorobenzene	106		70-130	%	08.24.18 08:40

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

XENCO LABORATORIES
Setting the Standard since 1990

CHAIN OF CUSTODY

Page 1 Of 1

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)
www.xenco.com

Xenco Quote #:
Xenco Job #: 595899

Client / Reporting Information

Company Name / Branch: LT Environmental, Inc. - Permian Office
Company Address: 3300 North "A" Street, Building 1, Unit #103, Midland, TX 79705
Email: Abaker@ltenv.com
Phone No: (432) 704-5178
Project Contact: Adrian Baker
Samplers's Name: Ben Belill

Project Information

Project Name/Number: Horned Toad 36 State #2H
Project Location: Carlsbad, NM
Invoice To: XTO Energy - Kyle Littrell
PO Number: 2RP-4880

Analytical Information: BTEX EPA 8020; TPH EPA 8015; Chloride 300.1

No.	Field ID / Point of Collection	Sample Depth	Date	Time	Matrix	# of bottles	HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	BTEX EPA 8020	TPH EPA 8015	Chloride 300.1								Field Comments
1	SW21	2.5'	8/13/18	0930	S	1								X	X	X	X								
2	SW22	2'	↓	1030	↓	↓								X	X	X	X								
3	FS14	7'	↓	1100	↓	↓								X	X	X	X								
4																									
5																									
6																									
7																									
8																									
9																									
10																									

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

Turnaround Time (Business days)

- [ ] Same Day TAT
- [x] 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 # 772975735439

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 [signature]	8/13/18 15:35	1 [signature]	2 [signature]	8/14 15:30	2 [signature] 8/15/18 1015
Relinquished by: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable	On Ice: X; Cooler Temp.: 0.3; Thermo. Corr. Factor: 0.0

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.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 08/15/2018 04:15:00 PM

Work Order #: 595899

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)?	.3
#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: 08/15/2018

Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 08/16/2018

Jessica Kramer

Analytical Report 595900

for

LT Environmental, Inc.

Project Manager: Adrian Baker

Horned Toad 36 State #2H

23-AUG-18

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-18-27), 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 (T104704221-18-13)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-17)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-16)
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)

23-AUG-18

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

Reference: XENCO Report No(s): **595900**
Horned Toad 36 State #2H
Project Address: Carlsbad, 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) 595900. 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. 595900 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.
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Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America

Sample Cross Reference 595900

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SW10	S	08-09-18 09:10	2.5 ft	595900-001
FS10	S	08-09-18 12:15	2 ft	595900-002
SW11	S	08-09-18 12:20	1 ft	595900-003
SW12	S	08-09-18 12:25	1 ft	595900-004
SW13	S	08-09-18 12:30	1 ft	595900-005
FS11	S	08-09-18 12:50	3 ft	595900-006
SW14	S	08-09-18 13:10	2.5 ft	595900-007
SW15	S	08-09-18 13:20	2.5 ft	595900-008

Version: 1.%

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: Horned Toad 36 State #2H

Project ID:
Work Order Number(s): *595900*

Report Date: *23-AUG-18*
Date Received: *08/15/2018*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3060904 BTEX by EPA 8021B

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

Certificate of Analysis Summary 595900

LT Environmental, Inc., Arvada, CO

Project Name: Horned Toad 36 State #2H

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

Date Received in Lab: Wed Aug-15-18 04:15 pm
Report Date: 23-AUG-18
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	595900-001		595900-002		595900-003		595900-004		595900-005		595900-006	
	Field Id:	SW10		FS10		SW11		SW12		SW13		FS11	
	Depth:	2.5- ft		2- ft		1- ft		1- ft		1- ft		3- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Aug-09-18 09:10		Aug-09-18 12:15		Aug-09-18 12:20		Aug-09-18 12:25		Aug-09-18 12:30		Aug-09-18 12:50	
BTEX by EPA 8021B	***Extracted:***	Aug-22-18 15:00		Aug-22-18 15:00		Aug-22-18 15:00		Aug-22-18 15:00		Aug-22-18 15:00		Aug-22-18 15:00	
	Analyzed:	Aug-22-18 18:10		Aug-22-18 18:31		Aug-22-18 18:52		Aug-22-18 19:12		Aug-22-18 19:33		Aug-22-18 19:54	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00198	0.00198	<0.00200	0.00200	<0.00202	0.00202	<0.00201	0.00201	<0.00199	0.00199	<0.00199	0.00199
Toluene		<0.00198	0.00198	<0.00200	0.00200	<0.00202	0.00202	<0.00201	0.00201	<0.00199	0.00199	<0.00199	0.00199
Ethylbenzene		<0.00198	0.00198	<0.00200	0.00200	<0.00202	0.00202	<0.00201	0.00201	<0.00199	0.00199	<0.00199	0.00199
m,p-Xylenes		<0.00397	0.00397	<0.00399	0.00399	<0.00403	0.00403	<0.00402	0.00402	<0.00398	0.00398	<0.00398	0.00398
o-Xylene		<0.00198	0.00198	<0.00200	0.00200	<0.00202	0.00202	<0.00201	0.00201	<0.00199	0.00199	<0.00199	0.00199
Total Xylenes		<0.00198	0.00198	<0.00200	0.00200	<0.00202	0.00202	<0.00201	0.00201	<0.00199	0.00199	<0.00199	0.00199
Total BTEX		<0.00198	0.00198	<0.00200	0.00200	<0.00202	0.00202	<0.00201	0.00201	<0.00199	0.00199	<0.00199	0.00199
Inorganic Anions by EPA 300	***Extracted:***	Aug-16-18 14:00		Aug-16-18 14:00		Aug-16-18 14:00		Aug-16-18 14:00		Aug-16-18 14:00		Aug-16-18 15:00	
	Analyzed:	Aug-16-18 17:54		Aug-16-18 17:59		Aug-16-18 18:05		Aug-16-18 18:10		Aug-16-18 18:16		Aug-16-18 18:49	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		259	5.00	<4.97	4.97	45.4	4.99	25.4	4.96	21.3	4.99	<4.95	4.95
TPH by SW8015 Mod	***Extracted:***	Aug-16-18 09:00		Aug-16-18 09:00		Aug-16-18 09:00		Aug-16-18 09:00		Aug-16-18 09:00		Aug-16-18 09:00	
	Analyzed:	Aug-16-18 15:52		Aug-16-18 16:52		Aug-16-18 17:12		Aug-16-18 17:31		Aug-16-18 17:51		Aug-16-18 18:11	
	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)		79.2	15.0	<14.9	14.9	110	15.0	<15.0	15.0	<15.0	15.0	47.8	15.0
Oil Range Hydrocarbons (ORO)		<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		79.2	15.0	<14.9	14.9	110	15.0	<15.0	15.0	<15.0	15.0	47.8	15.0

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Version: 1.%

Jessica Kramer
Project Assistant

Final 1.000

Certificate of Analysis Summary 595900

LT Environmental, Inc., Arvada, CO

Project Name: Horned Toad 36 State #2H

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

Date Received in Lab: Wed Aug-15-18 04:15 pm
Report Date: 23-AUG-18
Project Manager: Jessica Kramer

Analysis Requested									
	Lab Id:	595900-007		595900-008					
	Field Id:	SW14		SW15					
	Depth:	2.5- ft		2.5- ft					
	Matrix:	SOIL		SOIL					
	Sampled:	Aug-09-18 13:10		Aug-09-18 13:20					
BTEX by EPA 8021B	***Extracted:***	Aug-22-18 15:00		Aug-22-18 15:00					
	Analyzed:	Aug-22-18 21:18		Aug-22-18 21:39					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Benzene		<0.00201	0.00201	<0.00202	0.00202				
Toluene		<0.00201	0.00201	<0.00202	0.00202				
Ethylbenzene		<0.00201	0.00201	<0.00202	0.00202				
m,p-Xylenes		<0.00402	0.00402	<0.00404	0.00404				
o-Xylene		<0.00201	0.00201	<0.00202	0.00202				
Total Xylenes		<0.00201	0.00201	<0.00202	0.00202				
Total BTEX		<0.00201	0.00201	<0.00202	0.00202				
Inorganic Anions by EPA 300	***Extracted:***	Aug-16-18 15:00		Aug-16-18 15:00					
	Analyzed:	Aug-16-18 19:05		Aug-16-18 19:11					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Chloride		35.1	5.00	34.2	4.95				
TPH by SW8015 Mod	***Extracted:***	Aug-16-18 09:00		Aug-16-18 09:00					
	Analyzed:	Aug-16-18 18:30		Aug-16-18 18:50					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0				
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0				
Oil Range Hydrocarbons (ORO)		<15.0	15.0	<15.0	15.0				
Total TPH		<15.0	15.0	<15.0	15.0				

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analytical Results 595900

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SW10**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595900-001	Date Collected:	08.09.18 09.10	Sample Depth:	2.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	08.16.18 14.00	Basis:	Wet Weight
Seq Number:	3060331				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**259**	5.00	mg/kg	08.16.18 17.54		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.16.18 09.00	Basis:	Wet Weight
Seq Number:	3060379				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.16.18 15.52	U	1
Diesel Range Organics (DRO)	C10C28DRO	**79.2**	15.0	mg/kg	08.16.18 15.52		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.16.18 15.52	U	1
Total TPH	PHC635	**79.2**	15.0	mg/kg	08.16.18 15.52		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	08.16.18 15.52	
o-Terphenyl	84-15-1	95	%	70-135	08.16.18 15.52	

Certificate of Analytical Results 595900

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SW10**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595900-001	Date Collected:	08.09.18 09.10	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.22.18 15.00	Basis:	Wet Weight
Seq Number:	3060904				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.22.18 18.10	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.22.18 18.10	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.22.18 18.10	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	08.22.18 18.10	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.22.18 18.10	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.22.18 18.10	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.22.18 18.10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	102	%	70-130	08.22.18 18.10	
1,4-Difluorobenzene	540-36-3	98	%	70-130	08.22.18 18.10	

Certificate of Analytical Results 595900

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**FS10**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595900-002	Date Collected:	08.09.18 12.15	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	08.16.18 14.00	Basis:	Wet Weight
Seq Number:	3060331				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.97	4.97	mg/kg	08.16.18 17.59	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.16.18 09.00	Basis:	Wet Weight
Seq Number:	3060379				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	08.16.18 16.52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	08.16.18 16.52	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<14.9	14.9	mg/kg	08.16.18 16.52	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	08.16.18 16.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	08.16.18 16.52	
o-Terphenyl	84-15-1	88	%	70-135	08.16.18 16.52	

Certificate of Analytical Results 595900

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**FS10**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595900-002	Date Collected:	08.09.18 12.15	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.22.18 15.00	Basis:	Wet Weight
Seq Number:	3060904				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.22.18 18.31	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.22.18 18.31	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.22.18 18.31	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.22.18 18.31	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.22.18 18.31	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.22.18 18.31	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.22.18 18.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	08.22.18 18.31	
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.22.18 18.31	

Certificate of Analytical Results 595900

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SW11**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595900-003	Date Collected:	08.09.18 12.20	Sample Depth:	1 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	08.16.18 14.00	Basis:	Wet Weight
Seq Number:	3060331				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**45.4**	4.99	mg/kg	08.16.18 18.05		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.16.18 09.00	Basis:	Wet Weight
Seq Number:	3060379				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.16.18 17.12	U	1
Diesel Range Organics (DRO)	C10C28DRO	**110**	15.0	mg/kg	08.16.18 17.12		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.16.18 17.12	U	1
Total TPH	PHC635	**110**	15.0	mg/kg	08.16.18 17.12		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	08.16.18 17.12	
o-Terphenyl	84-15-1	96	%	70-135	08.16.18 17.12	

Certificate of Analytical Results 595900

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SW11**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595900-003	Date Collected:	08.09.18 12.20	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.22.18 15.00	Basis:	Wet Weight
Seq Number:	3060904				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	08.22.18 18.52	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	08.22.18 18.52	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	08.22.18 18.52	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	08.22.18 18.52	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	08.22.18 18.52	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	08.22.18 18.52	U	1
Total BTEX		<0.00202	0.00202	mg/kg	08.22.18 18.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	98	%	70-130	08.22.18 18.52	
4-Bromofluorobenzene	460-00-4	101	%	70-130	08.22.18 18.52	

Certificate of Analytical Results 595900

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SW12**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595900-004	Date Collected:	08.09.18 12.25	Sample Depth:	1 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	08.16.18 14.00	Basis:	Wet Weight
Seq Number:	3060331				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**25.4**	4.96	mg/kg	08.16.18 18.10		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.16.18 09.00	Basis:	Wet Weight
Seq Number:	3060379				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.16.18 17.31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.16.18 17.31	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.16.18 17.31	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.16.18 17.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	08.16.18 17.31	
o-Terphenyl	84-15-1	87	%	70-135	08.16.18 17.31	

Certificate of Analytical Results 595900

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SW12**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595900-004	Date Collected:	08.09.18 12.25	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.22.18 15.00	Basis:	Wet Weight
Seq Number:	3060904				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.22.18 19.12	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.22.18 19.12	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.22.18 19.12	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.22.18 19.12	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.22.18 19.12	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.22.18 19.12	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.22.18 19.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	109	%	70-130	08.22.18 19.12	
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.22.18 19.12	

Certificate of Analytical Results 595900

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SW13**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595900-005	Date Collected:	08.09.18 12.30	Sample Depth:	1 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	08.16.18 14.00	Basis:	Wet Weight
Seq Number:	3060331				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**21.3**	4.99	mg/kg	08.16.18 18.16		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.16.18 09.00	Basis:	Wet Weight
Seq Number:	3060379				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.16.18 17.51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.16.18 17.51	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.16.18 17.51	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.16.18 17.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	08.16.18 17.51	
o-Terphenyl	84-15-1	88	%	70-135	08.16.18 17.51	

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LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SW13**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595900-005	Date Collected:	08.09.18 12.30	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.22.18 15.00	Basis:	Wet Weight
Seq Number:	3060904				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.22.18 19.33	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.22.18 19.33	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.22.18 19.33	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.22.18 19.33	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.22.18 19.33	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.22.18 19.33	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.22.18 19.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	08.22.18 19.33	
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.22.18 19.33	

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LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**FS11**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595900-006	Date Collected:	08.09.18 12.50	Sample Depth:	3 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	08.16.18 15.00	Basis:	Wet Weight
Seq Number:	3060339				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.95	4.95	mg/kg	08.16.18 18.49	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.16.18 09.00	Basis:	Wet Weight
Seq Number:	3060379				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.16.18 18.11	U	1
Diesel Range Organics (DRO)	C10C28DRO	**47.8**	15.0	mg/kg	08.16.18 18.11		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.16.18 18.11	U	1
Total TPH	PHC635	**47.8**	15.0	mg/kg	08.16.18 18.11		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	08.16.18 18.11	
o-Terphenyl	84-15-1	96	%	70-135	08.16.18 18.11	

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LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**FS11**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595900-006	Date Collected:	08.09.18 12.50	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.22.18 15.00	Basis:	Wet Weight
Seq Number:	3060904				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.22.18 19.54	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.22.18 19.54	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.22.18 19.54	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.22.18 19.54	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.22.18 19.54	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.22.18 19.54	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.22.18 19.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	102	%	70-130	08.22.18 19.54	
1,4-Difluorobenzene	540-36-3	97	%	70-130	08.22.18 19.54	

Certificate of Analytical Results 595900

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SW14**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595900-007	Date Collected:	08.09.18 13.10	Sample Depth:	2.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	08.16.18 15.00	Basis:	Wet Weight
Seq Number:	3060339				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**35.1**	5.00	mg/kg	08.16.18 19.05		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.16.18 09.00	Basis:	Wet Weight
Seq Number:	3060379				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.16.18 18.30	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.16.18 18.30	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.16.18 18.30	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.16.18 18.30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	08.16.18 18.30	
o-Terphenyl	84-15-1	89	%	70-135	08.16.18 18.30	

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LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SW14**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595900-007	Date Collected:	08.09.18 13.10	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.22.18 15.00	Basis:	Wet Weight
Seq Number:	3060904				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.22.18 21.18	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.22.18 21.18	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.22.18 21.18	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.22.18 21.18	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.22.18 21.18	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.22.18 21.18	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.22.18 21.18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	97	%	70-130	08.22.18 21.18	
4-Bromofluorobenzene	460-00-4	98	%	70-130	08.22.18 21.18	

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LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SW15**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595900-008	Date Collected:	08.09.18 13.20	Sample Depth:	2.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	08.16.18 15.00	Basis:	Wet Weight
Seq Number:	3060339				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**34.2**	4.95	mg/kg	08.16.18 19.11		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.16.18 09.00	Basis:	Wet Weight
Seq Number:	3060379				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.16.18 18.50	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.16.18 18.50	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.16.18 18.50	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.16.18 18.50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	08.16.18 18.50	
o-Terphenyl	84-15-1	86	%	70-135	08.16.18 18.50	

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LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2H

Sample Id:	**SW15**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595900-008	Date Collected:	08.09.18 13.20	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.22.18 15.00	Basis:	Wet Weight
Seq Number:	3060904				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	08.22.18 21.39	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	08.22.18 21.39	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	08.22.18 21.39	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	08.22.18 21.39	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	08.22.18 21.39	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	08.22.18 21.39	U	1
Total BTEX		<0.00202	0.00202	mg/kg	08.22.18 21.39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	08.22.18 21.39	
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.22.18 21.39	

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 595900

LT Environmental, Inc.

Horned Toad 36 State #2H

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3060331 — Matrix: Solid — Date Prep: 08.16.18
MB Sample Id: 7660558-1-BLK — LCS Sample Id: 7660558-1-BKS — LCSD Sample Id: 7660558-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<4.99	250	247	99	246	98	90-110	0	20	mg/kg	08.16.18 15:25	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3060339 — Matrix: Solid — Date Prep: 08.16.18
MB Sample Id: 7660597-1-BLK — LCS Sample Id: 7660597-1-BKS — LCSD Sample Id: 7660597-1-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	248	99	250	100	90-110	1	20	mg/kg	08.16.18 18:38	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3060331 — Matrix: Soil — Date Prep: 08.16.18
Parent Sample Id: 595729-004 — MS Sample Id: 595729-004 S — MSD Sample Id: 595729-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	17.1	250	272	102	269	101	90-110	1	20	mg/kg	08.16.18 15:46	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3060331 — Matrix: Soil — Date Prep: 08.16.18
Parent Sample Id: 595898-005 — MS Sample Id: 595898-005 S — MSD Sample Id: 595898-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	140	250	388	99	405	106	90-110	4	20	mg/kg	08.16.18 17:10	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3060339 — Matrix: Soil — Date Prep: 08.16.18
Parent Sample Id: 595900-006 — MS Sample Id: 595900-006 S — MSD Sample Id: 595900-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<4.95	248	258	104	258	104	90-110	0	20	mg/kg	08.16.18 18:54	

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 595900

LT Environmental, Inc.

Horned Toad 36 State #2H

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3060339 Matrix: Soil Date Prep: 08.16.18
Parent Sample Id: 596049-001 MS Sample Id: 596049-001 S MSD Sample Id: 596049-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	169	248	409	97	414	99	90-110	1	20	mg/kg	08.16.18 20:11	

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3060379 Matrix: Solid Date Prep: 08.16.18
MB Sample Id: 7660590-1-BLK LCS Sample Id: 7660590-1-BKS LCSD Sample Id: 7660590-1-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)	<15.0	1000	897	90	980	98	70-135	9	20	mg/kg	08.16.18 11:37	
Diesel Range Organics (DRO)	<15.0	1000	957	96	1030	103	70-135	7	20	mg/kg	08.16.18 11:37	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	89		106		125		70-135	%	08.16.18 11:37
o-Terphenyl	92		95		115		70-135	%	08.16.18 11:37

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3060379 Matrix: Soil Date Prep: 08.16.18
Parent Sample Id: 595898-001 MS Sample Id: 595898-001 S MSD Sample Id: 595898-001 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)	<15.0	1000	875	88	866	87	70-135	1	20	mg/kg	08.16.18 12:35	
Diesel Range Organics (DRO)	<15.0	1000	948	95	938	94	70-135	1	20	mg/kg	08.16.18 12:35	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	107		109		70-135	%	08.16.18 12:35
o-Terphenyl	93		92		70-135	%	08.16.18 12:35

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 595900

LT Environmental, Inc.

Horned Toad 36 State #2H

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B

Seq Number: 3060904 Matrix: Solid Date Prep: 08.22.18

MB Sample Id: 7660920-1-BLK LCS Sample Id: 7660920-1-BKS LCSD Sample Id: 7660920-1-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	0.0957	96	0.0970	97	70-130	1	35	mg/kg	08.22.18 10:36	
Toluene	<0.00200	0.0998	0.0911	91	0.0937	94	70-130	3	35	mg/kg	08.22.18 10:36	
Ethylbenzene	<0.00200	0.0998	0.100	100	0.104	104	70-130	4	35	mg/kg	08.22.18 10:36	
m,p-Xylenes	<0.00399	0.200	0.216	108	0.234	116	70-130	8	35	mg/kg	08.22.18 10:36	
o-Xylene	<0.00200	0.0998	0.103	103	0.112	112	70-130	8	35	mg/kg	08.22.18 10:36	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		104		112		70-130	%	08.22.18 10:36
4-Bromofluorobenzene	92		100		104		70-130	%	08.22.18 10:36

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B

Seq Number: 3060904 Matrix: Soil Date Prep: 08.22.18

Parent Sample Id: 595901-001 MS Sample Id: 595901-001 S MSD Sample Id: 595901-001 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	0.0677	67	0.0655	66	70-130	3	35	mg/kg	08.22.18 12:08	X
Toluene	<0.00202	0.101	0.0655	65	0.0622	62	70-130	5	35	mg/kg	08.22.18 12:08	X
Ethylbenzene	<0.00202	0.101	0.0684	68	0.0647	65	70-130	6	35	mg/kg	08.22.18 12:08	X
m,p-Xylenes	<0.00403	0.202	0.143	71	0.137	69	70-130	4	35	mg/kg	08.22.18 12:08	X
o-Xylene	<0.00202	0.101	0.0673	67	0.0632	63	70-130	6	35	mg/kg	08.22.18 12:08	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		129		70-130	%	08.22.18 12:08
4-Bromofluorobenzene	106		110		70-130	%	08.22.18 12:08

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

XENCO LABORATORIES

Setting the Standard since 1990

Stafford,Texas (281-240-4200)
Dallas Texas (214-902-0300)

CHAIN OF CUSTODY

Page 1 Of 1

San Antonio, Texas (210-509-3334)
Midland, Texas (432-704-5251)

Phoenix, Arizona (480-355-0900)

www.xenco.com

Xenco Quote #:
Xenco Job #: 595900

Client / Reporting Information

Company Name / Branch: LT Environmental, Inc. - Permian Office
Company Address: 3300 North "A" Street, Building 1, Unit #103, Midland, TX 79705
Email: Abaker@ltenv.com
Phone No: (432) 704-5178
Project Contact: Adrian Baker
Samplers's Name: Ben Belill

Project Information

Project Name/Number: Horned Toad 36 State #2H
Project Location: Carlsbad, NM
Invoice To: XTO Energy - Kyle Littrell
PO Number: 2RP-4850

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 (Collection)	Matrix	# of bottles	HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	BTEX EPA 8020	TPH EPA 8015	Chloride 300.1	Field Comments
1	SW10	2.5'	8/9/18	0910	S	1								X	X	X	X	
2	FS10	2'		1215										X	X	X	X	
3	SW11	1'		1220										X	X	X	X	
4	SW12	1'		1225										X	X	X	X	
5	SW13	1'		1230										X	X	X	X	
6	FS11	3'		1250										X	X	X	X	
7	SW14	2.5'		1310										X	X	X	X	
8	SW15	2.5'		1320										X	X	X	X	
9																		
10																		

Turnaround Time (Business days)

- [ ] Same Day TAT
- [x] 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 # 772975735439

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

Relinquished by	Date Time	Received By	Relinquished By	Date Time	Received By
1 Relinquished by Sampler: [signature]	8/13/18 15:35	1 [signature]	2 [signature]	8/14 15:30	2 [signature] 8/15/18 1615
3 Relinquished by:	Date Time:	3 Received By:	4 Relinquished By:	Date Time:	4 Received By:
5 Relinquished by:	Date Time:	5 Received By:	Custody Seal #	Preserved where applicable	On Ice: X; Cooler Temp. 0.3; Thermo. Corr. Factor: R8 0.0

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.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 08/15/2018 04:15:00 PM

Work Order #: 595900

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)?	.3
#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: 08/15/2018

Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 08/16/2018

Jessica Kramer

Analytical Report 595901

for

LT Environmental, Inc.

Project Manager: Adrian Baker

Horned Toad 36 State #2

30-AUG-18

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-18-27), 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 (T104704221-18-13)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-17)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-16)
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)

30-AUG-18

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

Reference: XENCO Report No(s): **595901**
Horned Toad 36 State #2
Project Address: Carlsbad, 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) 595901. 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. 595901 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.
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Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America

Sample Cross Reference 595901

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SW09	S	08-08-18 11:05	2.5 ft	595901-001
FS08	S	08-08-18 11:10	3.5 ft	595901-002
FS09	S	08-08-18 12:15	2 ft	595901-003

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: Horned Toad 36 State #2

Project ID:
Work Order Number(s): *595901*

Report Date: *30-AUG-18*
Date Received: *08/15/2018*

Sample receipt non conformances and comments:

per clients email, corrected project name to Horned Toad 36 State #2. JKR 08/30/18

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3060904 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.
Lab Sample ID 595901-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene, Ethylbenzene, Toluene, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. m,p-Xylenes recovered below QC limits in the Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 595901-001, -002, -003.
The Laboratory Control Sample for Toluene, Benzene, m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.

Certificate of Analysis Summary 595901

LT Environmental, Inc., Arvada, CO

Project Name: Horned Toad 36 State #2

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

Date Received in Lab: Wed Aug-15-18 04:15 pm
Report Date: 30-AUG-18
Project Manager: Jessica Kramer

Analysis Requested									
	Lab Id:	595901-001		595901-002		595901-003			
	Field Id:	SW09		FS08		FS09			
	Depth:	2.5- ft		3.5- ft		2- ft			
	Matrix:	SOIL		SOIL		SOIL			
	Sampled:	Aug-08-18 11:05		Aug-08-18 11:10		Aug-08-18 12:15			
BTEX by EPA 8021B	***Extracted:***	Aug-22-18 15:00		Aug-22-18 15:00		Aug-22-18 15:00			
	Analyzed:	Aug-22-18 17:07		Aug-22-18 17:28		Aug-22-18 17:49			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Benzene		<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201		
Toluene		<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201		
Ethylbenzene		<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201		
m,p-Xylenes		<0.00398	0.00398	<0.00401	0.00401	<0.00402	0.00402		
o-Xylene		<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201		
Total Xylenes		<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201		
Total BTEX		<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201		
Inorganic Anions by EPA 300	***Extracted:***	Aug-20-18 13:00		Aug-20-18 13:00		Aug-20-18 13:00			
	Analyzed:	Aug-20-18 16:38		Aug-20-18 16:54		Aug-20-18 16:05			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Chloride		294	25.1	145	49.5	25.6	5.03		
TPH by SW8015 Mod	***Extracted:***	Aug-16-18 09:00		Aug-16-18 09:00		Aug-16-18 09:00			
	Analyzed:	Aug-16-18 19:10		Aug-16-18 19:29		Aug-16-18 19:48			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Gasoline Range Hydrocarbons (GRO)		<14.9	14.9	<15.0	15.0	<15.0	15.0		
Diesel Range Organics (DRO)		24.4	14.9	23.3	15.0	<15.0	15.0		
Oil Range Hydrocarbons (ORO)		<14.9	14.9	<15.0	15.0	<15.0	15.0		
Total TPH		24.4	14.9	23.3	15.0	<15.0	15.0		

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Jessica Kramer
Project Assistant

Certificate of Analytical Results 595901

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2

Sample Id:	**SW09**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595901-001	Date Collected:	08.08.18 11.05	Sample Depth:	2.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	08.20.18 13.00	Basis:	Wet Weight
Seq Number:	3060701				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**294**	25.1	mg/kg	08.20.18 16.38		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.16.18 09.00	Basis:	Wet Weight
Seq Number:	3060379				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	08.16.18 19.10	U	1
Diesel Range Organics (DRO)	C10C28DRO	**24.4**	14.9	mg/kg	08.16.18 19.10		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<14.9	14.9	mg/kg	08.16.18 19.10	U	1
Total TPH	PHC635	**24.4**	14.9	mg/kg	08.16.18 19.10		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	08.16.18 19.10	
o-Terphenyl	84-15-1	96	%	70-135	08.16.18 19.10	

Certificate of Analytical Results 595901

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2

Sample Id:	**SW09**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595901-001	Date Collected:	08.08.18 11.05	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.22.18 15.00	Basis:	Wet Weight
Seq Number:	3060904				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.22.18 17.07	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.22.18 17.07	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.22.18 17.07	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.22.18 17.07	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.22.18 17.07	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.22.18 17.07	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.22.18 17.07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	08.22.18 17.07	
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.22.18 17.07	

Certificate of Analytical Results 595901

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2

Sample Id:	**FS08**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595901-002	Date Collected:	08.08.18 11.10	Sample Depth:	3.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	08.20.18 13.00	Basis:	Wet Weight
Seq Number:	3060701				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**145**	49.5	mg/kg	08.20.18 16.54		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.16.18 09.00	Basis:	Wet Weight
Seq Number:	3060379				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.16.18 19.29	U	1
Diesel Range Organics (DRO)	C10C28DRO	**23.3**	15.0	mg/kg	08.16.18 19.29		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.16.18 19.29	U	1
Total TPH	PHC635	**23.3**	15.0	mg/kg	08.16.18 19.29		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	08.16.18 19.29	
o-Terphenyl	84-15-1	99	%	70-135	08.16.18 19.29	

Certificate of Analytical Results 595901

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2

Sample Id:	**FS08**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595901-002	Date Collected:	08.08.18 11.10	Sample Depth:	3.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.22.18 15.00	Basis:	Wet Weight
Seq Number:	3060904				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.22.18 17.28	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.22.18 17.28	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.22.18 17.28	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.22.18 17.28	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.22.18 17.28	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.22.18 17.28	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.22.18 17.28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	101	%	70-130	08.22.18 17.28	
1,4-Difluorobenzene	540-36-3	96	%	70-130	08.22.18 17.28	

Certificate of Analytical Results 595901

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2

Sample Id:	**FS09**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595901-003	Date Collected:	08.08.18 12.15	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	08.20.18 13.00	Basis:	Wet Weight
Seq Number:	3060701				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**25.6**	5.03	mg/kg	08.20.18 16.05		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.16.18 09.00	Basis:	Wet Weight
Seq Number:	3060379				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.16.18 19.48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.16.18 19.48	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.16.18 19.48	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.16.18 19.48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	08.16.18 19.48	
o-Terphenyl	84-15-1	90	%	70-135	08.16.18 19.48	

Certificate of Analytical Results 595901

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #2

Sample Id:	**FS09**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595901-003	Date Collected:	08.08.18 12.15	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.22.18 15.00	Basis:	Wet Weight
Seq Number:	3060904				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.22.18 17.49	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.22.18 17.49	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.22.18 17.49	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.22.18 17.49	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.22.18 17.49	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.22.18 17.49	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.22.18 17.49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.22.18 17.49	
4-Bromofluorobenzene	460-00-4	100	%	70-130	08.22.18 17.49	

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 595901

LT Environmental, Inc.

Horned Toad 36 State #2

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3060701 Matrix: Solid Date Prep: 08.20.18
MB Sample Id: 7660757-1-BLK LCS Sample Id: 7660757-1-BKS LCSD Sample Id: 7660757-1-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	247	99	246	98	90-110	0	20	mg/kg	08.20.18 15:54	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3060701 Matrix: Soil Date Prep: 08.20.18
Parent Sample Id: 595901-003 MS Sample Id: 595901-003 S MSD Sample Id: 595901-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	25.6	252	277	100	277	100	90-110	0	20	mg/kg	08.20.18 16:10	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3060701 Matrix: Soil Date Prep: 08.20.18
Parent Sample Id: 596206-004 MS Sample Id: 596206-004 S MSD Sample Id: 596206-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	7.52	252	262	101	259	100	90-110	1	20	mg/kg	08.20.18 17:37	

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3060379 Matrix: Solid Date Prep: 08.16.18
MB Sample Id: 7660590-1-BLK LCS Sample Id: 7660590-1-BKS LCSD Sample Id: 7660590-1-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)	<15.0	1000	897	90	980	98	70-135	9	20	mg/kg	08.16.18 11:37	
Diesel Range Organics (DRO)	<15.0	1000	957	96	1030	103	70-135	7	20	mg/kg	08.16.18 11:37	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	89		106		125		70-135	%	08.16.18 11:37
o-Terphenyl	92		95		115		70-135	%	08.16.18 11:37

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 595901

LT Environmental, Inc.

Horned Toad 36 State #2

Analytical Method: TPH by SW8015 Mod | Prep Method: TX1005P
Seq Number: 3060379 | Matrix: Soil | Date Prep: 08.16.18
Parent Sample Id: 595898-001 | MS Sample Id: 595898-001 S | MSD Sample Id: 595898-001 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)	<15.0	1000	875	88	866	87	70-135	1	20	mg/kg	08.16.18 12:35	
Diesel Range Organics (DRO)	<15.0	1000	948	95	938	94	70-135	1	20	mg/kg	08.16.18 12:35	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	107		109		70-135	%	08.16.18 12:35
o-Terphenyl	93		92		70-135	%	08.16.18 12:35

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3060904 | Matrix: Solid | Date Prep: 08.22.18
MB Sample Id: 7660920-1-BLK | LCS Sample Id: 7660920-1-BKS | LCSD Sample Id: 7660920-1-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	0.0957	96	0.0970	97	70-130	1	35	mg/kg	08.22.18 10:36	
Toluene	<0.00200	0.0998	0.0911	91	0.0937	94	70-130	3	35	mg/kg	08.22.18 10:36	
Ethylbenzene	<0.00200	0.0998	0.100	100	0.104	104	70-130	4	35	mg/kg	08.22.18 10:36	
m,p-Xylenes	<0.00399	0.200	0.216	108	0.234	116	70-130	8	35	mg/kg	08.22.18 10:36	
o-Xylene	<0.00200	0.0998	0.103	103	0.112	112	70-130	8	35	mg/kg	08.22.18 10:36	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		104		112		70-130	%	08.22.18 10:36
4-Bromofluorobenzene	92		100		104		70-130	%	08.22.18 10:36

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3060904 | Matrix: Soil | Date Prep: 08.22.18
Parent Sample Id: 595901-001 | MS Sample Id: 595901-001 S | MSD Sample Id: 595901-001 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	0.0677	67	0.0655	66	70-130	3	35	mg/kg	08.22.18 12:08	X
Toluene	<0.00202	0.101	0.0655	65	0.0622	62	70-130	5	35	mg/kg	08.22.18 12:08	X
Ethylbenzene	<0.00202	0.101	0.0684	68	0.0647	65	70-130	6	35	mg/kg	08.22.18 12:08	X
m,p-Xylenes	<0.00403	0.202	0.143	71	0.137	69	70-130	4	35	mg/kg	08.22.18 12:08	X
o-Xylene	<0.00202	0.101	0.0673	67	0.0632	63	70-130	6	35	mg/kg	08.22.18 12:08	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		129		70-130	%	08.22.18 12:08
4-Bromofluorobenzene	106		110		70-130	%	08.22.18 12:08

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

XENCO LABORATORIES

Setting the Standard since 1990

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)

www.xenco.com

CHAIN OF CUSTODY

Page 1 Of 1

Xenco Quote #

Xenco Job # 595101

Client / Reporting Information

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

Company Address: 3300 North "A" Street, Building 1, Unit #103, Midland, TX 79705

Email: Abaker@ltenv.com

Phone No: (432) 704-5178

Project Contact: Adrian Baker

Samplers's Name: Ben Belcher

Project Information

Project Name/Number: Horned Toad 36 State #2H

Project Location: Carlsbad, NM

Invoice To: XTO Energy - Kyle Littrell

PO Number: 2RP-4850

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	Collection: Sample Depth	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	BTEX 8021	TPH EPA 8015	Chloride 300.1	Field Comments
1	SW09	2.5'	8/8/18	1105	S	1								X	X	X	X	
2	FS08	3.5'	"	1110	"	1								X	X	X	X	
3	FS09	2'	"	1215	"	1								X	X	X	X	
4																		
5																		
6																		
7																		
8																		
9																		
10																		

8/8/18 BB

Turnaround Time (Business days)

- [ ] Same Day TAT
- [x] 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 # 779757535439

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	B. T. Belcher	8/13/18 15:35		2	8/14 15:50	8/15/18
3	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By: 1615
5	Relinquished by:	Date Time:	Received By: 6	Custody Seal #	Preserved where applicable	On Ice: ☒ Cooler Temp. 0.5 Thermo. Corr. Factor 0.0

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: 08/15/2018 04:15:00 PM

Work Order #: 595901

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)?	.3
#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: 08/15/2018

Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 08/16/2018

Jessica Kramer

Analytical Report 595901

for

LT Environmental, Inc.

Project Manager: Adrian Baker

Horned Toad 36 State #24

23-AUG-18

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-18-27), 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 (T104704221-18-13)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-17)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-16)
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)

23-AUG-18

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

Reference: XENCO Report No(s): **595901**
Horned Toad 36 State #24
Project Address: Carlsbad, 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) 595901. 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. 595901 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.
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Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America

Sample Cross Reference 595901

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #24

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SW09	S	08-08-18 11:05	2.5 ft	595901-001
FS08	S	08-08-18 11:10	3.5 ft	595901-002
FS09	S	08-08-18 12:15	2 ft	595901-003

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: Horned Toad 36 State #24

Project ID:
Work Order Number(s): *595901*

Report Date: *23-AUG-18*
Date Received: *08/15/2018*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3060904 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.
Lab Sample ID 595901-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene, Ethylbenzene, Toluene, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. m,p-Xylenes recovered below QC limits in the Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 595901-001, -002, -003.
The Laboratory Control Sample for Toluene, Benzene, m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.

Certificate of Analysis Summary 595901

LT Environmental, Inc., Arvada, CO

Project Name: Horned Toad 36 State #24

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

Date Received in Lab: Wed Aug-15-18 04:15 pm
Report Date: 23-AUG-18
Project Manager: Jessica Kramer

Analysis Requested									
	Lab Id:	595901-001		595901-002		595901-003			
	Field Id:	SW09		FS08		FS09			
	Depth:	2.5- ft		3.5- ft		2- ft			
	Matrix:	SOIL		SOIL		SOIL			
	Sampled:	Aug-08-18 11:05		Aug-08-18 11:10		Aug-08-18 12:15			
BTEX by EPA 8021B	***Extracted:***	Aug-22-18 15:00		Aug-22-18 15:00		Aug-22-18 15:00			
	Analyzed:	Aug-22-18 17:07		Aug-22-18 17:28		Aug-22-18 17:49			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Benzene		<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201		
Toluene		<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201		
Ethylbenzene		<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201		
m,p-Xylenes		<0.00398	0.00398	<0.00401	0.00401	<0.00402	0.00402		
o-Xylene		<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201		
Total Xylenes		<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201		
Total BTEX		<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201		
Inorganic Anions by EPA 300	***Extracted:***	Aug-20-18 13:00		Aug-20-18 13:00		Aug-20-18 13:00			
	Analyzed:	Aug-20-18 16:38		Aug-20-18 16:54		Aug-20-18 16:05			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Chloride		294	25.1	145	49.5	25.6	5.03		
TPH by SW8015 Mod	***Extracted:***	Aug-16-18 09:00		Aug-16-18 09:00		Aug-16-18 09:00			
	Analyzed:	Aug-16-18 19:10		Aug-16-18 19:29		Aug-16-18 19:48			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Gasoline Range Hydrocarbons (GRO)		<14.9	14.9	<15.0	15.0	<15.0	15.0		
Diesel Range Organics (DRO)		24.4	14.9	23.3	15.0	<15.0	15.0		
Oil Range Hydrocarbons (ORO)		<14.9	14.9	<15.0	15.0	<15.0	15.0		
Total TPH		24.4	14.9	23.3	15.0	<15.0	15.0		

Jessica Kramer
Project Assistant

Final 1.000

Certificate of Analytical Results 595901

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #24

Sample Id:	**SW09**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595901-001	Date Collected:	08.08.18 11.05	Sample Depth:	2.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	08.20.18 13.00	Basis:	Wet Weight
Seq Number:	3060701				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**294**	25.1	mg/kg	08.20.18 16.38		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.16.18 09.00	Basis:	Wet Weight
Seq Number:	3060379				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	08.16.18 19.10	U	1
Diesel Range Organics (DRO)	C10C28DRO	**24.4**	14.9	mg/kg	08.16.18 19.10		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<14.9	14.9	mg/kg	08.16.18 19.10	U	1
Total TPH	PHC635	**24.4**	14.9	mg/kg	08.16.18 19.10		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	08.16.18 19.10	
o-Terphenyl	84-15-1	96	%	70-135	08.16.18 19.10	

Certificate of Analytical Results 595901

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #24

Sample Id:	**SW09**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595901-001	Date Collected:	08.08.18 11.05	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.22.18 15.00	Basis:	Wet Weight
Seq Number:	3060904				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.22.18 17.07	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.22.18 17.07	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.22.18 17.07	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.22.18 17.07	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.22.18 17.07	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.22.18 17.07	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.22.18 17.07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	08.22.18 17.07	
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.22.18 17.07	

Certificate of Analytical Results 595901

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #24

Sample Id:	**FS08**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595901-002	Date Collected:	08.08.18 11.10	Sample Depth:	3.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	08.20.18 13.00	Basis:	Wet Weight
Seq Number:	3060701				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**145**	49.5	mg/kg	08.20.18 16.54		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.16.18 09.00	Basis:	Wet Weight
Seq Number:	3060379				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.16.18 19.29	U	1
Diesel Range Organics (DRO)	C10C28DRO	**23.3**	15.0	mg/kg	08.16.18 19.29		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.16.18 19.29	U	1
Total TPH	PHC635	**23.3**	15.0	mg/kg	08.16.18 19.29		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	08.16.18 19.29	
o-Terphenyl	84-15-1	99	%	70-135	08.16.18 19.29	

Certificate of Analytical Results 595901

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #24

Sample Id:	**FS08**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595901-002	Date Collected:	08.08.18 11.10	Sample Depth:	3.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.22.18 15.00	Basis:	Wet Weight
Seq Number:	3060904				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.22.18 17.28	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.22.18 17.28	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.22.18 17.28	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.22.18 17.28	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.22.18 17.28	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.22.18 17.28	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.22.18 17.28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	101	%	70-130	08.22.18 17.28	
1,4-Difluorobenzene	540-36-3	96	%	70-130	08.22.18 17.28	

Certificate of Analytical Results 595901

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #24

Sample Id:	**FS09**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595901-003	Date Collected:	08.08.18 12.15	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	08.20.18 13.00	Basis:	Wet Weight
Seq Number:	3060701				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**25.6**	5.03	mg/kg	08.20.18 16.05		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.16.18 09.00	Basis:	Wet Weight
Seq Number:	3060379				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.16.18 19.48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.16.18 19.48	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.16.18 19.48	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.16.18 19.48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	08.16.18 19.48	
o-Terphenyl	84-15-1	90	%	70-135	08.16.18 19.48	

Certificate of Analytical Results 595901

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #24

Sample Id:	**FS09**	Matrix:	Soil	Date Received:	08.15.18 16.15
Lab Sample Id:	595901-003	Date Collected:	08.08.18 12.15	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.22.18 15.00	Basis:	Wet Weight
Seq Number:	3060904				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.22.18 17.49	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.22.18 17.49	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.22.18 17.49	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.22.18 17.49	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.22.18 17.49	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.22.18 17.49	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.22.18 17.49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.22.18 17.49	
4-Bromofluorobenzene	460-00-4	100	%	70-130	08.22.18 17.49	

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 595901

LT Environmental, Inc.

Horned Toad 36 State #24

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3060701 Matrix: Solid Date Prep: 08.20.18
MB Sample Id: 7660757-1-BLK LCS Sample Id: 7660757-1-BKS LCSD Sample Id: 7660757-1-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	247	99	246	98	90-110	0	20	mg/kg	08.20.18 15:54	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3060701 Matrix: Soil Date Prep: 08.20.18
Parent Sample Id: 595901-003 MS Sample Id: 595901-003 S MSD Sample Id: 595901-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	25.6	252	277	100	277	100	90-110	0	20	mg/kg	08.20.18 16:10	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3060701 Matrix: Soil Date Prep: 08.20.18
Parent Sample Id: 596206-004 MS Sample Id: 596206-004 S MSD Sample Id: 596206-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	7.52	252	262	101	259	100	90-110	1	20	mg/kg	08.20.18 17:37	

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3060379 Matrix: Solid Date Prep: 08.16.18
MB Sample Id: 7660590-1-BLK LCS Sample Id: 7660590-1-BKS LCSD Sample Id: 7660590-1-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)	<15.0	1000	897	90	980	98	70-135	9	20	mg/kg	08.16.18 11:37	
Diesel Range Organics (DRO)	<15.0	1000	957	96	1030	103	70-135	7	20	mg/kg	08.16.18 11:37	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	89		106		125		70-135	%	08.16.18 11:37
o-Terphenyl	92		95		115		70-135	%	08.16.18 11:37

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 595901

LT Environmental, Inc.

Horned Toad 36 State #24

Analytical Method: TPH by SW8015 Mod — Prep Method: TX1005P
Seq Number: 3060379 — Matrix: Soil — Date Prep: 08.16.18
Parent Sample Id: 595898-001 — MS Sample Id: 595898-001 S — MSD Sample Id: 595898-001 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)	<15.0	1000	875	88	866	87	70-135	1	20	mg/kg	08.16.18 12:35	
Diesel Range Organics (DRO)	<15.0	1000	948	95	938	94	70-135	1	20	mg/kg	08.16.18 12:35	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	107		109		70-135	%	08.16.18 12:35
o-Terphenyl	93		92		70-135	%	08.16.18 12:35

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3060904 — Matrix: Solid — Date Prep: 08.22.18
MB Sample Id: 7660920-1-BLK — LCS Sample Id: 7660920-1-BKS — LCSD Sample Id: 7660920-1-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	0.0957	96	0.0970	97	70-130	1	35	mg/kg	08.22.18 10:36	
Toluene	<0.00200	0.0998	0.0911	91	0.0937	94	70-130	3	35	mg/kg	08.22.18 10:36	
Ethylbenzene	<0.00200	0.0998	0.100	100	0.104	104	70-130	4	35	mg/kg	08.22.18 10:36	
m,p-Xylenes	<0.00399	0.200	0.216	108	0.234	116	70-130	8	35	mg/kg	08.22.18 10:36	
o-Xylene	<0.00200	0.0998	0.103	103	0.112	112	70-130	8	35	mg/kg	08.22.18 10:36	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		104		112		70-130	%	08.22.18 10:36
4-Bromofluorobenzene	92		100		104		70-130	%	08.22.18 10:36

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3060904 — Matrix: Soil — Date Prep: 08.22.18
Parent Sample Id: 595901-001 — MS Sample Id: 595901-001 S — MSD Sample Id: 595901-001 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	0.0677	67	0.0655	66	70-130	3	35	mg/kg	08.22.18 12:08	X
Toluene	<0.00202	0.101	0.0655	65	0.0622	62	70-130	5	35	mg/kg	08.22.18 12:08	X
Ethylbenzene	<0.00202	0.101	0.0684	68	0.0647	65	70-130	6	35	mg/kg	08.22.18 12:08	X
m,p-Xylenes	<0.00403	0.202	0.143	71	0.137	69	70-130	4	35	mg/kg	08.22.18 12:08	X
o-Xylene	<0.00202	0.101	0.0673	67	0.0632	63	70-130	6	35	mg/kg	08.22.18 12:08	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		129		70-130	%	08.22.18 12:08
4-Bromofluorobenzene	106		110		70-130	%	08.22.18 12:08

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

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)

www.xenco.com

CHAIN OF CUSTODY

Page 1 Of 1

Xenco Quote #

Xenco Job # 595101

Client / Reporting Information

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

Company Address: 3300 North "A" Street, Building 1, Unit #103, Midland, TX 79705

Email: Abaker@ltenv.com

Phone No: (432) 704-5178

Project Contact: Adrian Baker

Samplers's Name: Ben Belill

Project Information

Project Name/Number: Horned Toad 36 State #2H

Project Location: Carlsbad, NM

Invoice To: XTO Energy - Kyle Littrell

PO Number: 2RP-4850

Analytical Information

BTEX 8020 | TPH EPA 8015 | Chloride 300.1

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	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	BTEX 8020	TPH EPA 8015	Chloride 300.1	Field Comments
1	SW09	2.5'	8/8/18	1105	S	1								X	X	X	X	
2	FS08	3.5'	"	1110	"	1								X	X	X	X	
3	FS09	2'	"	1215	"	1								X	X	X	X	
4																		
5																		
6			8/8/18		BB													
7																		
8																		
9																		
10																		

Turnaround Time (Business days)

- [ ] Same Day TAT
- [x] 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 # 779757354939

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	B. T. Belill	8/13/18 15:35		2	8/14 15:50	8/15/18
3	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By: 1615
5	Relinquished by:	Date Time:	Received By: 6	Custody Seal #	Preserved where applicable	On Ice: ☑ Cooler Temp. 0.5 Thermo. Corr. Factor 0.0

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.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 08/15/2018 04:15:00 PM

Work Order #: 595901

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)?	.3
#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: 08/15/2018

Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 08/16/2018

Jessica Kramer

Analytical Report 603506

for

LT Environmental, Inc.

Project Manager: Adrian Baker

Horned Toad 36 State #002H

012918129

29-OCT-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)

29-OCT-18

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

Reference: XENCO Report No(s): **603506**
Horned Toad 36 State #002H
Project Address: Eddy. NM 2RP-4850

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) 603506. 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. 603506 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.
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Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America

Sample Cross Reference 603506

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #002H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SW11A	S	10-22-18 15:40	1 ft	603506-001
SW03A	S	10-23-18 10:20	2 ft	603506-002
SW23	S	10-23-18 11:50	2 ft	603506-003

Version: 1.%

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: Horned Toad 36 State #002H

Project ID: *012918129*
Work Order Number(s): *603506*

Report Date: *29-OCT-18*
Date Received: *10/25/2018*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3067712 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3067839 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analysis Summary 603506

LT Environmental, Inc., Arvada, CO

Project Name: Horned Toad 36 State #002H

Project Id: 012918129
Contact: Adrian Baker
Project Location: Eddy. NM 2RP-4850

Date Received in Lab: Thu Oct-25-18 11:35 am
Report Date: 29-OCT-18
Project Manager: Jessica Kramer

Analysis Requested									
	Lab Id:	603506-001		603506-002		603506-003				
	Field Id:	SW11A		SW03A		SW23				
	Depth:	1- ft		2- ft		2- ft				
	Matrix:	SOIL		SOIL		SOIL				
	Sampled:	Oct-22-18 15:40		Oct-23-18 10:20		Oct-23-18 11:50				
BTEX by EPA 8021B	***Extracted:***	Oct-25-18 17:00		Oct-25-18 17:00		Oct-26-18 18:00				
	Analyzed:	Oct-25-18 22:55		Oct-25-18 23:56		Oct-28-18 03:07				
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL			
Benzene		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200			
Toluene		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200			
Ethylbenzene		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200			
m,p-Xylenes		<0.00400	0.00400	<0.00400	0.00400	<0.00400	0.00400			
o-Xylene		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200			
Total Xylenes		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200			
Total BTEX		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200			
Inorganic Anions by EPA 300	***Extracted:***	Oct-25-18 14:30		Oct-25-18 14:30		Oct-25-18 14:30				
	Analyzed:	Oct-25-18 18:52		Oct-25-18 18:57		Oct-25-18 19:03				
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL			
Chloride		225	4.95	327	25.0	74.4	4.99			
TPH by SW8015 Mod	***Extracted:***	Oct-25-18 16:00		Oct-25-18 16:00		Oct-25-18 16:00				
	Analyzed:	Oct-26-18 02:27		Oct-26-18 07:39		Oct-26-18 03:04				
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL			
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0			
Diesel Range Organics (DRO)		146	15.0	<15.0	15.0	<15.0	15.0			
Motor Oil Range Hydrocarbons (MRO)		18.0	15.0	<15.0	15.0	<15.0	15.0			
Total TPH		164	15.0	<15.0	15.0	<15.0	15.0			

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Version: 1.%

Jessica Kramer
Project Assistant

Final 1.000

Certificate of Analytical Results 603506

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #002H

Sample Id:	**SW11A**	Matrix:	Soil	Date Received:	10.25.18 11.35
Lab Sample Id:	603506-001	Date Collected:	10.22.18 15.40	Sample Depth:	1 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.25.18 14.30	Basis:	Wet Weight
Seq Number:	3067615				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**225**	4.95	mg/kg	10.25.18 18.52		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	10.25.18 16.00	Basis:	Wet Weight
Seq Number:	3067717				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	10.26.18 02.27	U	1
Diesel Range Organics (DRO)	C10C28DRO	**146**	15.0	mg/kg	10.26.18 02.27		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**18.0**	15.0	mg/kg	10.26.18 02.27		1
Total TPH	PHC635	**164**	15.0	mg/kg	10.26.18 02.27		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	10.26.18 02.27	
o-Terphenyl	84-15-1	98	%	70-135	10.26.18 02.27	

Certificate of Analytical Results 603506

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #002H

Sample Id:	**SW11A**	Matrix:	Soil	Date Received:	10.25.18 11.35
Lab Sample Id:	603506-001	Date Collected:	10.22.18 15.40	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	JUM			% Moisture:	
Analyst:	JUM	Date Prep:	10.25.18 17.00	Basis:	Wet Weight
Seq Number:	3067712				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.25.18 22.55	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.25.18 22.55	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.25.18 22.55	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	10.25.18 22.55	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.25.18 22.55	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.25.18 22.55	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.25.18 22.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	87	%	70-130	10.25.18 22.55	
1,4-Difluorobenzene	540-36-3	113	%	70-130	10.25.18 22.55	

Certificate of Analytical Results 603506

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #002H

Sample Id:	**SW03A**	Matrix:	Soil	Date Received:	10.25.18 11.35
Lab Sample Id:	603506-002	Date Collected:	10.23.18 10.20	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.25.18 14.30	Basis:	Wet Weight
Seq Number:	3067615				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**327**	25.0	mg/kg	10.25.18 18.57		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	10.25.18 16.00	Basis:	Wet Weight
Seq Number:	3067717				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	10.26.18 07.39	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	10.26.18 07.39	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	10.26.18 07.39	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	10.26.18 07.39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	10.26.18 07.39	
o-Terphenyl	84-15-1	96	%	70-135	10.26.18 07.39	

Certificate of Analytical Results 603506

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #002H

Sample Id:	**SW03A**	Matrix:	Soil	Date Received:	10.25.18 11.35
Lab Sample Id:	603506-002	Date Collected:	10.23.18 10.20	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	JUM			% Moisture:	
Analyst:	JUM	Date Prep:	10.25.18 17.00	Basis:	Wet Weight
Seq Number:	3067712				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.25.18 23.56	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.25.18 23.56	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.25.18 23.56	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	10.25.18 23.56	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.25.18 23.56	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.25.18 23.56	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.25.18 23.56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	79	%	70-130	10.25.18 23.56	
1,4-Difluorobenzene	540-36-3	107	%	70-130	10.25.18 23.56	

Certificate of Analytical Results 603506

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #002H

Sample Id:	**SW23**	Matrix:	Soil	Date Received:	10.25.18 11.35
Lab Sample Id:	603506-003	Date Collected:	10.23.18 11.50	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.25.18 14.30	Basis:	Wet Weight
Seq Number:	3067615				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**74.4**	4.99	mg/kg	10.25.18 19.03		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	10.25.18 16.00	Basis:	Wet Weight
Seq Number:	3067717				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	10.26.18 03.04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	10.26.18 03.04	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	10.26.18 03.04	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	10.26.18 03.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	10.26.18 03.04	
o-Terphenyl	84-15-1	92	%	70-135	10.26.18 03.04	

Certificate of Analytical Results 603506

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #002H

Sample Id:	**SW23**	Matrix:	Soil	Date Received:	10.25.18 11.35
Lab Sample Id:	603506-003	Date Collected:	10.23.18 11.50	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	JUM			% Moisture:	
Analyst:	JUM	Date Prep:	10.26.18 18.00	Basis:	Wet Weight
Seq Number:	3067839				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.28.18 03.07	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.28.18 03.07	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.28.18 03.07	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	10.28.18 03.07	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.28.18 03.07	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.28.18 03.07	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.28.18 03.07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	109	%	70-130	10.28.18 03.07	
4-Bromofluorobenzene	460-00-4	85	%	70-130	10.28.18 03.07	

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 603506

LT Environmental, Inc.

Horned Toad 36 State #002H

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3067615 Matrix: Solid Date Prep: 10.25.18
MB Sample Id: 7664859-1-BLK LCS Sample Id: 7664859-1-BKS LCSD Sample Id: 7664859-1-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	272	109	274	110	90-110	1	20	mg/kg	10.25.18 16:50	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3067615 Matrix: Soil Date Prep: 10.25.18
Parent Sample Id: 603504-001 MS Sample Id: 603504-001 S MSD Sample Id: 603504-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	15.5	248	280	107	282	107	90-110	1	20	mg/kg	10.25.18 17:06	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3067615 Matrix: Soil Date Prep: 10.25.18
Parent Sample Id: 603552-003 MS Sample Id: 603552-003 S MSD Sample Id: 603552-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.850	248	262	106	262	106	90-110	0	20	mg/kg	10.25.18 18:20	

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3067717 Matrix: Solid Date Prep: 10.25.18
MB Sample Id: 7664894-1-BLK LCS Sample Id: 7664894-1-BKS LCSD Sample Id: 7664894-1-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	991	99	1040	104	70-135	5	20	mg/kg	10.25.18 20:45	
Diesel Range Organics (DRO)	<8.13	1000	992	99	1070	107	70-135	8	20	mg/kg	10.25.18 20:45	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	95		129		122		70-135	%	10.25.18 20:45
o-Terphenyl	102		103		109		70-135	%	10.25.18 20:45

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 603506

LT Environmental, Inc.

Horned Toad 36 State #002H

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P

Seq Number: 3067717 Matrix: Soil Date Prep: 10.25.18

Parent Sample Id: 603504-001 MS Sample Id: 603504-001 S MSD Sample Id: 603504-001 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)	<7.99	999	1090	109	1020	102	70-135	7	20	mg/kg	10.25.18 21:42	
Diesel Range Organics (DRO)	<8.12	999	1130	113	1060	106	70-135	6	20	mg/kg	10.25.18 21:42	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	122		118		70-135	%	10.25.18 21:42
o-Terphenyl	118		100		70-135	%	10.25.18 21:42

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B

Seq Number: 3067712 Matrix: Solid Date Prep: 10.25.18

MB Sample Id: 7664946-1-BLK LCS Sample Id: 7664946-1-BKS LCSD Sample Id: 7664946-1-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	0.0956	96	0.0962	96	70-130	1	35	mg/kg	10.25.18 17:51	
Toluene	<0.00200	0.100	0.0956	96	0.0959	96	70-130	0	35	mg/kg	10.25.18 17:51	
Ethylbenzene	<0.00200	0.100	0.0983	98	0.0985	99	70-130	0	35	mg/kg	10.25.18 17:51	
m,p-Xylenes	<0.00400	0.200	0.188	94	0.190	95	70-130	1	35	mg/kg	10.25.18 17:51	
o-Xylene	<0.00200	0.100	0.0911	91	0.0925	93	70-130	2	35	mg/kg	10.25.18 17:51	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	114		91		95		70-130	%	10.25.18 17:51
4-Bromofluorobenzene	104		89		89		70-130	%	10.25.18 17:51

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B

Seq Number: 3067839 Matrix: Solid Date Prep: 10.26.18

MB Sample Id: 7665012-1-BLK LCS Sample Id: 7665012-1-BKS LCSD Sample Id: 7665012-1-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	0.0874	87	0.0897	90	70-130	3	35	mg/kg	10.27.18 10:04	
Toluene	<0.00200	0.100	0.0912	91	0.0910	91	70-130	0	35	mg/kg	10.27.18 10:04	
Ethylbenzene	<0.00200	0.100	0.0970	97	0.0918	92	70-130	6	35	mg/kg	10.27.18 10:04	
m,p-Xylenes	<0.00400	0.200	0.188	94	0.173	87	70-130	8	35	mg/kg	10.27.18 10:04	
o-Xylene	<0.00200	0.100	0.101	101	0.0899	90	70-130	12	35	mg/kg	10.27.18 10:04	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	114		92		93		70-130	%	10.27.18 10:04
4-Bromofluorobenzene	105		104		96		70-130	%	10.27.18 10:04

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 603506

LT Environmental, Inc.

Horned Toad 36 State #002H

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B

Seq Number: 3067712 Matrix: Soil Date Prep: 10.25.18

Parent Sample Id: 602545-007 MS Sample Id: 602545-007 S MSD Sample Id: 602545-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0775	78	0.0841	84	70-130	8	35	mg/kg	10.25.18 18:31	
Toluene	<0.00200	0.100	0.0789	79	0.0841	84	70-130	6	35	mg/kg	10.25.18 18:31	
Ethylbenzene	<0.00200	0.100	0.0813	81	0.0871	87	70-130	7	35	mg/kg	10.25.18 18:31	
m,p-Xylenes	<0.00400	0.200	0.157	79	0.169	85	70-130	7	35	mg/kg	10.25.18 18:31	
o-Xylene	<0.00200	0.100	0.0773	77	0.0833	83	70-130	7	35	mg/kg	10.25.18 18:31	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	91		94		70-130	%	10.25.18 18:31
4-Bromofluorobenzene	94		94		70-130	%	10.25.18 18:31

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B

Seq Number: 3067839 Matrix: Soil Date Prep: 10.26.18

Parent Sample Id: 603513-022 MS Sample Id: 603513-022 S MSD Sample Id: 603513-022 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	0.0754	75	0.0675	68	70-130	11	35	mg/kg	10.27.18 10:44	X
Toluene	<0.00200	0.100	0.0748	75	0.0680	68	70-130	10	35	mg/kg	10.27.18 10:44	X
Ethylbenzene	<0.00200	0.100	0.0744	74	0.0684	68	70-130	8	35	mg/kg	10.27.18 10:44	X
m,p-Xylenes	<0.00400	0.200	0.142	71	0.131	66	70-130	8	35	mg/kg	10.27.18 10:44	X
o-Xylene	<0.00200	0.100	0.0714	71	0.0659	66	70-130	8	35	mg/kg	10.27.18 10:44	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	95		92		70-130	%	10.27.18 10:44
4-Bromofluorobenzene	95		98		70-130	%	10.27.18 10:44

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

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Phoenix, Arizona (480-355-0900)
www.xenco.com

CHAIN OF CUSTODY

Page 1 Of 1

Xenco Quote #

Xenco Job # 1003506

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: L. Lambeth

Project Information

Project Name/Number: Horned Toad 36 State #002H / 012918129
Project Location: EDDY, NM 2RP 4850
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	SW11A	1'	10/23	15:40	S	1								X	X	X	X	
2	SW03A	2'	10/23	10:20	S	1								X	X	X	X	
3	SW23	2'	10/23	11:50	S	1								X	X	X	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 IV (Full Data Pkg /raw data)
- [ ] Level III Std QC+ Forms
- [ ] TRRP Level IV
- [ ] Level 3 (CLP Forms)
- [ ] UST / RG -411
- [ ] TRRP Checklist

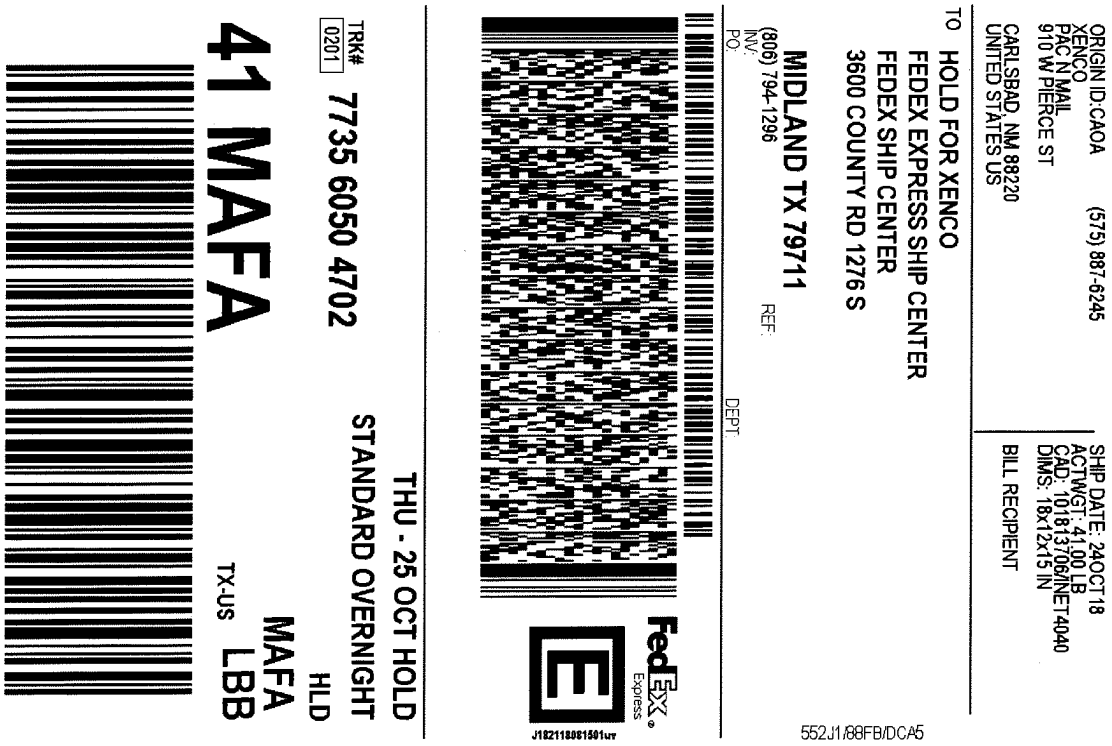
Notes:

FED-EX / UPS: Tracking # 773540504702

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		10/23/23 16:40	1	2	10/24 1530	2 10/25/18
3	Relinquished by:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4 1135
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable	On Ice: X; Cooler Temp: 0.3 0.0; Thermo. Corr. Factor

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.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 10/25/2018 11:35:00 AM

Work Order #: 603506

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)?	3
#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: 10/25/2018

Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 10/25/2018

Jessica Kramer

Analytical Report 604689

for

LT Environmental, Inc.

Project Manager: Adrian Baker

Horned Toad 36 State #002H

09-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)

09-NOV-18

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

Reference: XENCO Report No(s): **604689**
Horned Toad 36 State #002H
Project Address: Rural Eddy, NM 2RP-4850

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) 604689. 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. 604689 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 604689

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #002H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS15	S	11-05-18 14:00	2 ft	604689-001
SW11B	S	11-05-18 14:10	1 ft	604689-002
SW25	S	11-05-18 14:15	6 In	604689-003
SW24	S	11-05-18 14:30	1 ft	604689-004

Version: 1.%

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: Horned Toad 36 State #002H

Project ID:
Work Order Number(s): *604689*

Report Date: *09-NOV-18*
Date Received: *11/07/2018*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3069146 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.
Lab Sample ID 604689-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene recovered below QC limits in the Matrix Spike. Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 604689-001, -002, -003, -004.
The Laboratory Control Sample for Toluene, Benzene, m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.

Certificate of Analysis Summary 604689

LT Environmental, Inc., Arvada, CO

Project Name: Horned Toad 36 State #002H

Project Id:
Contact: Adrian Baker
Project Location: Rural Eddy, NM 2RP-4850

Date Received in Lab: Wed Nov-07-18 12:23 pm
Report Date: 09-NOV-18
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	604689-001		604689-002		604689-003		604689-004					
	Field Id:	FS15		SW11B		SW25		SW24					
	Depth:	2- ft		1- ft		6- In		1- ft					
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	Nov-05-18 14:00		Nov-05-18 14:10		Nov-05-18 14:15		Nov-05-18 14:30					
BTEX by EPA 8021B	***Extracted:***	Nov-08-18 16:00		Nov-08-18 16:00		Nov-08-18 16:00		Nov-08-18 16:00					
	Analyzed:	Nov-08-18 21:38		Nov-08-18 22:00		Nov-08-18 22:22		Nov-08-18 22:44					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		<0.00199	0.00199	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200				
Toluene		<0.00199	0.00199	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200				
Ethylbenzene		<0.00199	0.00199	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200				
m,p-Xylenes		<0.00398	0.00398	<0.00399	0.00399	<0.00403	0.00403	<0.00401	0.00401				
o-Xylene		<0.00199	0.00199	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200				
Total Xylenes		<0.00199	0.00199	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200				
Total BTEX		<0.00199	0.00199	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200				
Inorganic Anions by EPA 300	***Extracted:***	Nov-07-18 14:45		Nov-07-18 14:45		Nov-07-18 14:45		Nov-07-18 14:45					
	Analyzed:	Nov-08-18 10:11		Nov-07-18 15:27		Nov-07-18 15:39		Nov-07-18 15:44					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		<5.00	5.00	7.47	4.99	11.8	4.96	18.9	4.96				
TPH by SW8015 Mod	***Extracted:***	Nov-07-18 14:00		Nov-07-18 14:00		Nov-07-18 14:00		Nov-07-18 14:00					
	Analyzed:	Nov-08-18 02:28		Nov-08-18 02:46		Nov-08-18 07:28		Nov-08-18 07:45					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0				
Diesel Range Organics (DRO)		18.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0				
Motor Oil Range Hydrocarbons (MRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0				
Total TPH		18.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0				

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analytical Results 604689

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #002H

Sample Id:	**FS15**	Matrix:	Soil	Date Received:	11.07.18 12.23
Lab Sample Id:	604689-001	Date Collected:	11.05.18 14.00	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.07.18 14.45	Basis:	Wet Weight
Seq Number:	3069006				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.00	5.00	mg/kg	11.08.18 10.11	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.07.18 14.00	Basis:	Wet Weight
Seq Number:	3068984				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.08.18 02.28	U	1
Diesel Range Organics (DRO)	C10C28DRO	**18.0**	15.0	mg/kg	11.08.18 02.28		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.08.18 02.28	U	1
Total TPH	PHC635	**18.0**	15.0	mg/kg	11.08.18 02.28		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	11.08.18 02.28	
o-Terphenyl	84-15-1	88	%	70-135	11.08.18 02.28	

Certificate of Analytical Results 604689

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #002H

Sample Id:	**FS15**	Matrix:	Soil	Date Received:	11.07.18 12.23
Lab Sample Id:	604689-001	Date Collected:	11.05.18 14.00	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	11.08.18 16.00	Basis:	Wet Weight
Seq Number:	3069146				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	11.08.18 21.38	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	11.08.18 21.38	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	11.08.18 21.38	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	11.08.18 21.38	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	11.08.18 21.38	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	11.08.18 21.38	U	1
Total BTEX		<0.00199	0.00199	mg/kg	11.08.18 21.38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	73	%	70-130	11.08.18 21.38	
1,4-Difluorobenzene	540-36-3	102	%	70-130	11.08.18 21.38	

Certificate of Analytical Results 604689

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #002H

Sample Id:	**SW11B**	Matrix:	Soil	Date Received:	11.07.18 12.23
Lab Sample Id:	604689-002	Date Collected:	11.05.18 14.10	Sample Depth:	1 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.07.18 14.45	Basis:	Wet Weight
Seq Number:	3069006				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**7.47**	4.99	mg/kg	11.07.18 15.27		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.07.18 14.00	Basis:	Wet Weight
Seq Number:	3068984				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.08.18 02.46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	11.08.18 02.46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.08.18 02.46	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	11.08.18 02.46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-135	11.08.18 02.46	
o-Terphenyl	84-15-1	84	%	70-135	11.08.18 02.46	

Certificate of Analytical Results 604689

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #002H

Sample Id:	**SW11B**	Matrix:	Soil	Date Received:	11.07.18 12.23
Lab Sample Id:	604689-002	Date Collected:	11.05.18 14.10	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	11.08.18 16.00	Basis:	Wet Weight
Seq Number:	3069146				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	11.08.18 22.00	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	11.08.18 22.00	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	11.08.18 22.00	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	11.08.18 22.00	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	11.08.18 22.00	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	11.08.18 22.00	U	1
Total BTEX		<0.00200	0.00200	mg/kg	11.08.18 22.00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	108	%	70-130	11.08.18 22.00	
4-Bromofluorobenzene	460-00-4	70	%	70-130	11.08.18 22.00	

Certificate of Analytical Results 604689

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #002H

Sample Id:	**SW25**	Matrix:	Soil	Date Received:	11.07.18 12.23
Lab Sample Id:	604689-003	Date Collected:	11.05.18 14.15	Sample Depth:	6 In

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.07.18 14.45	Basis:	Wet Weight
Seq Number:	3069006				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**11.8**	4.96	mg/kg	11.07.18 15.39		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.07.18 14.00	Basis:	Wet Weight
Seq Number:	3068984				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.08.18 07.28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	11.08.18 07.28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.08.18 07.28	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	11.08.18 07.28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	11.08.18 07.28	
o-Terphenyl	84-15-1	96	%	70-135	11.08.18 07.28	

Certificate of Analytical Results 604689

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #002H

Sample Id:	**SW25**	Matrix:	Soil	Date Received:	11.07.18 12.23
Lab Sample Id:	604689-003	Date Collected:	11.05.18 14.15	Sample Depth:	6 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	11.08.18 16.00	Basis:	Wet Weight
Seq Number:	3069146				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	11.08.18 22.22	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	11.08.18 22.22	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	11.08.18 22.22	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	11.08.18 22.22	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	11.08.18 22.22	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	11.08.18 22.22	U	1
Total BTEX		<0.00202	0.00202	mg/kg	11.08.18 22.22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	73	%	70-130	11.08.18 22.22	
1,4-Difluorobenzene	540-36-3	109	%	70-130	11.08.18 22.22	

Certificate of Analytical Results 604689

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #002H

Sample Id:	**SW24**	Matrix:	Soil	Date Received:	11.07.18 12.23
Lab Sample Id:	604689-004	Date Collected:	11.05.18 14.30	Sample Depth:	1 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.07.18 14.45	Basis:	Wet Weight
Seq Number:	3069006				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**18.9**	4.96	mg/kg	11.07.18 15.44		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	11.07.18 14.00	Basis:	Wet Weight
Seq Number:	3068984				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.08.18 07.45	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	11.08.18 07.45	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.08.18 07.45	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	11.08.18 07.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	11.08.18 07.45	
o-Terphenyl	84-15-1	95	%	70-135	11.08.18 07.45	

Certificate of Analytical Results 604689

LT Environmental, Inc., Arvada, CO

Horned Toad 36 State #002H

Sample Id:	**SW24**	Matrix:	Soil	Date Received:	11.07.18 12.23
Lab Sample Id:	604689-004	Date Collected:	11.05.18 14.30	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	11.08.18 16.00	Basis:	Wet Weight
Seq Number:	3069146				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	11.08.18 22.44	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	11.08.18 22.44	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	11.08.18 22.44	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	11.08.18 22.44	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	11.08.18 22.44	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	11.08.18 22.44	U	1
Total BTEX		<0.00200	0.00200	mg/kg	11.08.18 22.44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	104	%	70-130	11.08.18 22.44	
4-Bromofluorobenzene	460-00-4	73	%	70-130	11.08.18 22.44	

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 604689

LT Environmental, Inc.

Horned Toad 36 State #002H

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3069006 Matrix: Solid Date Prep: 11.07.18
MB Sample Id: 7665672-1-BLK LCS Sample Id: 7665672-1-BKS LCSD Sample Id: 7665672-1-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	245	98	243	97	90-110	1	20	mg/kg	11.07.18 15:01	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3069006 Matrix: Soil Date Prep: 11.07.18
Parent Sample Id: 604543-011 MS Sample Id: 604543-011 S MSD Sample Id: 604543-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	213	250	446	93	439	90	90-110	2	20	mg/kg	11.08.18 10:43	

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3069006 Matrix: Soil Date Prep: 11.07.18
Parent Sample Id: 604689-001 MS Sample Id: 604689-001 S MSD Sample Id: 604689-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	259	104	260	104	90-110	0	20	mg/kg	11.08.18 10:17	

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3068984 Matrix: Solid Date Prep: 11.07.18
MB Sample Id: 7665710-1-BLK LCS Sample Id: 7665710-1-BKS LCSD Sample Id: 7665710-1-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	998	100	1010	101	70-135	1	20	mg/kg	11.07.18 20:55	
Diesel Range Organics (DRO)	<8.13	1000	1090	109	1100	110	70-135	1	20	mg/kg	11.07.18 20:55	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	97		123		117		70-135	%	11.07.18 20:55
o-Terphenyl	100		97		96		70-135	%	11.07.18 20:55

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 604689

LT Environmental, Inc.

Horned Toad 36 State #002H

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3068984 Matrix: Soil Date Prep: 11.07.18
Parent Sample Id: 604544-001 MS Sample Id: 604544-001 S MSD Sample Id: 604544-001 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)	<7.99	999	889	89	907	91	70-135	2	20	mg/kg	11.07.18 21:51	
Diesel Range Organics (DRO)	56.7	999	947	89	973	92	70-135	3	20	mg/kg	11.07.18 21:51	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	104		106		70-135	%	11.07.18 21:51
o-Terphenyl	85		85		70-135	%	11.07.18 21:51

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3069146 Matrix: Solid Date Prep: 11.08.18
MB Sample Id: 7665848-1-BLK LCS Sample Id: 7665848-1-BKS LCSD Sample Id: 7665848-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.0923	91	0.0880	88	70-130	5	35	mg/kg	11.08.18 19:30	
Toluene	<0.00202	0.101	0.0781	77	0.0759	76	70-130	3	35	mg/kg	11.08.18 19:30	
Ethylbenzene	<0.00202	0.101	0.0904	90	0.0866	87	70-130	4	35	mg/kg	11.08.18 19:30	
m,p-Xylenes	<0.00102	0.202	0.180	89	0.172	86	70-130	5	35	mg/kg	11.08.18 19:30	
o-Xylene	<0.00202	0.101	0.0933	92	0.0889	89	70-130	5	35	mg/kg	11.08.18 19:30	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	111		102		116		70-130	%	11.08.18 19:30
4-Bromofluorobenzene	70		74		74		70-130	%	11.08.18 19:30

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3069146 Matrix: Soil Date Prep: 11.08.18
Parent Sample Id: 604689-001 MS Sample Id: 604689-001 S MSD Sample Id: 604689-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00391	0.195	0.0767	39	0.0702	70	70-130	9	35	mg/kg	11.08.18 20:13	X
Toluene	<0.00391	0.195	0.0623	32	0.0591	59	70-130	5	35	mg/kg	11.08.18 20:13	X
Ethylbenzene	<0.00391	0.195	0.0656	34	0.0672	67	70-130	2	35	mg/kg	11.08.18 20:13	X
m,p-Xylenes	<0.00781	0.391	0.120	31	0.130	65	70-130	8	35	mg/kg	11.08.18 20:13	X
o-Xylene	<0.00391	0.195	0.0634	33	0.0682	68	70-130	7	35	mg/kg	11.08.18 20:13	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		104		70-130	%	11.08.18 20:13
4-Bromofluorobenzene	74		79		70-130	%	11.08.18 20:13

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

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Phoenix, Arizona (480-355-0900)
www.xenco.com

CHAIN OF CUSTODY

Page 1 of 1

Xenco Quote #

Xenco Job # 1041089

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

Project Information

Project Name/Number: Horned Toad 36 State #002H
Project Location: Rural Eddy, NM 2RP-4850
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	Collection Date	Collection Time	Matrix	# of bottles	Number of preserved 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	FS15	2'	11/5	14:00	S	1								X	X	X	X	
2	SW11B	1'		14:10	S	1								X	X	X	X	
3	SW25	6"		14:15	S	1								X	X	X	X	
4	SW24	1'		14:30	S	1								X	X	X	X	
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 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 # 777366362431 9

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

Relinquished by Sampler: 1	Date Time: 11/6/2018 14:40	Received By: 1	Relinquished By: 2	Date Time: 11/4/18 1550	Received By: 2		
Relinquished by: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4	11/7/18 1023	
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable	On Ice [X]	Cooler Temp. 0.3	Thermo. Corr. Factor -0.5

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.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 11/07/2018 12:23:00 PM

Work Order #: 604689

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)?	.3
#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: 11/07/2018

Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 11/07/2018

Jessica Kramer

ATTACHMENT 3: PHOTO LOG

View to the northeast of the excavation (2RP-4850)

Project: 012918129	XTO Energy, Inc. Horned Toad 36 State #002H	LTE Advancing Opportunity
October 23, 2018	Photographic Log	

View to the west of the excavation (2RP-4850)

Project: 012918129	XTO Energy, Inc. Horned Toad 36 State #002H	LTE Advancing Opportunity
October 23, 2018	Photographic Log	

View to the east of the excavation (2RP-4850)

Project: 012918129	XTO Energy, Inc. Horned Toad 36 State #002H	LTE Advancing Opportunity
October 23, 2018	Photographic Log	

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

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

CONDITIONS

Action 190470

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 190470
	Action Type: [IM-SD] Incident File Support Doc (ENV) (IM-BNF)

CONDITIONS

Created By	Condition	Condition Date
bhall	None	2/24/2023