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

February 13, 2020

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

RE: Closure Request
Nash 042 Tank Battery
Remediation Permit Number 2RP-4823
Eddy County, New Mexico

Dear Mr. Billings:

LT Environmental, Inc. (LTE), on behalf of XTO Energy, Inc. (XTO), presents the following Closure Request detailing site assessment, soil sampling, and excavation activities at the Nash 042 Tank Battery (Site) in Unit E, Section 18, Township 23 South, Range 30 East, in Eddy County, New Mexico (Figure 1). The purpose of the site assessment, soil sampling, and excavation activities was to address impacts to soil after a release of crude oil and produced water at the Site.

The release is included in the Compliance Agreement for Remediation for Historical Releases (Compliance Agreement) between XTO and the New Mexico Oil Conservation Division (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) as amended on August 14, 2018. The release is categorized as a Tier IV site in the Compliance Agreement, meaning the release occurred prior to August 14, 2018, the effective date of 19.15.29 NMAC; however, remediation was ongoing.

RELEASE BACKGROUND

On May 31, 2018, the programmable logic controller malfunctioned, which caused pumps to fail and the storage tanks to overflow. Approximately 702.5 barrels (bbls) of crude oil and 198.5 bbls of produced water were released within the lined storage tank containment. Approximately 1 bbl of overspray impacted the surface of the well pad outside of the containment. A vacuum truck recovered 900 bbls of fluid from within the lined containment. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form C-141 on June 15, 2018, and was assigned Remediation Permit (RP) Number 2RP-4823 (Attachment 1). The coordinates provided on the initial Form C-141 are incorrect, the final Form C-141 provides the correct coordinates. Based on the site assessment activities and results of the soil sampling events, XTO is requesting no further action for this release.

SITE CHARACTERIZATION

LTE characterized the Site according to Table 1, *Closure Criteria for Soils Impacted by a Release*, of 19.15.29.12 of the NMAC. Depth to groundwater at the Site is estimated to be between 50 feet and 100 feet below ground surface (bgs) based on the nearest water well data. The nearest permitted water well with depth to water data is United States Geological Survey (USGS) well 321742103552601, located approximately 4,262 feet southeast of the Site. The water well has a depth to groundwater of 66 feet and a total depth 100 feet. Ground surface elevation at the water well location is 3,034 feet above mean sea level (AMSL), which is approximately 13 feet higher in elevation than the Site. The closest continuously flowing water or significant watercourse to the Site is an unnamed dry wash located approximately 364 feet southwest of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is located in a high-potential karst area.

CLOSURE CRITERIA

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

- Benzene: 10 milligrams per kilogram (mg/kg);
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg;
- Total petroleum hydrocarbons (TPH): 100 mg/kg; and
- Chloride: 600 mg/kg.

SITE ASSESSMENT, EXCAVATION, AND DELINEATION SOIL SAMPLING ACTIVITIES

On August 6, 2019, LTE personnel inspected the Site to evaluate the release extent. Eight preliminary soil samples (SS01 through SS08) were collected around the storage tank containment to assess the lateral extent of impacted soil. The soil sample locations, depicted on Figure 2, were selected based on information provided on the initial Form C-141 and field observations. To eliminate the effects from weathering and natural degradation of contaminants at the ground surface, the soil samples were collected from each sample location from a depth of 1 foot bgs.

The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were shipped at or below 4 degrees Celsius (°C) under strict chain-of-custody (COC) procedures to Xenco Laboratories (Xenco) in Midland, Texas, for analysis of BTEX following United States Environmental Protection Agency (USEPA) Method 8021B; TPH-gasoline range organics, TPH-

diesel range organics, and TPH-oil range organics (ORO) following USEPA Method 8015M/D; and chloride following USEPA Method 300.0. The soil sample locations are depicted on Figure 2.

During September and November 2019, LTE personnel returned to the Site to oversee site assessment and excavation activities. Potholes and boreholes were advanced via backhoe or hand auger at eight locations around the storage tank containment, to confirm the lateral and vertical extent impacted soil. Potholes PH01 through PH05, and boreholes BH01 through BH03 were advanced to depths ranging from 2 feet to 4 feet bgs. Delineation soil samples were collected from each pothole and borehole from depths ranging from 2 feet to 4 feet bgs. Soil from the potholes and boreholes was field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photoionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. Field screening results and observations for the potholes and boreholes were logged on lithologic/soil sampling logs, which are included in Attachment 2. The delineation soil sample locations are depicted on Figure 3.

Impacted soil was excavated from the release area as indicated by field screening activities and laboratory analytical results for the preliminary and delineation soil samples. To direct excavation activities, LTE screened soil for volatile aromatic hydrocarbons and chloride utilizing a PID and Hach® chloride QuanTab® test strips, respectively. Impacted soil was excavated to a depth ranging from 2 feet to 4.5 feet bgs, in the areas around preliminary soil sample SS01 and delineation soil sample PH05A. Following removal of impacted soil, LTE collected 5-point composite soil samples every 200 square feet from the sidewalls and floors of the excavations. The 5-point composite samples were collected by depositing five aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil samples SW01 through SW03 were collected from the sidewalls of the excavations from depths ranging from the ground surface to 4.5 feet bgs. Composite soil samples FS01 through FS03 were collected from the floor of the excavations from depths ranging from 2 feet to 4.5 feet bgs. The excavation extents and excavation soil sample locations are depicted on Figure 4.

The delineation and excavation soil samples were collected, handled, and analyzed as described above and submitted to Xenco. Photographic documentation was conducted during the Site visits. Photographs are included in Attachment 3.

The combined excavations measured approximately 710 square feet in area and were completed to depths ranging from 2 feet to 4.5 feet bgs. A total of approximately 80 cubic yards of impacted soil were removed from the excavations. The impacted soil was transported and properly disposed of at the R360 Landfill located in Hobbs, New Mexico.

ANALYTICAL RESULTS

Laboratory analytical results indicated that BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria in preliminary soil samples SS02 through SS08. Laboratory

analytical results indicated that TPH concentrations exceeded the Closure Criteria in preliminary soil sample SS01, collected at 1 foot bgs. Laboratory analytical results for the delineation soil samples, collected from potholes PH01 through PH04 and boreholes BH01 through BH03 indicated that BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria. Laboratory analytical results indicated that chloride concentrations exceeded the Closure Criteria in delineation soil sample BH05A, collected at 4 feet bgs. Based on field screening results and laboratory analytical results for the preliminary and delineation soil samples, excavation of impacted soil was conducted.

Laboratory analytical results for excavation soil samples SW01 through SW03 and FS01 through FS03 indicated that BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Attachment 4.

CLOSURE REQUEST

Site assessment and soil sampling activities were completed in the release area around the storage tank containment, to assess for soil impacts resulting from the May 31, 2018, crude oil and produced water release. Based on the soil sample laboratory analytical results from the site assessment activities, impacted soil was excavated. Laboratory analytical results for the excavation soil samples indicated that BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria.

The majority of the release occurred within lined containment and was recovered during initial response activities. Initial response efforts and excavation of impacted soil have mitigated impacts at this Site. XTO requests no further action for RP Number 2RP-4823. XTO backfilled the excavations with material purchased locally and recontoured the Site to match pre-existing site conditions. An updated NMOCD Form C-141 is included in Attachment 1.

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

Sincerely,

LT ENVIRONMENTAL, INC.

Aimee Cole
Project Environmental Scientist

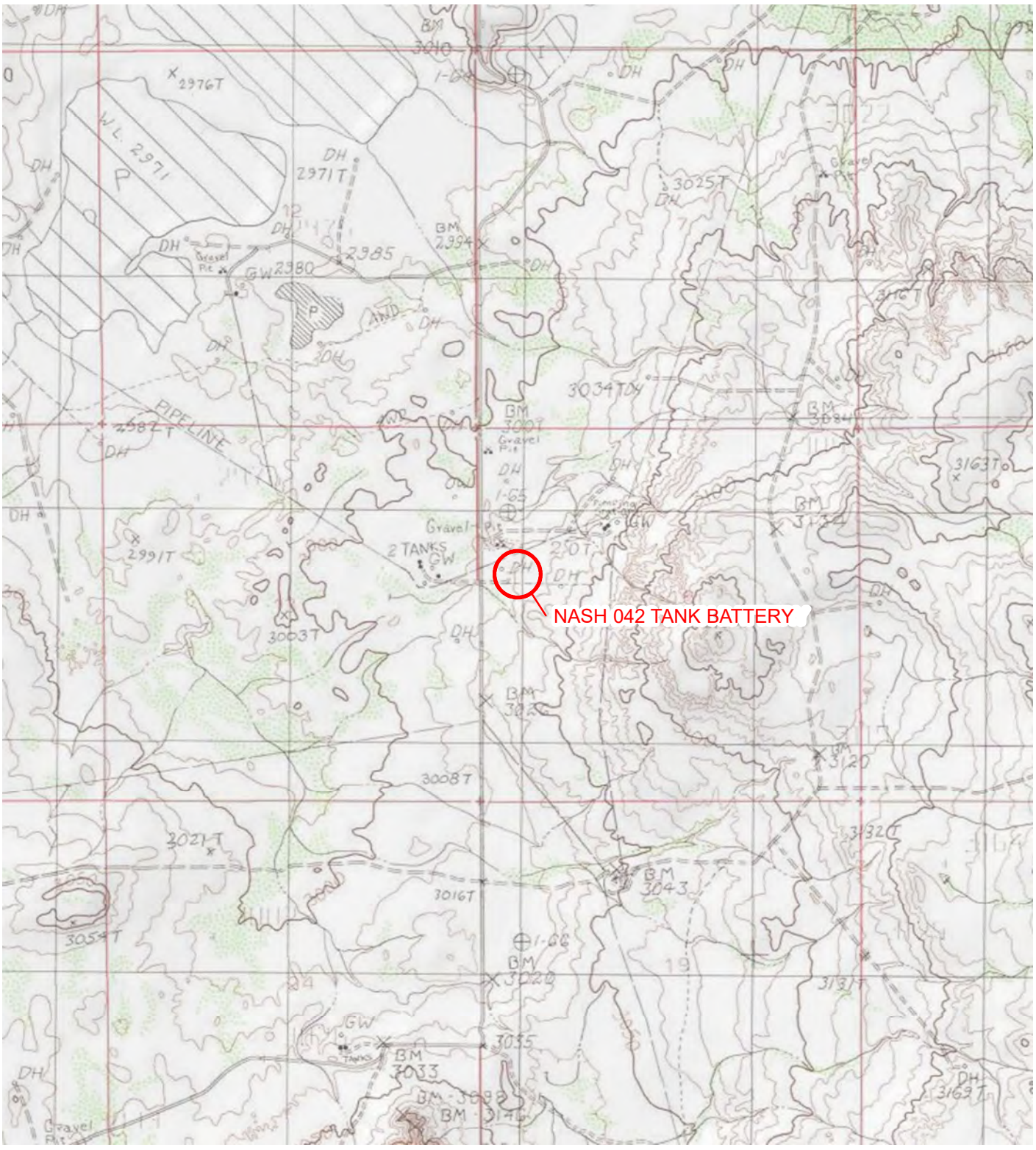
Ashley L. Ager, P.G.
Senior Geologist

cc: Kyle Littrell, XTO
Bureau of Land Management
Mike Bratcher, NMOCD

Attachments:

Figure 1	Site Location Map
Figure 2	Preliminary Soil Sample Locations
Figure 3	Delineation Soil Sample Locations
Figure 4	Excavation Soil Sample Locations
Table 1	Soil Analytical Results
Attachment 1	Initial/Final NMOCD Form C-141 (2RP-4823)
Attachment 2	Lithologic / Soil Sample Logs
Attachment 3	Photographic Log
Attachment 4	Laboratory Analytical Reports

FIGURES



LEGEND

IMAGE COURTESY OF ESRI/USGS

SITE LOCATION

0 2,000 4,000

Feet

N

NEW MEXICO

NOTE: REMEDIATION PERMIT NUMBER 2RP-4823

FIGURE 1
SITE LOCATION MAP
NASH 042 TANK BATTERY
UNIT E SEC 18 T23S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

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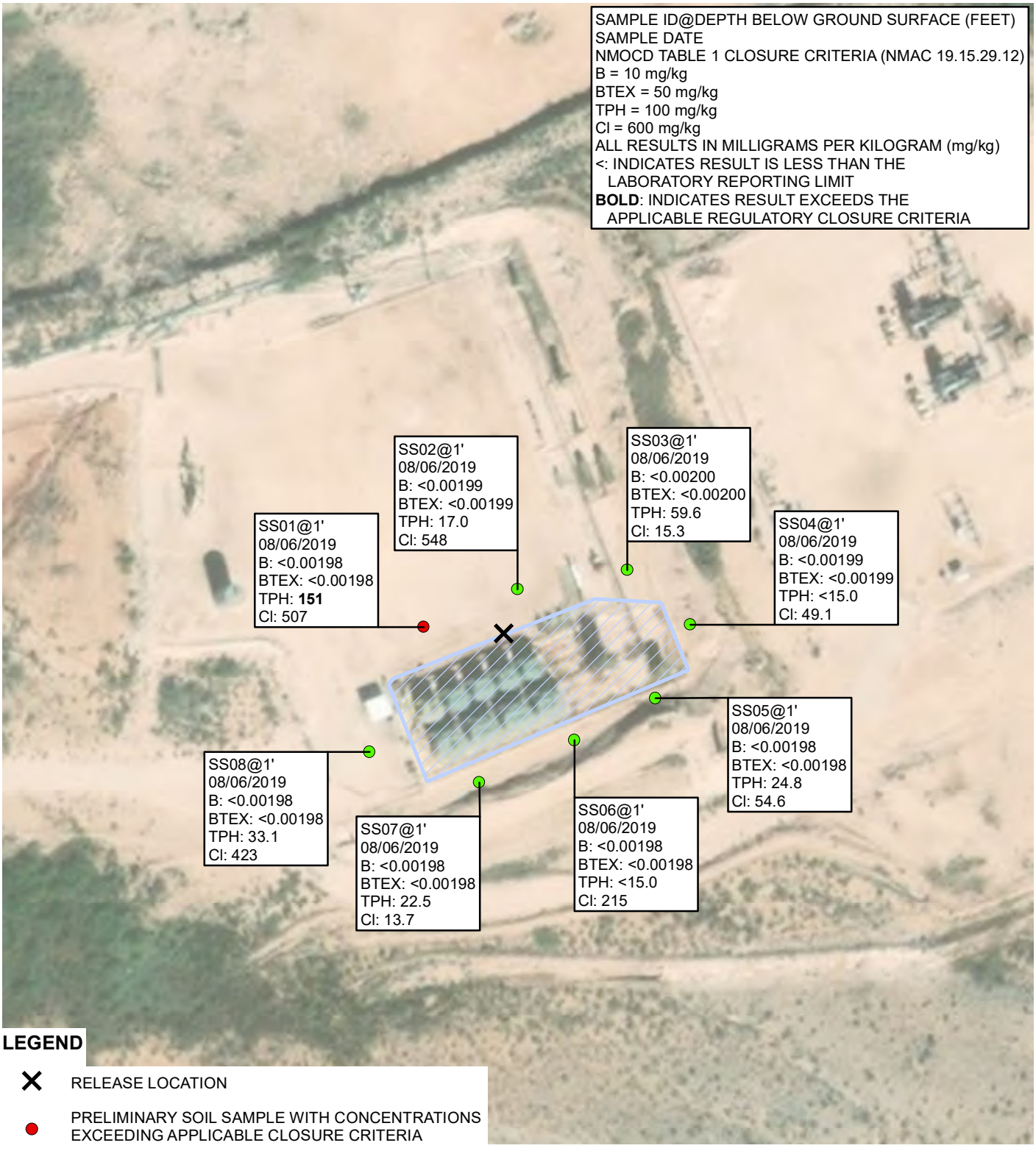

B: BENZENE
BTEX: TOTAL BENZENE, TOLUENE, ETHYLBENZENE, AND TOTAL XYLENES
TPH: TOTAL PETROLEUM HYDROCARBONS
Cl: CHLORIDE
NMAC: NEW MEXICO ADMINISTRATIVE CODE
NMOCD: NEW MEXICO OIL CONSERVATION DIVISION
NOTE: REMEDIATION PERMIT NUMBER 2RP-4823

FIGURE 2
PRELIMINARY SOIL SAMPLE LOCATIONS
NASH 042 TANK BATTERY
UNIT E SEC 18 T23S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

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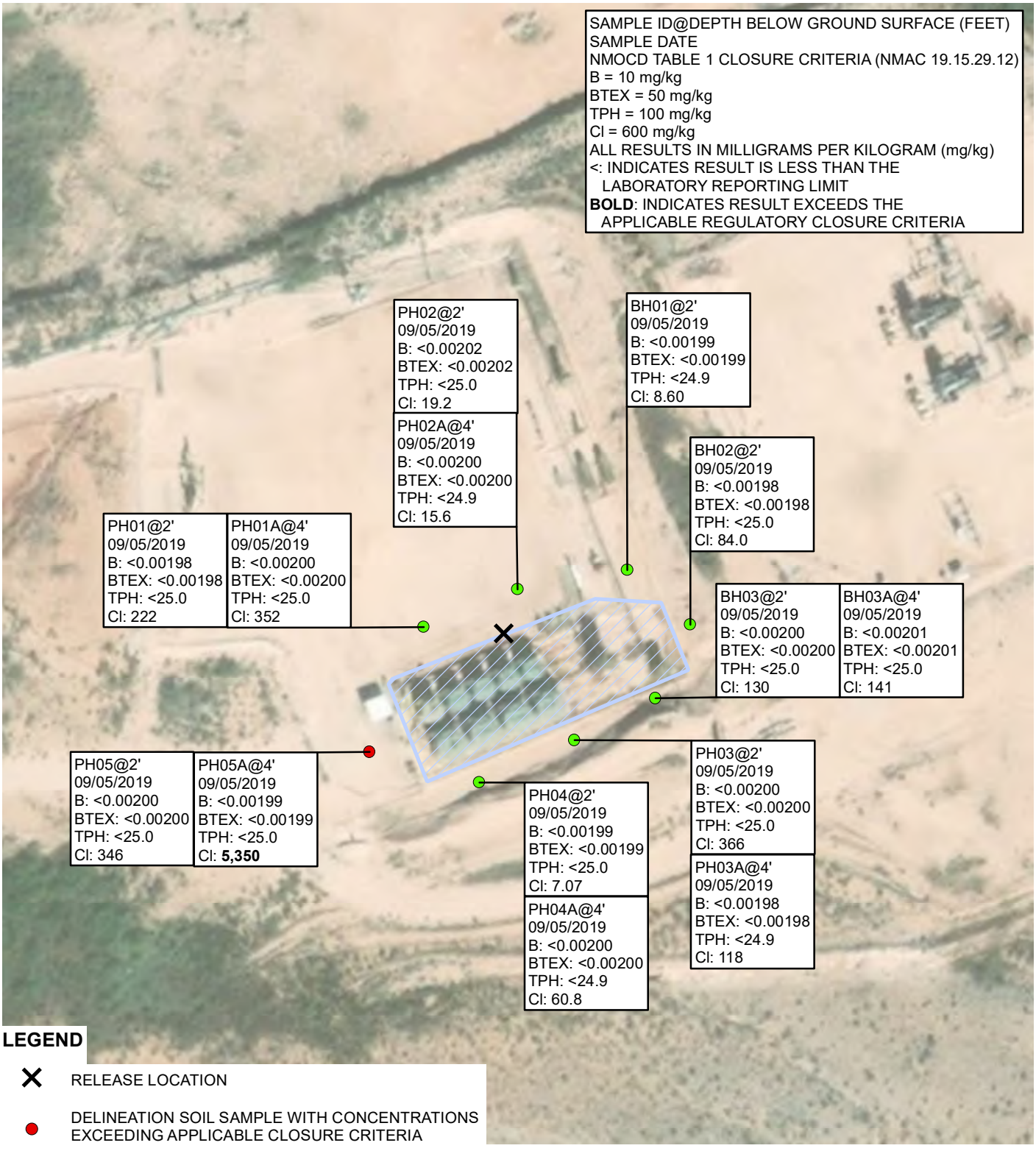

FIGURE 3
DELINEATION SOIL SAMPLE LOCATIONS
NASH 042 TANK BATTERY
UNIT E SEC 18 T23S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

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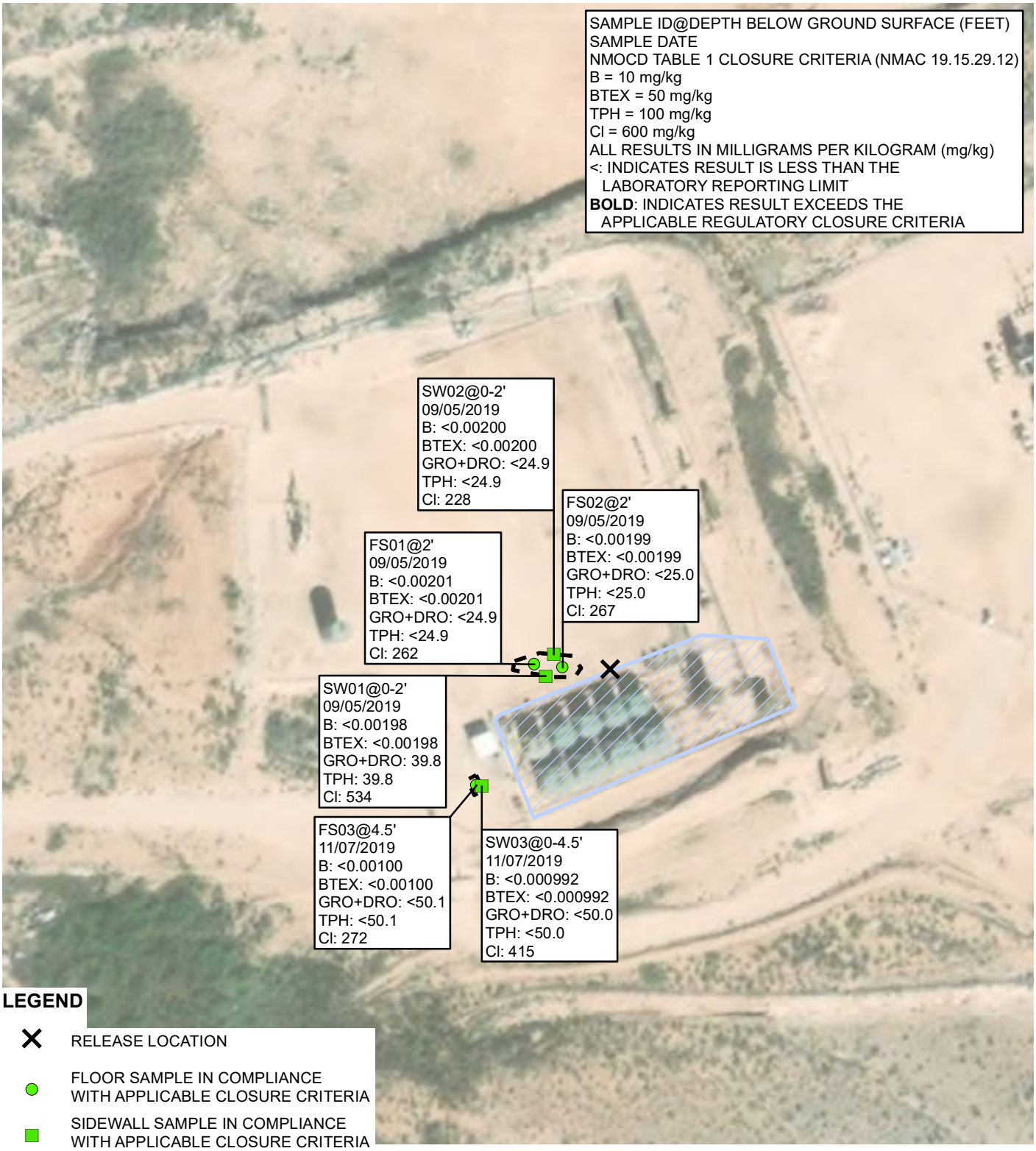

B: BENZENE
BTEX: TOTAL BENZENE, TOLUENE, ETHYLBENZENE, AND TOTAL XYLENES
TPH: TOTAL PETROLEUM HYDROCARBONS
Cl: CHLORIDE
NMAC: NEW MEXICO ADMINISTRATIVE CODE
NMOCD: NEW MEXICO OIL CONSERVATION DIVISION
NOTE: REMEDIATION PERMIT NUMBER 2RP-4823

FIGURE 4
EXCAVATION SOIL SAMPLE LOCATIONS
NASH 042 TANK BATTERY
UNIT E SEC 18 T23S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

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TABLES

TABLE 1
SOIL ANALYTICAL RESULTS

NASH 042 TANK BATTERY
REMEDIATION PERMIT NUMBER 2RP-4823
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

Sample Name	Sample Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
SS01	1	08/06/2019	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<15.0	124	27.3	124	**151**	507
SS02	1	08/06/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<14.9	17.0	<14.9	17.0	17.0	548
SS03	1	08/06/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	59.6	<15.0	59.6	59.6	15.3
SS04	1	08/06/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	<15.0	49.1
SS05	1	08/06/2019	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<15.0	24.8	<15.0	24.8	24.8	54.6
SS06	1	08/06/2019	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<15.0	<15.0	<15.0	<15.0	<15.0	215
SS07	1	08/06/2019	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<15.0	22.5	<15.0	22.5	22.5	13.7
SS08	1	08/06/2019	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<15.0	33.1	<15.0	33.1	33.1	423
PH01	2	09/05/2019	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<25.0	<25.0	<25.0	<25.0	<25.0	222
PH01A	4	09/05/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<25.0	<25.0	<25.0	<25.0	<25.0	352
PH02	2	09/05/2019	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<25.0	<25.0	<25.0	<25.0	<25.0	19.2
PH02A	4	09/05/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<24.9	<24.9	<24.9	<24.9	<24.9	15.6
PH03	2	09/05/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<25.0	<25.0	<25.0	<25.0	<25.0	366
PH03A	4	09/05/2019	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<24.9	<24.9	<24.9	<24.9	<24.9	118
PH04	2	09/05/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<25.0	<25.0	<25.0	<25.0	<25.0	7.07
PH04A	4	09/05/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<24.9	<24.9	<24.9	<24.9	<24.9	60.8
PH05	2	09/05/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<25.0	<25.0	<25.0	<25.0	<25.0	346
PH05A	4	09/05/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<25.0	<25.0	<25.0	<25.0	<25.0	**5,350**
BH01	2	09/05/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<24.9	<24.9	<24.9	<24.9	<24.9	8.60
BH02	2	09/05/2019	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<25.0	<25.0	<25.0	<25.0	<25.0	84
BH03	2	09/05/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<25.0	<25.0	<25.0	<25.0	<25.0	130
BH03A	4	09/05/2019	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<25.0	<25.0	<25.0	<25.0	<25.0	141
NMOCD Table 1 Closure Criteria			**10**	NE	NE	NE	**50**	NE	NE	NE	**NE**	**100**	**600**

TABLE 1
SOIL ANALYTICAL RESULTS

NASH 042 TANK BATTERY
REMEDIATION PERMIT NUMBER 2RP-4823
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

Sample Name	Sample Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
FS01	2	09/05/2019	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<24.9	<24.9	<24.9	<24.9	<24.9	262
FS02	2	09/05/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<25.0	<25.0	<25.0	<25.0	<25.0	267
FS03	4.5	11/07/2019	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<50.1	<50.1	<50.1	<50.1	<50.1	272
SW01	0-2	09/05/2019	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<25.0	39.8	<25.0	39.8	39.8	534
SW02	0-2	09/05/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<24.9	<24.9	<24.9	<24.9	<24.9	228
SW03	0 - 4.5	11/07/2019	<0.000992	<0.000992	<0.000992	<0.000992	<0.000992	<50.0	<50.0	<50.0	<50.0	<50.0	415
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

DRO - diesel range organics

GRO - gasoline range organics

mg/kg - milligrams per kilogram

ORO - motor oil range organics

NMAC - New Mexico Administrative Code

NMOCD - New Mexico Oil Conservation Division

NE - not established

TPH - total petroleum hydrocarbons

Bold - indicates result exceeds the applicable regulatory standard

< - indicates result is below laboratory reporting limits

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

ATTACHMENT 1: INITIAL/FINAL NMOCD FORM C-141 (2RP-4823)

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

JUN 15 2018

DISTRICT II-ARTESIA O.C.D.

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

Form C-141
Revised April 3, 2017

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

nAB1817256238

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: XTO Energy 5380	Contact: Kyle Littrell
Address: 522 W. Mermod, Suite 704 Carlsbad, N.M. 88220	Telephone No: 432-221-7331
Facility Name: Nash 042 Tank Battery (API for Nash Unit #042)	Facility Type: Exploration and Production

Surface Owner: Federal	Mineral Owner: Federal	API No: 30-015-37194

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
E	18	23S	30E	2100	North	600	West	Eddy

Latitude___32.152967____ **Longitude**___-103.867559____ NAD83

NATURE OF RELEASE

Type of Release Oil and produced water	Volume of Release 702.5 bbl Oil, 198.5 bbl PW	Volume Recovered 702 bbl Oil, 198 bbl PW
Source of Release Tanks	Date and Hour of Occurrence 5/31/2018, AM	Date and Hour of Discovery 5/31/2018, 1:00 PM
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Mike Bratcher and Crystal Weaver (NMOCD), Mark Naranjo and Ryan Mann (SLO)	
By Whom? Amy Ruth	Date and Hour: 6/1/2018, 8:40 AM	
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.*
Release was due to malfunctioning programmable logic controller which caused the pumps to fail and overflow the tanks. The controller was repaired before the facility resumed operations.

Describe Area Affected and Cleanup Action Taken.*
Almost all fluid was captured within the impervious lined containment. Vacuum trucks were dispatched and recovered 900bbl of fluid from the containment. A small amount of overspray (<1 bbl) impacted the pad surface near the containment. An environmental contractor has been retained to assist with 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:	OIL CONSERVATION DIVISION
Printed Name: Jake Foust	Approved by Environmental Specialist:
Title: Environmental Coordinator	Approval Date: 6/19/18 Expiration Date: NA
E-mail Address: Bryan_Foust@xtoenergy.com	Conditions of Approval: See Attached Attached # 4823
Date: 6/15/2018 Phone: 432-266-2663	

* Attach Additional Sheets If Necessary

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-4823
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-4823
Contact mailing address: 522 W. Mermod, Suite 704 Carlsbad, NM 88220	

Location of Release Source

Latitude N 32.30643 Longitude W -103.92803
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Nash 042 Tank Battery	Site Type: Exploration and Production
Date Release Discovered: 5/31/2018	API# *(if applicable):* 30-015-37194

Unit Letter	Section	Township	Range	County
E	18	23S	30E	Eddy

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

Nature and Volume of Release

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

☒ Crude Oil	Volume Released (bbls): 702.5	Volume Recovered (bbls): 702
☒ Produced Water	Volume Released (bbls): 198.5	Volume Recovered (bbls): 198
	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
The release was due to a malfunctioning programmable logic controller, which caused the pumps to fail and the tanks to overflow into the impervious lined containment. A small amount (< 1 bbl) of overspray impacted the pad surface near the containment.

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	2RP-4823
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? Release volume was greater than 25 bbls.

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
Notice was given by Amy Ruth to Mike Bratcher/Crystal Weaver (NMOCD) and Mark Naranjo/Ryan Mann (SLO) on June 1, 2018, at 8:40 AM.

Initial Response

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

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

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

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

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

Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature: Date: 2-13-2020

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-4823
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	2RP-4823
Facility ID	
Application ID	

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

Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature: Date: 2-13-2020

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

OCD Only

Received by: Date:

Incident ID	
District RP	2RP-4823
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 Supervisor

Signature: Date: 2-13-2020

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

OCD Only

Received by: Date: _____

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

ATTACHMENT 2: LITHOLOGIC / SOIL SAMPLE LOGS

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

Identifier: PH01	Date: 9/5/19
Project Name: North Dow 42	RP Number: 2RP-4823
Logged By: BB	Method: Backhoe
Hole Diameter: NA	Total Depth: 4'

LITHOLOGIC / SOIL SAMPLING LOG

Lat/Long:
Field Screening: PID, Chloride.
Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0		CLCHE fill	CALICHE, dry, lt brown, poorly cmtd, micro xln, no odor, fill
					1		ML	SILT w/ caliche gravel, dry, lt brown – tan, ~~well BG~~ non-plastic, no odor.
D	1.4 (128)	0.0	N	PH01	2	2'	ML	(12:40)
					3			
D	1.8 (180)	0.0	N	PH01A	4	4'	ML	SAA (Same As Above) (12:45)
								EOP @ 4'
					5			
					6			
					7			
					8			
					9			
					10			
					11			
					12			

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

Identifier:	Date:
PH02	9/5/19
Project Name:	**RP Number:**
Nash Draw 42	2RP-4823
Logged By: BB	**Method:** Backhoe
Hole Diameter: N/A	**Total Depth:** 4'

LITHOLOGIC / SOIL SAMPLING LOG

Lat/Long:

Field Screening:
PID, Chloride.

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0		CALICHE fill	CALICHE, dry, lt brown, poly cmtd, micro xln, no odor, fill
					1		ML	SILT w/ Caliche gravel, dry, tan, non-plastic, no odor.
D	0.4 (<128)	0.0	N	PH02	2	2'	ML	(12:50)
					3			
D	0.6 (<128)	0.0	N	PH02A	4	4'	ML	SAA (Same As Above) (12:55)
					5			TOP @ 4'
					6			
					7			
					8			
					9			
					10			
					11			
					12			

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

Identifier: PH03	Date: 9/5/19
Project Name: North Draw 42	RP Number: 2RP-4823
Logged By: BB	Method: Backhoe
Hole Diameter: N/A	Total Depth: 4'

LITHOLOGIC / SOIL SAMPLING LOG

Lat/Long:
Field Screening: PID, Chloride.
Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0		(SP-SM)	Silty SAND, dry, brown-lt brown, poorly graded, f.-m., no odor.
					1			
D	2.4 (276)	0.0	N	PH03	2	2'	(SP-SM)	SAA (Same As Above) (13:05)
					3			
D	0.8 (<128)	0.0	N	PH03A	4	4'	(SP-SM)	SAA (13:10)
					5			EOP @ 4'
					6			
					7			
					8			
					9			
					10			
					11			
					12			

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

Identifier:	Date:
PH04	9/5/19
Project Name:	**RP Number:**
NASH DRAW 42	2RP-4823
Logged By: BB	**Method:** Backhoe
Hole Diameter: N/A	**Total Depth:** 4'

LITHOLOGIC / SOIL SAMPLING LOG

Lat/Long:

Field Screening:
PID, Chloride.

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0		(SP-SM)	Silty SAND, dry, brown-lt brown, poorly graded, f.-m., no odor.
					1			
D	0.4 (128)	0.0	N	PH04	2	2'	(SP-SM)	SAA (Same As Above) (13:20)
					3			
D	0.0 (128)	0.0	N	PH04A	4	4'	(SP-SM)	SAA (13:25)
					5			EOP @ 4'
					6			
					7			
					8			
					9			
					10			
					11			
					12			

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

Identifier: PHOS	Date: 9/5/19
Project Name: North Draw 42	RP Number: 2RP-4823
Logged By: BB	Method: Backhoe
Hole Diameter: N/A	Total Depth: 4'

LITHOLOGIC / SOIL SAMPLING LOG

Lat/Long:
Field Screening: PID, Chloride.
Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0		(SP-SM)	silty SAND, dry, brown - lt brown, poorly graded, f.-m., no odor.
					1			
D	2.0(212)	0.0	N	PHOS	2	2'	(SP-SM)	AA (Same As Above)(13:30)
					3			
							ML	SILT w/ caliche gravel, dry, light brown - tan, non-plastic, no odor. (13:35).
D	2.8(352)	0.0	N	PHOSA	4	4'		
					5			EOP @ 4'
					6			
					7			
					8			
					9			
					10			
					11			
					12			

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

Identifier: BH01	Date: 9/5/19
Project Name: Nash Draw 42	RP Number: 2RP-4823
Logged By: BB	Method: Hand Auger
Lat/Long:	Field Screening: PID, Chloride:
Hole Diameter: 3.5"	Total Depth: 2

LITHOLOGIC / SOIL SAMPLING LOG

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0		(SP-SM)	Silty SAND, dry, brown - lt brown, poorly graded, f. - m., no odor.
					1			
D	0.4 (128)	0.1	N	BH01	2	2'	CLCHE	CALICHE, dry, tan, poorly consolidated, micro-fn xln, no odor. (14:55).
					3			EOB@2', Auger Refusal
					4			
					5			
					6			
					7			
					8			
					9			
					10			
					11			
					12			

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

Identifier: BH02	Date: 9/5/19
Project Name: Nash Draw 42	RP Number: 2RP-4823
Logged By: BB	Method: Hand Auger
Hole Diameter: 3.5"	Total Depth: 2'

LITHOLOGIC / SOIL SAMPLING LOG

Lat/Long:

Field Screening:
PID, Chloride.

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0		(SP-SM)	Silty SAND, dry, brown, lt brown, poorly graded, f.-m., no odor.
					1			
D	1.0(128)	0.4	N	BH02	2	2'	CALCHE	CALICHE, dry, tan, poorly consolidated, micro-fine xln, no odor. (15:15)
					3			EOB @ 2', Auger Refusal
					4			
					5			
					6			
					7			
					8			
					9			
					10			
					11			
					12			

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

Identifier: BH03	Date: 9/5/19
Project Name: Nash Draw 42	RP Number: 2RP-4823
Logged By: BB	Method: Hand Auger
Lat/Long:	Field Screening: PID, Chloride.
Hole Diameter: 3.5"	Total Depth: 4'

LITHOLOGIC / SOIL SAMPLING LOG

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0		(SP-SM)	Silty SAND, dry, brown-lt brown, poorly graded, f.-m., no odor.
					1			
D	1.2 (<128)	0.6	N	BH03	2	2'	ML	SILT w/ Caliche gravel, dry, light brown-tan, non-plastic, no odor. (15:25)
					3			
D	1.0 (<128)	0.5	N	BH03A	4		ML	SAA (Same As Above) (15:35) EOB @ 4'
					5			
					6			
					7			
					8			
					9			
					10			
					11			
					12			

ATTACHMENT 3: PHOTOGRAPHIC LOG

PHOTOGRAPHIC LOG

Photograph 1: West facing view of open excavation north of the tanks.

Photograph 2: East facing view of open excavation north of the tanks.

Photograph 3: East facing view of open excavation west of the tanks.

Photograph 4: East facing view of the backfilled excavation.

Nash 042 Tank Battery
Eddy County, New Mexico
Photographs Taken: September and November 2019

ATTACHMENT 4: LABORATORY ANALYTICAL REPORTS

Analytical Report 633409

for

LT Environmental, Inc.

Project Manager: Dan Moir

NASH 42 TB (2RP-4823)

012919120

12-AUG-19

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-29), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142), North Carolina (681)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-19-19), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-20)
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-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429), North Carolina (483)

12-AUG-19

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

Reference: XENCO Report No(s): **633409**
NASH 42 TB (2RP-4823)
Project Address:

Dan Moir:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 633409. 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. 633409 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 633409

LT Environmental, Inc., Arvada, CO

NASH 42 TB (2RP-4823)

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS01	S	08-06-19 10:10	1 ft	633409-001
SS02	S	08-06-19 10:20	1 ft	633409-002
SS03	S	08-06-19 10:30	1 ft	633409-003
SS04	S	08-06-19 10:40	1 ft	633409-004
SS05	S	08-06-19 10:50	1 ft	633409-005
SS06	S	08-06-19 11:00	1 ft	633409-006
SS07	S	08-06-19 11:15	1 ft	633409-007
SS08	S	08-06-19 11:30	1 ft	633409-008

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: NASH 42 TB (2RP-4823)

Project ID: *012919120*
Work Order Number(s): *633409*

Report Date: *12-AUG-19*
Date Received: *08/08/2019*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3098269 BTEX by EPA 8021B
Surrogate 4-Bromofluorobenzene recovered below QC limits. Matrix interferences is suspected; data confirmed by re-analysis.
Samples affected are: 633409-007.
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analysis Summary 633409

LT Environmental, Inc., Arvada, CO

Project Name: NASH 42 TB (2RP-4823)

Project Id: 012919120
Contact: Dan Moir
Project Location:

Date Received in Lab: Thu Aug-08-19 11:05 am
Report Date: 12-AUG-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	633409-001		633409-002		633409-003		633409-004		633409-005		633409-006	
	Field Id:	SS01		SS02		SS03		SS04		SS05		SS06	
	Depth:	1- ft		1- ft		1- ft		1- ft		1- ft		1- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Aug-06-19 10:10		Aug-06-19 10:20		Aug-06-19 10:30		Aug-06-19 10:40		Aug-06-19 10:50		Aug-06-19 11:00	
BTEX by EPA 8021B	***Extracted:***	Aug-08-19 15:16		Aug-08-19 15:16		Aug-08-19 15:16		Aug-08-19 15:16		Aug-08-19 15:16		Aug-08-19 15:16	
	Analyzed:	Aug-10-19 01:04		Aug-10-19 01:24		Aug-10-19 02:50		Aug-10-19 03:13		Aug-10-19 03:35		Aug-10-19 03:58	
	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	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198	<0.00198	0.00198
Toluene		<0.00198	0.00198	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198	<0.00198	0.00198
Ethylbenzene		<0.00198	0.00198	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198	<0.00198	0.00198
m,p-Xylenes		<0.00397	0.00397	<0.00398	0.00398	<0.00401	0.00401	<0.00398	0.00398	<0.00396	0.00396	<0.00397	0.00397
o-Xylene		<0.00198	0.00198	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198	<0.00198	0.00198
Total Xylenes		<0.00198	0.00198	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198	<0.00198	0.00198
Total BTEX		<0.00198	0.00198	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198	<0.00198	0.00198
Chloride by EPA 300	***Extracted:***	Aug-08-19 13:30		Aug-08-19 13:30		Aug-08-19 13:30		Aug-08-19 13:30		Aug-08-19 13:30		Aug-08-19 13:30	
	Analyzed:	Aug-08-19 15:56		Aug-08-19 16:03		Aug-08-19 15:38		Aug-08-19 16:22		Aug-08-19 16:28		Aug-08-19 16:34	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		507	25.2	548	5.01	15.3	4.95	49.1	4.98	54.6	5.00	215	4.99
TPH by SW8015 Mod	***Extracted:***	Aug-08-19 13:00		Aug-08-19 13:00		Aug-08-19 13:00		Aug-08-19 13:00		Aug-08-19 13:00		Aug-08-19 13:00	
	Analyzed:	Aug-10-19 00:30		Aug-10-19 00:49		Aug-10-19 01:08		Aug-10-19 01:27		Aug-10-19 01:45		Aug-10-19 02:04	
	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)		124	15.0	17.0	14.9	59.6	15.0	<15.0	15.0	24.8	15.0	<15.0	15.0
Motor Oil Range Hydrocarbons (MRO)		27.3	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Total TPH		151	15.0	17.0	14.9	59.6	15.0	<15.0	15.0	24.8	15.0	<15.0	15.0
Total GRO-DRO		124	15.0	17.0	14.9	59.6	15.0	<15.0	15.0	24.8	15.0	<15.0	15.0

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 633409

LT Environmental, Inc., Arvada, CO

Project Name: NASH 42 TB (2RP-4823)

Project Id: 012919120
Contact: Dan Moir
Project Location:

Date Received in Lab: Thu Aug-08-19 11:05 am
Report Date: 12-AUG-19
Project Manager: Jessica Kramer

Analysis Requested									
	Lab Id:	633409-007		633409-008					
	Field Id:	SS07		SS08					
	Depth:	1- ft		1- ft					
	Matrix:	SOIL		SOIL					
	Sampled:	Aug-06-19 11:15		Aug-06-19 11:30					
BTEX by EPA 8021B	***Extracted:***	Aug-08-19 15:16		Aug-08-19 15:16					
	Analyzed:	Aug-10-19 04:21		Aug-10-19 04:44					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Benzene		<0.00198	0.00198	<0.00198	0.00198				
Toluene		<0.00198	0.00198	<0.00198	0.00198				
Ethylbenzene		<0.00198	0.00198	<0.00198	0.00198				
m,p-Xylenes		<0.00396	0.00396	<0.00396	0.00396				
o-Xylene		<0.00198	0.00198	<0.00198	0.00198				
Total Xylenes		<0.00198	0.00198	<0.00198	0.00198				
Total BTEX		<0.00198	0.00198	<0.00198	0.00198				
Chloride by EPA 300	***Extracted:***	Aug-08-19 13:30		Aug-08-19 13:30					
	Analyzed:	Aug-08-19 16:41		Aug-08-19 16:47					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Chloride		13.7	5.04	423	25.0				
TPH by SW8015 Mod	***Extracted:***	Aug-08-19 13:00		Aug-08-19 13:00					
	Analyzed:	Aug-10-19 02:42		Aug-10-19 03:00					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0				
Diesel Range Organics (DRO)		22.5	15.0	33.1	15.0				
Motor Oil Range Hydrocarbons (MRO)		<15.0	15.0	<15.0	15.0				
Total TPH		22.5	15.0	33.1	15.0				
Total GRO-DRO		22.5	15.0	33.1	15.0				

Jessica Kramer
Project Assistant

Certificate of Analytical Results 633409

LT Environmental, Inc., Arvada, CO

NASH 42 TB (2RP-4823)

Sample Id: **SS01** Matrix: Soil Date Received:08.08.19 11.05

Lab Sample Id: 633409-001 Date Collected: 08.06.19 10.10 Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE % Moisture:

Analyst: CHE Date Prep: 08.08.19 13.30 Basis: Wet Weight

Seq Number: 3097977

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**507**	25.2	mg/kg	08.08.19 15.56		5

Analytical Method: TPH by SW8015 Mod Prep Method: TX1005P

Tech: DVM % Moisture:

Analyst: ARM Date Prep: 08.08.19 13.00 Basis: Wet Weight

Seq Number: 3098119

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.10.19 00.30	U	1
Diesel Range Organics (DRO)	C10C28DRO	**124**	15.0	mg/kg	08.10.19 00.30		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**27.3**	15.0	mg/kg	08.10.19 00.30		1
Total TPH	PHC635	**151**	15.0	mg/kg	08.10.19 00.30		1
Total GRO-DRO	PHC628	**124**	15.0	mg/kg	08.10.19 00.30		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	08.10.19 00.30	
o-Terphenyl	84-15-1	101	%	70-135	08.10.19 00.30	

Certificate of Analytical Results 633409

LT Environmental, Inc., Arvada, CO

NASH 42 TB (2RP-4823)

Sample Id:	**SS01**	Matrix:	Soil	Date Received:	08.08.19 11.05
Lab Sample Id:	633409-001	Date Collected:	08.06.19 10.10	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	ALG	Date Prep:	08.08.19 15.16	Basis:	Wet Weight
Seq Number:	3098269				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.10.19 01.04	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.10.19 01.04	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.10.19 01.04	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	08.10.19 01.04	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.10.19 01.04	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.10.19 01.04	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.10.19 01.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	105	%	70-130	08.10.19 01.04	
4-Bromofluorobenzene	460-00-4	108	%	70-130	08.10.19 01.04	

Certificate of Analytical Results 633409

LT Environmental, Inc., Arvada, CO

NASH 42 TB (2RP-4823)

Sample Id:	**SS02**	Matrix:	Soil	Date Received:	08.08.19 11.05
Lab Sample Id:	633409-002	Date Collected:	08.06.19 10.20	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	08.08.19 13.30	Basis:	Wet Weight
Seq Number:	3097977				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**548**	5.01	mg/kg	08.08.19 16.03		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	08.08.19 13.00	Basis:	Wet Weight
Seq Number:	3098119				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	08.10.19 00.49	U	1
Diesel Range Organics (DRO)	C10C28DRO	**17.0**	14.9	mg/kg	08.10.19 00.49		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	14.9	mg/kg	08.10.19 00.49	U	1
Total TPH	PHC635	**17.0**	14.9	mg/kg	08.10.19 00.49		1
Total GRO-DRO	PHC628	**17.0**	14.9	mg/kg	08.10.19 00.49		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	08.10.19 00.49	
o-Terphenyl	84-15-1	94	%	70-135	08.10.19 00.49	

Certificate of Analytical Results 633409

LT Environmental, Inc., Arvada, CO

NASH 42 TB (2RP-4823)

Sample Id:	**SS02**	Matrix:	Soil	Date Received:	08.08.19 11.05
Lab Sample Id:	633409-002	Date Collected:	08.06.19 10.20	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	ALG	Date Prep:	08.08.19 15.16	Basis:	Wet Weight
Seq Number:	3098269				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.10.19 01.24	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.10.19 01.24	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.10.19 01.24	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.10.19 01.24	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.10.19 01.24	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.10.19 01.24	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.10.19 01.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	107	%	70-130	08.10.19 01.24	
4-Bromofluorobenzene	460-00-4	119	%	70-130	08.10.19 01.24	

Certificate of Analytical Results 633409

LT Environmental, Inc., Arvada, CO

NASH 42 TB (2RP-4823)

Sample Id:	**SS03**	Matrix:	Soil	Date Received:	08.08.19 11.05
Lab Sample Id:	633409-003	Date Collected:	08.06.19 10.30	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	08.08.19 13.30	Basis:	Wet Weight
Seq Number:	3097977				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**15.3**	4.95	mg/kg	08.08.19 15.38		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	08.08.19 13.00	Basis:	Wet Weight
Seq Number:	3098119				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.10.19 01.08	U	1
Diesel Range Organics (DRO)	C10C28DRO	**59.6**	15.0	mg/kg	08.10.19 01.08		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	08.10.19 01.08	U	1
Total TPH	PHC635	**59.6**	15.0	mg/kg	08.10.19 01.08		1
Total GRO-DRO	PHC628	**59.6**	15.0	mg/kg	08.10.19 01.08		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	08.10.19 01.08	
o-Terphenyl	84-15-1	89	%	70-135	08.10.19 01.08	

Certificate of Analytical Results 633409

LT Environmental, Inc., Arvada, CO

NASH 42 TB (2RP-4823)

Sample Id:	**SS03**	Matrix:	Soil	Date Received:	08.08.19 11.05
Lab Sample Id:	633409-003	Date Collected:	08.06.19 10.30	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	ALG	Date Prep:	08.08.19 15.16	Basis:	Wet Weight
Seq Number:	3098269				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.10.19 02.50	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.10.19 02.50	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.10.19 02.50	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.10.19 02.50	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.10.19 02.50	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.10.19 02.50	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.10.19 02.50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	84	%	70-130	08.10.19 02.50	
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.10.19 02.50	

Certificate of Analytical Results 633409

LT Environmental, Inc., Arvada, CO

NASH 42 TB (2RP-4823)

Sample Id:	**SS04**	Matrix:	Soil	Date Received:	08.08.19 11.05
Lab Sample Id:	633409-004	Date Collected:	08.06.19 10.40	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	08.08.19 13.30	Basis:	Wet Weight
Seq Number:	3097977				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**49.1**	4.98	mg/kg	08.08.19 16.22		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	08.08.19 13.00	Basis:	Wet Weight
Seq Number:	3098119				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.10.19 01.27	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.10.19 01.27	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	08.10.19 01.27	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.10.19 01.27	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	08.10.19 01.27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	08.10.19 01.27	
o-Terphenyl	84-15-1	95	%	70-135	08.10.19 01.27	

Certificate of Analytical Results 633409

LT Environmental, Inc., Arvada, CO

NASH 42 TB (2RP-4823)

Sample Id:	**SS04**	Matrix:	Soil	Date Received:	08.08.19 11.05
Lab Sample Id:	633409-004	Date Collected:	08.06.19 10.40	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	ALG	Date Prep:	08.08.19 15.16	Basis:	Wet Weight
Seq Number:	3098269				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.10.19 03.13	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.10.19 03.13	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.10.19 03.13	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.10.19 03.13	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.10.19 03.13	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.10.19 03.13	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.10.19 03.13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	110	%	70-130	08.10.19 03.13	
1,4-Difluorobenzene	540-36-3	108	%	70-130	08.10.19 03.13	

Certificate of Analytical Results 633409

LT Environmental, Inc., Arvada, CO

NASH 42 TB (2RP-4823)

Sample Id:	**SS05**	Matrix:	Soil	Date Received:	08.08.19 11.05
Lab Sample Id:	633409-005	Date Collected:	08.06.19 10.50	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	08.08.19 13.30	Basis:	Wet Weight
Seq Number:	3097977				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**54.6**	5.00	mg/kg	08.08.19 16.28		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	08.08.19 13.00	Basis:	Wet Weight
Seq Number:	3098119				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.10.19 01.45	U	1
Diesel Range Organics (DRO)	C10C28DRO	**24.8**	15.0	mg/kg	08.10.19 01.45		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	08.10.19 01.45	U	1
Total TPH	PHC635	**24.8**	15.0	mg/kg	08.10.19 01.45		1
Total GRO-DRO	PHC628	**24.8**	15.0	mg/kg	08.10.19 01.45		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	08.10.19 01.45	
o-Terphenyl	84-15-1	92	%	70-135	08.10.19 01.45	

Certificate of Analytical Results 633409

LT Environmental, Inc., Arvada, CO

NASH 42 TB (2RP-4823)

Sample Id:	**SS05**	Matrix:	Soil	Date Received:	08.08.19 11.05
Lab Sample Id:	633409-005	Date Collected:	08.06.19 10.50	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	ALG	Date Prep:	08.08.19 15.16	Basis:	Wet Weight
Seq Number:	3098269				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.10.19 03.35	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.10.19 03.35	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.10.19 03.35	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	08.10.19 03.35	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.10.19 03.35	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.10.19 03.35	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.10.19 03.35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	107	%	70-130	08.10.19 03.35	
4-Bromofluorobenzene	460-00-4	112	%	70-130	08.10.19 03.35	

Certificate of Analytical Results 633409

LT Environmental, Inc., Arvada, CO

NASH 42 TB (2RP-4823)

Sample Id:	**SS06**	Matrix:	Soil	Date Received:	08.08.19 11.05
Lab Sample Id:	633409-006	Date Collected:	08.06.19 11.00	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	08.08.19 13.30	Basis:	Wet Weight
Seq Number:	3097977				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**215**	4.99	mg/kg	08.08.19 16.34		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	08.08.19 13.00	Basis:	Wet Weight
Seq Number:	3098119				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.10.19 02.04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.10.19 02.04	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	08.10.19 02.04	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.10.19 02.04	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	08.10.19 02.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	08.10.19 02.04	
o-Terphenyl	84-15-1	92	%	70-135	08.10.19 02.04	

Certificate of Analytical Results 633409

LT Environmental, Inc., Arvada, CO

NASH 42 TB (2RP-4823)

Sample Id:	**SS06**	Matrix:	Soil	Date Received:	08.08.19 11.05
Lab Sample Id:	633409-006	Date Collected:	08.06.19 11.00	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	ALG	Date Prep:	08.08.19 15.16	Basis:	Wet Weight
Seq Number:	3098269				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.10.19 03.58	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.10.19 03.58	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.10.19 03.58	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	08.10.19 03.58	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.10.19 03.58	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.10.19 03.58	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.10.19 03.58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	108	%	70-130	08.10.19 03.58	
4-Bromofluorobenzene	460-00-4	110	%	70-130	08.10.19 03.58	

Certificate of Analytical Results 633409

LT Environmental, Inc., Arvada, CO

NASH 42 TB (2RP-4823)

Sample Id:	**SS07**	Matrix:	Soil	Date Received:	08.08.19 11.05
Lab Sample Id:	633409-007	Date Collected:	08.06.19 11.15	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	08.08.19 13.30	Basis:	Wet Weight
Seq Number:	3097977				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**13.7**	5.04	mg/kg	08.08.19 16.41		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	08.08.19 13.00	Basis:	Wet Weight
Seq Number:	3098119				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.10.19 02.42	U	1
Diesel Range Organics (DRO)	C10C28DRO	**22.5**	15.0	mg/kg	08.10.19 02.42		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	08.10.19 02.42	U	1
Total TPH	PHC635	**22.5**	15.0	mg/kg	08.10.19 02.42		1
Total GRO-DRO	PHC628	**22.5**	15.0	mg/kg	08.10.19 02.42		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	08.10.19 02.42	
o-Terphenyl	84-15-1	96	%	70-135	08.10.19 02.42	

Certificate of Analytical Results 633409

LT Environmental, Inc., Arvada, CO

NASH 42 TB (2RP-4823)

Sample Id:	**SS07**	Matrix:	Soil	Date Received:	08.08.19 11.05
Lab Sample Id:	633409-007	Date Collected:	08.06.19 11.15	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	ALG	Date Prep:	08.08.19 15.16	Basis:	Wet Weight
Seq Number:	3098269				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.10.19 04.21	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.10.19 04.21	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.10.19 04.21	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	08.10.19 04.21	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.10.19 04.21	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.10.19 04.21	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.10.19 04.21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	107	%	70-130	08.10.19 04.21	
4-Bromofluorobenzene	460-00-4	61	%	70-130	08.10.19 04.21	**

Certificate of Analytical Results 633409

LT Environmental, Inc., Arvada, CO

NASH 42 TB (2RP-4823)

Sample Id:	**SS08**	Matrix:	Soil	Date Received:	08.08.19 11.05
Lab Sample Id:	633409-008	Date Collected:	08.06.19 11.30	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	08.08.19 13.30	Basis:	Wet Weight
Seq Number:	3097977				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**423**	25.0	mg/kg	08.08.19 16.47		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	08.08.19 13.00	Basis:	Wet Weight
Seq Number:	3098119				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.10.19 03.00	U	1
Diesel Range Organics (DRO)	C10C28DRO	**33.1**	15.0	mg/kg	08.10.19 03.00		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	08.10.19 03.00	U	1
Total TPH	PHC635	**33.1**	15.0	mg/kg	08.10.19 03.00		1
Total GRO-DRO	PHC628	**33.1**	15.0	mg/kg	08.10.19 03.00		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	08.10.19 03.00	
o-Terphenyl	84-15-1	91	%	70-135	08.10.19 03.00	

Certificate of Analytical Results 633409

LT Environmental, Inc., Arvada, CO

NASH 42 TB (2RP-4823)

Sample Id:	**SS08**	Matrix:	Soil	Date Received:	08.08.19 11.05
Lab Sample Id:	633409-008	Date Collected:	08.06.19 11.30	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	ALG	Date Prep:	08.08.19 15.16	Basis:	Wet Weight
Seq Number:	3098269				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.10.19 04.44	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.10.19 04.44	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.10.19 04.44	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	08.10.19 04.44	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.10.19 04.44	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.10.19 04.44	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.10.19 04.44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	109	%	70-130	08.10.19 04.44	
1,4-Difluorobenzene	540-36-3	107	%	70-130	08.10.19 04.44	

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 633409

LT Environmental, Inc.

NASH 42 TB (2RP-4823)

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3097977 Matrix: Solid Date Prep: 08.08.19
MB Sample Id: 7683800-1-BLK LCS Sample Id: 7683800-1-BKS LCSD Sample Id: 7683800-1-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	251	100	249	100	90-110	1	20	mg/kg	08.08.19 13:56	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3097977 Matrix: Soil Date Prep: 08.08.19
Parent Sample Id: 633408-001 MS Sample Id: 633408-001 S MSD Sample Id: 633408-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	16.4	250	266	100	266	100	90-110	0	20	mg/kg	08.08.19 14:15	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3097977 Matrix: Soil Date Prep: 08.08.19
Parent Sample Id: 633409-003 MS Sample Id: 633409-003 S MSD Sample Id: 633409-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	15.3	248	258	98	258	98	90-110	0	20	mg/kg	08.08.19 15:44	

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3098119 Matrix: Solid Date Prep: 08.08.19
MB Sample Id: 7683829-1-BLK LCS Sample Id: 7683829-1-BKS LCSD Sample Id: 7683829-1-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	1140	114	1130	113	70-135	1	20	mg/kg	08.09.19 22:01	
Diesel Range Organics (DRO)	<8.13	1000	1030	103	1010	101	70-135	2	20	mg/kg	08.09.19 22:01	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	90		117		115		70-135	%	08.09.19 22:01
o-Terphenyl	92		100		97		70-135	%	08.09.19 22:01

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 633409

LT Environmental, Inc.

NASH 42 TB (2RP-4823)

Analytical Method: TPH by SW8015 Mod — Prep Method: TX1005P
Seq Number: 3098119 — Matrix: Soil — Date Prep: 08.08.19
Parent Sample Id: 633407-021 — MS Sample Id: 633407-021 S — MSD Sample Id: 633407-021 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)	<7.98	997	1170	117	1170	117	70-135	0	20	mg/kg	08.09.19 22:57	
Diesel Range Organics (DRO)	<8.10	997	1060	106	1080	108	70-135	2	20	mg/kg	08.09.19 22:57	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	116		115		70-135	%	08.09.19 22:57
o-Terphenyl	101		103		70-135	%	08.09.19 22:57

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3098269 — Matrix: Solid — Date Prep: 08.08.19
MB Sample Id: 7683824-1-BLK — LCS Sample Id: 7683824-1-BKS — LCSD Sample Id: 7683824-1-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	0.0789	79	0.0848	85	70-130	7	35	mg/kg	08.10.19 08:19	
Toluene	<0.00200	0.100	0.0776	78	0.0810	81	70-130	4	35	mg/kg	08.10.19 08:19	
Ethylbenzene	<0.00200	0.100	0.0876	88	0.0911	91	70-130	4	35	mg/kg	08.10.19 08:19	
m,p-Xylenes	<0.00400	0.200	0.176	88	0.183	92	70-130	4	35	mg/kg	08.10.19 08:19	
o-Xylene	<0.00200	0.100	0.0859	86	0.0891	89	70-130	4	35	mg/kg	08.10.19 08:19	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		100		102		70-130	%	08.10.19 08:19
4-Bromofluorobenzene	103		113		121		70-130	%	08.10.19 08:19

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3098269 — Matrix: Soil — Date Prep: 08.08.19
Parent Sample Id: 633407-021 — MS Sample Id: 633407-021 S — MSD Sample Id: 633407-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00198	0.0992	0.0923	93	0.0917	92	70-130	1	35	mg/kg	08.10.19 09:00	
Toluene	<0.00198	0.0992	0.0861	87	0.0866	87	70-130	1	35	mg/kg	08.10.19 09:00	
Ethylbenzene	<0.00198	0.0992	0.0951	96	0.0932	93	70-130	2	35	mg/kg	08.10.19 09:00	
m,p-Xylenes	<0.00397	0.198	0.193	97	0.188	94	70-130	3	35	mg/kg	08.10.19 09:00	
o-Xylene	<0.00198	0.0992	0.0970	98	0.0931	93	70-130	4	35	mg/kg	08.10.19 09:00	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		103		70-130	%	08.10.19 09:00
4-Bromofluorobenzene	127		119		70-130	%	08.10.19 09:00

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

Chain of Custody

Work Order No: E334109

XENCO LABORATORIES

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

www.xenco.com Page 1 of 1

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

Work Order Comments

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

Project Name:	NASH 42 T.B. (ZAP-4823)	Turn Around	
Project Number:	012919120	Routine ☐	
P.O. Number:		Rush: 24hr	
Sampler's Name:	Benjamin Belill	Due Date: 8/8/19	

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	0.7 / 0.5	Thermometer ID	VE
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Total Containers:	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
SS01	S	8/6/19	1010	1'	1	X	X	X
SS02			1020	1'		X	X	X
SS03			1030	1'		X	X	X
SS04			1040	1'		X	X	X
SS05			1050	1'		X	X	X
SS06			1100	1'		X	X	X
SS07			1115	1'		X	X	X
SS08	↓	↓	1130	1'	↓	X	X	X

Work Order Notes

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

Sample Comments

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

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		Costo	8/7/19 08:20	2	FedEx	8/7/19 14:00
3				4		8/8/19 1105
5				6		

Revised Date 051418 Rev. 2018.1

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: 08/08/2019 11:05:00 AM

Work Order #: 633409

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)?	.5
#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: 08/08/2019

Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 08/08/2019

Jessica Kramer

Analytical Report 636321

for

LT Environmental, Inc.

Project Manager: Dan Moir

Nash Draw 42

012919120

18-SEP-19

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-29), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142), North Carolina (681)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-19-19), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-20)
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-Tampa: Florida (E87429), North Carolina (483)

18-SEP-19

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

Reference: XENCO Report No(s): **636321**
Nash Draw 42
Project Address:

Dan Moir:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 636321. 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. 636321 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 636321

LT Environmental, Inc., Arvada, CO

Nash Draw 42

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH01	S	09-05-19 12:40	2 ft	636321-001
PH01A	S	09-05-19 12:45	4 ft	636321-002
PH02	S	09-05-19 12:50	2 ft	636321-003
PH02A	S	09-05-19 12:55	4 ft	636321-004
PH03	S	09-05-19 13:05	2 ft	636321-005
PH03A	S	09-05-19 13:10	4 ft	636321-006
PH04	S	09-05-19 13:20	2 ft	636321-007
PH04A	S	09-05-19 13:25	4 ft	636321-008
PH05	S	09-05-19 13:30	2 ft	636321-009
PH05A	S	09-05-19 13:35	4 ft	636321-010
BH01	S	09-05-19 14:55	2 ft	636321-011
BH02	S	09-05-19 15:15	2 ft	636321-012
BH03	S	09-05-19 15:25	2 ft	636321-013
BH03A	S	09-05-19 15:35	4 ft	636321-014
FS01	S	09-05-19 15:50	2 ft	636321-015
FS02	S	09-05-19 16:00	2 ft	636321-016
SW01	S	09-05-19 16:10	0 - 2 ft	636321-017
SW02	S	09-05-19 16:20	0 - 2 ft	636321-018

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: Nash Draw 42

Project ID: *012919120*
Work Order Number(s): *636321*

Report Date: *18-SEP-19*
Date Received: *09/09/2019*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3101025 BTEX by EPA 8021B
Lab Sample ID 636321-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene recovered below QC limits in the Matrix Spike Duplicate. Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered above QC limits in the Matrix Spike. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 636321-001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -011, -012, -013, -014, -015, -016, -017, -018.
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.
Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene Relative Percent Difference (RPD) between matrix spike and duplicate were above quality control limits.
Samples in the analytical batch are: 636321-001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -011, -012, -013, -014, -015, -016, -017, -018

Batch: LBA-3101189 Chloride by EPA 300
Sample 636321-012 was reanalysed due to errors in recording the sample weight and dilution.

Certificate of Analysis Summary 636321

LT Environmental, Inc., Arvada, CO

Project Name: Nash Draw 42

Project Id: 012919120
Contact: Dan Moir
Project Location:

Date Received in Lab: Mon Sep-09-19 09:30 am
Report Date: 18-SEP-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	636321-001		636321-002		636321-003		636321-004		636321-005		636321-006	
	Field Id:	PH01		PH01A		PH02		PH02A		PH03		PH03A	
	Depth:	2- ft		4- ft		2- ft		4- ft		2- ft		4- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Sep-05-19 12:40		Sep-05-19 12:45		Sep-05-19 12:50		Sep-05-19 12:55		Sep-05-19 13:05		Sep-05-19 13:10	
BTEX by EPA 8021B SUB: T104704400-18-16	***Extracted:***	Sep-10-19 11:15		Sep-10-19 11:15		Sep-10-19 11:15		Sep-10-19 11:15		Sep-10-19 11:15		Sep-10-19 11:15	
	Analyzed:	** ** ** **		** ** ** **		** ** ** **		** ** ** **		** ** ** **		** ** ** **	
	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	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198
Toluene		<0.00198	0.00198	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198
Ethylbenzene		<0.00198	0.00198	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198
m,p-Xylenes		<0.00397	0.00397	<0.00399	0.00399	<0.00403	0.00403	<0.00399	0.00399	<0.00399	0.00399	<0.00397	0.00397
o-Xylene		<0.00198	0.00198	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198
Total Xylenes		<0.00198	0.00198	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198
Total BTEX		<0.00198	0.00198	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198
Chloride by EPA 300 SUB: T104704400-18-16	***Extracted:***	Sep-10-19 14:45		Sep-10-19 14:45		Sep-10-19 14:45		Sep-10-19 14:45		Sep-11-19 10:40		Sep-11-19 10:40	
	Analyzed:	Sep-10-19 16:22		Sep-10-19 16:29		Sep-11-19 15:49		Sep-11-19 15:55		Sep-11-19 15:16		Sep-11-19 15:23	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		222	25.1	352	4.97	19.2	4.99	15.6	5.02	366	5.00	118	50.3
TPH by SW8015 Mod SUB: T104704400-18-16	***Extracted:***	Sep-10-19 12:00		Sep-10-19 12:00		Sep-10-19 12:00		Sep-10-19 12:00		Sep-10-19 12:00		Sep-10-19 12:00	
	Analyzed:	Sep-11-19 00:43		Sep-11-19 01:46		Sep-11-19 02:07		Sep-11-19 02:28		Sep-11-19 02:49		Sep-11-19 03:10	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<25.0	25.0	<25.0	25.0	<25.0	25.0	<24.9	24.9	<25.0	25.0	<24.9	24.9
Diesel Range Organics (DRO)		<25.0	25.0	<25.0	25.0	<25.0	25.0	<24.9	24.9	<25.0	25.0	<24.9	24.9
Motor Oil Range Hydrocarbons (MRO)		<25.0	25.0	<25.0	25.0	<25.0	25.0	<24.9	24.9	<25.0	25.0	<24.9	24.9
Total GRO-DRO		<25.0	25.0	<25.0	25.0	<25.0	25.0	<24.9	24.9	<25.0	25.0	<24.9	24.9
Total TPH		<25.0	25.0	<25.0	25.0	<25.0	25.0	<24.9	24.9	<25.0	25.0	<24.9	24.9

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Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 636321

LT Environmental, Inc., Arvada, CO

Project Name: Nash Draw 42

Project Id: 012919120
Contact: Dan Moir
Project Location:

Date Received in Lab: Mon Sep-09-19 09:30 am
Report Date: 18-SEP-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	636321-007		636321-008		636321-009		636321-010		636321-011		636321-012	
	Field Id:	PH04		PH04A		PH05		PH05A		BH01		BH02	
	Depth:	2- ft		4- ft		2- ft		4- ft		2- ft		2- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Sep-05-19 13:20		Sep-05-19 13:25		Sep-05-19 13:30		Sep-05-19 13:35		Sep-05-19 14:55		Sep-05-19 15:15	
BTEX by EPA 8021B SUB: T104704400-18-16	***Extracted:***	Sep-10-19 11:15		Sep-10-19 11:15		Sep-10-19 11:15		Sep-10-19 11:15		Sep-10-19 11:15		Sep-10-19 11:15	
	Analyzed:	** ** ** **		** ** ** **		** ** ** **		** ** ** **		** ** ** **		** ** ** **	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00198	0.00198
Toluene		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00198	0.00198
Ethylbenzene		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00198	0.00198
m,p-Xylenes		<0.00398	0.00398	<0.00401	0.00401	<0.00400	0.00400	<0.00398	0.00398	<0.00398	0.00398	<0.00397	0.00397
o-Xylene		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00198	0.00198
Total Xylenes		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00198	0.00198
Total BTEX		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00198	0.00198
Chloride by EPA 300 SUB: T104704400-18-16	***Extracted:***	Sep-11-19 10:40		Sep-11-19 10:40		Sep-11-19 10:40		Sep-11-19 11:05		Sep-11-19 11:05		Sep-11-19 11:05	
	Analyzed:	Sep-11-19 15:29		Sep-11-19 15:36		Sep-11-19 15:42		Sep-11-19 15:01		Sep-11-19 14:42		Sep-16-19 15:17	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		7.07	5.00	60.8	25.0	346	25.0	5350	49.5	8.60	4.96	84.0	50.0
TPH by SW8015 Mod SUB: T104704400-18-16	***Extracted:***	Sep-10-19 12:00		Sep-10-19 12:00		Sep-10-19 12:00		Sep-10-19 12:00		Sep-10-19 12:00		Sep-10-19 12:00	
	Analyzed:	Sep-11-19 03:31		Sep-11-19 03:52		Sep-11-19 04:12		Sep-11-19 04:33		Sep-11-19 05:15		Sep-11-19 05:37	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<25.0	25.0	<24.9	24.9	<25.0	25.0	<25.0	25.0	<24.9	24.9	<25.0	25.0
Diesel Range Organics (DRO)		<25.0	25.0	<24.9	24.9	<25.0	25.0	<25.0	25.0	<24.9	24.9	<25.0	25.0
Motor Oil Range Hydrocarbons (MRO)		<25.0	25.0	<24.9	24.9	<25.0	25.0	<25.0	25.0	<24.9	24.9	<25.0	25.0
Total GRO-DRO		<25.0	25.0	<24.9	24.9	<25.0	25.0	<25.0	25.0	<24.9	24.9	<25.0	25.0
Total TPH		<25.0	25.0	<24.9	24.9	<25.0	25.0	<25.0	25.0	<24.9	24.9	<25.0	25.0

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Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 636321

LT Environmental, Inc., Arvada, CO

Project Name: Nash Draw 42

Project Id: 012919120
Contact: Dan Moir
Project Location:

Date Received in Lab: Mon Sep-09-19 09:30 am
Report Date: 18-SEP-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	636321-013		636321-014		636321-015		636321-016		636321-017		636321-018	
	Field Id:	BH03		BH03A		FS01		FS02		SW01		SW02	
	Depth:	2- ft		4- ft		2- ft		2- ft		0-2 ft		0-2 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Sep-05-19 15:25		Sep-05-19 15:35		Sep-05-19 15:50		Sep-05-19 16:00		Sep-05-19 16:10		Sep-05-19 16:20	
BTEX by EPA 8021B SUB: T104704400-18-16	***Extracted:***	Sep-10-19 11:15		Sep-10-19 11:15		Sep-10-19 11:15		Sep-10-19 11:15		Sep-10-19 11:15		Sep-10-19 11:15	
	Analyzed:	** ** ** **		** ** ** **		** ** ** **		** ** ** **		** ** ** **		** ** ** **	
	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	<0.00201	0.00201	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200
Toluene		<0.00200	0.00200	<0.00201	0.00201	<0.00201	0.00201	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200
Ethylbenzene		<0.00200	0.00200	<0.00201	0.00201	<0.00201	0.00201	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200
m,p-Xylenes		<0.00399	0.00399	<0.00402	0.00402	<0.00402	0.00402	<0.00398	0.00398	<0.00397	0.00397	<0.00400	0.00400
o-Xylene		<0.00200	0.00200	<0.00201	0.00201	<0.00201	0.00201	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200
Total Xylenes		<0.00200	0.00200	<0.00201	0.00201	<0.00201	0.00201	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200
Total BTEX		<0.00200	0.00200	<0.00201	0.00201	<0.00201	0.00201	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200
Chloride by EPA 300 SUB: T104704400-18-16	***Extracted:***	Sep-11-19 11:05		Sep-11-19 11:05		Sep-11-19 11:05		Sep-11-19 11:05		Sep-11-19 11:05		Sep-11-19 11:05	
	Analyzed:	Sep-11-19 15:13		Sep-11-19 15:20		Sep-11-19 15:39		Sep-11-19 15:45		Sep-11-19 15:51		Sep-11-19 15:58	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		130	5.03	141	4.96	262	5.00	267	5.00	534	5.00	228	5.03
TPH by SW8015 Mod SUB: T104704400-18-16	***Extracted:***	Sep-10-19 12:00		Sep-10-19 12:00		Sep-10-19 12:00		Sep-10-19 12:00		Sep-10-19 12:00		Sep-10-19 12:00	
	Analyzed:	Sep-11-19 05:58		Sep-11-19 06:19		Sep-11-19 06:40		Sep-11-19 07:02		Sep-11-19 07:23		Sep-11-19 07:44	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<25.0	25.0	<25.0	25.0	<24.9	24.9	<25.0	25.0	<25.0	25.0	<24.9	24.9
Diesel Range Organics (DRO)		<25.0	25.0	<25.0	25.0	<24.9	24.9	<25.0	25.0	39.8	25.0	<24.9	24.9
Motor Oil Range Hydrocarbons (MRO)		<25.0	25.0	<25.0	25.0	<24.9	24.9	<25.0	25.0	<25.0	25.0	<24.9	24.9
Total GRO-DRO		<25.0	25.0	<25.0	25.0	<24.9	24.9	<25.0	25.0	39.8	25.0	<24.9	24.9
Total TPH		<25.0	25.0	<25.0	25.0	<24.9	24.9	<25.0	25.0	39.8	25.0	<24.9	24.9

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Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analytical Results 636321

LT Environmental, Inc., Arvada, CO

Nash Draw 42

Sample Id:	**PH01**	Matrix:	Soil	Date Received:	09.09.19 09.30
Lab Sample Id:	636321-001	Date Collected:	09.05.19 12.40	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	09.10.19 14.45	Basis:	Wet Weight
Seq Number:	3101054			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**222**	25.1	mg/kg	09.10.19 16.22		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	09.10.19 12.00	Basis:	Wet Weight
Seq Number:	3101077			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<25.0	25.0	mg/kg	09.11.19 00.43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<25.0	25.0	mg/kg	09.11.19 00.43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<25.0	25.0	mg/kg	09.11.19 00.43	U	1
Total GRO-DRO	PHC628	<25.0	25.0	mg/kg	09.11.19 00.43	U	1
Total TPH	PHC635	<25.0	25.0	mg/kg	09.11.19 00.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	82	%	70-135	09.11.19 00.43	
o-Terphenyl	84-15-1	84	%	70-135	09.11.19 00.43	

Certificate of Analytical Results 636321

LT Environmental, Inc., Arvada, CO

Nash Draw 42

Sample Id:	**PH01**	Matrix:	Soil	Date Received:	09.09.19 09.30
Lab Sample Id:	636321-001	Date Collected:	09.05.19 12.40	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	09.10.19 11.15	Basis:	Wet Weight
Seq Number:	3101025			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	09.10.19 01.01	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	09.10.19 01.01	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	09.10.19 01.01	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	09.10.19 01.01	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	09.10.19 01.01	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	09.10.19 01.01	U	1
Total BTEX		<0.00198	0.00198	mg/kg	09.10.19 01.01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	115	%	70-130	09.10.19 01.01	
4-Bromofluorobenzene	460-00-4	110	%	70-130	09.10.19 01.01	

Certificate of Analytical Results 636321

LT Environmental, Inc., Arvada, CO

Nash Draw 42

Sample Id:	**PH01A**	Matrix:	Soil	Date Received:	09.09.19 09.30
Lab Sample Id:	636321-002	Date Collected:	09.05.19 12.45	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	09.10.19 14.45	Basis:	Wet Weight
Seq Number:	3101054			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**352**	4.97	mg/kg	09.10.19 16.29		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	09.10.19 12.00	Basis:	Wet Weight
Seq Number:	3101077			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<25.0	25.0	mg/kg	09.11.19 01.46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<25.0	25.0	mg/kg	09.11.19 01.46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<25.0	25.0	mg/kg	09.11.19 01.46	U	1
Total GRO-DRO	PHC628	<25.0	25.0	mg/kg	09.11.19 01.46	U	1
Total TPH	PHC635	<25.0	25.0	mg/kg	09.11.19 01.46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	09.11.19 01.46	
o-Terphenyl	84-15-1	90	%	70-135	09.11.19 01.46	

Certificate of Analytical Results 636321

LT Environmental, Inc., Arvada, CO

Nash Draw 42

Sample Id:	**PH01A**	Matrix:	Soil	Date Received:	09.09.19 09.30
Lab Sample Id:	636321-002	Date Collected:	09.05.19 12.45	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	09.10.19 11.15	Basis:	Wet Weight
Seq Number:	3101025			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.10.19 01.21	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.10.19 01.21	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.10.19 01.21	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	09.10.19 01.21	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.10.19 01.21	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.10.19 01.21	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.10.19 01.21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	107	%	70-130	09.10.19 01.21	
4-Bromofluorobenzene	460-00-4	107	%	70-130	09.10.19 01.21	

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Nash Draw 42

Sample Id:	**PH02**	Matrix:	Soil	Date Received:	09.09.19 09.30
Lab Sample Id:	636321-003	Date Collected:	09.05.19 12.50	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	09.10.19 14.45	Basis:	Wet Weight
Seq Number:	3101054			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**19.2**	4.99	mg/kg	09.11.19 15.49		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	09.10.19 12.00	Basis:	Wet Weight
Seq Number:	3101077			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<25.0	25.0	mg/kg	09.11.19 02.07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<25.0	25.0	mg/kg	09.11.19 02.07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<25.0	25.0	mg/kg	09.11.19 02.07	U	1
Total GRO-DRO	PHC628	<25.0	25.0	mg/kg	09.11.19 02.07	U	1
Total TPH	PHC635	<25.0	25.0	mg/kg	09.11.19 02.07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	84	%	70-135	09.11.19 02.07	
o-Terphenyl	84-15-1	87	%	70-135	09.11.19 02.07	

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LT Environmental, Inc., Arvada, CO

Nash Draw 42

Sample Id:	**PH02**	Matrix:	Soil	Date Received:	09.09.19 09.30
Lab Sample Id:	636321-003	Date Collected:	09.05.19 12.50	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	09.10.19 11.15	Basis:	Wet Weight
Seq Number:	3101025			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	09.10.19 01.41	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	09.10.19 01.41	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	09.10.19 01.41	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	09.10.19 01.41	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	09.10.19 01.41	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	09.10.19 01.41	U	1
Total BTEX		<0.00202	0.00202	mg/kg	09.10.19 01.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	115	%	70-130	09.10.19 01.41	
1,4-Difluorobenzene	540-36-3	111	%	70-130	09.10.19 01.41	

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Nash Draw 42

Sample Id:	**PH02A**	Matrix:	Soil	Date Received:	09.09.19 09.30
Lab Sample Id:	636321-004	Date Collected:	09.05.19 12.55	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	09.10.19 14.45	Basis:	Wet Weight
Seq Number:	3101054			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**15.6**	5.02	mg/kg	09.11.19 15.55		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	09.10.19 12.00	Basis:	Wet Weight
Seq Number:	3101077			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<24.9	24.9	mg/kg	09.11.19 02.28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<24.9	24.9	mg/kg	09.11.19 02.28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<24.9	24.9	mg/kg	09.11.19 02.28	U	1
Total GRO-DRO	PHC628	<24.9	24.9	mg/kg	09.11.19 02.28	U	1
Total TPH	PHC635	<24.9	24.9	mg/kg	09.11.19 02.28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	81	%	70-135	09.11.19 02.28	
o-Terphenyl	84-15-1	85	%	70-135	09.11.19 02.28	

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Nash Draw 42

Sample Id:	**PH02A**	Matrix:	Soil	Date Received:	09.09.19 09.30
Lab Sample Id:	636321-004	Date Collected:	09.05.19 12.55	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	09.10.19 11.15	Basis:	Wet Weight
Seq Number:	3101025			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.10.19 02.02	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.10.19 02.02	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.10.19 02.02	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	09.10.19 02.02	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.10.19 02.02	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.10.19 02.02	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.10.19 02.02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	111	%	70-130	09.10.19 02.02	
4-Bromofluorobenzene	460-00-4	111	%	70-130	09.10.19 02.02	

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Nash Draw 42

Sample Id:	**PH03**	Matrix:	Soil	Date Received:	09.09.19 09.30
Lab Sample Id:	636321-005	Date Collected:	09.05.19 13.05	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	09.11.19 10.40	Basis:	Wet Weight
Seq Number:	3101188			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**366**	5.00	mg/kg	09.11.19 15.16		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	09.10.19 12.00	Basis:	Wet Weight
Seq Number:	3101077			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<25.0	25.0	mg/kg	09.11.19 02.49	U	1
Diesel Range Organics (DRO)	C10C28DRO	<25.0	25.0	mg/kg	09.11.19 02.49	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<25.0	25.0	mg/kg	09.11.19 02.49	U	1
Total GRO-DRO	PHC628	<25.0	25.0	mg/kg	09.11.19 02.49	U	1
Total TPH	PHC635	<25.0	25.0	mg/kg	09.11.19 02.49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	09.11.19 02.49	
o-Terphenyl	84-15-1	100	%	70-135	09.11.19 02.49	

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LT Environmental, Inc., Arvada, CO

Nash Draw 42

Sample Id:	**PH03**	Matrix:	Soil	Date Received:	09.09.19 09.30
Lab Sample Id:	636321-005	Date Collected:	09.05.19 13.05	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	09.10.19 11.15	Basis:	Wet Weight
Seq Number:	3101025			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.10.19 02.22	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.10.19 02.22	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.10.19 02.22	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	09.10.19 02.22	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.10.19 02.22	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.10.19 02.22	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.10.19 02.22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	102	%	70-130	09.10.19 02.22	
1,4-Difluorobenzene	540-36-3	106	%	70-130	09.10.19 02.22	

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Nash Draw 42

Sample Id: **PH03A** Matrix: Soil Date Received:09.09.19 09.30

Lab Sample Id: 636321-006 Date Collected: 09.05.19 13.10 Sample Depth: 4 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE % Moisture:

Analyst: CHE Date Prep: 09.11.19 10.40 Basis: Wet Weight

Seq Number: 3101188 SUB: T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**118**	50.3	mg/kg	09.11.19 15.23		10

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DVM % Moisture:

Analyst: ARM Date Prep: 09.10.19 12.00 Basis: Wet Weight

Seq Number: 3101077 SUB: T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<24.9	24.9	mg/kg	09.11.19 03.10	U	1
Diesel Range Organics (DRO)	C10C28DRO	<24.9	24.9	mg/kg	09.11.19 03.10	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<24.9	24.9	mg/kg	09.11.19 03.10	U	1
Total GRO-DRO	PHC628	<24.9	24.9	mg/kg	09.11.19 03.10	U	1
Total TPH	PHC635	<24.9	24.9	mg/kg	09.11.19 03.10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	80	%	70-135	09.11.19 03.10	
o-Terphenyl	84-15-1	84	%	70-135	09.11.19 03.10	

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Nash Draw 42

Sample Id:	**PH03A**	Matrix:	Soil	Date Received:	09.09.19 09.30
Lab Sample Id:	636321-006	Date Collected:	09.05.19 13.10	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	09.10.19 11.15	Basis:	Wet Weight
Seq Number:	3101025			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	09.10.19 02.42	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	09.10.19 02.42	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	09.10.19 02.42	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	09.10.19 02.42	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	09.10.19 02.42	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	09.10.19 02.42	U	1
Total BTEX		<0.00198	0.00198	mg/kg	09.10.19 02.42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	09.10.19 02.42	
1,4-Difluorobenzene	540-36-3	107	%	70-130	09.10.19 02.42	

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Nash Draw 42

Sample Id:	**PH04**	Matrix:	Soil	Date Received:	09.09.19 09.30
Lab Sample Id:	636321-007	Date Collected:	09.05.19 13.20	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	09.11.19 10.40	Basis:	Wet Weight
Seq Number:	3101188			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**7.07**	5.00	mg/kg	09.11.19 15.29		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	09.10.19 12.00	Basis:	Wet Weight
Seq Number:	3101077			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<25.0	25.0	mg/kg	09.11.19 03.31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<25.0	25.0	mg/kg	09.11.19 03.31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<25.0	25.0	mg/kg	09.11.19 03.31	U	1
Total GRO-DRO	PHC628	<25.0	25.0	mg/kg	09.11.19 03.31	U	1
Total TPH	PHC635	<25.0	25.0	mg/kg	09.11.19 03.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	82	%	70-135	09.11.19 03.31	
o-Terphenyl	84-15-1	85	%	70-135	09.11.19 03.31	

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Nash Draw 42

Sample Id:	**PH04**	Matrix:	Soil	Date Received:	09.09.19 09.30
Lab Sample Id:	636321-007	Date Collected:	09.05.19 13.20	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	09.10.19 11.15	Basis:	Wet Weight
Seq Number:	3101025			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.10.19 03.02	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.10.19 03.02	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.10.19 03.02	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.10.19 03.02	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.10.19 03.02	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.10.19 03.02	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.10.19 03.02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	09.10.19 03.02	
1,4-Difluorobenzene	540-36-3	108	%	70-130	09.10.19 03.02	

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Nash Draw 42

Sample Id:	**PH04A**	Matrix:	Soil	Date Received:	09.09.19 09.30
Lab Sample Id:	636321-008	Date Collected:	09.05.19 13.25	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	09.11.19 10.40	Basis:	Wet Weight
Seq Number:	3101188			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**60.8**	25.0	mg/kg	09.11.19 15.36		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	09.10.19 12.00	Basis:	Wet Weight
Seq Number:	3101077			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<24.9	24.9	mg/kg	09.11.19 03.52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<24.9	24.9	mg/kg	09.11.19 03.52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<24.9	24.9	mg/kg	09.11.19 03.52	U	1
Total GRO-DRO	PHC628	<24.9	24.9	mg/kg	09.11.19 03.52	U	1
Total TPH	PHC635	<24.9	24.9	mg/kg	09.11.19 03.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	09.11.19 03.52	
o-Terphenyl	84-15-1	90	%	70-135	09.11.19 03.52	

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Nash Draw 42

Sample Id:	**PH04A**	Matrix:	Soil	Date Received:	09.09.19 09.30
Lab Sample Id:	636321-008	Date Collected:	09.05.19 13.25	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	09.10.19 11.15	Basis:	Wet Weight
Seq Number:	3101025			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.10.19 03.22	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.10.19 03.22	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.10.19 03.22	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	09.10.19 03.22	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.10.19 03.22	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.10.19 03.22	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.10.19 03.22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	108	%	70-130	09.10.19 03.22	
1,4-Difluorobenzene	540-36-3	107	%	70-130	09.10.19 03.22	

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Nash Draw 42

Sample Id:	**PH05**	Matrix:	Soil	Date Received:	09.09.19 09.30
Lab Sample Id:	636321-009	Date Collected:	09.05.19 13.30	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	09.11.19 10.40	Basis:	Wet Weight
Seq Number:	3101188			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**346**	25.0	mg/kg	09.11.19 15.42		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	09.10.19 12.00	Basis:	Wet Weight
Seq Number:	3101077			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<25.0	25.0	mg/kg	09.11.19 04.12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<25.0	25.0	mg/kg	09.11.19 04.12	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<25.0	25.0	mg/kg	09.11.19 04.12	U	1
Total GRO-DRO	PHC628	<25.0	25.0	mg/kg	09.11.19 04.12	U	1
Total TPH	PHC635	<25.0	25.0	mg/kg	09.11.19 04.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	80	%	70-135	09.11.19 04.12	
o-Terphenyl	84-15-1	84	%	70-135	09.11.19 04.12	

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LT Environmental, Inc., Arvada, CO

Nash Draw 42

Sample Id:	**PH05**	Matrix:	Soil	Date Received:	09.09.19 09.30
Lab Sample Id:	636321-009	Date Collected:	09.05.19 13.30	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	09.10.19 11.15	Basis:	Wet Weight
Seq Number:	3101025			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.10.19 03.42	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.10.19 03.42	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.10.19 03.42	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	09.10.19 03.42	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.10.19 03.42	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.10.19 03.42	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.10.19 03.42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	111	%	70-130	09.10.19 03.42	
4-Bromofluorobenzene	460-00-4	114	%	70-130	09.10.19 03.42	

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Nash Draw 42

Sample Id:	**PH05A**	Matrix:	Soil	Date Received:	09.09.19 09.30
Lab Sample Id:	636321-010	Date Collected:	09.05.19 13.35	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	09.11.19 11.05	Basis:	Wet Weight
Seq Number:	3101189			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**5350**	49.5	mg/kg	09.11.19 15.01		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	09.10.19 12.00	Basis:	Wet Weight
Seq Number:	3101077			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<25.0	25.0	mg/kg	09.11.19 04.33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<25.0	25.0	mg/kg	09.11.19 04.33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<25.0	25.0	mg/kg	09.11.19 04.33	U	1
Total GRO-DRO	PHC628	<25.0	25.0	mg/kg	09.11.19 04.33	U	1
Total TPH	PHC635	<25.0	25.0	mg/kg	09.11.19 04.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	81	%	70-135	09.11.19 04.33	
o-Terphenyl	84-15-1	84	%	70-135	09.11.19 04.33	

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Nash Draw 42

Sample Id:	**PH05A**	Matrix:	Soil	Date Received:	09.09.19 09.30
Lab Sample Id:	636321-010	Date Collected:	09.05.19 13.35	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	09.10.19 11.15	Basis:	Wet Weight
Seq Number:	3101025			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.10.19 04.02	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.10.19 04.02	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.10.19 04.02	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.10.19 04.02	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.10.19 04.02	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.10.19 04.02	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.10.19 04.02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	109	%	70-130	09.10.19 04.02	
1,4-Difluorobenzene	540-36-3	108	%	70-130	09.10.19 04.02	

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Nash Draw 42

Sample Id:	**BH01**	Matrix:	Soil	Date Received:	09.09.19 09.30
Lab Sample Id:	636321-011	Date Collected:	09.05.19 14.55	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	09.11.19 11.05	Basis:	Wet Weight
Seq Number:	3101189			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**8.60**	4.96	mg/kg	09.11.19 14.42		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	09.10.19 12.00	Basis:	Wet Weight
Seq Number:	3101077			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<24.9	24.9	mg/kg	09.11.19 05.15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<24.9	24.9	mg/kg	09.11.19 05.15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<24.9	24.9	mg/kg	09.11.19 05.15	U	1
Total GRO-DRO	PHC628	<24.9	24.9	mg/kg	09.11.19 05.15	U	1
Total TPH	PHC635	<24.9	24.9	mg/kg	09.11.19 05.15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	81	%	70-135	09.11.19 05.15	
o-Terphenyl	84-15-1	84	%	70-135	09.11.19 05.15	

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Nash Draw 42

Sample Id:	**BH01**	Matrix:	Soil	Date Received:	09.09.19 09.30
Lab Sample Id:	636321-011	Date Collected:	09.05.19 14.55	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	09.10.19 11.15	Basis:	Wet Weight
Seq Number:	3101025			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.10.19 05.23	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.10.19 05.23	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.10.19 05.23	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.10.19 05.23	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.10.19 05.23	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.10.19 05.23	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.10.19 05.23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	100	%	70-130	09.10.19 05.23	
1,4-Difluorobenzene	540-36-3	103	%	70-130	09.10.19 05.23	

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Nash Draw 42

Sample Id:	**BH02**	Matrix:	Soil	Date Received:	09.09.19 09.30
Lab Sample Id:	636321-012	Date Collected:	09.05.19 15.15	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	09.11.19 11.05	Basis:	Wet Weight
Seq Number:	3101189			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**84.0**	50.0	mg/kg	09.16.19 15.17		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	09.10.19 12.00	Basis:	Wet Weight
Seq Number:	3101077			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<25.0	25.0	mg/kg	09.11.19 05.37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<25.0	25.0	mg/kg	09.11.19 05.37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<25.0	25.0	mg/kg	09.11.19 05.37	U	1
Total GRO-DRO	PHC628	<25.0	25.0	mg/kg	09.11.19 05.37	U	1
Total TPH	PHC635	<25.0	25.0	mg/kg	09.11.19 05.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	82	%	70-135	09.11.19 05.37	
o-Terphenyl	84-15-1	86	%	70-135	09.11.19 05.37	

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Nash Draw 42

Sample Id:	**BH02**	Matrix:	Soil	Date Received:	09.09.19 09.30
Lab Sample Id:	636321-012	Date Collected:	09.05.19 15.15	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	09.10.19 11.15	Basis:	Wet Weight
Seq Number:	3101025			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	09.10.19 05.43	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	09.10.19 05.43	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	09.10.19 05.43	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	09.10.19 05.43	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	09.10.19 05.43	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	09.10.19 05.43	U	1
Total BTEX		<0.00198	0.00198	mg/kg	09.10.19 05.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	108	%	70-130	09.10.19 05.43	
4-Bromofluorobenzene	460-00-4	76	%	70-130	09.10.19 05.43	

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Nash Draw 42

Sample Id:	**BH03**	Matrix:	Soil	Date Received:	09.09.19 09.30
Lab Sample Id:	636321-013	Date Collected:	09.05.19 15.25	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	09.11.19 11.05	Basis:	Wet Weight
Seq Number:	3101189			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**130**	5.03	mg/kg	09.11.19 15.13		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	09.10.19 12.00	Basis:	Wet Weight
Seq Number:	3101077			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<25.0	25.0	mg/kg	09.11.19 05.58	U	1
Diesel Range Organics (DRO)	C10C28DRO	<25.0	25.0	mg/kg	09.11.19 05.58	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<25.0	25.0	mg/kg	09.11.19 05.58	U	1
Total GRO-DRO	PHC628	<25.0	25.0	mg/kg	09.11.19 05.58	U	1
Total TPH	PHC635	<25.0	25.0	mg/kg	09.11.19 05.58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-135	09.11.19 05.58	
o-Terphenyl	84-15-1	86	%	70-135	09.11.19 05.58	

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Nash Draw 42

Sample Id:	**BH03**	Matrix:	Soil	Date Received:	09.09.19 09.30
Lab Sample Id:	636321-013	Date Collected:	09.05.19 15.25	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	09.10.19 11.15	Basis:	Wet Weight
Seq Number:	3101025			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.10.19 06.03	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.10.19 06.03	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.10.19 06.03	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	09.10.19 06.03	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.10.19 06.03	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.10.19 06.03	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.10.19 06.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	99	%	70-130	09.10.19 06.03	
1,4-Difluorobenzene	540-36-3	105	%	70-130	09.10.19 06.03	

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Nash Draw 42

Sample Id:	**BH03A**	Matrix:	Soil	Date Received:	09.09.19 09.30
Lab Sample Id:	636321-014	Date Collected:	09.05.19 15.35	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	09.11.19 11.05	Basis:	Wet Weight
Seq Number:	3101189			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**141**	4.96	mg/kg	09.11.19 15.20		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	09.10.19 12.00	Basis:	Wet Weight
Seq Number:	3101077			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<25.0	25.0	mg/kg	09.11.19 06.19	U	1
Diesel Range Organics (DRO)	C10C28DRO	<25.0	25.0	mg/kg	09.11.19 06.19	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<25.0	25.0	mg/kg	09.11.19 06.19	U	1
Total GRO-DRO	PHC628	<25.0	25.0	mg/kg	09.11.19 06.19	U	1
Total TPH	PHC635	<25.0	25.0	mg/kg	09.11.19 06.19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-135	09.11.19 06.19	
o-Terphenyl	84-15-1	87	%	70-135	09.11.19 06.19	

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Nash Draw 42

Sample Id:	**BH03A**	Matrix:	Soil	Date Received:	09.09.19 09.30
Lab Sample Id:	636321-014	Date Collected:	09.05.19 15.35	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	09.10.19 11.15	Basis:	Wet Weight
Seq Number:	3101025			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.10.19 06.24	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.10.19 06.24	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.10.19 06.24	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.10.19 06.24	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.10.19 06.24	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.10.19 06.24	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.10.19 06.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	105	%	70-130	09.10.19 06.24	
4-Bromofluorobenzene	460-00-4	107	%	70-130	09.10.19 06.24	

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Nash Draw 42

Sample Id:	**FS01**	Matrix:	Soil	Date Received:	09.09.19 09.30
Lab Sample Id:	636321-015	Date Collected:	09.05.19 15.50	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	09.11.19 11.05	Basis:	Wet Weight
Seq Number:	3101189			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**262**	5.00	mg/kg	09.11.19 15.39		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	09.10.19 12.00	Basis:	Wet Weight
Seq Number:	3101077			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<24.9	24.9	mg/kg	09.11.19 06.40	U	1
Diesel Range Organics (DRO)	C10C28DRO	<24.9	24.9	mg/kg	09.11.19 06.40	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<24.9	24.9	mg/kg	09.11.19 06.40	U	1
Total GRO-DRO	PHC628	<24.9	24.9	mg/kg	09.11.19 06.40	U	1
Total TPH	PHC635	<24.9	24.9	mg/kg	09.11.19 06.40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	09.11.19 06.40	
o-Terphenyl	84-15-1	95	%	70-135	09.11.19 06.40	

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Nash Draw 42

Sample Id:	**FS01**	Matrix:	Soil	Date Received:	09.09.19 09.30
Lab Sample Id:	636321-015	Date Collected:	09.05.19 15.50	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	09.10.19 11.15	Basis:	Wet Weight
Seq Number:	3101025			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.10.19 06.44	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.10.19 06.44	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.10.19 06.44	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.10.19 06.44	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.10.19 06.44	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.10.19 06.44	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.10.19 06.44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	118	%	70-130	09.10.19 06.44	
1,4-Difluorobenzene	540-36-3	111	%	70-130	09.10.19 06.44	

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Nash Draw 42

Sample Id:	**FS02**	Matrix:	Soil	Date Received:	09.09.19 09.30
Lab Sample Id:	636321-016	Date Collected:	09.05.19 16.00	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	09.11.19 11.05	Basis:	Wet Weight
Seq Number:	3101189			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**267**	5.00	mg/kg	09.11.19 15.45		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	09.10.19 12.00	Basis:	Wet Weight
Seq Number:	3101077			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<25.0	25.0	mg/kg	09.11.19 07.02	U	1
Diesel Range Organics (DRO)	C10C28DRO	<25.0	25.0	mg/kg	09.11.19 07.02	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<25.0	25.0	mg/kg	09.11.19 07.02	U	1
Total GRO-DRO	PHC628	<25.0	25.0	mg/kg	09.11.19 07.02	U	1
Total TPH	PHC635	<25.0	25.0	mg/kg	09.11.19 07.02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	82	%	70-135	09.11.19 07.02	
o-Terphenyl	84-15-1	85	%	70-135	09.11.19 07.02	

Certificate of Analytical Results 636321

LT Environmental, Inc., Arvada, CO

Nash Draw 42

Sample Id:	**FS02**	Matrix:	Soil	Date Received:	09.09.19 09.30
Lab Sample Id:	636321-016	Date Collected:	09.05.19 16.00	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	09.10.19 11.15	Basis:	Wet Weight
Seq Number:	3101025			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.10.19 07.04	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.10.19 07.04	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.10.19 07.04	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.10.19 07.04	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.10.19 07.04	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.10.19 07.04	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.10.19 07.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	100	%	70-130	09.10.19 07.04	
1,4-Difluorobenzene	540-36-3	111	%	70-130	09.10.19 07.04	

Certificate of Analytical Results 636321

LT Environmental, Inc., Arvada, CO

Nash Draw 42

Sample Id:	**SW01**	Matrix:	Soil	Date Received:	09.09.19 09.30
Lab Sample Id:	636321-017	Date Collected:	09.05.19 16.10	Sample Depth:	0 - 2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	09.11.19 11.05	Basis:	Wet Weight
Seq Number:	3101189			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**534**	5.00	mg/kg	09.11.19 15.51		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	09.10.19 12.00	Basis:	Wet Weight
Seq Number:	3101077			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<25.0	25.0	mg/kg	09.11.19 07.23	U	1
Diesel Range Organics (DRO)	C10C28DRO	**39.8**	25.0	mg/kg	09.11.19 07.23		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<25.0	25.0	mg/kg	09.11.19 07.23	U	1
Total GRO-DRO	PHC628	**39.8**	25.0	mg/kg	09.11.19 07.23		1
Total TPH	PHC635	**39.8**	25.0	mg/kg	09.11.19 07.23		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	80	%	70-135	09.11.19 07.23	
o-Terphenyl	84-15-1	83	%	70-135	09.11.19 07.23	

Certificate of Analytical Results 636321

LT Environmental, Inc., Arvada, CO

Nash Draw 42

Sample Id:	**SW01**	Matrix:	Soil	Date Received:	09.09.19 09.30
Lab Sample Id:	636321-017	Date Collected:	09.05.19 16.10	Sample Depth:	0 - 2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	09.10.19 11.15	Basis:	Wet Weight
Seq Number:	3101025			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	09.10.19 07.24	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	09.10.19 07.24	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	09.10.19 07.24	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	09.10.19 07.24	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	09.10.19 07.24	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	09.10.19 07.24	U	1
Total BTEX		<0.00198	0.00198	mg/kg	09.10.19 07.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	109	%	70-130	09.10.19 07.24	
1,4-Difluorobenzene	540-36-3	107	%	70-130	09.10.19 07.24	

Certificate of Analytical Results 636321

LT Environmental, Inc., Arvada, CO

Nash Draw 42

Sample Id:	**SW02**	Matrix:	Soil	Date Received:	09.09.19 09.30
Lab Sample Id:	636321-018	Date Collected:	09.05.19 16.20	Sample Depth:	0 - 2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	09.11.19 11.05	Basis:	Wet Weight
Seq Number:	3101189			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**228**	5.03	mg/kg	09.11.19 15.58		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	09.10.19 12.00	Basis:	Wet Weight
Seq Number:	3101077			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<24.9	24.9	mg/kg	09.11.19 07.44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<24.9	24.9	mg/kg	09.11.19 07.44	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<24.9	24.9	mg/kg	09.11.19 07.44	U	1
Total GRO-DRO	PHC628	<24.9	24.9	mg/kg	09.11.19 07.44	U	1
Total TPH	PHC635	<24.9	24.9	mg/kg	09.11.19 07.44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	09.11.19 07.44	
o-Terphenyl	84-15-1	98	%	70-135	09.11.19 07.44	

Certificate of Analytical Results 636321

LT Environmental, Inc., Arvada, CO

Nash Draw 42

Sample Id:	**SW02**	Matrix:	Soil	Date Received:	09.09.19 09.30
Lab Sample Id:	636321-018	Date Collected:	09.05.19 16.20	Sample Depth:	0 - 2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	09.10.19 11.15	Basis:	Wet Weight
Seq Number:	3101025			SUB:	T104704400-18-16

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.10.19 07.44	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.10.19 07.44	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.10.19 07.44	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	09.10.19 07.44	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.10.19 07.44	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.10.19 07.44	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.10.19 07.44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	109	%	70-130	09.10.19 07.44	
1,4-Difluorobenzene	540-36-3	104	%	70-130	09.10.19 07.44	

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 636321

LT Environmental, Inc.

Nash Draw 42

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3101054 — Matrix: Solid — Date Prep: 09.10.19
MB Sample Id: 7685921-1-BLK — LCS Sample Id: 7685921-1-BKS — LCSD Sample Id: 7685921-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	254	102	254	102	90-110	0	20	mg/kg	09.10.19 15:05	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3101188 — Matrix: Solid — Date Prep: 09.11.19
MB Sample Id: 7685967-1-BLK — LCS Sample Id: 7685967-1-BKS — LCSD Sample Id: 7685967-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	261	104	260	104	90-110	0	20	mg/kg	09.11.19 12:34	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3101189 — Matrix: Solid — Date Prep: 09.11.19
MB Sample Id: 7685968-1-BLK — LCS Sample Id: 7685968-1-BKS — LCSD Sample Id: 7685968-1-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	253	101	253	101	90-110	0	20	mg/kg	09.11.19 14:29	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3101574 — Matrix: Solid — Date Prep: 09.16.19
MB Sample Id: 7686244-1-BLK — LCS Sample Id: 7686244-1-BKS — LCSD Sample Id: 7686244-1-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	256	102	253	101	90-110	1	20	mg/kg	09.16.19 12:47	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3101054 — Matrix: Soil — Date Prep: 09.10.19
Parent Sample Id: 636292-021 — MS Sample Id: 636292-021 S — MSD Sample Id: 636292-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	14.0	252	273	103	274	103	90-110	0	20	mg/kg	09.10.19 15:24	

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 636321

LT Environmental, Inc.

Nash Draw 42

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3101054 — Matrix: Soil — Date Prep: 09.10.19
Parent Sample Id: 636421-001 — MS Sample Id: 636421-001 S — MSD Sample Id: 636421-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1.88	250	261	104	261	104	90-110	0	20	mg/kg	09.10.19 16:55	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3101188 — Matrix: Soil — Date Prep: 09.11.19
Parent Sample Id: 636383-162 — MS Sample Id: 636383-162 S — MSD Sample Id: 636383-162 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	11.6	253	271	103	274	104	90-110	1	20	mg/kg	09.11.19 12:55	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3101188 — Matrix: Soil — Date Prep: 09.11.19
Parent Sample Id: 636383-171 — MS Sample Id: 636383-171 S — MSD Sample Id: 636383-171 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	35.1	251	283	99	284	99	90-110	0	20	mg/kg	09.11.19 14:25	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3101189 — Matrix: Soil — Date Prep: 09.11.19
Parent Sample Id: 636321-011 — MS Sample Id: 636321-011 S — MSD Sample Id: 636321-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	8.60	248	254	99	254	99	90-110	0	20	mg/kg	09.11.19 14:48	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3101189 — Matrix: Soil — Date Prep: 09.11.19
Parent Sample Id: 636324-002 — MS Sample Id: 636324-002 S — MSD Sample Id: 636324-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	12.4	251	270	103	271	103	90-110	0	20	mg/kg	09.11.19 16:17	

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 636321

LT Environmental, Inc.

Nash Draw 42

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3101574 Matrix: Soil Date Prep: 09.16.19
Parent Sample Id: 636809-033 MS Sample Id: 636809-033 S MSD Sample Id: 636809-033 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	353	252	633	111	630	110	90-110	0	20	mg/kg	09.16.19 14:57	X

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3101077 Matrix: Solid Date Prep: 09.10.19
MB Sample Id: 7685875-1-BLK LCS Sample Id: 7685875-1-BKS LCSD Sample Id: 7685875-1-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	906	91	855	86	70-135	6	20	mg/kg	09.11.19 00:00	
Diesel Range Organics (DRO)	<25.0	1000	983	98	842	84	70-135	15	20	mg/kg	09.11.19 00:00	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	84		100		87		70-135	%	09.11.19 00:00
o-Terphenyl	87		103		88		70-135	%	09.11.19 00:00

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3101077 Matrix: Soil Date Prep: 09.10.19
Parent Sample Id: 636321-001 MS Sample Id: 636321-001 S MSD Sample Id: 636321-001 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	997	901	90	833	84	70-135	8	20	mg/kg	09.11.19 01:04	
Diesel Range Organics (DRO)	<24.9	997	977	98	901	90	70-135	8	20	mg/kg	09.11.19 01:04	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	99		92		70-135	%	09.11.19 01:04
o-Terphenyl	99		98		70-135	%	09.11.19 01:04

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 636321

LT Environmental, Inc.

Nash Draw 42

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

Seq Number: 3101025 Matrix: Solid Date Prep: 09.10.19

MB Sample Id: 7685876-1-BLK LCS Sample Id: 7685876-1-BKS LCSD Sample Id: 7685876-1-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	0.0887	89	0.0957	96	70-130	8	35	mg/kg	09.10.19 09:55	
Toluene	<0.00200	0.100	0.0918	92	0.0995	100	70-130	8	35	mg/kg	09.10.19 09:55	
Ethylbenzene	<0.00200	0.100	0.107	107	0.115	115	70-130	7	35	mg/kg	09.10.19 09:55	
m,p-Xylenes	<0.00400	0.200	0.221	111	0.234	117	70-130	6	35	mg/kg	09.10.19 09:55	
o-Xylene	<0.00200	0.100	0.107	107	0.115	115	70-130	7	35	mg/kg	09.10.19 09:55	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		93		101		70-130	%	09.10.19 09:55
4-Bromofluorobenzene	95		110		119		70-130	%	09.10.19 09:55

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

Seq Number: 3101025 Matrix: Soil Date Prep: 09.10.19

Parent Sample Id: 636321-001 MS Sample Id: 636321-001 S MSD Sample Id: 636321-001 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	0.132	132	0.0657	66	70-130	67	35	mg/kg	09.10.19 11:41	XF
Toluene	<0.00200	0.0998	0.138	138	0.0706	71	70-130	65	35	mg/kg	09.10.19 11:41	XF
Ethylbenzene	<0.00200	0.0998	0.162	162	0.0827	83	70-130	65	35	mg/kg	09.10.19 11:41	XF
m,p-Xylenes	<0.00399	0.200	0.336	168	0.170	85	70-130	66	35	mg/kg	09.10.19 11:41	XF
o-Xylene	<0.00200	0.0998	0.156	156	0.0803	81	70-130	64	35	mg/kg	09.10.19 11:41	XF

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	107		102		70-130	%	09.10.19 11:41
4-Bromofluorobenzene	124		118		70-130	%	09.10.19 11:41

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

Chain of Custody

XENCO LABORATORIES

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

Work Order No: 636321

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

Work Order Comments

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

Project Name:	NASH DRAW 42 (2RP-4823)	Turn Around	
Project Number:	01291120	Routine	☒
P.O. Number:		Rush:	
Sampler's Name:	Benjamin Belill	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Temperature (°C):	5.8	Thermometer ID	
Received Intact:	Yes No	T-NM-007	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Total Containers:	18

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
PH01	S	9/5/19	12:40	2'	1	X	X	X
PH01A			12:45	4'		X	X	X
PH02			12:50	2'		X	X	X
PH02A			1255	4'		X	X	X
PH03			1305	2'		X	X	X
PH03A			1310	4'		X	X	X
PH04			1320	2'		X	X	X
PH04A			1325	4'		X	X	X
PH05			1330	2'		X	X	X
PH05A			1335	4'		X	X	X

ANALYSIS REQUEST

Work Order Notes

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

Sample Comments

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

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		9/6/19 @ 09:30	2		
			4		
			6		

Revised Date 051418 Rev. 2018.1

XENCO LABORATORIES

Chain of Custody

Work Order No: 636321

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

www.xenco.com Page 2 of 2

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

Work Order Comments

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

Project Name:	NASH DRAW 42 (2RP-4823)	Turn Around	
Project Number:	012919120	Routine	X
P.O. Number:		Rush:	
Sampler's Name:	Benjamin Belill	Due Date:	

ANALYSIS REQUEST — **Work Order Notes**

SAMPLE RECEIPT	Temp Blank: Yes No	Wet Ice: (Yes) No
Temperature (°C):		Thermometer ID
Received Intact:	Yes No	see pg 1 eey
Cooler Custody Seals:	Yes No N/A	Correction Factor:
Sample Custody Seals:	~~Yes~~ No N/A	Total Containers:

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	Sample Comments
BH01	S	9/5/19	1455	2'	1	X	X	X	
BH02	↓	↓	1515	2'	↓	X	X	X	
BH03	↓	↓	1525	2'	↓	X	X	X	
BH03A	↓	↓	1535	4'	↓	X	X	X	
FS01	↓	↓	1550	2'	↓	X	X	X	
FS02	↓	↓	1600	2'	↓	X	X	X	
SW01	↓	↓	1610	0-2'	↓	X	X	X	
SW02	↓	↓	1620	0-2'	↓	X	X	X	

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
[signature]	[signature]	09/09/19 @ 09:30	2		
			4		
			6		

Revised Date 051418 Rev. 2018.1

Inter-Office Shipment

IOS Number **47647**

Date/Time: 09/09/19 11:47
Lab# From: **Carlsbad**
Lab# To: **Midland**

Created by: Elizabeth Mcclellan
Delivery Priority:
Air Bill No.:

Please send report to: Jessica Kramer
Address: 1089 N Canal Street
E-Mail: jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
636321-001	S	PH01	09/05/19 12:40	SW8021B	BTEX by EPA 8021B	09/13/19	09/19/19	JKR	BR4FBZ BZ BZME EBZ X	
636321-001	S	PH01	09/05/19 12:40	E300_CL	Chloride by EPA 300	09/13/19	03/03/20	JKR	CL	
636321-001	S	PH01	09/05/19 12:40	SW8015MOD_NM	TPH by SW8015 Mod	09/13/19	09/19/19	JKR	GRO-DRO PHCC10C28 PI	
636321-002	S	PH01A	09/05/19 12:45	SW8021B	BTEX by EPA 8021B	09/13/19	09/19/19	JKR	BR4FBZ BZ BZME EBZ X	
636321-002	S	PH01A	09/05/19 12:45	E300_CL	Chloride by EPA 300	09/13/19	03/03/20	JKR	CL	
636321-002	S	PH01A	09/05/19 12:45	SW8015MOD_NM	TPH by SW8015 Mod	09/13/19	09/19/19	JKR	GRO-DRO PHCC10C28 PI	
636321-003	S	PH02	09/05/19 12:50	E300_CL	Chloride by EPA 300	09/13/19	03/03/20	JKR	CL	
636321-003	S	PH02	09/05/19 12:50	SW8015MOD_NM	TPH by SW8015 Mod	09/13/19	09/19/19	JKR	GRO-DRO PHCC10C28 PI	
636321-003	S	PH02	09/05/19 12:50	SW8021B	BTEX by EPA 8021B	09/13/19	09/19/19	JKR	BR4FBZ BZ BZME EBZ X	
636321-004	S	PH02A	09/05/19 12:55	E300_CL	Chloride by EPA 300	09/13/19	03/03/20	JKR	CL	
636321-004	S	PH02A	09/05/19 12:55	SW8015MOD_NM	TPH by SW8015 Mod	09/13/19	09/19/19	JKR	GRO-DRO PHCC10C28 PI	
636321-004	S	PH02A	09/05/19 12:55	SW8021B	BTEX by EPA 8021B	09/13/19	09/19/19	JKR	BR4FBZ BZ BZME EBZ X	
636321-005	S	PH03	09/05/19 13:05	SW8015MOD_NM	TPH by SW8015 Mod	09/13/19	09/19/19	JKR	GRO-DRO PHCC10C28 PI	
636321-005	S	PH03	09/05/19 13:05	E300_CL	Chloride by EPA 300	09/13/19	03/03/20	JKR	CL	
636321-005	S	PH03	09/05/19 13:05	SW8021B	BTEX by EPA 8021B	09/13/19	09/19/19	JKR	BR4FBZ BZ BZME EBZ X	
636321-006	S	PH03A	09/05/19 13:10	SW8021B	BTEX by EPA 8021B	09/13/19	09/19/19	JKR	BR4FBZ BZ BZME EBZ X	
636321-006	S	PH03A	09/05/19 13:10	E300_CL	Chloride by EPA 300	09/13/19	03/03/20	JKR	CL	
636321-006	S	PH03A	09/05/19 13:10	SW8015MOD_NM	TPH by SW8015 Mod	09/13/19	09/19/19	JKR	GRO-DRO PHCC10C28 PI	
636321-007	S	PH04	09/05/19 13:20	E300_CL	Chloride by EPA 300	09/13/19	03/03/20	JKR	CL	
636321-007	S	PH04	09/05/19 13:20	SW8015MOD_NM	TPH by SW8015 Mod	09/13/19	09/19/19	JKR	GRO-DRO PHCC10C28 PI	
636321-007	S	PH04	09/05/19 13:20	SW8021B	BTEX by EPA 8021B	09/13/19	09/19/19	JKR	BR4FBZ BZ BZME EBZ X	
636321-008	S	PH04A	09/05/19 13:25	E300_CL	Chloride by EPA 300	09/13/19	03/03/20	JKR	CL	
636321-008	S	PH04A	09/05/19 13:25	SW8021B	BTEX by EPA 8021B	09/13/19	09/19/19	JKR	BR4FBZ BZ BZME EBZ X	
636321-008	S	PH04A	09/05/19 13:25	SW8015MOD_NM	TPH by SW8015 Mod	09/13/19	09/19/19	JKR	GRO-DRO PHCC10C28 PI	
636321-009	S	PH05	09/05/19 13:30	SW8021B	BTEX by EPA 8021B	09/13/19	09/19/19	JKR	BR4FBZ BZ BZME EBZ X	

Inter-Office Shipment

IOS Number **47647**

Date/Time: 09/09/19 11:47
Created by: Elizabeth Mcclellan
Please send report to: Jessica Kramer

Lab# From: **Carlsbad**
Delivery Priority:
Address: 1089 N Canal Street

Lab# To: **Midland**
Air Bill No.:
E-Mail: jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
636321-009	S	PH05	09/05/19 13:30	SW8015MOD_NM	TPH by SW8015 Mod	09/13/19	09/19/19	JKR	GRO-DRO PHCC10C28 PI	
636321-009	S	PH05	09/05/19 13:30	E300_CL	Chloride by EPA 300	09/13/19	03/03/20	JKR	CL	
636321-010	S	PH05A	09/05/19 13:35	E300_CL	Chloride by EPA 300	09/13/19	03/03/20	JKR	CL	
636321-010	S	PH05A	09/05/19 13:35	SW8015MOD_NM	TPH by SW8015 Mod	09/13/19	09/19/19	JKR	GRO-DRO PHCC10C28 PI	
636321-010	S	PH05A	09/05/19 13:35	SW8021B	BTEX by EPA 8021B	09/13/19	09/19/19	JKR	BR4FBZ BZ BZME EBZ X	
636321-011	S	BH01	09/05/19 14:55	SW8015MOD_NM	TPH by SW8015 Mod	09/13/19	09/19/19	JKR	GRO-DRO PHCC10C28 PI	
636321-011	S	BH01	09/05/19 14:55	SW8021B	BTEX by EPA 8021B	09/13/19	09/19/19	JKR	BR4FBZ BZ BZME EBZ X	
636321-011	S	BH01	09/05/19 14:55	E300_CL	Chloride by EPA 300	09/13/19	03/03/20	JKR	CL	
636321-012	S	BH02	09/05/19 15:15	SW8021B	BTEX by EPA 8021B	09/13/19	09/19/19	JKR	BR4FBZ BZ BZME EBZ X	
636321-012	S	BH02	09/05/19 15:15	SW8015MOD_NM	TPH by SW8015 Mod	09/13/19	09/19/19	JKR	GRO-DRO PHCC10C28 PI	
636321-012	S	BH02	09/05/19 15:15	E300_CL	Chloride by EPA 300	09/13/19	03/03/20	JKR	CL	
636321-013	S	BH03	09/05/19 15:25	SW8021B	BTEX by EPA 8021B	09/13/19	09/19/19	JKR	BR4FBZ BZ BZME EBZ X	
636321-013	S	BH03	09/05/19 15:25	SW8015MOD_NM	TPH by SW8015 Mod	09/13/19	09/19/19	JKR	GRO-DRO PHCC10C28 PI	
636321-013	S	BH03	09/05/19 15:25	E300_CL	Chloride by EPA 300	09/13/19	03/03/20	JKR	CL	
636321-014	S	BH03A	09/05/19 15:35	SW8015MOD_NM	TPH by SW8015 Mod	09/13/19	09/19/19	JKR	GRO-DRO PHCC10C28 PI	
636321-014	S	BH03A	09/05/19 15:35	E300_CL	Chloride by EPA 300	09/13/19	03/03/20	JKR	CL	
636321-014	S	BH03A	09/05/19 15:35	SW8021B	BTEX by EPA 8021B	09/13/19	09/19/19	JKR	BR4FBZ BZ BZME EBZ X	
636321-015	S	FS01	09/05/19 15:50	SW8015MOD_NM	TPH by SW8015 Mod	09/13/19	09/19/19	JKR	GRO-DRO PHCC10C28 PI	
636321-015	S	FS01	09/05/19 15:50	SW8021B	BTEX by EPA 8021B	09/13/19	09/19/19	JKR	BR4FBZ BZ BZME EBZ X	
636321-015	S	FS01	09/05/19 15:50	E300_CL	Chloride by EPA 300	09/13/19	03/03/20	JKR	CL	
636321-016	S	FS02	09/05/19 16:00	SW8015MOD_NM	TPH by SW8015 Mod	09/13/19	09/19/19	JKR	GRO-DRO PHCC10C28 PI	
636321-016	S	FS02	09/05/19 16:00	SW8021B	BTEX by EPA 8021B	09/13/19	09/19/19	JKR	BR4FBZ BZ BZME EBZ X	
636321-016	S	FS02	09/05/19 16:00	E300_CL	Chloride by EPA 300	09/13/19	03/03/20	JKR	CL	
636321-017	S	SW01	09/05/19 16:10	SW8021B	BTEX by EPA 8021B	09/13/19	09/19/19	JKR	BR4FBZ BZ BZME EBZ X	
636321-017	S	SW01	09/05/19 16:10	E300_CL	Chloride by EPA 300	09/13/19	03/03/20	JKR	CL	

Inter Office Shipment or Sample Comments:

Inter-Office Shipment

IOS Number **47647**

Date/Time: 09/09/19 11:47
Lab# From: **Carlsbad**
Lab# To: **Midland**

Created by: Elizabeth Mcclellan
Delivery Priority:
Air Bill No.:

Please send report to: Jessica Kramer
Address: 1089 N Canal Street
E-Mail: jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
636321-017	S	SW01	09/05/19 16:10	SW8015MOD_NM	TPH by SW8015 Mod	09/13/19	09/19/19	JKR	GRO-DRO PHCC10C28 PI	
636321-018	S	SW02	09/05/19 16:20	SW8021B	BTEX by EPA 8021B	09/13/19	09/19/19	JKR	BR4FBZ BZ BZME EBZ X	
636321-018	S	SW02	09/05/19 16:20	E300_CL	Chloride by EPA 300	09/13/19	03/03/20	JKR	CL	
636321-018	S	SW02	09/05/19 16:20	SW8015MOD_NM	TPH by SW8015 Mod	09/13/19	09/19/19	JKR	GRO-DRO PHCC10C28 PI	

Inter Office Shipment or Sample Comments:

Relinquished By: Elizabeth McClellan
Date Relinquished: 09/09/2019

Received By: Brianna Teel
Date Received: 09/10/2019 10:52
Cooler Temperature: 0.6

XENCO Laboratories

Inter Office Report- Sample Receipt Checklist

Sent To: Midland

IOS #: 47647

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient
Temperature Measuring device used : R8

Sent By: Elizabeth McClellan **Date Sent:** 09/09/2019 11:47 AM

Received By: Brianna Teel **Date Received:** 09/10/2019 10:52 AM

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

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

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

Checklist reviewed by: Brianna Teel Date: 09/10/2019

Brianna Teel

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 09/09/2019 09:30:00 AM

Work Order #: 636321

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

Temperature Measuring device used : T-NM-007

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	5.8	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**No**	
#5 Custody Seals intact on sample bottles?	**No**	
#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)?	**Yes**	Subbed to Xenco Midland
#18 Water VOC samples have zero headspace?	**N/A**	

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

Analyst: PH Device/Lot#:

Checklist completed by: Elizabeth McClellan Date: 09/09/2019

Checklist reviewed by: Jessica Kramer Date: 09/09/2019

Analytical Report 642594

for

LT Environmental, Inc.

Project Manager: Dan Moir

Nash Draw 42

012919120

11-NOV-19

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

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

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

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

11-NOV-19

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

Reference: XENCO Report No(s): **642594**
Nash Draw 42
Project Address:

Dan Moir:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 642594. 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. 642594 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 642594

LT Environmental, Inc., Arvada, CO

Nash Draw 42

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS03	S	11-07-19 13:15	4.5 ft	642594-001
SW03	S	11-07-19 13:25	0 - 4.5 ft	642594-002

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: Nash Draw 42

Project ID: *012919120*
Work Order Number(s): *642594*

Report Date: *11-NOV-19*
Date Received: *11/08/2019*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3106914 TPH by SW8015 Mod

Surrogate 1-Chlorooctane, Surrogate o-Terphenyl recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 642594-001 S.

Batch: LBA-3106935 BTEX by EPA 8021B

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

Certificate of Analysis Summary 642594

LT Environmental, Inc., Arvada, CO

Project Name: Nash Draw 42

Project Id: 012919120
Contact: Dan Moir
Project Location:

Date Received in Lab: Fri Nov-08-19 08:51 am
Report Date: 11-NOV-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	642594-001		642594-002									
	Field Id:	FS03		SW03									
	Depth:	4.5- ft		0-4.5 ft									
	Matrix:	SOIL		SOIL									
	Sampled:	Nov-07-19 13:15		Nov-07-19 13:25									
BTEX by EPA 8021B	***Extracted:***	Nov-08-19 09:50		Nov-08-19 09:50									
	Analyzed:	Nov-08-19 12:04		Nov-08-19 12:23									
	Units/RL:	mg/kg	RL	mg/kg	RL								
Benzene		<0.00100	0.00100	<0.000992	0.000992								
Toluene		<0.00100	0.00100	<0.000992	0.000992								
Ethylbenzene		<0.00100	0.00100	<0.000992	0.000992								
m,p-Xylenes		<0.00201	0.00201	<0.00198	0.00198								
o-Xylene		<0.00100	0.00100	<0.000992	0.000992								
Total Xylenes		<0.00100	0.00100	<0.000992	0.000992								
Total BTEX		<0.00100	0.00100	<0.000992	0.000992								
Chloride by EPA 300	***Extracted:***	Nov-08-19 10:11		Nov-08-19 10:11									
	Analyzed:	Nov-08-19 12:19		Nov-08-19 12:37									
	Units/RL:	mg/kg	RL	mg/kg	RL								
Chloride		272	100	415	100								
TPH by SW8015 Mod	***Extracted:***	Nov-08-19 12:00		Nov-08-19 12:00									
	Analyzed:	Nov-08-19 13:00		Nov-08-19 13:59									
	Units/RL:	mg/kg	RL	mg/kg	RL								
Gasoline Range Hydrocarbons (GRO)		<50.1	50.1	<50.0	50.0								
Diesel Range Organics (DRO)		<50.1	50.1	<50.0	50.0								
Motor Oil Range Hydrocarbons (MRO)		<50.1	50.1	<50.0	50.0								
Total GRO-DRO		<50.1	50.1	<50.0	50.0								
Total TPH		<50.1	50.1	<50.0	50.0								

Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analytical Results 642594

LT Environmental, Inc., Arvada, CO

Nash Draw 42

Sample Id:	**FS03**	Matrix:	Soil	Date Received:	11.08.19 08.51
Lab Sample Id:	642594-001	Date Collected:	11.07.19 13.15	Sample Depth:	4.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.08.19 10.11	Basis:	Wet Weight
Seq Number:	3106922				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**272**	100	mg/kg	11.08.19 12.19		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	11.08.19 12.00	Basis:	Wet Weight
Seq Number:	3106914				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	11.08.19 13.00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	11.08.19 13.00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	11.08.19 13.00	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	11.08.19 13.00	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	11.08.19 13.00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	11.08.19 13.00	
o-Terphenyl	84-15-1	108	%	70-135	11.08.19 13.00	

Certificate of Analytical Results 642594

LT Environmental, Inc., Arvada, CO

Nash Draw 42

Sample Id:	**FS03**	Matrix:	Soil	Date Received:	11.08.19 08.51
Lab Sample Id:	642594-001	Date Collected:	11.07.19 13.15	Sample Depth:	4.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.08.19 09.50	Basis:	Wet Weight
Seq Number:	3106935				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00100	0.00100	mg/kg	11.08.19 12.04	U	1
Toluene	108-88-3	<0.00100	0.00100	mg/kg	11.08.19 12.04	U	1
Ethylbenzene	100-41-4	<0.00100	0.00100	mg/kg	11.08.19 12.04	U	1
m,p-Xylenes	179601-23-1	<0.00201	0.00201	mg/kg	11.08.19 12.04	U	1
o-Xylene	95-47-6	<0.00100	0.00100	mg/kg	11.08.19 12.04	U	1
Total Xylenes	1330-20-7	<0.00100	0.00100	mg/kg	11.08.19 12.04	U	1
Total BTEX		<0.00100	0.00100	mg/kg	11.08.19 12.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	70-130	11.08.19 12.04	
4-Bromofluorobenzene	460-00-4	113	%	70-130	11.08.19 12.04	

Certificate of Analytical Results 642594

LT Environmental, Inc., Arvada, CO

Nash Draw 42

Sample Id: **SW03** Matrix: Soil Date Received:11.08.19 08.51

Lab Sample Id: 642594-002 Date Collected: 11.07.19 13.25 Sample Depth:0 - 4.5 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB % Moisture:

Analyst: MAB Date Prep: 11.08.19 10.11 Basis: Wet Weight

Seq Number: 3106922

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**415**	100	mg/kg	11.08.19 12.37		10

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DTH % Moisture:

Analyst: DTH Date Prep: 11.08.19 12.00 Basis: Wet Weight

Seq Number: 3106914

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	11.08.19 13.59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	11.08.19 13.59	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	11.08.19 13.59	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	11.08.19 13.59	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	11.08.19 13.59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	11.08.19 13.59	
o-Terphenyl	84-15-1	108	%	70-135	11.08.19 13.59	

Certificate of Analytical Results 642594

LT Environmental, Inc., Arvada, CO

Nash Draw 42

Sample Id:	**SW03**	Matrix:	Soil	Date Received:	11.08.19 08.51
Lab Sample Id:	642594-002	Date Collected:	11.07.19 13.25	Sample Depth:	0 - 4.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	11.08.19 09.50	Basis:	Wet Weight
Seq Number:	3106935				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000992	0.000992	mg/kg	11.08.19 12.23	U	1
Toluene	108-88-3	<0.000992	0.000992	mg/kg	11.08.19 12.23	U	1
Ethylbenzene	100-41-4	<0.000992	0.000992	mg/kg	11.08.19 12.23	U	1
m,p-Xylenes	179601-23-1	<0.00198	0.00198	mg/kg	11.08.19 12.23	U	1
o-Xylene	95-47-6	<0.000992	0.000992	mg/kg	11.08.19 12.23	U	1
Total Xylenes	1330-20-7	<0.000992	0.000992	mg/kg	11.08.19 12.23	U	1
Total BTEX		<0.000992	0.000992	mg/kg	11.08.19 12.23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	122	%	70-130	11.08.19 12.23	
1,4-Difluorobenzene	540-36-3	103	%	70-130	11.08.19 12.23	

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 642594

LT Environmental, Inc.

Nash Draw 42

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3106922 — Matrix: Solid — Date Prep: 11.08.19
MB Sample Id: 7689889-1-BLK — LCS Sample Id: 7689889-1-BKS — LCSD Sample Id: 7689889-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	249	100	250	100	90-110	0	20	mg/kg	11.08.19 12:07	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3106922 — Matrix: Soil — Date Prep: 11.08.19
Parent Sample Id: 642594-001 — MS Sample Id: 642594-001 S — MSD Sample Id: 642594-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	272	200	456	92	458	93	90-110	0	20	mg/kg	11.08.19 12:25	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3106922 — Matrix: Soil — Date Prep: 11.08.19
Parent Sample Id: 642596-002 — MS Sample Id: 642596-002 S — MSD Sample Id: 642596-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	2740	200	2950	105	2940	100	90-110	0	20	mg/kg	11.08.19 13:54	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3106914 — Matrix: Solid — Date Prep: 11.08.19
MB Sample Id: 7689947-1-BLK — LCS Sample Id: 7689947-1-BKS — LCSD Sample Id: 7689947-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	905	91	921	92	70-135	2	35	mg/kg	11.08.19 12:21	
Diesel Range Organics (DRO)	<50.0	1000	1010	101	1030	103	70-135	2	35	mg/kg	11.08.19 12:21	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	107		120		121		70-135	%	11.08.19 12:21
o-Terphenyl	113		121		121		70-135	%	11.08.19 12:21

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3106914 — Matrix: Solid — Date Prep: 11.08.19
MB Sample Id: 7689947-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	11.08.19 12:01	

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 642594

LT Environmental, Inc.

Nash Draw 42

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3106914 — Matrix: Soil — Date Prep: 11.08.19
Parent Sample Id: 642594-001 — MS Sample Id: 642594-001 S — MSD Sample Id: 642594-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.1	1000	1100	110	892	89	70-135	21	35	mg/kg	11.08.19 13:20	
Diesel Range Organics (DRO)	<50.1	1000	1220	122	991	99	70-135	21	35	mg/kg	11.08.19 13:20	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	141	**	117		70-135	%	11.08.19 13:20
o-Terphenyl	139	**	118		70-135	%	11.08.19 13:20

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3106935 — Matrix: Solid — Date Prep: 11.08.19
MB Sample Id: 7689955-1-BLK — LCS Sample Id: 7689955-1-BKS — LCSD Sample Id: 7689955-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00100	0.100	0.0960	96	0.0934	93	70-130	3	35	mg/kg	11.08.19 10:22	
Toluene	<0.00100	0.100	0.102	102	0.0979	98	70-130	4	35	mg/kg	11.08.19 10:22	
Ethylbenzene	<0.00100	0.100	0.0938	94	0.0900	90	71-129	4	35	mg/kg	11.08.19 10:22	
m,p-Xylenes	<0.00200	0.200	0.198	99	0.190	95	70-135	4	35	mg/kg	11.08.19 10:22	
o-Xylene	<0.00100	0.100	0.101	101	0.0962	96	71-133	5	35	mg/kg	11.08.19 10:22	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		104		105		70-130	%	11.08.19 10:22
4-Bromofluorobenzene	112		113		111		70-130	%	11.08.19 10:22

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3106935 — Matrix: Soil — Date Prep: 11.08.19
Parent Sample Id: 642594-001 — MS Sample Id: 642594-001 S — MSD Sample Id: 642594-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00101	0.101	0.0932	92	0.0870	87	70-130	7	35	mg/kg	11.08.19 11:00	
Toluene	<0.00101	0.101	0.0934	92	0.0858	86	70-130	8	35	mg/kg	11.08.19 11:00	
Ethylbenzene	<0.00101	0.101	0.0920	91	0.0839	84	71-129	9	35	mg/kg	11.08.19 11:00	
m,p-Xylenes	<0.00202	0.202	0.196	97	0.178	89	70-135	10	35	mg/kg	11.08.19 11:00	
o-Xylene	<0.00101	0.101	0.0984	97	0.0895	90	71-133	9	35	mg/kg	11.08.19 11:00	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	105		105		70-130	%	11.08.19 11:00
4-Bromofluorobenzene	119		119		70-130	%	11.08.19 11:00

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

XENCO LABORATORIES

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

Work Order No: 642594

www.xenco.com Page 1 of 1

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

Work Order Comments

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

Project Name:	Nash Draw 42 (2RP-4823)	Turn Around	
Project Number:	01291912O	Routine ☐	
P.O. Number:		Rush: 24HR	
Sampler's Name:	Benjamin Belill	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Temperature (°C):	2.5	Thermometer ID		
Received Intact:	Yes No	T-NM-007		
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No N/A	Total Containers:	2	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)	Sample Comments
FS03	S	11/7/19	13:15	4.5'	1	X	X	X	Composite
SW03	S	11/7/19	13:25	0-4.5'	1	X	X	X	Composite

ANALYSIS REQUEST

Work Order Notes

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

BTEX 11/7/19

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

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		11/8/19 851	2		
			4		
			6		

Revised Date 051418 Rev. 2018.1

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 11/08/2019 08:51:00 AM

Work Order #: 642594

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

Temperature Measuring device used : T-NM-007

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	2.5
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**
#5 Custody Seals intact on sample bottles?	**Yes**
#6*Custody Seals Signed and dated?	**Yes**
#7 *Chain of Custody present?	**Yes**
#8 Any missing/extra samples?	**No**
#9 Chain of Custody signed when relinquished/ received?	**Yes**
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**
#11 Container label(s) legible and intact?	**Yes**
#12 Samples in proper container/ bottle?	**Yes**
#13 Samples properly preserved?	**Yes**
#14 Sample container(s) intact?	**Yes**
#15 Sufficient sample amount for indicated test(s)?	**Yes**
#16 All samples received within hold time?	**Yes**
#17 Subcontract of sample(s)?	**No**
#18 Water VOC samples have zero headspace?	**N/A**

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

Analyst: PH Device/Lot#:

Checklist completed by: Elizabeth McClellan Date: 11/08/2019

Checklist reviewed by: Jessica Kramer Date: 11/08/2019

Jessica Kramer