LT Environmental, Inc.
3300 North A Street, Building 1, #103
Midland, Texas 79705
T 432.704.5178 / F 432.704.5179

July 3, 2018

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

RE: Closure Request
Nash Unit 046H
Remediation Permit Number 2RP-4732
Eddy County, New Mexico

Dear Mr. Bratcher;

LT Environmental, Inc. (LTE), on behalf of XTO Energy, Inc. (XTO), presents the following letter report detailing excavation of impacted soil and confirmation soil sampling activities at the Nash Unit 046H well pad, (Site), in Unit C of Section 18, Township 23 South, Range 30 East, in Eddy County, New Mexico (Figure 1). The purpose of the excavation was to remove impacted soil after a nipple failure upstream of the back pressure valve caused a release of approximately 10.5 barrels (bbls) of crude oil and 42 bbls of produced water. The well was shut in and repairs were made. The release occurred on April 18, 2018, and impacted approximately 11,100 square feet of caliche well pad north and south of the wellhead. Free-standing liquid was removed with a vacuum truck; approximately 9 bbls of crude oil and 36 bbls of produced water was recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form C-141 on May 3, 2018, and was assigned Remediation Permit Number (RP) 2RP-4732 (Attachment 1). Based on the results of the excavation event and subsequent confirmation sampling described herein, XTO is requesting no further action for this release at this time. Residual chloride concentrations exist at the wellhead. It is XTO safety policy to prohibit soil removal within 10 feet of the wellbore. The soil containing residual elevated chloride will be removed upon plugging and abandonment of the production well and final reclamation.

BACKGROUND

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest water well data and known aquifer properties. The nearest permitted water well is C 03478 POD1, located approximately 2.3 miles southeast of the Site, with a depth to groundwater of 105 feet bgs and a total depth of 230 feet bgs. The closest surface water to the Site is a dry arroyo located approximately 230 feet southeast of the release area. The Site is greater than 1,000 feet from a water source and greater than 200 feet from a private domestic water source. Based on these criteria, the NMOCD site ranking for remediation action levels is 10, and the following remediation action levels apply: 10 milligrams per kilogram (mg/kg) benzene; 50 mg/kg benzene, toluene, ethylbenzene, and total xylenes (BTEX); and 1,000 mg/kg total petroleum

hydrocarbons (TPH). Based on standard practice in this region, LTE proposes a site-specific chloride action level of 600 mg/kg or within 10 percent (%) of the background concentration.

EXCAVATION ACTIVITIES

Excavation activities within the release footprint commenced on May 11, 2018, and concluded on May 16, 2018. In an effort to delineate hydrocarbon and chloride impacts to soil and direct excavation activities, LTE screened soil samples using a photo-ionization detector (PID) and Hach® chloride QuanTab® test strips. The remediated area is best described as 6 different areas based on depth of soil removed. The entire area covers approximately 4,425 square feet and depths ranged from approximately 1 foot of soil being removed from scraped areas to 4 feet of soil excavated southwest of the wellhead. The horizontal extents of these excavations are illustrated on Figure 2. Approximately 650 cubic yards of impacted soil were removed via backhoe and skid loader or by hand digging/hydro excavation when within 2 feet of exposed underground lines. No impacted soil was removed within 10 feet of the wellhead due to safety policy enforced by XTO to protect the borehole integrity. Impacted soil was transported and properly disposed of at Lea Land and R360, located in Eunice, New Mexico and Hobbs, New Mexico respectively.

SOIL SAMPLING

Following initial excavation activities, LTE collected a total of 19 confirmation soil samples on May 14 through May 16, 2018, as depicted on Figure 2. Eight of the confirmation soil samples were collected from the base of the scraped areas and excavations (FS1 through FS6, SS1, and SS2) and 11 along the excavation sidewalls that exceeded 2 feet in depth (SW01 through SW11). The soil samples were collected from the excavation using a hand auger. The soil was placed directly into pre-cleaned glass jars, labeled with location, date, time, sampler, and method of analysis, and immediately placed on ice. The samples were hand delivered to a laboratory courier at 4 degrees Celsius (°C) under strict chain-of-custody procedures to Xenco Laboratories in Midland, Texas, for analysis of BTEX by United States Environmental Protection Agency (USEPA) Method 8021B, TPH-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH- oil range organics (ORO) by USEPA Method 8015M, and chloride by USEPA Method 300.

ANALYTICAL RESULTS

Laboratory analytical results for the all 19 soil samples indicated benzene and BTEX concentrations were below laboratory reporting limits. Laboratory analytical results for TPH indicated concentrations did not exceed the NMOCD remediation action levels for the Site with values ranging from below the laboratory reporting limit (SS1, FS1, FS2, FS3, FS5, FS6, SW1, SW2, SW3, SW5, and SW7) to 25.9 mg/kg in soil sample SS2. Chloride concentrations ranged from below the laboratory reporting limit (SW3, SS2, SW4, SW8, SW10 and SW11) to 5,150 mg/kg in soil sample SW9. Two samples exceeded the remediation action level for chloride (SW1 and SW9). These samples were known to be impacted at the time of collection, but due to the

proximity of the impacted soil to the wellhead, the excavations in these areas could not be advanced any further for safety concerns and to preserve the borehole integrity of the well. SW1 and SW9 were collected to document remaining impact within 10 feet of the wellhead on the north and the east side. This impacted soil will be remediated at the time the well is plugged and abandoned and the Site is ready to be reclaimed. Laboratory analytical results are presented on Figure 2 and in Table 1, and the complete laboratory analytical report is included as Attachment 2.

CONCLUSIONS

Laboratory analytical results for the majority of soil samples collected within the release footprint indicate impact to soil, as defined by concentrations of BTEX, TPH, and chloride, do not exceed NMOCD site-specific remediation action levels. A minor volume of soil surrounding the wellhead containing 5,150 mg/kg and 4,060 mg/kg of chloride has been left in place. XTO requests no further action at this time. The remaining impacted soil will be removed upon plugging and abandonment of the well and final reclamation. Upon approval of this request, XTO will backfill the excavation with caliche well pad material and recontour the Site. An updated NMOCD Form C-141 is included with Attachment 1.

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

Sincerely,

LT ENVIRONMENTAL, INC.

Adrian Baker
Project Geologist

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

cc: Kyle Littrell, XTO
Crystal Weaver, NMOCD
Jim Amos, BLM
Shelly Tucker, BLM

Attachments:

Figure 1	Site Location Map
Figure 2	Soil Sample Locations
Table 1	Soil Analytical Results
Attachment 1	Initial/Final NMOCD Form C-141
Attachment 2	Laboratory Analytical Report

FIGURES

Advancing Opportunity

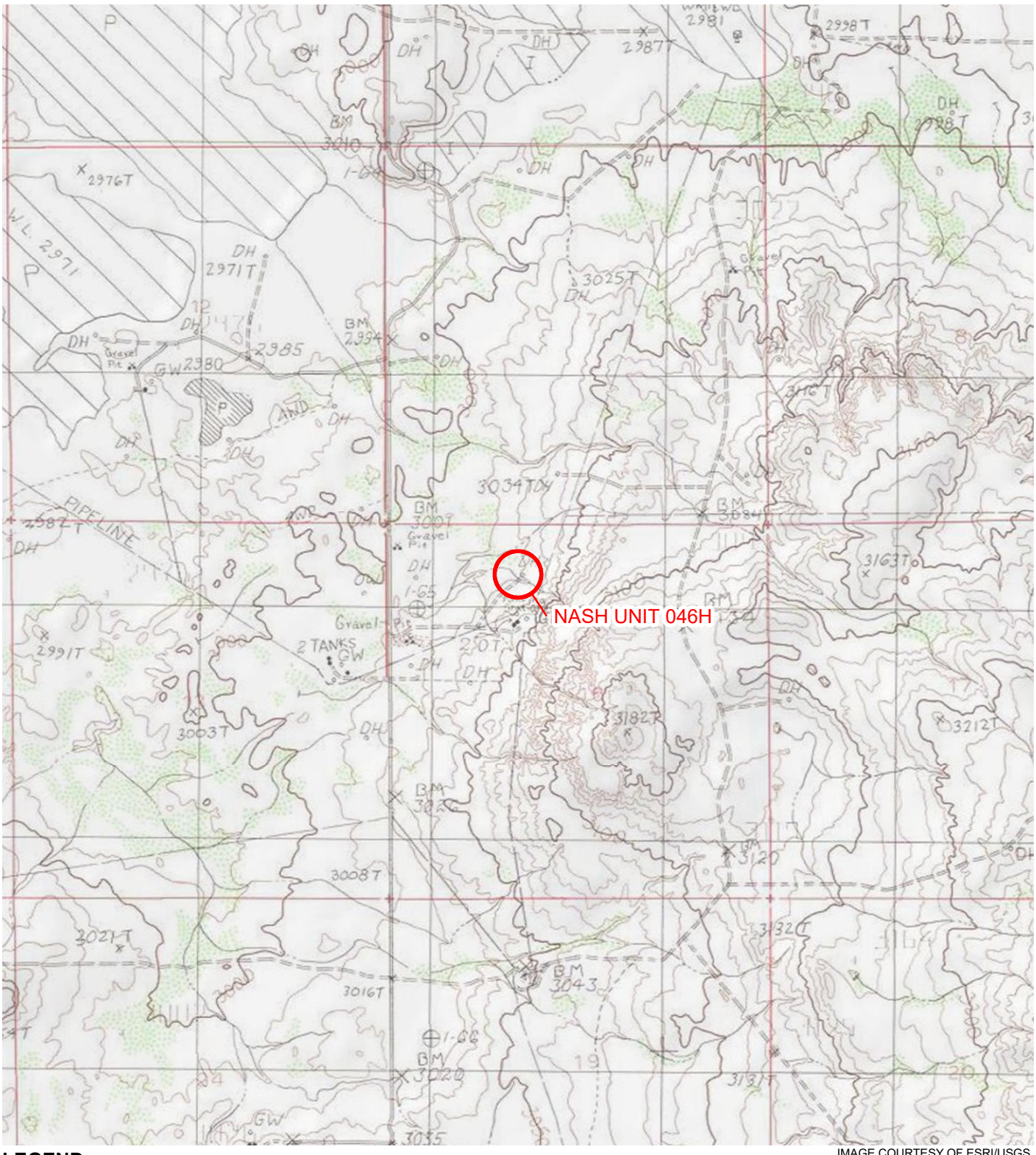


IMAGE COURTESY OF ESRI/USGS

LEGEND

SITE LOCATION

0 2,000 4,000

Feet

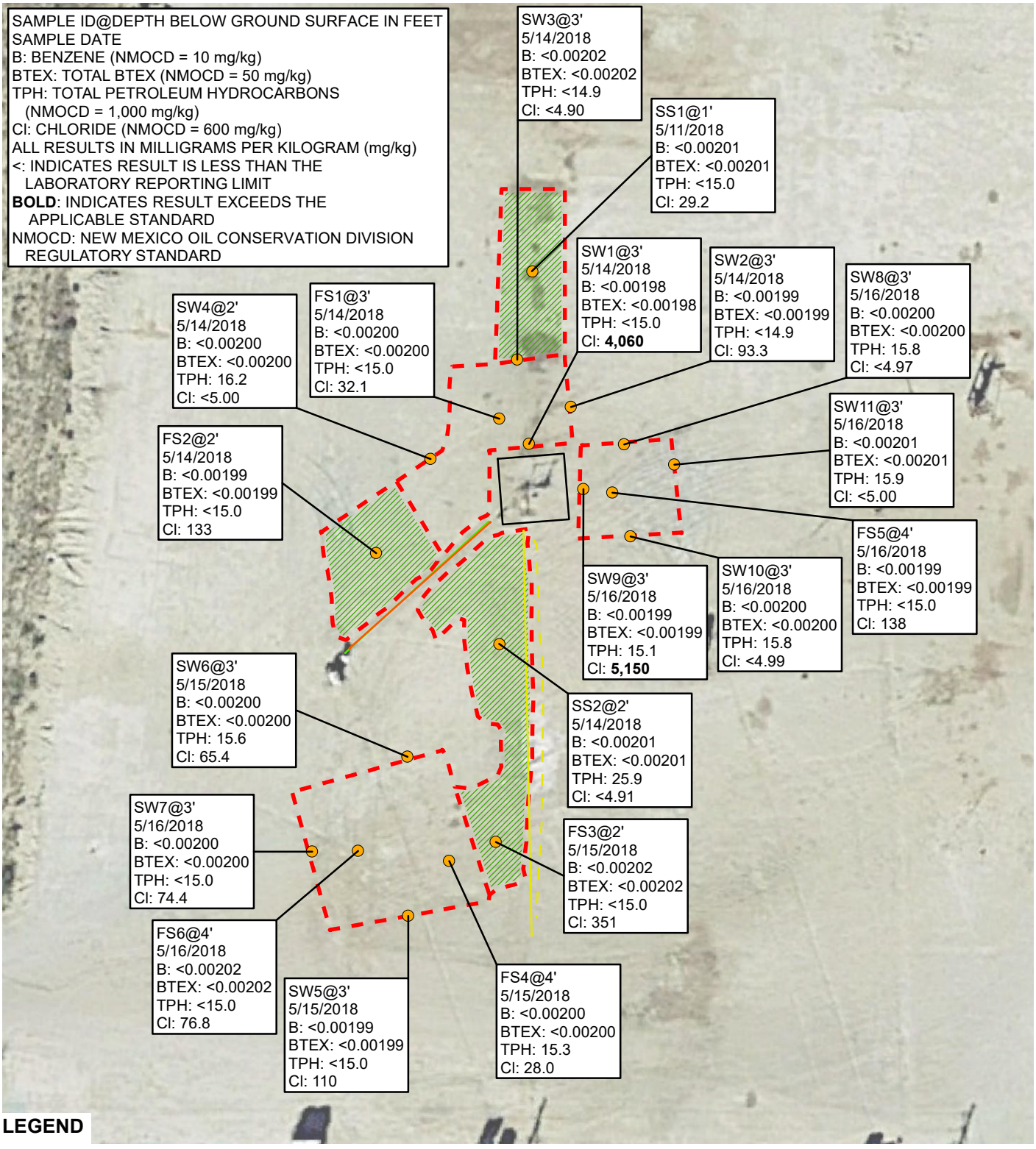
N

NEW MEXICO

NOTE: REMEDIATION PERMIT NUMBER 2RP-4732

FIGURE 1
SITE LOCATION MAP
NASH UNIT 046H
UNIT C SEC 18 T23S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012918109_NASH 46H\012918109_FIG01_SL_2018_4732.mxd



NOTE: REMEDIATION PERMIT NUMBER 2RP-4732

FIGURE 2
SOIL SAMPLE LOCATIONS
NASH UNIT 046H
UNIT C SEC 18 T23S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012918109_NASH 46H\012918109_FIG02_SITE_2018_4732.mxd

TABLE

Advancing Opportunity

TABLE 1
SOIL ANALYTICAL RESULTS
NASH UNIT 046H
REMEDIATION PERMIT NUMBER 2RP-4732
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

Sample Name	Sample Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	C6-C10 Gasoline Range Organics (mg/kg)	C10-C28 Diesel Range Organics (mg/kg)	C28-40 Motor Oil Range Organics (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
SS1	1	5/14/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	29.2
FS1	3	5/14/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	32.1
SW1	3	5/14/2018	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<15.0	<15.0	<15.0	<15.0	**4,060**
SW2	3	5/14/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<14.9	<14.9	<14.9	<14.9	93.3
SW3	3	5/14/2018	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<14.9	<14.9	<14.9	<14.9	<4.90
SS2	2	5/14/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	25.9	<15.0	25.9	<4.91
FS2	2	5/14/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	133
SW4	2	5/14/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	16.2	<15.0	16.2	<5.00
FS3	2	5/15/2018	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<15.0	<15.0	<15.0	<15.0	351
FS4	4	5/15/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	15.3	<15.0	15.3	28.0
SW5	3	5/15/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	110
SW6	3	5/15/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	15.6	<15.0	15.6	65.4
FS5	4	5/16/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	138
SW8	3	5/16/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<14.9	15.8	<14.9	15.8	<4.97
SW7	3	5/16/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	74.4
SW9	3	5/16/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<14.9	15.1	<14.9	15.1	**5,150**
SW10	3	5/16/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	15.8	<15.0	15.8	<4.99
SW11	3	5/16/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	15.9	<15.0	15.9	<5.00
FS6	4	5/16/2018	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<15.0	<15.0	<15.0	<15.0	76.8
NMOCD Remediation Action Levels			10	NE	NE	NE	50	NE	NE	NE	5,000	600

Notes:
bgs - below ground surface
BTEX - benzene, toluene, ethylbenzene, and total xylenes
mg/kg - milligrams per kilogram
NE - not established
NMOCD - New Mexico Oil Conservation Division
TPH - total petroleum hydrocarbons
Bold - indicates result exceeds NMOCD remediation action level
< - indicates result is below laboratory reporting limits

ATTACHMENT 1

INITIAL/FINAL NMOCD FORM C-141

Advancing Opportunity

RECEIVED

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

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

MAY 0 3 2018

DISTRICT II-ARTESIA O.C.D.

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

nAB1812846489

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 Unit 046H	Facility Type: Exploration and Production

Surface Owner: Federal	Mineral Owner: Federal	API No: 30-01543081

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
C	18	23S	30E	700	North	1880	West	Eddy

Latitude 32.310289 **Longitude** -103.923423 NAD83

NATURE OF RELEASE

Type of Release Oil and produced water	Volume of Release 10.5 BO, 42 BPW	Volume Recovered 9 BO, 36 BPW
Source of Release Submersible pump	Date and Hour of Occurrence 4/18/2018, AM	Date and Hour of Discovery 4/18/2018, 1:00 PM
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Mike Bratcher and Crystal Weaver (NMOCD), Tucker Shelly and Jim Amos (BLM)	
By Whom? Kyle Littrell	Date and Hour: 4/19/2018, 9:23 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 nipple failure upstream of back pressure valve. Well was shut in while repairs were made.

Describe Area Affected and Cleanup Action Taken.*
Release caused fluid to spray north to south along the well pad, covering an area of 11,100 square feet. Vac truck was dispatched and recovered standing fluid. An environmental contractor has been retained to assist with delineation and remediation efforts.

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

Signature:	OIL CONSERVATION DIVISION
Printed Name: Kyle Littrell	Approved by Environmental Specialist: Mike Bratcher
Title: Environmental Coordinator	Approval Date: 5/7/18 Expiration Date: N/A
E-mail Address: Kyle_Littrell@xtoenergy.com	Conditions of Approval: See attached Attached ☐
Date: 5/03/2018 Phone: 432-221-7331	2RP-4732

* Attach Additional Sheets If Necessary

Operator/Responsible Party,

The OCD has received the form C-141 you provided on 5/3/2018 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 2RP-4732 has been assigned. **Please refer to this case number in all future correspondence.**

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

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

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District 2 office in ARTESIA on or before 6/3/2018. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

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

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

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

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

- Composite sampling is not generally allowed.

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

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

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

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

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

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

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

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
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State of New Mexico
Energy Minerals and Natural Resources

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

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company XTO Energy	Contact Kyle Littrell
Address 3104 E Greene Street Carlsbad, N.M. 88220	Telephone No. 432-221-7331
Facility Name: Nash Unit 046H	Facility Type Exploration and Production

Surface Owner Federal	Mineral Owner Federal	API No. 30-015-43081

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
C	18	23S	30E	700	North	1880	West	Eddy

Latitude N 32.310289 **Longitude** -103.923423 NAD83

NATURE OF RELEASE

Type of Release Produced Water and crude oil	Volume of Release: 10.5 bbls oil, 42 bbls produced water	Volume Recovered: 9 bbls oil, 36 bbls produced water
Source of Release: Submersible pump	Date and Hour of Occurrence 4/18/2018, AM	Date and Hour of Discovery 4/18/2018, 1:00 PM
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Mike Bratcher and Crystal Weaver (NMOCD) Shelly Tucker/ Jim Amos (BLM)	
By Whom? Kyle Littrell	Date and Hour 4/19/2018 9:23 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 nipple failure upstream of back pressure valve. Well was shut in while repairs were made.

Describe Area Affected and Cleanup Action Taken.*
Release caused fluid to spray north to south along the well pad, covering an area of 11,100 square feet. A vacuum truck was dispatched and recovered standing fluid.

LTE conducted excavation activities within the release footprint between May 11, 2018 and May 16, 2018. Approximately 650 cubic yards of impacted soil was removed via backhoe and skid loader or by hand digging/hydro excavation. Following excavation activities, LTE collected a total of 19 confirmation soil samples. Laboratory analytical results for the all 19 soil samples indicated benzene and BTEX concentrations were below laboratory reporting limits. Laboratory analytical results for TPH indicated concentrations did not exceed the NMOCD remediation action levels for the Site. A total of 17 of 19 soil samples did not exceed NMOCD action levels for chloride. Two soil samples exceeded the chloride standard, but were in areas where the excavation could not be advanced any closer to the well head. It is XTO safety policy to prohibit soil removal within 10 feet of the wellbore. The soil containing residual elevated chloride will be removed upon plugging and abandonment of the production well and final reclamation.

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: Kyle Littrell	Approved by Environmental Specialist:
Title: SH&E Coordinator	Approval Date: / Expiration Date:
E-mail Address: Kyle_Littrell@xtoenergy.com	Conditions of Approval: / Attached ☐
Date: 7/6/2018 Phone: 432-221-7331	

* Attach Additional Sheets If Necessary

ATTACHMENT 2

LABORATORY ANALYTICAL REPORT

Advancing Opportunity

Analytical Report 586492

for

LT Environmental, Inc.

Project Manager: Adrian Baker

Nash 46H

25-MAY-18

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-18-25), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-17-12)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-17-16)
Xenco-Odessa (EPA Lab Code: TX00158): Texas (T104704400-18-14)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-17-3)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Phoenix Mobile (EPA Lab Code: AZ00901): Arizona (AZM757)
Xenco-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429)
Xenco-Lakeland: Florida (E84098)

25-MAY-18

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

Reference: XENCO Report No(s): **586492**
Nash 46H
Project Address: NM

Adrian Baker:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 586492. 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. 586492 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jessica Kramer

Jessica Kramer
Project Assistant

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
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Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America

Sample Cross Reference 586492

LT Environmental, Inc., Arvada, CO

Nash 46H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS1	S	05-11-18 12:15	0.5 ft	586492-001
FS1	S	05-11-18 08:05	3 ft	586492-002
SW1	S	05-11-18 09:00	3 ft	586492-003
SW2	S	05-11-18 09:05	3 ft	586492-004
SW3	S	05-11-18 09:10	3 ft	586492-005
SS2	S	05-11-18 10:55	2 ft	586492-006
FS2	S	05-11-18 13:40	2 ft	586492-007
SW4	S	05-11-18 15:00	3 ft	586492-008
FS3	S	05-11-18 08:40	3 ft	586492-009
FS4	S	05-11-18 10:00	2.5 ft	586492-010
SW5	S	05-11-18 12:30	3 ft	586492-011
SW6	S	05-11-18 13:30	3 ft	586492-012
FS5	S	05-11-18 09:50	3 ft	586492-013
SW8	S	05-11-18 09:55	3 ft	586492-014
SW7	S	05-11-18 10:20	3 ft	586492-015
SW9	S	05-11-18 10:00	3 ft	586492-016
SW10	S	05-11-18 10:05	3 ft	586492-017
SW11	S	05-11-18 12:10	0.5 ft	586492-018
FS6	S	05-11-18 14:30	0.5 ft	586492-019

CASE NARRATIVE

Client Name: LT Environmental, Inc.
Project Name: Nash 46H

Project ID:
Work Order Number(s): *586492*

Report Date: *25-MAY-18*
Date Received: *05/18/2018*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3051206 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.
Lab Sample ID 586492-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene, Ethylbenzene, Toluene recovered below QC limits in the Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 586492-001, -002, -003, -004, -005, -006, -007, -008, -011, -012.
The Laboratory Control Sample for Toluene, Benzene, Ethylbenzene is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3051213 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analysis Summary 586492

LT Environmental, Inc., Arvada, CO

Project Name: Nash 46H

Project Id:
Contact: Adrian Baker
Project Location: NM

Date Received in Lab: Fri May-18-18 10:30 am
Report Date: 25-MAY-18
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	586492-001		586492-002		586492-003		586492-004		586492-005		586492-006	
	Field Id:	SS1		FS1		SW1		SW2		SW3		SS2	
	Depth:	0.5- ft		3- ft		3- ft		3- ft		3- ft		2- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	May-11-18 12:15		May-11-18 08:05		May-11-18 09:00		May-11-18 09:05		May-11-18 09:10		May-11-18 10:55	
BTEX by EPA 8021B	***Extracted:***	May-23-18 16:00		May-23-18 16:00		May-23-18 16:00		May-23-18 16:00		May-23-18 16:00		May-23-18 16:00	
	Analyzed:	May-23-18 19:19		May-23-18 19:55		May-23-18 20:14		May-23-18 20:32		May-23-18 20:50		May-23-18 21:08	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198	<0.00199	0.00199	<0.00202	0.00202	<0.00200	0.00200
Toluene		<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198	<0.00199	0.00199	<0.00202	0.00202	<0.00200	0.00200
Ethylbenzene		<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198	<0.00199	0.00199	<0.00202	0.00202	<0.00200	0.00200
m,p-Xylenes		<0.00402	0.00402	<0.00399	0.00399	<0.00397	0.00397	<0.00398	0.00398	<0.00403	0.00403	<0.00401	0.00401
o-Xylene		<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198	<0.00199	0.00199	<0.00202	0.00202	<0.00200	0.00200
Total Xylenes		<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198	<0.00199	0.00199	<0.00202	0.00202	<0.00200	0.00200
Total BTEX		<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198	<0.00199	0.00199	<0.00202	0.00202	<0.00200	0.00200
Inorganic Anions by EPA 300	***Extracted:***	May-22-18 08:30		May-22-18 08:30		May-22-18 08:30		May-22-18 08:30		May-22-18 08:30		May-22-18 08:30	
	Analyzed:	May-22-18 16:57		May-22-18 17:03		May-22-18 11:02		May-22-18 11:08		May-22-18 17:09		May-22-18 17:15	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		29.2	4.98	32.1	4.97	4060	98.0	93.3	24.7	<4.90	4.90	<4.91	4.91
TPH by SW8015 Mod	***Extracted:***	May-23-18 14:00		May-23-18 14:00		May-23-18 14:00		May-23-18 14:00		May-23-18 14:00		May-23-18 14:00	
	Analyzed:	May-24-18 07:30		May-23-18 22:29		May-23-18 22:48		May-23-18 23:06		May-23-18 23:24		May-23-18 23:42	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9	<14.9	14.9	<15.0	15.0
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9	<14.9	14.9	25.9	15.0
Oil Range Hydrocarbons (ORO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9	<14.9	14.9	<15.0	15.0
Total TPH		<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9	<14.9	14.9	25.9	15.0

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Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 586492

LT Environmental, Inc., Arvada, CO

Project Name: Nash 46H

Project Id:
Contact: Adrian Baker
Project Location: NM

Date Received in Lab: Fri May-18-18 10:30 am
Report Date: 25-MAY-18
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	586492-007		586492-008		586492-009		586492-010		586492-011		586492-012	
	Field Id:	FS2		SW4		FS3		FS4		SW5		SW6	
	Depth:	2- ft		3- ft		3- ft		2.5- ft		3- ft		3- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	May-11-18 13:40		May-11-18 15:00		May-11-18 08:40		May-11-18 10:00		May-11-18 12:30		May-11-18 13:30	
BTEX by EPA 8021B	*Extracted:*	May-23-18 16:00		May-23-18 16:00		May-23-18 17:00		May-23-18 17:00		May-23-18 16:00		May-23-18 16:00	
	Analyzed:	May-23-18 21:26		May-23-18 21:45		May-24-18 07:34		May-24-18 07:52		May-23-18 22:03		May-23-18 22:56	
	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	<0.00202	0.00202	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200
Toluene		<0.00199	0.00199	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200
Ethylbenzene		<0.00199	0.00199	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200
m,p-Xylenes		<0.00398	0.00398	<0.00399	0.00399	<0.00403	0.00403	<0.00401	0.00401	<0.00398	0.00398	<0.00401	0.00401
o-Xylene		<0.00199	0.00199	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200
Total Xylenes		<0.00199	0.00199	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200
Total BTEX		<0.00199	0.00199	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200
Inorganic Anions by EPA 300	*Extracted:*	May-22-18 08:30		May-22-18 08:30		May-22-18 08:30		May-22-18 08:30		May-22-18 08:30		May-22-18 08:30	
	Analyzed:	May-22-18 17:21		May-22-18 17:27		May-22-18 12:08		May-22-18 17:33		May-22-18 17:39		May-22-18 17:45	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		133	4.94	<5.00	5.00	351	4.93	28.0	4.98	110	4.90	65.4	4.95
TPH by SW8015 Mod	*Extracted:*	May-23-18 14:00		May-23-18 14:00		May-23-18 14:00		May-23-18 14:00		May-23-18 14:00		May-23-18 14:00	
	Analyzed:	May-24-18 00:00		May-24-18 00:19		May-24-18 00:37		May-24-18 00:55		May-24-18 01:50		May-24-18 02:08	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		<15.0	15.0	16.2	15.0	<15.0	15.0	15.3	15.0	<15.0	15.0	15.6	15.0
Oil Range Hydrocarbons (ORO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Total TPH		<15.0	15.0	16.2	15.0	<15.0	15.0	15.3	15.0	<15.0	15.0	15.6	15.0

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Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 586492

LT Environmental, Inc., Arvada, CO

Project Name: Nash 46H

Project Id:
Contact: Adrian Baker
Project Location: NM

Date Received in Lab: Fri May-18-18 10:30 am
Report Date: 25-MAY-18
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	586492-013		586492-014		586492-015		586492-016		586492-017		586492-018	
	Field Id:	FS5		SW8		SW7		SW9		SW10		SW11	
	Depth:	3- ft		3- ft		3- ft		3- ft		3- ft		0.5- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	May-11-18 09:50		May-11-18 09:55		May-11-18 10:20		May-11-18 10:00		May-11-18 10:05		May-11-18 12:10	
BTEX by EPA 8021B	***Extracted:***	May-23-18 17:00		May-23-18 17:00		May-23-18 17:00		May-23-18 17:00		May-23-18 17:00		May-23-18 17:00	
	Analyzed:	May-24-18 08:08		May-24-18 08:45		May-24-18 09:03		May-24-18 09:21		May-24-18 09:39		May-24-18 09:58	
	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	<0.00200	0.00200	<0.00201	0.00201
Toluene		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201
Ethylbenzene		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201
m,p-Xylenes		<0.00398	0.00398	<0.00399	0.00399	<0.00401	0.00401	<0.00398	0.00398	<0.00399	0.00399	<0.00402	0.00402
o-Xylene		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201
Total Xylenes		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201
Total BTEX		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201
Inorganic Anions by EPA 300	***Extracted:***	May-22-18 08:30		May-22-18 08:30		May-22-18 08:30		May-22-18 13:00		May-22-18 13:00		May-22-18 13:00	
	Analyzed:	May-22-18 17:51		May-22-18 18:09		May-22-18 18:15		May-22-18 13:49		May-22-18 18:21		May-22-18 18:27	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		138	4.98	<4.97	4.97	74.4	4.93	5150	99.8	<4.99	4.99	<5.00	5.00
TPH by SW8015 Mod	***Extracted:***	May-23-18 14:00		May-23-18 14:00		May-23-18 14:00		May-23-18 14:00		May-23-18 14:00		May-23-18 14:00	
	Analyzed:	May-24-18 02:26		May-24-18 02:45		May-24-18 03:03		May-24-18 03:21		May-24-18 03:39		May-24-18 03:57	
	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	<14.9	14.9	<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		<15.0	15.0	15.8	14.9	<15.0	15.0	15.1	14.9	15.8	15.0	15.9	15.0
Oil Range Hydrocarbons (ORO)		<15.0	15.0	<14.9	14.9	<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0
Total TPH		<15.0	15.0	15.8	14.9	<15.0	15.0	15.1	14.9	15.8	15.0	15.9	15.0

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Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 586492

LT Environmental, Inc., Arvada, CO

Project Name: Nash 46H

Project Id:
Contact: Adrian Baker
Project Location: NM

Date Received in Lab: Fri May-18-18 10:30 am
Report Date: 25-MAY-18
Project Manager: Jessica Kramer

Analysis Requested							
	Lab Id:	586492-019					
	Field Id:	FS6					
	Depth:	0.5- ft					
	Matrix:	SOIL					
	Sampled:	May-11-18 14:30					
BTEX by EPA 8021B	***Extracted:***	May-23-18 17:00					
	Analyzed:	May-24-18 10:16					
	Units/RL:	mg/kg	RL				
Benzene		<0.00202	0.00202				
Toluene		<0.00202	0.00202				
Ethylbenzene		<0.00202	0.00202				
m,p-Xylenes		<0.00403	0.00403				
o-Xylene		<0.00202	0.00202				
Total Xylenes		<0.00202	0.00202				
Total BTEX		<0.00202	0.00202				
Inorganic Anions by EPA 300	***Extracted:***	May-22-18 13:00					
	Analyzed:	May-22-18 18:33					
	Units/RL:	mg/kg	RL				
Chloride		76.8	4.97				
TPH by SW8015 Mod	***Extracted:***	May-23-18 14:00					
	Analyzed:	May-24-18 04:16					
	Units/RL:	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0				
Diesel Range Organics (DRO)		<15.0	15.0				
Oil Range Hydrocarbons (ORO)		<15.0	15.0				
Total TPH		<15.0	15.0				

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Version: 1.%

Jessica Kramer
Project Assistant

Final 1.000

Certificate of Analytical Results 586492

LT Environmental, Inc., Arvada, CO

Nash 46H

Sample Id:	**SS1**	Matrix:	Soil	Date Received:	05.18.18 10.30
Lab Sample Id:	586492-001	Date Collected:	05.11.18 12.15	Sample Depth:	0.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.22.18 08.30	Basis:	Wet Weight
Seq Number:	3050914				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**29.2**	4.98	mg/kg	05.22.18 16.57		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.23.18 14.00	Basis:	Wet Weight
Seq Number:	3051200				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.24.18 07.30	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.24.18 07.30	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	05.24.18 07.30	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.24.18 07.30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	05.24.18 07.30	
o-Terphenyl	84-15-1	96	%	70-135	05.24.18 07.30	

Certificate of Analytical Results 586492

LT Environmental, Inc., Arvada, CO

Nash 46H

Sample Id:	**SS1**	Matrix:	Soil	Date Received:	05.18.18 10.30
Lab Sample Id:	586492-001	Date Collected:	05.11.18 12.15	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	05.23.18 16.00	Basis:	Wet Weight
Seq Number:	3051206				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	05.23.18 19.19	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	05.23.18 19.19	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	05.23.18 19.19	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	05.23.18 19.19	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	05.23.18 19.19	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	05.23.18 19.19	U	1
Total BTEX		<0.00201	0.00201	mg/kg	05.23.18 19.19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	84	%	70-130	05.23.18 19.19	
1,4-Difluorobenzene	540-36-3	106	%	70-130	05.23.18 19.19	

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LT Environmental, Inc., Arvada, CO

Nash 46H

Sample Id:	**FS1**	Matrix:	Soil	Date Received:	05.18.18 10.30
Lab Sample Id:	586492-002	Date Collected:	05.11.18 08.05	Sample Depth:	3 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.22.18 08.30	Basis:	Wet Weight
Seq Number:	3050914				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**32.1**	4.97	mg/kg	05.22.18 17.03		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.23.18 14.00	Basis:	Wet Weight
Seq Number:	3051200				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.23.18 22.29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.23.18 22.29	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	05.23.18 22.29	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.23.18 22.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	05.23.18 22.29	
o-Terphenyl	84-15-1	97	%	70-135	05.23.18 22.29	

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LT Environmental, Inc., Arvada, CO

Nash 46H

Sample Id:	**FS1**	Matrix:	Soil	Date Received:	05.18.18 10.30
Lab Sample Id:	586492-002	Date Collected:	05.11.18 08.05	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	05.23.18 16.00	Basis:	Wet Weight
Seq Number:	3051206				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.23.18 19.55	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.23.18 19.55	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.23.18 19.55	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	05.23.18 19.55	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.23.18 19.55	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.23.18 19.55	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.23.18 19.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	95	%	70-130	05.23.18 19.55	
1,4-Difluorobenzene	540-36-3	106	%	70-130	05.23.18 19.55	

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LT Environmental, Inc., Arvada, CO

Nash 46H

Sample Id:	**SW1**	Matrix:	Soil	Date Received:	05.18.18 10.30
Lab Sample Id:	586492-003	Date Collected:	05.11.18 09.00	Sample Depth:	3 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.22.18 08.30	Basis:	Wet Weight
Seq Number:	3050914				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4060**	98.0	mg/kg	05.22.18 11.02		20

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.23.18 14.00	Basis:	Wet Weight
Seq Number:	3051200				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.23.18 22.48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.23.18 22.48	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	05.23.18 22.48	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.23.18 22.48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	05.23.18 22.48	
o-Terphenyl	84-15-1	100	%	70-135	05.23.18 22.48	

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LT Environmental, Inc., Arvada, CO

Nash 46H

Sample Id:	**SW1**	Matrix:	Soil	Date Received:	05.18.18 10.30
Lab Sample Id:	586492-003	Date Collected:	05.11.18 09.00	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	05.23.18 16.00	Basis:	Wet Weight
Seq Number:	3051206				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	05.23.18 20.14	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	05.23.18 20.14	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	05.23.18 20.14	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	05.23.18 20.14	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	05.23.18 20.14	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	05.23.18 20.14	U	1
Total BTEX		<0.00198	0.00198	mg/kg	05.23.18 20.14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	70-130	05.23.18 20.14	
4-Bromofluorobenzene	460-00-4	97	%	70-130	05.23.18 20.14	

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LT Environmental, Inc., Arvada, CO

Nash 46H

Sample Id:	**SW2**	Matrix:	Soil	Date Received:	05.18.18 10.30
Lab Sample Id:	586492-004	Date Collected:	05.11.18 09.05	Sample Depth:	3 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.22.18 08.30	Basis:	Wet Weight
Seq Number:	3050914				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**93.3**	24.7	mg/kg	05.22.18 11.08		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.23.18 14.00	Basis:	Wet Weight
Seq Number:	3051200				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	05.23.18 23.06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	05.23.18 23.06	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<14.9	14.9	mg/kg	05.23.18 23.06	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	05.23.18 23.06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	05.23.18 23.06	
o-Terphenyl	84-15-1	101	%	70-135	05.23.18 23.06	

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LT Environmental, Inc., Arvada, CO

Nash 46H

Sample Id:	**SW2**	Matrix:	Soil	Date Received:	05.18.18 10.30
Lab Sample Id:	586492-004	Date Collected:	05.11.18 09.05	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	05.23.18 16.00	Basis:	Wet Weight
Seq Number:	3051206				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	05.23.18 20.32	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	05.23.18 20.32	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	05.23.18 20.32	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	05.23.18 20.32	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	05.23.18 20.32	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	05.23.18 20.32	U	1
Total BTEX		<0.00199	0.00199	mg/kg	05.23.18 20.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	98	%	70-130	05.23.18 20.32	
4-Bromofluorobenzene	460-00-4	107	%	70-130	05.23.18 20.32	

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LT Environmental, Inc., Arvada, CO

Nash 46H

Sample Id:	**SW3**	Matrix:	Soil	Date Received:	05.18.18 10.30
Lab Sample Id:	586492-005	Date Collected:	05.11.18 09.10	Sample Depth:	3 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.22.18 08.30	Basis:	Wet Weight
Seq Number:	3050914				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.90	4.90	mg/kg	05.22.18 17.09	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.23.18 14.00	Basis:	Wet Weight
Seq Number:	3051200				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	05.23.18 23.24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	05.23.18 23.24	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<14.9	14.9	mg/kg	05.23.18 23.24	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	05.23.18 23.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	05.23.18 23.24	
o-Terphenyl	84-15-1	99	%	70-135	05.23.18 23.24	

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LT Environmental, Inc., Arvada, CO

Nash 46H

Sample Id:	**SW3**	Matrix:	Soil	Date Received:	05.18.18 10.30
Lab Sample Id:	586492-005	Date Collected:	05.11.18 09.10	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	05.23.18 16.00	Basis:	Wet Weight
Seq Number:	3051206				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	05.23.18 20.50	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	05.23.18 20.50	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	05.23.18 20.50	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	05.23.18 20.50	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	05.23.18 20.50	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	05.23.18 20.50	U	1
Total BTEX		<0.00202	0.00202	mg/kg	05.23.18 20.50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	83	%	70-130	05.23.18 20.50	
4-Bromofluorobenzene	460-00-4	78	%	70-130	05.23.18 20.50	

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Nash 46H

Sample Id:	**SS2**	Matrix:	Soil	Date Received:	05.18.18 10.30
Lab Sample Id:	586492-006	Date Collected:	05.11.18 10.55	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.22.18 08.30	Basis:	Wet Weight
Seq Number:	3050914				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.91	4.91	mg/kg	05.22.18 17.15	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.23.18 14.00	Basis:	Wet Weight
Seq Number:	3051200				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.23.18 23.42	U	1
Diesel Range Organics (DRO)	C10C28DRO	**25.9**	15.0	mg/kg	05.23.18 23.42		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	05.23.18 23.42	U	1
Total TPH	PHC635	**25.9**	15.0	mg/kg	05.23.18 23.42		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	05.23.18 23.42	
o-Terphenyl	84-15-1	94	%	70-135	05.23.18 23.42	

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LT Environmental, Inc., Arvada, CO

Nash 46H

Sample Id:	**SS2**	Matrix:	Soil	Date Received:	05.18.18 10.30
Lab Sample Id:	586492-006	Date Collected:	05.11.18 10.55	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	05.23.18 16.00	Basis:	Wet Weight
Seq Number:	3051206				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.23.18 21.08	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.23.18 21.08	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.23.18 21.08	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	05.23.18 21.08	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.23.18 21.08	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.23.18 21.08	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.23.18 21.08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	109	%	70-130	05.23.18 21.08	
4-Bromofluorobenzene	460-00-4	106	%	70-130	05.23.18 21.08	

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Nash 46H

Sample Id:	**FS2**	Matrix:	Soil	Date Received:	05.18.18 10.30
Lab Sample Id:	586492-007	Date Collected:	05.11.18 13.40	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.22.18 08.30	Basis:	Wet Weight
Seq Number:	3050914				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**133**	4.94	mg/kg	05.22.18 17.21		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.23.18 14.00	Basis:	Wet Weight
Seq Number:	3051200				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.24.18 00.00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.24.18 00.00	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	05.24.18 00.00	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.24.18 00.00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	05.24.18 00.00	
o-Terphenyl	84-15-1	98	%	70-135	05.24.18 00.00	

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LT Environmental, Inc., Arvada, CO

Nash 46H

Sample Id:	**FS2**	Matrix:	Soil	Date Received:	05.18.18 10.30
Lab Sample Id:	586492-007	Date Collected:	05.11.18 13.40	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	05.23.18 16.00	Basis:	Wet Weight
Seq Number:	3051206				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	05.23.18 21.26	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	05.23.18 21.26	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	05.23.18 21.26	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	05.23.18 21.26	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	05.23.18 21.26	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	05.23.18 21.26	U	1
Total BTEX		<0.00199	0.00199	mg/kg	05.23.18 21.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	98	%	70-130	05.23.18 21.26	
1,4-Difluorobenzene	540-36-3	90	%	70-130	05.23.18 21.26	

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Nash 46H

Sample Id:	**SW4**	Matrix:	Soil	Date Received:	05.18.18 10.30
Lab Sample Id:	586492-008	Date Collected:	05.11.18 15.00	Sample Depth:	3 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.22.18 08.30	Basis:	Wet Weight
Seq Number:	3050914				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.00	5.00	mg/kg	05.22.18 17.27	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.23.18 14.00	Basis:	Wet Weight
Seq Number:	3051200				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.24.18 00.19	U	1
Diesel Range Organics (DRO)	C10C28DRO	**16.2**	15.0	mg/kg	05.24.18 00.19		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	05.24.18 00.19	U	1
Total TPH	PHC635	**16.2**	15.0	mg/kg	05.24.18 00.19		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	05.24.18 00.19	
o-Terphenyl	84-15-1	91	%	70-135	05.24.18 00.19	

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LT Environmental, Inc., Arvada, CO

Nash 46H

Sample Id:	**SW4**	Matrix:	Soil	Date Received:	05.18.18 10.30
Lab Sample Id:	586492-008	Date Collected:	05.11.18 15.00	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	05.23.18 16.00	Basis:	Wet Weight
Seq Number:	3051206				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.23.18 21.45	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.23.18 21.45	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.23.18 21.45	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	05.23.18 21.45	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.23.18 21.45	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.23.18 21.45	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.23.18 21.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	84	%	70-130	05.23.18 21.45	
4-Bromofluorobenzene	460-00-4	97	%	70-130	05.23.18 21.45	

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Nash 46H

Sample Id:	**FS3**	Matrix:	Soil	Date Received:	05.18.18 10.30
Lab Sample Id:	586492-009	Date Collected:	05.11.18 08.40	Sample Depth:	3 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.22.18 08.30	Basis:	Wet Weight
Seq Number:	3050914				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**351**	4.93	mg/kg	05.22.18 12.08		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.23.18 14.00	Basis:	Wet Weight
Seq Number:	3051200				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.24.18 00.37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.24.18 00.37	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	05.24.18 00.37	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.24.18 00.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	05.24.18 00.37	
o-Terphenyl	84-15-1	100	%	70-135	05.24.18 00.37	

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LT Environmental, Inc., Arvada, CO

Nash 46H

Sample Id:	**FS3**	Matrix:	Soil	Date Received:	05.18.18 10.30
Lab Sample Id:	586492-009	Date Collected:	05.11.18 08.40	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	05.23.18 17.00	Basis:	Wet Weight
Seq Number:	3051213				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	05.24.18 07.34	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	05.24.18 07.34	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	05.24.18 07.34	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	05.24.18 07.34	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	05.24.18 07.34	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	05.24.18 07.34	U	1
Total BTEX		<0.00202	0.00202	mg/kg	05.24.18 07.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	104	%	70-130	05.24.18 07.34	
4-Bromofluorobenzene	460-00-4	89	%	70-130	05.24.18 07.34	

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LT Environmental, Inc., Arvada, CO

Nash 46H

Sample Id:	**FS4**	Matrix:	Soil	Date Received:	05.18.18 10.30
Lab Sample Id:	586492-010	Date Collected:	05.11.18 10.00	Sample Depth:	2.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.22.18 08.30	Basis:	Wet Weight
Seq Number:	3050914				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**28.0**	4.98	mg/kg	05.22.18 17.33		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.23.18 14.00	Basis:	Wet Weight
Seq Number:	3051200				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.24.18 00.55	U	1
Diesel Range Organics (DRO)	C10C28DRO	**15.3**	15.0	mg/kg	05.24.18 00.55		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	05.24.18 00.55	U	1
Total TPH	PHC635	**15.3**	15.0	mg/kg	05.24.18 00.55		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	05.24.18 00.55	
o-Terphenyl	84-15-1	94	%	70-135	05.24.18 00.55	

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LT Environmental, Inc., Arvada, CO

Nash 46H

Sample Id:	**FS4**	Matrix:	Soil	Date Received:	05.18.18 10.30
Lab Sample Id:	586492-010	Date Collected:	05.11.18 10.00	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	05.23.18 17.00	Basis:	Wet Weight
Seq Number:	3051213				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.24.18 07.52	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.24.18 07.52	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.24.18 07.52	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	05.24.18 07.52	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.24.18 07.52	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.24.18 07.52	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.24.18 07.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	98	%	70-130	05.24.18 07.52	
4-Bromofluorobenzene	460-00-4	93	%	70-130	05.24.18 07.52	

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LT Environmental, Inc., Arvada, CO

Nash 46H

Sample Id:	**SW5**	Matrix:	Soil	Date Received:	05.18.18 10.30
Lab Sample Id:	586492-011	Date Collected:	05.11.18 12.30	Sample Depth:	3 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.22.18 08.30	Basis:	Wet Weight
Seq Number:	3050914				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**110**	4.90	mg/kg	05.22.18 17.39		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.23.18 14.00	Basis:	Wet Weight
Seq Number:	3051200				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.24.18 01.50	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.24.18 01.50	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	05.24.18 01.50	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.24.18 01.50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	05.24.18 01.50	
o-Terphenyl	84-15-1	96	%	70-135	05.24.18 01.50	

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LT Environmental, Inc., Arvada, CO

Nash 46H

Sample Id:	**SW5**	Matrix:	Soil	Date Received:	05.18.18 10.30
Lab Sample Id:	586492-011	Date Collected:	05.11.18 12.30	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	05.23.18 16.00	Basis:	Wet Weight
Seq Number:	3051206				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	05.23.18 22.03	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	05.23.18 22.03	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	05.23.18 22.03	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	05.23.18 22.03	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	05.23.18 22.03	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	05.23.18 22.03	U	1
Total BTEX		<0.00199	0.00199	mg/kg	05.23.18 22.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	107	%	70-130	05.23.18 22.03	
1,4-Difluorobenzene	540-36-3	87	%	70-130	05.23.18 22.03	

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LT Environmental, Inc., Arvada, CO

Nash 46H

Sample Id:	**SW6**	Matrix:	Soil	Date Received:	05.18.18 10.30
Lab Sample Id:	586492-012	Date Collected:	05.11.18 13.30	Sample Depth:	3 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.22.18 08.30	Basis:	Wet Weight
Seq Number:	3050914				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**65.4**	4.95	mg/kg	05.22.18 17.45		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.23.18 14.00	Basis:	Wet Weight
Seq Number:	3051200				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.24.18 02.08	U	1
Diesel Range Organics (DRO)	C10C28DRO	**15.6**	15.0	mg/kg	05.24.18 02.08		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	05.24.18 02.08	U	1
Total TPH	PHC635	**15.6**	15.0	mg/kg	05.24.18 02.08		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	05.24.18 02.08	
o-Terphenyl	84-15-1	97	%	70-135	05.24.18 02.08	

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LT Environmental, Inc., Arvada, CO

Nash 46H

Sample Id:	**SW6**	Matrix:	Soil	Date Received:	05.18.18 10.30
Lab Sample Id:	586492-012	Date Collected:	05.11.18 13.30	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	05.23.18 16.00	Basis:	Wet Weight
Seq Number:	3051206				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.23.18 22.56	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.23.18 22.56	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.23.18 22.56	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	05.23.18 22.56	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.23.18 22.56	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.23.18 22.56	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.23.18 22.56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	120	%	70-130	05.23.18 22.56	
1,4-Difluorobenzene	540-36-3	78	%	70-130	05.23.18 22.56	

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LT Environmental, Inc., Arvada, CO

Nash 46H

Sample Id:	**FS5**	Matrix:	Soil	Date Received:	05.18.18 10.30
Lab Sample Id:	586492-013	Date Collected:	05.11.18 09.50	Sample Depth:	3 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.22.18 08.30	Basis:	Wet Weight
Seq Number:	3050914				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**138**	4.98	mg/kg	05.22.18 17.51		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.23.18 14.00	Basis:	Wet Weight
Seq Number:	3051200				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.24.18 02.26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.24.18 02.26	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	05.24.18 02.26	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.24.18 02.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	05.24.18 02.26	
o-Terphenyl	84-15-1	100	%	70-135	05.24.18 02.26	

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LT Environmental, Inc., Arvada, CO

Nash 46H

Sample Id:	**FS5**	Matrix:	Soil	Date Received:	05.18.18 10.30
Lab Sample Id:	586492-013	Date Collected:	05.11.18 09.50	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	05.23.18 17.00	Basis:	Wet Weight
Seq Number:	3051213				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	05.24.18 08.08	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	05.24.18 08.08	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	05.24.18 08.08	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	05.24.18 08.08	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	05.24.18 08.08	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	05.24.18 08.08	U	1
Total BTEX		<0.00199	0.00199	mg/kg	05.24.18 08.08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	115	%	70-130	05.24.18 08.08	
1,4-Difluorobenzene	540-36-3	93	%	70-130	05.24.18 08.08	

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LT Environmental, Inc., Arvada, CO

Nash 46H

Sample Id:	**SW8**	Matrix:	Soil	Date Received:	05.18.18 10.30
Lab Sample Id:	586492-014	Date Collected:	05.11.18 09.55	Sample Depth:	3 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.22.18 08.30	Basis:	Wet Weight
Seq Number:	3050914				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.97	4.97	mg/kg	05.22.18 18.09	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.23.18 14.00	Basis:	Wet Weight
Seq Number:	3051200				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	05.24.18 02.45	U	1
Diesel Range Organics (DRO)	C10C28DRO	**15.8**	14.9	mg/kg	05.24.18 02.45		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<14.9	14.9	mg/kg	05.24.18 02.45	U	1
Total TPH	PHC635	**15.8**	14.9	mg/kg	05.24.18 02.45		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	05.24.18 02.45	
o-Terphenyl	84-15-1	99	%	70-135	05.24.18 02.45	

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LT Environmental, Inc., Arvada, CO

Nash 46H

Sample Id:	**SW8**	Matrix:	Soil	Date Received:	05.18.18 10.30
Lab Sample Id:	586492-014	Date Collected:	05.11.18 09.55	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	05.23.18 17.00	Basis:	Wet Weight
Seq Number:	3051213				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.24.18 08.45	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.24.18 08.45	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.24.18 08.45	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	05.24.18 08.45	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.24.18 08.45	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.24.18 08.45	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.24.18 08.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	84	%	70-130	05.24.18 08.45	
4-Bromofluorobenzene	460-00-4	95	%	70-130	05.24.18 08.45	

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Nash 46H

Sample Id:	**SW7**	Matrix:	Soil	Date Received:	05.18.18 10.30
Lab Sample Id:	586492-015	Date Collected:	05.11.18 10.20	Sample Depth:	3 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.22.18 08.30	Basis:	Wet Weight
Seq Number:	3050914				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**74.4**	4.93	mg/kg	05.22.18 18.15		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.23.18 14.00	Basis:	Wet Weight
Seq Number:	3051200				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.24.18 03.03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.24.18 03.03	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	05.24.18 03.03	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.24.18 03.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	05.24.18 03.03	
o-Terphenyl	84-15-1	96	%	70-135	05.24.18 03.03	

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Nash 46H

Sample Id:	**SW7**	Matrix:	Soil	Date Received:	05.18.18 10.30
Lab Sample Id:	586492-015	Date Collected:	05.11.18 10.20	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	05.23.18 17.00	Basis:	Wet Weight
Seq Number:	3051213				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.24.18 09.03	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.24.18 09.03	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.24.18 09.03	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	05.24.18 09.03	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.24.18 09.03	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.24.18 09.03	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.24.18 09.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	84	%	70-130	05.24.18 09.03	
4-Bromofluorobenzene	460-00-4	123	%	70-130	05.24.18 09.03	

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Nash 46H

Sample Id:	**SW9**	Matrix:	Soil	Date Received:	05.18.18 10.30
Lab Sample Id:	586492-016	Date Collected:	05.11.18 10.00	Sample Depth:	3 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.22.18 13.00	Basis:	Wet Weight
Seq Number:	3051032				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**5150**	99.8	mg/kg	05.22.18 13.49		20

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.23.18 14.00	Basis:	Wet Weight
Seq Number:	3051200				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	05.24.18 03.21	U	1
Diesel Range Organics (DRO)	C10C28DRO	**15.1**	14.9	mg/kg	05.24.18 03.21		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<14.9	14.9	mg/kg	05.24.18 03.21	U	1
Total TPH	PHC635	**15.1**	14.9	mg/kg	05.24.18 03.21		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	05.24.18 03.21	
o-Terphenyl	84-15-1	97	%	70-135	05.24.18 03.21	

Certificate of Analytical Results 586492

LT Environmental, Inc., Arvada, CO

Nash 46H

Sample Id:	**SW9**	Matrix:	Soil	Date Received:	05.18.18 10.30
Lab Sample Id:	586492-016	Date Collected:	05.11.18 10.00	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	05.23.18 17.00	Basis:	Wet Weight
Seq Number:	3051213				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	05.24.18 09.21	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	05.24.18 09.21	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	05.24.18 09.21	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	05.24.18 09.21	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	05.24.18 09.21	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	05.24.18 09.21	U	1
Total BTEX		<0.00199	0.00199	mg/kg	05.24.18 09.21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	83	%	70-130	05.24.18 09.21	
1,4-Difluorobenzene	540-36-3	90	%	70-130	05.24.18 09.21	

Certificate of Analytical Results 586492

LT Environmental, Inc., Arvada, CO

Nash 46H

Sample Id:	**SW10**	Matrix:	Soil	Date Received:	05.18.18 10.30
Lab Sample Id:	586492-017	Date Collected:	05.11.18 10.05	Sample Depth:	3 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.22.18 13.00	Basis:	Wet Weight
Seq Number:	3051032				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.99	4.99	mg/kg	05.22.18 18.21	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.23.18 14.00	Basis:	Wet Weight
Seq Number:	3051200				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.24.18 03.39	U	1
Diesel Range Organics (DRO)	C10C28DRO	**15.8**	15.0	mg/kg	05.24.18 03.39		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	05.24.18 03.39	U	1
Total TPH	PHC635	**15.8**	15.0	mg/kg	05.24.18 03.39		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	05.24.18 03.39	
o-Terphenyl	84-15-1	96	%	70-135	05.24.18 03.39	

Certificate of Analytical Results 586492

LT Environmental, Inc., Arvada, CO

Nash 46H

Sample Id:	**SW10**	Matrix:	Soil	Date Received:	05.18.18 10.30
Lab Sample Id:	586492-017	Date Collected:	05.11.18 10.05	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	05.23.18 17.00	Basis:	Wet Weight
Seq Number:	3051213				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.24.18 09.39	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.24.18 09.39	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.24.18 09.39	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	05.24.18 09.39	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.24.18 09.39	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.24.18 09.39	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.24.18 09.39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	102	%	70-130	05.24.18 09.39	
1,4-Difluorobenzene	540-36-3	93	%	70-130	05.24.18 09.39	

Certificate of Analytical Results 586492

LT Environmental, Inc., Arvada, CO

Nash 46H

Sample Id:	**SW11**	Matrix:	Soil	Date Received:	05.18.18 10.30
Lab Sample Id:	586492-018	Date Collected:	05.11.18 12.10	Sample Depth:	0.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.22.18 13.00	Basis:	Wet Weight
Seq Number:	3051032				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.00	5.00	mg/kg	05.22.18 18.27	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.23.18 14.00	Basis:	Wet Weight
Seq Number:	3051200				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.24.18 03.57	U	1
Diesel Range Organics (DRO)	C10C28DRO	**15.9**	15.0	mg/kg	05.24.18 03.57		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	05.24.18 03.57	U	1
Total TPH	PHC635	**15.9**	15.0	mg/kg	05.24.18 03.57		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	05.24.18 03.57	
o-Terphenyl	84-15-1	97	%	70-135	05.24.18 03.57	

Certificate of Analytical Results 586492

LT Environmental, Inc., Arvada, CO

Nash 46H

Sample Id:	**SW11**	Matrix:	Soil	Date Received:	05.18.18 10.30
Lab Sample Id:	586492-018	Date Collected:	05.11.18 12.10	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	05.23.18 17.00	Basis:	Wet Weight
Seq Number:	3051213				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	05.24.18 09.58	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	05.24.18 09.58	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	05.24.18 09.58	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	05.24.18 09.58	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	05.24.18 09.58	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	05.24.18 09.58	U	1
Total BTEX		<0.00201	0.00201	mg/kg	05.24.18 09.58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	94	%	70-130	05.24.18 09.58	
4-Bromofluorobenzene	460-00-4	98	%	70-130	05.24.18 09.58	

Certificate of Analytical Results 586492

LT Environmental, Inc., Arvada, CO

Nash 46H

Sample Id:	**FS6**	Matrix:	Soil	Date Received:	05.18.18 10.30
Lab Sample Id:	586492-019	Date Collected:	05.11.18 14.30	Sample Depth:	0.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.22.18 13.00	Basis:	Wet Weight
Seq Number:	3051032				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**76.8**	4.97	mg/kg	05.22.18 18.33		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.23.18 14.00	Basis:	Wet Weight
Seq Number:	3051200				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.24.18 04.16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.24.18 04.16	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	05.24.18 04.16	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.24.18 04.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	05.24.18 04.16	
o-Terphenyl	84-15-1	100	%	70-135	05.24.18 04.16	

Certificate of Analytical Results 586492

LT Environmental, Inc., Arvada, CO

Nash 46H

Sample Id:	**FS6**	Matrix:	Soil	Date Received:	05.18.18 10.30
Lab Sample Id:	586492-019	Date Collected:	05.11.18 14.30	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	05.23.18 17.00	Basis:	Wet Weight
Seq Number:	3051213				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	05.24.18 10.16	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	05.24.18 10.16	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	05.24.18 10.16	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	05.24.18 10.16	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	05.24.18 10.16	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	05.24.18 10.16	U	1
Total BTEX		<0.00202	0.00202	mg/kg	05.24.18 10.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	88	%	70-130	05.24.18 10.16	
1,4-Difluorobenzene	540-36-3	82	%	70-130	05.24.18 10.16	

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 586492

LT Environmental, Inc.

Nash 46H

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3050914 — Matrix: Solid — Date Prep: 05.22.18
MB Sample Id: 7645182-1-BLK — LCS Sample Id: 7645182-1-BKS — LCSD Sample Id: 7645182-1-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	244	98	244	98	90-110	0	20	mg/kg	05.22.18 09:50	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3051032 — Matrix: Solid — Date Prep: 05.22.18
MB Sample Id: 7645260-1-BLK — LCS Sample Id: 7645260-1-BKS — LCSD Sample Id: 7645260-1-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	231	92	231	92	90-110	0	20	mg/kg	05.22.18 13:14	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3050914 — Matrix: Soil — Date Prep: 05.22.18
Parent Sample Id: 586658-010 — MS Sample Id: 586658-010 S — MSD Sample Id: 586658-010 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	7.32	250	262	102	262	102	90-110	0	20	mg/kg	05.22.18 10:08	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3050914 — Matrix: Soil — Date Prep: 05.22.18
Parent Sample Id: 586658-011 — MS Sample Id: 586658-011 S — MSD Sample Id: 586658-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	218	87	227	91	90-110	4	20	mg/kg	05.22.18 11:32	X

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3051032 — Matrix: Soil — Date Prep: 05.22.18
Parent Sample Id: 586542-001 — MS Sample Id: 586542-001 S — MSD Sample Id: 586542-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<4.94	247	237	96	236	96	90-110	0	20	mg/kg	05.22.18 13:37	

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

QC Summary 586492

LT Environmental, Inc.

Nash 46H

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3051032 Matrix: Soil Date Prep: 05.22.18
Parent Sample Id: 586542-002 MS Sample Id: 586542-002 S MSD Sample Id: 586542-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<4.92	246	235	96	223	91	90-110	5	20	mg/kg	05.22.18 15:01	

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3051200 Matrix: Solid Date Prep: 05.23.18
MB Sample Id: 7645325-1-BLK LCS Sample Id: 7645325-1-BKS LCSD Sample Id: 7645325-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	882	88	892	89	70-135	1	20	mg/kg	05.23.18 20:58	
Diesel Range Organics (DRO)	<15.0	1000	1030	103	1020	102	70-135	1	20	mg/kg	05.23.18 20:58	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	104		126		129		70-135	%	05.23.18 20:58
o-Terphenyl	109		114		114		70-135	%	05.23.18 20:58

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3051200 Matrix: Soil Date Prep: 05.23.18
Parent Sample Id: 586492-001 MS Sample Id: 586492-001 S MSD Sample Id: 586492-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	999	994	99	952	95	70-135	4	20	mg/kg	05.23.18 21:53	
Diesel Range Organics (DRO)	<15.0	999	1120	112	1130	113	70-135	1	20	mg/kg	05.23.18 21:53	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	118		124		70-135	%	05.23.18 21:53
o-Terphenyl	113		111		70-135	%	05.23.18 21:53

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 586492

LT Environmental, Inc.

Nash 46H

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3051206 — Matrix: Solid — Date Prep: 05.23.18
MB Sample Id: 7645341-1-BLK — LCS Sample Id: 7645341-1-BKS — LCSD Sample Id: 7645341-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.0886	88	0.0965	97	70-130	9	35	mg/kg	05.23.18 17:32	
Toluene	<0.00202	0.101	0.0879	87	0.0967	97	70-130	10	35	mg/kg	05.23.18 17:32	
Ethylbenzene	<0.00202	0.101	0.0905	90	0.0988	99	70-130	9	35	mg/kg	05.23.18 17:32	
m,p-Xylenes	<0.00403	0.202	0.192	95	0.207	103	70-130	8	35	mg/kg	05.23.18 17:32	
o-Xylene	<0.00202	0.101	0.0940	93	0.104	104	70-130	10	35	mg/kg	05.23.18 17:32	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	86		83		93		70-130	%	05.23.18 17:32
4-Bromofluorobenzene	98		84		89		70-130	%	05.23.18 17:32

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3051213 — Matrix: Solid — Date Prep: 05.23.18
MB Sample Id: 7645343-1-BLK — LCS Sample Id: 7645343-1-BKS — LCSD Sample Id: 7645343-1-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	0.0829	83	0.108	108	70-130	26	35	mg/kg	05.24.18 02:11	
Toluene	<0.00200	0.100	0.0787	79	0.102	102	70-130	26	35	mg/kg	05.24.18 02:11	
Ethylbenzene	<0.00200	0.100	0.0805	81	0.106	106	70-130	27	35	mg/kg	05.24.18 02:11	
m,p-Xylenes	<0.00401	0.200	0.171	86	0.223	112	70-130	26	35	mg/kg	05.24.18 02:11	
o-Xylene	<0.00200	0.100	0.0889	89	0.112	112	70-130	23	35	mg/kg	05.24.18 02:11	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	90		88		112		70-130	%	05.24.18 02:11
4-Bromofluorobenzene	76		89		117		70-130	%	05.24.18 02:11

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3051206 — Matrix: Soil — Date Prep: 05.23.18
Parent Sample Id: 586492-001 — MS Sample Id: 586492-001 S — MSD Sample Id: 586492-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0762	76	0.0695	69	70-130	9	35	mg/kg	05.23.18 18:08	X
Toluene	<0.00200	0.100	0.0745	75	0.0670	66	70-130	11	35	mg/kg	05.23.18 18:08	X
Ethylbenzene	<0.00200	0.100	0.0737	74	0.0687	68	70-130	7	35	mg/kg	05.23.18 18:08	X
m,p-Xylenes	<0.00401	0.200	0.154	77	0.144	72	70-130	7	35	mg/kg	05.23.18 18:08	
o-Xylene	<0.00200	0.100	0.0815	82	0.0778	77	70-130	5	35	mg/kg	05.23.18 18:08	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	90		105		70-130	%	05.23.18 18:08
4-Bromofluorobenzene	101		104		70-130	%	05.23.18 18:08

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

QC Summary 586492

LT Environmental, Inc.

Nash 46H

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

Seq Number: 3051213 Matrix: Soil Date Prep: 05.23.18

Parent Sample Id: 586499-002 MS Sample Id: 586499-002 S MSD Sample Id: 586499-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0620	62	0.0645	65	70-130	4	35	mg/kg	05.24.18 02:47	X
Toluene	<0.00200	0.100	0.0549	55	0.0600	60	70-130	9	35	mg/kg	05.24.18 02:47	X
Ethylbenzene	<0.00200	0.100	0.0474	47	0.0564	57	70-130	17	35	mg/kg	05.24.18 02:47	X
m,p-Xylenes	<0.00401	0.200	0.0952	48	0.116	58	70-130	20	35	mg/kg	05.24.18 02:47	X
o-Xylene	<0.00200	0.100	0.0486	49	0.0606	61	70-130	22	35	mg/kg	05.24.18 02:47	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	90		98		70-130	%	05.24.18 02:47
4-Bromofluorobenzene	89		80		70-130	%	05.24.18 02:47

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

XENCO LABORATORIES

Setting the Standard since 1990

Stafford,Texas (281-240-4200)

Dallas Texas (214-902-0300)

San Antonio, Texas (210-509-3334)

Midland, Texas (432-704-5251)

Phoenix, Arizona (480-355-0900)

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CHAIN OF CUSTODY

Page 1 Of 2

Xenco Quote #

Xenco Job # 586492

Client / Reporting Information

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

Company Address: 3300 North "A" Street, Building 1 Unit 108 Midland Tx 79705

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

Project Contact: Adrian Baker

Samplers's Name Lynda Laumbach

Project Information

Project Name/Number: Nash 46 H

Project Location:

Invoice To: XTO ENERGY - Kyle Littrell

PO Number:

Analytical Information

Matrix Codes

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

No.	Field ID / Point of Collection	Collection: Sample Depth	Date	Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	BTEX 8021 (only BTEX)	TPH (MRO, DRO, GRO) 8015	Chloride (300.0)	Field Comments
1	SS 1	0.5'	5/14/18	12:15	S	1								X	X	X	X	NE exc.
2	FS 1	3'	5/14/18	8:05	S	1								X	X	X	X	South wall, ~~blocked~~
3	SW 1	3'	"	9:00	S	1								X	X	X	X	South
4	SW 2	3'	"	9:05	S	1								X	X	X	X	East
5	SW 3	3'	"	9:10	S	1								X	X	X	X	North
6	SS 2	2'	"	10:55	S	1								X	X	X	X	East exc. N
7	FS 2	2'	"	13:40	S	1								X	X	X	X	mid/South exc.
8	SW 4	3'	"	15:00	S	1								X	X	X	X	west wall
9	FS 3	3'	5/15/18	8:40	S	1								X	X	X	X	west floor south exc.
10	FS 4	2.5'	5/15/18	10:00	S	1								X	X	X	X	

Turnaround Time (Business days)

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

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

Data Deliverable Information

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

Notes:

FED-EX / UPS: Tracking #

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

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	Lynda Laumbach	5/16/2018 17:20	Chris Pollard			
2					5/17 15:30	
3	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
4						5/18/18 10:30
5	Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable	On Ice: X

Cooler Temp. 4.8 R 0.0 Thermo. Corr. Factor

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

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CHAIN OF CUSTODY

Page 2 Of 2

Xenco Quote #

Xenco Job # 586492

Client / Reporting Information

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

Company Address: 3300 North "A" Street, Building 1 unit 103 Midland Tx, 79705

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

Project Contact:

Samplers's Name Lynda Lambach

Project Information

Project Name/Number: Nash 46H

Project Location:

Invoice To: XTO Energy - Kyle Littrell

PO Number:

Analytical Information

Matrix Codes

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GW =Ground Water
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A = Air

No.	Field ID / Point of Collection	Collection: Sample Depth	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	BTEX 8021 (only BTEX)	TPH (MRO, DRO, GRO) 8015	Chloride (300.0)	Field Comments
1	SW5	3'	5/15/18	12:30	S	1								X	X	X	X	
2	SW6	3'	5/15/18	13:30	S	1								X	X	X	X	
3	FS5	3'	5/16/18	9:50	S	1								X	X	X	X	
4	SW8	3'		9:55	S	1								X	X	X	X	
5	SW7	3'		10:20	S	1								X	X	X	X	N - East of pump
6	SW9	3'		10:00	S	1								X	X	X	X	W - west exc.
7	SW10	3'		10:05	S	1								X	X	X	X	W - east
8	SW11	3'		12:10	S	1								X	X	X	X	South - east exc.
9	FS6	3'		14:30	S	1								X	X	X	X	East, east
10																		west exc.

Turnaround Time (Business days)

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

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

Data Deliverable Information

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

Notes:

FED-EX / UPS: Tracking #

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

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	Lynda Lambach	5/16/2018 17:20	Chad Pelton			
2					5/17 15:30	5/18/18 10:30
3	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
4						
5	Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable	On Ice: X

Cooler Temp. 4.8 R8 Thermo. Corr. Factor 0.0

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

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 05/18/2018 10:30:00 AM

Work Order #: 586492

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)?	4.8	
#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**	TPH received in bulk container
#13 Samples properly preserved?	**Yes**	
#14 Sample container(s) intact?	**Yes**	
#15 Sufficient sample amount for indicated test(s)?	**Yes**	
#16 All samples received within hold time?	**Yes**	
#17 Subcontract of sample(s)?	**No**	
#18 Water VOC samples have zero headspace?	**N/A**	

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

Analyst: PH Device/Lot#:

Checklist completed by: Katie Lowe Date: 05/18/2018

Checklist reviewed by: Jessica Kramer Date: 05/18/2018

Jessica Kramer

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

COMMENTS

Action 199130

COMMENTS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 199130
	Action Type: [IM-SD] Incident File Support Doc (ENV) (IM-BNF)

COMMENTS

Created By	Comment	Comment Date
amaxwell	Historical document review.	3/21/2023

District I
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Action 199130

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amaxwell	None	3/21/2023