A proud member of WSP

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

June 10, 2020

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

RE: Closure Request
North Indian Flats 24 Federal 15
Remediation Permit Number 2RP-3518
Eddy County, New Mexico

Dear Mr. Billings:

LT Environmental, Inc. (LTE), on behalf of XTO Energy, Inc. (XTO), presents the following Closure Request report detailing site assessment and soil sampling activities at the North Indian Flats 24 Federal 15 (Site) in Unit D, Section 24, Township 21 South, Range 28 East, in Eddy County, New Mexico (Figure 1). The purpose of the site assessment and soil sampling activities was to assess for the presence or absence of impacted to soil resulting from a historical release of crude oil at the Site. Based on visual observations, field screening activities, and soil sample laboratory analytical results, XTO is submitting this Closure Request, and requesting no further action for Remediation Permit (RP) Number 2RP-3518.

The release is included in the Compliance Agreement for Remediation for Historical Releases (Compliance Agreement) between XTO and the New Mexico Oil Conservation Division (NMOCD) effective November 13, 2018. The purpose of the Compliance Agreement is to ensure reportable releases that occurred prior to August 14, 2018, where XTO is responsible for the corrective action, comply with Title 19, Chapter 15, Part 29 (19.15.29) of the New Mexico Administrative Code (NMAC) as amended on August 14, 2018. The release is categorized as a Tier IV site in the Compliance Agreement, meaning the release occurred prior to August 14, 2018, the effective date of 19.15.29 NMAC; however, remediation was ongoing.

RELEASE BACKGROUND

On January 13, 2016, the stuffing box on the wellhead failed, causing 5 barrels (bbls) of crude oil to release onto the surface of the well pad. A vacuum truck recovered approximately 3 bbls of free-standing fluid. The release affected approximately 1,284 square feet of the well pad east and southeast of the wellhead. XTO reported the release to the NMOCD on a Release Notification and Corrective Action Form C-141 on January 25, 2016 and was assigned RP Number 2RP-3518 (Attachment 1).

SITE CHARACTERIZATION

LTE characterized the Site according to Table 1, *Closure Criteria for Soils Impacted by a Release*, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest water well data. The closest permitted water well with depth to water data is United States Geological Survey (USGS) well 322850104014201, located approximately 6,265 feet northeast of the Site. The water well has a depth to groundwater of approximately 134 feet bgs and a total depth of 160 feet bgs. Ground surface elevation at the water well location is 3,294 feet above mean sea level (AMSL), which is approximately 9 feet lower in elevation than the Site. The closest continuously flowing water or significant watercourse to the Site is an intermittent riverine, located approximately 3,128 feet northwest of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is located in a medium-potential karst area.

CLOSURE CRITERIA

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

- Benzene: 10 milligrams per kilogram (mg/kg);
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg;
- Total petroleum hydrocarbons (TPH): 2,500 mg/kg;
- TPH-gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg;
- Chloride: 20,000 mg/kg.

SITE ASSESSMENT AND SOIL SAMPLING ACTIVITIES

During January 2018, preliminary assessment of the release was conducted by Basin Environmental Service Technologies (Basin), an environmental consulting firm that is no longer in operation. Basin personnel documented the visible release area and collected soil samples from three sample points (SP1 through SP3) within the release extent. Soil samples were collected from the ground surface and 1 foot bgs at each of the three sample points. Laboratory analytical results for the soil samples indicated that benzene, BTEX, GRO/DRO, TPH, and chloride concentrations were compliant with the current Closure Criteria. Chloride concentrations exceeded 600 mg/kg (the standard applied to all sites at the time) in the surface samples collected from sample points SP1 and SP3. Chloride concentrations were below 600 mg/kg in the subsequent samples collected at 1 foot bgs. Basin submitted a Corrective Action Plan (CAP) to

the NMOCD proposing soil excavation based on the results of the preliminary assessment activities. NMOCD approved the CAP via email on April 3, 2018. The CAP and historical documentation including site photographs, release extent map, and soil sample laboratory analytical results are included in Attachment 2.

Due to the absence of follow-up confirmation soil sampling records since the 2018 CAP submittal, LTE personnel conducted additional site assessment and soil sampling activities to confirm that the current Closure Criteria requirements were met.

During June 2020, LTE personnel was at the Site to complete site assessment activities. The surface hydrocarbon staining identified in Basin's release documentation was no longer visible, which implies execution of the CAP was likely completed. Boreholes were advanced at five locations within the documented release area to assess for the presence or absence of impacted soil. Boreholes BH01 through BH05 were advanced to a depth of 3 feet bgs. Delineation soil samples were collected from each borehole from depths ranging from 0.5 feet to 3 feet bgs. Soil from the boreholes was field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photoionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. Field screening results and observations for the boreholes were logged on lithologic/soil sampling logs, which are included in Attachment 3. The delineation soil sample locations are depicted on Figure 2. Photographic documentation was conducted during the Site visit. Photographs are included in Attachment 4.

The delineation soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were shipped at or below 4 degrees Celsius (°C) under strict chain-of-custody (COC) procedures to Xenco Laboratories (Xenco) in Carlsbad, New Mexico, for analysis of BTEX following United States Environmental Protection Agency (USEPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following USEPA Method 8015M/D; and chloride following USEPA Method 300.0.

ANALYTICAL RESULTS

Laboratory analytical results for the delineation soil samples, collected from boreholes BH01 through BH05 indicated that benzene, BTEX, GRO/DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Attachment 5.

CLOSURE REQUEST

Delineation soil samples were collected from five boreholes (BH01 through BH05) within the historical release extent, to assess for the presence or absence of soil impacts as a result of the January 13, 2016 crude oil release at the Site. Laboratory analytical results indicated that

benzene, BTEX, GRO/DRO, TPH, and chloride concentrations were compliant with the Closure Criteria in all delineation soil samples. Additionally, no visible indications of the release or petroleum hydrocarbon odors were identified.

Based on initial response efforts, absence of elevated field screening results, and soil sample laboratory analytical results compliant with the Closure Criteria, no further remediation was required. XTO requests NFA for this release event and requests closure of RP Number 2RP-3518. An updated NMOCD Form C-141 is included in Attachment 1.

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

Sincerely,

LT ENVIRONMENTAL, INC.

Aimee Cole
Project Environmental Scientist

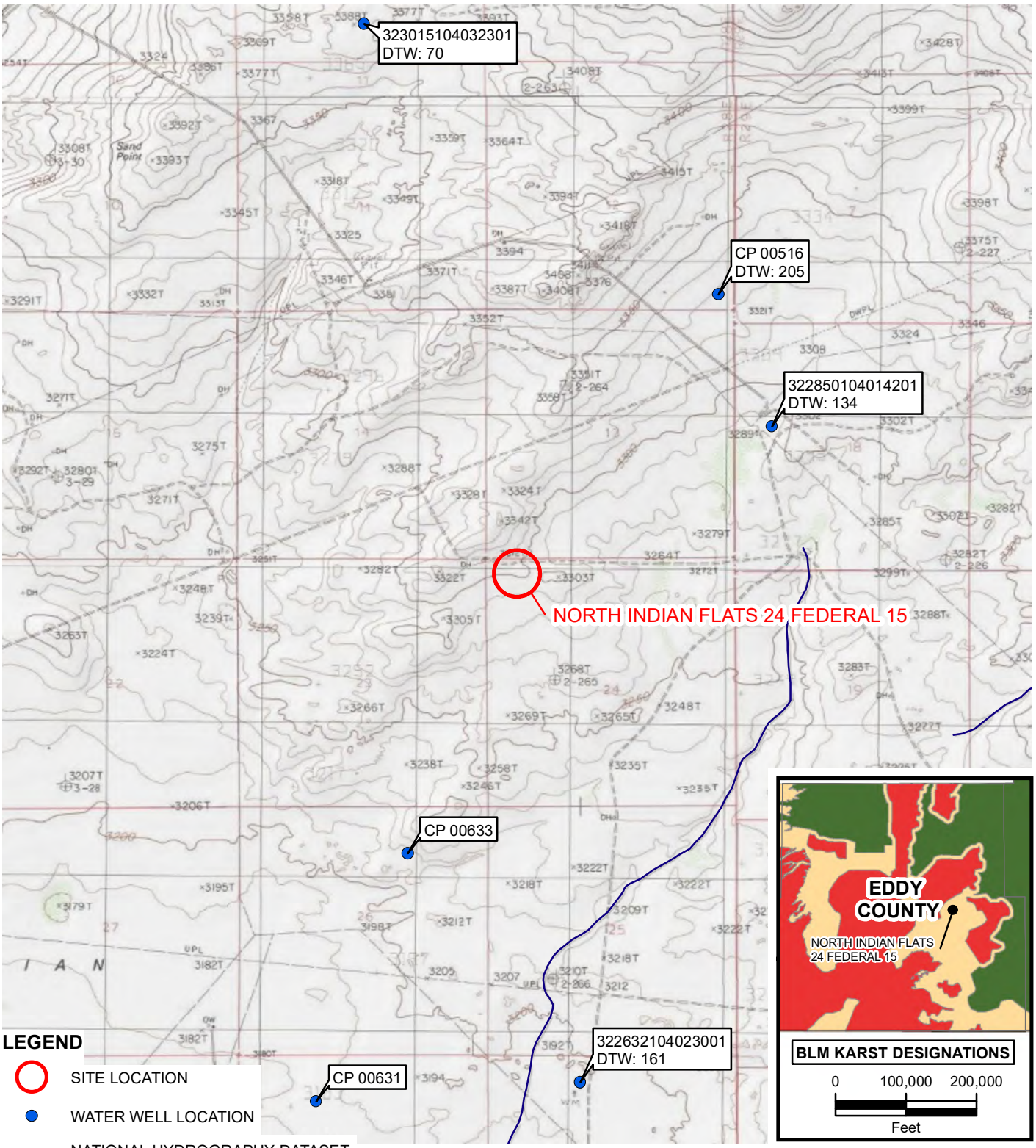
Ashley L. Ager, P.G.
Senior Geologist

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

Attachments:

Figure 1	Site Location Map
Figure 2	Delineation Soil Sample Locations
Table 1	Soil Analytical Results
Attachment 1	Initial/Final NMOCD Form C-141 (2RP-3518)
Attachment 2	Historical Documentation
Attachment 3	Lithologic / Soil Sample Logs
Attachment 4	Photographic Log
Attachment 5	Laboratory Analytical Reports

FIGURES



LEGEND

- SITE LOCATION
- WATER WELL LOCATION
- NATIONAL HYDROGRAPHY DATASET SURFACE WATER FEATURE
- NATIONAL WETLANDS INVENTORY SURFACE WATER FEATURE
- LOW KARST
- MEDIUM KARST
- HIGH KARST

NOTE: REMEDIATION PERMIT NUMBER 2RP-3518
DTW: DEPTH TO WATER IN FEET
BLM: BUREAU OF LAND MANAGEMENT

FIGURE 1
SITE LOCATION MAP
NORTH INDIAN FLATS 24 FEDERAL 15
UNIT D SEC 24 T21S R28E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012920082_NORTH INDIAN FLATS 24 FEDERAL 15\012920082_FIG01_SL_RECEPTOR_3518.mxd

LEGEND

IMAGE COURTESY OF ESRI

- RELEASE LOCATION
- DELINEATION SOIL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- ELECTRIC LINE
- HISTORICAL RELEASE EXTENT

0 50 100
Feet

N

NOTE: REMEDIATION PERMIT NUMBER 2RP-3518
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

FIGURE 2
DELINEATION SOIL SAMPLE LOCATIONS
NORTH INDIAN FLATS 24 FEDERAL 15
UNIT D SEC 24 T21S R28E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012920082_NORTH INDIAN FLATS 24 FEDERAL 15\012920082_FIG02_DELINEATION_3518.mxd

TABLES

TABLE 1
SOIL ANALYTICAL RESULTS

NORTH INDIAN FLATS 24 FEDERAL 15
REMEDIATION PERMIT NUMBER 2RP-3518
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

Sample Name	Sample Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria			**10**	NE	NE	NE	**50**	NE	NE	NE	**1,000**	**2,500**	**20,000**
BH01	0.5	6/3/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.2	<50.2	<50.2	<50.2	<50.2	913
BH01A	3.0	6/5/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.3	<50.3	<50.3	<50.3	<50.3	762
BH02	0.5	6/3/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<49.9	<49.9	<49.9	<49.9	<49.9	86.7
BH02A	3.0	6/5/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.1	<50.1	<50.1	<50.1	<50.1	122
BH03	0.5	6/3/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.3	<50.3	<50.3	<50.3	<50.3	19.1
BH03A	2.0	6/3/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.3	<50.3	<50.3	<50.3	<50.3	71.1
BH03B	3.0	6/5/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.2	<50.2	<50.2	<50.2	<50.2	64.3
BH04	0.5	6/3/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.1	<50.1	<50.1	<50.1	<50.1	33.9
BH04A	2.0	6/5/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.8	<49.8	<49.8	<49.8	<49.8	22.6
BH05	1.0	6/3/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	19
BH05A	3.0	6/3/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	111

Notes:

bgs - below ground surface
BTEX - benzene, toluene, ethylbenzene, and total xylenes
DRO - diesel range organics
GRO - gasoline range organics
mg/kg - milligrams per kilogram
MRO - motor oil range organics
NMAC - New Mexico Administrative Code
NMOCD - New Mexico Oil Conservation Division
NE - not established
TPH - total petroleum hydrocarbons
Bold - indicates result exceeds the applicable regulatory standard
< - indicates result is below laboratory reporting limits
Table 1 - closure criteria for soils impacted by a release per NMAC 19.15.29 August 2018

A proud member of WSP

ATTACHMENT 1: INITIAL/FINAL NMOCD FORM C-141 (2RP-3518)

NM OIL CONSERVATION
ARTESIA DISTRICT
JAN 26 2016
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

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

nAB1602732604 2RP-3518

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: BOPCO, L.P. 260737	Contact: Amy Ruth
Address: 522 W. Mermod, Suite 704 Carlsbad, N.M. 88220	Telephone No. 575-887-7329
Facility Name: North Indian Flats 24 Federal #015	Facility Type: Exploration and Production

Surface Owner: Federal	Mineral Owner: Federal	API No. 30-015-39137

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
D	24	21S	28E	330	North	660	West	Eddy

Latitude 32.472117° **Longitude** -104.046462°

NATURE OF RELEASE

Type of Release Crude Oil	Volume of Release 5 bbls	Volume Recovered 3 bbls
Source of Release Stuffing Box	Date and Hour of Occurrence 1/13/2016 time unknown	Date and Hour of Discovery 1/13/2016 10 am
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom? N/A	
By Whom? N/A	Date and Hour N/A	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	

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

Describe Cause of Problem and Remedial Action Taken.*
Stuffing box packing on the well head failed. The e-pot on the pumping unit shut down the well and the packing was replaced.

Describe Area Affected and Cleanup Action Taken.*
The leak affected 1284 ft² of well pad and vacuum trucks recovered standing fluids.

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

Signature:

Printed Name: Amy C. Ruth

Title: EHS Remediation Specialist

E-mail Address: ACRuth@basspet.com

Date: 1/25/2016 Phone: 432-661-0571

OIL CONSERVATION DIVISION

Approved by Environmental Specialist: Signed By

Approval Date: 1/26/16 Expiration Date: N/A

Conditions of Approval: Attached ☐

Remediation per O.C.D. Rules & Guidelines
SUBMIT REMEDIATION PROPOSAL NO LATER THAN: 2/27/16

2RP-3518

* Attach Additional Sheets If Necessary

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	
District RP	2RP-3518
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: XTO Energy, Inc	OGRID: 5380
Contact Name: Kyle Littrell	Contact Telephone: (432)-221-7331
Contact email: Kyle_Littrell@xtoenergy.com	Incident #: 2RP-3518
Contact mailing address: 522 W. Mermod, Suite 704 Carlsbad, NM 88220	

Location of Release Source

Latitude 32.472117 Longitude -104.046462
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: North Indian Flats 24 Federal 015	Site Type: Production Facility
Date Release Discovered: 1-13-2016	API# *(if applicable):* 30-015-39137

Unit Letter	Section	Township	Range	County
D	24	21S	28E	Eddy

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

Nature and Volume of Release

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

☒ Crude Oil	Volume Released (bbls): 5	Volume Recovered (bbls): 3
☐ Produced Water	Volume Released (bbls):	Volume Recovered (bbls):
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release
The stuffing box packing on the well head failed.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	2RP-3518
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ No	If YES, for what reason(s) does the responsible party consider this a major release? Release volume was less than 25 bbls.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

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

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

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

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

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

Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature: _____ Date: 6-10-2020

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

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	2RP-3518
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	2RP-3518
Facility ID	
Application ID	

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

Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature: Date: 6-10-2020

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

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	2RP-3518
Facility ID	
Application ID	

Closure

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

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

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

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

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

☒ Description of remediation activities

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

Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature: _____ Date: 6-10-2020

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

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: Brittany Hall Date: 10/6/2022

Printed Name: Brittany Hall Title: Environmental Specialist

ATTACHMENT 2: HISTORICAL DOCUMENTATION

PO Box 301 | Lovington, NM 88260 | Phone 575.396.2378

February 2, 2017

Attn. Mike Bratcher
NMOCD, District 2
811 South First Street
Artesia, NM 88210

RE: **Corrective Action Plan**
XTO Energy
North Indian Flats 24 Federal 15
UL/D Sec24, T21S R28E
32.472117, -104.046462
NMOCD Reference # 2RP – 3518

Mr. Bratcher:

XTO Energy (XTO) has retained Basin Environmental Service Technologies (Basin) to address potential environmental concerns at the above-referenced site.

Background and Previous Work

The site is located approximately eleven and four tenths (11.4) miles northeast of Carlsbad, New Mexico at Unit Letter D of Section 24 in Township 21 South of Range 28 East. (See Figure 1) This site is located in an area where groundwater can be anticipated to be found at a depth of over two-hundred feet (200') below ground surface (bgs) (See Figure 2).

On January 13th, 2016, XTO discovered a release of approximately five (5) barrels (bbls) of crude oil when the stuffing box packing on the well head failed. The pumping unit was shut down and packing was replaced. An estimated three (3) bbls of crude were recovered. An estimated one-thousand, two-hundred eighty-four square feet (1,284 ft^2) of the gypsum (caliche) pad area was impacted. The New Mexico Oil Conservation Division (NMOCD) was notified of the release on January 26th, 2016. An initial Release Notification and Corrective Action form (C-141) was submitted to NMOCD on September 18th, 2017, for approval.

Basin personnel were on site beginning January 4th, 2017, to begin delineation activities. Three (3) soil sample points were established. The soil sample points, (SP 1, SP 2, SP 3) were advanced to one foot bgs. Discrete soil samples were retrieved at the surface and at one foot. The discrete soil samples were delivered to an NMOCD approved laboratory for concentration analysis of Benzene, Toluene, Ethyl-benzene, Xylenes (BTEX), Gasoline Range Organics (GRO), Diesel Range Organics (DRO), Oil Range Organics (ORO) [Total Petroleum Hydrocarbons (TPH)] and chloride concentrations. (See Soil Chemistry Table).

Corrective Action Plan

The impacted area will be excavated to one foot bgs between SP 1 and SP 3 as shown on Figure 2. The contaminated soils will be removed and disposed of at an NMOCD approved facility. Floor soil samples will be retrieved at the completion of remediation to ensure the impacted soils have been removed from the release area. The excavated area will then be backfilled with clean, imported, non-impacted soils and contoured to the surrounding area.

The supporting documentation for this Corrective Action Plan is attached.

Basin appreciates the opportunity to work with you on this project. Please contact me if you have any questions or wish to discuss the site.

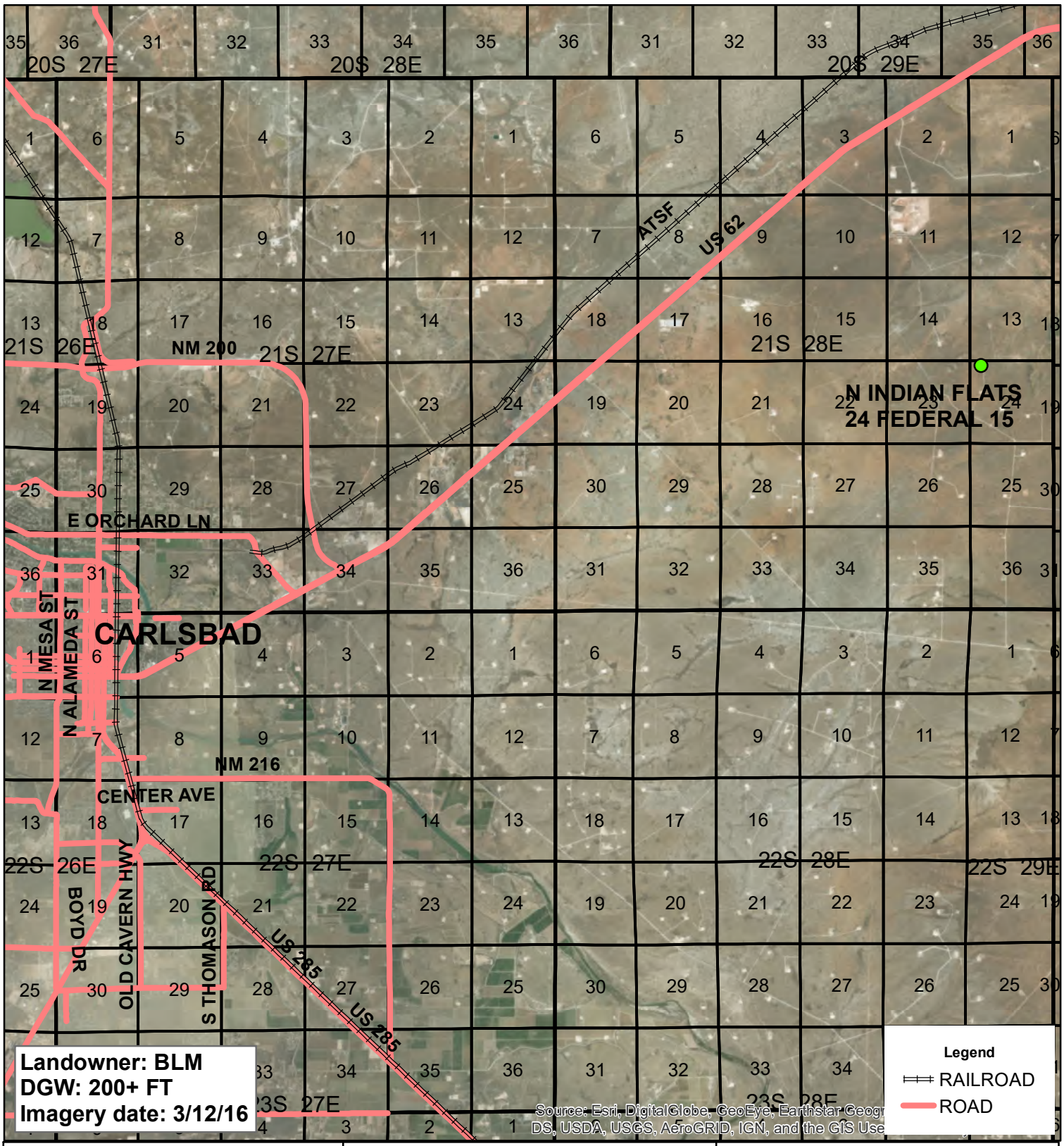
Sincerely,

Robbie Runnels
Project Manager
Basin Environmental Service Technologies
(575) 396-2378

Attachments:

Figure 1 – Site Location Map
Figure 2 – Depth to Groundwater Map
Figure 3 - Area Sampling and Proposed Excavation Map
Figure 4 – Soil Chemistry Table
Appendix A – Photo Documentation
Appendix B – Initial C-141
Appendix C - Analytical Report

Geographic Location



Basin Environmental Effective Solutions Service Technologies

XTO
NORTH INDIAN FLATS 24 FEDERAL 15

UL D SECTION 24
T-21-S R-28-E
EDDY COUNTY, NM

GPS: 32.472126 -104.046437

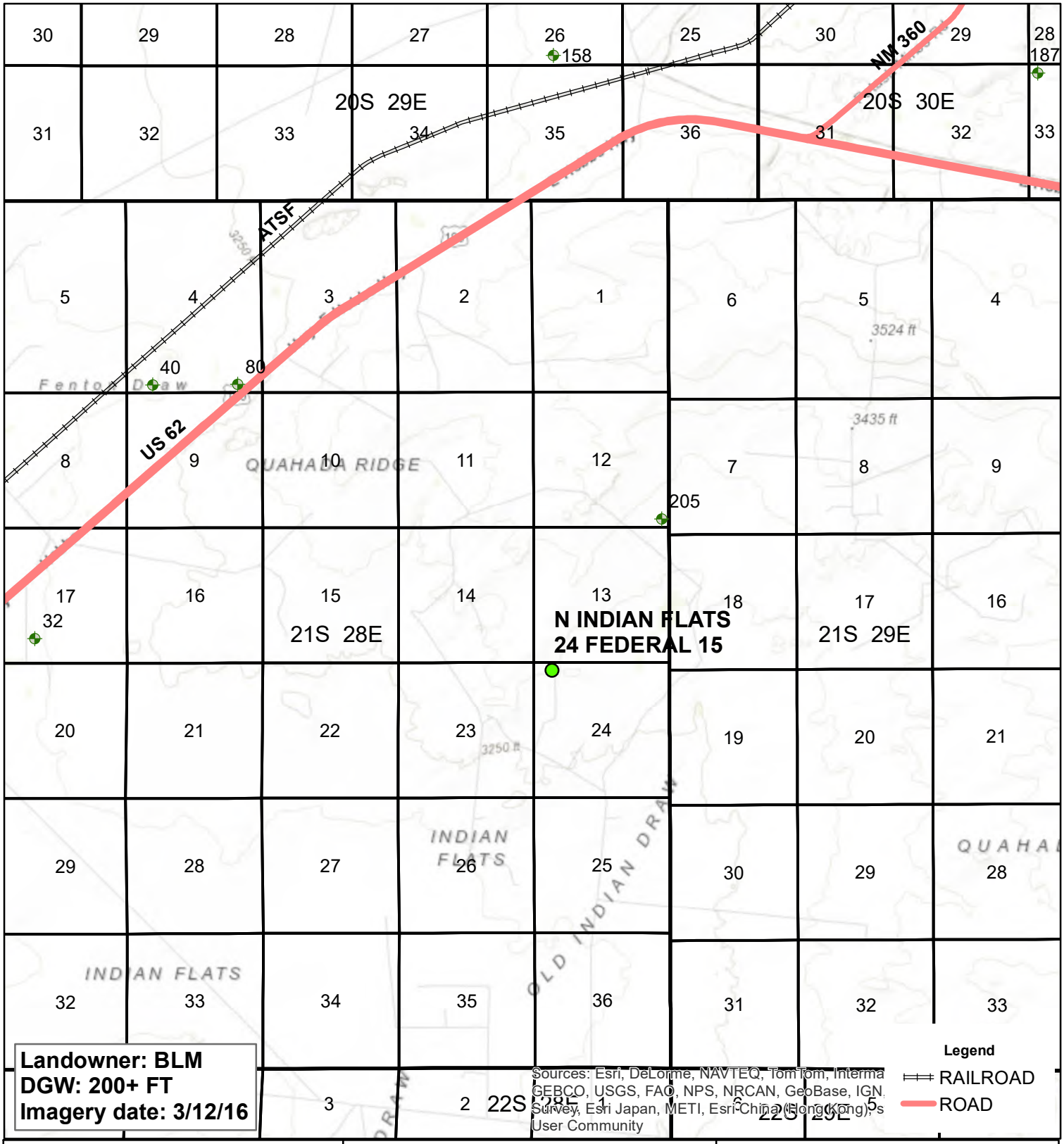
Figure 1

0 1 2 Miles

N W E S

Drawing date:1/31/18
Drafted by: T. Grieco

Depth to Groundwater



Basin Environmental Service Technologies
Effective Solutions

XTO
NORTH INDIAN FLATS 24 FEDERAL 15

UL D SECTION 24
T-21-S R-28-E
EDDY COUNTY, NM

GPS: 32.472126 -104.046437

Figure 2

0 0.5 1 Miles

N W E S

Drawing date:1/31/18
Drafted by: T. Grieco

Inittial Sampling

Basin Environmental Effective Solutions Service Technologies

XTO
NORTH INDIAN FLATS
24 FEDERAL 15

UL D SECTION 24
T-21-S R-28-E
EDDY COUNTY, NM

GPS: 32.472126 -104.046437

Figure 3

0 25 50 Feet

N W E S

Drawing date:1/31/18
Drafted by: T. Grieco

FIGURE 4
CONCENTRATIONS OF BENZENE, BTEX, TPH & CHLORIDE IN SOIL
SOIL CHEMISTRY TABLE
XTO Energy
North Indian Flats 24 Federal #15
EDDY COUNTY, NEW MEXICO
Unit Letter D, Section 24, Township 21 South, Range 28 East
NMOCD # - 2RP - 3518

SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	SOIL STATUS	METHOD: EPA SW 846-8021B, 5030					METHOD: 8015M			TPH C_6-C_{35} (mg/Kg)	4500 Cl-B
				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL-BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO C_6-C_{10} (mg/Kg)	DRO C_{10}-C_{28} (mg/Kg)	ORO C_{28}-C_{35} (mg/Kg)		CHLORIDE (mg/Kg)
SP 1 @ Surface	0'	1/4/2018	In-Situ	<0.050	<0.050	<0.050	<0.150	0.300	<10.0	<10.0	<10.0	<10.0	784
SP 1 @ 1'	1'	1/4/2018	In-Situ	<0.050	<0.050	<0.050	<0.150	0.300	<10.0	<10.0	<10.0	<10.0	320.0
SP 2 @ Surface	0'	1/4/2018	In-Situ	<0.050	<0.050	<0.050	<0.150	0.300	<10.0	<10.0	<10.0	<10.0	<16.0
SP 2 @ 1'	1'	1/4/2018	In-Situ	<0.050	<0.050	<0.050	<0.150	0.300	<10.0	<10.0	<10.0	<10.0	32.0
SP 3 @ Surface	0'	1/4/2018	In-Situ	<0.050	<0.050	<0.050	<0.150	0.300	<10.0	<10.0	<10.0	<10.0	928
SP 3 @ 1'	1'	1/4/2018	In-Situ	<0.050	<0.050	<0.050	<0.150	0.300	<10.0	<10.0	<10.0	<10.0	448
NMOCD Recommended Remediation Action Level				**10**				**50**				**5000**	**600**

NA = Not analyzed.

XTO Energy – North Indian Flats 24 Federal 15

Unit Letter D of Section 24, T21S, R28E

Release area, facing northwest

Release area, facing north

Release area, facing northeast

Release area, facing south

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

January 11, 2018

ROBBIE RUNNELS

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: NORTH INDIAN FLATS 24 FEDERAL #15

Enclosed are the results of analyses for samples received by the laboratory on 01/05/18 14:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-17-10. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Basin Environmental Service
ROBBIE RUNNELS
P.O. Box 301
Lovington NM, 88260
Fax To: (575) 396-1429

Received:	01/05/2018	Sampling Date:	01/04/2018
Reported:	01/11/2018	Sampling Type:	Soil
Project Name:	NORTH INDIAN FLATS 24 FEDERAL #15	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	XTO ENERGY - EDDY CO NM		

Sample ID: SP 1 @ SURFACE (H800045-01)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/09/2018	ND	1.98	99.2	2.00	3.50	
Toluene*	<0.050	0.050	01/09/2018	ND	1.97	98.5	2.00	4.24	
Ethylbenzene*	<0.050	0.050	01/09/2018	ND	1.97	98.5	2.00	4.48	
Total Xylenes*	<0.150	0.150	01/09/2018	ND	6.08	101	6.00	4.44	
Total BTEX	<0.300	0.300	01/09/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *72-148*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**784**	16.0	01/10/2018	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/10/2018	ND	200	99.8	200	8.76	
DRO >C10-C28*	<10.0	10.0	01/10/2018	ND	197	98.6	200	5.21	
EXT DRO >C28-C36	<10.0	10.0	01/10/2018	ND					

Surrogate: 1-Chlorooctane *75.4 %* *41-142*

Surrogate: 1-Chlorooctadecane *74.8 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Basin Environmental Service
ROBBIE RUNNELS
P.O. Box 301
Lovington NM, 88260
Fax To: (575) 396-1429

Received:	01/05/2018	Sampling Date:	01/04/2018
Reported:	01/11/2018	Sampling Type:	Soil
Project Name:	NORTH INDIAN FLATS 24 FEDERAL #15	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	XTO ENERGY - EDDY CO NM		

Sample ID: SP 1 @ 1' (H800045-02)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/09/2018	ND	1.98	99.2	2.00	3.50	
Toluene*	<0.050	0.050	01/09/2018	ND	1.97	98.5	2.00	4.24	
Ethylbenzene*	<0.050	0.050	01/09/2018	ND	1.97	98.5	2.00	4.48	
Total Xylenes*	<0.150	0.150	01/09/2018	ND	6.08	101	6.00	4.44	
Total BTEX	<0.300	0.300	01/09/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *72-148*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**320**	16.0	01/10/2018	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/10/2018	ND	200	99.8	200	8.76	
DRO >C10-C28*	<10.0	10.0	01/10/2018	ND	197	98.6	200	5.21	
EXT DRO >C28-C36	<10.0	10.0	01/10/2018	ND					

Surrogate: 1-Chlorooctane *74.3 %* *41-142*

Surrogate: 1-Chlorooctadecane *74.7 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Basin Environmental Service
ROBBIE RUNNELS
P.O. Box 301
Lovington NM, 88260
Fax To: (575) 396-1429

Received:	01/05/2018	Sampling Date:	01/04/2018
Reported:	01/11/2018	Sampling Type:	Soil
Project Name:	NORTH INDIAN FLATS 24 FEDERAL #15	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	XTO ENERGY - EDDY CO NM		

Sample ID: SP 2 @ SURFACE (H800045-03)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/09/2018	ND	1.98	99.2	2.00	3.50	
Toluene*	<0.050	0.050	01/09/2018	ND	1.97	98.5	2.00	4.24	
Ethylbenzene*	<0.050	0.050	01/09/2018	ND	1.97	98.5	2.00	4.48	
Total Xylenes*	<0.150	0.150	01/09/2018	ND	6.08	101	6.00	4.44	
Total BTEX	<0.300	0.300	01/09/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *72-148*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	01/10/2018	ND	432	108	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/10/2018	ND	200	99.8	200	8.76	
DRO >C10-C28*	<10.0	10.0	01/10/2018	ND	197	98.6	200	5.21	
EXT DRO >C28-C36	<10.0	10.0	01/10/2018	ND					

Surrogate: 1-Chlorooctane *64.1 %* *41-142*

Surrogate: 1-Chlorooctadecane *63.6 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Basin Environmental Service
ROBBIE RUNNELS
P.O. Box 301
Lovington NM, 88260
Fax To: (575) 396-1429

Received:	01/05/2018	Sampling Date:	01/04/2018
Reported:	01/11/2018	Sampling Type:	Soil
Project Name:	NORTH INDIAN FLATS 24 FEDERAL #15	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	XTO ENERGY - EDDY CO NM		

Sample ID: SP 2 @ 1' (H800045-04)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/09/2018	ND	1.98	99.0	2.00	2.55	
Toluene*	<0.050	0.050	01/09/2018	ND	2.02	101	2.00	2.46	
Ethylbenzene*	<0.050	0.050	01/09/2018	ND	2.05	103	2.00	2.25	
Total Xylenes*	<0.150	0.150	01/09/2018	ND	6.09	102	6.00	2.02	
Total BTEX	<0.300	0.300	01/09/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *106 %* *72-148*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	01/10/2018	ND	432	108	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/10/2018	ND	200	99.8	200	8.76	
DRO >C10-C28*	<10.0	10.0	01/10/2018	ND	197	98.6	200	5.21	
EXT DRO >C28-C36	<10.0	10.0	01/10/2018	ND					

Surrogate: 1-Chlorooctane *74.1 %* *41-142*

Surrogate: 1-Chlorooctadecane *74.7 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Basin Environmental Service
ROBBIE RUNNELS
P.O. Box 301
Lovington NM, 88260
Fax To: (575) 396-1429

Received:	01/05/2018	Sampling Date:	01/04/2018
Reported:	01/11/2018	Sampling Type:	Soil
Project Name:	NORTH INDIAN FLATS 24 FEDERAL #15	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	XTO ENERGY - EDDY CO NM		

Sample ID: SP 3@ SURFACE (H800045-05)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/09/2018	ND	1.98	99.0	2.00	2.55	
Toluene*	<0.050	0.050	01/09/2018	ND	2.02	101	2.00	2.46	
Ethylbenzene*	<0.050	0.050	01/09/2018	ND	2.05	103	2.00	2.25	
Total Xylenes*	<0.150	0.150	01/09/2018	ND	6.09	102	6.00	2.02	
Total BTEX	<0.300	0.300	01/09/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *106 %* *72-148*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**928**	16.0	01/10/2018	ND	432	108	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/10/2018	ND	201	100	200	11.8	
DRO >C10-C28*	<10.0	10.0	01/10/2018	ND	197	98.3	200	13.5	
EXT DRO >C28-C36	<10.0	10.0	01/10/2018	ND					

Surrogate: 1-Chlorooctane *85.8 %* *41-142*

Surrogate: 1-Chlorooctadecane *76.1 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Basin Environmental Service
ROBBIE RUNNELS
P.O. Box 301
Lovington NM, 88260
Fax To: (575) 396-1429

Received:	01/05/2018	Sampling Date:	01/04/2018
Reported:	01/11/2018	Sampling Type:	Soil
Project Name:	NORTH INDIAN FLATS 24 FEDERAL #15	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	XTO ENERGY - EDDY CO NM		

Sample ID: SP 3@ 1' (H800045-06)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/09/2018	ND	1.98	99.0	2.00	2.55	
Toluene*	<0.050	0.050	01/09/2018	ND	2.02	101	2.00	2.46	
Ethylbenzene*	<0.050	0.050	01/09/2018	ND	2.05	103	2.00	2.25	
Total Xylenes*	<0.150	0.150	01/09/2018	ND	6.09	102	6.00	2.02	
Total BTEX	<0.300	0.300	01/09/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *109 %* *72-148*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**448**	16.0	01/10/2018	ND	432	108	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/10/2018	ND	201	100	200	11.8	
DRO >C10-C28*	<10.0	10.0	01/10/2018	ND	197	98.3	200	13.5	
EXT DRO >C28-C36	<10.0	10.0	01/10/2018	ND					

Surrogate: 1-Chlorooctane *75.2 %* *41-142*

Surrogate: 1-Chlorooctadecane *71.9 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

QR-02	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL LABORATORIES
101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	Basin Environmental Service Technologies, LLC	**BILL TO**	
Project Manager:	Robbie Runnels	**P.O. #:**	
Address:	P.O. Box 301	**Company:**	XTO Energy
City:	Lovington **State:** NM **Zip:** 88260	**Attn:**	Amy Ruth
Phone #:	(575)396-2378 **Fax #:** (575)396-1429	**Address:**	
Project #:	**Project Owner:** XTO Energy	**City:**	
Project Name:	North Indian Flats 24 Federal 15	**State:** NM **Zip:** 88260	
Project Location:	Eddy	**Phone #:**	
Sampler Name:	Jimmy Hand	**Fax #:**	

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST											
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	Chloride	TPH (8015M)	BTEX (8021B)									
H800045																									
1	SP 1 @ Surface	g	1			X					x		1/4/18	13:00	X	x	x								
2	SP 1 @ 1'	g	1			x					x		1/4/18	13:10	x	x	x								
3	SP 2 @ Surface	g	1			x					x		1/4/18	13:20	x	x	x								
4	SP 2 @ 1'	g	1			x					x		1/4/18	13:30	x	x	x								
5	SP 3 @ Surface	g	1			x					x		1/4/18	13:40	x	x	x								
6	SP 3 @ 1'	g	1			x					x		1/4/18	13:50	x	x	x								

Relinquished By:	**Date:** 1/5/2018	**Received By:**		Phone Result: ☐ Yes ☐ No	Add'l Phone #:
Jimmy Hand	**Time:** 600	Robbie Runnels		Fax Result: ☐ Yes ☐ No	Add'l Fax #:
Relinquished By:	**Date:** 1-5-18	**Received By:**		REMARKS:	
	Time: 14:15	Tamara Oldaker			
Delivered By: (Circle One)	-0.1°	**Sample Condition** Cool: ☑ Yes ☐ No Intact: ☐ Yes ☐ No	**CHECKED BY: (Initials)**	Please email results to pm@basinenv.com, amy_Ruth@xtoenergy.com	
Sampler - UPS - Bus - Other:	Corrected 0.1°		TO-#75		

FORM-006
Revision 1.0

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476

From: Bratcher, Mike, EMNRD
To: Robbie Runnels; Weaver, Crystal, EMNRD
Cc: Ruth, Amy; Littrell, Kyle
Subject: RE: North Indian Flats 24 Federal 15 Corrective Action Plan
Date: Tuesday, April 3, 2018 1:56:52 PM

RE: XTO * North Indian Flats 24 Fed 15 * 2RP-3518 * DOR: 1/13/16

All,

I realize this is a late response, but your proposal for remediation of the above referenced release is approved. Federal sites will require like approval from BLM.

Thank you,

Mike Bratcher
NMOCD District 2
811 South First Street
Artesia, NM 88210
575-748-1283 Ext 108

OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

From: Robbie Runnels <rrunnels@basinenv.com>
Sent: Tuesday, February 13, 2018 10:37 AM
To: Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; Weaver, Crystal, EMNRD <Crystal.Weaver@state.nm.us>
Cc: Amy Ruth <amy_ruth@XTOenergy.com>; Kyle_Littrell@xtoenergy.com
Subject: North Indian Flats 24 Federal 15 Corrective Action Plan

Mr. Bratcher,

Attached is the Corrective Action Plan for the aforementioned site. Basin has the remediation tentatively scheduled for around February 28, 2018. A Termination Request will be submitted after the remediation is complete. Please let me know if you have any questions or comments.

Thank you,

Robbie Runnels

Project Manager
Basin Environmental Service Technologies
3100 Plains Hwy.
P.O. Box 301
Lovington, NM 88260
p. 575-396-2378 m. 575-441-5598
f. 575-396-1429
rrunnels@basinenv.com

ATTACHMENT 3: LITHOLOGIC / SOIL SAMPLE LOGS

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

BH or PH Name: BH01	Date: 6/3/2020 / 6/5/20
Site Name: N. Indian Flats 24 Fed 15	
RP or Incident Number: 2RP-3518	
LTE Job Number: 12920082	
Logged By: JH	Method: H. Auger / Backhoe
Lat/Long: 32.472117, -104.046462	Field Screening: Hatch Chloride Strips, PID
Hole Diameter: 3" / 14" backed	Total Depth: 3'

LITHOLOGIC / SOIL SAMPLING LOG

Comments: 4:1 dilution method for chlorides/ NO=No Odor, NP=No Plasticicty, LP=Low Plasticity, MP=Medium Plasticity, HP=High Plasticity
H. Auger refusal at 30", backhoe to continue to TD

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D	4140	0.3	N	BH01	0.5	0	SWSM	Well graded fine sand w/ silt & gravel Lt.Brown/ tan/light gray NO, NP, Org.
M	536	0.2	N		1.0	1	SP	Poorly graded fine sand w/ gravel Red/Brown NO, NP, OG
M	584	0.2	N		2.0	2	SP	" " "
M	804	0.1	N		3.0	3	SPSM	Poorly graded (fine) sand w/ silt & gravel red/Brown NO, NP. OG
						4		TD @ 3.0 ft
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		

H. Auger → Backhoe

LT Environmental, Inc.
508 West Stevens Street
Carlsbad, New Mexico 88220

A proud member of WSP

Compliance · Engineering · Remediation

BH or PH Name: BH02	Date: 6/3/2020 / 6/5/20
Site Name: N. Indian Flats 24 Fed 15	
RP or Incident Number: 2RP-3518	
LTE Job Number: 12920082	
Logged By: JH	Method: H. Auger
Lat/Long: 32.472117, -104.046462	Field Screening: Hatch Chloride Strips, PID
Hole Diameter: 3" / 14" bucket	Total Depth: 3'

LITHOLOGIC / SOIL SAMPLING LOG

Comments: 4:1 dilution method for chlorides/ NO=No Odor, NP=No Plasticicty, LP=Low Plasticity, MP=Medium Plasticity, HP=High Plasticity

H Auger Refusal at 1', Bubble to Bottom in TD

	Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
H Auger	D	248	0.1	N	BH02	0.5	0	SWSM	well graded / med-coarse) sand w/ gravel 1 ft. Brown to dry white gravel NO, NP, Org.
Bucket	M	184	0.0	N	~~1@~~	1.0	1	SP	Poorly graded (fine) sand w/ gravel red/Brown NO, NP, OS
	M	212	0.0	N		2.0	2	SP	" "
	M	248	0.0	N		3.0	3	SWSM	well graded (fine-med) sand w/ silt & gravel. red/Brown NO, NP, OS
							4		TD @ 3.0 ft
							5		
							6		
							7		
							8		
							9		
							10		
							11		
							12		

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

BH or PH Name: BH03	Date: 6/3/2020 / 6/5/20
Site Name: N. Indian Flats 24 Fed 15	
RP or Incident Number: 2RP-3518	
LTE Job Number: 12920082	
Logged By: JH	Method: H. Auger
Lat/Long: 32.472117, -104.046462	Field Screening: Hatch Chloride Strips, PID
Hole Diameter: 3" / 14" bucket	Total Depth: 3'

LITHOLOGIC / SOIL SAMPLING LOG

Comments: 4:1 dilution method for chlorides/ NO=No Odor, NP=No Plasticity, LP=Low Plasticity, MP=Medium Plasticity, HP=High Plasticity

H. Auger refusal at 2.5', backed to continue to 70

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D	184	0.0	N	BH03	0.5	0	SP	Poorly graded (fine) sand w/ gravel red/Brown
M	184	0.0	N		1.0	1	SP	NO, NP, Org " "
M	248	0.0	N	BH03A	2.0	2	SPSM	Poorly graded fine sand w/ silt & gravel red/Brown NO, NP, Org
M	184	0.3	N	@ 3'	3.0	3	SPSM	Poorly graded fine sand w/ silt & gravel red/Brown NO, NP, Org
						4		TD @ 3.0 ft
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		

H. Auger Backhoe

LT Environmental, Inc.
508 West Stevens Street
Carlsbad, New Mexico 88220

A proud member of WSP

Compliance · Engineering · Remediation

BH or PH Name: BH04	Date: 6/3/2020 / 6/5/20
Site Name: N. Indian Flats 24 Fed 15	
RP or Incident Number: 2RP-3518	
LTE Job Number: 12920082	
Logged By: JH	Method: H. Auger
Hole Diameter: 3" / 14" Bucket	Total Depth: 3'

LITHOLOGIC / SOIL SAMPLING LOG

Lat/Long: 32.472117, -104.046462

Field Screening: Hatch Chloride Strips, PID

Comments: 4:1 dilution method for chlorides/ NO=No Odor, NP=No Plasticity, LP=Low Plasticity, MP=Medium Plasticity, HP=High Plasticity

H. Auger refusal at 1.5', backhoe will carry to TD

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D	184	0.0	N	BH04	0.5	0	SWSM	wet grade (fine-coarse) sand w/ silt ~~sand~~ & gravel lt. Brn w/ white gravel NO, NP, Org
M	152	0.0	N		1.0	1	SP	Poorly graded fine sand w/ gravel Red/Brn NO, NP, Org
H. Auger back hoe	M	184	0.2	N		2.0	2	SPSM	Poorly graded (fine) sand w/ silt & gravel red/Brn NO. NP. Org
M	184	0.1	N		3.0	3	SPSM	" "
						4		TOB 3.0 ft
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		

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

BH or PH Name: BH05	Date: 6/3/2020
Site Name: N. Indian Flats 24 Fed 15	
RP or Incident Number:	2RP-3518
LTE Job Number:	12920082
Logged By: JH	Method: H. Auger
Lat/Long: 32.472117, -104.046462	Field Screening: Hatch Chloride Strips, PID
Hole Diameter: 3"	Total Depth: 3'

LITHOLOGIC / SOIL SAMPLING LOG

Comments: 4:1 dilution method for chlorides/ NO=No Odor, NP=No Plasticicty, LP=Low Plasticity, MP=Medium Plasticity, HP=High Plasticity

TD @ 3.0ft

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
M	152	0.0	N		0.5	0	SP	Poorly grad fine sand w/ gravel Red/Brown NO, NP, Org
M	152	0.0	N	BH05	1.0	1	SP	" "
M	184	0.0	N		2.0	2	SP	" "
M	248	0.0	N	BH05A	3.0	3	SPSM	Poorly grad fine sand w/ silt & gravel red/Brown NO, NP, Org
						4		TD @ 3.0'
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		

ATTACHMENT 4: PHOTOGRAPHIC LOG

PHOTOGRAPHIC LOG

Photograph 1: Southeast facing view of historical release area.

Photograph 2: North facing view of historical release area.

Photograph 3: Northeast facing view of historical release area.

Photograph 4: South facing view of historical release area.

North Indian Flats 24 Federal 15
Eddy County, New Mexico
Photographs Taken: June 2020

ATTACHMENT 5: LABORATORY ANALYTICAL REPORTS

Certificate of Analysis Summary 663367

LT Environmental, Inc., Arvada, CO

Project Name: N. Indian Flats 24 Fed 15

Project Id: 012920082
Contact: Dan Moir
Project Location:

Date Received in Lab: Wed 06.03.2020 13:50
Report Date: 06.04.2020 15:18
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	663367-001		663367-002		663367-003		663367-004		663367-005		663367-006	
	Field Id:	BH01		BH02		BH03		BH03A		BH04		BH05	
	Depth:	0.5- ft		0.5- ft		0.5- ft		2.0- ft		0.5- ft		1.0- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	06.03.2020 09:35		06.03.2020 10:03		06.03.2020 10:13		06.03.2020 10:36		06.03.2020 10:49		06.03.2020 11:20	
BTEX by EPA 8021B	***Extracted:***	06.03.2020 15:15		06.03.2020 15:15		06.03.2020 15:15		06.03.2020 15:15		06.03.2020 15:15		06.03.2020 15:15	
	Analyzed:	06.03.2020 21:19		06.03.2020 21:39		06.03.2020 22:00		06.03.2020 22:20		06.03.2020 22:40		06.03.2020 23:01	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00202	0.00202	<0.00202	0.00202	<0.00202	0.00202	<0.00201	0.00201	<0.00201	0.00201	<0.00198	0.00198
Toluene		<0.00202	0.00202	<0.00202	0.00202	<0.00202	0.00202	<0.00201	0.00201	<0.00201	0.00201	<0.00198	0.00198
Ethylbenzene		<0.00202	0.00202	<0.00202	0.00202	<0.00202	0.00202	<0.00201	0.00201	<0.00201	0.00201	<0.00198	0.00198
m,p-Xylenes		<0.00404	0.00404	<0.00404	0.00404	<0.00403	0.00403	<0.00402	0.00402	<0.00402	0.00402	<0.00396	0.00396
o-Xylene		<0.00202	0.00202	<0.00202	0.00202	<0.00202	0.00202	<0.00201	0.00201	<0.00201	0.00201	<0.00198	0.00198
Total Xylenes		<0.00202	0.00202	<0.00202	0.00202	<0.00202	0.00202	<0.00201	0.00201	<0.00201	0.00201	<0.00198	0.00198
Total BTEX		<0.00202	0.00202	<0.00202	0.00202	<0.00202	0.00202	<0.00201	0.00201	<0.00201	0.00201	<0.00198	0.00198
Chloride by EPA 300	***Extracted:***	06.03.2020 15:07		06.03.2020 15:07		06.03.2020 15:07		06.03.2020 15:07		06.03.2020 15:07		06.03.2020 15:07	
	Analyzed:	06.03.2020 18:57		06.03.2020 19:04		06.03.2020 19:11		06.03.2020 19:18		06.03.2020 19:39		06.03.2020 19:46	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		913	10.0	86.7	10.1	19.1	9.98	71.1	9.92	33.9	9.98	19.0	9.96
TPH by SW8015 Mod	***Extracted:***	06.03.2020 15:00		06.03.2020 15:00		06.03.2020 15:00		06.03.2020 15:00		06.03.2020 15:00		06.03.2020 15:00	
	Analyzed:	06.03.2020 15:38		06.03.2020 21:14		06.03.2020 21:34		06.03.2020 21:55		06.03.2020 22:16		06.04.2020 10:41	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.2	50.2	<49.9	49.9	<50.3	50.3	<50.3	50.3	<50.1	50.1	<50.0	50.0
Diesel Range Organics (DRO)		<50.2	50.2	<49.9	49.9	<50.3	50.3	<50.3	50.3	<50.1	50.1	<50.0	50.0
Motor Oil Range Hydrocarbons (MRO)		<50.2	50.2	<49.9	49.9	<50.3	50.3	<50.3	50.3	<50.1	50.1	<50.0	50.0
Total GRO-DRO		<50.2	50.2	<49.9	49.9	<50.3	50.3	<50.3	50.3	<50.1	50.1	<50.0	50.0
Total TPH		<50.2	50.2	<49.9	49.9	<50.3	50.3	<50.3	50.3	<50.1	50.1	<50.0	50.0

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

Jessica Kramer
Project Manager

Certificate of Analysis Summary 663367

LT Environmental, Inc., Arvada, CO

Project Name: N. Indian Flats 24 Fed 15

Project Id: 012920082
Contact: Dan Moir
Project Location:

Date Received in Lab: Wed 06.03.2020 13:50
Report Date: 06.04.2020 15:18
Project Manager: Jessica Kramer

Analysis Requested							
	Lab Id:	663367-007					
	Field Id:	BH05A					
	Depth:	3.0- ft					
	Matrix:	SOIL					
	Sampled:	06.03.2020 11:28					
BTEX by EPA 8021B	***Extracted:***	06.03.2020 15:15					
	Analyzed:	06.03.2020 23:21					
	Units/RL:	mg/kg	RL				
Benzene		<0.00199	0.00199				
Toluene		<0.00199	0.00199				
Ethylbenzene		<0.00199	0.00199				
m,p-Xylenes		<0.00398	0.00398				
o-Xylene		<0.00199	0.00199				
Total Xylenes		<0.00199	0.00199				
Total BTEX		<0.00199	0.00199				
Chloride by EPA 300	***Extracted:***	06.03.2020 15:07					
	Analyzed:	06.03.2020 19:53					
	Units/RL:	mg/kg	RL				
Chloride		111	9.98				
TPH by SW8015 Mod	***Extracted:***	06.03.2020 15:00					
	Analyzed:	06.03.2020 23:18					
	Units/RL:	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<49.9	49.9				
Diesel Range Organics (DRO)		<49.9	49.9				
Motor Oil Range Hydrocarbons (MRO)		<49.9	49.9				
Total GRO-DRO		<49.9	49.9				
Total TPH		<49.9	49.9				

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

Jessica Kramer
Project Manager

Analytical Report 663367

for

LT Environmental, Inc.

Project Manager: Dan Moir

N. Indian Flats 24 Fed 15

012920082

06.04.2020

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

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

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

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

06.04.2020

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

Reference: XENCO Report No(s): **663367**
N. Indian Flats 24 Fed 15
Project Address:

Dan Moir:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 663367. 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. 663367 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jessica Kramer

Jessica Kramer
Project Manager

A Small Business and Minority Company

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

Sample Cross Reference 663367

LT Environmental, Inc., Arvada, CO

N. Indian Flats 24 Fed 15

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH01	S	06.03.2020 09:35	0.5 ft	663367-001
BH02	S	06.03.2020 10:03	0.5 ft	663367-002
BH03	S	06.03.2020 10:13	0.5 ft	663367-003
BH03A	S	06.03.2020 10:36	2.0 ft	663367-004
BH04	S	06.03.2020 10:49	0.5 ft	663367-005
BH05	S	06.03.2020 11:20	1.0 ft	663367-006
BH05A	S	06.03.2020 11:28	3.0 ft	663367-007

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: N. Indian Flats 24 Fed 15

Project ID: *012920082*
Work Order Number(s): *663367*

Report Date: *06.04.2020*
Date Received: *06.03.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analytical Results 663367

LT Environmental, Inc., Arvada, CO

N. Indian Flats 24 Fed 15

Sample Id:	**BH01**	Matrix:	Soil	Date Received:	06.03.2020 13:50
Lab Sample Id:	663367-001	Date Collected:	06.03.2020 09:35	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.03.2020 15:07	Basis:	Wet Weight
Seq Number:	3127912				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**913**	10.0	mg/kg	06.03.2020 18:57		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	06.03.2020 15:00	Basis:	Wet Weight
Seq Number:	3127951				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	06.03.2020 15:38	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	06.03.2020 15:38	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	06.03.2020 15:38	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	06.03.2020 15:38	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	06.03.2020 15:38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	06.03.2020 15:38	
o-Terphenyl	84-15-1	99	%	70-135	06.03.2020 15:38	

Certificate of Analytical Results 663367

LT Environmental, Inc., Arvada, CO

N. Indian Flats 24 Fed 15

Sample Id:	**BH01**	Matrix:	Soil	Date Received:	06.03.2020 13:50
Lab Sample Id:	663367-001	Date Collected:	06.03.2020 09:35	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.03.2020 15:15	Basis:	Wet Weight
Seq Number:	3127950				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	06.03.2020 21:19	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	06.03.2020 21:19	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	06.03.2020 21:19	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	06.03.2020 21:19	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	06.03.2020 21:19	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	06.03.2020 21:19	U	1
Total BTEX		<0.00202	0.00202	mg/kg	06.03.2020 21:19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	98	%	70-130	06.03.2020 21:19	
1,4-Difluorobenzene	540-36-3	111	%	70-130	06.03.2020 21:19	

Certificate of Analytical Results 663367

LT Environmental, Inc., Arvada, CO

N. Indian Flats 24 Fed 15

Sample Id:	**BH02**	Matrix:	Soil	Date Received:	06.03.2020 13:50
Lab Sample Id:	663367-002	Date Collected:	06.03.2020 10:03	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.03.2020 15:07	Basis:	Wet Weight
Seq Number:	3127912				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**86.7**	10.1	mg/kg	06.03.2020 19:04		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	06.03.2020 15:00	Basis:	Wet Weight
Seq Number:	3127951				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	06.03.2020 21:14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	06.03.2020 21:14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	06.03.2020 21:14	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	06.03.2020 21:14	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	06.03.2020 21:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	06.03.2020 21:14	
o-Terphenyl	84-15-1	90	%	70-135	06.03.2020 21:14	

Certificate of Analytical Results 663367

LT Environmental, Inc., Arvada, CO

N. Indian Flats 24 Fed 15

Sample Id:	**BH02**	Matrix:	Soil	Date Received:	06.03.2020 13:50
Lab Sample Id:	663367-002	Date Collected:	06.03.2020 10:03	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.03.2020 15:15	Basis:	Wet Weight
Seq Number:	3127950				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	06.03.2020 21:39	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	06.03.2020 21:39	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	06.03.2020 21:39	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	06.03.2020 21:39	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	06.03.2020 21:39	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	06.03.2020 21:39	U	1
Total BTEX		<0.00202	0.00202	mg/kg	06.03.2020 21:39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	111	%	70-130	06.03.2020 21:39	
4-Bromofluorobenzene	460-00-4	99	%	70-130	06.03.2020 21:39	

Certificate of Analytical Results 663367

LT Environmental, Inc., Arvada, CO

N. Indian Flats 24 Fed 15

Sample Id:	**BH03**	Matrix:	Soil	Date Received:	06.03.2020 13:50
Lab Sample Id:	663367-003	Date Collected:	06.03.2020 10:13	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.03.2020 15:07	Basis:	Wet Weight
Seq Number:	3127912				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**19.1**	9.98	mg/kg	06.03.2020 19:11		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	06.03.2020 15:00	Basis:	Wet Weight
Seq Number:	3127951				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	06.03.2020 21:34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	06.03.2020 21:34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	06.03.2020 21:34	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	06.03.2020 21:34	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	06.03.2020 21:34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	06.03.2020 21:34	
o-Terphenyl	84-15-1	88	%	70-135	06.03.2020 21:34	

Certificate of Analytical Results 663367

LT Environmental, Inc., Arvada, CO

N. Indian Flats 24 Fed 15

Sample Id:	**BH03**	Matrix:	Soil	Date Received:	06.03.2020 13:50
Lab Sample Id:	663367-003	Date Collected:	06.03.2020 10:13	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.03.2020 15:15	Basis:	Wet Weight
Seq Number:	3127950				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	06.03.2020 22:00	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	06.03.2020 22:00	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	06.03.2020 22:00	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	06.03.2020 22:00	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	06.03.2020 22:00	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	06.03.2020 22:00	U	1
Total BTEX		<0.00202	0.00202	mg/kg	06.03.2020 22:00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	109	%	70-130	06.03.2020 22:00	
4-Bromofluorobenzene	460-00-4	97	%	70-130	06.03.2020 22:00	

Certificate of Analytical Results 663367

LT Environmental, Inc., Arvada, CO

N. Indian Flats 24 Fed 15

Sample Id:	**BH03A**	Matrix:	Soil	Date Received:	06.03.2020 13:50
Lab Sample Id:	663367-004	Date Collected:	06.03.2020 10:36	Sample Depth:	2.0 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.03.2020 15:07	Basis:	Wet Weight
Seq Number:	3127912				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**71.1**	9.92	mg/kg	06.03.2020 19:18		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	06.03.2020 15:00	Basis:	Wet Weight
Seq Number:	3127951				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	06.03.2020 21:55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	06.03.2020 21:55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	06.03.2020 21:55	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	06.03.2020 21:55	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	06.03.2020 21:55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	06.03.2020 21:55	
o-Terphenyl	84-15-1	93	%	70-135	06.03.2020 21:55	

Certificate of Analytical Results 663367

LT Environmental, Inc., Arvada, CO

N. Indian Flats 24 Fed 15

Sample Id:	**BH03A**	Matrix:	Soil	Date Received:	06.03.2020 13:50
Lab Sample Id:	663367-004	Date Collected:	06.03.2020 10:36	Sample Depth:	2.0 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.03.2020 15:15	Basis:	Wet Weight
Seq Number:	3127950				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.03.2020 22:20	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	06.03.2020 22:20	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.03.2020 22:20	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.03.2020 22:20	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.03.2020 22:20	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.03.2020 22:20	U	1
Total BTEX		<0.00201	0.00201	mg/kg	06.03.2020 22:20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	06.03.2020 22:20	
4-Bromofluorobenzene	460-00-4	98	%	70-130	06.03.2020 22:20	

Certificate of Analytical Results 663367

LT Environmental, Inc., Arvada, CO

N. Indian Flats 24 Fed 15

Sample Id:	**BH04**	Matrix:	Soil	Date Received:	06.03.2020 13:50
Lab Sample Id:	663367-005	Date Collected:	06.03.2020 10:49	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.03.2020 15:07	Basis:	Wet Weight
Seq Number:	3127912				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**33.9**	9.98	mg/kg	06.03.2020 19:39		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	06.03.2020 15:00	Basis:	Wet Weight
Seq Number:	3127951				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	06.03.2020 22:16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	06.03.2020 22:16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	06.03.2020 22:16	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	06.03.2020 22:16	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	06.03.2020 22:16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	06.03.2020 22:16	
o-Terphenyl	84-15-1	98	%	70-135	06.03.2020 22:16	

Certificate of Analytical Results 663367

LT Environmental, Inc., Arvada, CO

N. Indian Flats 24 Fed 15

Sample Id:	**BH04**	Matrix:	Soil	Date Received:	06.03.2020 13:50
Lab Sample Id:	663367-005	Date Collected:	06.03.2020 10:49	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.03.2020 15:15	Basis:	Wet Weight
Seq Number:	3127950				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.03.2020 22:40	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	06.03.2020 22:40	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.03.2020 22:40	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.03.2020 22:40	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.03.2020 22:40	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.03.2020 22:40	U	1
Total BTEX		<0.00201	0.00201	mg/kg	06.03.2020 22:40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	70-130	06.03.2020 22:40	
1,4-Difluorobenzene	540-36-3	111	%	70-130	06.03.2020 22:40	

Certificate of Analytical Results 663367

LT Environmental, Inc., Arvada, CO

N. Indian Flats 24 Fed 15

Sample Id:	**BH05**	Matrix:	Soil	Date Received:	06.03.2020 13:50
Lab Sample Id:	663367-006	Date Collected:	06.03.2020 11:20	Sample Depth:	1.0 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.03.2020 15:07	Basis:	Wet Weight
Seq Number:	3127912				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**19.0**	9.96	mg/kg	06.03.2020 19:46		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	06.03.2020 15:00	Basis:	Wet Weight
Seq Number:	3127951				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	06.04.2020 10:41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	06.04.2020 10:41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	06.04.2020 10:41	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	06.04.2020 10:41	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	06.04.2020 10:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	123	%	70-135	06.04.2020 10:41	
o-Terphenyl	84-15-1	117	%	70-135	06.04.2020 10:41	

Certificate of Analytical Results 663367

LT Environmental, Inc., Arvada, CO

N. Indian Flats 24 Fed 15

Sample Id:	**BH05**	Matrix:	Soil	Date Received:	06.03.2020 13:50
Lab Sample Id:	663367-006	Date Collected:	06.03.2020 11:20	Sample Depth:	1.0 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.03.2020 15:15	Basis:	Wet Weight
Seq Number:	3127950				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	06.03.2020 23:01	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	06.03.2020 23:01	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	06.03.2020 23:01	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	06.03.2020 23:01	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	06.03.2020 23:01	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	06.03.2020 23:01	U	1
Total BTEX		<0.00198	0.00198	mg/kg	06.03.2020 23:01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	96	%	70-130	06.03.2020 23:01	
1,4-Difluorobenzene	540-36-3	110	%	70-130	06.03.2020 23:01	

Certificate of Analytical Results 663367

LT Environmental, Inc., Arvada, CO

N. Indian Flats 24 Fed 15

Sample Id:	**BH05A**	Matrix:	Soil	Date Received:	06.03.2020 13:50
Lab Sample Id:	663367-007	Date Collected:	06.03.2020 11:28	Sample Depth:	3.0 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.03.2020 15:07	Basis:	Wet Weight
Seq Number:	3127912				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**111**	9.98	mg/kg	06.03.2020 19:53		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	06.03.2020 15:00	Basis:	Wet Weight
Seq Number:	3127951				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	06.03.2020 23:18	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	06.03.2020 23:18	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	06.03.2020 23:18	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	06.03.2020 23:18	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	06.03.2020 23:18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	06.03.2020 23:18	
o-Terphenyl	84-15-1	98	%	70-135	06.03.2020 23:18	

Certificate of Analytical Results 663367

LT Environmental, Inc., Arvada, CO

N. Indian Flats 24 Fed 15

Sample Id:	**BH05A**	Matrix:	Soil	Date Received:	06.03.2020 13:50
Lab Sample Id:	663367-007	Date Collected:	06.03.2020 11:28	Sample Depth:	3.0 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.03.2020 15:15	Basis:	Wet Weight
Seq Number:	3127950				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.03.2020 23:21	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.03.2020 23:21	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.03.2020 23:21	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.03.2020 23:21	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.03.2020 23:21	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.03.2020 23:21	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.03.2020 23:21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	96	%	70-130	06.03.2020 23:21	
1,4-Difluorobenzene	540-36-3	110	%	70-130	06.03.2020 23:21	

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

QC Summary 663367

LT Environmental, Inc.

N. Indian Flats 24 Fed 15

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3127912 — Matrix: Solid — Date Prep: 06.03.2020
MB Sample Id: 7704705-1-BLK — LCS Sample Id: 7704705-1-BKS — LCSD Sample Id: 7704705-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	252	101	252	101	90-110	0	20	mg/kg	06.03.2020 16:09	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3127912 — Matrix: Soil — Date Prep: 06.03.2020
Parent Sample Id: 663293-001 — MS Sample Id: 663293-001 S — MSD Sample Id: 663293-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	634	202	802	83	802	83	90-110	0	20	mg/kg	06.03.2020 16:44	X

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3127912 — Matrix: Soil — Date Prep: 06.03.2020
Parent Sample Id: 663365-003 — MS Sample Id: 663365-003 S — MSD Sample Id: 663365-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	385	200	568	92	570	93	90-110	0	20	mg/kg	06.03.2020 18:36	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3127951 — Matrix: Solid — Date Prep: 06.03.2020
MB Sample Id: 7704753-1-BLK — LCS Sample Id: 7704753-1-BKS — LCSD Sample Id: 7704753-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	794	79	973	97	70-135	20	35	mg/kg	06.03.2020 13:02	
Diesel Range Organics (DRO)	<50.0	1000	814	81	1000	100	70-135	21	35	mg/kg	06.03.2020 13:02	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	72		107		132		70-135	%	06.03.2020 13:02
o-Terphenyl	72		97		102		70-135	%	06.03.2020 13:02

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3127951 — Matrix: Solid — Date Prep: 06.03.2020
MB Sample Id: 7704753-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	06.03.2020 12:41	

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

QC Summary 663367

LT Environmental, Inc.

N. Indian Flats 24 Fed 15

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3127951 Matrix: Soil Date Prep: 06.03.2020
Parent Sample Id: 663367-001 MS Sample Id: 663367-001 S MSD Sample Id: 663367-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1190	119	1220	122	70-135	2	35	mg/kg	06.03.2020 15:58	
Diesel Range Organics (DRO)	<50.0	1000	1090	109	1090	109	70-135	0	35	mg/kg	06.03.2020 15:58	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	125		127		70-135	%	06.03.2020 15:58
o-Terphenyl	112		113		70-135	%	06.03.2020 15:58

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3127950 Matrix: Solid Date Prep: 06.03.2020
MB Sample Id: 7704707-1-BLK LCS Sample Id: 7704707-1-BKS LCSD Sample Id: 7704707-1-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	0.112	112	0.114	114	70-130	2	35	mg/kg	06.03.2020 14:10	
Toluene	<0.00200	0.100	0.106	106	0.108	108	70-130	2	35	mg/kg	06.03.2020 14:10	
Ethylbenzene	<0.00200	0.100	0.0979	98	0.0995	100	71-129	2	35	mg/kg	06.03.2020 14:10	
m,p-Xylenes	<0.00400	0.200	0.200	100	0.203	102	70-135	1	35	mg/kg	06.03.2020 14:10	
o-Xylene	<0.00200	0.100	0.103	103	0.104	104	71-133	1	35	mg/kg	06.03.2020 14:10	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	110		107		107		70-130	%	06.03.2020 14:10
4-Bromofluorobenzene	93		93		93		70-130	%	06.03.2020 14:10

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3127950 Matrix: Soil Date Prep: 06.03.2020
Parent Sample Id: 663293-001 MS Sample Id: 663293-001 S MSD Sample Id: 663293-001 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	0.117	117	0.111	110	70-130	5	35	mg/kg	06.03.2020 14:51	
Toluene	<0.00200	0.100	0.112	112	0.106	105	70-130	6	35	mg/kg	06.03.2020 14:51	
Ethylbenzene	<0.00200	0.100	0.106	106	0.100	99	71-129	6	35	mg/kg	06.03.2020 14:51	
m,p-Xylenes	<0.00401	0.200	0.218	109	0.206	102	70-135	6	35	mg/kg	06.03.2020 14:51	
o-Xylene	<0.00200	0.100	0.109	109	0.103	102	71-133	6	35	mg/kg	06.03.2020 14:51	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	109		108		70-130	%	06.03.2020 14:51
4-Bromofluorobenzene	97		94		70-130	%	06.03.2020 14:51

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

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

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

Chain of Custody

XENCO LABORATORIES

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

Work Order No: 20203307

www.xenco.com Page 1 of 1

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littrell
Company Name:	LT Environmental, Inc., Permian office	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	522 W. Mermod St.
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(432) 236-3849 Email:		Jhill@ltenv.com, dmoir@ltenv.com

Work Order Comments

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

Project Name:	N. Indian Flats 24 Fed 15	Turn Around	
Project Number:	01292 0082	Routine ☐	
P.O. Number:	3RP-3518	Rush: 3dy	
Sampler's Name:	Jeremy Hill	Due Date: 6/8/20	

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	2.6	Thermometer ID	TNM007
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.7
Sample Custody Seals:	Yes (No) N/A	Total Containers:	7

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
BH01	S	6/3/20	0935	0.5	1	X	X	X
BH02			1003	0.5				
BH03			1013	0.5				
BH03A			1036	2.0				
BH04			1049	0.5				
BH05			1120	1.0				
BH05A			1138	3.0				

ANALYSIS REQUEST

Work Order Notes

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

Sample Comments

discrete

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		6/3/20 13:50	2		
			4		
			6		

Revised Date 051418 Rev. 2018.1

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 06.03.2020 01.50.00 PM

Work Order #: 663367

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

Temperature Measuring device used : T-NM-007

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	2.6	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 Custody Seals intact on sample bottles?	**Yes**	
#6*Custody Seals Signed and dated?	**Yes**	
#7 *Chain of Custody present?	**Yes**	
#8 Any missing/extra samples?	**No**	
#9 Chain of Custody signed when relinquished/ received?	**Yes**	
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**	
#11 Container label(s) legible and intact?	**Yes**	
#12 Samples in proper container/ bottle?	**Yes**	Samples received in bulk containers.
#13 Samples properly preserved?	**Yes**	
#14 Sample container(s) intact?	**Yes**	
#15 Sufficient sample amount for indicated test(s)?	**Yes**	
#16 All samples received within hold time?	**Yes**	
#17 Subcontract of sample(s)?	**No**	
#18 Water VOC samples have zero headspace?	**N/A**	

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

Analyst: PH Device/Lot#:

Checklist completed by: Elizabeth McClellan Date: 06.03.2020

Checklist reviewed by: Jessica Kramer Date: 06.04.2020

Jessica Kramer

Certificate of Analysis Summary 663628

LT Environmental, Inc., Arvada, CO

Project Name: N. Indian Flats 24 Fed 15

Project Id: 012920082
Contact: Dan Moir
Project Location:

Date Received in Lab: Fri 06.05.2020 13:55
Report Date: 06.08.2020 12:35
Project Manager: Jessica Kramer

Analysis Requested		663628-001		663628-002		663628-003		663628-004			
	Field Id:	BH01A		BH02A		BH03B		BH04A			
	Depth:	3.0- ft		3.0- ft		3.0- ft		2.0- ft			
	Matrix:	SOIL		SOIL		SOIL		SOIL			
	Sampled:	06.05.2020 11:18		06.05.2020 11:44		06.05.2020 12:05		06.05.2020 12:25			
BTEX by EPA 8021B	*Extracted:*	06.05.2020 15:00		06.05.2020 15:00		06.05.2020 15:00		06.05.2020 15:00			
	Analyzed:	06.05.2020 18:43		06.05.2020 19:03		06.05.2020 19:24		06.05.2020 19:44			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Benzene		<0.00201	0.00201	<0.00198	0.00198	<0.00199	0.00199	<0.00199	0.00199		
Toluene		<0.00201	0.00201	<0.00198	0.00198	<0.00199	0.00199	<0.00199	0.00199		
Ethylbenzene		<0.00201	0.00201	<0.00198	0.00198	<0.00199	0.00199	<0.00199	0.00199		
m,p-Xylenes		<0.00402	0.00402	<0.00395	0.00395	<0.00398	0.00398	<0.00398	0.00398		
o-Xylene		<0.00201	0.00201	<0.00198	0.00198	<0.00199	0.00199	<0.00199	0.00199		
Total Xylenes		<0.00201	0.00201	<0.00198	0.00198	<0.00199	0.00199	<0.00199	0.00199		
Total BTEX		<0.00201	0.00201	<0.00198	0.00198	<0.00199	0.00199	<0.00199	0.00199		
Chloride by EPA 300	*Extracted:*	06.05.2020 16:00		06.05.2020 16:00		06.05.2020 16:00		06.05.2020 16:00			
	Analyzed:	06.05.2020 16:57		06.05.2020 17:18		06.05.2020 17:25		06.05.2020 17:31			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Chloride		762	9.98	122	9.98	64.3	10.1	22.6	9.96		
TPH by SW8015 Mod	*Extracted:*	06.05.2020 17:30		06.05.2020 17:30		06.05.2020 17:30		06.05.2020 17:30			
	Analyzed:	06.05.2020 18:40		06.05.2020 19:42		06.05.2020 20:03		06.05.2020 20:24			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Gasoline Range Hydrocarbons (GRO)		<50.3	50.3	<50.1	50.1	<50.2	50.2	<49.8	49.8		
Diesel Range Organics (DRO)		<50.3	50.3	<50.1	50.1	<50.2	50.2	<49.8	49.8		
Motor Oil Range Hydrocarbons (MRO)		<50.3	50.3	<50.1	50.1	<50.2	50.2	<49.8	49.8		
Total GRO-DRO		<50.3	50.3	<50.1	50.1	<50.2	50.2	<49.8	49.8		
Total TPH		<50.3	50.3	<50.1	50.1	<50.2	50.2	<49.8	49.8		

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

Jessica Kramer
Project Manager

Analytical Report 663628

for

LT Environmental, Inc.

Project Manager: Dan Moir

N. Indian Flats 24 Fed 15

012920082

06.08.2020

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

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

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

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

06.08.2020

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

Reference: XENCO Report No(s): **663628**
N. Indian Flats 24 Fed 15
Project Address:

Dan Moir:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 663628. 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. 663628 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jessica Kramer

Jessica Kramer
Project Manager

A Small Business and Minority Company

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

Sample Cross Reference 663628

LT Environmental, Inc., Arvada, CO

N. Indian Flats 24 Fed 15

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH01A	S	06.05.2020 11:18	3.0 ft	663628-001
BH02A	S	06.05.2020 11:44	3.0 ft	663628-002
BH03B	S	06.05.2020 12:05	3.0 ft	663628-003
BH04A	S	06.05.2020 12:25	2.0 ft	663628-004

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: N. Indian Flats 24 Fed 15

Project ID: *012920082*
Work Order Number(s): *663628*

Report Date: *06.08.2020*
Date Received: *06.05.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analytical Results 663628

LT Environmental, Inc., Arvada, CO

N. Indian Flats 24 Fed 15

Sample Id:	**BH01A**	Matrix:	Soil	Date Received:	06.05.2020 13:55
Lab Sample Id:	663628-001	Date Collected:	06.05.2020 11:18	Sample Depth:	3.0 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.05.2020 16:00	Basis:	Wet Weight
Seq Number:	3128163				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**762**	9.98	mg/kg	06.05.2020 16:57		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	06.05.2020 17:30	Basis:	Wet Weight
Seq Number:	3128174				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	06.05.2020 18:40	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	06.05.2020 18:40	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	06.05.2020 18:40	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	06.05.2020 18:40	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	06.05.2020 18:40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	06.05.2020 18:40	
o-Terphenyl	84-15-1	83	%	70-135	06.05.2020 18:40	

Certificate of Analytical Results 663628

LT Environmental, Inc., Arvada, CO

N. Indian Flats 24 Fed 15

Sample Id:	**BH01A**	Matrix:	Soil	Date Received:	06.05.2020 13:55
Lab Sample Id:	663628-001	Date Collected:	06.05.2020 11:18	Sample Depth:	3.0 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.05.2020 15:00	Basis:	Wet Weight
Seq Number:	3128164				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.05.2020 18:43	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	06.05.2020 18:43	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.05.2020 18:43	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.05.2020 18:43	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.05.2020 18:43	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.05.2020 18:43	U	1
Total BTEX		<0.00201	0.00201	mg/kg	06.05.2020 18:43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	06.05.2020 18:43	
4-Bromofluorobenzene	460-00-4	97	%	70-130	06.05.2020 18:43	

Certificate of Analytical Results 663628

LT Environmental, Inc., Arvada, CO

N. Indian Flats 24 Fed 15

Sample Id:	**BH02A**	Matrix:	Soil	Date Received:	06.05.2020 13:55
Lab Sample Id:	663628-002	Date Collected:	06.05.2020 11:44	Sample Depth:	3.0 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.05.2020 16:00	Basis:	Wet Weight
Seq Number:	3128163				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**122**	9.98	mg/kg	06.05.2020 17:18		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	06.05.2020 17:30	Basis:	Wet Weight
Seq Number:	3128174				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	06.05.2020 19:42	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	06.05.2020 19:42	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	06.05.2020 19:42	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	06.05.2020 19:42	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	06.05.2020 19:42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-135	06.05.2020 19:42	
o-Terphenyl	84-15-1	82	%	70-135	06.05.2020 19:42	

Certificate of Analytical Results 663628

LT Environmental, Inc., Arvada, CO

N. Indian Flats 24 Fed 15

Sample Id:	**BH02A**	Matrix:	Soil	Date Received:	06.05.2020 13:55
Lab Sample Id:	663628-002	Date Collected:	06.05.2020 11:44	Sample Depth:	3.0 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.05.2020 15:00	Basis:	Wet Weight
Seq Number:	3128164				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	06.05.2020 19:03	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	06.05.2020 19:03	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	06.05.2020 19:03	U	1
m,p-Xylenes	179601-23-1	<0.00395	0.00395	mg/kg	06.05.2020 19:03	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	06.05.2020 19:03	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	06.05.2020 19:03	U	1
Total BTEX		<0.00198	0.00198	mg/kg	06.05.2020 19:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	70-130	06.05.2020 19:03	
1,4-Difluorobenzene	540-36-3	113	%	70-130	06.05.2020 19:03	

Certificate of Analytical Results 663628

LT Environmental, Inc., Arvada, CO

N. Indian Flats 24 Fed 15

Sample Id:	**BH03B**	Matrix:	Soil	Date Received:	06.05.2020 13:55
Lab Sample Id:	663628-003	Date Collected:	06.05.2020 12:05	Sample Depth:	3.0 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.05.2020 16:00	Basis:	Wet Weight
Seq Number:	3128163				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**64.3**	10.1	mg/kg	06.05.2020 17:25		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	06.05.2020 17:30	Basis:	Wet Weight
Seq Number:	3128174				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	06.05.2020 20:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	06.05.2020 20:03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	06.05.2020 20:03	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	06.05.2020 20:03	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	06.05.2020 20:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	06.05.2020 20:03	
o-Terphenyl	84-15-1	81	%	70-135	06.05.2020 20:03	

Certificate of Analytical Results 663628

LT Environmental, Inc., Arvada, CO

N. Indian Flats 24 Fed 15

Sample Id:	**BH03B**	Matrix:	Soil	Date Received:	06.05.2020 13:55
Lab Sample Id:	663628-003	Date Collected:	06.05.2020 12:05	Sample Depth:	3.0 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.05.2020 15:00	Basis:	Wet Weight
Seq Number:	3128164				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.05.2020 19:24	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.05.2020 19:24	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.05.2020 19:24	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.05.2020 19:24	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.05.2020 19:24	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.05.2020 19:24	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.05.2020 19:24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	108	%	70-130	06.05.2020 19:24	
4-Bromofluorobenzene	460-00-4	99	%	70-130	06.05.2020 19:24	

Certificate of Analytical Results 663628

LT Environmental, Inc., Arvada, CO

N. Indian Flats 24 Fed 15

Sample Id:	**BH04A**	Matrix:	Soil	Date Received:	06.05.2020 13:55
Lab Sample Id:	663628-004	Date Collected:	06.05.2020 12:25	Sample Depth:	2.0 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.05.2020 16:00	Basis:	Wet Weight
Seq Number:	3128163				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**22.6**	9.96	mg/kg	06.05.2020 17:31		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	06.05.2020 17:30	Basis:	Wet Weight
Seq Number:	3128174				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	06.05.2020 20:24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	06.05.2020 20:24	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	06.05.2020 20:24	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	06.05.2020 20:24	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	06.05.2020 20:24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	84	%	70-135	06.05.2020 20:24	
o-Terphenyl	84-15-1	81	%	70-135	06.05.2020 20:24	

Certificate of Analytical Results 663628

LT Environmental, Inc., Arvada, CO

N. Indian Flats 24 Fed 15

Sample Id:	**BH04A**	Matrix:	Soil	Date Received:	06.05.2020 13:55
Lab Sample Id:	663628-004	Date Collected:	06.05.2020 12:25	Sample Depth:	2.0 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	06.05.2020 15:00	Basis:	Wet Weight
Seq Number:	3128164				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.05.2020 19:44	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.05.2020 19:44	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.05.2020 19:44	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.05.2020 19:44	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.05.2020 19:44	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.05.2020 19:44	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.05.2020 19:44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	99	%	70-130	06.05.2020 19:44	
1,4-Difluorobenzene	540-36-3	112	%	70-130	06.05.2020 19:44	

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

QC Summary 663628

LT Environmental, Inc.

N. Indian Flats 24 Fed 15

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3128163 — Matrix: Solid — Date Prep: 06.05.2020
MB Sample Id: 7704903-1-BLK — LCS Sample Id: 7704903-1-BKS — LCSD Sample Id: 7704903-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	252	101	253	101	90-110	0	20	mg/kg	06.05.2020 16:43	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3128163 — Matrix: Soil — Date Prep: 06.05.2020
Parent Sample Id: 663628-001 — MS Sample Id: 663628-001 S — MSD Sample Id: 663628-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	762	201	946	92	941	90	90-110	1	20	mg/kg	06.05.2020 17:04	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3128174 — Matrix: Solid — Date Prep: 06.05.2020
MB Sample Id: 7704912-1-BLK — LCS Sample Id: 7704912-1-BKS — LCSD Sample Id: 7704912-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	959	96	973	97	70-135	1	35	mg/kg	06.05.2020 17:59	
Diesel Range Organics (DRO)	<50.0	1000	987	99	1010	101	70-135	2	35	mg/kg	06.05.2020 17:59	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	88		95		102		70-135	%	06.05.2020 17:59
o-Terphenyl	84		84		90		70-135	%	06.05.2020 17:59

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3128174 — Matrix: Solid — Date Prep: 06.05.2020
MB Sample Id: 7704912-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	06.05.2020 17:38	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3128174 — Matrix: Soil — Date Prep: 06.05.2020
Parent Sample Id: 663628-001 — MS Sample Id: 663628-001 S — MSD Sample Id: 663628-001 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)	<49.9	998	1200	120	1210	121	70-135	1	35	mg/kg	06.05.2020 19:01	
Diesel Range Organics (DRO)	<49.9	998	1150	115	1150	115	70-135	0	35	mg/kg	06.05.2020 19:01	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	101		101		70-135	%	06.05.2020 19:01
o-Terphenyl	88		87		70-135	%	06.05.2020 19:01

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

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

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

QC Summary 663628

LT Environmental, Inc.

N. Indian Flats 24 Fed 15

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3128164 Matrix: Solid Date Prep: 06.05.2020
MB Sample Id: 7704901-1-BLK LCS Sample Id: 7704901-1-BKS LCSD Sample Id: 7704901-1-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	0.111	111	0.109	109	70-130	2	35	mg/kg	06.05.2020 17:01	
Toluene	<0.00200	0.100	0.107	107	0.105	105	70-130	2	35	mg/kg	06.05.2020 17:01	
Ethylbenzene	<0.00200	0.100	0.101	101	0.0987	99	71-129	2	35	mg/kg	06.05.2020 17:01	
m,p-Xylenes	<0.00400	0.200	0.209	105	0.204	102	70-135	2	35	mg/kg	06.05.2020 17:01	
o-Xylene	<0.00200	0.100	0.105	105	0.103	103	71-133	2	35	mg/kg	06.05.2020 17:01	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	110		109		107		70-130	%	06.05.2020 17:01
4-Bromofluorobenzene	96		94		95		70-130	%	06.05.2020 17:01

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3128164 Matrix: Soil Date Prep: 06.05.2020
Parent Sample Id: 663628-001 MS Sample Id: 663628-001 S MSD Sample Id: 663628-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.101	0.116	115	0.103	102	70-130	12	35	mg/kg	06.05.2020 17:42	
Toluene	<0.00201	0.101	0.111	110	0.0982	97	70-130	12	35	mg/kg	06.05.2020 17:42	
Ethylbenzene	<0.00201	0.101	0.102	101	0.0927	92	71-129	10	35	mg/kg	06.05.2020 17:42	
m,p-Xylenes	<0.00402	0.201	0.212	105	0.189	94	70-135	11	35	mg/kg	06.05.2020 17:42	
o-Xylene	<0.00201	0.101	0.106	105	0.0957	95	71-133	10	35	mg/kg	06.05.2020 17:42	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	107		106		70-130	%	06.05.2020 17:42
4-Bromofluorobenzene	94		93		70-130	%	06.05.2020 17:42

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

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

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

Chain of Custody

XENCO LABORATORIES

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

Work Order No: 16G3628

www.xenco.com Page 1 of 1

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littrell
Company Name:	LT Environmental, Inc., Permian office	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	522 W. Mermod St.
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(432) 236-3849 Email:	Jhill@ltenv.com, dmoir@ltenv.com	

Work Order Comments

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

Project Name:	N. Indian Flats 24 Fed 15	Turn Around	
Project Number:	01992008d	Routine ☐	
P.O. Number:	2RP-3518	Rush: 24 hr	
Sampler's Name:	Jeremy Hill	Due Date: 6/8/20	

SAMPLE RECEIPT				
Temperature (°C):	5.2	Temp Blank: (Yes) No	Wet Ice: (Yes) No	
Received Intact:	(Yes) No	Thermometer ID	T-NM-007	
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes (No) N/A	Total Containers:	4	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
BH01A	S	6/5/20	1118	3.0	1	X	X	X
BH02A			1144	3.0'				
BH03B			1205	3.0'				
BH04A			1225	~~3.0~~ 2.0				

Work Order Notes

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

Sample Comments

discrete

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		6/5/20 1355	2		
			4		
			6		

Revised Date 051418 Rev. 2018.1

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 06.05.2020 01.55.00 PM

Work Order #: 663628

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

Temperature Measuring device used : T-NM-007

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	5.2	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 Custody Seals intact on sample bottles?	**Yes**	
#6*Custody Seals Signed and dated?	**Yes**	
#7 *Chain of Custody present?	**Yes**	
#8 Any missing/extra samples?	**No**	
#9 Chain of Custody signed when relinquished/ received?	**Yes**	
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**	
#11 Container label(s) legible and intact?	**Yes**	
#12 Samples in proper container/ bottle?	**Yes**	Samples received in bulk containers.
#13 Samples properly preserved?	**Yes**	
#14 Sample container(s) intact?	**Yes**	
#15 Sufficient sample amount for indicated test(s)?	**Yes**	
#16 All samples received within hold time?	**Yes**	
#17 Subcontract of sample(s)?	**No**	
#18 Water VOC samples have zero headspace?	**N/A**	

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

Analyst: PH Device/Lot#:

Checklist completed by: Elizabeth McClellan Date: 06.05.2020

Checklist reviewed by: Jessica Kramer Date: 06.08.2020

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

CONDITIONS

Action 8674

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 8674
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
bhall	Closure approved. 2RP-3518 closed. Final reclamation will need to take place in accordance with 19.15.29.13 NMAC once the site is no longer being used for oil and gas operations.	10/6/2022