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	NRM2019550034
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: WPX Energy Permian, LLC.	OGRID: 246289
Contact Name: Lynda Laumbach	Contact Telephone: (575) 725-1647
Contact email: Lynda.Laumbach@wpxenergy.com	Incident # *(assigned by OCD)*
Contact mailing address: 5315 Buena Vista Drive, Carlsbad, NM 88220	

Location of Release Source

Latitude 32.0799323 Longitude -103.9563395
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: North Brushy Federal 35 #004H TB	Site Type: Production Facility
Date Release Discovered: 06/29/2020	API# *(if applicable)*: 30-015-42290

Unit Letter	Section	Township	Range	County
N	35	25S	29E	Eddy

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

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls):	Volume Recovered (bbls):
☒ Produced Water	Volume Released (bbls): 10	Volume Recovered (bbls): 10
	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:
Pinhole leak developed on PW line en route to water transfer pump causing an estimated 10bbl of PW to be released inside the lined secondary containment. All fluids were recovered with a vacuum truck.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NRM2019550034
District RP	
Facility ID	
Application ID	

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

Initial Response

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

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

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

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

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

Printed Name: Lynda Laumbach Title: Environmental Specialist

Signature: Lynda Laumbach Date: 07/06/2020

email: Lynda.Laumbach@wpxenergy.com Telephone: (575)725-1647

OCD Only

Received by: Ramona Marcus Date: 7/13/2020

State of New Mexico
Oil Conservation Division

Incident ID	NRM2019550034
District RP	
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?	>50 (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	NRM2019550034
District RP	
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: Lynda Laumbach Title: Environmental Specialist

Signature: Lynda Laumbach Date: 12/14/2020

email: Lynda.Laumbach@wpxenergy.com Telephone: (575)725-1647

OCD Only

Received by: Karen Collins Date: 4/20/2021

State of New Mexico
Oil Conservation Division

Incident ID	NRM2019550034
District RP	
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: ***Each of the following items must be included in the plan.***

- ☐ Detailed description of proposed remediation technique
- ☐ Scaled sitemap with GPS coordinates showing delineation points
- ☐ Estimated volume of material to be remediated
- ☐ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☐ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: ***Each of the following items must be confirmed as part of any request for deferral of remediation.***

☒ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.

☒ Extents of contamination must be fully delineated.

☒ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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: Lynda Laumbach Title: Environmental Specialist

Signature: Lynda Laumbach Date: 12/14/2020

email: Lynda.Laumbach@wpxenergy.com Telephone: (575)725-1647

OCD Only

Received by: Karen Collins Date: 4/20/2021

☒ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: Karen Collins Date: 4/20/2021

NM OIL CONSERVATION
ARTESIA DISTRICT
FEB 12 2015
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
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State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

nAB1504835072

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company RKI E&P, LLC 246289	Contact Zack Laird
Address 210 Park Ave. – Ste. 900, OKC, OK 73102	Telephone No. 405-742-2696
Facility Name: North Brushy Draw 35-4H	Facility Type : Oil and Gas Well

Surface Owner: Federal	Mineral Owner: Federal	API No. 30-015-42290

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	35	25S	29E		175 FSL		2365FWL	Eddy

Latitude: 32.0793265 **Longitude:** -103.9554992

NATURE OF RELEASE

Type of Release. Oil	Volume of Release: 30Bbls	Volume Recovered: 30Bbls
Source of Release Tanks over ran because oil wasn't hauled	Date and Hour of Occurrence 02/12/15 – 0800hrs MT	Date and Hour of Discovery 02/12/15 – 0900hrs MT
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Heather Patterson (left VM on office line)	
By Whom? Zack Laird	Date and Hour: 02/12/15 – 1530hrs CT	
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.*

Oil tanks ran over during normal well production activity because oil wasn't hauled.

Dispatched oil haulers to haul oil. Recovered oil from lined containment with vacuum truck and wash containment.

Describe Area Affected and Cleanup Action Taken.*

All fluid remained in secondary containment berm, 30/30Bbls recovered.

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: Zack Laird

Title: Sr. EHS Manager

E-mail Address: ZLaird@rkixp.com

Date: 02/12/15 Phone: 405-987-2213

OIL CONSERVATION DIVISION

Approved by Environmental Specialist:

Approval Date: 2/17/15 Expiration Date: N/A

Conditions of Approval: Attached ☐

Remediation per O.C.D. Rules & Guidelines
SUBMIT REMEDIATION PROPOSAL NO LATER THAN: 3/17/15

2RP-2814

* Attach Additional Sheets If Necessary

Incident ID	
District RP	2RP-2814
Facility ID	
Application ID	

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Page 4

State of New Mexico
Oil Conservation Division

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Printed Name: Lynda Laumbach Title: Environmental Specialist

Signature: Lynda Laumbach Date: 12/14/2020

email: Lynda.Laumbach@wpxenergy.com Telephone: (575)725-1647

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	2RP-2814
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Printed Name: Lynda Laumbach Title: Environmental Specialist

Signature: Lynda Laumbach Date: 12/14/2020

email: Lynda.Laumbach@wpxenergy.com Telephone: (575)725-1647

OCD Only

Received by: _____ Date: _____

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: _____ Date: _____

December 14, 2020
Mike Bratcher
NMOCD District 2
811 South First Street
Artesia, NM 88210

Re: North Brushy Federal 35 #004H Release Deferral Request (NRM2019550034 & 2RP-2814)

Mr. Bratcher,

This report summarizes the secondary containment inspection activities at the North Brushy Federal 35 #004H multi-well pad (Site). The topographic map of the Site is provided as Figure 01. On June 29, 2020, a produced water line inside secondary lined containment developed a pinhole leak releasing 10 barrels (bbls) of produced water into the containment. No fluids were observed outside the containment and all fluids were recovered using a water truck. A previous historical release occurred on February 12, 2015, 2RP-2814, due to an oil tank overflow releasing 30 bbls of oil. All fluids were reported to be recovered

Well Location: North Brushy Federal 35 #004H (& #005H)
API #:30-015-42290
NMOCD Reference #: NRM2019550034, 2RP-2814
Site Location Description: Unit Letter N, Section 35, Township 25S, Range 29E
Release Latitude/Longitude: N32.0799323, W103.9563395
Land Jurisdiction: Federal
Agency Notification: New Mexico Oil Conservation Division (NMOCD), Artesia District Office

NMOCD Site Characterization Standards
The Closure criteria of this site was determined based on the New Mexico Administrative Code (NMAC) Table 1, *Closure Criteria for Soils Impacted by a Release*, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12). Depth to groundwater at the site is estimated to be greater than 50 feet below ground surface (bgs). The Site is located within 300 feet of an OSE waterbody. Based on the criteria outlined above, the closure criteria from the NMOCD Table 1 are as follows:

- 600 milligrams per kilogram (mg/kg) Chloride
- 50 mg/kg Benzene, Toluene, Ethylbenzene, and xylenes (BTEX)
- 10 mg/kg Benzene
- 100 mg/kg Total Petroleum Hydrocarbons (TPH)

Field Activities
On July 7, 2020, WPX personnel were onsite to confirm the release extent. The area of interest is located on Figure 02. The secondary liner containment was washed on July 14, 2020. The liner inspection was completed July 15, 2020. The liner was found to be compromised in three locations marked on Figure 02 as BH01, BH02, and BH03. Samples were advanced at these three locations on August 6, 2020. On October 30, 2020 a Consultant was utilized to further delineate

underneath the liner. Final sampling was completed on November 19, 2020. Photographs of the described work are provided in Attachment 01.

Sampling Activities

Discrete samples were taken to confirm that contamination was contained to the Site surface and underneath the lined secondary containment. All samples were taken with decontaminated equipment, jarred in precleaned glass soil jars, labelled with sample name, date, Site name, and depth, and immediately placed on ice to lower sample temperatures below 4° Celsius, adhering to the chain of custody of Xenco laboratories. Analysis was completed at Xenco Laboratories in Carlsbad, NM. All samples were analyzed for Chlorides via Method EPA 300.0, TPH via Method 8015M, and BTEX via Method 8021B.

Laboratory Analytical Results

The laboratory analytical results of impacted soils showed elevated levels of chlorides and TPH at BH01 and BH02 to a depth down to 0.5 feet bgs. The contamination cleared up to below standards at 6-6.5 feet and 2-2.5 feet bgs in corresponding CH01 and CH02, respectively. The sample locations are depicted in Figure 02. All sample results are summarized in Table 01 and complete laboratory results are provided in Attachment 02.

- Chloride samples ranged from 10.9 to 6,190 mg/kg
- BTEX analysis ranged from below the Laboratory detectable limit to 0.377 mg/kg
- Benzene analysis was below the Laboratory detectable limit
- TPH ranged from below the Laboratory detectable limit to 10,900 mg/kg

Based on soil analysis of DS01-DS04 the impacted area is estimated to be no greater than the dimensions of the lined secondary containment, 45 feet X 130 feet. A soil volume of 650 cubic yards and not exceeding 1,300 cubic yards is estimated to remain underneath the liner at a an average contamination depth of 4.5 feet bgs.

Conclusions

The liner inspection to address the release impacts from NRM2019550034 and 2RP-2814 demonstrates compliance with the Table 1 Closure Criteria set forth by the NMOCD. The secondary containment was determined to be intact and functioning properly to contain releases. WPX requests no further action for these incidents currently. Once the Site is abandoned and approved for reclamation, WPX will conduct further soil testing and remove contamination until contaminant levels meet the closure criteria outlined above to comply with NMOCD and Bureau of Land Management standards for reclamation. The updated C-141s are attached to the beginning of this report.

If any questions or further information is warranted, please do not hesitate to contact me by cell phone at (575) 725-1647 or by email at Lynda.Laumbach@wpxenergy.com.

Best regards,

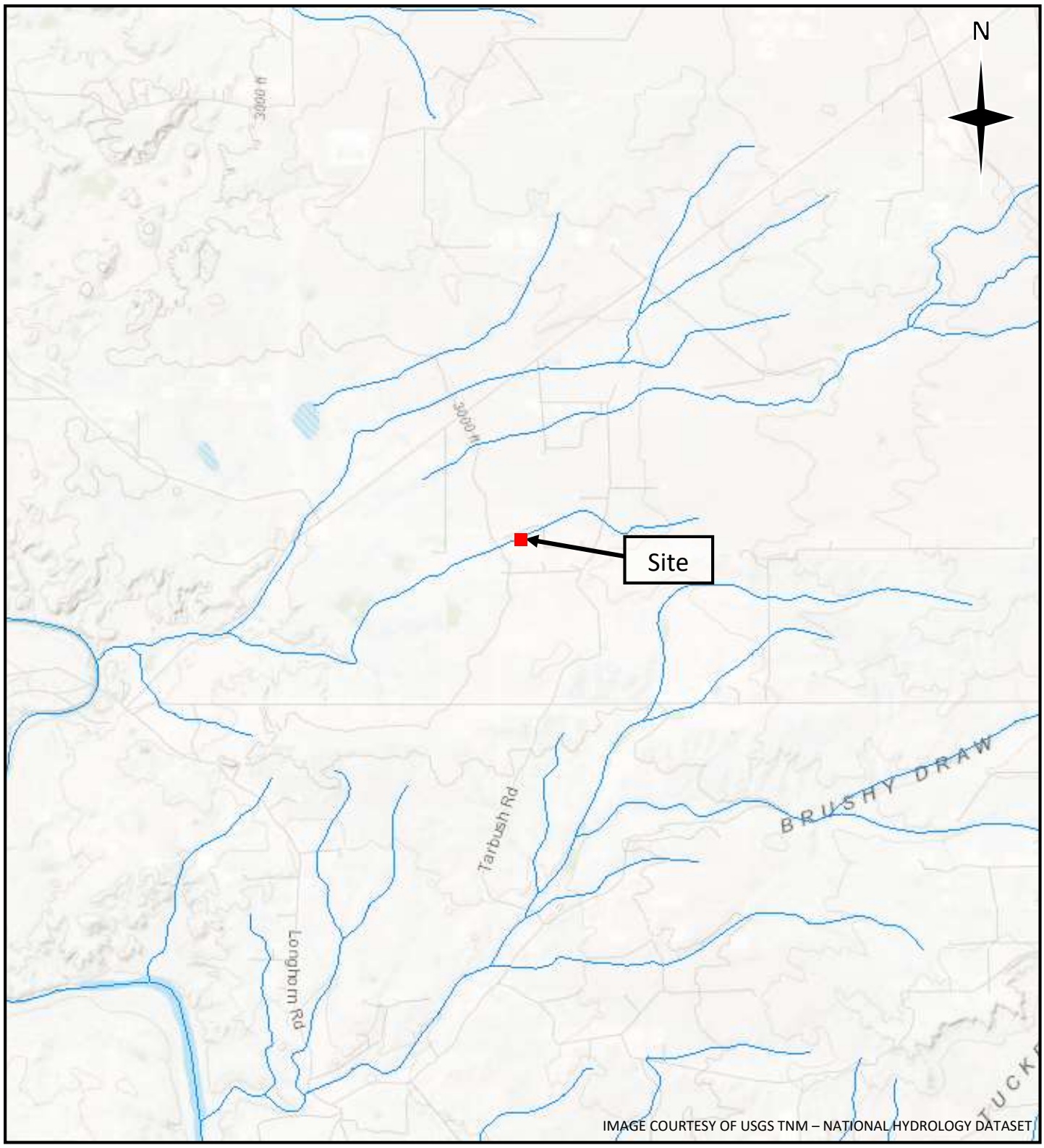
Lynda Laumbach

Lynda Laumbach
Environmental Specialist

CC: Robert Hamlet, NMOCD
Victoria Venegas, NMOCD

Attachments:
Figure 01 Topography
Figure 02 Site Map
Table 01 Soil Sample Results
Attachment 01 Photograph Log
Attachment 02 Analytical Results

Figures



WPXENERGY

0 0.3 0.6mi

Legend

Site

OSE Water Body

Figure 01
North Brushy Draw Federal 35 #004H
30-015-42290
Permian Basin, Eddy County, NM

32.0799323, -103.9563395

WPXENERGY

Legend

✖ Point of Release

Figure 02
North Brushy Draw Federal 35 #004H
30-015-42290
Permian Basin, Eddy County, NM

32.0799323, -103.9563395

Table

TABLE 01
SOIL SAMPLE ANALYTICAL RESULTS

North Brushy Federal 35 #004H
NMOCD REFERENCE NUMBER: NRM2019550034 & 2RP-2814

Sample Name	Depth (ft bgs)	Sample Date	Benzene (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	MRO (mg/kg)	GRO + DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
BH01	0.1 - 0.3	08/07/2020	<0.00200	<0.00200	<250	9780	1080	9780	**10900**	116
BH01A	0.3 - 0.5	08/07/2020	<0.00500	<0.00500	<249	9740	938	9740	**10700**	33.6
CH01	4 - 4.5	10/30/2020	<0.00200	<0.00200	<13.9	11.6	<11.5	11.6	11.6	**6190**
CH01	6 - 6.5	10/30/2020	<0.00200	<0.00200	<50.2	<50.2	<50.2	-	-	208
CH01	8 - 8.5	10/30/2020	<0.00200	<0.00200	<50.2	<50.2	<50.2	-	-	120
BH02	0.2 - 0.5	08/07/2020	<0.00250	0.377	<251	2900	399	2900	**3300**	**5400**
BH02A	2 - 2.5	08/07/2020	<0.00200	<0.00200	<49.8	81.6	<49.8	81.6	81.6	**5630**
CH02	2 - 2.5	10/30/2020	<0.00202	<0.00202	<49.9	<49.9	<49.9	-	-	64.3
CH02	4 - 4.5	10/30/2020	<0.00199	<0.00199	<50.3	<50.3	<50.3	-	-	34.2
CH02	6 - 6.5	10/30/2020	<0.00200	<0.00200	<50.1	<50.1	<50.1	-	-	148
CH02	8 - 8.5	10/30/2020	<0.00201	<0.00201	<49.8	<49.8	<49.8	-	-	136
BH03	0.2 - 0.5	08/07/2020	<0.00202	<0.00202	<50.1	<50.1	<50.1	-	-	43.4
BH03A	0.5 - 1	08/07/2020	<0.00200	<0.00200	<50.2	<50.2	<50.2	-	-	54.6
DS01	0.5	11/20/2020	<0.00199	<0.00199	<50.2	<50.2	<50.2	-	-	128.0
DS01A	1	11/20/2020	<0.00199	<0.00199	<49.9	<49.9	<49.9	-	-	63.6
DS02	0.5	11/20/2020	<0.00201	<0.00201	<50.1	<50.1	<50.1	-	-	66.4
DS02A	1	11/20/2020	<0.00199	<0.00199	<49.8	<49.8	<49.8	-	-	30.4
DS03	0.5	11/20/2020	<0.00201	<0.00201	<49.9	<49.9	<49.9	-	-	18.0
DS03A	1	11/20/2020	<0.00202	<0.00202	<50.1	<50.1	<50.1	-	-	27.1
DS04	0.5	11/20/2020	<0.002	<0.002	<49.8	<49.8	<49.8	-	-	10.9
DS04A	1	11/20/2020	<0.002	<0.002	<49.8	<49.8	<49.8	-	-	11.9
NMOCD Table 1 Closure Criteria			**10**	**50**	**NE**	**NE**	**NE**	**-**	**100**	**600**

Reference:	BTEX: benzene, toluene, ethylbenzene, and total xylenes	mg/kg: milligrams per kilogram
	GRO: gasoline range organics	NMOCD: New Mexico Oil Conservation Division
	DRO: diesel range organics	TPH: total petroleum hydrocarbons
	ft bgs: feet below ground surface	
	NMOCD Table 1 Closure Criteria: NMAC 19.15.29 August 2018 criteria for soils impacted based on characterization	

Attachment 01:

Photograph Log

Picture 1- Liner tear at BH01	Picture 2- Liner tear at BH02
6-Aug-20 	6-Aug-20 
Picture 3- Liner tear at BH03	Picture 4- East face, Northwest edge of TB
6-Aug-20 	6-Aug-20 

Picture 5- West face, Northwest edge of TB	Picture 6- East face, west side of TB
6-Aug-20 	6-Aug-20 
Picture 7- West face, south edge of TB	Picture 8- East face, south side of TB
6-Aug-20 	6-Aug-20 

Picture 9- North face, south edge of TB	Picture 10- West face,east side of TB
20-Nov-20 	20-Nov-20 
Picture 11- West face, east edge of TB	**Picture 12- North face, west side of TB**
20-Nov-20 	20-Nov-20 

Attachment 02:
Analytical Reports

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Certificate of Analysis Summary 678647

WPX Energy Permian Basin, LLC, Carlsbad, NM

Project Name: North Brushy Draw 35-04 H

Project Id:

Contact: Lynda Laumbach

Project Location: Eddy County, New Mexico

Date Received in Lab: Fri 11.20.2020 14:35

Report Date: 11.25.2020 07:29

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	678647-001		678647-002		678647-003		678647-004		678647-005		678647-006	
	Field Id:	DS01		DS01 A		DS02		DS02 A		DS03		DS03 A	
	Depth:	0.5- ft		1- ft		0.5- ft		1- ft		0.5- ft		1- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	11.20.2020 10:00		11.20.2020 10:15		11.20.2020 10:30		11.20.2020 10:40		11.20.2020 10:50		11.20.2020 11:10	
BTEX by EPA 8021B	***Extracted:***	11.21.2020 17:01		11.21.2020 17:01		11.21.2020 17:01		11.21.2020 17:04		11.21.2020 17:04		11.21.2020 17:04	
	Analyzed:	11.22.2020 04:14		11.22.2020 04:36		11.22.2020 04:59		11.22.2020 09:08		11.22.2020 09:30		11.22.2020 09:52	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00199	0.00199	<0.00199	0.00199	<0.00201	0.00201	<0.00199	0.00199	<0.00201	0.00201	<0.00202	0.00202
Toluene		<0.00199	0.00199	<0.00199	0.00199	<0.00201	0.00201	<0.00199	0.00199	<0.00201	0.00201	<0.00202	0.00202
Ethylbenzene		<0.00199	0.00199	<0.00199	0.00199	<0.00201	0.00201	<0.00199	0.00199	<0.00201	0.00201	<0.00202	0.00202
m,p-Xylenes		<0.00398	0.00398	<0.00398	0.00398	<0.00402	0.00402	<0.00398	0.00398	<0.00402	0.00402	<0.00403	0.00403
o-Xylene		<0.00199	0.00199	<0.00199	0.00199	<0.00201	0.00201	<0.00199	0.00199	<0.00201	0.00201	<0.00202	0.00202
Total Xylenes		<0.001990	0.001990	<0.001990	0.001990	<0.002010	0.002010	<0.001990	0.001990	<0.002010	0.002010	<0.002020	0.002020
Total BTEX		<0.001990	0.001990	<0.001990	0.001990	<0.002010	0.002010	<0.001990	0.001990	<0.002010	0.002010	<0.002020	0.002020
Inorganic Anions by EPA 300	***Extracted:***	11.23.2020 07:52		11.23.2020 07:52		11.23.2020 07:52		11.20.2020 17:47		11.20.2020 17:47		11.20.2020 17:47	
	Analyzed:	11.23.2020 11:21		11.23.2020 11:26		11.23.2020 11:31		11.21.2020 03:23		11.21.2020 03:39		11.21.2020 03:54	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		128	9.98	63.6	9.96	66.4	9.98	30.4	9.98	18.0	9.92	27.1	9.98
TPH by SW8015 Mod	***Extracted:***	11.21.2020 16:00		11.21.2020 16:00		11.21.2020 16:00		11.21.2020 16:00		11.21.2020 16:00		11.21.2020 16:00	
	Analyzed:	11.21.2020 19:39		11.21.2020 20:39		11.21.2020 21:00		11.21.2020 21:20		11.21.2020 21:41		11.21.2020 22:01	
	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	<50.1	50.1	<49.8	49.8	<49.9	49.9	<50.1	50.1
Diesel Range Organics (DRO)		<50.2	50.2	<49.9	49.9	<50.1	50.1	<49.8	49.8	<49.9	49.9	<50.1	50.1
Motor Oil Range Hydrocarbons (MRO)		<50.2	50.2	<49.9	49.9	<50.1	50.1	<49.8	49.8	<49.9	49.9	<50.1	50.1
Total TPH		<50.20	50.20	<49.90	49.90	<50.10	50.10	<49.80	49.80	<49.90	49.90	<50.10	50.10

BRL - Below Reporting Limit

Jessica Kramer

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

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Certificate of Analysis Summary 678647

WPX Energy Permian Basin, LLC, Carlsbad, NM

Project Name: North Brushy Draw 35-04 H

Project Id:

Contact: Lynda Laumbach

Project Location: Eddy County, New Mexico

Date Received in Lab: Fri 11.20.2020 14:35

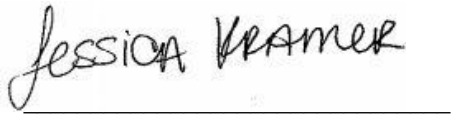
Report Date: 11.25.2020 07:29

Project Manager: Jessica Kramer

Analysis Requested							
	Lab Id:	678647-007		678647-008			
	Field Id:	DS04		DS04 A			
	Depth:	0.5- ft		1- ft			
	Matrix:	SOIL		SOIL			
	Sampled:	11.20.2020 11:30		11.20.2020 11:40			
BTEX by EPA 8021B	***Extracted:***	11.21.2020 17:04		11.21.2020 17:04			
	Analyzed:	11.22.2020 10:15		11.22.2020 10:37			
	Units/RL:	mg/kg	RL	mg/kg	RL		
Benzene		<0.00200	0.00200	<0.00200	0.00200		
Toluene		<0.00200	0.00200	<0.00200	0.00200		
Ethylbenzene		<0.00200	0.00200	<0.00200	0.00200		
m,p-Xylenes		<0.00399	0.00399	<0.00399	0.00399		
o-Xylene		<0.00200	0.00200	<0.00200	0.00200		
Total Xylenes		<0.002000	0.002000	<0.002000	0.002000		
Total BTEX		<0.002000	0.002000	<0.002000	0.002000		
Inorganic Anions by EPA 300	***Extracted:***	11.20.2020 17:47		11.20.2020 17:47			
	Analyzed:	11.21.2020 04:00		11.21.2020 04:05			
	Units/RL:	mg/kg	RL	mg/kg	RL		
Chloride		10.9	10.0	11.9	10.0		
TPH by SW8015 Mod	***Extracted:***	11.21.2020 16:00		11.21.2020 16:00			
	Analyzed:	11.21.2020 22:21		11.21.2020 22:41			
	Units/RL:	mg/kg	RL	mg/kg	RL		
Gasoline Range Hydrocarbons (GRO)		<49.8	49.8	<49.8	49.8		
Diesel Range Organics (DRO)		<49.8	49.8	<49.8	49.8		
Motor Oil Range Hydrocarbons (MRO)		<49.8	49.8	<49.8	49.8		
Total TPH		<49.80	49.80	<49.80	49.80		

BRL - Below Reporting Limit

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



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Analytical Report 678647

for

WPX Energy Permian Basin, LLC

Project Manager: Lynda Laumbach

North Brushy Draw 35-04 H

11.25.2020

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)

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11.25.2020

Project Manager: **Lynda Laumbach**
WPX Energy Permian Basin, LLC
5315 Buena Vista Dr.
Carlsbad, NM 88220

Reference: Eurofins Xenco, LLC Report No(s): **678647**
North Brushy Draw 35-04 H
Project Address: Eddy County, New Mexico

Lynda Laumbach:

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 Eurofins Xenco, LLC Report Number(s) 678647. 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 Eurofins Xenco, LLC. 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. 678647 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 Eurofins Xenco, LLC 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

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Sample Cross Reference 678647

WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-04 H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
DS01	S	11.20.2020 10:00	0.5 ft	678647-001
DS01 A	S	11.20.2020 10:15	1 ft	678647-002
DS02	S	11.20.2020 10:30	0.5 ft	678647-003
DS02 A	S	11.20.2020 10:40	1 ft	678647-004
DS03	S	11.20.2020 10:50	0.5 ft	678647-005
DS03 A	S	11.20.2020 11:10	1 ft	678647-006
DS04	S	11.20.2020 11:30	0.5 ft	678647-007
DS04 A	S	11.20.2020 11:40	1 ft	678647-008

CASE NARRATIVE

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Client Name: WPX Energy Permian Basin, LLC

Project Name: North Brushy Draw 35-04 H

Project ID:
Work Order Number(s): *678647*

Report Date: *11.25.2020*
Date Received: *11.20.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

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Certificate of Analytical Results 678647

WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-04 H

Sample Id:	**DS01**	Matrix:	Soil	Date Received:	11.20.2020 14:35
Lab Sample Id:	678647-001	Date Collected:	11.20.2020 10:00	Sample Depth:	0.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	MAB				
Analyst:	MAB	Date Prep:	11.23.2020 07:52	% Moisture:	
Seq Number:	3143163			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**128**	9.98	mg/kg	11.23.2020 11:21		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	11.21.2020 16:00	% Moisture:	
Seq Number:	3143020			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	11.21.2020 19:39	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	11.21.2020 19:39	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	11.21.2020 19:39	U	1
Total TPH	PHC635	<50.20	50.20	mg/kg	11.21.2020 19:39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	11.21.2020 19:39	
o-Terphenyl	84-15-1	107	%	70-135	11.21.2020 19:39	

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Certificate of Analytical Results 678647

WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-04 H

Sample Id:	**DS01**	Matrix:	Soil	Date Received:	11.20.2020 14:35
Lab Sample Id:	678647-001	Date Collected:	11.20.2020 10:00	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	11.21.2020 17:01	% Moisture:	
Seq Number:	3143103			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	11.22.2020 04:14	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	11.22.2020 04:14	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	11.22.2020 04:14	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	11.22.2020 04:14	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	11.22.2020 04:14	U	1
Total Xylenes	1330-20-7	<0.001990	0.001990	mg/kg	11.22.2020 04:14	U	1
Total BTEX		<0.001990	0.001990	mg/kg	11.22.2020 04:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	119	%	70-130	11.22.2020 04:14	
1,4-Difluorobenzene	540-36-3	102	%	70-130	11.22.2020 04:14	

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Certificate of Analytical Results 678647

WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-04 H

Sample Id:	**DS01 A**	Matrix:	Soil	Date Received:	11.20.2020 14:35
Lab Sample Id:	678647-002	Date Collected:	11.20.2020 10:15	Sample Depth:	1 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	MAB				
Analyst:	MAB	Date Prep:	11.23.2020 07:52	% Moisture:	
Seq Number:	3143163			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**63.6**	9.96	mg/kg	11.23.2020 11:26		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	11.21.2020 16:00	% Moisture:	
Seq Number:	3143020			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	11.21.2020 20:39	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	11.21.2020 20:39	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	11.21.2020 20:39	U	1
Total TPH	PHC635	<49.90	49.90	mg/kg	11.21.2020 20:39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	11.21.2020 20:39	
o-Terphenyl	84-15-1	118	%	70-135	11.21.2020 20:39	

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Certificate of Analytical Results 678647

WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-04 H

Sample Id:	**DS01 A**	Matrix:	Soil	Date Received:	11.20.2020 14:35
Lab Sample Id:	678647-002	Date Collected:	11.20.2020 10:15	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	11.21.2020 17:01	% Moisture:	
Seq Number:	3143103			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	11.22.2020 04:36	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	11.22.2020 04:36	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	11.22.2020 04:36	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	11.22.2020 04:36	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	11.22.2020 04:36	U	1
Total Xylenes	1330-20-7	<0.001990	0.001990	mg/kg	11.22.2020 04:36	U	1
Total BTEX		<0.001990	0.001990	mg/kg	11.22.2020 04:36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	103	%	70-130	11.22.2020 04:36	
4-Bromofluorobenzene	460-00-4	118	%	70-130	11.22.2020 04:36	

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Certificate of Analytical Results 678647

WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-04 H

Sample Id:	**DS02**	Matrix:	Soil	Date Received:	11.20.2020 14:35
Lab Sample Id:	678647-003	Date Collected:	11.20.2020 10:30	Sample Depth:	0.5 ft

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P

Tech: MAB

Analyst: MAB — Date Prep: 11.23.2020 07:52 — % Moisture:

Seq Number: 3143163 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**66.4**	9.98	mg/kg	11.23.2020 11:31		1

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P

Tech: MAB

Analyst: CAC — Date Prep: 11.21.2020 16:00 — % Moisture:

Seq Number: 3143020 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	11.21.2020 21:00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	11.21.2020 21:00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	11.21.2020 21:00	U	1
Total TPH	PHC635	<50.10	50.10	mg/kg	11.21.2020 21:00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	11.21.2020 21:00	
o-Terphenyl	84-15-1	113	%	70-135	11.21.2020 21:00	

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Certificate of Analytical Results 678647

WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-04 H

Sample Id:	**DS02**	Matrix:	Soil	Date Received:	11.20.2020 14:35
Lab Sample Id:	678647-003	Date Collected:	11.20.2020 10:30	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	11.21.2020 17:01	% Moisture:	
Seq Number:	3143103			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	11.22.2020 04:59	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	11.22.2020 04:59	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	11.22.2020 04:59	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	11.22.2020 04:59	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	11.22.2020 04:59	U	1
Total Xylenes	1330-20-7	<0.002010	0.002010	mg/kg	11.22.2020 04:59	U	1
Total BTEX		<0.002010	0.002010	mg/kg	11.22.2020 04:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	116	%	70-130	11.22.2020 04:59	
1,4-Difluorobenzene	540-36-3	103	%	70-130	11.22.2020 04:59	

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Certificate of Analytical Results 678647

WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-04 H

Sample Id:	**DS02 A**	Matrix:	Soil	Date Received:	11.20.2020 14:35
Lab Sample Id:	678647-004	Date Collected:	11.20.2020 10:40	Sample Depth:	1 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	MAB				
Analyst:	MAB	Date Prep:	11.20.2020 17:47	% Moisture:	
Seq Number:	3142929			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**30.4**	9.98	mg/kg	11.21.2020 03:23		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	11.21.2020 16:00	% Moisture:	
Seq Number:	3143020			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	11.21.2020 21:20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	11.21.2020 21:20	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	11.21.2020 21:20	U	1
Total TPH	PHC635	<49.80	49.80	mg/kg	11.21.2020 21:20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	11.21.2020 21:20	
o-Terphenyl	84-15-1	103	%	70-135	11.21.2020 21:20	

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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-04 H

Sample Id:	**DS02 A**	Matrix:	Soil	Date Received:	11.20.2020 14:35
Lab Sample Id:	678647-004	Date Collected:	11.20.2020 10:40	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	11.21.2020 17:04	% Moisture:	
Seq Number:	3142998			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	11.22.2020 09:08	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	11.22.2020 09:08	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	11.22.2020 09:08	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	11.22.2020 09:08	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	11.22.2020 09:08	U	1
Total Xylenes	1330-20-7	<0.001990	0.001990	mg/kg	11.22.2020 09:08	U	1
Total BTEX		<0.001990	0.001990	mg/kg	11.22.2020 09:08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	120	%	70-130	11.22.2020 09:08	
1,4-Difluorobenzene	540-36-3	101	%	70-130	11.22.2020 09:08	

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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-04 H

Sample Id:	**DS03**	Matrix:	Soil	Date Received:	11.20.2020 14:35
Lab Sample Id:	678647-005	Date Collected:	11.20.2020 10:50	Sample Depth:	0.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	MAB				
Analyst:	MAB	Date Prep:	11.20.2020 17:47	% Moisture:	
Seq Number:	3142929			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**18.0**	9.92	mg/kg	11.21.2020 03:39		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	11.21.2020 16:00	% Moisture:	
Seq Number:	3143020			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	11.21.2020 21:41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	11.21.2020 21:41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	11.21.2020 21:41	U	1
Total TPH	PHC635	<49.90	49.90	mg/kg	11.21.2020 21:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	11.21.2020 21:41	
o-Terphenyl	84-15-1	111	%	70-135	11.21.2020 21:41	

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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-04 H

Sample Id:	**DS03**	Matrix:	Soil	Date Received:	11.20.2020 14:35
Lab Sample Id:	678647-005	Date Collected:	11.20.2020 10:50	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	11.21.2020 17:04	% Moisture:	
Seq Number:	3142998			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	11.22.2020 09:30	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	11.22.2020 09:30	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	11.22.2020 09:30	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	11.22.2020 09:30	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	11.22.2020 09:30	U	1
Total Xylenes	1330-20-7	<0.002010	0.002010	mg/kg	11.22.2020 09:30	U	1
Total BTEX		<0.002010	0.002010	mg/kg	11.22.2020 09:30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	116	%	70-130	11.22.2020 09:30	
1,4-Difluorobenzene	540-36-3	101	%	70-130	11.22.2020 09:30	

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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-04 H

Sample Id:	**DS03 A**	Matrix:	Soil	Date Received:	11.20.2020 14:35
Lab Sample Id:	678647-006	Date Collected:	11.20.2020 11:10	Sample Depth:	1 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	MAB				
Analyst:	MAB	Date Prep:	11.20.2020 17:47	% Moisture:	
Seq Number:	3142929			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**27.1**	9.98	mg/kg	11.21.2020 03:54		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	11.21.2020 16:00	% Moisture:	
Seq Number:	3143020			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	11.21.2020 22:01	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	11.21.2020 22:01	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	11.21.2020 22:01	U	1
Total TPH	PHC635	<50.10	50.10	mg/kg	11.21.2020 22:01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	11.21.2020 22:01	
o-Terphenyl	84-15-1	115	%	70-135	11.21.2020 22:01	

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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-04 H

Sample Id:	**DS03 A**	Matrix:	Soil	Date Received:	11.20.2020 14:35
Lab Sample Id:	678647-006	Date Collected:	11.20.2020 11:10	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	11.21.2020 17:04	% Moisture:	
Seq Number:	3142998			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	11.22.2020 09:52	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	11.22.2020 09:52	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	11.22.2020 09:52	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	11.22.2020 09:52	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	11.22.2020 09:52	U	1
Total Xylenes	1330-20-7	<0.002020	0.002020	mg/kg	11.22.2020 09:52	U	1
Total BTEX		<0.002020	0.002020	mg/kg	11.22.2020 09:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	107	%	70-130	11.22.2020 09:52	
4-Bromofluorobenzene	460-00-4	118	%	70-130	11.22.2020 09:52	

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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-04 H

Sample Id:	**DS04**	Matrix:	Soil	Date Received:	11.20.2020 14:35
Lab Sample Id:	678647-007	Date Collected:	11.20.2020 11:30	Sample Depth:	0.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	MAB				
Analyst:	MAB	Date Prep:	11.20.2020 17:47	% Moisture:	
Seq Number:	3142929			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**10.9**	10.0	mg/kg	11.21.2020 04:00		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	11.21.2020 16:00	% Moisture:	
Seq Number:	3143020			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	11.21.2020 22:21	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	11.21.2020 22:21	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	11.21.2020 22:21	U	1
Total TPH	PHC635	<49.80	49.80	mg/kg	11.21.2020 22:21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	11.21.2020 22:21	
o-Terphenyl	84-15-1	99	%	70-135	11.21.2020 22:21	

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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-04 H

Sample Id:	**DS04**	Matrix:	Soil	Date Received:	11.20.2020 14:35
Lab Sample Id:	678647-007	Date Collected:	11.20.2020 11:30	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	11.21.2020 17:04	% Moisture:	
Seq Number:	3142998			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	11.22.2020 10:15	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	11.22.2020 10:15	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	11.22.2020 10:15	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	11.22.2020 10:15	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	11.22.2020 10:15	U	1
Total Xylenes	1330-20-7	<0.002000	0.002000	mg/kg	11.22.2020 10:15	U	1
Total BTEX		<0.002000	0.002000	mg/kg	11.22.2020 10:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	112	%	70-130	11.22.2020 10:15	
1,4-Difluorobenzene	540-36-3	103	%	70-130	11.22.2020 10:15	

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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-04 H

Sample Id:	**DS04 A**	Matrix:	Soil	Date Received:	11.20.2020 14:35
Lab Sample Id:	678647-008	Date Collected:	11.20.2020 11:40	Sample Depth:	1 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	MAB				
Analyst:	MAB	Date Prep:	11.20.2020 17:47	% Moisture:	
Seq Number:	3142929			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**11.9**	10.0	mg/kg	11.21.2020 04:05		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	11.21.2020 16:00	% Moisture:	
Seq Number:	3143020			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	11.21.2020 22:41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	11.21.2020 22:41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	11.21.2020 22:41	U	1
Total TPH	PHC635	<49.80	49.80	mg/kg	11.21.2020 22:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	11.21.2020 22:41	
o-Terphenyl	84-15-1	107	%	70-135	11.21.2020 22:41	

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Certificate of Analytical Results 678647

WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-04 H

Sample Id:	**DS04 A**	Matrix:	Soil	Date Received:	11.20.2020 14:35
Lab Sample Id:	678647-008	Date Collected:	11.20.2020 11:40	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	11.21.2020 17:04	% Moisture:	
Seq Number:	3142998			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	11.22.2020 10:37	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	11.22.2020 10:37	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	11.22.2020 10:37	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	11.22.2020 10:37	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	11.22.2020 10:37	U	1
Total Xylenes	1330-20-7	<0.002000	0.002000	mg/kg	11.22.2020 10:37	U	1
Total BTEX		<0.002000	0.002000	mg/kg	11.22.2020 10:37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	107	%	70-130	11.22.2020 10:37	
4-Bromofluorobenzene	460-00-4	120	%	70-130	11.22.2020 10:37	

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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 678647

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WPX Energy Permian Basin, LLC

North Brushy Draw 35-04 H

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3142929 — Matrix: Solid — Date Prep: 11.20.2020
MB Sample Id: 7715683-1-BLK — LCS Sample Id: 7715683-1-BKS — LCSD Sample Id: 7715683-1-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	254	102	90-110	1	20	mg/kg	11.21.2020 02:01	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3143163 — Matrix: Solid — Date Prep: 11.23.2020
MB Sample Id: 7715704-1-BLK — LCS Sample Id: 7715704-1-BKS — LCSD Sample Id: 7715704-1-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	247	99	244	98	90-110	1	20	mg/kg	11.23.2020 09:01	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3142929 — Matrix: Soil — Date Prep: 11.20.2020
Parent Sample Id: 678622-001 — MS Sample Id: 678622-001 S — MSD Sample Id: 678622-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<9.98	200	209	105	201	101	90-110	4	20	mg/kg	11.21.2020 02:16	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3142929 — Matrix: Soil — Date Prep: 11.20.2020
Parent Sample Id: 678647-004 — MS Sample Id: 678647-004 S — MSD Sample Id: 678647-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	30.4	200	229	99	229	99	90-110	0	20	mg/kg	11.21.2020 03:29	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3143163 — Matrix: Soil — Date Prep: 11.23.2020
Parent Sample Id: 678616-015 — MS Sample Id: 678616-015 S — MSD Sample Id: 678616-015 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	85.6	199	284	100	291	103	90-110	2	20	mg/kg	11.23.2020 09:17	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3143163 — Matrix: Soil — Date Prep: 11.23.2020
Parent Sample Id: 678642-002 — MS Sample Id: 678642-002 S — MSD Sample Id: 678642-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	9430	198	9640	106	9630	99	90-110	0	20	mg/kg	11.23.2020 10:29	

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

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QC Summary 678647

WPX Energy Permian Basin, LLC

North Brushy Draw 35-04 H

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3143020 — Matrix: Solid — Date Prep: 11.21.2020
MB Sample Id: 7715747-1-BLK — LCS Sample Id: 7715747-1-BKS — LCSD Sample Id: 7715747-1-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	1180	118	1210	121	70-135	3	35	mg/kg	11.21.2020 18:58	
Diesel Range Organics (DRO)	<50.0	1000	1060	106	1120	112	70-135	6	35	mg/kg	11.21.2020 18:58	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	130		114		110		70-135	%	11.21.2020 18:58
o-Terphenyl	130		111		116		70-135	%	11.21.2020 18:58

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3143020 — Matrix: Solid — Date Prep: 11.21.2020
MB Sample Id: 7715747-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	11.21.2020 18:38	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3143020 — Matrix: Soil — Date Prep: 11.21.2020
Parent Sample Id: 678647-001 — MS Sample Id: 678647-001 S — MSD Sample Id: 678647-001 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	1070	107	1130	113	70-135	5	35	mg/kg	11.21.2020 19:59	
Diesel Range Organics (DRO)	<50.0	1000	1040	104	996	100	70-135	4	35	mg/kg	11.21.2020 19:59	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	119		111		70-135	%	11.21.2020 19:59
o-Terphenyl	109		109		70-135	%	11.21.2020 19:59

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3143103 — Matrix: Solid — Date Prep: 11.21.2020
MB Sample Id: 7715708-1-BLK — LCS Sample Id: 7715708-1-BKS — LCSD Sample Id: 7715708-1-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	0.106	106	0.0977	98	70-130	8	35	mg/kg	11.21.2020 18:51	
Toluene	<0.00200	0.100	0.0971	97	0.0905	91	70-130	7	35	mg/kg	11.21.2020 18:51	
Ethylbenzene	<0.00200	0.100	0.100	100	0.0945	95	71-129	6	35	mg/kg	11.21.2020 18:51	
m,p-Xylenes	<0.00400	0.200	0.205	103	0.195	98	70-135	5	35	mg/kg	11.21.2020 18:51	
o-Xylene	<0.00200	0.100	0.100	100	0.0963	96	71-133	4	35	mg/kg	11.21.2020 18:51	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	115		103		100		70-130	%	11.21.2020 18:51
4-Bromofluorobenzene	119		106		107		70-130	%	11.21.2020 18:51

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

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QC Summary 678647

WPX Energy Permian Basin, LLC

North Brushy Draw 35-04 H

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3142998 — Matrix: Solid — Date Prep: 11.21.2020
MB Sample Id: 7715709-1-BLK — LCS Sample Id: 7715709-1-BKS — LCSD Sample Id: 7715709-1-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	0.0974	97	0.0977	98	70-130	0	35	mg/kg	11.22.2020 07:03	
Toluene	<0.00200	0.100	0.0908	91	0.0909	91	70-130	0	35	mg/kg	11.22.2020 07:03	
Ethylbenzene	<0.00200	0.100	0.0943	94	0.0937	94	71-129	1	35	mg/kg	11.22.2020 07:03	
m,p-Xylenes	<0.00400	0.200	0.193	97	0.192	96	70-135	1	35	mg/kg	11.22.2020 07:03	
o-Xylene	<0.00200	0.100	0.0960	96	0.0963	96	71-133	0	35	mg/kg	11.22.2020 07:03	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		97		100		70-130	%	11.22.2020 07:03
4-Bromofluorobenzene	115		108		109		70-130	%	11.22.2020 07:03

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3143103 — Matrix: Soil — Date Prep: 11.21.2020
Parent Sample Id: 678616-015 — MS Sample Id: 678616-015 S — MSD Sample Id: 678616-015 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	0.0917	92	0.0822	82	70-130	11	35	mg/kg	11.21.2020 19:36	
Toluene	<0.00200	0.100	0.0860	86	0.0721	72	70-130	18	35	mg/kg	11.21.2020 19:36	
Ethylbenzene	<0.00200	0.100	0.0861	86	0.0792	79	71-129	8	35	mg/kg	11.21.2020 19:36	
m,p-Xylenes	<0.00400	0.200	0.176	88	0.139	70	70-135	23	35	mg/kg	11.21.2020 19:36	
o-Xylene	<0.00200	0.100	0.0864	86	0.0709	71	71-133	20	35	mg/kg	11.21.2020 19:36	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	95		100		70-130	%	11.21.2020 19:36
4-Bromofluorobenzene	102		111		70-130	%	11.21.2020 19:36

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3142998 — Matrix: Soil — Date Prep: 11.21.2020
Parent Sample Id: 678647-004 — MS Sample Id: 678647-004 S — MSD Sample Id: 678647-004 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	0.0841	84	0.0828	83	70-130	2	35	mg/kg	11.22.2020 07:48	
Toluene	<0.00200	0.100	0.0786	79	0.0768	77	70-130	2	35	mg/kg	11.22.2020 07:48	
Ethylbenzene	<0.00200	0.100	0.0813	81	0.0766	77	71-129	6	35	mg/kg	11.22.2020 07:48	
m,p-Xylenes	<0.00401	0.200	0.163	82	0.159	79	70-135	2	35	mg/kg	11.22.2020 07:48	
o-Xylene	<0.00200	0.100	0.0823	82	0.0809	81	71-133	2	35	mg/kg	11.22.2020 07:48	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	96		97		70-130	%	11.22.2020 07:48
4-Bromofluorobenzene	106		104		70-130	%	11.22.2020 07:48

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

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, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701
Atlanta, GA (770) 449-8800

Work Order No: 678647

www.xenco.com Page 1 of 1

Project Manager:	Lynda Laumbach	Bill to: (if different)	Lynda Laumbach
Company Name:	WPX Enery Permian, LLC.	Company Name:	WPX Energy Permian, LLC.
Address:	5315 Buena Vista Dr	Address:	5315 Buena Vista Dr
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	(575)725-1647	Email:	Lynda.Laumbach@wpxenergy.com

Work Order Comments

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

Project Name:	North Brushy Draw 35-044H	Turn Around	☒ Routine ☐ Rush
Project Number:		Due Date:	
Project Location	Eddy, NM	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Victoria Winn		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Received Intact:	Yes No	Thermometer ID:	THM007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	5.2
Total Containers:	8	Corrected Temperature:	5.0

Preservative Codes

None: NO; DI Water: H_2O; Cool: Cool; MeOH: Me; HCL: HC; HNO_3: HN; H_2S0_4: H_2; NaOH: Na; H_3PO_4: HP; $NaHSO_4$: NABIS; $Na_2S_2O_3$: $NaSO_3$; Zn Acetate+NaOH: Zn; NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: Chlorides (EPA 300.00)	BTEX (Method 8021)	TPH (Method 8015)	TPH (TX- Extended 1005)	Sample Comments
DS01	S	11.20.20	10:00	0.5'	G	1		X	X	X		
DS01 A	S	11.20.20	10:15	1'	G	1		X	X	X		
DS02	S	11.20.20	10:30	0.5'	G	1		X	X	X		
DS02 A	S	11.20.20	10:40	1'	G	1		X	X	X		
DS03	S	11.20.20	10:50	0.5'	G	1		X	X	X		
DS03A	S	11.20.20	11:10	1'	G	1		X	X	X		
DS04	S	11.20.20	11:30	0.5'	G	1		X	X	X		
DS04A	S	11.20.20	11:40	1'	G	1		X	X	X		

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 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 Hg: **1631 / 245.1 / 7470 / 7471**

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		11.20.2014.35	2		
			4		
			6		

Revised Date 05012020 Rev. 2020.1

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: WPX Energy Permian Basin, LLC

Date/ Time Received: 11.20.2020 02.35.00 PM

Work Order #: 678647

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 *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: Cloe Clifton Date: 11.20.2020

Checklist reviewed by: Jessica Kramer Date: 11.23.2020

Jessica Kramer

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Certificate of Analysis Summary 669618

LT Environmental, Inc., Arvada, CO

Project Name: North Brushy Draw 35-4

Project Id: 034820029
Contact: Joseph Hernandez
Project Location: Eddy County

Date Received in Lab: Mon 08.10.2020 11:37
Report Date: 08.14.2020 20:45
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	669618-001		669618-002		669618-003		669618-004		669618-005		669618-006	
	Field Id:	BH01		BH01A		BH02		BH02A		BH03		BH03A	
	Depth:	0.1-0.3 ft		0.3-0.5 ft		0.2-0.5 ft		2-2.5 ft		0.2-0.5 ft		0.5-1 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	08.07.2020 08:50		08.07.2020 08:55		08.07.2020 09:20		08.07.2020 11:10		08.07.2020 09:40		08.07.2020 09:50	
BTEX by EPA 8021B	***Extracted:***	08.12.2020 12:19		08.12.2020 12:19		08.12.2020 12:19		08.12.2020 12:19		08.12.2020 12:19		08.12.2020 12:19	
	Analyzed:	08.12.2020 16:33		08.12.2020 17:55		08.12.2020 18:15		08.12.2020 16:54		08.12.2020 17:14		08.12.2020 17:35	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00200	0.00200	<0.00500	0.00500	<0.00250	0.00250	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200
Toluene		<0.00200	0.00200	<0.00500	0.00500	<0.00250	0.00250	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200
Ethylbenzene		<0.00200	0.00200	<0.0200	0.0200	0.0981	0.0100	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200
m,p-Xylenes		<0.00401	0.00401	<0.0400	0.0400	0.0426	0.0200	<0.00399	0.00399	<0.00404	0.00404	<0.00401	0.00401
o-Xylene		<0.00200	0.00200	<0.0200	0.0200	0.236	0.0100	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200
Total Xylenes		<0.00200	0.00200	<0.0200	0.0200	0.279	0.0100	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200
Total BTEX		<0.00200	0.00200	<0.00500	0.00500	0.377	0.00250	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200
Inorganic Anions by EPA 300	***Extracted:***	08.12.2020 12:34		08.12.2020 12:34		08.12.2020 12:34		08.12.2020 12:34		08.12.2020 12:34		08.12.2020 12:34	
	Analyzed:	08.12.2020 14:37		08.12.2020 14:54		08.12.2020 15:00		08.12.2020 15:05		08.12.2020 15:11		08.12.2020 15:28	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		116	9.98	33.6	9.96	5400	49.6	5630	49.6	43.4	9.98	54.6	10.0
TPH by SW8015 Mod	***Extracted:***	08.11.2020 17:20		08.11.2020 17:20		08.11.2020 17:20		08.10.2020 15:15		08.10.2020 15:15		08.10.2020 15:15	
	Analyzed:	08.12.2020 03:59		08.12.2020 04:20		08.12.2020 04:40		08.10.2020 22:14		08.10.2020 22:34		08.10.2020 22:54	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<250	250	<249	249	<251	251	<49.8	49.8	<50.1	50.1	<50.2	50.2
Diesel Range Organics (DRO)		9780	250	9740	249	2900	251	81.6	49.8	<50.1	50.1	<50.2	50.2
Motor Oil Range Hydrocarbons (MRO)		1080	250	938	249	399	251	<49.8	49.8	<50.1	50.1	<50.2	50.2
Total TPH		10900	250	10700	249	3300	251	81.6	49.8	<50.1	50.1	<50.2	50.2

BRL - Below Reporting Limit

Jessica Kramer

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

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Analytical Report 669618

for

LT Environmental, Inc.

Project Manager: Joseph Hernandez

North Brushy Draw 35-4

034820029

08.14.2020

Collected By: Anna Byers

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-36), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-25), 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)

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08.14.2020

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

Reference: Eurofins Xenco, LLC Report No(s): **669618**
North Brushy Draw 35-4
Project Address: Eddy County

Joseph Hernandez:

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 Eurofins Xenco, LLC Report Number(s) 669618. 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 Eurofins Xenco, LLC. 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. 669618 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 Eurofins Xenco, LLC 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

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Sample Cross Reference 669618

LT Environmental, Inc., Arvada, CO

North Brushy Draw 35-4

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH01	S	08.07.2020 08:50	0.1 - 0.3 ft	669618-001
BH01A	S	08.07.2020 08:55	0.3 - 0.5 ft	669618-002
BH02	S	08.07.2020 09:20	0.2 - 0.5 ft	669618-003
BH02A	S	08.07.2020 11:10	2 - 2.5 ft	669618-004
BH03	S	08.07.2020 09:40	0.2 - 0.5 ft	669618-005
BH03A	S	08.07.2020 09:50	0.5 - 1 ft	669618-006

CASE NARRATIVE

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Client Name: LT Environmental, Inc.

Project Name: North Brushy Draw 35-4

Project ID: *034820029*
Work Order Number(s): *669618*

Report Date: *08.14.2020*
Date Received: *08.10.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3134273 TPH by SW8015 Mod

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

Samples affected are: 669618-002.

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Certificate of Analytical Results 669618

LT Environmental, Inc., Arvada, CO

North Brushy Draw 35-4

Sample Id:	**BH01**	Matrix:	Soil	Date Received:	08.10.2020 11:37
Lab Sample Id:	669618-001	Date Collected:	08.07.2020 08:50	Sample Depth:	0.1 - 0.3 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CAC			% Moisture:	
Analyst:	MAB	Date Prep:	08.12.2020 12:34	Basis:	Wet Weight
Seq Number:	3134397				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**116**	9.98	mg/kg	08.12.2020 14:37		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	08.11.2020 17:20	Basis:	Wet Weight
Seq Number:	3134273				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<250	250	mg/kg	08.12.2020 03:59	U	5
Diesel Range Organics (DRO)	C10C28DRO	**9780**	250	mg/kg	08.12.2020 03:59		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**1080**	250	mg/kg	08.12.2020 03:59		5
Total TPH	PHC635	**10900**	250	mg/kg	08.12.2020 03:59		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	08.12.2020 03:59	
o-Terphenyl	84-15-1	107	%	70-135	08.12.2020 03:59	

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Certificate of Analytical Results 669618

LT Environmental, Inc., Arvada, CO

North Brushy Draw 35-4

Sample Id:	**BH01**	Matrix:	Soil	Date Received:	08.10.2020 11:37
Lab Sample Id:	669618-001	Date Collected:	08.07.2020 08:50	Sample Depth:	0.1 - 0.3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	CAC			% Moisture:	
Analyst:	MAB	Date Prep:	08.12.2020 12:19	Basis:	Wet Weight
Seq Number:	3134380				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.12.2020 16:33	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.12.2020 16:33	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.12.2020 16:33	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.12.2020 16:33	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.12.2020 16:33	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.12.2020 16:33	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.12.2020 16:33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	93	%	70-130	08.12.2020 16:33	
4-Bromofluorobenzene	460-00-4	95	%	70-130	08.12.2020 16:33	

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LT Environmental, Inc., Arvada, CO

North Brushy Draw 35-4

Sample Id:	**BH01A**	Matrix:	Soil	Date Received:	08.10.2020 11:37
Lab Sample Id:	669618-002	Date Collected:	08.07.2020 08:55	Sample Depth:	0.3 - 0.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CAC			% Moisture:	
Analyst:	MAB	Date Prep:	08.12.2020 12:34	Basis:	Wet Weight
Seq Number:	3134397				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**33.6**	9.96	mg/kg	08.12.2020 14:54		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	08.11.2020 17:20	Basis:	Wet Weight
Seq Number:	3134273				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<249	249	mg/kg	08.12.2020 04:20	U	5
Diesel Range Organics (DRO)	C10C28DRO	**9740**	249	mg/kg	08.12.2020 04:20		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**938**	249	mg/kg	08.12.2020 04:20		5
Total TPH	PHC635	**10700**	249	mg/kg	08.12.2020 04:20		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	08.12.2020 04:20	
o-Terphenyl	84-15-1	138	%	70-135	08.12.2020 04:20	**

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LT Environmental, Inc., Arvada, CO

North Brushy Draw 35-4

Sample Id:	**BH01A**	Matrix:	Soil	Date Received:	08.10.2020 11:37
Lab Sample Id:	669618-002	Date Collected:	08.07.2020 08:55	Sample Depth:	0.3 - 0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	CAC			% Moisture:	
Analyst:	MAB	Date Prep:	08.12.2020 12:19	Basis:	Wet Weight
Seq Number:	3134380				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00500	0.00500	mg/kg	08.12.2020 17:55	U	1
Toluene	108-88-3	<0.00500	0.00500	mg/kg	08.12.2020 17:55	U	1
Ethylbenzene	100-41-4	<0.0200	0.0200	mg/kg	08.12.2020 17:55	U	1
m,p-Xylenes	179601-23-1	<0.0400	0.0400	mg/kg	08.12.2020 17:55	U	1
o-Xylene	95-47-6	<0.0200	0.0200	mg/kg	08.12.2020 17:55	U	1
Total Xylenes	1330-20-7	<0.0200	0.0200	mg/kg	08.12.2020 17:55	U	1
Total BTEX		<0.00500	0.00500	mg/kg	08.12.2020 17:55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	70-130	08.12.2020 17:55	
1,4-Difluorobenzene	540-36-3	97	%	70-130	08.12.2020 17:55	

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LT Environmental, Inc., Arvada, CO

North Brushy Draw 35-4

Sample Id:	**BH02**	Matrix:	Soil	Date Received:	08.10.2020 11:37
Lab Sample Id:	669618-003	Date Collected:	08.07.2020 09:20	Sample Depth:	0.2 - 0.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CAC			% Moisture:	
Analyst:	MAB	Date Prep:	08.12.2020 12:34	Basis:	Wet Weight
Seq Number:	3134397				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**5400**	49.6	mg/kg	08.12.2020 15:00		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	08.11.2020 17:20	Basis:	Wet Weight
Seq Number:	3134273				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<251	251	mg/kg	08.12.2020 04:40	U	5
Diesel Range Organics (DRO)	C10C28DRO	**2900**	251	mg/kg	08.12.2020 04:40		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**399**	251	mg/kg	08.12.2020 04:40		5
Total TPH	PHC635	**3300**	251	mg/kg	08.12.2020 04:40		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	08.12.2020 04:40	
o-Terphenyl	84-15-1	113	%	70-135	08.12.2020 04:40	

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LT Environmental, Inc., Arvada, CO

North Brushy Draw 35-4

Sample Id:	**BH02**	Matrix:	Soil	Date Received:	08.10.2020 11:37
Lab Sample Id:	669618-003	Date Collected:	08.07.2020 09:20	Sample Depth:	0.2 - 0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	CAC			% Moisture:	
Analyst:	MAB	Date Prep:	08.12.2020 12:19	Basis:	Wet Weight
Seq Number:	3134380				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00250	0.00250	mg/kg	08.12.2020 18:15	U	1
Toluene	108-88-3	<0.00250	0.00250	mg/kg	08.12.2020 18:15	U	1
Ethylbenzene	100-41-4	**0.0981**	0.0100	mg/kg	08.12.2020 18:15		1
m,p-Xylenes	179601-23-1	**0.0426**	0.0200	mg/kg	08.12.2020 18:15		1
o-Xylene	95-47-6	**0.236**	0.0100	mg/kg	08.12.2020 18:15		1
Total Xylenes	1330-20-7	**0.279**	0.0100	mg/kg	08.12.2020 18:15		1
Total BTEX		**0.377**	0.00250	mg/kg	08.12.2020 18:15		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	102	%	70-130	08.12.2020 18:15	
1,4-Difluorobenzene	540-36-3	94	%	70-130	08.12.2020 18:15	

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LT Environmental, Inc., Arvada, CO

North Brushy Draw 35-4

Sample Id:	**BH02A**	Matrix:	Soil	Date Received:	08.10.2020 11:37
Lab Sample Id:	669618-004	Date Collected:	08.07.2020 11:10	Sample Depth:	2 - 2.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CAC			% Moisture:	
Analyst:	MAB	Date Prep:	08.12.2020 12:34	Basis:	Wet Weight
Seq Number:	3134397				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**5630**	49.6	mg/kg	08.12.2020 15:05		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	08.10.2020 15:15	Basis:	Wet Weight
Seq Number:	3134122				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.10.2020 22:14	U	1
Diesel Range Organics (DRO)	C10C28DRO	**81.6**	49.8	mg/kg	08.10.2020 22:14		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	08.10.2020 22:14	U	1
Total TPH	PHC635	**81.6**	49.8	mg/kg	08.10.2020 22:14		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	08.10.2020 22:14	
o-Terphenyl	84-15-1	99	%	70-135	08.10.2020 22:14	

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North Brushy Draw 35-4

Sample Id:	**BH02A**	Matrix:	Soil	Date Received:	08.10.2020 11:37
Lab Sample Id:	669618-004	Date Collected:	08.07.2020 11:10	Sample Depth:	2 - 2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	CAC			% Moisture:	
Analyst:	MAB	Date Prep:	08.12.2020 12:19	Basis:	Wet Weight
Seq Number:	3134380				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.12.2020 16:54	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.12.2020 16:54	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.12.2020 16:54	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.12.2020 16:54	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.12.2020 16:54	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.12.2020 16:54	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.12.2020 16:54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	96	%	70-130	08.12.2020 16:54	
4-Bromofluorobenzene	460-00-4	108	%	70-130	08.12.2020 16:54	

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LT Environmental, Inc., Arvada, CO

North Brushy Draw 35-4

Sample Id:	**BH03**	Matrix:	Soil	Date Received:	08.10.2020 11:37
Lab Sample Id:	669618-005	Date Collected:	08.07.2020 09:40	Sample Depth:	0.2 - 0.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CAC			% Moisture:	
Analyst:	MAB	Date Prep:	08.12.2020 12:34	Basis:	Wet Weight
Seq Number:	3134397				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**43.4**	9.98	mg/kg	08.12.2020 15:11		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	08.10.2020 15:15	Basis:	Wet Weight
Seq Number:	3134122				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	08.10.2020 22:34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	08.10.2020 22:34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	08.10.2020 22:34	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	08.10.2020 22:34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	08.10.2020 22:34	
o-Terphenyl	84-15-1	101	%	70-135	08.10.2020 22:34	

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LT Environmental, Inc., Arvada, CO

North Brushy Draw 35-4

Sample Id:	**BH03**	Matrix:	Soil	Date Received:	08.10.2020 11:37
Lab Sample Id:	669618-005	Date Collected:	08.07.2020 09:40	Sample Depth:	0.2 - 0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	CAC			% Moisture:	
Analyst:	MAB	Date Prep:	08.12.2020 12:19	Basis:	Wet Weight
Seq Number:	3134380				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	08.12.2020 17:14	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	08.12.2020 17:14	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	08.12.2020 17:14	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	08.12.2020 17:14	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	08.12.2020 17:14	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	08.12.2020 17:14	U	1
Total BTEX		<0.00202	0.00202	mg/kg	08.12.2020 17:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	101	%	70-130	08.12.2020 17:14	
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.12.2020 17:14	

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LT Environmental, Inc., Arvada, CO

North Brushy Draw 35-4

Sample Id:	**BH03A**	Matrix:	Soil	Date Received:	08.10.2020 11:37
Lab Sample Id:	669618-006	Date Collected:	08.07.2020 09:50	Sample Depth:	0.5 - 1 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CAC			% Moisture:	
Analyst:	MAB	Date Prep:	08.12.2020 12:34	Basis:	Wet Weight
Seq Number:	3134397				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**54.6**	10.0	mg/kg	08.12.2020 15:28		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	08.10.2020 15:15	Basis:	Wet Weight
Seq Number:	3134122				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	08.10.2020 22:54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	08.10.2020 22:54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	08.10.2020 22:54	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	08.10.2020 22:54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	08.10.2020 22:54	
o-Terphenyl	84-15-1	102	%	70-135	08.10.2020 22:54	

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LT Environmental, Inc., Arvada, CO

North Brushy Draw 35-4

Sample Id:	**BH03A**	Matrix:	Soil	Date Received:	08.10.2020 11:37
Lab Sample Id:	669618-006	Date Collected:	08.07.2020 09:50	Sample Depth:	0.5 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	CAC			% Moisture:	
Analyst:	MAB	Date Prep:	08.12.2020 12:19	Basis:	Wet Weight
Seq Number:	3134380				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.12.2020 17:35	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.12.2020 17:35	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.12.2020 17:35	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.12.2020 17:35	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.12.2020 17:35	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.12.2020 17:35	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.12.2020 17:35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	08.12.2020 17:35	
1,4-Difluorobenzene	540-36-3	105	%	70-130	08.12.2020 17:35	

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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 669618

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LT Environmental, Inc.

North Brushy Draw 35-4

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3134397 — Matrix: Solid — Date Prep: 08.12.2020
MB Sample Id: 7709318-1-BLK — LCS Sample Id: 7709318-1-BKS — LCSD Sample Id: 7709318-1-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	267	107	267	107	90-110	0	20	mg/kg	08.12.2020 14:26	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3134397 — Matrix: Soil — Date Prep: 08.12.2020
Parent Sample Id: 669618-001 — MS Sample Id: 669618-001 S — MSD Sample Id: 669618-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	116	200	322	103	322	103	90-110	0	20	mg/kg	08.12.2020 14:43	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3134397 — Matrix: Soil — Date Prep: 08.12.2020
Parent Sample Id: 669663-001 — MS Sample Id: 669663-001 S — MSD Sample Id: 669663-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<9.98	200	205	103	205	103	90-110	0	20	mg/kg	08.12.2020 16:01	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3134122 — Matrix: Solid — Date Prep: 08.10.2020
MB Sample Id: 7709153-1-BLK — LCS Sample Id: 7709153-1-BKS — LCSD Sample Id: 7709153-1-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	1070	107	1050	105	70-135	2	35	mg/kg	08.10.2020 12:40	
Diesel Range Organics (DRO)	<50.0	1000	1180	118	1140	114	70-135	3	35	mg/kg	08.10.2020 12:40	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	105		127		123		70-135	%	08.10.2020 12:40
o-Terphenyl	107		120		116		70-135	%	08.10.2020 12:40

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3134273 — Matrix: Solid — Date Prep: 08.11.2020
MB Sample Id: 7709262-1-BLK — LCS Sample Id: 7709262-1-BKS — LCSD Sample Id: 7709262-1-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	1040	104	1080	108	70-135	4	35	mg/kg	08.11.2020 21:35	
Diesel Range Organics (DRO)	<50.0	1000	1060	106	1100	110	70-135	4	35	mg/kg	08.11.2020 21:35	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	110		134		129		70-135	%	08.11.2020 21:35
o-Terphenyl	107		117		119		70-135	%	08.11.2020 21:35

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 669618

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LT Environmental, Inc.

North Brushy Draw 35-4

Analytical Method: TPH by SW8015 Mod
Seq Number: 3134122
Prep Method: SW8015P
Date Prep: 08.10.2020
Matrix: Solid
MB Sample Id: 7709153-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	08.10.2020 12:20	

Analytical Method: TPH by SW8015 Mod
Seq Number: 3134273
Prep Method: SW8015P
Date Prep: 08.11.2020
Matrix: Solid
MB Sample Id: 7709262-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	08.11.2020 21:15	

Analytical Method: TPH by SW8015 Mod
Seq Number: 3134122
Prep Method: SW8015P
Date Prep: 08.10.2020
Parent Sample Id: 669620-001
Matrix: Soil
MS Sample Id: 669620-001 S
MSD Sample Id: 669620-001 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)	<49.8	995	1020	103	1010	102	70-135	1	35	mg/kg	08.10.2020 15:49	
Diesel Range Organics (DRO)	<49.8	995	1110	112	1090	110	70-135	2	35	mg/kg	08.10.2020 15:49	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	130		128		70-135	%	08.10.2020 15:49
o-Terphenyl	122		121		70-135	%	08.10.2020 15:49

Analytical Method: TPH by SW8015 Mod
Seq Number: 3134273
Prep Method: SW8015P
Date Prep: 08.11.2020
Parent Sample Id: 669624-111
Matrix: Soil
MS Sample Id: 669624-111 S
MSD Sample Id: 669624-111 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)	<50.2	1000	1310	131	1160	116	70-135	12	35	mg/kg	08.11.2020 22:35	
Diesel Range Organics (DRO)	<50.2	1000	1340	134	1160	116	70-135	14	35	mg/kg	08.11.2020 22:35	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	95		132		70-135	%	08.11.2020 22:35
o-Terphenyl	109		126		70-135	%	08.11.2020 22:35

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

Final 1.000

QC Summary 669618

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LT Environmental, Inc.

North Brushy Draw 35-4

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3134380 Matrix: Solid Date Prep: 08.12.2020
MB Sample Id: 7709314-1-BLK LCS Sample Id: 7709314-1-BKS LCSD Sample Id: 7709314-1-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	0.0980	98	0.0997	100	70-130	2	35	mg/kg	08.12.2020 14:37	
Toluene	<0.00200	0.100	0.0936	94	0.0950	95	70-130	1	35	mg/kg	08.12.2020 14:37	
Ethylbenzene	<0.00200	0.100	0.100	100	0.0990	99	71-129	1	35	mg/kg	08.12.2020 14:37	
m,p-Xylenes	<0.00400	0.200	0.203	102	0.202	101	70-135	0	35	mg/kg	08.12.2020 14:37	
o-Xylene	<0.00200	0.100	0.101	101	0.0996	100	71-133	1	35	mg/kg	08.12.2020 14:37	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		95		100		70-130	%	08.12.2020 14:37
4-Bromofluorobenzene	106		98		97		70-130	%	08.12.2020 14:37

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3134380 Matrix: Soil Date Prep: 08.12.2020
Parent Sample Id: 669618-001 MS Sample Id: 669618-001 S MSD Sample Id: 669618-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.107	106	0.108	108	70-130	1	35	mg/kg	08.12.2020 15:17	
Toluene	<0.00202	0.101	0.102	101	0.104	104	70-130	2	35	mg/kg	08.12.2020 15:17	
Ethylbenzene	<0.00202	0.101	0.105	104	0.108	108	71-129	3	35	mg/kg	08.12.2020 15:17	
m,p-Xylenes	<0.00403	0.202	0.213	105	0.218	109	70-135	2	35	mg/kg	08.12.2020 15:17	
o-Xylene	<0.00202	0.101	0.105	104	0.108	108	71-133	3	35	mg/kg	08.12.2020 15:17	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		97		70-130	%	08.12.2020 15:17
4-Bromofluorobenzene	100		100		70-130	%	08.12.2020 15:17

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

Work Order No: 646618

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 Crasbad, NM (432) 704-5440
Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701
www.xenco.com Page 1 of 1

Project Manager:	JOSEPH HERNANDEZ	Bill to: (if different)	LYNDA LAUMBACH
Company Name:	LT ENVIRONMENTAL	Company Name:	WPX ENERGY
Address:	3300 NORTH A STREET	Address:	5315 BUENA VISTA DR
City, State ZIP:	MIDLAND, TX 79705	City, State ZIP:	CARLSBAD, NM 88220
Phone:	(432) 894-5641	Email:	abyers@lenv.com

Work Order Comments

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

Project Name:	NORTH BRUSHY DRAW 35-4	Turn Around	
Project Number:	03482029	Routine	☒
Project Location	EDDY COUNTY	Rush:	
Sampler's Name:	ANNA BYERS	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT			
Temp Blank:	Yes / No	Wet Ice:	Yes / No
Temperature (°C):	1.0 / 0.8	Thermometer ID	TNM007
Received Intact:	Yes / No		
Cooler Custody Seals:	Yes / No / N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes / No / N/A	Total Containers:	6

Preservative Codes

MeOH: Me
None: NO
HNO3: HN
H2S04: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day recevied by the lab, if received by 4:00pm

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Pres. Code	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)	Sample Comments
	BH01	S	8/7/20	0850	0.1-0.3'	1		X	X	X	
	BH01A			0855	0.3-0.5'	1					
	BH02			0920	0.2-0.5'	1					
	BH02A			1110	2-2.5'	1					
	BH03			0940	0.2-0.5'	1					
	BH03A			0950	0.5-1'	1					

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

Circle Method(s) and Metal(s) to be analyzed

TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	Anna Byers		8/10/20 11:37	2		
3				4		
5				6		

Revised Date 022619 Rev. 2019.1

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 08.10.2020 11.37.00 AM

Work Order #: 669618

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)?	.8	
#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: 08.10.2020

Checklist reviewed by: Jessica Kramer Date: 08.11.2020

Jessica Kramer

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Certificate of Analysis Summary 676683

LT Environmental, Inc., Arvada, CO

Project Name: North Brushy Draw 35.4

Project Id: 034820029
Contact: Joseph Hernandez
Project Location: NM

Date Received in Lab: Mon 11.02.2020 15:50
Report Date: 11.10.2020 09:09
Project Manager: Jessica Kramer

Analysis Requested								
	Lab Id:	676683-001						
	Field Id:	CH01 @ 4-4.5'						
	Depth:	4-4.5 ft						
	Matrix:	SOIL						
	Sampled:	10.30.2020 10:52						
BTEX by EPA 8021B	***Extracted:***	11.03.2020 09:30						
	Analyzed:	11.03.2020 17:52						
	Units/RL:	mg/kg	RL					
Benzene		<0.00200	0.00200					
Toluene		<0.00200	0.00200					
Ethylbenzene		<0.00200	0.00200					
m,p-Xylenes		<0.00401	0.00401					
o-Xylene		<0.00200	0.00200					
Total Xylenes		<0.00200	0.00200					
Total BTEX		<0.00200	0.00200					
Chloride by EPA 300	***Extracted:***	11.02.2020 16:33						
	Analyzed:	11.02.2020 20:44						
	Units/RL:	mg/kg	RL					
Chloride		6190	50.0					
TPH by SW8015 Mod	***Extracted:***	11.02.2020 16:30						
	Analyzed:	11.03.2020 02:38						
	Units/RL:	mg/kg	RL					
Gasoline Range Hydrocarbons (GRO)		<13.9	50.2					
Diesel Range Organics (DRO)		11.6 J	50.2					
Motor Oil Range Hydrocarbons (MRO)		<11.5	50.2					
Total TPH		11.6 J	50.2					

BRL - Below Reporting Limit

Jessica Kramer

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

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Analytical Report 676683

for

LT Environmental, Inc.

Project Manager: Joseph Hernandez

North Brushy Draw 35.4

034820029

11.10.2020

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)

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11.10.2020

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

Reference: Eurofins Xenco, LLC Report No(s): **676683**
North Brushy Draw 35.4
Project Address: NM

Joseph Hernandez:

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 Eurofins Xenco, LLC Report Number(s) 676683. 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 Eurofins Xenco, LLC. 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. 676683 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 Eurofins Xenco, LLC 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

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Sample Cross Reference 676683

LT Environmental, Inc., Arvada, CO

North Brushy Draw 35.4

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
CH01 @ 4-4.5'	S	10.30.2020 10:52	4 - 4.5 ft	676683-001

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CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: North Brushy Draw 35.4

Project ID: *034820029*
Work Order Number(s): *676683*

Report Date: *11.10.2020*
Date Received: *11.02.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

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Certificate of Analytical Results 676683

LT Environmental, Inc., Arvada, CO

North Brushy Draw 35.4

Sample Id:	**CH01 @ 4-4.5'**	Matrix:	Soil	Date Received:	11.02.2020 15:50
Lab Sample Id:	676683-001	Date Collected:	10.30.2020 10:52	Sample Depth:	4 - 4.5 ft

Analytical Method: Chloride by EPA 300 — Prep Method: E300P

Tech: MAB

Analyst: MAB — Date Prep: 11.02.2020 16:33 — % Moisture:

Seq Number: 3141207 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**6190**	50.0	mg/kg	11.02.2020 20:44		5

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P

Tech: MAB

Analyst: CAC — Date Prep: 11.02.2020 16:30 — % Moisture:

Seq Number: 3141201 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.2	mg/kg	11.03.2020 02:38	U	1
Diesel Range Organics (DRO)	C10C28DRO	**11.6**	50.2	mg/kg	11.03.2020 02:38	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.2	mg/kg	11.03.2020 02:38	U	1
Total TPH	PHC635	**11.6**	50.2	mg/kg	11.03.2020 02:38	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	134	%	70-135	11.03.2020 02:38	
o-Terphenyl	84-15-1	130	%	70-135	11.03.2020 02:38	

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Certificate of Analytical Results 676683

LT Environmental, Inc., Arvada, CO

North Brushy Draw 35.4

Sample Id:	**CH01 @ 4-4.5'**	Matrix:	Soil	Date Received:	11.02.2020 15:50
Lab Sample Id:	676683-001	Date Collected:	10.30.2020 10:52	Sample Depth:	4 - 4.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	11.03.2020 09:30	% Moisture:	
Seq Number:	3141311			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	11.03.2020 17:52	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	11.03.2020 17:52	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	11.03.2020 17:52	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	11.03.2020 17:52	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	11.03.2020 17:52	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	11.03.2020 17:52	U	1
Total BTEX		<0.00200	0.00200	mg/kg	11.03.2020 17:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	111	%	70-130	11.03.2020 17:52	
1,4-Difluorobenzene	540-36-3	106	%	70-130	11.03.2020 17:52	

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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 676683

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LT Environmental, Inc.

North Brushy Draw 35.4

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3141207 — Matrix: Solid — Date Prep: 11.02.2020
MB Sample Id: 7714384-1-BLK — LCS Sample Id: 7714384-1-BKS — LCSD Sample Id: 7714384-1-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	253	101	252	101	90-110	0	20	mg/kg	11.02.2020 18:55	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3141207 — Matrix: Soil — Date Prep: 11.02.2020
Parent Sample Id: 676514-005 — MS Sample Id: 676514-005 S — MSD Sample Id: 676514-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	3690	199	3900	106	3880	95	90-110	1	20	mg/kg	11.02.2020 19:11	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3141207 — Matrix: Soil — Date Prep: 11.02.2020
Parent Sample Id: 676679-001 — MS Sample Id: 676679-001 S — MSD Sample Id: 676679-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	344	200	530	93	542	99	90-110	2	20	mg/kg	11.02.2020 20:28	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3141201 — Matrix: Solid — Date Prep: 11.02.2020
MB Sample Id: 7714382-1-BLK — LCS Sample Id: 7714382-1-BKS — LCSD Sample Id: 7714382-1-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)	<13.9	1000	907	91	852	85	70-135	6	35	mg/kg	11.02.2020 18:36	
Diesel Range Organics (DRO)	<11.5	1000	1040	104	1000	100	70-135	4	35	mg/kg	11.02.2020 18:36	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	95		125		105		70-135	%	11.02.2020 18:36
o-Terphenyl	101		103		101		70-135	%	11.02.2020 18:36

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3141201 — Matrix: Solid — Date Prep: 11.02.2020
MB Sample Id: 7714382-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<11.5	mg/kg	11.02.2020 18:16	

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

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QC Summary 676683

LT Environmental, Inc.

North Brushy Draw 35.4

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3141201 Matrix: Soil Date Prep: 11.02.2020
Parent Sample Id: 676514-007 MS Sample Id: 676514-007 S MSD Sample Id: 676514-007 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)	<13.9	1000	837	84	838	84	70-135	0	35	mg/kg	11.02.2020 19:37	
Diesel Range Organics (DRO)	<11.5	1000	910	91	927	93	70-135	2	35	mg/kg	11.02.2020 19:37	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	129		133		70-135	%	11.02.2020 19:37
o-Terphenyl	118		123		70-135	%	11.02.2020 19:37

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3141311 Matrix: Solid Date Prep: 11.03.2020
MB Sample Id: 7714461-1-BLK LCS Sample Id: 7714461-1-BKS LCSD Sample Id: 7714461-1-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	0.101	101	0.106	106	70-130	5	35	mg/kg	11.03.2020 09:56	
Toluene	<0.00200	0.100	0.0955	96	0.101	101	70-130	6	35	mg/kg	11.03.2020 09:56	
Ethylbenzene	<0.00200	0.100	0.0976	98	0.102	102	71-129	4	35	mg/kg	11.03.2020 09:56	
m,p-Xylenes	<0.00400	0.200	0.197	99	0.205	103	70-135	4	35	mg/kg	11.03.2020 09:56	
o-Xylene	<0.00200	0.100	0.0967	97	0.102	102	71-133	5	35	mg/kg	11.03.2020 09:56	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		99		104		70-130	%	11.03.2020 09:56
4-Bromofluorobenzene	110		103		110		70-130	%	11.03.2020 09:56

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3141311 Matrix: Soil Date Prep: 11.03.2020
Parent Sample Id: 676514-007 MS Sample Id: 676514-007 S MSD Sample Id: 676514-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.101	0.107	106	0.0886	89	70-130	19	35	mg/kg	11.03.2020 10:41	
Toluene	<0.00201	0.101	0.0986	98	0.0879	88	70-130	11	35	mg/kg	11.03.2020 10:41	
Ethylbenzene	<0.00201	0.101	0.0998	99	0.0910	91	71-129	9	35	mg/kg	11.03.2020 10:41	
m,p-Xylenes	<0.00402	0.201	0.202	100	0.186	93	70-135	8	35	mg/kg	11.03.2020 10:41	
o-Xylene	<0.00201	0.101	0.102	101	0.0943	94	71-133	8	35	mg/kg	11.03.2020 10:41	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		101		70-130	%	11.03.2020 10:41
4-Bromofluorobenzene	107		117		70-130	%	11.03.2020 10:41

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

Work Order No: 676683

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

Project Manager:	Joseph Hernandez	Bill to: (if different)	Lynda Laumbach
Company Name:	LT Environmental, Inc.	Company Name:	WPX Energy
Address:	3300 North A Street	Address:	5315 Buena Vista Dr
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	281-702-2329	Email:	jhernandez@ltenv.com & abyers@ltenv.com

Work Order Comments

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

Project Name:	North Brushy Draw 35-4	Turn Around	
Project Number:	034820029	Routine	☒
P.O. Number:	Liner	Rush:	
Sampler's Name:	Anna Byers	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Temperature (°C):	1.2 / 1.0	Thermometer ID	
Received Intact:	Yes No	TNH007	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Total Containers:	1

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015 Mod)	BTEX (EPA 8021B)	Chloride (EPA 300.0)
CH01 @ 4-4.5	S	10/30/20	1052	4-4.5'	1	X	X	X

ANALYSIS REQUEST

Work Order Notes

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

Sample Comments

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		11/2/20 15:50	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 11.02.2020 03.50.00 PM

Work Order #: 676683

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

Temperature Measuring device used : TNM007

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

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

Analyst: PH Device/Lot#:

Checklist completed by: Martha Castro Date: 11.02.2020

Checklist reviewed by: Jessica Kramer Date: 11.03.2020

Jessica Kramer

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Certificate of Analysis Summary 676708

LT Environmental, Inc., Arvada, CO

Project Name: North Brushy Draw 35-4

Project Id: 034820029
Contact: Joseph Hernandez
Project Location: NM

Date Received in Lab: Mon 11.02.2020 15:50
Report Date: 11.05.2020 08:16
Project Manager: Jessica Kramer

Analysis Requested							
	Lab Id:	676708-001					
	Field Id:	CH01 6-6.5'					
	Depth:	6-6.5 ft					
	Matrix:	SOIL					
	Sampled:	10.30.2020 11:10					
BTEX by EPA 8021B	***Extracted:***	11.03.2020 09:30					
	Analyzed:	11.03.2020 18:14					
	Units/RL:	mg/kg	RL				
Benzene		<0.00200	0.00200				
Toluene		<0.00200	0.00200				
Ethylbenzene		<0.00200	0.00200				
m,p-Xylenes		<0.00401	0.00401				
o-Xylene		<0.00200	0.00200				
Total Xylenes		<0.00200	0.00200				
Total BTEX		<0.00200	0.00200				
Inorganic Anions by EPA 300	***Extracted:***	11.03.2020 13:00					
	Analyzed:	11.03.2020 15:37					
	Units/RL:	mg/kg	RL				
Chloride		208	9.94				
TPH by SW8015 Mod	***Extracted:***	11.03.2020 13:27					
	Analyzed:	11.03.2020 17:22					
	Units/RL:	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<50.2	50.2				
Diesel Range Organics (DRO)		<50.2	50.2				
Motor Oil Range Hydrocarbons (MRO)		<50.2	50.2				
Total TPH		<50.2	50.2				

BRL - Below Reporting Limit

Jessica Kramer

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

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Analytical Report 676708

for

LT Environmental, Inc.

Project Manager: Joseph Hernandez

North Brushy Draw 35-4

034820029

11.05.2020

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)

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11.05.2020

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

Reference: Eurofins Xenco, LLC Report No(s): **676708**
North Brushy Draw 35-4
Project Address: NM

Joseph Hernandez:

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 Eurofins Xenco, LLC Report Number(s) 676708. 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 Eurofins Xenco, LLC. 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. 676708 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 Eurofins Xenco, LLC 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

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Sample Cross Reference 676708

LT Environmental, Inc., Arvada, CO

North Brushy Draw 35-4

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
CH01 6-6.5'	S	10.30.2020 11:10	6 - 6.5 ft	676708-001

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CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: North Brushy Draw 35-4

Project ID: *034820029*
Work Order Number(s): *676708*

Report Date: *11.05.2020*
Date Received: *11.02.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

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Certificate of Analytical Results 676708

LT Environmental, Inc., Arvada, CO

North Brushy Draw 35-4

Sample Id:	**CH01 6-6.5'**	Matrix:	Soil	Date Received:	11.02.2020 15:50
Lab Sample Id:	676708-001	Date Collected:	10.30.2020 11:10	Sample Depth:	6 - 6.5 ft

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P

Tech: MAB

Analyst: MAB — Date Prep: 11.03.2020 13:00 — % Moisture:

Seq Number: 3141306 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**208**	9.94	mg/kg	11.03.2020 15:37		1

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P

Tech: MAB

Analyst: CAC — Date Prep: 11.03.2020 13:27 — % Moisture:

Seq Number: 3141297 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	11.03.2020 17:22	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	11.03.2020 17:22	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	11.03.2020 17:22	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	11.03.2020 17:22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	131	%	70-135	11.03.2020 17:22	
o-Terphenyl	84-15-1	124	%	70-135	11.03.2020 17:22	

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Certificate of Analytical Results 676708

LT Environmental, Inc., Arvada, CO

North Brushy Draw 35-4

Sample Id:	**CH01 6-6.5'**	Matrix:	Soil	Date Received:	11.02.2020 15:50
Lab Sample Id:	676708-001	Date Collected:	10.30.2020 11:10	Sample Depth:	6 - 6.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	11.03.2020 09:30	% Moisture:	
Seq Number:	3141311			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	11.03.2020 18:14	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	11.03.2020 18:14	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	11.03.2020 18:14	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	11.03.2020 18:14	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	11.03.2020 18:14	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	11.03.2020 18:14	U	1
Total BTEX		<0.00200	0.00200	mg/kg	11.03.2020 18:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	104	%	70-130	11.03.2020 18:14	
4-Bromofluorobenzene	460-00-4	110	%	70-130	11.03.2020 18:14	

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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 676708

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LT Environmental, Inc.

North Brushy Draw 35-4

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3141306 — Matrix: Solid — Date Prep: 11.03.2020
MB Sample Id: 7714455-1-BLK — LCS Sample Id: 7714455-1-BKS — LCSD Sample Id: 7714455-1-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	260	104	259	104	90-110	0	20	mg/kg	11.03.2020 15:10	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3141306 — Matrix: Soil — Date Prep: 11.03.2020
Parent Sample Id: 676707-001 — MS Sample Id: 676707-001 S — MSD Sample Id: 676707-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	606	200	796	95	806	100	90-110	1	20	mg/kg	11.03.2020 15:26	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3141306 — Matrix: Soil — Date Prep: 11.03.2020
Parent Sample Id: 676720-001 — MS Sample Id: 676720-001 S — MSD Sample Id: 676720-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	148	200	361	107	363	108	90-110	1	20	mg/kg	11.03.2020 16:43	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3141297 — Matrix: Solid — Date Prep: 11.03.2020
MB Sample Id: 7714426-1-BLK — LCS Sample Id: 7714426-1-BKS — LCSD Sample Id: 7714426-1-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	1180	118	1130	113	70-135	4	35	mg/kg	11.03.2020 15:40	
Diesel Range Organics (DRO)	<50.0	1000	1250	125	1200	120	70-135	4	35	mg/kg	11.03.2020 15:40	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	122		130		126		70-135	%	11.03.2020 15:40
o-Terphenyl	117		120		118		70-135	%	11.03.2020 15:40

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3141297 — Matrix: Solid — Date Prep: 11.03.2020
MB Sample Id: 7714426-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	11.03.2020 15:20	

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

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QC Summary 676708

LT Environmental, Inc.

North Brushy Draw 35-4

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3141297 Matrix: Soil Date Prep: 11.03.2020
Parent Sample Id: 676707-001 MS Sample Id: 676707-001 S MSD Sample Id: 676707-001 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)	<50.3	1010	1130	112	1050	105	70-135	7	35	mg/kg	11.03.2020 16:41	
Diesel Range Organics (DRO)	<50.3	1010	1150	114	1140	114	70-135	1	35	mg/kg	11.03.2020 16:41	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	129		133		70-135	%	11.03.2020 16:41
o-Terphenyl	123		105		70-135	%	11.03.2020 16:41

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3141311 Matrix: Solid Date Prep: 11.03.2020
MB Sample Id: 7714461-1-BLK LCS Sample Id: 7714461-1-BKS LCSD Sample Id: 7714461-1-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	0.101	101	0.106	106	70-130	5	35	mg/kg	11.03.2020 09:56	
Toluene	<0.00200	0.100	0.0955	96	0.101	101	70-130	6	35	mg/kg	11.03.2020 09:56	
Ethylbenzene	<0.00200	0.100	0.0976	98	0.102	102	71-129	4	35	mg/kg	11.03.2020 09:56	
m,p-Xylenes	<0.00400	0.200	0.197	99	0.205	103	70-135	4	35	mg/kg	11.03.2020 09:56	
o-Xylene	<0.00200	0.100	0.0967	97	0.102	102	71-133	5	35	mg/kg	11.03.2020 09:56	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		99		104		70-130	%	11.03.2020 09:56
4-Bromofluorobenzene	110		103		110		70-130	%	11.03.2020 09:56

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3141311 Matrix: Soil Date Prep: 11.03.2020
Parent Sample Id: 676514-007 MS Sample Id: 676514-007 S MSD Sample Id: 676514-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.101	0.107	106	0.0886	89	70-130	19	35	mg/kg	11.03.2020 10:41	
Toluene	<0.00201	0.101	0.0986	98	0.0879	88	70-130	11	35	mg/kg	11.03.2020 10:41	
Ethylbenzene	<0.00201	0.101	0.0998	99	0.0910	91	71-129	9	35	mg/kg	11.03.2020 10:41	
m,p-Xylenes	<0.00402	0.201	0.202	100	0.186	93	70-135	8	35	mg/kg	11.03.2020 10:41	
o-Xylene	<0.00201	0.101	0.102	101	0.0943	94	71-133	8	35	mg/kg	11.03.2020 10:41	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		101		70-130	%	11.03.2020 10:41
4-Bromofluorobenzene	107		117		70-130	%	11.03.2020 10:41

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

Work Order No: 676708

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)
www.xenco.com Page 1 of 1

Project Manager:	Joseph Hernandez	Bill to: (if different)	Lynda Laumbach
Company Name:	LT Environmental, Inc.	Company Name:	WPX Energy
Address:	3300 North A Street	Address:	5315 Buena Vista Dr
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	281-702-2329	Email:	jhernandez@ltenv.com & abyers@ltenv.com

Work Order Comments

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

Project Name:	North Brushy Draw 35-4	Turn Around	
Project Number:	034820029	Routine	☑
P.O. Number:	Liner	Rush:	
Sampler's Name:	Anna Byers	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No	
Temperature (°C):	1.2 / 1.0	Thermometer ID		
Received Intact:	(Yes) No	TNM007		
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes (No) N/A	Total Containers:	1	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015 Mod)	BTEX (EPA 8021B)	Chloride (EPA 300.0)
CH01 @ 6-6.5'	S	10/30/20	1110	6-6.5'	1	X	X	X

Work Order Notes

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

Sample Comments

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		11/2/20 15:50	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 11.02.2020 03.50.00 PM

Work Order #: 676708

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)?	1	
#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: Cloe Clifton Date: 11.03.2020

Checklist reviewed by: Jessica Kramer Date: 11.03.2020

Jessica Kramer

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Certificate of Analysis Summary 676710

LT Environmental, Inc., Arvada, CO

Project Name: North Brushy Draw 35-4

Project Id: 034820029
Contact: Joseph Hernandez
Project Location: NM

Date Received in Lab: Mon 11.02.2020 15:50
Report Date: 11.05.2020 08:16
Project Manager: Jessica Kramer

Analysis Requested								
	Lab Id:	676710-001						
	Field Id:	CH01 @ 8-8.5'						
	Depth:	8-8.5 ft						
	Matrix:	SOIL						
	Sampled:	10.30.2020 11:35						
BTEX by EPA 8021B	***Extracted:***	11.03.2020 09:30						
	Analyzed:	11.03.2020 18:59						
	Units/RL:	mg/kg	RL					
Benzene		<0.00200	0.00200					
Toluene		<0.00200	0.00200					
Ethylbenzene		<0.00200	0.00200					
m,p-Xylenes		<0.00399	0.00399					
o-Xylene		<0.00200	0.00200					
Total Xylenes		<0.00200	0.00200					
Total BTEX		<0.00200	0.00200					
Inorganic Anions by EPA 300	***Extracted:***	11.03.2020 13:00						
	Analyzed:	11.03.2020 15:48						
	Units/RL:	mg/kg	RL					
Chloride		120	50.5					
TPH by SW8015 Mod	***Extracted:***	11.03.2020 13:27						
	Analyzed:	11.03.2020 18:02						
	Units/RL:	mg/kg	RL					
Gasoline Range Hydrocarbons (GRO)		<50.2	50.2					
Diesel Range Organics (DRO)		<50.2	50.2					
Motor Oil Range Hydrocarbons (MRO)		<50.2	50.2					
Total TPH		<50.2	50.2					

BRL - Below Reporting Limit

Jessica Kramer

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

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Analytical Report 676710

for

LT Environmental, Inc.

Project Manager: Joseph Hernandez

North Brushy Draw 35-4

034820029

11.05.2020

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)

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11.05.2020

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

Reference: Eurofins Xenco, LLC Report No(s): **676710**
North Brushy Draw 35-4
Project Address: NM

Joseph Hernandez:

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 Eurofins Xenco, LLC Report Number(s) 676710. 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 Eurofins Xenco, LLC. 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. 676710 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 Eurofins Xenco, LLC 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

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Sample Cross Reference 676710

LT Environmental, Inc., Arvada, CO

North Brushy Draw 35-4

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
CH01 @ 8-8.5'	S	10.30.2020 11:35	8 - 8.5 ft	676710-001

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CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: North Brushy Draw 35-4

Project ID: *034820029*
Work Order Number(s): *676710*

Report Date: *11.05.2020*
Date Received: *11.02.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

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Certificate of Analytical Results 676710

LT Environmental, Inc., Arvada, CO

North Brushy Draw 35-4

Sample Id:	**CH01 @ 8-8.5'**	Matrix:	Soil	Date Received:	11.02.2020 15:50
Lab Sample Id:	676710-001	Date Collected:	10.30.2020 11:35	Sample Depth:	8 - 8.5 ft

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P

Tech: MAB

Analyst: MAB — Date Prep: 11.03.2020 13:00 — % Moisture:

Seq Number: 3141306 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**120**	50.5	mg/kg	11.03.2020 15:48		5

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P

Tech: MAB

Analyst: CAC — Date Prep: 11.03.2020 13:27 — % Moisture:

Seq Number: 3141297 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	11.03.2020 18:02	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	11.03.2020 18:02	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	11.03.2020 18:02	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	11.03.2020 18:02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	123	%	70-135	11.03.2020 18:02	
o-Terphenyl	84-15-1	119	%	70-135	11.03.2020 18:02	

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Certificate of Analytical Results 676710

LT Environmental, Inc., Arvada, CO

North Brushy Draw 35-4

Sample Id:	**CH01 @ 8-8.5'**	Matrix:	Soil	Date Received:	11.02.2020 15:50
Lab Sample Id:	676710-001	Date Collected:	10.30.2020 11:35	Sample Depth:	8 - 8.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	11.03.2020 09:30	% Moisture:	
Seq Number:	3141311			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	11.03.2020 18:59	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	11.03.2020 18:59	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	11.03.2020 18:59	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	11.03.2020 18:59	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	11.03.2020 18:59	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	11.03.2020 18:59	U	1
Total BTEX		<0.00200	0.00200	mg/kg	11.03.2020 18:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	109	%	70-130	11.03.2020 18:59	
4-Bromofluorobenzene	460-00-4	126	%	70-130	11.03.2020 18:59	

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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

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QC Summary 676710

LT Environmental, Inc.

North Brushy Draw 35-4

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3141306 — Matrix: Solid — Date Prep: 11.03.2020
MB Sample Id: 7714455-1-BLK — LCS Sample Id: 7714455-1-BKS — LCSD Sample Id: 7714455-1-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	260	104	259	104	90-110	0	20	mg/kg	11.03.2020 15:10	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3141306 — Matrix: Soil — Date Prep: 11.03.2020
Parent Sample Id: 676707-001 — MS Sample Id: 676707-001 S — MSD Sample Id: 676707-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	606	200	796	95	806	100	90-110	1	20	mg/kg	11.03.2020 15:26	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3141306 — Matrix: Soil — Date Prep: 11.03.2020
Parent Sample Id: 676720-001 — MS Sample Id: 676720-001 S — MSD Sample Id: 676720-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	148	200	361	107	363	108	90-110	1	20	mg/kg	11.03.2020 16:43	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3141297 — Matrix: Solid — Date Prep: 11.03.2020
MB Sample Id: 7714426-1-BLK — LCS Sample Id: 7714426-1-BKS — LCSD Sample Id: 7714426-1-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	1180	118	1130	113	70-135	4	35	mg/kg	11.03.2020 15:40	
Diesel Range Organics (DRO)	<50.0	1000	1250	125	1200	120	70-135	4	35	mg/kg	11.03.2020 15:40	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	122		130		126		70-135	%	11.03.2020 15:40
o-Terphenyl	117		120		118		70-135	%	11.03.2020 15:40

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3141297 — Matrix: Solid — Date Prep: 11.03.2020
MB Sample Id: 7714426-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	11.03.2020 15:20	

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

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QC Summary 676710

LT Environmental, Inc.

North Brushy Draw 35-4

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3141297 Matrix: Soil Date Prep: 11.03.2020
Parent Sample Id: 676707-001 MS Sample Id: 676707-001 S MSD Sample Id: 676707-001 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)	<50.3	1010	1130	112	1050	105	70-135	7	35	mg/kg	11.03.2020 16:41	
Diesel Range Organics (DRO)	<50.3	1010	1150	114	1140	114	70-135	1	35	mg/kg	11.03.2020 16:41	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	129		133		70-135	%	11.03.2020 16:41
o-Terphenyl	123		105		70-135	%	11.03.2020 16:41

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3141311 Matrix: Solid Date Prep: 11.03.2020
MB Sample Id: 7714461-1-BLK LCS Sample Id: 7714461-1-BKS LCSD Sample Id: 7714461-1-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	0.101	101	0.106	106	70-130	5	35	mg/kg	11.03.2020 09:56	
Toluene	<0.00200	0.100	0.0955	96	0.101	101	70-130	6	35	mg/kg	11.03.2020 09:56	
Ethylbenzene	<0.00200	0.100	0.0976	98	0.102	102	71-129	4	35	mg/kg	11.03.2020 09:56	
m,p-Xylenes	<0.00400	0.200	0.197	99	0.205	103	70-135	4	35	mg/kg	11.03.2020 09:56	
o-Xylene	<0.00200	0.100	0.0967	97	0.102	102	71-133	5	35	mg/kg	11.03.2020 09:56	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		99		104		70-130	%	11.03.2020 09:56
4-Bromofluorobenzene	110		103		110		70-130	%	11.03.2020 09:56

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3141311 Matrix: Soil Date Prep: 11.03.2020
Parent Sample Id: 676514-007 MS Sample Id: 676514-007 S MSD Sample Id: 676514-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.101	0.107	106	0.0886	89	70-130	19	35	mg/kg	11.03.2020 10:41	
Toluene	<0.00201	0.101	0.0986	98	0.0879	88	70-130	11	35	mg/kg	11.03.2020 10:41	
Ethylbenzene	<0.00201	0.101	0.0998	99	0.0910	91	71-129	9	35	mg/kg	11.03.2020 10:41	
m,p-Xylenes	<0.00402	0.201	0.202	100	0.186	93	70-135	8	35	mg/kg	11.03.2020 10:41	
o-Xylene	<0.00201	0.101	0.102	101	0.0943	94	71-133	8	35	mg/kg	11.03.2020 10:41	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		101		70-130	%	11.03.2020 10:41
4-Bromofluorobenzene	107		117		70-130	%	11.03.2020 10:41

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

Work Order No: 6076710

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)
www.xenco.com Page 1 of 1

Project Manager:	Joseph Hernandez	Bill to: (if different)	Lynda Laumbach
Company Name:	LT Environmental, Inc.	Company Name:	WPX Energy
Address:	3300 North A Street	Address:	5315 Buena Vista Dr
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	281-702-2329	Email:	jhernandez@ltenv.com & abyers@ltenv.com

Work Order Comments

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

Project Name:	North Brushy Draw 35-4	Turn Around	
Project Number:	034820029	Routine	☒
P.O. Number:	Liner	Rush:	
Sampler's Name:	Anna Byers	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):	1.2/1.0	Thermometer ID	TNM007
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes (No) N/A	Total Containers:	1

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015 Mod)	BTEX (EPA 8021B)	Chloride (EPA 300.0)
CH01 @ 8-8.5'	S	10/30/20	1135	8-8.5'	1	X	X	X

Work Order Notes

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

Sample Comments

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		11/2/20 15:50	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 11.02.2020 03.50.00 PM

Work Order #: 676710

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)?	1	
#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: Cloe Clifton Date: 11.03.2020

Checklist reviewed by: Jessica Kramer Date: 11.03.2020

Jessica Kramer

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Certificate of Analysis Summary 676716

LT Environmental, Inc., Arvada, CO

Project Name: North Brushy Draw 35-4

Project Id: 034820029
Contact: Joseph Hernandez
Project Location: NM

Date Received in Lab: Mon 11.02.2020 15:50
Report Date: 11.05.2020 08:37
Project Manager: Jessica Kramer

Analysis Requested							
	Lab Id:	676716-001					
	Field Id:	CH02 @ 2-2.5'					
	Depth:	2-2.5 ft					
	Matrix:	SOIL					
	Sampled:	10.30.2020 12:38					
BTEX by EPA 8021B	***Extracted:***	11.03.2020 09:30					
	Analyzed:	11.03.2020 20:29					
	Units/RL:	mg/kg	RL				
Benzene		<0.00202	0.00202				
Toluene		<0.00202	0.00202				
Ethylbenzene		<0.00202	0.00202				
m,p-Xylenes		<0.00404	0.00404				
o-Xylene		<0.00202	0.00202				
Total Xylenes		<0.00202	0.00202				
Total BTEX		<0.00202	0.00202				
Inorganic Anions by EPA 300	***Extracted:***	11.03.2020 13:00					
	Analyzed:	11.03.2020 16:21					
	Units/RL:	mg/kg	RL				
Chloride		64.3	9.92				
TPH by SW8015 Mod	***Extracted:***	11.03.2020 13:27					
	Analyzed:	11.03.2020 19:24					
	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 TPH		<49.9	49.9				

BRL - Below Reporting Limit

Jessica Kramer

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

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Analytical Report 676716

for

LT Environmental, Inc.

Project Manager: Joseph Hernandez

North Brushy Draw 35-4

034820029

11.05.2020

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)

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11.05.2020

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

Reference: Eurofins Xenco, LLC Report No(s): **676716**
North Brushy Draw 35-4
Project Address: NM

Joseph Hernandez:

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 Eurofins Xenco, LLC Report Number(s) 676716. 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 Eurofins Xenco, LLC. 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. 676716 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 Eurofins Xenco, LLC 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

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Sample Cross Reference 676716

LT Environmental, Inc., Arvada, CO

North Brushy Draw 35-4

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
CH02 @ 2-2.5'	S	10.30.2020 12:38	2 - 2.5 ft	676716-001

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CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: North Brushy Draw 35-4

Project ID: *034820029*
Work Order Number(s): *676716*

Report Date: *11.05.2020*
Date Received: *11.02.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

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Certificate of Analytical Results 676716

LT Environmental, Inc., Arvada, CO

North Brushy Draw 35-4

Sample Id:	**CH02 @ 2-2.5'**	Matrix:	Soil	Date Received:	11.02.2020 15:50
Lab Sample Id:	676716-001	Date Collected:	10.30.2020 12:38	Sample Depth:	2 - 2.5 ft

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P

Tech: MAB

Analyst: MAB — Date Prep: 11.03.2020 13:00 — % Moisture: Basis: Wet Weight

Seq Number: 3141306

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**64.3**	9.92	mg/kg	11.03.2020 16:21		1

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P

Tech: MAB

Analyst: CAC — Date Prep: 11.03.2020 13:27 — % Moisture: Basis: Wet Weight

Seq Number: 3141297

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	11.03.2020 19:24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	11.03.2020 19:24	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	11.03.2020 19:24	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	11.03.2020 19:24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	129	%	70-135	11.03.2020 19:24	
o-Terphenyl	84-15-1	128	%	70-135	11.03.2020 19:24	

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Certificate of Analytical Results 676716

LT Environmental, Inc., Arvada, CO

North Brushy Draw 35-4

Sample Id:	**CH02 @ 2-2.5'**	Matrix:	Soil	Date Received:	11.02.2020 15:50
Lab Sample Id:	676716-001	Date Collected:	10.30.2020 12:38	Sample Depth:	2 - 2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	11.03.2020 09:30	% Moisture:	
Seq Number:	3141311			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	11.03.2020 20:29	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	11.03.2020 20:29	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	11.03.2020 20:29	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	11.03.2020 20:29	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	11.03.2020 20:29	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	11.03.2020 20:29	U	1
Total BTEX		<0.00202	0.00202	mg/kg	11.03.2020 20:29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	108	%	70-130	11.03.2020 20:29	
4-Bromofluorobenzene	460-00-4	117	%	70-130	11.03.2020 20:29	

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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

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QC Summary 676716

LT Environmental, Inc.

North Brushy Draw 35-4

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3141306 — Matrix: Solid — Date Prep: 11.03.2020
MB Sample Id: 7714455-1-BLK — LCS Sample Id: 7714455-1-BKS — LCSD Sample Id: 7714455-1-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	260	104	259	104	90-110	0	20	mg/kg	11.03.2020 15:10	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3141306 — Matrix: Soil — Date Prep: 11.03.2020
Parent Sample Id: 676707-001 — MS Sample Id: 676707-001 S — MSD Sample Id: 676707-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	606	200	796	95	806	100	90-110	1	20	mg/kg	11.03.2020 15:26	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3141306 — Matrix: Soil — Date Prep: 11.03.2020
Parent Sample Id: 676720-001 — MS Sample Id: 676720-001 S — MSD Sample Id: 676720-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	148	200	361	107	363	108	90-110	1	20	mg/kg	11.03.2020 16:43	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3141297 — Matrix: Solid — Date Prep: 11.03.2020
MB Sample Id: 7714426-1-BLK — LCS Sample Id: 7714426-1-BKS — LCSD Sample Id: 7714426-1-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	1180	118	1130	113	70-135	4	35	mg/kg	11.03.2020 15:40	
Diesel Range Organics (DRO)	<50.0	1000	1250	125	1200	120	70-135	4	35	mg/kg	11.03.2020 15:40	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	122		130		126		70-135	%	11.03.2020 15:40
o-Terphenyl	117		120		118		70-135	%	11.03.2020 15:40

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3141297 — Matrix: Solid — Date Prep: 11.03.2020
MB Sample Id: 7714426-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	11.03.2020 15:20	

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

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QC Summary 676716

LT Environmental, Inc.

North Brushy Draw 35-4

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3141297 Matrix: Soil Date Prep: 11.03.2020
Parent Sample Id: 676707-001 MS Sample Id: 676707-001 S MSD Sample Id: 676707-001 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)	<50.3	1010	1130	112	1050	105	70-135	7	35	mg/kg	11.03.2020 16:41	
Diesel Range Organics (DRO)	<50.3	1010	1150	114	1140	114	70-135	1	35	mg/kg	11.03.2020 16:41	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	129		133		70-135	%	11.03.2020 16:41
o-Terphenyl	123		105		70-135	%	11.03.2020 16:41

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3141311 Matrix: Solid Date Prep: 11.03.2020
MB Sample Id: 7714461-1-BLK LCS Sample Id: 7714461-1-BKS LCSD Sample Id: 7714461-1-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	0.101	101	0.106	106	70-130	5	35	mg/kg	11.03.2020 09:56	
Toluene	<0.00200	0.100	0.0955	96	0.101	101	70-130	6	35	mg/kg	11.03.2020 09:56	
Ethylbenzene	<0.00200	0.100	0.0976	98	0.102	102	71-129	4	35	mg/kg	11.03.2020 09:56	
m,p-Xylenes	<0.00400	0.200	0.197	99	0.205	103	70-135	4	35	mg/kg	11.03.2020 09:56	
o-Xylene	<0.00200	0.100	0.0967	97	0.102	102	71-133	5	35	mg/kg	11.03.2020 09:56	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		99		104		70-130	%	11.03.2020 09:56
4-Bromofluorobenzene	110		103		110		70-130	%	11.03.2020 09:56

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3141311 Matrix: Soil Date Prep: 11.03.2020
Parent Sample Id: 676514-007 MS Sample Id: 676514-007 S MSD Sample Id: 676514-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.101	0.107	106	0.0886	89	70-130	19	35	mg/kg	11.03.2020 10:41	
Toluene	<0.00201	0.101	0.0986	98	0.0879	88	70-130	11	35	mg/kg	11.03.2020 10:41	
Ethylbenzene	<0.00201	0.101	0.0998	99	0.0910	91	71-129	9	35	mg/kg	11.03.2020 10:41	
m,p-Xylenes	<0.00402	0.201	0.202	100	0.186	93	70-135	8	35	mg/kg	11.03.2020 10:41	
o-Xylene	<0.00201	0.101	0.102	101	0.0943	94	71-133	8	35	mg/kg	11.03.2020 10:41	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		101		70-130	%	11.03.2020 10:41
4-Bromofluorobenzene	107		117		70-130	%	11.03.2020 10:41

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

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

Work Order No: 676716

Page 1 of 1

Project Manager:	Joseph Hernandez	Bill to: (if different)	Lynda Laumbach
Company Name:	LT Environmental, Inc.	Company Name:	WPX Energy
Address:	3300 North A Street	Address:	5315 Buena Vista Dr
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	281-702-2329	Email:	jhernandez@ltenv.com & abyers@ltenv.com

Work Order Comments

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

Project Name:	North Brushy Draw 35-4	Turn Around	
Project Number:	034820029	Routine	☒
P.O. Number:	Liner	Rush:	
Sampler's Name:	Anna Byers	Due Date:	

SAMPLE RECEIPT			
Temperature (°C):	1-2/1-0	Temp Blank: (Yes) No	Wet Ice: (Yes) No
Received Intact:	(Yes) No	Thermometer ID	THM007
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes (No) N/A	Total Containers:	1

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015 Mod)	BTEX (EPA 8021B)	Chloride (EPA 300.0)
CH02@ 2-2.5'	S	11/3[illegible]	1238	2-2.5'	1	X	X	X

Work Order Notes

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

Sample Comments

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

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		11/2/20 15:50	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 11.02.2020 03.50.00 PM

Work Order #: 676716

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)?	1	
#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?	**Yes**	
#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: Cloe Clifton Date: 11.03.2020

Checklist reviewed by: Jessica Kramer Date: 11.03.2020

Jessica Kramer

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Certificate of Analysis Summary 676718

LT Environmental, Inc., Arvada, CO

Project Name: North Brushy Draw 35-4

Project Id: 034820029
Contact: Joseph Hernandez
Project Location: NM

Date Received in Lab: Mon 11.02.2020 16:50
Report Date: 11.05.2020 08:38
Project Manager: Jessica Kramer

Analysis Requested								
	Lab Id:	676718-001						
	Field Id:	CH02 @ 4-4.5'						
	Depth:	4-4.5 ft						
	Matrix:	SOIL						
	Sampled:	10.30.2020 13:00						
BTEX by EPA 8021B	***Extracted:***	11.03.2020 09:30						
	Analyzed:	11.03.2020 20:51						
	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					
Inorganic Anions by EPA 300	***Extracted:***	11.03.2020 13:00						
	Analyzed:	11.03.2020 16:26						
	Units/RL:	mg/kg	RL					
Chloride		34.2	10.0					
TPH by SW8015 Mod	***Extracted:***	11.03.2020 13:27						
	Analyzed:	11.03.2020 19:44						
	Units/RL:	mg/kg	RL					
Gasoline Range Hydrocarbons (GRO)		<50.3	50.3					
Diesel Range Organics (DRO)		<50.3	50.3					
Motor Oil Range Hydrocarbons (MRO)		<50.3	50.3					
Total TPH		<50.3	50.3					

BRL - Below Reporting Limit

Jessica Kramer

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

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Analytical Report 676718

for

LT Environmental, Inc.

Project Manager: Joseph Hernandez

North Brushy Draw 35-4

034820029

11.05.2020

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)

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11.05.2020

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

Reference: Eurofins Xenco, LLC Report No(s): **676718**
North Brushy Draw 35-4
Project Address: NM

Joseph Hernandez:

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 Eurofins Xenco, LLC Report Number(s) 676718. 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 Eurofins Xenco, LLC. 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. 676718 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 Eurofins Xenco, LLC 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

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Sample Cross Reference 676718

LT Environmental, Inc., Arvada, CO

North Brushy Draw 35-4

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
CH02 @ 4-4.5'	S	10.30.2020 13:00	4 - 4.5 ft	676718-001

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CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: North Brushy Draw 35-4

Project ID: *034820029*
Work Order Number(s): *676718*

Report Date: *11.05.2020*
Date Received: *11.02.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

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Certificate of Analytical Results 676718

LT Environmental, Inc., Arvada, CO

North Brushy Draw 35-4

Sample Id:	**CH02 @ 4-4.5'**	Matrix:	Soil	Date Received:	11.02.2020 16:50
Lab Sample Id:	676718-001	Date Collected:	10.30.2020 13:00	Sample Depth:	4 - 4.5 ft

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P

Tech: MAB

Analyst: MAB — Date Prep: 11.03.2020 13:00 — % Moisture:

Seq Number: 3141306 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**34.2**	10.0	mg/kg	11.03.2020 16:26		1

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P

Tech: MAB

Analyst: CAC — Date Prep: 11.03.2020 13:27 — % Moisture:

Seq Number: 3141297 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	11.03.2020 19:44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	11.03.2020 19:44	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	11.03.2020 19:44	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	11.03.2020 19:44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	131	%	70-135	11.03.2020 19:44	
o-Terphenyl	84-15-1	127	%	70-135	11.03.2020 19:44	

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Certificate of Analytical Results 676718

LT Environmental, Inc., Arvada, CO

North Brushy Draw 35-4

Sample Id:	**CH02 @ 4-4.5'**	Matrix:	Soil	Date Received:	11.02.2020 16:50
Lab Sample Id:	676718-001	Date Collected:	10.30.2020 13:00	Sample Depth:	4 - 4.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	11.03.2020 09:30	% Moisture:	
Seq Number:	3141311			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	11.03.2020 20:51	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	11.03.2020 20:51	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	11.03.2020 20:51	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	11.03.2020 20:51	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	11.03.2020 20:51	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	11.03.2020 20:51	U	1
Total BTEX		<0.00199	0.00199	mg/kg	11.03.2020 20:51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	115	%	70-130	11.03.2020 20:51	
1,4-Difluorobenzene	540-36-3	105	%	70-130	11.03.2020 20:51	

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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

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QC Summary 676718

LT Environmental, Inc.

North Brushy Draw 35-4

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3141306 — Matrix: Solid — Date Prep: 11.03.2020
MB Sample Id: 7714455-1-BLK — LCS Sample Id: 7714455-1-BKS — LCSD Sample Id: 7714455-1-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	260	104	259	104	90-110	0	20	mg/kg	11.03.2020 15:10	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3141306 — Matrix: Soil — Date Prep: 11.03.2020
Parent Sample Id: 676707-001 — MS Sample Id: 676707-001 S — MSD Sample Id: 676707-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	606	200	796	95	806	100	90-110	1	20	mg/kg	11.03.2020 15:26	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3141306 — Matrix: Soil — Date Prep: 11.03.2020
Parent Sample Id: 676720-001 — MS Sample Id: 676720-001 S — MSD Sample Id: 676720-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	148	200	361	107	363	108	90-110	1	20	mg/kg	11.03.2020 16:43	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3141297 — Matrix: Solid — Date Prep: 11.03.2020
MB Sample Id: 7714426-1-BLK — LCS Sample Id: 7714426-1-BKS — LCSD Sample Id: 7714426-1-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	1180	118	1130	113	70-135	4	35	mg/kg	11.03.2020 15:40	
Diesel Range Organics (DRO)	<50.0	1000	1250	125	1200	120	70-135	4	35	mg/kg	11.03.2020 15:40	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	122		130		126		70-135	%	11.03.2020 15:40
o-Terphenyl	117		120		118		70-135	%	11.03.2020 15:40

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3141297 — Matrix: Solid — Date Prep: 11.03.2020
MB Sample Id: 7714426-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	11.03.2020 15:20	

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

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QC Summary 676718

LT Environmental, Inc.

North Brushy Draw 35-4

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3141297 Matrix: Soil Date Prep: 11.03.2020
Parent Sample Id: 676707-001 MS Sample Id: 676707-001 S MSD Sample Id: 676707-001 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)	<50.3	1010	1130	112	1050	105	70-135	7	35	mg/kg	11.03.2020 16:41	
Diesel Range Organics (DRO)	<50.3	1010	1150	114	1140	114	70-135	1	35	mg/kg	11.03.2020 16:41	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	129		133		70-135	%	11.03.2020 16:41
o-Terphenyl	123		105		70-135	%	11.03.2020 16:41

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3141311 Matrix: Solid Date Prep: 11.03.2020
MB Sample Id: 7714461-1-BLK LCS Sample Id: 7714461-1-BKS LCSD Sample Id: 7714461-1-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	0.101	101	0.106	106	70-130	5	35	mg/kg	11.03.2020 09:56	
Toluene	<0.00200	0.100	0.0955	96	0.101	101	70-130	6	35	mg/kg	11.03.2020 09:56	
Ethylbenzene	<0.00200	0.100	0.0976	98	0.102	102	71-129	4	35	mg/kg	11.03.2020 09:56	
m,p-Xylenes	<0.00400	0.200	0.197	99	0.205	103	70-135	4	35	mg/kg	11.03.2020 09:56	
o-Xylene	<0.00200	0.100	0.0967	97	0.102	102	71-133	5	35	mg/kg	11.03.2020 09:56	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		99		104		70-130	%	11.03.2020 09:56
4-Bromofluorobenzene	110		103		110		70-130	%	11.03.2020 09:56

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3141311 Matrix: Soil Date Prep: 11.03.2020
Parent Sample Id: 676514-007 MS Sample Id: 676514-007 S MSD Sample Id: 676514-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.101	0.107	106	0.0886	89	70-130	19	35	mg/kg	11.03.2020 10:41	
Toluene	<0.00201	0.101	0.0986	98	0.0879	88	70-130	11	35	mg/kg	11.03.2020 10:41	
Ethylbenzene	<0.00201	0.101	0.0998	99	0.0910	91	71-129	9	35	mg/kg	11.03.2020 10:41	
m,p-Xylenes	<0.00402	0.201	0.202	100	0.186	93	70-135	8	35	mg/kg	11.03.2020 10:41	
o-Xylene	<0.00201	0.101	0.102	101	0.0943	94	71-133	8	35	mg/kg	11.03.2020 10:41	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		101		70-130	%	11.03.2020 10:41
4-Bromofluorobenzene	107		117		70-130	%	11.03.2020 10:41

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

Work Order No: 676718

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

Project Manager:	Joseph Hernandez	Bill to: (if different)	Lynda Laumbach
Company Name:	LT Environmental, Inc.	Company Name:	WPX Energy
Address:	3300 North A Street	Address:	5315 Buena Vista Dr
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	281-702-2329	Email:	jhernandez@ltenv.com & abyers@ltenv.com

Work Order Comments

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

Project Name:	North Brushy Draw 35-4	Turn Around	
Project Number:	034820029	Routine	☒
P.O. Number:	Liner	Rush:	
Sampler's Name:	Anna Byers	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No	
Temperature (°C):	1.2 / 1.0	Thermometer ID		
Received Intact:	(Yes) No	TNM007		
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes (No) N/A	Total Containers:	1	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015 Mod)	BTEX (EPA 8021B)	Chloride (EPA 300.0)
CH02 @ 4-4.5'	S	10/31/20	1300	4-4.5'	1	X	X	X

ANALYSIS REQUEST

Work Order Notes

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

Sample Comments

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

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		11/2/20 16:50	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 11.02.2020 04.50.00 PM

Work Order #: 676718

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)?	1	
#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 conainers.
#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: Cloe Clifton Date: 11.03.2020

Cloe Clifton

Checklist reviewed by: Jessica Kramer Date: 11.03.2020

Jessica Kramer

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Certificate of Analysis Summary 676720

LT Environmental, Inc., Arvada, CO

Project Name: North Brushy Draw 35-4

Project Id: 034820029
Contact: Joseph Hernandez
Project Location: NM

Date Received in Lab: Mon 11.02.2020 15:50
Report Date: 11.04.2020 12:59
Project Manager: Jessica Kramer

Analysis Requested							
	Lab Id:	676720-001					
	Field Id:	CH02 @ 6-6.5'					
	Depth:	6-6.5 ft					
	Matrix:	SOIL					
	Sampled:	10.30.2020 13:25					
BTEX by EPA 8021B	***Extracted:***	11.03.2020 14:07					
	Analyzed:	11.03.2020 19:17					
	Units/RL:	mg/kg	RL				
Benzene		<0.00200	0.00200				
Toluene		<0.00200	0.00200				
Ethylbenzene		<0.00200	0.00200				
m,p-Xylenes		<0.00401	0.00401				
o-Xylene		<0.00200	0.00200				
Total Xylenes		<0.00200	0.00200				
Total BTEX		<0.00200	0.00200				
Inorganic Anions by EPA 300	***Extracted:***	11.03.2020 13:00					
	Analyzed:	11.03.2020 16:37					
	Units/RL:	mg/kg	RL				
Chloride		148	9.94				
TPH by SW8015 Mod	***Extracted:***	11.03.2020 13:27					
	Analyzed:	11.03.2020 20:44					
	Units/RL:	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<50.1	50.1				
Diesel Range Organics (DRO)		<50.1	50.1				
Motor Oil Range Hydrocarbons (MRO)		<50.1	50.1				
Total TPH		<50.1	50.1				

BRL - Below Reporting Limit

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

Jessica Kramer

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Analytical Report 676720

for

LT Environmental, Inc.

Project Manager: Joseph Hernandez

North Brushy Draw 35-4

034820029

11.04.2020

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)

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11.04.2020

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

Reference: Eurofins Xenco, LLC Report No(s): **676720**
North Brushy Draw 35-4
Project Address: NM

Joseph Hernandez:

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 Eurofins Xenco, LLC Report Number(s) 676720. 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 Eurofins Xenco, LLC. 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. 676720 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 Eurofins Xenco, LLC 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

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Sample Cross Reference 676720

LT Environmental, Inc., Arvada, CO

North Brushy Draw 35-4

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
CH02 @ 6-6.5'	S	10.30.2020 13:25	6 - 6.5 ft	676720-001

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CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: North Brushy Draw 35-4

Project ID: *034820029*
Work Order Number(s): *676720*

Report Date: *11.04.2020*
Date Received: *11.02.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

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Certificate of Analytical Results 676720

LT Environmental, Inc., Arvada, CO

North Brushy Draw 35-4

Sample Id:	**CH02 @ 6-6.5'**	Matrix:	Soil	Date Received:	11.02.2020 15:50
Lab Sample Id:	676720-001	Date Collected:	10.30.2020 13:25	Sample Depth:	6 - 6.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	MAB				
Analyst:	MAB	Date Prep:	11.03.2020 13:00	% Moisture:	
Seq Number:	3141306			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**148**	9.94	mg/kg	11.03.2020 16:37		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	11.03.2020 13:27	% Moisture:	
Seq Number:	3141297			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	11.03.2020 20:44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	11.03.2020 20:44	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	11.03.2020 20:44	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	11.03.2020 20:44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	128	%	70-135	11.03.2020 20:44	
o-Terphenyl	84-15-1	126	%	70-135	11.03.2020 20:44	

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Certificate of Analytical Results 676720

LT Environmental, Inc., Arvada, CO

North Brushy Draw 35-4

Sample Id:	**CH02 @ 6-6.5'**	Matrix:	Soil	Date Received:	11.02.2020 15:50
Lab Sample Id:	676720-001	Date Collected:	10.30.2020 13:25	Sample Depth:	6 - 6.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	11.03.2020 14:07	% Moisture:	
Seq Number:	3141303			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	11.03.2020 19:17	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	11.03.2020 19:17	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	11.03.2020 19:17	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	11.03.2020 19:17	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	11.03.2020 19:17	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	11.03.2020 19:17	U	1
Total BTEX		<0.00200	0.00200	mg/kg	11.03.2020 19:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	104	%	70-130	11.03.2020 19:17	
4-Bromofluorobenzene	460-00-4	88	%	70-130	11.03.2020 19:17	

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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

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QC Summary 676720

LT Environmental, Inc.

North Brushy Draw 35-4

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3141306 — Matrix: Solid — Date Prep: 11.03.2020
MB Sample Id: 7714455-1-BLK — LCS Sample Id: 7714455-1-BKS — LCSD Sample Id: 7714455-1-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	260	104	259	104	90-110	0	20	mg/kg	11.03.2020 15:10	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3141306 — Matrix: Soil — Date Prep: 11.03.2020
Parent Sample Id: 676707-001 — MS Sample Id: 676707-001 S — MSD Sample Id: 676707-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	606	200	796	95	806	100	90-110	1	20	mg/kg	11.03.2020 15:26	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3141306 — Matrix: Soil — Date Prep: 11.03.2020
Parent Sample Id: 676720-001 — MS Sample Id: 676720-001 S — MSD Sample Id: 676720-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	148	200	361	107	363	108	90-110	1	20	mg/kg	11.03.2020 16:43	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3141297 — Matrix: Solid — Date Prep: 11.03.2020
MB Sample Id: 7714426-1-BLK — LCS Sample Id: 7714426-1-BKS — LCSD Sample Id: 7714426-1-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	1180	118	1130	113	70-135	4	35	mg/kg	11.03.2020 15:40	
Diesel Range Organics (DRO)	<50.0	1000	1250	125	1200	120	70-135	4	35	mg/kg	11.03.2020 15:40	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	122		130		126		70-135	%	11.03.2020 15:40
o-Terphenyl	117		120		118		70-135	%	11.03.2020 15:40

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3141297 — Matrix: Solid — Date Prep: 11.03.2020
MB Sample Id: 7714426-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	11.03.2020 15:20	

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

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QC Summary 676720

LT Environmental, Inc.

North Brushy Draw 35-4

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3141297 Matrix: Soil Date Prep: 11.03.2020
Parent Sample Id: 676707-001 MS Sample Id: 676707-001 S MSD Sample Id: 676707-001 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)	<50.3	1010	1130	112	1050	105	70-135	7	35	mg/kg	11.03.2020 16:41	
Diesel Range Organics (DRO)	<50.3	1010	1150	114	1140	114	70-135	1	35	mg/kg	11.03.2020 16:41	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	129		133		70-135	%	11.03.2020 16:41
o-Terphenyl	123		105		70-135	%	11.03.2020 16:41

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3141303 Matrix: Solid Date Prep: 11.03.2020
MB Sample Id: 7714462-1-BLK LCS Sample Id: 7714462-1-BKS LCSD Sample Id: 7714462-1-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	0.0975	98	0.0945	95	70-130	3	35	mg/kg	11.03.2020 15:44	
Toluene	<0.00200	0.100	0.0952	95	0.0926	93	70-130	3	35	mg/kg	11.03.2020 15:44	
Ethylbenzene	<0.00200	0.100	0.0880	88	0.0861	86	71-129	2	35	mg/kg	11.03.2020 15:44	
m,p-Xylenes	<0.00400	0.200	0.178	89	0.173	87	70-135	3	35	mg/kg	11.03.2020 15:44	
o-Xylene	<0.00200	0.100	0.0872	87	0.0851	85	71-133	2	35	mg/kg	11.03.2020 15:44	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		100		100		70-130	%	11.03.2020 15:44
4-Bromofluorobenzene	88		85		85		70-130	%	11.03.2020 15:44

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3141303 Matrix: Soil Date Prep: 11.03.2020
Parent Sample Id: 676707-001 MS Sample Id: 676707-001 S MSD Sample Id: 676707-001 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	0.129	128	0.117	117	70-130	10	35	mg/kg	11.03.2020 16:29	
Toluene	<0.00201	0.101	0.123	122	0.111	111	70-130	10	35	mg/kg	11.03.2020 16:29	
Ethylbenzene	<0.00201	0.101	0.111	110	0.0997	100	71-129	11	35	mg/kg	11.03.2020 16:29	
m,p-Xylenes	<0.00402	0.201	0.225	112	0.200	100	70-135	12	35	mg/kg	11.03.2020 16:29	
o-Xylene	<0.00201	0.101	0.109	108	0.0983	98	71-133	10	35	mg/kg	11.03.2020 16:29	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		99		70-130	%	11.03.2020 16:29
4-Bromofluorobenzene	86		85		70-130	%	11.03.2020 16:29

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

Work Order No: 676720

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

Page 1 of 1

Project Manager:	Joseph Hernandez	Bill to: (if different)	Lynda Laumbach
Company Name:	LT Environmental, Inc.	Company Name:	WPX Energy
Address:	3300 North A Street	Address:	5315 Buena Vista Dr
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	281-702-2329	Email:	jhernandez@ltenv.com & abyers@ltenv.com

Work Order Comments

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

Project Name:	North Brushy Draw 35-4	Turn Around	
Project Number:	034820029	Routine	☒
P.O. Number:	Liner	Rush:	
Sampler's Name:	Anna Byers	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No	
Temperature (°C):	1.2/1.0	Thermometer ID	TNM007	
Received Intact:	(Yes) No			
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes (No) N/A	Total Containers:	1	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015 Mod)	BTEX (EPA 8021B)	Chloride (EPA 300.0)
CH02 @ 6-6.5'	S	10/30/20	1325	6-6.5'	1	X	X	X

Work Order Notes

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

Sample Comments

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

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time		Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			11/2/20 15:50	2			
3				4			
5				6			

Revised Date 051418 Rev. 2018.1

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 11.02.2020 03.50.00 PM

Work Order #: 676720

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)?	1	
#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: Cloe Clifton Date: 11.03.2020

Checklist reviewed by: Jessica Kramer Date: 11.03.2020

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 12034

CONDITIONS OF APPROVAL

Operator:			OGRID:	Action Number:	Action Type:
WPX ENERGY PERMIAN, LLC	3500 One Williams Center	Tulsa, OK74172	246289	12034	C-141

OCD Reviewer	Condition
kcollins	Please file each incident separately. They should each have a fee of $150.00. Please resubmit incident #NRM2019548894 by itself. Thank you.