

January 17, 2018

Mr. Kyle Littrell
XTO Energy Inc.
6401 Holiday Hill Road #200
Midland, Texas 79707

PRELIMINARY RESULTS

**RE: Soil Sampling Report
XTO Energy Inc.
Sharp Nose Federal #1 Tank Battery
1RP-4771
Lea County, New Mexico**

Dear Mr. Littrell;

LT Environmental, Inc. (LTE) is pleased to present to XTO Energy Inc. (XTO) the following letter report detailing the collection of soil samples at the Sharp Nose Federal #1 tank battery (Site) in Section 13 of Township 20 North Range 33 East in Lea County, New Mexico (Figure 1). The purpose of the investigation was to assess impact to soil after a third-party vehicle made contact with a load line causing a release on July 13, 2017, into a containment area. The release did not overflow the containment and all standing fluids were recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form C-141 on July 27, 2017, and was assigned Remediation Permit Number (RP) 1RP-4771 (Attachment 1). This sampling was conducted in response to the conditions of approval from the NMOCD documented on the C-141 form.

BACKGROUND

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest water well data and known aquifer properties. The nearest permitted water well is CP 00798, located approximately 3,551 feet southwest of the Site with a total depth of 850 feet. Depth to water is not listed for CP 00798; however, the groundwater potentiometric map used by NMOCD for Lea County indicates groundwater is greater than 100 feet deep at the Site. The closest surface water to the Site is a seasonal playa lake located approximately 4.47 miles to the west of the Site. Based on these criteria, the NMOCD site ranking for remediation action levels is 0, and the following remediation action levels apply: 10 milligrams per kilogram (mg/kg) benzene; 50 mg/kg benzene, toluene, ethylbenzene, and total xylenes (BTEX); and 5,000 mg/kg total petroleum hydrocarbons (TPH). Based on depth to groundwater greater than 100 feet, LTE proposes a site-specific chloride action level of 600 mg/kg or within range (plus or minus 10 percent [%]) of background concentrations.



SOIL SAMPLING

Environmental Plus, Inc. collected 14 soil samples from seven locations on August 14, 17, and 18, 2017, as depicted on Figure 2. Surface samples were collected from each location, and subsurface samples ranged from one foot bgs to 12 feet bgs. The samples were submitted to Cardinal Laboratories in Hobbs, New Mexico, for analysis of benzene, toluene, ethylbenzene, and total xylenes (BTEX) by United States Environmental Protection Agency (USEPA) 8021B, chloride by SM4500Cl-B, and total petroleum hydrocarbons (TPH)-gasoline range organics (GRO) and diesel range organics (DRO) by USEPA Method 8015M.

ANALYTICAL RESULTS

Laboratory analytical results for all soil samples indicated BTEX analytes were below laboratory detection limits, except for SP1 (Surface). Laboratory analytical results for TPH were below laboratory detection limits, except SP1 (Surface), SP2 (12'), and SP3 (Surface); however, none of the concentrations exceeded the NMOCD site-specific standard. Chloride concentrations ranged from below laboratory detection limits in SP7 (1') to 560 milligrams per kilogram (mg/kg) in SP1 (Surface). Laboratory analytical data are presented in Table 1, and the complete laboratory analytical report is included as Attachment 2.

CONCLUSIONS

Laboratory analytical results of soil samples collected within the release footprint indicate impact to soil, as defined by concentrations of BTEX, TPH, and chloride, do not exceed NMOCD site-specific standards.

LTE appreciates the opportunity to provide this report to XTO. If you have any questions or comments, do not hesitate to contact Adrian Baker at (432) 887-1255 or abaker@ltenv.com.

Sincerely,

LT ENVIRONMENTAL, INC.

A handwritten signature in blue ink that reads 'Adrian Baker'.

Adrian Baker
Project Geologist

A handwritten signature in black ink that reads 'Ashley L. Ager'.

Ashley L. Ager, P.G.
Senior Geologist





Attachments:

Figure 1 Site Location Map

Figure 2 Site Map

Table 1 Soil Analytical Results: Volatile Organic Compounds

Table 2 Soil Analytical Results: Chloride

Attachment 1 Initial NMOCD C-141 Form

Attachment 2 Laboratory Analytical Reports



FIGURES

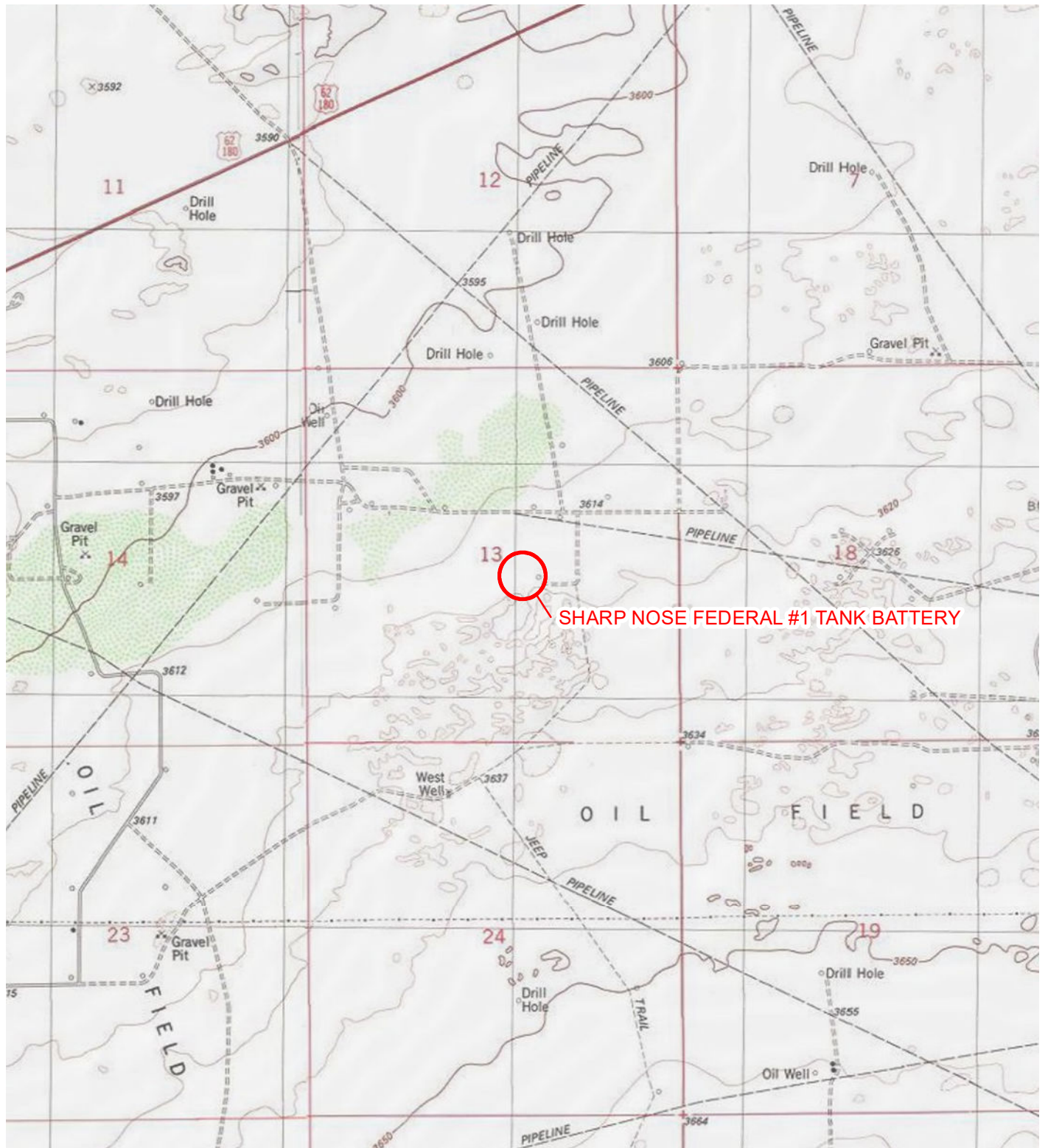


IMAGE COURTESY OF ESRI/USGS

LEGEND

○ SITE LOCATION

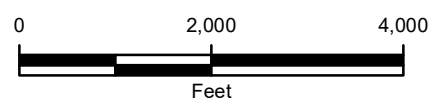


FIGURE 1
SITE LOCATION MAP
SHARP NOSE FEDERAL #1 TANK BATTERY
LEA COUNTY, NEW MEXICO

XTO ENERGY, INC.





IMAGE COURTESY OF GOOGLE EARTH 2017

LEGEND

- SOIL SAMPLE
- ▭ RELEASE EXTENT

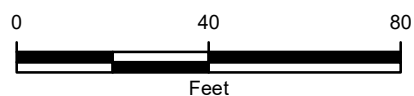


FIGURE 2
SITE MAP
SHARP NOSE FEDERAL #1 TANK BATTERY
LEA COUNTY, NEW MEXICO

XTO ENERGY, INC.



TABLES

TABLE 1
SOIL ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS, TPH, AND CHLORIDE

SHARP NOSE FEDERAL #1 TANK BATTERY
LEA COUNTY, NEW MEXICO
XTO ENERGY INC.

Sample Name	Sample Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	GRO C6-C10 (mg/kg)	DRO > C10-C28 (mg/kg)	Chloride (mg/kg)	TPH (mg/kg)
SP1 (Surface)	0	8/14/2017	<0.050	0.133	<0.050	<0.150	<0.300	17.3	4,510	560	4,527.30
SP1 (12')	12	8/18/2017	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	14.6	48	14.6
SP2 (Surface)	0	8/17/2017	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	240	<10.0
SP2 (8')	8	8/17/2017	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	80	<10.0
SP3 (Surface)	0	8/17/2017	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	370	272	370
SP3 (4')	4	8/17/2017	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	32	<10.0
SP4 (Surface)	0	8/17/2017	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	80	<10.0
SP4 (1')	1	8/17/2017	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	16	<10.0
SP5 (Surface)	0	8/17/2017	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	64	<10.0
SP5 (1')	1	8/17/2017	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	16	<10.0
SP6 (Surface)	0	8/18/2017	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	16	<10.0
SP6 (1')	1	8/18/2017	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	16	<10.0
SP 7 (Surface)	0	8/18/2017	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<16	<10.0
SP 7 (1')	1	8/18/2017	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	176	<10.0
NMOCD Regulatory Standard			10 ppm				50 ppm			600 mg/kg	5,000 ppm

Notes:

bgs - below ground surface

mg/kg - milligrams per kilogram

NMOCD - New Mexico Oil Conservation Division

ppm - parts per million

TPH - total petroleum hydrocarbons

< - indicates result less than laboratory detection limit

mg/kg to ppm conversion is 1:1

ATTACHMENT 1
INITIAL NMOCD C-141 FORM



Advancing Opportunity

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: XTO Energy	Contact: Amy Ruth	
Address: 522 W. Mermod, Suite 704 Carlsbad, N.M. 88220	Telephone No. 575-887-7329	
Facility Name: Sharp Nose Federal #1 Tank Battery	Facility Type: Exploration and Production	
Surface Owner: Federal	Mineral Owner: Federal	API No. 30-025-31397

LOCATION OF RELEASE

Unit Letter J	Section 13	Township 20S	Range 33E	Feet from the 2300	North/South Line South	Feet from the 2200	East/West Line East	County Lea
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Latitude 32.572231° Longitude -103.615307°

NATURE OF RELEASE

Type of Release Crude oil and produced water	Volume of Release 0.93 BO 45.64 BPW	Volume Recovered 0.5 BO 45.5 BPW
Source of Release Third party damage to load line and tank	Date and Hour of Occurrence 7/13/2017 2:00 pm	Date and Hour of Discovery 7/13/2017 2:00 pm
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Olivia Yu (NMOCD)	
By Whom? Amy Ruth	Date and Hour 7/14/2017 8:00 am by office visit	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. N/A	
If a Watercourse was Impacted, Describe Fully.* N/A		

RECEIVED

By Olivia Yu at 12:58 pm, Jul 28, 2017

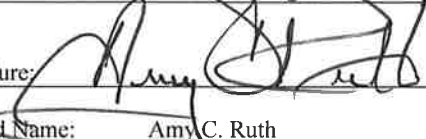

Describe Cause of Problem and Remedial Action Taken.*

Third party vehicle made contact with load line from production tank. The load line was disconnected from the tank and fluids were released to the earthen containment. Vacuum truck drained tank to prevent further spillage until repair can be made.

Describe Area Affected and Cleanup Action Taken.*

The leak affected the area within the earthen containment. All standing fluids were recovered immediately as vacuum truck was on location.

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

Signature: 	OIL CONSERVATION DIVISION	
Printed Name: Amy C. Ruth	Approved by Environmental Specialist: 	
Title: Environmental Supervisor	Approval Date: 7/28/2017	Expiration Date:
E-mail Address: Amy_Ruth@xtoenergy.com	Conditions of Approval: see attached directive	Attached <input checked="" type="checkbox"/>
Date: 7/27/2017	Phone: 432-661-0571	

* Attach Additional Sheets If Necessary

1RP-4771

nOY1720946955

pOY1720947205

Operator/Responsible Party,

The OCD has received the form C-141 you provided on 7/27/2017 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 1RP-4771 has been assigned. **Please refer to this case number in all future correspondence.**

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

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

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District 1 office in Hobbs on or before 8/28/2017. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

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

- Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C₆ thru C₃₆), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.
- Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C₆ thru C₃₆), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.
- Nominal detection limits for field and laboratory analyses must be provided.
- Composite sampling is not generally allowed.
- Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

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

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

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

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

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

Jim Griswold

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

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

State of New Mexico
Energy Minerals and Natural Resources

Form C-141
Revised April 3, 2017

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

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

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

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Surface Owner: Federal	Mineral Owner: Federal	API No.: 30-025-31397

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By Whom? Amy Ruth	Date and Hour 7/14/2017 8:00 am by office visit	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.*

N/A

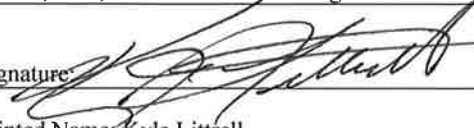
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Third party vehicle made contact with load line from production tank. The load line was disconnected from the tank and fluids were released to the earthen containment. Vacuum truck drained tank to prevent further spillage until repair can be made.

Describe Area Affected and Cleanup Action Taken.*

The leak affected the area within the earthen containment. All standing fluids were recovered immediately as vacuum truck was on location. Environmental Plus, Inc. collected 14 soil samples from seven locations on August 14, 17, and 18, 2017. Laboratory analytical results for all soil samples indicated BTEX, TPH, and Chloride were in compliance with NMOCD site-specific standard. A Soil Sampling Report is attached describing all field activities.

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

Signature: 	OIL CONSERVATION DIVISION		
Printed Name: Kyle Littrell	Approved by Environmental Specialist:		
Title: EH&S Coordinator	Approval Date:	Expiration Date:	
E-mail Address: kyle_littrell@xtoenergy.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 1/17/2018	Phone: (432) 221-7331		

* Attach Additional Sheets If Necessary

ATTACHMENT 2
LABORATORY ANALYTICAL REPORTS



Advancing Opportunity



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

August 28, 2017

Daniel Dominguez

Environmental Plus, Inc.

P.O. Box 1558

Eunice, NM 88231

RE: SHARP NOSE FEDERAL #1

Enclosed are the results of analyses for samples received by the laboratory on 08/22/17 15:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

Environmental Plus, Inc.
Daniel Dominguez
P.O. Box 1558
Eunice NM, 88231
Fax To: (505) 394-2601

Received: 08/22/2017
Reported: 08/28/2017
Project Name: SHARP NOSE FEDERAL #1
Project Number: XTO
Project Location: UL - J SEC.13,T20S, R33E

Sampling Date: 08/14/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: SP1 (SURFACE) (H702233-01)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/23/2017	ND	2.10	105	2.00	3.71	
Toluene*	0.133	0.050	08/23/2017	ND	1.94	97.1	2.00	3.19	
Ethylbenzene*	<0.050	0.050	08/23/2017	ND	1.99	99.4	2.00	3.78	
Total Xylenes*	<0.150	0.150	08/23/2017	ND	5.96	99.4	6.00	3.72	
Total BTEx	<0.300	0.300	08/23/2017	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	560	16.0	08/25/2017	ND	448	112	400	7.41		

TPH 8015M		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	17.3	10.0	08/24/2017	ND	191	95.4	200	6.17	
DRO >C10-C28	4510	10.0	08/24/2017	ND	192	95.9	200	5.37	

Surrogate: 1-Chlorooctane 101 % 28.3-164

Surrogate: 1-Chlorooctadecane 176 % 34.7-157

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

Environmental Plus, Inc.
Daniel Dominguez
P.O. Box 1558
Eunice NM, 88231
Fax To: (505) 394-2601

Received: 08/22/2017
Reported: 08/28/2017
Project Name: SHARP NOSE FEDERAL #1
Project Number: XTO
Project Location: UL - J SEC.13,T20S, R33E

Sampling Date: 08/18/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: SP1 (12') (H702233-02)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/23/2017	ND	2.10	105	2.00	3.71		
Toluene*	<0.050	0.050	08/23/2017	ND	1.94	97.1	2.00	3.19		
Ethylbenzene*	<0.050	0.050	08/23/2017	ND	1.99	99.4	2.00	3.78		
Total Xylenes*	<0.150	0.150	08/23/2017	ND	5.96	99.4	6.00	3.72		
Total BTEx	<0.300	0.300	08/23/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 132 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	08/25/2017	ND	448	112	400	7.41		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/24/2017	ND	191	95.4	200	6.17	
DRO >C10-C28	14.6	10.0	08/24/2017	ND	192	95.9	200	5.37	

Surrogate: 1-Chlorooctane 100 % 28.3-164

Surrogate: 1-Chlorooctadecane 103 % 34.7-157

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

Environmental Plus, Inc.
Daniel Dominguez
P.O. Box 1558
Eunice NM, 88231
Fax To: (505) 394-2601

Received: 08/22/2017
Reported: 08/28/2017
Project Name: SHARP NOSE FEDERAL #1
Project Number: XTO
Project Location: UL - J SEC.13,T20S, R33E

Sampling Date: 08/17/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: SP2 (SURFACE) (H702233-03)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/23/2017	ND	2.10	105	2.00	3.71	
Toluene*	<0.050	0.050	08/23/2017	ND	1.94	97.1	2.00	3.19	
Ethylbenzene*	<0.050	0.050	08/23/2017	ND	1.99	99.4	2.00	3.78	
Total Xylenes*	<0.150	0.150	08/23/2017	ND	5.96	99.4	6.00	3.72	
Total BTX	<0.300	0.300	08/23/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	08/25/2017	ND	448	112	400	7.41	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/24/2017	ND	191	95.4	200	6.17	
DRO >C10-C28	<10.0	10.0	08/24/2017	ND	192	95.9	200	5.37	

Surrogate: 1-Chlorooctane 104 % 28.3-164

Surrogate: 1-Chlorooctadecane 112 % 34.7-157

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Received: 08/22/2017
Reported: 08/28/2017
Project Name: SHARP NOSE FEDERAL #1
Project Number: XTO
Project Location: UL - J SEC.13,T20S, R33E

Sampling Date: 08/17/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: SP2 (8') (H702233-04)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/23/2017	ND	2.10	105	2.00	3.71	
Toluene*	<0.050	0.050	08/23/2017	ND	1.94	97.1	2.00	3.19	
Ethylbenzene*	<0.050	0.050	08/23/2017	ND	1.99	99.4	2.00	3.78	
Total Xylenes*	<0.150	0.150	08/23/2017	ND	5.96	99.4	6.00	3.72	
Total BTX	<0.300	0.300	08/23/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	08/25/2017	ND	448	112	400	7.41	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/24/2017	ND	191	95.4	200	6.17	
DRO >C10-C28	<10.0	10.0	08/24/2017	ND	192	95.9	200	5.37	

Surrogate: 1-Chlorooctane 106 % 28.3-164

Surrogate: 1-Chlorooctadecane 110 % 34.7-157

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Received: 08/22/2017
Reported: 08/28/2017
Project Name: SHARP NOSE FEDERAL #1
Project Number: XTO
Project Location: UL - J SEC.13,T20S, R33E

Sampling Date: 08/17/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: SP3 (SURFACE) (H702233-05)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/24/2017	ND	2.10	105	2.00	3.71	
Toluene*	<0.050	0.050	08/24/2017	ND	1.94	97.1	2.00	3.19	
Ethylbenzene*	<0.050	0.050	08/24/2017	ND	1.99	99.4	2.00	3.78	
Total Xylenes*	<0.150	0.150	08/24/2017	ND	5.96	99.4	6.00	3.72	
Total BTX	<0.300	0.300	08/24/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	272	16.0	08/25/2017	ND	448	112	400	7.41	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/24/2017	ND	191	95.4	200	6.17	
DRO >C10-C28	370	10.0	08/24/2017	ND	192	95.9	200	5.37	

Surrogate: 1-Chlorooctane 101 % 28.3-164

Surrogate: 1-Chlorooctadecane 116 % 34.7-157

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Received: 08/22/2017
Reported: 08/28/2017
Project Name: SHARP NOSE FEDERAL #1
Project Number: XTO
Project Location: UL - J SEC.13,T20S, R33E

Sampling Date: 08/17/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: SP3 (4') (H702233-06)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/24/2017	ND	2.10	105	2.00	3.71	
Toluene*	<0.050	0.050	08/24/2017	ND	1.94	97.1	2.00	3.19	
Ethylbenzene*	<0.050	0.050	08/24/2017	ND	1.99	99.4	2.00	3.78	
Total Xylenes*	<0.150	0.150	08/24/2017	ND	5.96	99.4	6.00	3.72	
Total BTX	<0.300	0.300	08/24/2017	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	08/25/2017	ND	448	112	400	7.41	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/24/2017	ND	191	95.4	200	6.17	
DRO >C10-C28	<10.0	10.0	08/24/2017	ND	192	95.9	200	5.37	

Surrogate: 1-Chlorooctane 99.0 % 28.3-164

Surrogate: 1-Chlorooctadecane 102 % 34.7-157

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Received: 08/22/2017
Reported: 08/28/2017
Project Name: SHARP NOSE FEDERAL #1
Project Number: XTO
Project Location: UL - J SEC.13,T20S, R33E

Sampling Date: 08/17/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: SP4 (SURFACE) (H702233-07)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/24/2017	ND	2.10	105	2.00	3.71		
Toluene*	<0.050	0.050	08/24/2017	ND	1.94	97.1	2.00	3.19		
Ethylbenzene*	<0.050	0.050	08/24/2017	ND	1.99	99.4	2.00	3.78		
Total Xylenes*	<0.150	0.150	08/24/2017	ND	5.96	99.4	6.00	3.72		
Total BTEx	<0.300	0.300	08/24/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	08/25/2017	ND	448	112	400	7.41	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/24/2017	ND	191	95.4	200	6.17	
DRO >C10-C28	<10.0	10.0	08/24/2017	ND	192	95.9	200	5.37	

Surrogate: 1-Chlorooctane 111 % 28.3-164

Surrogate: 1-Chlorooctadecane 111 % 34.7-157

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Received: 08/22/2017
Reported: 08/28/2017
Project Name: SHARP NOSE FEDERAL #1
Project Number: XTO
Project Location: UL - J SEC.13,T20S, R33E

Sampling Date: 08/17/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: SP4 (1') (H702233-08)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/24/2017	ND	2.10	105	2.00	3.71	
Toluene*	<0.050	0.050	08/24/2017	ND	1.94	97.1	2.00	3.19	
Ethylbenzene*	<0.050	0.050	08/24/2017	ND	1.99	99.4	2.00	3.78	
Total Xylenes*	<0.150	0.150	08/24/2017	ND	5.96	99.4	6.00	3.72	
Total BTEx	<0.300	0.300	08/24/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	08/25/2017	ND	448	112	400	7.41	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/24/2017	ND	191	95.4	200	6.17	
DRO >C10-C28	<10.0	10.0	08/24/2017	ND	192	95.9	200	5.37	

Surrogate: 1-Chlorooctane 95.7 % 28.3-164

Surrogate: 1-Chlorooctadecane 105 % 34.7-157

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Received: 08/22/2017
Reported: 08/28/2017
Project Name: SHARP NOSE FEDERAL #1
Project Number: XTO
Project Location: UL - J SEC.13,T20S, R33E

Sampling Date: 08/17/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: SP5 (SURFACE) (H702233-09)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/24/2017	ND	2.10	105	2.00	3.71	
Toluene*	<0.050	0.050	08/24/2017	ND	1.94	97.1	2.00	3.19	
Ethylbenzene*	<0.050	0.050	08/24/2017	ND	1.99	99.4	2.00	3.78	
Total Xylenes*	<0.150	0.150	08/24/2017	ND	5.96	99.4	6.00	3.72	
Total BTEx	<0.300	0.300	08/24/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	08/25/2017	ND	448	112	400	7.41	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/24/2017	ND	191	95.4	200	6.17	
DRO >C10-C28	<10.0	10.0	08/24/2017	ND	192	95.9	200	5.37	

Surrogate: 1-Chlorooctane 97.3 % 28.3-164

Surrogate: 1-Chlorooctadecane 98.5 % 34.7-157

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Received: 08/22/2017
Reported: 08/28/2017
Project Name: SHARP NOSE FEDERAL #1
Project Number: XTO
Project Location: UL - J SEC.13,T20S, R33E

Sampling Date: 08/17/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: SP5 (1') (H702233-10)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/24/2017	ND	2.10	105	2.00	3.71	
Toluene*	<0.050	0.050	08/24/2017	ND	1.94	97.1	2.00	3.19	
Ethylbenzene*	<0.050	0.050	08/24/2017	ND	1.99	99.4	2.00	3.78	
Total Xylenes*	<0.150	0.150	08/24/2017	ND	5.96	99.4	6.00	3.72	
Total BTX	<0.300	0.300	08/24/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	08/25/2017	ND	448	112	400	7.41	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/24/2017	ND	191	95.4	200	6.17	
DRO >C10-C28	<10.0	10.0	08/24/2017	ND	192	95.9	200	5.37	

Surrogate: 1-Chlorooctane 105 % 28.3-164

Surrogate: 1-Chlorooctadecane 109 % 34.7-157

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Received: 08/22/2017
Reported: 08/28/2017
Project Name: SHARP NOSE FEDERAL #1
Project Number: XTO
Project Location: UL - J SEC.13,T20S, R33E

Sampling Date: 08/18/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: SP6 (SURFACE) (H702233-11)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/24/2017	ND	2.10	105	2.00	3.71	
Toluene*	<0.050	0.050	08/24/2017	ND	1.94	97.1	2.00	3.19	
Ethylbenzene*	<0.050	0.050	08/24/2017	ND	1.99	99.4	2.00	3.78	
Total Xylenes*	<0.150	0.150	08/24/2017	ND	5.96	99.4	6.00	3.72	
Total BTEx	<0.300	0.300	08/24/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	08/25/2017	ND	448	112	400	7.41	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/24/2017	ND	179	89.5	200	3.01	
DRO >C10-C28	<10.0	10.0	08/24/2017	ND	192	96.1	200	1.48	

Surrogate: 1-Chlorooctane 90.8 % 28.3-164

Surrogate: 1-Chlorooctadecane 99.7 % 34.7-157

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 Environmental Plus, Inc.
 Daniel Dominguez
 P.O. Box 1558
 Eunice NM, 88231
 Fax To: (505) 394-2601

 Received: 08/22/2017
 Reported: 08/28/2017
 Project Name: SHARP NOSE FEDERAL #1
 Project Number: XTO
 Project Location: UL - J SEC.13,T20S, R33E

 Sampling Date: 08/18/2017
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: SP6 (1') (H702233-12)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/24/2017	ND	2.10	105	2.00	3.71	
Toluene*	<0.050	0.050	08/24/2017	ND	1.94	97.1	2.00	3.19	
Ethylbenzene*	<0.050	0.050	08/24/2017	ND	1.99	99.4	2.00	3.78	
Total Xylenes*	<0.150	0.150	08/24/2017	ND	5.96	99.4	6.00	3.72	
Total BTEx	<0.300	0.300	08/24/2017	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	08/25/2017	ND	448	112	400	7.41	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/24/2017	ND	183	91.7	200	3.29	
DRO >C10-C28	<10.0	10.0	08/24/2017	ND	204	102	200	3.25	

Surrogate: 1-Chlorooctane 99.9 % 28.3-164

Surrogate: 1-Chlorooctadecane 109 % 34.7-157

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Daniel Dominguez
P.O. Box 1558
Eunice NM, 88231
Fax To: (505) 394-2601

Received: 08/22/2017
Reported: 08/28/2017
Project Name: SHARP NOSE FEDERAL #1
Project Number: XTO
Project Location: UL - J SEC.13,T20S, R33E

Sampling Date: 08/18/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: SP7 (SURFACE) (H702233-13)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/24/2017	ND	2.10	105	2.00	3.71	
Toluene*	<0.050	0.050	08/24/2017	ND	1.94	97.1	2.00	3.19	
Ethylbenzene*	<0.050	0.050	08/24/2017	ND	1.99	99.4	2.00	3.78	
Total Xylenes*	<0.150	0.150	08/24/2017	ND	5.96	99.4	6.00	3.72	
Total BTEx	<0.300	0.300	08/24/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	08/25/2017	ND	448	112	400	7.41	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/24/2017	ND	183	91.7	200	3.29	
DRO >C10-C28	<10.0	10.0	08/24/2017	ND	204	102	200	3.25	

Surrogate: 1-Chlorooctane 85.5 % 28.3-164

Surrogate: 1-Chlorooctadecane 84.9 % 34.7-157

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Analytical Results For:

Environmental Plus, Inc.
Daniel Dominguez
P.O. Box 1558
Eunice NM, 88231
Fax To: (505) 394-2601

Received: 08/22/2017
Reported: 08/28/2017
Project Name: SHARP NOSE FEDERAL #1
Project Number: XTO
Project Location: UL - J SEC.13,T20S, R33E

Sampling Date: 08/18/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: SP7 (1') (H702233-14)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/24/2017	ND	2.10	105	2.00	3.71	
Toluene*	<0.050	0.050	08/24/2017	ND	1.94	97.1	2.00	3.19	
Ethylbenzene*	<0.050	0.050	08/24/2017	ND	1.99	99.4	2.00	3.78	
Total Xylenes*	<0.150	0.150	08/24/2017	ND	5.96	99.4	6.00	3.72	
Total BTX	<0.300	0.300	08/24/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	08/25/2017	ND	448	112	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/24/2017	ND	183	91.7	200	3.29	
DRO >C10-C28	<10.0	10.0	08/24/2017	ND	204	102	200	3.25	

Surrogate: 1-Chlorooctane 95.3 % 28.3-164

Surrogate: 1-Chlorooctadecane 102 % 34.7-157

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene, Lab Director/Quality Manager

Environmental Plus, Inc.

2100 Avenue O, Eunice, NM 88231
(575) 394-3481 FAX: (575) 394-2601

P.O. Box 1558, Eunice, NM 88231

Chain of Custody Form

LAB **Cardinal**

Page 17 of 18

Company Name		Environmental Plus, Inc.		Bill To				ANALYSIS REQUEST																			
EPI Project Manager		Daniel Dominguez		XTO Attn: Amy Ruth																							
Mailing Address		P.O. BOX 1558																									
City, State, Zip		Eunice New Mexico 88231																									
EPI Phone#/Fax#		575-394-3481 / 575-394-2601																									
Client Company		XTO																									
Facility Name		Sharp Nose Federal #1																									
Location		UL- J Sec. 13, T20S, R33E																									
Project Reference																											
EPI Sampler Name		Dustin Crockett																									
LAB I.D.	SAMPLE I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV.			SAMPLING		BTEX 8021B	TPH 8015M	CHLORIDES (Cl ⁻)	SULFATES (SO ₄ ²⁻)	pH	TCLP	OTHER >>>	PAH					
				GROUND WATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER:	ACID/BASE	ICE/COOL	OTHER	DATE	TIME													
H702233																											
	1 SP1 (Surface)	G	1			X					X				14-Aug-17	14:18	X	X	X								
	2 SP1 (12')	G	1			X					X				18-Aug-17	11:38	X	X	X								
	3 SP2 (Surface)	G	1			X					X				17-Aug-17	9:10	X	X	X								
	4 SP2 (8')	G	1			X					X				17-Aug-17	11:00	X	X	X								
	5 SP3 (Surface)	G	1			X					X				17-Aug-17	11:42	X	X	X								
	6 SP3 (4')	G	1			X					X				17-Aug-17	12:15	X	X	X								
	7 SP4 (Surface)	G	1			X					X				17-Aug-17	13:00	X	X	X								
	8 SP4 (1')	G	1			X					X				17-Aug-17	13:15	X	X	X								
	9 SP5 (Surface)	G	1			X					X				17-Aug-17	13:30	X	X	X								
	10 SP5 (1')	G	1			X					X				17-Aug-17	13:40	X	X	X								
Sampler Relinquished:		Date 8/21/17		Received By:		E-mail results to: ddominguezepi@gmail.com & amy_ruth@xtoenergy.com																					
Time 6:00 am						NOTES:																					
Relinquished by:		Date 8-22-17		Received By: (lab staff)																							
Time 3:40																											
Delivered by:		-11.42		Sample Cool & Intact		Checked By:																					
Corrected -11.15c				Yes No		T.O. #15																					

Chain of Custody Form

P.O. Box 1558, Eunice, NM 88231

LAB Cardinal

(575) 394-3481 FAX: (575) 394-2601

(575) 394-3481 FAX: (575) 394-2601						Bill To		ANALYSIS REQUEST															
Company Name		Environmental Plus, Inc.				XTO Attn: Amy Ruth																	
EPI Project Manager		Daniel Dominguez																					
Mailing Address		P.O. BOX 1558																					
City, State, Zip		Eunice New Mexico 88231																					
EPI Phone#/Fax#		575-394-3481 / 575-394-2601																					
Client Company		XTO																					
Facility Name		Sharp Nose Federal #1																					
Location		UL- J Sec. 13, T20S, R33E																					
Project Reference																							
EPI Sampler Name		Dustin Crockett																					
LAB I.D.	SAMPLE I.D.	(G)RAB OR (C)OMP. # CONTAINERS	GROUND WATER	WASTEWATER	MATRIX				PRESERV.			SAMPLING		BTEX 8021B	TPH 8015M	CHLORIDES (Cl ⁻)	SULFATES (SO ₄ ⁼)	pH	TCLP	OTHER >>>	PAH		
					SOIL	CRUDE OIL	SLUDGE	OTHER:	ACID/BASE	ICE/COOL	OTHER	DATE	TIME										
H702233																							
11	SP6 (Surface)	G 1			X					X			18-Aug-17	7:45	X	X	X						
12	SP6 (1')	G 1			X					X			18-Aug-17	8:00	X	X	X						
13	SP7 (Surface)	G 1			X					X			18-Aug-17	8:35	X	X	X						
14	SP7 (1')	G 1			X					X			18-Aug-17	9:15	X	X	X						
15																							
16																							
17																							
18																							
19																							
20																							

Sampler Relinquished by: *Dustin Crockett*

Relinquished by: *[Signature]*

Delivered by: *-11.4%*
Corrected = -11.15%

Date: 8/21/17 Time: 6:00 am

Date: *8-22-17* Time: *3:40*

Sample Cool & Intact: ☒ Yes ☐ No

Received By: *[Signature]*

Received By: (lab staff) *[Signature]*

Checked By: *[Signature]*

E-mail results to: ddominguezepi@gmail.com & amy_ruth@xtoenergy.com

NOTES: