

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, Inc.	Contact: Kurt Hoekstra
Address: 382 Road 3100, Aztec, New Mexico 87410	Telephone No.: (505) 333-3100
Facility Name: Ohio C Govt # 2E	Facility Type: Gas Well (Basin Dakota)
Surface Owner: Federal	Mineral Owner
API No.: 30-045-24395	

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	26	28N	11W	1025	FNL	1050	FEL	San Juan

Latitude 36.63759 Longitude -107.96726

**NATURE OF RELEASE**

Type of Release: Produced Water	Volume of Release: 25 BBL's	Volume Recovered: None
Source of Release: Pit Tank	Date and Hour of Occurrence: Time: Unknown	Date and Hour of Discovery: 6-20-2017, 1:00pm.
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	
By Whom? N/A	Date and Hour:	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\* On 6-20-2017 an XTO lease operator noticed the pit tank gauge from the previous week had dropped. Approximately 25 BBLs of produced water was released into the pit cellar. No Produced Water was recovered. EH&S was notified on 6-20-2017 at approximately 1:00pm. An XTO construction crew washed the pit tank and found that the pit tank had an integrity failure and leaked produced water into the pit tank cellar. EHS sent the 24 hour required notification to the OCD on Wednesday 6-21-2017 at approximately 8:25am. The site was then ranked according to the NMOCD Guidelines for the Remediation of Leaks, Spills and Releases. The site was ranked a 10 due to an estimated depth to groundwater of greater than 100 feet, greater than 1000 feet from a water source, and distance to an arroyo 200-1000 feet, as discussed with NMOCD representative on location Vanessa Fields. This set the closure standard to 1000 ppm TPH, 10 ppm benzene, and 50 ppm total BTEX.

Describe Area Affected and Cleanup Action Taken.\* A release has been confirmed based on an integrity failure of the pit tank, and twenty five (25) BBLs of produced water released into the pit tank cellar. On 7-10-2017 XTO excavated the cellar to 10 feet deep and re-sampled, these sample results were still above standards for this site (see attached). On 7-17-2017 XTO excavated another five (5) feet deep to a total depth of 15 feet below the surface in the BGT cellar. This sample returned results below the standards for this site (see attached). No further action is required.

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 "Initial 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: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Kurt Hoekstra	Approved by Environmental Specialist: 	
Title: EHS Coordinator	Approval Date: 8/10/2017	Expiration Date:
E-mail Address: Kurt.Hoekstra@xtoenergy.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 7-24-2017	Phone: 505-333-3100	

\* Attach Additional Sheets If Necessary

NRF 1717281683

## Hoekstra, Kurt

---

**From:** Hoekstra, Kurt  
**Sent:** Wednesday, June 21, 2017 8:25 AM  
**To:** Smith, Cory, EMNRD; Fields, Vanessa, EMNRD (Vanessa.Fields@state.nm.us); Whitney Thomas (l1thomas@blm.gov)  
**Cc:** McDaniel, James (James\_McDaniel@xtoenergy.com); Weaver, John; Trujillo, Marcos; Hixon, Logan; Dawes, Thomas  
**Subject:** Ohio C Govt # 2E Spill

Hello Whitney, Cory, and Vanessa,

Please consider this the required 24 hour notification for a produced water spill at the Ohio C Govt # 2E , API # 30-045-24395,

Unit A, Sec 26, T-28N, R-11W, Lat. 36.63759, Long -107.96726. On 6-20-2017 at approximately 1:00 pm. EHS Supervisor James McDaniel was notified

An XTO lease operator noticed the pit tank gauge from the previous week had dropped. Approximately 25 BBLs of produced water was released into the pit cellar. No Produced Water was recovered.

XTO plans to remove the Pit Tank from the cellar on Friday 6-23-2017 at 9:00 am. and sample below the tank. If anyone has questions or concerns please let me know.

Thank you.

Kurt Hoekstra  
EHS Coordinator  
XTO Energy  
505-333-3202 Office  
505-486-9543 Cell  
[Kurt\\_Hoekstra@xtoenergy.com](mailto:Kurt_Hoekstra@xtoenergy.com)  
An **ExxonMobil** Subsidiary

July 14, 2017

## XTO Energy - San Juan Division

Sample Delivery Group: L921749  
Samples Received: 07/12/2017  
Project Number: 30-045-24395  
Description: Ohio C Govt #2 E

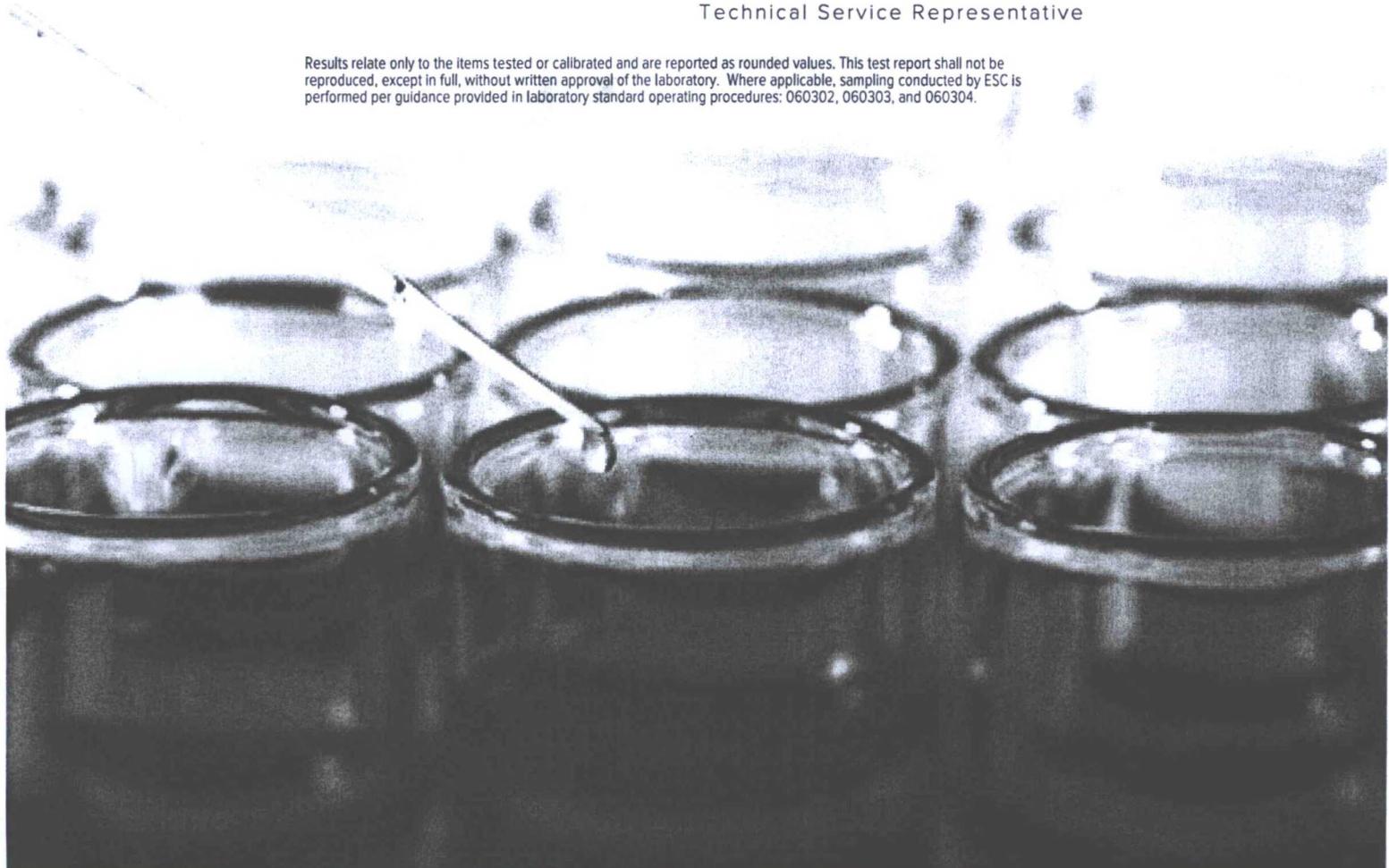
Report To: Kurt Hoekstra  
382 County Road 3100  
Aztec, NM 87410

Entire Report Reviewed By:



Jason Romer  
Technical Service Representative

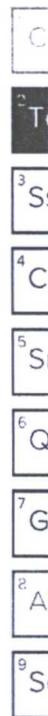
Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



OHIO C GOUT #2E L921749-01 Solid

Collected by  
Kurt

Collected date/time  
07/10/17 14:55

Received date/time  
07/12/17 09:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG998334	1	07/13/17 15:15	07/13/17 15:27	KDW
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG998646	1	07/12/17 16:54	07/14/17 09:29	JHH
Semi-Volatile Organic Compounds (GC) by Method 8015	WG998338	10	07/12/17 14:49	07/14/17 16:23	KLM

1 C

2 T

3 S

4 C

5 S

6 Q

7 G

8 A

9 S



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Jason Romer  
Technical Service Representative

- 1 Q
- 2 Tc
- 3 Sc
- 4 Cr
- 5 Sr
- 6 Q
- 7 Gl
- 8 Al
- 9 Sc

## OHIO C GOUT #2E

Collected date/time: 07/10/17 14:55

## SAMPLE RESULTS - 01

L921749

ONE LAB. NATIONWIDE.



## Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.2		1	07/13/2017 15:27	<u>WG998334</u>

## Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	6.31		0.105	1	07/14/2017 09:29	<u>WG998646</u>
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	89.7		77.0-120		07/14/2017 09:29	<u>WG998646</u>

## Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	3980		42.0	10	07/14/2017 16:23	<u>WG998338</u>
C28-C40 Oil Range	578		42.0	10	07/14/2017 16:23	<u>WG998338</u>
(S) <i>o</i> -Terphenyl	55.3		18.0-148		07/14/2017 16:23	<u>WG998338</u>

WG998334

Total Solids by Method 2540 G-2011

QUALITY CONTROL SUMMARY

L921749-01

Method Blank (MB)

(MB) R3233210-1 07/13/17 15:27

Analyte	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
	%		%	%
Total Solids	0.000100			

L921749-01 Original Sample (OS) • Duplicate (DUP)

(OS) L921749-01 07/13/17 15:27 • (DUP) R3233210-3 07/13/17 15:27

Analyte	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
	%	%		%		%
Total Solids	95.2	95.1	1	0.195		5

Laboratory Control Sample (LCS)

(LCS) R3233210-2 07/13/17 15:27

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
	%	%	%	%	
Total Solids	50.0	50.0	100	85.0-115	

ACCOUNT:  
XTO Energy - San Juan Division

PROJECT:  
30-045-24395

SDG:  
L921749

DATE/T  
07/14/17

WG998646

Volatile Organic Compounds (GC) by Method 8015D/GRO

QUALITY CONTROL SUMMARY

L921749-01

Method Blank (MB)

(MB) R3233313-3 07/14/17 00:16

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) <i>a,a,a</i> -Trifluorotoluene(FID) 115				77.0-120

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3233313-1 07/13/17 23:05 • (LCSD) R3233313-2 07/13/17 23:28

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	5.24	5.02	95.2	91.3	70.0-136			4.18	20
(S) <i>a,a,a</i> -Trifluorotoluene(FID)				95.2	96.4	77.0-120				

ACCOUNT:  
XTO Energy - San Juan Division

PROJECT:  
30-045-24395

SDG:  
L921749

DATE/T  
07/14/17

WG998338

Semi-Volatile Organic Compounds (GC) by Method 8015

QUALITY CONTROL SUMMARY

L921749-01

Method Blank (MB)

(MB) R3233339-1 07/14/17 09:39

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	95.0			18.0-148

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3233339-2 07/14/17 09:56 • (LCSD) R3233339-3 07/14/17 10:13

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	60.0	49.6	44.4	82.7	74.0	50.0-150			11.1	20
(S) o-Terphenyl				103	89.5	18.0-148				

ACCOUNT:  
XTO Energy - San Juan Division

PROJECT:  
30-045-24395

SDG:  
L921749

DATE/T  
07/14/17



Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL (dry)	Reported Detection Limit.
RDL	Reported Detection Limit.
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.

Qualifier                      Description

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

1	C
2	T
3	S
4	C
5	S
6	Q
7	G
8	A
9	S



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE**.  
 \* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

## State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey-NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina <sup>1</sup>	DW21704
Florida	E87487	North Carolina <sup>2</sup>	41
Georgia	NELAP	North Dakota	R-140
Georgia <sup>1</sup>	923	Ohio-VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky <sup>1</sup>	90010	South Dakota	n/a
Kentucky <sup>2</sup>	16	Tennessee <sup>14</sup>	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas <sup>5</sup>	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

## Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC	100789
A2LA – ISO 17025 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA-Crypto	TN00003		

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>14</sup> Accreditation not applicable

## Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**





**ESC LAB SCIENCES**  
Cooler Receipt Form

Client: X Tolman SDG# 920  
Cooler Received/Opened On: 7/ 12 /17 Temperature: 5

Received By: Jon Deboard

Signature: J Deboard

Receipt Check List	NP	Yes
COC Seal Present / Intact?	/	
COC Signed / Accurate?		/
Bottles arrive intact?		/
Correct bottles used?		/
Sufficient volume sent?		/
If Applicable		
VOA Zero headspace?		
Preservation Correct / Checked?		

## Analytical Report

### Report Summary

Client: XTO Energy Inc.  
Chain Of Custody Number:  
Samples Received: 7/17/2017 12:40:00PM  
Job Number: 98031-0528  
Work Order: P707025  
Project Name/Location: Ohio C Govt #2E

Report Reviewed By:



Date: 7/18/17

Walter Hinchman, Laboratory Director



Date: 7/18/17

Tim Cain, Quality Assurance Officer

The results in this report apply to the samples submitted to Envirotech's Analytical Laboratory and were analyzed in accordance with the chain of custody document supplied by you, the client, and as such are for your exclusive use only. The results in this report are based on the sample as received unless otherwise noted. Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc. If you have any questions regarding this analytical report, please don't hesitate to contact Envirotech's Laboratory Staff.



XTO Energy Inc. 382 CR 3100 Aztec NM, 87410	Project Name: Ohio C Govt #2E Project Number: 98031-0528 Project Manager: Kurt Hoekstra	Reported: 18-Jul-17 15:58
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**Analytical Report for Samples**

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BGT Cellar 15'	P707025-01A	Soil	07/17/17	07/17/17	Glass Jar, 4 oz.

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5796 US Highway 64, Farmington, NM 87401

Ph (505) 632-0615 Fx (505) 632-1865

Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301

Ph (970) 259-0615 Fr (800) 362-1879

envirotech-inc.com  
laboratory@envirotech-inc.com

XTO Energy Inc. 382 CR 3100 Aztec NM, 87410	Project Name: Ohio C Govt #2E Project Number: 98031-0528 Project Manager: Kurt Hoekstra	Reported: 18-Jul-17 15:58
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**BGT Cellar 15'  
P707025-01 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

**Nonhalogenated Organics by 8015**

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1729002	07/17/17	07/17/17	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1729005	07/18/17	07/18/17	EPA 8015D	
Oil Range Organics (C28-C40+)	ND	50.0	mg/kg	1	1729005	07/18/17	07/18/17	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		108 %		50-150	1729002	07/17/17	07/17/17	EPA 8015D	
<i>Surrogate: n-Nonane</i>		109 %		50-200	1729005	07/18/17	07/18/17	EPA 8015D	

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XTO Energy Inc. 382 CR 3100 Aztec NM, 87410	Project Name: Ohio C Govt #2E Project Number: 98031-0528 Project Manager: Kurt Hoekstra	Reported: 18-Jul-17 15:58
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**Nonhalogenated Organics by 8015 - Quality Control**

**Envirotech Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 1729002 - Purge and Trap EPA 5030A**

<b>Blank (1729002-BLK1)</b>		Prepared & Analyzed: 17-Jul-17								
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg							
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.98		"	8.00		112	50-150			
<b>LCS (1729002-BS1)</b>		Prepared & Analyzed: 17-Jul-17								
Gasoline Range Organics (C6-C10)	67.1	20.0	mg/kg	60.9		110	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.71		"	8.00		109	50-150			
<b>Matrix Spike (1729002-MS1)</b>		Source: P707025-01		Prepared & Analyzed: 17-Jul-17						
Gasoline Range Organics (C6-C10)	66.7	20.0	mg/kg	60.9	ND	110	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.68		"	8.00		109	50-150			
<b>Matrix Spike Dup (1729002-MSD1)</b>		Source: P707025-01		Prepared & Analyzed: 17-Jul-17						
Gasoline Range Organics (C6-C10)	65.7	20.0	mg/kg	60.9	ND	108	70-130	1.51	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.60		"	8.00		108	50-150			

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laboratory@envirotech-inc.com



XTO Energy Inc. 382 CR 3100 Aztec NM, 87410	Project Name: Ohio C Govt #2E Project Number: 98031-0528 Project Manager: Kurt Hoekstra	Reported: 18-Jul-17 15:58
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**Nonhalogenated Organics by 8015 - Quality Control**  
**Envirotech Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 1729005 - DRO Extraction EPA 3570</b>										
<b>Blank (1729005-BLK1)</b>				Prepared & Analyzed: 18-Jul-17						
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg							
Oil Range Organics (C28-C40+)	ND	50.0	"							
Surrogate: n-Nonane	46.0		"	50.0		92.1	50-200			
<b>LCS (1729005-BS1)</b>				Prepared & Analyzed: 18-Jul-17						
Diesel Range Organics (C10-C28)	499	25.0	mg/kg	500		99.8	38-132			
Surrogate: n-Nonane	45.2		"	50.0		90.4	50-200			
<b>Matrix Spike (1729005-MS1)</b>				Source: P707025-01		Prepared & Analyzed: 18-Jul-17				
Diesel Range Organics (C10-C28)	599	25.0	mg/kg	500	ND	120	38-132			
Surrogate: n-Nonane	56.6		"	50.0		113	50-200			
<b>Matrix Spike Dup (1729005-MSD1)</b>				Source: P707025-01		Prepared & Analyzed: 18-Jul-17				
Diesel Range Organics (C10-C28)	553	25.0	mg/kg	500	ND	111	38-132	8.02	20	
Surrogate: n-Nonane	53.0		"	50.0		106	50-200			

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XTO Energy Inc.  
382 CR 3100  
Aztec NM, 87410

Project Name: Ohio C Govt #2E  
Project Number: 98031-0528  
Project Manager: Kurt Hoekstra

Reported:  
18-Jul-17 15:58

#### Notes and Definitions

DET Analyte DETECTED  
ND Analyte NOT DETECTED at or above the reporting limit  
NR Not Reported  
dry Sample results reported on a dry weight basis  
RPD Relative Percent Difference

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Three Springs - 65 Mercado Street, Suite 115, Durango, CO 81301

Ph (970) 259-0615 Fr (800) 362-1879

envirotech-inc.com  
laboratory@envirotech-inc.com

Client: XTO ENERGY  
 Project: OHIO C. GOVT # 2E  
 Sampler: KURT  
 Phone: 505-486-9543  
 Email(s): JAMES, KURT, LOGAN  
 Project Manager:

RUSH?  
 1d  
 3d

Lab Use Only		Analysis and Method						Lab Only		
Lab WO# <u>P707025</u>		GRO/DRO by 8015/HRD	BTEX by 8021	TPH by 418.1	Chloride by 300.0	TCLP Metals	CO Table 910-1	TDS	Lab Number	Correct Cont/Prsrv(s) Y/N
Job Number <u>98031-0528</u>										

Sample ID	Sample Date	Sample Time	Matrix	Containers QTY - Vol/TYPE/Preservative	GRO/DRO by 8015/HRD	BTEX by 8021	TPH by 418.1	Chloride by 300.0	TCLP Metals	CO Table 910-1	TDS	Lab Number	Correct Cont/Prsrv(s) Y/N
BGT CELLAR 15'	7-17	11:50	S	(1) 4oz Jar <sup>ON</sup> ICE	X							1	Y

Relinquished by: (Signature) <u>Kurt Logau</u>	Date 7-17	Time 12:40	Received by: (Signature) <u>[Signature]</u>	Date 7/17/17	Time 12:40	Lab Use Only	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	**Received on Ice <u>Y/N</u>	
						T1 _____	T2 _____
						AVG Temp °C <u>4.0</u>	

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other \_\_\_\_\_ Container Type: g - glass, p - poly/plastic, ag - amber glass

\*\*Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Sample(s) dropped off after hours to a secure drop off area. Chain of Custody Notes/Billing info: vis ice in cooler

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January 27, 2015

Mr. Cory Smith  
Oil Conservation Division  
1000 Rio Brazos Rd.  
Aztec, New Mexico 87410

Email: cory.smith@state.nm.us  
Phone (505) 334-6178 Ext 115

**RE: VARIANCE REQUEST FOR 19.15.17 NMAC TABLE I AND TABLE II**

Mr. Smith,

Please accept this letter as a variance request as outlined in 19.15.17.15(A) NMAC. XTO Energy would like to request the replacement of USEPA Method 418.1 for the analysis of Total Petroleum Hydrocarbons (TPH) for USEPA Method 8015M, measuring carbon ranges C6-C36, for all sampling associated with closures and confirmations samples in relation to 19.15.17 NMAC, both in Table I and Table II (2103) and the 'pit rule' passed in 2008.

XTO Energy is requesting this variance on the grounds that USEPA Method 418.1 is an outdated analytical method that reports a full range of hydrocarbons from C<sub>8</sub> through C<sub>40</sub>. (*Reference: American Petroleum Institute*). The attached table demonstrates the carbon ranges, and the typical hydrocarbon products that can be found in those ranges. As you can see, lube oil ranges from C<sub>28</sub>-C<sub>35</sub>. Analytical Method USEPA 418.1 extends past lube oils from C<sub>35</sub> through C<sub>40</sub>. This range of hydrocarbons is above the range that can reasonably be expected to be found in our field in both drilling pits and beneath below grade tanks. USEPA Method 8015M (GRO/DRO + extended analysis) will report hydrocarbons ranging from C<sub>6</sub>-C<sub>10</sub> for GRO, C<sub>10</sub>-C<sub>28</sub> for DRO, and C<sub>28</sub>-C<sub>36</sub> for extended analysis. This information was provided by Environmental Science Corporation Laboratories. As the information demonstrates, the 8015M analytical method reports as low as C<sub>6</sub>, reporting lower than USEPA Method 418.1. Utilizing analytical method 8015M, lighter range hydrocarbons will be reported instead of higher range, heavy hydrocarbons that may not be reasonably expected to be found in our field. Utilization of USEPA Method 8015M will better protect groundwater resources by identifying lighter, more mobile hydrocarbons that USEPA Method 418.1 cannot identify. The heavier range hydrocarbons, C<sub>36</sub>-C<sub>40</sub>, that are not identified by USEPA Method 8015M are not a mobile form of hydrocarbon, and are not a threat to human health and the environment. With your acceptance of this variance request, XTO Energy will begin utilizing USEPA Method 8015M in place of USEPA Method 418.1 for all sampling activities associated with 19.15.17 NMAC, both from the rules passed in 2008 and 2013.

Respectfully Submitted,

James McDaniel, CHMM #15676  
EH&S Supervisor  
XTO Energy, Inc.  
Western Division

**Carbon Ranges of Typical Hydrocarbons**

<b>Hydrocarbon</b>	<b>Carbon Range</b>
Condensate	C2-C12
Aromatics	C5-C7
Gasoline	C7-C11
Kerosene	C6-C16
Diesel Fuel	C8-C21
Fuel Oil #1	C9-C16
Fuel Oil #2	C11-C20
Heating Oil	C14-C20
Lube Oil	C28-C35



Inspector Name	Record Date	Inspection Time	Visible Liner Tears	Visible Liner Tears	Visible Liner Tears	Visible Leak Overflow	Collection Surface	Visible Layer Oil	Visible Leak	Freeboard	Est FT	Pit Location	Pit Type	Notes
sr	2/3/2012	01:15	No	No	No	No	No	No	No	4		Well Water Pit	Below Ground	Well Water Pit
sr	3/1/2012	10:15	No	No	No	No	No	No	No	4		Well Water Pit	Below Ground	Well Water Pit
sr	4/19/2012	10:00	No	No	No	No	No	No	No	4		Well Water Pit	Below Ground	Well Water Pit
sr	5/16/2012	10:30	No	No	No	No	No	No	No	4		Well Water Pit	Below Ground	Well Water Pit
sr	6/7/2012	02:00	No	No	No	No	No	No	No	5		Well Water Pit	Below Ground	Well Water Pit
sr	7/1/2012	10:30	No	No	No	No	No	No	No	5		Well Water Pit	Below Ground	Well Water Pit
sr	8/22/2012	08:00	No	No	No	No	No	No	No	5		Well Water Pit	Below Ground	Well Water Pit
sr	9/1/2012	09:30	No	No	No	No	No	No	No	5		Well Water Pit	Below Ground	Well Water Pit
sr	10/10/2012	08:00	No	No	No	No	No	No	No	5		Well Water Pit	Below Ground	Well Water Pit
sr	11/15/2012	09:00	No	No	No	No	No	No	No	3		Well Water Pit	Below Ground	Well Water Pit
sr	12/19/2012	09:15	No	No	No	No	No	No	No	3		Well Water Pit	Below Ground	Well Water Pit
sr	1/16/2013	10:15	No	No	No	No	No	No	No	3		Well Water Pit	Below Ground	Well Water Pit
sr	2/14/2013	10:00	No	No	No	No	No	No	No	3		Well Water Pit	Below Ground	Well Water Pit
sr	3/7/2013	10:00	No	No	No	No	No	No	No	3		Well Water Pit	Below Ground	Well Water Pit
sr	4/12/2013	11:00	No	No	No	No	No	No	No	3		Well Water Pit	Below Ground	Well Water Pit
sr	5/15/2013	08:00	No	No	No	No	No	No	No	3		Well Water Pit	Below Ground	Well Water Pit
sr	6/19/2013	09:15	No	No	No	No	No	No	No	3		Well Water Pit	Below Ground	Well Water Pit
sr	7/17/2013	09:15	No	No	No	No	No	No	No	3		Well Water Pit	Below Ground	Well Water Pit
sr	8/15/2013	11:15	No	No	No	No	No	No	No	3		Well Water Pit	Below Ground	Well Water Pit
sr	10/11/2013	11:30	No	No	No	No	No	No	No	3		Well Water Pit	Below Ground	Well Water Pit
sr	11/8/2013	10:00	No	No	No	No	No	No	No	3		Well Water Pit	Below Ground	Well Water Pit
sr	2/13/2014	09:00	No	No	No	No	No	No	No	3		Well Water Pit	Below Ground	Well Water Pit
sr	3/12/2014	10:00	No	No	No	No	No	No	No	3		Well Water Pit	Below Ground	Well Water Pit
sr	4/18/2014	10:30	No	No	No	No	No	No	No	3		Well Water Pit	Below Ground	Well Water Pit
sr	6/13/2014	08:30	No	No	No	No	No	No	No	3		Well Water Pit	Below Ground	Well Water Pit
sr	7/24/2014	11:15	No	No	No	No	No	No	No	3		Well Water Pit	Below Ground	Well Water Pit
sr	8/20/2014	08:15	No	No	No	No	No	No	No	3		Well Water Pit	Below Ground	Well Water Pit
sr	9/18/2014	08:30	No	No	No	No	No	No	No	3		Well Water Pit	Below Ground	Well Water Pit
sr	12/11/2014	08:15	No	No	No	No	No	No	No	3		Well Water Pit	Below Ground	Well Water Pit
sr	3/18/2015	08:30	No	No	No	No	No	No	No	3		Well Water Pit	Below Ground	Well Water Pit
sr	6/18/2015	30:45	No	No	No	No	No	No	No	3		Well Water Pit	Below Ground	Well Water Pit
sr	7/7/2015	08:45	No	No	No	No	No	No	No	3		Well Water Pit	Below Ground	Well Water Pit
sr	9/16/2015	08:30	No	No	No	No	No	No	No	3		Well Water Pit	Below Ground	Well Water Pit
sr	10/14/2015	12:00	No	No	No	No	No	No	No	3		Well Water Pit	Below Ground	Well Water Pit
sr	1/14/2016	08:15	No	No	No	No	No	No	No	3		Well Water Pit	Below Ground	Well Water Pit
sr	2/13/2016	08:30	No	No	No	No	No	No	No	3		Well Water Pit	Below Ground	Well Water Pit
sr	4/21/2016	08:45	No	No	No	No	No	No	No	3		Well Water Pit	Below Ground	Well Water Pit
sr	5/19/2016	10:15	No	No	No	No	No	No	No	3		Well Water Pit	Below Ground	Well Water Pit
sr	6/28/2016	10:00	No	No	No	No	No	No	No	3		Well Water Pit	Below Ground	Well Water Pit
sr	7/28/2016	08:30	No	No	No	No	No	No	No	3		Well Water Pit	Below Ground	Well Water Pit
sr	9/16/2016	08:45	No	No	No	No	No	No	No	3		Well Water Pit	Below Ground	Well Water Pit
sr	10/12/2016	09:45	No	No	No	No	No	No	No	3		Well Water Pit	Below Ground	Well Water Pit
sr	11/16/2016	10:45	No	No	No	No	No	No	No	3		Well Water Pit	Below Ground	Well Water Pit
sr	12/27/2016	01:30	No	No	No	No	No	No	No	3		Well Water Pit	Below Ground	Well Water Pit
GW	1/17/2017	13:44	No	No	No	No	No	No	No	3		Well Water Pit	Below Ground	Well Water Pit
MG	2/16/2017	13:30	No	No	No	No	No	No	No	3		Well Water Pit	Below Ground	Well Water Pit
DD	3/10/2017	15:08	No	No	No	No	No	No	No	4		Well Water Pit	Below Ground	Well Water Pit
DD	4/7/2017	13:15	No	No	No	No	No	No	No	3		Well Water Pit	Below Ground	Well Water Pit
DD	5/5/2017	14:30	No	No	No	No	No	No	No	3		Well Water Pit	Below Ground	Well Water Pit
DD	6/9/2017	12:15	No	No	No	No	No	No	No	3		Well Water Pit	Below Ground	Well Water Pit

