

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: WF Federal 28-2	Facility Type: Gas Well (Twin Mounds FR Sand PC)

Surface Owner: Federal	Mineral Owner	API No. 30-045-29948
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**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
J	28	30N	14W	1525	FSL	1850	FEL	San Juan

Latitude: 36.782120 Longitude: -108.311902

**NATURE OF RELEASE**

Type of Release: Produced Water	Volume of Release: 5-8 BBL	Volume Recovered: None
Source of Release: 4" produced water line	Date and Hour of Occurrence Unknown	Date and Hour of Discovery: 2-20-2017 @ 6:30am.
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom? N/A	
By Whom?	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 February 20, 2017 at approximately 6:30am an XTO operator notified his supervisor that there was a produced water release from a 4" poly pipe, an estimated 5-8 BBLs of produced was released and none was recovered. XTO, EHS collected a soil sample from the source of the leak and a composite sample from the beginning, middle and end of the spill. The site was ranked a 30 pursuant to the NMOCD Guidelines for the Remediation of Leaks, Spills and Releases due to distance to surface water 0-200 feet, and an estimated depth to groundwater 50 - 100 feet and an estimated distance to a water well greater than 1000 feet. This will set the closure standards to 100 ppm TPH, 10 ppm benzene and 50 ppm total BTEX. The soil was sampled for TPH via USEPA Method 8015, for BTEX via USEPA Method 8021, and for chlorides.

Describe Area Affected and Cleanup Action Taken.\* Due to 5-8 BBLs of produced water leaking onto the ground a release has been confirmed at this location. The sample results (attached) returned chloride results of 5390 ppm at the source, and the composite returned chloride results of 3160 ppm chloride. XTO proposes to rake gypsum into the soil at an application rate of approximately one (1) pound per square foot of impacted soil.

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: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Kurt Hoekstra	Approved by Environmental Specialist: 	
Title: EHS Coordinator	Approval Date: 3/8/2017	Expiration Date:
E-mail Address: Kurt.Hoekstra@xtoenergy.com	Conditions of Approval: NVE 1706733883	Attached <input type="checkbox"/>
Date: 2-23-2017 Phone: 505-333-3100		

\* Attach Additional Sheets If Necessary

OIL CONS. DIV DIST. 3

FEB 27 2017

15

## XTO Energy - San Juan Division

Sample Delivery Group: L891312  
Samples Received: 02/21/2017  
Project Number: 30-045-29948  
Description: WF Federal 28 #2

Report To: James McDaniel  
382 County Road 3100  
Aztec, NM 87410

Entire Report Reviewed By:



Daphne Richards  
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.

FARKH-022017-1230 L891312-01 Solid

Collected by Kurt  
Collected date/time 02/20/17 12:30  
Received date/time 02/21/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Semi-Volatile Organic Compounds (GC) by Method 8015	WG954345	1	02/21/17 18:14	02/22/17 00:37	ACM
Total Solids by Method 2540 G-2011	WG954334	1	02/21/17 14:00	02/21/17 14:08	MEL
Volatile Organic Compounds (GC) by Method 8015/8021	WG954444	1	02/21/17 14:09	02/22/17 12:44	JHH
Wet Chemistry by Method 9056A	WG954374	10	02/22/17 08:24	02/22/17 10:22	KCF

FARKH-022017-1240 L891312-02 Solid

Collected by Kurt  
Collected date/time 02/20/17 12:40  
Received date/time 02/21/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Semi-Volatile Organic Compounds (GC) by Method 8015	WG954345	1	02/21/17 18:14	02/22/17 00:49	ACM
Total Solids by Method 2540 G-2011	WG954334	1	02/21/17 14:00	02/21/17 14:08	MEL
Volatile Organic Compounds (GC) by Method 8015/8021	WG954444	1	02/21/17 14:09	02/22/17 13:06	JHH
Wet Chemistry by Method 9056A	WG954374	10	02/22/17 08:24	02/22/17 10:40	KCF

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.



Daphne Richards  
Technical Service Representative

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

## Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	83.0		1	02/21/2017 14:08	<u>WG954334</u>

## Wet Chemistry by Method 9056A

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
Chloride	5390		121	10	02/22/2017 10:22	<u>WG954374</u>

## Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
Benzene	ND		0.000603	1	02/22/2017 12:44	<u>WG954444</u>
Toluene	ND		0.00603	1	02/22/2017 12:44	<u>WG954444</u>
Ethylbenzene	ND		0.000603	1	02/22/2017 12:44	<u>WG954444</u>
Total Xylene	ND		0.00181	1	02/22/2017 12:44	<u>WG954444</u>
TPH (GC/FID) Low Fraction	ND		0.121	1	02/22/2017 12:44	<u>WG954444</u>
(S) <i>o,o,a</i> -Trifluorotoluene(FID)	98.9		77.0-120		02/22/2017 12:44	<u>WG954444</u>
(S) <i>o,o,a</i> -Trifluorotoluene(PID)	104		75.0-128		02/22/2017 12:44	<u>WG954444</u>

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) High Fraction	ND		4.82	1	02/22/2017 00:37	<u>WG954345</u>
(S) <i>o</i> -Terphenyl	71.5		18.0-148		02/22/2017 00:37	<u>WG954345</u>

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	81.2		1	02/21/2017 14:08	<u>WG954334</u>

Wet Chemistry by Method 9056A

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
Chloride	3160	<u>V</u>	123	10	02/22/2017 10:40	<u>WG954374</u>

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
Benzene	ND		0.000616	1	02/22/2017 13:06	<u>WG954444</u>
Toluene	ND		0.00616	1	02/22/2017 13:06	<u>WG954444</u>
Ethylbenzene	ND		0.000616	1	02/22/2017 13:06	<u>WG954444</u>
Total Xylene	ND		0.00185	1	02/22/2017 13:06	<u>WG954444</u>
TPH (GC/FID) Low Fraction	0.246	<u>B</u>	0.123	1	02/22/2017 13:06	<u>WG954444</u>
<i>(S) a,a,a-Trifluorotoluene(FID)</i>	100		77.0-120		02/22/2017 13:06	<u>WG954444</u>
<i>(S) a,a,a-Trifluorotoluene(PID)</i>	105		75.0-128		02/22/2017 13:06	<u>WG954444</u>

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) High Fraction	ND		4.92	1	02/22/2017 00:49	<u>WG954345</u>
<i>(S) o-Terphenyl</i>	59.4		18.0-148		02/22/2017 00:49	<u>WG954345</u>

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

**WG954334**

Total Solids by Method 2540 G-2011

**QUALITY CONTROL SUMMARY**L891312-01,02

## Method Blank (MB)

(MB) R3198374-1 02/21/17 14:08

	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	%		%	%
Total Solids	0.000800			

## L891309-01 Original Sample (OS) • Duplicate (DUP)

(OS) L891309-01 02/21/17 14:08 • (DUP) R3198374-3 02/21/17 14:08

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	%	%		%		%
Total Solids	73.3	74.5	1	1.61		5

## Laboratory Control Sample (LCS)

(LCS) R3198374-2 02/21/17 14:08

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

**ACCOUNT:**  
XTO Energy - San Juan Division

**PROJECT:**  
30-045-29948

**SDG:**  
L891312

**DATE:**  
02/22/17

WG954374

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L891312-01,02

Method Blank (MB)

(MB) R3198490-1 02/22/17 09:17

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chloride	U		0.795	10.0

L891312-01 Original Sample (OS) • Duplicate (DUP)

(OS) L891312-01 02/22/17 10:22 • (DUP) R3198490-4 02/22/17 10:31

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	5390	4820	10	11		15

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

(LCS) R3198490-2 02/22/17 09:26 • (LCSD) R3198490-3 02/22/17 09:55

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 Limi %
Chloride	200	191	190	95	95	80-120			0	15

L891312-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L891312-02 02/22/17 10:40 • (MS) R3198490-5 02/22/17 10:49 • (MSD) R3198490-6 02/22/17 11:10

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier
Chloride	61.6	3160	3530	4110	60	155	10	80-120	<u>V</u>	<u>V</u>

ACCOUNT:  
XTO Energy - San Juan Division

PROJECT:  
30-045-29948

SDG:  
L891312

DATE:  
02/22/17

Method Blank (MB)

(MB) R3198519-5 02/22/17 11:59

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Benzene	U		0.000120	0.000500
Toluene	0.000283	J	0.000150	0.00500
Ethylbenzene	U		0.000110	0.000500
Total Xylene	U		0.000460	0.00150
TPH (GC/FID) Low Fraction	0.0269	J	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	99.8			77.0-120
(S) a,a,a-Trifluorotoluene(PID)	105			75.0-128

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

(LCS) R3198519-1 02/22/17 10:08 • (LCSD) R3198519-2 02/22/17 10:30

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limi
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Benzene	0.0500	0.0444	0.0450	88.9	89.9	71.0-121			1.17	20
Toluene	0.0500	0.0445	0.0446	89.1	89.3	72.0-120			0.190	20
Ethylbenzene	0.0500	0.0456	0.0461	91.2	92.2	76.0-121			1.08	20
Total Xylene	0.150	0.136	0.138	90.8	91.7	75.0-124			0.950	20
(S) a,a,a-Trifluorotoluene(FID)				98.8	99.1	77.0-120				
(S) a,a,a-Trifluorotoluene(PID)				103	103	75.0-128				

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

(LCS) R3198519-3 02/22/17 10:53 • (LCSD) R3198519-4 02/22/17 11:15

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limi
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
TPH (GC/FID) Low Fraction	5.50	5.41	5.99	98.3	109	70.0-136			10.2	20
(S) a,a,a-Trifluorotoluene(FID)				106	106	77.0-120				
(S) a,a,a-Trifluorotoluene(PID)				112	113	75.0-128				

ACCOUNT:  
XTO Energy - San Juan Division

PROJECT:  
30-045-29948

SDG:  
L891312

DATE  
02/22/

**WG954345**

Semi-Volatile Organic Compounds (GC) by Method 8015

**QUALITY CONTROL SUMMARY**L891312-01,02

## Method Blank (MB)

(MB) R3198419-1 02/21/17 22:00

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) High Fraction	U		0.769	4.00
<i>(S) o-Terphenyl</i>	74.8			18.0-148

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

(LCS) R3198419-2 02/21/17 22:11 • (LCSD) R3198419-3 02/21/17 22:23

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 Limi %
TPH (GC/FID) High Fraction	60.0	53.6	47.6	89.3	79.4	50.0-150			11.8	20
<i>(S) o-Terphenyl</i>				95.9	89.6	18.0-148				

**ACCOUNT:**  
XTO Energy - San Juan Division

**PROJECT:**  
30-045-29948

**SDG:**  
L891312

**DATE:**  
02/22/1

Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
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
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
V	The sample concentration is too high to evaluate accurate spike recoveries.

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# ACCREDITATIONS & LOCATIONS

ONE LAB. NATIONWIDE.

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	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: <u>XTO</u>	SDG#	<u>68</u>
Cooler Received/Opened On: <u>2/21/17</u>	Temperature:	<u>4.2</u>
Received By: <u>Nadiar Yakob</u>		
Signature: 		
Receipt Check List		NP
COC Seal Present / Intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
COC Signed / Accurate?		<input checked="" type="checkbox"/>
Bottles arrive intact?		<input checked="" type="checkbox"/>
Correct bottles used?		<input checked="" type="checkbox"/>
Sufficient volume sent?		<input checked="" type="checkbox"/>
If Applicable		
VOA Zero headspace?		
Preservation Correct / Checked?		