

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: Logan Hixon	
Address: 382 Road 3100, Aztec, New Mexico 87410	Telephone No.: (505) 333-3683	
Facility Name: Gardner C 2A	Facility Type: Gas well	
Surface Owner: BLM	Mineral Owner: BLM	API No. 30-045-32057

**LOCATION OF RELEASE**

Unit Letter C	Section 31	Township 32 N	Range 8W	Feet from the 940	North/South Line FNL	Feet from the 1385	East/West Line FWL	County San Juan
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Latitude: N36.94556 Longitude: W-107.71726

**NATURE OF RELEASE**


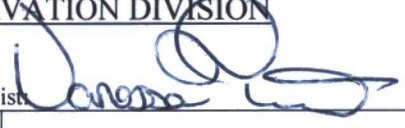
Type of Release: Produced Water	Volume of Release: Approximately 14 bbl.	Volume Recovered: 0 bbl. Recovered
Source of Release: Water Manifold (Gas Eliminator)	Date and Hour of Occurrence: April 19, 2017 at Unknown Time	Date and Hour of Discovery: April 19, 2017 at 1330.
Was Immediate Notice Given? <input 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 April 19, 2017, a water leak was discovered at the Gardner C 2A wellhead stuffing box. An estimated 14 bbl. of produced water leaked from the wellhead. The produced water stayed on location and was 90' at the longest point and 35' at the widest point. The site was ranked a 10 pursuant to the NMOCD Guidelines for the Remediation of Leaks, Spills and Releases. The distance to a waterway is estimated to be less than 1,000 feet but greater than 200 feet.. This set the regulatory limits to 1,000 ppm TPH, 10 ppm benzene, and 50 ppm total BTEX.

Describe Area Affected and Cleanup Action Taken.\* On April 19, 2017, a composite sample was collected at the source of the release, a composite sample was collected with in the first 45 foot length, and another composite sample was collected for the remaining 45 foot length. The samples were analyzed for DRO/GRO via USEPA Method 8015, BTEX via USEPA Method 8021, and for chlorides. The samples returned results below all regulatory standards determined for this location. On May 1, 2017, NMOCD approved of the gypsum application to the release area. On May 15, 2017, approximately 150 pounds of gypsum was raked into the release area. The sample results are attached for your reference. 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 "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: Logan Hixon	Approved by Environmental Specialist: 	
Title: EHS Coordinator	Approval Date: 5/23/2017	Expiration Date:
E-mail Address: Logan_Hixon@xtoenergy.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 5/19/17	Phone: 505-333-3683	

\* Attach Additional Sheets If Necessary

NF1714532459

OIL CONS. DIV DIST. 3

MAY 22 2017



## Hixon, Logan

---

**From:** Smith, Cory, EMNRD <Cory.Smith@state.nm.us>  
**Sent:** Monday, May 01, 2017 7:46 AM  
**To:** Hixon, Logan; Powell, Brandon, EMNRD; Fields, Vanessa, EMNRD; Thomas, Leigh (l1thomas@blm.gov)  
**Cc:** McDaniel, James; Hoekstra, Kurt; Bramwell, Chris; Weaver, John; Farnsworth, Rex  
**Subject:** RE: 2017-4-19 Gardner C 2A Wellhead Release  
  
**Categories:** External Sender

Logan,

OCD approves of XTO proposed plan to apply gypsum to the affected area.

Please include this approval in your Final C-141.

OCD approval does not relieve XTO of any requirements imposed by other regulatory agencies.

Cory Smith  
Environmental Specialist  
Oil Conservation Division  
Energy, Minerals, & Natural Resources  
1000 Rio Brazos, Aztec, NM 87410  
(505)334-6178 ext 115  
[cory.smith@state.nm.us](mailto:cory.smith@state.nm.us)

**From:** Hixon, Logan [mailto:Logan\_Hixon@xtoenergy.com]  
**Sent:** Friday, April 28, 2017 7:03 AM  
**To:** Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>; Smith, Cory, EMNRD <Cory.Smith@state.nm.us>; Fields, Vanessa, EMNRD <Vanessa.Fields@state.nm.us>; Thomas, Leigh (l1thomas@blm.gov) <l1thomas@blm.gov>  
**Cc:** McDaniel, James <James\_McDaniel@xtoenergy.com>; Hoekstra, Kurt <Kurt\_Hoekstra@xtoenergy.com>; Bramwell, Chris <Chris\_Bramwell@xtoenergy.com>; Weaver, John <John\_Weaver@xtoenergy.com>; Farnsworth, Rex <Rex\_Farnsworth@xtoenergy.com>  
**Subject:** 2017-4-19 Gardner C 2A Wellhead Release

Good Morning,

Attached for your reference are the analytical results April 19, 2017 from the Gardner C 2A well head stuffing box release, where approximately 14 bbls of fruitland coal produced water was released from the well head stuffing box. XTO proposes to remediate the impacted area with gypsum, in an area that is approximately 90' in length and at the widest point 35'. Approximately 150 lbs. of gypsum will be distributed in the impacted area by raking and spreading of the gypsum. After the application of gypsum to the impacted area XTO will consider this site closed and an initial C-141 documentation will be submitted with actions taken.

Thank you for your time and consideration with this site.

*If you have any questions do not hesitate to contact us.*

**Thank You!**

**EHS Coordinator**

Logan Hixon | 382 CR 3100 | Aztec, NM 87410 | ph: 505-333-3100 | Cell: 505-386 8018 |

Home: 505-320-6133 | [Logan\\_Hixon@xtoenergy.com](mailto:Logan_Hixon@xtoenergy.com)

**XTO ENERGY INC.**, an ExxonMobil subsidiary

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April 27, 2017

## XTO Energy - San Juan Division

Sample Delivery Group: L904233  
Samples Received: 04/21/2017  
Project Number:  
Description: Gardner C ZA

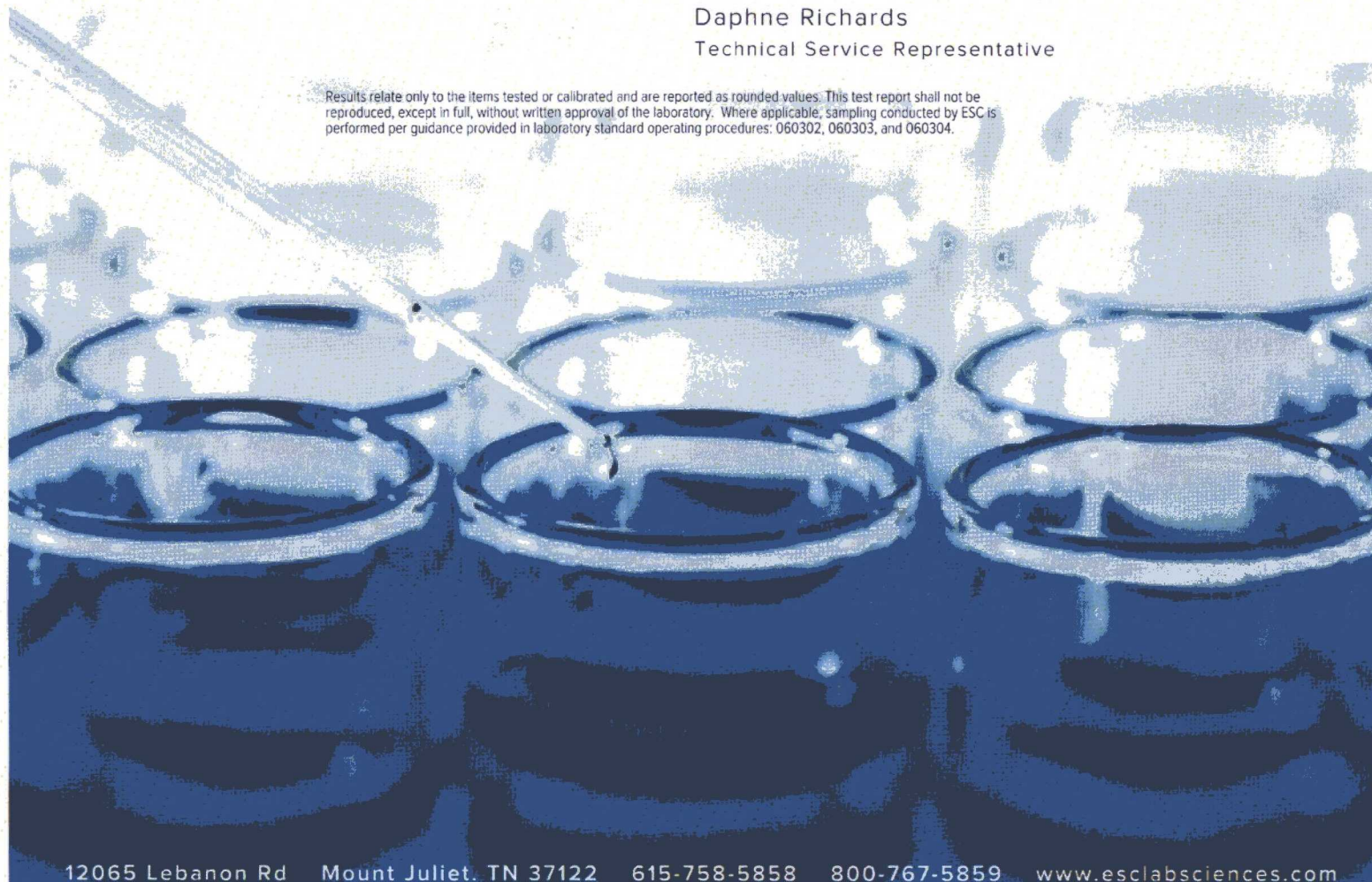
Report To: James McDaniel  
382 County Road 3100  
Aztec, NM 87410

Entire Report Reviewed By:

*Daphne R Richards*

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.



## 0-45' COMPOSITE L904233-01 Solid

Collected by  
Logan HixonCollected date/time  
04/19/17 16:50Received date/time  
04/21/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG973448	1	04/24/17 16:38	04/24/17 16:46	MLW
Wet Chemistry by Method 9056A	WG973758	10	04/26/17 09:39	04/26/17 15:38	KCF
Volatile Organic Compounds (GC) by Method 8015/8021	WG974196	1	04/26/17 12:42	04/27/17 06:20	JAH
Semi-Volatile Organic Compounds (GC) by Method 8015	WG973964	1	04/26/17 04:44	04/26/17 11:00	ACM

Cp

Tc

## 45-90' COMPOSITE L904233-02 Solid

Collected by  
Logan HixonCollected date/time  
04/19/17 17:00Received date/time  
04/21/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG973448	1	04/24/17 16:38	04/24/17 16:46	MLW
Wet Chemistry by Method 9056A	WG973758	10	04/26/17 09:39	04/26/17 15:59	KCF
Volatile Organic Compounds (GC) by Method 8015/8021	WG974196	97	04/26/17 12:42	04/27/17 06:42	JAH
Semi-Volatile Organic Compounds (GC) by Method 8015	WG973964	1	04/26/17 04:44	04/26/17 10:42	ACM

Cn

Sr

Qc

Gl

Al

Sc

ACCOUNT:

XTO Energy - San Juan Division

PROJECT:

SDG:

L904233

DATE/TIME:

04/27/17 17:08

PAGE:

3 of 16





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

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>5</sup> Sr<sup>6</sup> Qc<sup>7</sup> Gl<sup>8</sup> Al<sup>9</sup> Sc

## 0-45' COMPOSITE

Collected date/time: 04/19/17 16:50

## SAMPLE RESULTS - 01

L904233

ONE LAB. NATIONWIDE.



## Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	82.9		1	04/24/2017 16:46	<a href="#">WG973448</a>

## Wet Chemistry by Method 9056A

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis date / time	Batch
Chloride	mg/kg		mg/kg			
	2500		121	10	04/26/2017 15:38	<a href="#">WG973758</a>

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis date / time	Batch
Benzene	mg/kg		mg/kg			
	ND		0.000603	1	04/27/2017 06:20	<a href="#">WG974196</a>
Toluene	ND		0.00603	1	04/27/2017 06:20	<a href="#">WG974196</a>
Ethylbenzene	ND		0.000603	1	04/27/2017 06:20	<a href="#">WG974196</a>
Total Xylene	ND		0.00181	1	04/27/2017 06:20	<a href="#">WG974196</a>
TPH (GC/FID) Low Fraction	ND		0.121	1	04/27/2017 06:20	<a href="#">WG974196</a>
(S) a,a,a-Trifluorotoluene(FID)	93.7		77.0-120		04/27/2017 06:20	<a href="#">WG974196</a>
(S) a,a,a-Trifluorotoluene(PID)	98.1		75.0-128		04/27/2017 06:20	<a href="#">WG974196</a>

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	mg/kg		mg/kg			
	21.2		4.83	1	04/26/2017 11:00	<a href="#">WG973964</a>
C28-C40 Oil Range	26.5		4.83	1	04/26/2017 11:00	<a href="#">WG973964</a>
(S) o-Terphenyl	34.0		18.0-148		04/26/2017 11:00	<a href="#">WG973964</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Qc

7 Gl

8 Al

9 Sc



## 45-90' COMPOSITE

Collected date/time: 04/19/17 17:00

## SAMPLE RESULTS - 02

L904233

ONE LAB. NATIONWIDE.



## Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	80.2		1	04/24/2017 16:46	<a href="#">WG973448</a>

## Wet Chemistry by Method 9056A

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	6340		125	10	04/26/2017 15:59	<a href="#">WG973758</a>

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	ND		0.000605	.97	04/27/2017 06:42	<a href="#">WG974196</a>
Toluene	ND		0.00605	.97	04/27/2017 06:42	<a href="#">WG974196</a>
Ethylbenzene	ND		0.000605	.97	04/27/2017 06:42	<a href="#">WG974196</a>
Total Xylene	ND		0.00181	.97	04/27/2017 06:42	<a href="#">WG974196</a>
TPH (GC/FID) Low Fraction	ND		0.121	.97	04/27/2017 06:42	<a href="#">WG974196</a>
(S) a,a,a-Trifluorotoluene(FID)	94.4		77.0-120		04/27/2017 06:42	<a href="#">WG974196</a>
(S) a,a,a-Trifluorotoluene(PID)	99.4		75.0-128		04/27/2017 06:42	<a href="#">WG974196</a>

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	ND		4.99	1	04/26/2017 10:42	<a href="#">WG973964</a>
C28-C40 Oil Range	ND		4.99	1	04/26/2017 10:42	<a href="#">WG973964</a>
(S) o-Terphenyl	79.2		18.0-148		04/26/2017 10:42	<a href="#">WG973964</a>

Cp

Tc

Ss

Cn

Qc

Gl

Al

Sc

WG973448

Total Solids by Method 2540 G-2011

## QUALITY CONTROL SUMMARY

L904233-01,02

ONE LAB. NATIONWIDE.



## Method Blank (MB)

(MB) R3213142-1 04/24/17 16:46

	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	%		%	%
Total Solids	0.000700			

## L904205-01 Original Sample (OS) • Duplicate (DUP)

(OS) L904205-01 04/24/17 16:46 • (DUP) R3213142-3 04/24/17 16:46

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	%	%		%		%
Total Solids	87.7	87.8	1	0.173		5

## Laboratory Control Sample (LCS)

(LCS) R3213142-2 04/24/17 16:46

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

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>4</sup> Cn<sup>5</sup> Sr<sup>7</sup> Gl<sup>8</sup> Al<sup>9</sup> Sc



WG973758

Wet Chemistry by Method 9056A

## QUALITY CONTROL SUMMARY

L904233-01,02

ONE LAB. NATIONWIDE



## Method Blank (MB)

(MB) R3214077-1 04/26/17 12:47

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

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

## L904295-05 Original Sample (OS) • Duplicate (DUP)

(OS) L904295-05 04/26/17 19:33 • (DUP) R3214077-4 04/26/17 19:55

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/kg	mg/kg		%		%
Chloride	40.6	46.4	1	13		15

## L904295-09 Original Sample (OS) • Duplicate (DUP)

(OS) L904295-09 04/26/17 22:46 • (DUP) R3214077-7 04/26/17 23:07

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/kg	mg/kg		%		%
Chloride	53.6	53.0	1	1		15

7 Gl

8 Al

9 Sc

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

(LCS) R3214077-2 04/26/17 13:09 • (LCSD) R3214077-3 04/26/17 13:30

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Chloride	200	209	210	104	105	80-120			0	15

## L904295-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L904295-06 04/26/17 20:16 • (MS) R3214077-5 04/26/17 20:37 • (MSD) R3214077-6 04/26/17 20:59

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Chloride	500	42.3	574	567	106	105	1	80-120			1	15



WG974196

Volatile Organic Compounds (GC) by Method 8015/8021

## QUALITY CONTROL SUMMARY

L904233-01,02

ONE LAB. NATIONWIDE.



## Method Blank (MB)

(MB) R3214047-5 04/26/17 23:40

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Benzene	U		0.000120	0.000500
Toluene	0.000165	J	0.000150	0.00500
Ethylbenzene	U		0.000110	0.000500
Total Xylene	U		0.000460	0.00150
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	95.9			77.0-120
(S) a,a,a-Trifluorotoluene(PID)	101			75.0-128

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

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

(LCS) R3214047-1 04/26/17 21:49 • (LCSD) R3214047-2 04/26/17 22:12

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Benzene	0.0500	0.0464	0.0448	92.9	89.6	71.0-121			3.61	20
Toluene	0.0500	0.0458	0.0438	91.7	87.5	72.0-120			4.60	20
Ethylbenzene	0.0500	0.0472	0.0453	94.4	90.6	76.0-121			4.05	20
Total Xylene	0.150	0.141	0.135	93.7	90.2	75.0-124			3.84	20
(S) a,a,a-Trifluorotoluene(FID)				95.5	95.0	77.0-120				
(S) a,a,a-Trifluorotoluene(PID)				99.9	99.3	75.0-128				

7 Gl

8 Al

9 Sc

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

(LCS) R3214047-3 04/26/17 22:34 • (LCSD) R3214047-4 04/26/17 22:56

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
TPH (GC/FID) Low Fraction	5.50	5.66	5.93	103	108	70.0-136			4.53	20
(S) a,a,a-Trifluorotoluene(FID)				103	103	77.0-120				
(S) a,a,a-Trifluorotoluene(PID)				110	110	75.0-128				

## L904133-39 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L904133-39 04/27/17 05:57 • (MS) R3214047-6 04/27/17 00:03 • (MSD) R3214047-7 04/27/17 00:25

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Benzene	0.0587	U	0.0393	0.0346	66.9	58.9	1	10.0-146			12.7	29
Toluene	0.0587	U	0.0385	0.0336	65.5	57.2	1	10.0-143			13.6	30
Ethylbenzene	0.0587	U	0.0392	0.0337	66.7	57.4	1	10.0-147			15.1	31
Total Xylene	0.176	U	0.118	0.101	66.7	57.2	1	10.0-149	J6	J6	15.4	30



WG974196

## QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE.



Volatile Organic Compounds (GC) by Method 8015/8021

L904233-01,02

## L904133-39 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L904133-39 04/27/17 05:57 • (MS) R3214047-6 04/27/17 00:03 • (MSD) R3214047-7 04/27/17 00:25

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	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits
(S) a,a,a-Trifluorotoluene(FID)					94.0	94.4		77.0-120				
(S) a,a,a-Trifluorotoluene(PID)					98.7	98.6		75.0-128				

## L904133-39 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L904133-39 04/27/17 05:57 • (MS) R3214047-8 04/27/17 00:47 • (MSD) R3214047-9 04/27/17 01:09

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	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits
TPH (GC/FID) Low Fraction	6.46	0.0233	3.89	4.37	60.2	67.7	1	10.0-147			11.7	30
(S) a,a,a-Trifluorotoluene(FID)					97.5	97.6		77.0-120				
(S) a,a,a-Trifluorotoluene(PID)					104	103		75.0-128				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

7 Gl

8 Al

9 Sc

WG973964

Semi-Volatile Organic Compounds (GC) by Method 8015

## QUALITY CONTROL SUMMARY

L904233-01.02

ONE LAB. NATIONWIDE



## Method Blank (MB)

(MB) R3213722-1 04/26/17 09:51

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	82.4			18.0-148

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

(LCS) R3213722-2 04/26/17 10:08 • (LCSD) R3213722-3 04/26/17 10:25

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	47.8	47.0	79.7	78.3	50.0-150			1.76	20
(S) o-Terphenyl				79.5	83.1	18.0-148				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

7 Gl

8 Al

9 Sc





## Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL (dry)	Reported 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

J	The identification of the analyte is acceptable; the reported value is an estimate.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>4</sup> Cn<sup>5</sup> Sr<sup>6</sup> Qc<sup>8</sup> Al<sup>9</sup> Sc



# 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		

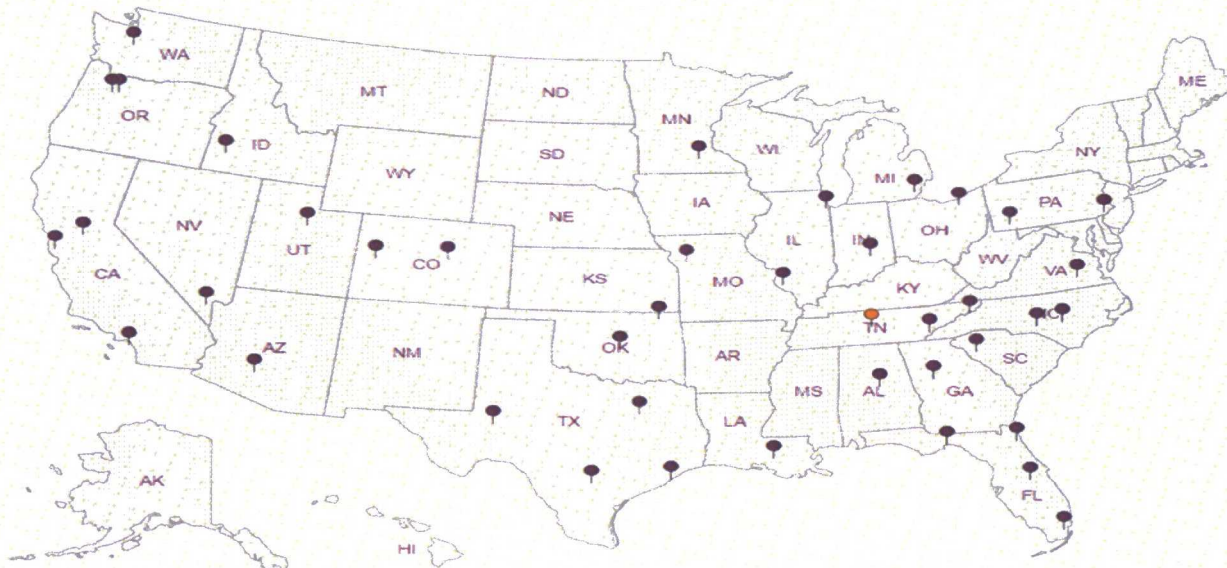
## Third Party & Federal Accreditations

A2LA - ISO 17025	1461.01	AIHA-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>n/a</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.**



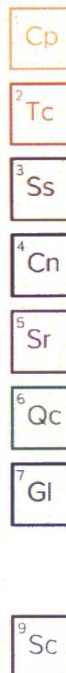
ACCOUNT:  
XTO Energy - San Juan Division

PROJECT:

SDG:  
L904233

DATE/TIME:  
04/27/17 17:08

PAGE:  
13 of 16





L904 233

1050

[illegible]

\* Sample ID will be the office and sampler-date-military time FARJ-M-MDDYY-1200



# ESC LAB SCIENCES Cooler Receipt Form

Client: <b>XFORM</b>	SDG#	<b>L904233</b>		
Cooler Received/Opened On: <b>4/ 21 /17</b>	Temperature:	<b>4.8</b>		
Received By: Marina Malone				
Signature: <i>Marina Malone</i>				
Receipt Check List		NP	Yes	No
COC Seal Present / Intact?				
COC Signed / Accurate?				
Bottles arrive intact?				
Correct bottles used?				
Sufficient volume sent?				
If Applicable				
VOA Zero headspace?				
Preservation Correct / Checked?				



**Andy Vann**

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**From:** Daphne Richards  
**Sent:** Monday, April 24, 2017 4:08 PM  
**To:** Login; Blake Judge  
**Subject:** L904233 XTORN M

Please change DRO to DRORLA on L904233 per client request  
thanks

Daphne Richards  
E-mail: [drichards@esclabsciences.com](mailto:drichards@esclabsciences.com)  
Phone: 800-767-5859 Ext. 9662  
Direct: 615-773-9662  
[www.esclabsciences.com](http://www.esclabsciences.com)

