

District I  
1625 N French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, 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 October 10, 2003

Submit 2 Copies to appropriate  
District Office in accordance  
with Rule 116 on back  
side of form

**Release Notification and Corrective Action**

**OPERATOR**

☐ Initial Report ☒ Final Report

Name of Company: XTO Energy, Inc.	Contact: James McDaniel
Address: 382 Road 3100, Aztec, New Mexico 87410	Telephone No.: (505) 333-3701
Facility Name: NV Navajo 25-4 (30-045-31303)	Facility Type: Gas Well (Fruitland Coal)

Surface Owner: Navajo	Mineral Owner:	Lease No.: 14206032172
-----------------------	----------------	------------------------

**LOCATION OF RELEASE**

Unit Letter O	Section 25	Township 29N	Range 14W	Feet from the 725	North/South Line FSL	Feet from the 1930	East/West Line FEL	County San Juan
------------------	---------------	-----------------	--------------	----------------------	-------------------------	-----------------------	-----------------------	--------------------

Latitude: 36.6921 Longitude: -108.2593

**NATURE OF RELEASE**

Type of Release: Produced Water	Volume of Release: 23 bbls	Volume Recovered: None
Source of Release: Water Line	Date and Hour of Occurrence: March 6, 2011	Date and Hour of Discovery: March 6, 2011 - 0919
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Brandon Powell - Phone Call	
By Whom? James McDaniel	Date and Hour: March 7, 2011	
Was a Watercourse Reached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, Volume Impacting the Watercourse. 10 bbls	

If a Watercourse was Impacted, Describe Fully.  
Produced water from a waterline leak left the well pad, traveling approximately 100 feet down a small drainage feature, before entering a dry wash. The spill traveled approximately 300 feet in the dry wash before ending.

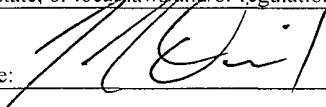
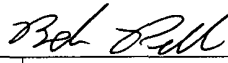
**Describe Cause of Problem and Remedial Action Taken.\***

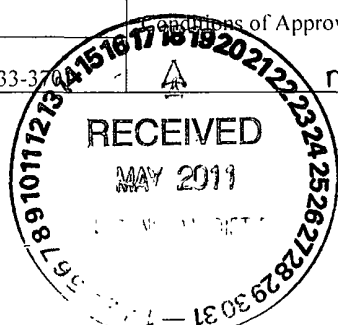
On March 6, 2011, a waterline leak was discovered at the NV Navajo 25-4 well site. The line had over-pressured and burst, releasing approximately 23 bbls of produced water onto the well pad. The water flowed across the well pad, and flowed off the east side of the well pad in a small drainage feature. The water traveled 100 feet in the drainage feature before entering a dry wash. The spill traveled in the dry wash for approximately 300 feet before ending. The site was ranked a 30 due to a wash at less than 200 feet, and a depth to groundwater of over 50 feet. This set the closure standard to 100 ppm TPH, 10 ppm benzene and 50 ppm total BTEX. The well was shut in, and the water pipe was replaced.

**Describe Area Affected and Cleanup Action Taken.\***

See Attached Remediation Report.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOC 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 NMOC 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, NMOC 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: James McDaniel	Approved by District Supervisor: 	
Title: EH&S Coordinator	Approval Date: <u>5/18/11</u>	Expiration Date:
E-mail Address: James_McDaniel@xtoenergy.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: <u>5/16/2011</u>	Phone: <u>505-333-3701</u>	<u>nJK1122355215</u>



## **Remediation Report**

NV Navajo 25-4

Section 25, Township 29N, Range 14W

San Juan County, New Mexico

### **Introduction**

On March 6, 2011, a XTO Lease operator noticed a waterline leak at the NV Navajo 25-4 well site. The well site was then shut in to stop the leak. An estimated 23 bbls of produced water was released when the waterline over pressured and burst. The water ran across the well site, and entered a small drainage feature on the east end of the location. The produced water traveled in the drainage feature for approximately 100 feet, before entering an unnamed wash to the south of the well pad. The wash was dry at the time. The produced water traveled approximately 300 feet in the wash before coming to an end. The site was ranked a 30 pursuant to the New Mexico Oil Conservation Division (NMOCD) Guidelines for the Remediation of Leaks, Spills and Releases, due to a wash at less than 200 feet from the site, and an estimated depth to groundwater of over 50 feet.

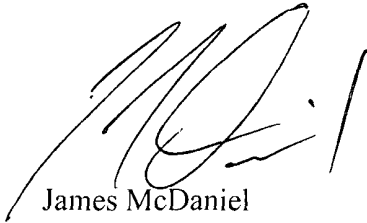
### **Remediation**

On March 7, 2011, EH&S Coordinator James McDaniel was on-site to assess the spill and collect initial samples. At this time, four (4) composite samples were collected of the spill area. Sample One was collected in the drainage feature to the east of the well site. Sample Two was collected in the wash at the surface of the spill area, Sample Three was a background sample collected in the wash up gradient of the spill area, and Sample 4 was collected in the spill area on the well pad. All sampling locations can be referenced on the attached *Field Sheets*. The three (3) spill composite samples were analyzed for DRO/GRO via USEPA Method 8015 and for BTEX via USEPA Method 8021. All four (4) samples were analyzed for chlorides as well. All three (3) spill composite samples returned BTEX results below the NMOCD standards, and the spill composite samples collected in the wash and in the drainage feature returned results below the NMOCD 100 ppm TPH standard as well. The well pad composite returned a TPH results above the NMOCD 100 ppm standard at 300 ppm. The background sample returned a chloride result of 160 ppm, while the samples collected in the spill area returned results ranging from 5,900 to 16,000 ppm on the well pad.

On March 15<sup>th</sup>, 2011, Mr. Bill Freeman with the Navajo Nation EPA (NNEPA) was notified of the release. Due to the high chlorides still present on the well pad, and the 300 ppm TPH on the well pad, we proposed a 2-3" scrape of the well pad surface at the NV Navajo 25-4 well site to remove soil impacted with chlorides and TPH on the well pad.

On March 30, 2011, a construction crew scraped approximately 2-3 inches from the surface of the well pad at the NV Navajo 25-4, hauling approximately 20 cubic yards of impacted soil to IEI for disposal. After the spill area was scraped 2-3 inches, a composite sample was collected in the scraped area. This sample was analyzed for DRO/GRO via USEPA Method 8015, and for chlorides. This sample was not analyzed for BTEX, due to the low levels of BTEX found in the initial sampling results for this release. The sample returned results of 2,300 ppm chlorides and 260 ppm TPH, with all 260 ppm being diesel range organics. Due to the low levels of BTEX and GRO (gasoline

range organics) found in the soil, XTO does not believe that the impacted soils at this location will pose a threat to human health and the environment. XTO requested the NNEPA to allow the current cleanup activities to be sufficient for this well site. On May 12, 2011, the NNEPA agreed that the release at this well site had been sufficiently remediated to levels acceptable by the NNEPA. All field sheets and analytical results applicable to this release are attached to this report for your reference.

A handwritten signature in black ink, appearing to read 'J. McDaniel', with a long horizontal stroke extending to the right.

James McDaniel  
EH&S Coordinator  
XTO Energy, Inc.



## XTO Energy On-Site Form

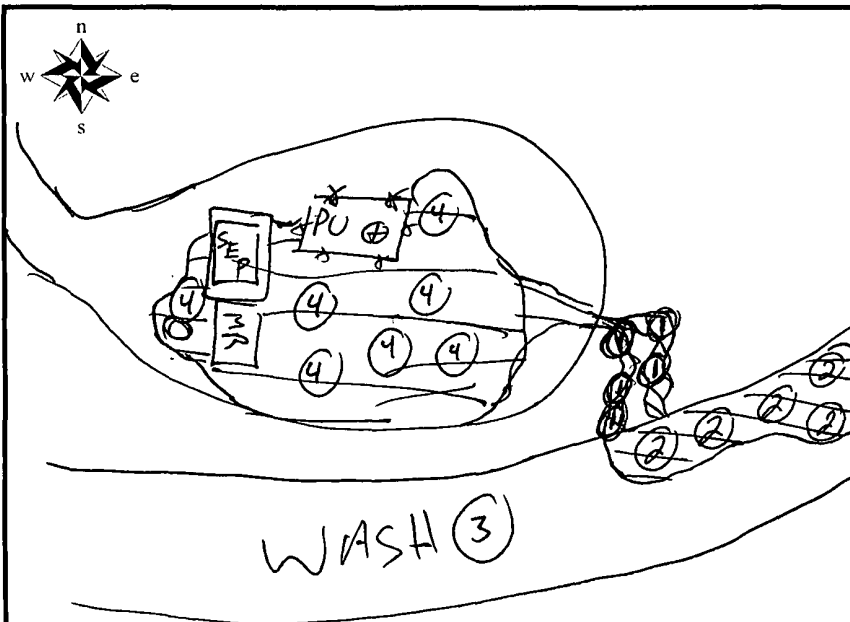
Well Name NV Navajo 25 #4 API # 30-045-31303

Section 25 Township 29N Range 14W County San Juan

Contractors On-Site None Time On-Site 10<sup>15</sup> Time Off-Site 11<sup>10</sup>

Spill Amount 20 bbls Spilled ( Oil / Produced Water / Other — )

Land Use ( Grazing ) Residential ( Tribe Navajo ) Excavation — x — x — deep



Sample Location

Site Diagram

Sample Location

\* no sheen or hydrocarbon odor  
\* limited coal fires

Comments

Number of Photos Taken

13

### Samples

Time	Sample #	Sample Description	Characteristics	OVM (ppm)	Analysis Requested
—	NA	100 Standard	NA	—	NA
10 <sup>35</sup>	1	Drainage Composite	Wet, Brown Sand	—	8015, 8021, chlorides
10 <sup>40</sup>	2	Wash Composite	Wet, Brown Coarse Sand	—	8015, 8021, chlorides
10 <sup>45</sup>	3	Seepage ground	Damp, Brown Coarse Sand	—	chlorides
10 <sup>50</sup>	4	Wall p/c composite	Wet, Brown Sandy loam	—	8015, 8021, chlorides

Name (Print) James McDaniel

Date 3/7/11

Name (Signature) [Signature] Company XTO



## XTO Energy On-Site Form

Well Name NV Navajo 25-4 API # 30-045-31303  
Section 25 Township 29N Range 14W County San Juan  
Contractors On-Site Keystone Time On-Site 08<sup>35</sup> Time Off-Site 12<sup>00</sup>  
Spill Amount 20 bbls Spilled ( Oil / Produced Water / Other — )  
Land Use ( Grazing / Residential ( Tribe Navajo ) Excavation — x — x 2" deep

 Site Diagram	Sample Location
	Sample Location
Comments	Number of Photos Taken

### Samples

Time	Sample #	Sample Description	Characteristics	OVM (ppm)	Analysis Requested
—	NA	100 Standard	NA	—	NA
0930	1	Wellpac Composite-2"	Brown, Dry, Sandy	—	EO15, Chloride

Name (Print) James McDaniel Date 3/30/11  
Name (Signature) [Signature] Company XTO



12065 Lebanon Rd  
Mt Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est 1970

James McDaniel  
XTO Energy - San Juan Division  
382 Road 3100  
Aztec, NM 87410

### Report Summary

Friday March 11, 2011

Report Number: L505080

Samples Received: 03/08/11

Client Project:

Description: NV Navajo 25-4

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Mark W. Beasley, ESC Representative

### Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487  
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140  
NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233  
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A,  
TX - T104704245, OK-9915

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences

Note The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP

This report may not be reproduced, except in full, without written approval from ESC Lab Sciences  
Where applicable, sampling conducted by ESC is performed per guidance provided  
in laboratory standard operating procedures 060302, 060303, and 060304.



12065 Lebanon Rd  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D 62-0814289

Est 1970

# REPORT OF ANALYSIS

March 11, 2011

James McDaniel  
XTO Energy - San Juan Division  
382 Road 3100  
Aztec, NM 87410

Date Received : March 08, 2011  
Description : NV Navajo 25-4

Sample ID : DRAINAGE COMPOSITE

Collected By : James McDaniel  
Collection Date : 03/07/11 10:35

ESC Sample # : L505080-01

Site ID : NV NAVAJO 25-4

Project # :

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Chloride	7700	120	mg/kg	9056	03/09/11	10
Total Solids	82.		%	2540G	03/11/11	1
Benzene	BDL	0.0030	mg/kg	8021/8015	03/08/11	5
Toluene	BDL	0.030	mg/kg	8021/8015	03/08/11	5
Ethylbenzene	BDL	0.0030	mg/kg	8021/8015	03/08/11	5
Total Xylene	0.020	0.0091	mg/kg	8021/8015	03/08/11	5
TPH (GC/FID) Low Fraction	BDL	0.61	mg/kg	GRO	03/08/11	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene (FID)	94.3		% Rec.	8021/8015	03/08/11	5
a,a,a-Trifluorotoluene (PID)	95.5		% Rec	8021/8015	03/08/11	5
TPH (GC/FID) High Fraction	28.	4.9	mg/kg	3546/DRO	03/10/11	1
Surrogate recovery(%)						
o-Terphenyl	104		% Rec.	3546/DRO	03/10/11	1

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note:

This report shall not be reproduced, except in full, without the written approval from ESC.

The reported analytical results relate only to the sample submitted

Reported: 03/11/11 13 10 Printed: 03/11/11 13:11



12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I D. 62-0814289

Est. 1970

# REPORT OF ANALYSIS

March 11, 2011

James McDaniel  
XTO Energy - San Juan Division  
382 Road 3100  
Aztec, NM 87410

ESC Sample # : L505080-02

Date Received : March 08, 2011  
Description : NV Navajo 25-4

Site ID : NV NAVAJO 25-4

Sample ID : WASH COMPOSITE

Project # :

Collected By : James McDaniel  
Collection Date : 03/07/11 10:40

Parameter	Dry Result	Det Limit	Units	Method	Date	Dil
Chloride	5900	120	mg/kg	9056	03/09/11	10
Total Solids	87.		%	2540G	03/11/11	1
Benzene	BDL	0.0029	mg/kg	8021/8015	03/08/11	5
Toluene	BDL	0.029	mg/kg	8021/8015	03/08/11	5
Ethylbenzene	BDL	0.0029	mg/kg	8021/8015	03/08/11	5
Total Xylene	BDL	0.0087	mg/kg	8021/8015	03/08/11	5
TPH (GC/FID) Low Fraction	BDL	0.58	mg/kg	GRO	03/08/11	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene (FID)	95.6		% Rec.	8021/8015	03/08/11	5
a,a,a-Trifluorotoluene (PID)	96.8		% Rec.	8021/8015	03/08/11	5
TPH (GC/FID) High Fraction	BDL	4.6	mg/kg	3546/DRO	03/10/11	1
Surrogate recovery(%)						
o-Terphenyl	95.8		% Rec.	3546/DRO	03/10/11	1

Results listed are dry weight basis.

BDL - Below Detection Limit

Det Limit - Practical Quantitation Limit (PQL)

Note:

This report shall not be reproduced, except in full, without the written approval from ESC.

The reported analytical results relate only to the sample submitted

Reported. 03/11/11 13:10 Printed: 03/11/11 13:11





12065 Lebanon Rd  
Mt Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D 62-0814289

Est 1970

# REPORT OF ANALYSIS

March 11, 2011

James McDaniel  
XTO Energy - San Juan Division  
382 Road 3100  
Aztec, NM 87410

ESC Sample # L505080-03

Date Received : March 08, 2011  
Description : NV Navajo 25-4

Site ID : NV NAVAJO 25-4

Sample ID : WELL PAD COMPOSITE

Project # :

Collected By : James McDaniel  
Collection Date : 03/07/11 10:30

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Chloride	16000	240	mg/kg	9056	03/09/11	20
Total Solids	85.		%	2540G	03/11/11	1
Benzene	0.028	0.0029	mg/kg	8021/8015	03/08/11	5
Toluene	0.058	0.029	mg/kg	8021/8015	03/08/11	5
Ethylbenzene	0.0068	0.0029	mg/kg	8021/8015	03/08/11	5
Total Xylene	0.039	0.0088	mg/kg	8021/8015	03/08/11	5
TPH (GC/FID) Low Fraction	1.5	0.59	mg/kg	GRO	03/08/11	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene (FID)	94.8		% Rec.	8021/8015	03/08/11	5
a,a,a-Trifluorotoluene (PID)	97.5		% Rec.	8021/8015	03/08/11	5
TPH (GC/FID) High Fraction	300	4.7	mg/kg	3546/DRO	03/10/11	1
Surrogate recovery(%)						
o-Terphenyl	142.		% Rec.	3546/DRO	03/10/11	1

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note.

This report shall not be reproduced, except in full, without the written approval from ESC.

The reported analytical results relate only to the sample submitted

Reported: 03/11/11 13:10 Printed: 03/11/11 13:11



12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I D 62-0814289

Est. 1970

# REPORT OF ANALYSIS

March 11, 2011

James McDaniel  
XTO Energy - San Juan Division  
382 Road 3100  
Aztec, NM 87410

Date Received : March 08, 2011  
Description : NV Navajo 25-4

Sample ID : BACKGROUND

Collected By : James McDaniel  
Collection Date : 03/07/11 10:45

ESC Sample # : L505080-04

Site ID : NV NAVAJO 25-4

Project # :

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Chloride	160	12.	mg/kg	9056	03/09/11	1
Total Solids	83.		%	2540G	03/11/11	1

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note:

This report shall not be reproduced, except in full, without the written approval from ESC.

The reported analytical results relate only to the sample submitted

Reported. 03/11/11 13:10 Printed: 03/11/11 13:11

Summary of Remarks For Samples Printed  
03/11/11 at 13:11:16

TSR Signing Reports: 288  
R4 - Rush: Three Day

drywt

Sample L505080-01 Account: XTORNM Received: 03/08/11 08:30 Due Date: 03/11/11 00:00 RPT Date: 03/11/11 13:10  
Sample: L505080-02 Account: XTORNM Received: 03/08/11 08:30 Due Date 03/11/11 00:00 RPT Date: 03/11/11 13:10  
Sample L505080-03 Account: XTORNM Received: 03/08/11 08:30 Due Date: 03/11/11 00:00 RPT Date: 03/11/11 13:10  
Sample: L505080-04 Account: XTORNM Received: 03/08/11 08:30 Due Date: 03/11/11 00:00 RPT Date: 03/11/11 13:10



YOUR LAB OF CHOICE

XTO Energy - San Juan Division  
James McDaniel  
382 Road 3100

Aztec, NM 87410

Quality Assurance Report  
Level II

L505080

12065 Lebanon Rd.  
Mt Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I D 62-0814289

Est 1970

March 11, 2011

Analyte	Result	Laboratory Blank Units	% Rec	Limit	Batch	Date Analyzed
Benzene	< .0005	mg/kg			WG524978	03/08/11 21:06
Ethylbenzene	< .0005	mg/kg			WG524978	03/08/11 21:06
Toluene	< .005	mg/kg			WG524978	03/08/11 21:06
TPH (GC/FID) Low Fraction	< 1	mg/kg			WG524978	03/08/11 21:06
Total Xylene	< .0015	mg/kg			WG524978	03/08/11 21:06
a,a,a-Trifluorotoluene (FID)		% Rec.	96.46	59-128	WG524978	03/08/11 21:06
a,a,a-Trifluorotoluene (PID)		% Rec.	98.05	54-144	WG524978	03/08/11 21:06
Chloride	< 10	mg/kg			WG524727	03/09/11 09:50
TPH (GC/FID) High Fraction	< 4	ppm			WG524988	03/10/11 15:24
o-Terphenyl		% Rec	95.81	50-150	WG524988	03/10/11 15:24
Total Solids	< .1	%			WG525312	03/11/11 10:33

Analyte	Units	Result	Duplicate Duplicate	RPD	Limit	Ref Samp	Batch
Chloride	mg/kg	1200	1200	4.26	20	L505078-02	WG524727
Total Solids	%	89.0	90.2	1.16	5	L505101-02	WG525312

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Benzene	mg/kg	.05	0.0503	101	76-113	WG524978
Ethylbenzene	mg/kg	.05	0.0481	96.3	78-115	WG524978
Toluene	mg/kg	.05	0.0479	95.8	76-114	WG524978
Total Xylene	mg/kg	.15	0.144	96.2	81-118	WG524978
a,a,a-Trifluorotoluene (PID)			99.15	54-144	WG524978	
TPH (GC/FID) Low Fraction	mg/kg	5.5	5.41	98.4	67-135	WG524978
a,a,a-Trifluorotoluene (FID)			102.7	59-128	WG524978	
Chloride	mg/kg	200	214.	107.	85-115	WG524727
TPH (GC/FID) High Fraction	ppm	60	48.6	81.0	50-150	WG524988
o-Terphenyl				86.66	50-150	WG524988
Total Solids	%	50	50.0	100	85-155	WG525312

Analyte	Units	Result	Ref	Sample Duplicate %Rec	Limit	RPD	Limit	Batch
Benzene	mg/kg	0.0522	0.0503	104.	76-113	3.80	20	WG524978
Ethylbenzene	mg/kg	0.0500	0.0481	100	78-115	3.74	20	WG524978
Toluene	mg/kg	0.0499	0.0479	100	76-114	4.05	20	WG524978
Total Xylene	mg/kg	0.150	0.144	100	81-118	3.95	20	WG524978
a,a,a-Trifluorotoluene (PID)				97.09	54-144			WG524978
TPH (GC/FID) Low Fraction	mg/kg	5.42	5.41	98.0	67-135	0.130	20	WG524978
a,a,a-Trifluorotoluene (FID)				102.8	59-128			WG524978

\* Performance of this Analyte is outside of established criteria.  
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers'



YOUR LAB OF CHOICE

XTO Energy - San Juan Division  
James McDaniel  
382 Road 3100

Aztec, NM 87410

Quality Assurance Report  
Level II

L505080

12065 Lebanon Rd  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I D. 62-0814289

Est. 1970

March 11, 2011

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Chloride	mg/kg	210.	214	105.	85-115	1.89	20	WG524727
TPH (GC/FID) High Fraction	ppm	50.2	48.6	84.0	50-150	3.25	25	WG524988
o-Terphenyl				89.46	50-150			WG524988

Analyte	Units	Matrix Spike Duplicate				Limit	Ref Samp	Batch
		MS Res	Ref Res	TV	% Rec			
Benzene	mg/kg	0.252	0	.05	101	32-137	L505080-02	WG524978
Ethylbenzene	mg/kg	0.239	0	.05	95.4	10-150	L505080-02	WG524978
Toluene	mg/kg	0.237	0	.05	95.0	20-142	L505080-02	WG524978
Total Xylene	mg/kg	0.710	0	.15	94.6	16-141	L505080-02	WG524978
a,a,a-Trifluorotoluene(PID)					96.04	54-144		WG524978
TPH (GC/FID) Low Fraction	mg/kg	23.7	0	5.5	86.3	55-109	L505080-02	WG524978
a,a,a-Trifluorotoluene(FID)					101.2	59-128		WG524978
TPH (GC/FID) High Fraction	ppm	52.3	0	60	87.1	50-150	L504852-19	WG524988
o-Terphenyl					91.16	50-150		WG524988

Analyte	Units	Matrix Spike Duplicate			Limit	RPD	Limit	Ref Samp	Batch
		MSD	Ref	%Rec					
Benzene	mg/kg	0.249	0.252	99.7	32-137	1.16	39	L505080-02	WG524978
Ethylbenzene	mg/kg	0.233	0.239	93.3	10-150	2.26	44	L505080-02	WG524978
Toluene	mg/kg	0.229	0.237	91.6	20-142	3.62	42	L505080-02	WG524978
Total Xylene	mg/kg	0.698	0.710	93.0	16-141	1.75	46	L505080-02	WG524978
a,a,a-Trifluorotoluene(PID)				96.45	54-144				WG524978
TPH (GC/FID) Low Fraction	mg/kg	25.2	23.7	91.6	55-109	5.99	20	L505080-02	WG524978
a,a,a-Trifluorotoluene(FID)				102.0	59-128				WG524978
TPH (GC/FID) High Fraction	ppm	54.8	52.3	91.2	50-150	4.61	25	L504852-19	WG524988
o-Terphenyl				101.3	50-150				WG524988

Batch number /Run number / Sample number cross reference

WG524978. R1603449: L505080-01 02 03  
WG524727 R1605072 L505080-01 02 03 04  
WG524988 R1606189. L505080-01 02 03  
WG525312 R1606719 L505080-01 02 03 04

\* \* Calculations are performed prior to rounding of reported values.  
\* Performance of this Analyte is outside of established criteria.  
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers'



**YOUR LAB OF CHOICE**

XTO Energy - San Juan Division  
James McDaniel  
382 Road 3100

Aztec, NM 87410

Quality Assurance Report  
Level II

L505080

12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est 1970

March 11, 2011

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

Company Name/Address  <b>XTO Energy, Inc.</b> <b>382 County Road 3100</b> <b>Aztec, NM 87410</b>				Alternate Billing  XTORN0318105  Report to: James McDaniel E-mail to: James_McDaniel@xtoenergy.com				Analysis/Container/Preservative										Chain of Custody Page ___ of ___	
								<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;">           Project Description: <b>NV Navajo 25-4</b>            PHONE 505-333-3701            FAX            Collected by: James McDaniel            Collected by (signature): <i>[Signature]</i>            Packed on Ice N <input checked="" type="checkbox"/> </div> <div style="width: 45%;">           City/State Collected: <b>Napi, NM</b>            Client Project No.: <b>-</b>            Site/Facility ID#: <b>NV Navajo 25-4</b>            Rush? <input checked="" type="checkbox"/> (Lab MUST be Notified)                <input checked="" type="checkbox"/> Next Day ... 100%                ___ Two Day ... 50%                ___ Three Day ... 25%            Date Results Needed            Email? ___ No <input checked="" type="checkbox"/> Yes            FAX? ___ No ___ Yes         </div> </div>										Prepared by:	
																		<b>ENVIRONMENTAL</b> <b>Science corp</b> 12065 Lebanon Road Mt. Juliet TN 37122 Phone (615)758-5858 Phone (800) 767-5859 FAX (615)758-5859	
Sample ID		Comp/Grab	Matrix	Depth	Date	Time	Cntrs											Remarks/contaminant	Sample # (lab only)
Drainage Composite		Comp	SS	-	3/7/11	1035	1	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <b>1-4oz / Cool</b>  <b>1-4oz / Cool</b>  <b>1-4oz / Cool</b> </div> <div style="width: 45%;"> <b>1-4oz / Cool</b>  <b>1-4oz / Cool</b>  <b>1-4oz / Cool</b> </div> </div>											L So So 80-9
Wash Composite		Comp	SS	-	3/7/11	1040	1												02
Well Pad Composite		Comp	SS	-	3/7/11	1030	1												03
Background		Comp	SS	-	3/7/11	1045	1												04

Matrix: SS-Soil/Solid GW-Groundwater WW-Wastewater DW-Drinking Water OT-Other \_\_\_\_\_

pH \_\_\_\_\_ Temp \_\_\_\_\_

Flow \_\_\_\_\_ Other \_\_\_\_\_

Relinquisher by (Signature)		Date	Time	Received by (Signature)		Samples returned via: FedEx_X_UPS_Other_		Condition (lab use only)	
<i>[Signature]</i>		3/7/11	1505	<i>[Signature]</i>		434198168846		<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;">           Temp: 30            Bottles Received: 4         </div> <div style="width: 45%;"> <b>01C</b> </div> </div>	
Relinquisher by (Signature)		Date	Time	Received by (Signature)		Temp: 30 Bottles Received: 4			
Relinquisher by (Signature)		Date	Time	Received for lab by (Signature)		Date		pH Checked: NCF	
<i>[Signature]</i>				<i>[Signature]</i>		3/8/11		0430	



12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I D. 62-0814289

Est. 1970

James McDaniel  
XTO Energy - San Juan Division  
382 Road 3100  
Aztec, NM 87410

### Report Summary

Tuesday April 05, 2011

Report Number: L509261

Samples Received: 04/02/11

Client Project:

Description: NV Navajo 25-4

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Daphne Richards, ESC Representative

### Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487  
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140  
NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233  
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A,  
TX - T104704245, OK-9915

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences

Note The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP

This report may not be reproduced, except in full, without written approval from ESC Lab Sciences  
Where applicable, sampling conducted by ESC is performed per guidance provided  
in laboratory standard operating procedures: 060302, 060303, and 060304





12065 Lebanon Rd  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859  
Tax I.D 62-0814289  
Est. 1970

REPORT OF ANALYSIS

April 05, 2011

James McDaniel  
XTO Energy - San Juan Division  
382 Road 3100  
Aztec, NM 87410

ESC Sample # : L509261-01

Date Received : April 02, 2011  
Description : NV Navajo 25-4

Site ID : NV NAVAJO 25-4

Sample ID : WELLPAD COMP 2 IN

Project # :

Collected By : James McDaniel  
Collection Date : 03/30/11 09:30

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Chloride	2300	54.	mg/kg	9056	04/04/11	5
Total Solids	92.		%	2540G	04/05/11	1
TPH (GC/FID) Low Fraction	BDL	0.54	mg/kg	8015D/GRO	04/02/11	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene (FID)	103.		% Rec.	602/8015	04/02/11	5
TPH (GC/FID) High Fraction	260	4.3	mg/kg	3546/DRO	04/04/11	1
Surrogate recovery(%) o-Terphenyl	82.1		% Rec.	3546/DRO	04/04/11	1

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note:

This report shall not be reproduced, except in full, without the written approval from ESC.

The reported analytical results relate only to the sample submitted

Reported: 04/05/11 13:34 Printed: 04/05/11 13:43



**YOUR LAB OF CHOICE**

XTO Energy - San Juan Division  
James McDaniel  
382 Road 3100

Aztec, NM 87410

Quality Assurance Report  
Level II

L509261

12065 Lebanon Rd  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I D 62-0814289

Est. 1970

April 05, 2011

Analyte	Result	Laboratory Blank Units	% Rec	Limit	Batch	Date Analyzed
TPH (GC/FID) Low Fraction a,a,a-Trifluorotoluene(FID)	< .1	mg/kg	103 9	59-128	WG529216	04/02/11 21 45
Chloride	< 10	mg/kg			WG529197	04/03/11 20.11
TPH (GC/FID) High Fraction o-Terphenyl	< 4	ppm	73 07	50-150	WG529149	04/04/11 13 41
Total Solids	< 1	%			WG529192	04/05/11 10:10

Analyte	Units	Duplicate Result	Duplicate	RPD	Limit	Ref Samp	Batch
Total Solids	%	93.0	92.3	0 410	5	L509261-01	WG529192

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
TPH (GC/FID) Low Fraction a,a,a-Trifluorotoluene(FID)	mg/kg	5 5	5 25	95.4 114 5	67-135 59-128	WG529216 WG529216
Chloride	mg/kg	200	208.	104.	85-115	WG529197
TPH (GC/FID) High Fraction o-Terphenyl	ppm	60	44.8	74 6 72 53	50-150 50-150	WG529149 WG529149
Total Solids	%	50	49.9	99.9	85-155	WG529192

Analyte	Units	Laboratory Control Sample Result	Ref	%Rec	Limit	RPD	Limit	Batch
TPH (GC/FID) Low Fraction a,a,a-Trifluorotoluene(FID)	mg/kg	5 04	5.25	92.0 113 3	67-135 59-128	4.07	20	WG529216 WG529216
Chloride	mg/kg	208.	208	104.	85-115	0	20	WG529197
TPH (GC/FID) High Fraction o-Terphenyl	ppm	41 7	44.8	69.0 68.27	50-150 50-150	7.08	25	WG529149 WG529149

Analyte	Units	Matrix Spike MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
TPH (GC/FID) Low Fraction a,a,a-Trifluorotoluene(FID)	mg/kg	20 9	0 190	5 5	75 4 111 5	55-109 59-128	L509310-01	WG529216 WG529216
TPH (GC/FID) High Fraction o-Terphenyl	ppm	199	190	60	15.7* 65 61	50-150 50-150	L509268-02	WG529149 WG529149

\* Performance of this Analyte is outside of established criteria  
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers '



**YOUR LAB OF CHOICE**

XTO Energy - San Juan Division  
James McDaniel  
382 Road 3100

Aztec, NM 87410

Quality Assurance Report  
Level II

L509261

12065 Lebanon Rd  
Mt Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I D 62-0814289

Est. 1970

April 05, 2011

Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
TPH (GC/FID) Low Fraction	mg/kg	22.2	20.9	79.9	55-109	5.75	20	L509310-01	WG529216
a,a,a-Trifluorotoluene(FID)				112.0	59-128				WG529216
TPH (GC/FID) High Fraction	ppm	260.	199.	116.	50-150	26.3*	25	L509268-02	WG529149
o-Terphenyl				83.96	50-150				WG529149

Batch number /Run number / Sample number cross reference

WG529216: R1634629. L509261-01  
WG529197 R1636031: L509261-01  
WG529149 R1636211 L509261-01  
WG529192 R1637182 L509261-01

\* \* Calculations are performed prior to rounding of reported values.

\* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers '



**YOUR LAB OF CHOICE**

XTO Energy - San Juan Division  
James McDaniel  
382 Road 3100

Aztec, NM 87410

Quality Assurance Report  
Level II

L509261

12065 Lebanon Rd  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I D 62-0814289

Est 1970

April 05, 2011

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

