State of New Mexico Energy Minerals and Natural Resources

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

OIL CONS. DIV DIST. 3

DEC 1 1 2014

Form C-141 Revised August 8, 2011

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

API No. 30-045-31439

Santa Fe, NM 87505

Release Notification and Corrective Action

OPERATOR	Initial Report	🛛 Final Report
Contact: Logan Hixon		
Telephone No.: (505) 333-3683		
Facility Type: Gas Well		
	Contact: Logan Hixon Telephone No.: (505) 333-3683	Contact: Logan Hixon Telephone No.: (505) 333-3683

Surface Owner: Federal Land

LOCATION OF RELEASE

Mineral Owner

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
Р	9	30 N	12W	660	FSL	990	FEL	San Juan

Latitude: N36*.82194 Longitude: W-108*.09833

NATURE OF RELEASE

Type of Release: Produced Water	Volume of Release: Unknown	Volume Recovered: Unknown
Source of Release: BGT	Date and Hour of Occurrence: Unknown	Date and Hour of Discovery: October 24, 2014
Was Immediate Notice Given?	If YES, To Whom?	
🗌 Yes 🔲 No 🖾 Not Required	N/A	
By Whom?	Date and Hour	
Was a Watercourse Reached?	If YES, Volume Impacting the Wa	atercourse.
🗌 Yes 🖾 No		
If a Watercourse was Impacted, Describe Fully.*		
Describe Cause of Problem and Remedial Action Taken.*	the De Aling of this well site. A service	its sound use collected hereath the location of
The below grade tank was taken out of service at the McKenzie A 3 well site due to the on-site BGT, and submitted for laboratory analysis for TPH via USEPA Metho		
The sample returned results below the 'Pit Rule' spill confirmation standards for B	enzene, Total BTEX and the total chloride	es, but above the 'pit rule' standards for TPH,
confirming that a release has occurred at this location. The site was then ranked ac		
site was ranked a 20 due to an estimated depth to groundwater of between 50-100 to ppm TPH, 10 ppm benzene, and 50 ppm total BTEX.	feet, and a distance to surface water betwe	en 200-1,000 teel. This set the closure standard to
Describe Area Affected and Cleanup Action Taken.*	· · · · · · · · · · · · · · · · · · ·	
The below grade tank closure sample was analyzed for DRO/GRO via USEPA Me	thod 8015, returning results of 508 ppm T	PH. This was above the 100 ppm TPH closure
standard determined for this site per NMOCD Guidelines for the Remediation of L excavation reached approximately 14'x14'x 6.5' deep, where a consolidated sands		
of the bottom of the excavation for laboratory analysis for TPH via USEPA Metho	d 8015. The sample returned results above	e the standards for the site per NMOCD
Guidelines for the Remediation of Leaks, Spills, and Releases. On 10/27/14 request		
practical at the consolidated sandstone layer (<i>attached</i>). On 10/28/14 NMOCD app recommended that XTO apply an oxidizer to assist with in-situ remediation (<i>attach</i>	<i>(hed)</i> . On 11/7/14 approximately 100 gallo	ons of 4% solution of potassium permanganate was
applied to the bottom of the excavation as suggested by NMOCD for in-situ remed	liation (photos attached). No further action	n is required regarding this incident. *All
documents attached	C	unt to NMOCD rules and regulations all apartors
I hereby certify that the information given above is true and complete to the best o are required to report and/or file certain release notifications and perform correctiv	e actions for releases which may endange	r public health or the environment. The
acceptance of a C-141 report by the NMOCD marked as "Final Report" does not re	elieve the operator of liability should their	operations have failed to adequately investigate
and remediate contamination that pose a threat to ground water, surface water, hun	nan health or the environment. In addition	n, NMOCD acceptance of a C-141 report does not
relieve the operator of responsibility for compliance with any other federal, state, c		VATION DIVISION
f i) c	<u>OIL CONSER</u>	VATION DIVISION
Signature: Loyan Huison		I XI TY
	Approved by Environmental Special	ist: / will /
Printed Name: Logan Hixon		CAIM
	Approval Date: 1/8/15	Fouriertier Defe
Title: EHS Coordinator	Approval Date: 1/8/15	Expiration Date:
E-mail Address: Logan Hixon@xtoenergy.com	Conditions of Approval:	Ausshell 🗖
		Attached
Date: 12-9-14 Phone: 505-333-3683		
* Attach Additional Sheets If Necessary	#WCS 150083	2261 >
	TT VOUL - 5 - 0 -	

MCKENZIE A 3

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Well lat and long Flora Vista, NM 87415 United States (36.821918, -108.098442)

API 30-045-31439

State NM

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County SJ

Time On-Site 10/24/14, 2:05 PM

Reason for On-Site BGT CONFIRMATION SMPLE FAILED-remove soil till meet limits for site

Contractors On Site No

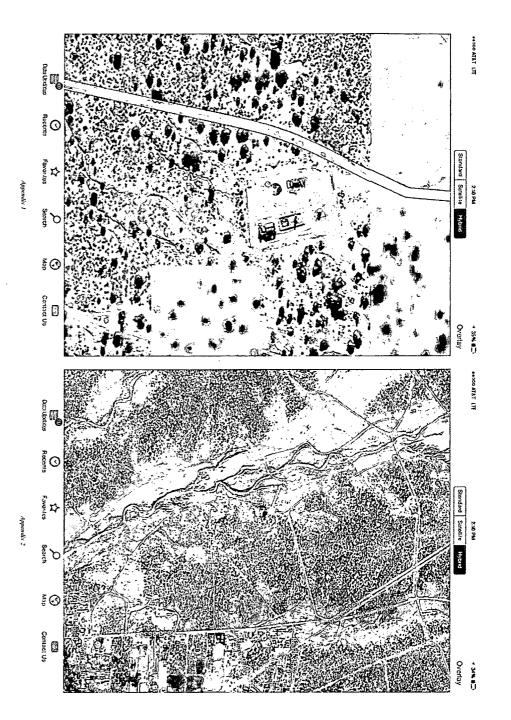
Land Usage range Audit

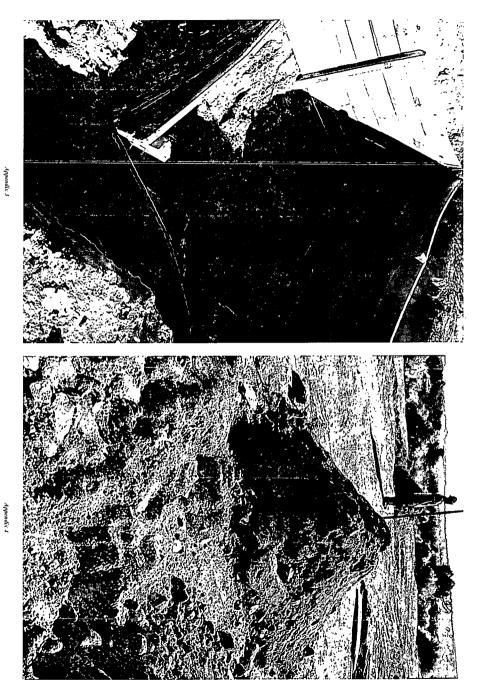
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Ranking							
Distance to groundwater		10					
Distance to surface water		10					
Distance to water well		0					
Total ranking		20					
		10/24/14,	2:06	5 PM			
OVM (PPM)		100					
Sample 1							
Time sample collected		10/24/14,	3:30) PM			
Sample description		bgt compo	osite-	c-6" sandstone			
Characteristic		sand/sand	stone	e			
OVM (PPM)		1.4 .					
Analysis Requested		yes		8015 (DRO/GRO)			
Appendix 3	Appendix 4						
LAT and LONG			Flora Vista, NM 87415 United States (36.821934, -108.098495)				
Comments				Removed approximately 6" across bottom- consolidated sandstone base found			
Print Name & Sign	LOGAN H.						
Company			хто				
			10/24/14, 3:45 PM				

Media





Appena



Analytical Report

Report Summary

Client: XTO Energy Inc. Chain Of Custody Number: 0104 Samples Received: 10/24/2014 3:53:00PM Job Number: 98031-0528 Work Order: P410108 Project Name/Location: McKenzie A 3

Tim Cain, Laboratory Manager

Entire Report Reviewed By:

Date: 10/27/14

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.

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

Ph (505) 632-0615 Fx (505) 632-1865 Ph (970) 259-0615 Fr (800) 362-1879 envirotech-inc.com laboratory@envirotech-inc.com



XTO Energy Inc.	Project Name:	McKenzie A 3	
382 CR 3100	Project Number:	98031-0528	Reported:
Aztec NM, 87410	Project Manager:	Logan Hixon	27-Oct-14 13:48

Analyical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BGT Composite- 6" Sandstone	P410108-01A	Soil	10/24/14	10/24/14	Glass Jar, 4 oz.

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Surrogate: o-Terphenyl

Surrogate: 4-Bromochlorobenzene-FID

XTO Energy Inc. 382 CR 3100 Aztec NM, 87410	5	Name: Number: Manager:	9803	enzie A 3 1-0528 n Hixon				Reported : 27-Oct-14 13	:48
	ВС	GT Compo P4101	osite- 6'' 08-01 (Se		e				
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	9.99	mg/kg	1	1443050	10/24/14	10/27/14	EPA 8015D	
Diesel Range Organics (C10-C28)	373	44.9	mg/kg	2	1443051	10/24/14	10/27/14	EPA 8015D	

50-200

50-150

1443051

1443050

10/24/14

10/24/14

10/27/14

10/27/14

EPA 8015D

EPA 8015D

96.2 %

89.4 %

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	XTO Energy Inc.	Project Name:	McKenzie A 3	
ł	382 CR 3100	Project Number:	98031-0528	Reported:
l	Aztec NM, 87410	Project Manager:	Logan Hixon	27-Oct-14 13:48

Nonhalogenated Organics by 8015 - Quality Control

Envirotech Analytical Laboratory

		Reporting		Spike	Source	-	%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 1443050 - Purge and Trap EPA 5030A										
Blank (1443050-BLK1)				Prepared: 2	24-Oct-14	Analyzed: 2	27-Oct-14			
Gasoline Range Organics (C6-C10)	ND	9.98	mg/kg						-	
Surrogate: 4-Bromochlorobenzene-FID	0.378		"	0.399		94.6	50-150			
LCS (1443050-BS1)				Prepared: 2	24-Oct-14	Analyzed: 2	27-Oct-14			
Gasoline Range Organics (C6-C10)	286	9.98	mg/kg	291		98.1	80-120			
Surrogate: 4-Bromochlorobenzene-FID	0.368		"	0.399		92.2	50-150			
Matrix Spike (1443050-MS1)	Sou	rce: P410107-	01	Prepared: 2	24-Oct-14	Analyzed: 2	27-Oct-14			
Gasoline Range Organics (C6-C10)	297	9.99	mg/kg	292	ND	102	75-125			
Surrogate: 4-Bromochlorobenzene-FID	0.374		"	0.399		93.6	50-150			
Matrix Spike Dup (1443050-MSD1)	Sou	rce: P410107-	01	Prepared: 2	24-Oct-14	Analyzed: 2	27-Oct-14			
Gasoline Range Organics (C6-C10)	285	9.99	mg/kg	292	ND	97.9	75-125	4.13	15	
Surrogate: 4-Bromochlorobenzene-FID	0.372		"	0.400		93.2	50-150			

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	XTO Energy Inc.	Project Name:	McKenzie A 3	
	382 CR 3100	Project Number:	98031-0528	Reported:
ĺ	Aztec NM, 87410	Project Manager:	Logan Hixon	27-Oct-14 13:48

Nonhalogenated Organics by 8015 - Quality Control

Envirotech Analytical Laboratory

			•		•					
		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 1443051 - DRO Extraction EPA 3	550M									
Blank (1443051-BLK1)				Prepared: 2	24-Oct-14 A	Analyzed: 2	.7-Oct-14			
Diesel Range Organics (C10-C28)	ND	24.9	mg/kg							
Surrogate: o-Terphenyl	38.0		"	39.9		95.2	50-200			
LCS (1443051-BS1)				Prepared: 2	24-Oct-14	Analyzed: 2	.7-Oct-14			
Diesel Range Organics (C10-C28)	504	25.0	mg/kg	500		101	38-132			
Surrogate: o-Terphenyl	40.8		"	40.0		102	50-200			
Matrix Spike (1443051-MS1)	Sour	ce: P410107-	01	Prepared: 2	24-Oct-14 A	Analyzed: 2	.7-Oct-14			
Diesel Range Organics (C10-C28)	543	39.9	mg/kg	499	ND	109	38-132			
Surrogate: o-Terphenyl	47.1		"	39.9		118	50-200			
Matrix Spike Dup (1443051-MSD1)	Sour	ce: P410107-	01	Prepared: 2	24-Oct-14	Analyzed: 2	.7-Oct-14			
Diesel Range Organics (C10-C28)	658	44.9	mg/kg	499	ND	132	38-132	19.2	20	
Surrogate: o-Terphenyl	57.4		"	39.9		144	50-200			

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XTO Energy Inc.	Project Name:	McKenzie A 3	
382 CR 3100	Project Number:	98031-0528	Reported:
Aztec NM, 87410	Project Manager:	Logan Hixon	27-Oct-14 13:48

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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Western Division Well Site/Location MCKenzie A 3 Collected By Logan Hixon Company XTO Signature	API 30-045 Samp	e Number Contact Cogan, Number 5 - 3/43 Jes on Ice Jes on Ice V N) Requeste	Email Kurt 9	l Results , Jarre BgT		ne # >18	610)					Lab Information 98031-0528 Office Abbreviations Farmington = FAR Durango = DUR	
Western Division Well Site/Location MCKenzie A 3 Collected By Logan Hixon Company	API <u>30-64</u> Samp QA/QC	Number Number 5 - 3/430 ales on Ice 9/N)	Kurt 9	l Results , Jarre BgT	<u>505 386-80</u> to: -S Test Reason	218	٥)					<u>Office Abbreviations</u> Farmington = FAR Durango = DUR	
Western Division Well Site/Location MCKenzie A 3 Collected By Logan Hixon Company	API <u>30-649</u> Samp QA/QC	Number 5 - 31.430 ales on Ice 9 / N)	Kurt 9	, Jane BgT	S Test Reason	⁽ A)	0)					Farmington = FAR Durango = DUR	
Well Site/Location MCKenzie A 3 Collected By Logan Hixon Company XTO	API <u>30-649</u> Samp QA/QC	Number 5 - 31.430 ales on Ice 9 / N)	9	BgTSt	Test Reason	(A)	6					Farmington = FAR Durango = DUR	
MCKenzie A 3 Collected By Logan Hixon Company		5 - 31.430 Des on Ice 9/ N)		St	Test Reason Clasure (pt Turnaround	(A)	5					-	
Collected By Logan Hixon Company		9/N)		St	Closure (pf Turnaround	<u>(A)</u>	S						
Logan Hixon Company		9/N)		St	Tarnarouna		6					Bakken = BAK Raton = RAT	
Company XT (2			d		andard		40					Piceance = PC	
	Gray Areas	-			ext Day		120					Roosevelt = RSV	
Signature				Two Day			20					La Barge = LB	
	Gray Areas	2.9.17.19.10.10.00.01.01	1043 H 11672	C	nree Day I. 5 Bus. Days (by	contract)						Orangeville = OV	
Joy H	TO LET THE PLEASE TO DECIMAL THE PLEASE PLEASE	for Lab Use	e Only!	Date No	eeded		$\overline{\mathbf{v}}$						
0						No. of	8015						
Sample ID	Sample Name	Media	Date		Preservative	Conts.						Sample Number	
FARCH-102414-1530 Bg	<u>it Composite-6"</u> SancStore	S	10424	1530	2001	1-402	M					PHI0108-01	
											_		
						_							
			ļ	ļ									
			<u> </u>				Ⅰ		_	<u> </u>			
				<u> </u>			╞──┤		_				
Media : Filter = F Soil = S Wastewate			rinhing V	Varter = C		Surface Wate		Air 5		Mud -			
Relinquished By: (Signature)		Date:		Time:	Received By: (Sig		= 7 - 7 W	AIF -					
Tog		16-24-1	14	15:50	Increived DA. (M	gnatare)						bitles Sample Condition :	
Relinquished By: (Signature)				Time:	Received By: (Sig	eceived By: (Signature)				Temy	eratur U.S	e Other information	
Relinquished By: (Signature) Date:				Time:									
Comments		-		•	0	-001							

* Sample ID will be the office and sampler-date-military time FARJM-MMDDYY-1200

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Hixon, Logan

From: Sent: To: Cc: Subject: Attachments:	Hixon, Logan Monday, October 27, 2014 2:53 PM BRANDON POWELL (brandon.powell@state.nm.us); Smith, Cory, EMNRD McDaniel, James (James_McDaniel@xtoenergy.com); Hoekstra, Kurt; Espinosa, Tony; Trujillo, Marcos (Marcos_Trujillo@xtoenergy.com); Dawes, Thomas (Thomas_Dawes@xtoenergy.com); Daniels, Melissa (Melissa_Daniels@xtoenergy.com) BGT Closure Request: McKenzie A 3 (30-045-31439) 10-23-14 Siting Report.pdf; 10-24-14 Final Sample Results.pdf; 10-24-14 Onsite.docx; 10-27-14 Final Sample Results.pdf
Importance:	High
Follow Up Flag:	Follow up
Flag Status:	Flagged

Brandon/Cory,

XTO is requesting to close the BGT at the following site with sample results above the standards for this site per the NMOCD Guidelines for the Remediation of Leaks, Spills and Releases ranking. The site (McKenzie A 3) was ranked a 20 due to an estimated distance to surface water of 475', and an estimated depth to groundwater of between 50-100 feet. This set the closure standard to 100 ppm TPH, 10 ppm benzene, and 50 ppm total BTEX. XTO requests this closure due to a consolidated sandstone base located in the bottom of the BGT cellar, XTO has reached the furthest vertical extent practical, and the majority of the TPH make up being derived of DRO, which is non mobile and is not believed to be a threat to human health or the environment. Attached for your review and approval are the siting report, confirmation sample results from 10/23/14, onsite form from 10/24/14, and sample results from 10/24/14. Thank you for your time in regards to this site and have a good day!

If you have any questions or concerns do not hesitate to contact me at anytime. Thank you and have a good day!

Thank You!

XTO ENERGY INC., an ExxonMobil subsidiary

Logan Hixon | 72 Suttle Street, Suite J | Durango, CO 81303 | ph: 970-247-7708 | Cell: 505-386-8018 Logan Hixon | 382 CR 3100 | Aztec, NM 87410 | ph: 505-333-3100 | Logan Hixon@xtoenergy.com

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From:	Smith, Cory, EMNRD
To:	<u>Hixon, Logan</u>
Cc:	McDaniel, James; Hoekstra, Kurt; Powell, Brandon, EMNRD
Subject:	RE: BGT Closure Request: McKenzie A 3 (30-045-31439)
Date:	Tuesday, October 28, 2014 8:16:09 AM

Mr. Hixon,

Upon review of the data supplied OCD is approving XTO request to close the BGT excavation at the McKenzie A 3 (30-045-31439) due to reaching practical extent. The OCD recommends that XTO apply an oxidizer to assist with the in-situ remediation.

If you have any questions please call me at your leisure.

Thank you,

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

From: Hixon, Logan [mailto:Logan_Hixon@xtoenergy.com]
Sent: Monday, October 27, 2014 2:53 PM
To: Powell, Brandon, EMNRD; Smith, Cory, EMNRD
Cc: McDaniel, James; Hoekstra, Kurt; Espinosa, Tony; Trujillo, Marcos; Dawes, Thomas; Daniels, Melissa
Subject: BGT Closure Request: McKenzie A 3 (30-045-31439)
Importance: High

Brandon/Cory,

XTO is requesting to close the BGT at the following site with sample results above the standards for this site per the NMOCD Guidelines for the Remediation of Leaks, Spills and Releases ranking. The site (McKenzie A 3) was ranked a 20 due to an estimated distance to surface water of 475', and an estimated depth to groundwater of between 50-100 feet. This set the closure standard to 100 ppm TPH, 10 ppm benzene, and 50 ppm total BTEX. XTO requests this closure due to a consolidated sandstone base located in the bottom of the BGT cellar, XTO has reached the furthest vertical extent practical, and the majority of the TPH make up being derived of DRO, which is non mobile and is not believed to be a threat to human health or the environment. Attached for your review and approval are the siting report, confirmation sample results from 10/23/14, onsite form from 10/24/14, and sample results from 10/24/14. Thank you for your time in regards to this site and have a good day!

If you have any questions or concerns do not hesitate to contact me at anytime. Thank you and have a good day!

Thank You!

XTO ENERGY INC., an ExxonMobil subsidiary

Logan Hixon | 72 Suttle Street, Suite J | Durango, CO 81303 | ph: 970-247-7708 | Cell: 505-386-8018

Logan Hixon | 382 CR 3100 | Aztec, NM 87410 | ph: 505-333-3100 | Logan_Hixon@xtoenergy.com

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XTO Energy, Inc. McKenzie A 3 (30-045-31439)

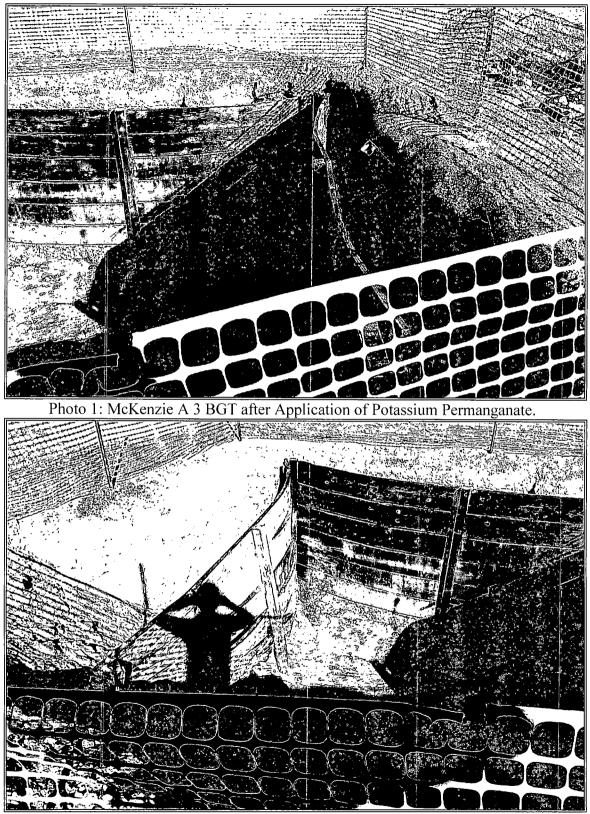


Photo 2: McKenzie A 3 BGT after Application of Potassium Permanganate.



Analytical Report

Report Summary

Client: XTO Energy Inc. Chain Of Custody Number: 0102 Samples Received: 10/22/2014 4:15:00PM Job Number: 98031-0528 Work Order: P410097 Project Name/Location: McKenzie A 3

Entire Report Reviewed By:

Date: 10/24/14

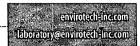
Tim Cain, Laboratory Manager

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XTO Energy Inc.	Project Name:	McKenzie A 3	
382 CR 3100	Project Number:	98031-0528	Reported:
Aztec NM, 87410	Project Manager:	Logan Hixon	24-Oct-14 11:00

Analyical Report for Samples

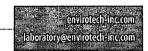
Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BGT Composite Sandstone	P410097-01A	Soil	10/22/14	10/22/14	Glass Jar, 4 oz.
	P410097-01B	Soil	10/22/14	10/22/14	Glass Jar, 4 oz.

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XTO Energy Inc. 382 CR 3100 Aztec NM, 87410	Project Name: Project Number: Project Manager:		McKenzie A 3 98031-0528 Logan Hixon					Reported: 24-Oct-14 11	
		BGT Comj P4100	posite Sa 97-01 (So						
		Reporting			· <u> </u>				
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.10	mg/kg	1	1443037	10/22/14	10/23/14	EPA 8021B	
Toluene	ND	0.10	mg/kg	1	1443037	10/22/14	10/23/14	EPA 8021B	
Ethylbenzene	ND	0.10	mg/kg	1	1443037	10/22/14	10/23/14	EPA 8021B	
p,m-Xylene	ND	0.20	mg/kg	1	1443037	10/22/14	10/23/14	EPA 8021B	
o-Xylene	ND	0.10	mg/kg	1	1443037	10/22/14	10/23/14	EPA 8021B	
Total Xylenes	ND	0.10	mg/kg	1	1443037	10/22/14	10/23/14	EPA 8021B	
Total BTEX	ND	0.10	mg/kg	1	1443037	10/22/14	10/23/14	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		97.2 %	50	-150	1443037	10/22/14	10/23/14	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	9.99	mg/kg	1	1443037	10/22/14	10/23/14	EPA 8015D	
Diesel Range Organics (C10-C28)	508	39.9	mg/kg	2	1443038	10/22/14	10/23/14	EPA 8015D	
Surrogate: o-Terphenyl		87.3 %	50	-200	1443038	10/22/14	10/23/14	EPA 8015D	
Surrogate: 4-Bromochlorobenzene-FID		88.0 %	50	-150	1443037	10/22/14	10/23/14	EPA 8015D	
Total Petroleum Hydrocarbons by 418.1					-			=	
Total Petroleum Hydrocarbons	3910	349	mg/kg	10	1443040	10/23/14	10/23/14	EPA 418.1	
Cation/Anion Analysis							_		
Chloride	34.8	9.82	mg/kg	1	1443039	10/23/14	10/23/14	EPA 300.0	

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XTO Energy Inc.	Project Name:	McKenzie A 3	
382 CR 3100	Project Number:	98031-0528	Reported:
Aztec NM, 87410	Project Manager:	Logan Hixon	24-Oct-14 11:00

Volatile Organics by EPA 8021 - Quality Control

Envirotech Analytical Laboratory

		Reporting		Spike	Source	·	%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 1443037 - Purge and Trap EPA 50	30A									
Blank (1443037-BLK1)		_		Prepared: 2	2-Oct-14	Analyzed: 2	3-Oct-14			
Benzene	ND	0.10	mg/kg							
Foluene	ND	0.10								
Ethylbenzene	ND	0.10								
o,m-Xylene	ND	0.20	"							
p-Xylene	ND	0.10	"							
Total Xylenes	ND	0.10	"							
Fotal BTEX	ND	0.10	"							
Surrogate: 4-Bromochlorobenzene-PID	0.409		"	. 0.400		102	50-150			
LCS (1443037-BS1)				Prepared: 2	2-Oct-14	Analyzed: 2	3-Oct-14			
Benzene	18.8	0.10	mg/kg	20.0		94.0	75-125			
oluene	18.9	0.10	11	20.0		94.6	70-125			
Ethylbenzene	19.1	0.10	"	20.0		95.7	75-125			
o,m-Xylene	38.7	0.20	"	40.0		96.7	80-125			
o-Xylene	19.0	0.10	51	20.0		95.0	75-125			
Surrogate: 4-Bromochlorobenzene-PID	0.403		"	0.400		101	50-150			_
Matrix Spike (1443037-MS1)	Sou	rce: P410097-	01	Prepared: 22-Oct-14 Analyzed: 23-Oct-14						
Benzene	18.7	0.10	mg/kg	20.0	ND	93.8	75-125			
Foluene	19.0	0.10	H	20.0	ND	94.8	70-125			
Ethylbenzene	19.2	0.10	**	20.0	ND	96.1	75-125			
p,m-Xylene 🦕	38.9	0.20	"	40.0	ND	97.2	80-125			
p-Xylene	19.2	0.10	"	20.0	ND	96.0	75-125			
Surrogate: 4-Bromochlorobenzene-PID	0.398		"	0.400		99.5	50-150			
Matrix Spike Dup (1443037-MSD1)	Sou	rce: P410097-	01	Prepared: 2	2-Oct-14	Analyzed: 2	23-Oct-14			
Benzene	18.9	0.10	mg/kg	20.0	ND	94.8	75-125	1.01	15	
Foluene	19.2	0.10	"	20.0	ND	96.3	70-125	1.51	15	
Ethylbenzene	19.4	0.10	"	20.0	ND	97.0	75-125	0.842	15	
o,m-Xylene	39.2	0.20	"	40.0	ND	98.2	80-125	0.969	15	
o-Xylene	19.4	0.10	"	20.0	ND	97.0	75-125	1.01	15	
Surrogate: 4-Bromochlorobenzene-P1D	0.403			0.400		101	50-150			

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XTO Energy Inc.	Project Name:	McKenzie A 3	
382 CR 3100	Project Number:	98031-0528	Reported:
Aztec NM, 87410	Project Manager:	Logan Hixon	24-Oct-14 11:00

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 1443037 - Purge and Trap EPA 5030A									-	
Blank (1443037-BLK1)				Prepared: 2	2-Oct-14	Analyzed: 2	23-Oct-14			
Gasoline Range Organics (C6-C10)	ND	9,99	mg/kg							
Surrogate: 4-Bromochlorobenzene-FID	0.373		"	0.400		93.3	50-150			
LCS (1443037-BS1)				• Prepared: 2	22-Oct-14	Analyzed: 2	23-Oct-14			
Gasoline Range Organics (C6-C10)	269	9.99	mg/kg	292		92.2	80-120			
Surrogate: 4-Bromochlorobenzene-FID	0.366		"	0.400		91.5	50-150			
Matrix Spike (1443037-MS1)	Sou	rce: P410097-	01	Prepared: 2	22-Oct-14	Analyzed: 2	23-Oct-14			
Gasoline Range Organics (C6-C10)	271	10.0	mg/kg	292	ND	92.9	75-125			
Surrogate: 4-Bromochlorobenzene-FID	0.362		n	0.400		90.6	50-150			
Matrix Spike Dup (1443037-MSD1)	Sou	rce: P410097-	01	Prepared: 22-Oct-14 Analyzed: 23-Oct-14			23-Oct-14			
Gasoline Range Organics (C6-C10)	273	9.99	mg/kg	292	ND	93.6	75-125	0.638	15	
Surrogate: 4-Bromochlorobenzene-FID	0.364		"	0.400		91.2	50-150			

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XTO Energy Inc.	Project Name: McKenzie A 3	
382 CR 3100	Project Number: 98031-0528	Reported:
Aztec NM, 87410	Project Manager: Logan Hixon	24-Oct-14 11:00

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Nonhalogenated Organics by 8015 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
	Result		Units	Level	Result	70REC	Linns	RFD		INDIES
Batch 1443038 - DRO Extraction EPA 3	550M									
Blank (1443038-BLK1)				•Prepared: 2	22-Oct-14	Analyzed: 2	3-Oct-14			
Diesel Range Organics (C10-C28)	ND	24.9	mg/kg							
Surrogate: o-Terphenyl	35.7		"	39.9		89.5	50-200			
LCS (1443038-BS1)		_		Prepared: 2	22-Oct-14	Analyzed: 2	23-Oct-14			
Diesel Range Organics (C10-C28)	455	25.0	mg/kg	500		91.0	38-132			
Surrogate: 0-Terphenyl	38.7	·····	"	40.0		96.8	50-200			
Matrix Spike (1443038-MS1)	Sou	rce: P410097-	01	Prepared &	Analyzed:	23-Oct-14				
Diesel Range Organics (C10-C28)	708	34.9	mg/kg	498	508	40.1	38-132			
Surrogate: o-Terphenyl	42.3		"	39.9		106	50-200			
Matrix Spike Dup (1443038-MSD1)	Sou	rce: P410097-	-01	Prepared & Analyzed: 23-Oct-14						
Diesel Range Organics (C10-C28)	874	35.0	mg/kg	500	508	73.2	38-132	21.0	20	DI
Surrogate: o-Terphenyl	43.2		"	40.0		108	50-200			

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XTO Energy Inc.	Project Name:	McKenzie A 3	
382 CR 3100	Project Number:	98031-0528	Reported:
Aztec NM, 87410	Project Manager:	Logan Hixon	24-Oct-14 11:00

Total Petroleum Hydrocarbons by 418.1 - Quality Control

Envirotech Analytical Laboratory

			. •	•)						
•	Reporting			Spike Source		%REC	%REC			
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 1443040 - 418 Freon Extraction				•						
Blank (1443040-BLK1)				Prepared &	ed & Analyzed: 23-Oct-14					
Total Petroleum Hydrocarbons	ND	35.0	mg/kg							
Duplicate (1443040-DUP1)	Sour	e: P410097-	-01	Prepared &	Analyzed	23-Oct-14				
Total Petroleum Hydrocarbons	4150	349	mg/kg		3910			5.93	30	
Matrix Spike (1443040-MS1)	Source: P410097-01 P		Prepared & Analyzed: 23-Oct-14							
Total Petroleum Hydrocarbons	5550	349	mg/kg	2010	3910	81.3	80-120			

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XTO Energy Inc. 382 CR 3100 Aztec NM, 87410	Proje	ect Name: ect Number: ect Manager:	98	lcKenzie A 3 8031-0528 ogan Hixon					Report 24-Oct-14	
			·	- Quality						
	En	virotech A	Analytic	cal Labor	atory					
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1443039 - Anion Extraction EPA 30	0.0									
Blank (1443039-BLK1)	·			Prepared &	Analyzed:	23-Oct-14				
Chloride	ND	9.84	mg/kg	•						
LCS (1443039-BS1)				Prepared &	z Analyzed:	23-Oct-14				
Chloride	490	9.81	mg/kg	490		99.9	90-110			
Matrix Spike (1443039-MS1)	Sour	ce: P410097-	01	Prepared &	Prepared & Analyzed: 23-Oct-14					
Chloride	531	9.92	mg/kg	496	34.8	100	80-120			
Matrix Spike Dup (1443039-MSD1)	Sour	ce: P410097-	01	Prepared &	k Analyzed:	23-Oct-14				
Chloride	529	9.85	mg/kg	492	34.8	100	80-120	0.423	20	



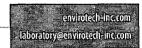
XTO Energy Inc.	Project Name:	McKenzie A 3			
382 CR 3100	Project Number:	98031-0528		Reported:	
Aztec NM, 87410	Project Manager:	Logan Hixon		24-Oct-14 11:00	

Notes and Definitions

D1Duplicates or Matrix Spike Duplicates Relative Percent Difference exceeds control limits.DETAnalyte DETECTEDNDAnalyte NOT DETECTED at or above the reporting limitNRNot ReporteddrySample results reported on a dry weight basisRPDRelative Percent Difference

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<u>M</u>	Quot	Quote Number			Dame Arris A			Analysis				Lab Information	
XTO -		XTO Contact		Page 1 of 1 XTO Contact Phone #						- Ta	98031-0528		
M ENERGY		- -		Results								Office Abbreviations	
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