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 Department Oil Conservation Division

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office.
For permanent pits and exceptions submit to the Santa Fe Environmental Burgau office and provide a copy to the appropriate NMOCD District Office.

11414

# Pit, Closed-Loop System, Below-Grade Tank, or Proposed Alternative Method Permit or Closure Plan Application

V
Type of action:    Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method   Existing BGT   Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method   Modification to an existing permit   Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system, below-grade tank, or proposed alternative method
• • •
Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the
nvironment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.
1. OCDUD # 5300
Operator: XTO Energy, Inc. OGRID #: 5380
Address: #382 County Road 3100, Aztec, NM 87410
Facility or well name:FEASEL FRED J #1F
API Number: 30-045-33589 OCD Permit Number:
U/L or Qtr/Qtr B Section 34 Township 28N Range 10W County: San Juan
Center of Proposed Design: Latitude <u>36.6241389</u> Longitude <u>107.87864</u> NAD: □1927 ☑ 1983
Surface Owner:  Federal State Tribal Trust or Indian Allotment
Pit: Subsection F or G of 19.15.17.11 NMA   RCUD SEP 20 '13     Temporary:   Drilling   Workover   OIL CONS. DIV.     Permanent   Emergency   Cavitation   P&A   DIST. 3     Lined   Unlined   Liner type: Thickness   mil   LLDPE   HDPE   PVC   Other     String-Reinforced     Liner Seams:   Welded   Factory   Other   Volume:   bbl Dimensions: L   x W   x D     Closed-loop System: Subsection H of 19.15.17.11 NMAC     Type of Operation:   P&A   Drilling a new well   Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)     Drying Pad   Above Ground Steel Tanks   Haul-off Bins   Other     Lined   Unlined Liner type: Thickness   mil   LLDPE   HDPE   PVC   Other     Liner Seams:   Welded   Factory   Other
Selow-grade tank: Subsection I of 19.15.17.11 NMAC   Volume:
5. Alternative Method:

Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

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Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks)  Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, institution or church)  Four foot height, four strands of barbed wire evenly spaced between one and four feet  Alternate. Please specify Four foot height, steel mesh field fence (hogwire) with pipe top railing	hospital,
Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)  Screen Netting Other Expanded metal or solid vaulted top  Monthly inspections (If netting or screening is not physically feasible)	
Signs: Subsection C of 19.15.17.11 NMAC  □ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers  □ Signed in compliance with 19.15.3.103 NMAC	
s.  Administrative Approvals and Exceptions:  Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.  Please check a box if one or more of the following is requested, if not leave blank:  Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau consideration of approval.  Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	office for
Siting Criteria (regarding permitting): 19.15.17.10 NMAC Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptant material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate of the Santa Fe Environmental Bureau office for consideration of a Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to dry above-grade tanks associated with a closed-loop system.	priate district pproval.
Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.  - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☑ No 
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	Yes No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  (Applies to temporary, emergency, or cavitation pits and below-grade tanks)  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ⊠ No ☐ NA
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (Applies to permanent pits)	☐ Yes ☐ No ☑ NA
<ul> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> <li>Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.</li> <li>NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site</li> </ul>	☐ Yes ⊠ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended.  - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☑ No
Within 500 feet of a wetland.  - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☑ No
Within the area overlying a subsurface mine.  - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☑ No
<ul> <li>Within an unstable area.</li> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological Society; Topographic map</li> </ul>	☐ Yes ⊠ No
Within a 100-year floodplain FEMA map	☐ Yes ☒ No

	Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.    Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC     Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC     Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC     Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC     Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC     Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC     Previously Approved Design (attach copy of design)   API Number:   or Permit Number:
	Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC  Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.  Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9
	☐ Siting Criteria Compliance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC ☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
	Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
	Previously Approved Design (attach copy of design) API Number:
	Previously Approved Operating and Maintenance Plan API Number: (Applies only to closed-loop system that use
	above ground steel tanks or haul-off bins and propose to implement waste removal for closure)
	Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC  Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.  Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC  Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
	☐ Climatological Factors Assessment ☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC ☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC ☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC ☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC ☐ Quality Control/Quality Assurance Construction and Installation Plan
	<ul> <li>□ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC</li> <li>□ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC</li> <li>□ Nuisance or Hazardous Odors, including H₂S, Prevention Plan</li> <li>□ Emergency Response Plan</li> <li>□ Oil Field Waste Stream Characterization</li> </ul>
	☐ Monitoring and Inspection Plan ☐ Erosion Control Plan
	Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
	14. <u>Proposed Closure</u> : 19.15.17.13 NMAC  Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.
	Type: Drilling Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Closed-loop System Alternative
	Proposed Closure Method: Waste Excavation and Removal Waste Removal (Closed-loop systems only) On-site Closure Method (Only for temporary pits and closed-loop systems)
İ	☐ In-place Burial ☐ On-site Trench Burial
	Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)
	Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.  Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC  Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC  Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)
	Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC  Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC  Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.1 Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if facilities are required.	NMAC) more than two
Disposal Facility Name: Disposal Facility Permit Number:	
Disposal Facility Name: Disposal Facility Permit Number:	
Will any of the proposed closed-loop system operations and associated activities occur on or in areas that will not be used for future ser   Yes (If yes, please provide the information below)  No	
Required for impacted areas which will not be used for future service and operations:  Soil Backfill and Cover Design Specifications based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC	C
Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC  Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable sour provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate dist considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justide demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.	rict office or may be
Ground water is less than 50 feet below the bottom of the buried waste.  - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	Yes No
Ground water is between 50 and 100 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is more than 100 feet below the bottom of the buried waste.  - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.  - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended.  - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within 500 feet of a wetland US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within the area overlying a subsurface mine.  - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
<ul> <li>Within an unstable area.</li> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological Society; Topographic map</li> </ul>	☐ Yes ☐ No
Within a 100-year floodplain FEMA map	☐ Yes ☐ No
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plants a check mark in the box, that the documents are attached.  Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC  Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC  Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC  Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.  Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC  Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC  Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC  Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cann Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC  Re-vegetation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC  Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC	15.17.11 NMAC

19.	· · · · · · · · · · · · · · · · · · ·	
Operator Application Certification:  I hereby certify that the information submitted with this application is	s true, accurate and complete to the	e best of my knowledge and belief.
Name (Print): Kim Champlin	Title:	Environmental Representative
Signature: Kun Champlin	Date:	11.31.08
e-mail address: kim_champlin@xtoenergy.com	Telephone:	(505) 333-3100
20.		
OCD Approval: Permit Application (including closure plan)		$h \cap \Delta (a) (1 - 2) = 1$
OCD Representative Signature:	Jovern D. M	Approval Date: 2 (19 (15
	Compliance	Officer
Title: Semon Hydrologis 1	OCD Permit Num	ber:
21.  Closure Report (required within 60 days of closure completion):  Instructions: Operators are required to obtain an approved closure  The closure report is required to be submitted to the division within  section of the form until an approved closure plan has been obtaine	plan prior to implementing any 60 days of the completion of the d and the closure activities have	closure activities and submitting the closure report. closure activities. Please do not complete this
22.		
Closure Method:  ☐ Waste Excavation and Removal ☐ On-Site Closure Method ☐ If different from approved plan, please explain.	☐ Alternative Closure Method	☐ Waste Removal (Closed-loop systems only)
23.  Closure Report Regarding Waste Removal Closure For Closed-lo Instructions: Please indentify the facility or facilities for where the two facilities were utilized.		
Disposal Facility Name:	Disposal Facility P	ermit Number:
Disposal Facility Name:	Disposal Facility P	ermit Number:
Were the closed-loop system operations and associated activities perf  Yes (If yes, please demonstrate compliance to the items below)		be used for future service and operations?
Required for impacted areas which will not be used for future service	and operations:	
☐ Site Reclamation (Photo Documentation) ☐ Soil Backfilling and Cover Installation		
Re-vegetation Application Rates and Seeding Technique		
24. Closure Report Attachment Checklist: Instructions: Each of the	following items must be attached	to the closure report. Please indicate, by a check
mark in the box, that the documents are attached.  Proof of Closure Notice (surface owner and division)		
Proof of Deed Notice (required for on-site closure)		
☐ Plot Plan (for on-site closures and temporary pits) ☐ Confirmation Sampling Analytical Results (if applicable)		
☐ Waste Material Sampling Analytical Results (required for on-s	ite closure)	
<ul> <li>☑ Disposal Facility Name and Permit Number</li> <li>☑ Soil Backfilling and Cover Installation</li> </ul>		
Re-vegetation Application Rates and Seeding Technique		
Site Reclamation (Photo Documentation) On-site Closure Location: Latitude	Longitude	NAD: □1927 □ 1983
25.	Longitude	NAD. [1927   1963
Operator Closure Certification:		
I hereby certify that the information and attachments submitted with t belief. I also certify that the closure complies with all applicable clos		
Name (Print): Kust, HOEKSTRA	Title: FNVIR	CONNENTAL COORDINATOR
Signature: Kut Harkello	Date:	9-17-13
e-mail address: Kurt Hoekstra Cxto energy.c	OV Telephone:	505-333-310D

District I
1625 N. French Dr., Hobbs, NM 88240
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# 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   Fina							al Report
Name of Co	mpany: X	TO Energy,	Inc.			Contact: Kurt Hoekstra							
Address: 38	2 Road 31	00, Aztec, N	lew Mexi	co 87410			No.: (505) 333-3						
Facility Nan	ne: Fred F	easel J # 1F	(30-045-	33589)	!	Facility Typ	e: Gas Well (Ba	asin Da	kota/Oter	Chacra)			
Surface Ow	ner: Feder	al		Mineral O	wner:				Lease N	lo. NMSF-	04656	3	
				LOCA	TION	OF REI	LEASE						
Unit Letter	Section	Township	Range	Feet from the		South Line FNL	Feet from the 1545	1	West Line FEL	County San Juan			
Б	<u> </u>	2011	10W	Latitude: 36	5.62414		e: -107.87864		TEL	San Juan			
Type of Rele	ase: Produ	ced Water / C	ondensate			Volume of	Release: Unknov	vn		Recovered: N			
Source of Re	lease: Belo	w Grade Tank					lour of Occurrenc	e:		Hour of Dis	covery	: 8-20	0-2013
Unit Letter Section Township Range Feet from the B 34 28N 10W 665  Latitude:						Unknown If YES, To	Whom9		8:00 am.				
was immedia	ate Notice (		Yes [	No 🛛 Not Re	equired	11 165, 10	whom?						i
By Whom?				_		Date and I-	Iour						
Was a Water	course Read		] No		If YES, Volume Impacting the Watercourse.								
If a Watercou	ırse was Im	pacted, Descr	ibe Fully.	*									
The BGT cel The sample r 100 ppm TPI according to groundwater	lar beneath eturned res I standard : the NMOC of 50 to 10	the BGT was ults below the at 27000 ppm D Guidelines 0 feet and a di	sampled f 'Pit Rule' via USEP for the Re stance to	or TPH via USEP spill confirmatio A Method 418.1, mediation of Leak surface water of 2	PA Meth n standa confirmits, Spills 00 to 1,0	od 8015 and rds for benzeing that a release and Release 000 feet and o	418.1, for BTEX ne, but above star ase has occurred s. The site was ra	via USI ndards f at this I nked a 2	EPA Metho for total BT ocation. The 20 due to ar	d 8021, and EX at 389 pp e site was the estimated of	for tota pm, and en rank lepth to	al chl d abo ked	lorides. ove the
	a Affected	and Cleanup	Action Tal	cen. Based on TPI	H results	of 2700 ppn	n via USEPA Met	thod 418	3.1 a release	e has been co	onfirme	ed at	this
I hereby certify are required to acceptance of and remediate	report and/o a C-141 repo contamination	or file certain rel ort by the NMOO on that pose a th	ease notific CD marked reat to grou	cations and perform as "Final Report" do and water, surface w	corrective ses not re ater, hum	e actions for re lieve the opera an health or th	leases which may enter of liability shou environment. In a	ndanger Id their o	public health perations ha	or the enviro	nment. lequatel	The ly inve	estigate
						•	OIL CON	<b>SERV</b>	ATION	DIVISIO	<u>N(</u>		
	Kuit t	Vocketin				Approved by	District Supervis	sor:					
rinted Nam	c. Nuri F106	KSUTA											
Title: Enviro	nmental Co	oordinator		·		Approval Da	te:		Expiration	Date:			
E-mail Addre	n		Conditions o	f Approval:			Attached						
Date: 9-	17-13	Phone: 505	5-333-310	0									

District I
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# 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 Rep								
						Contact: Kurt Hoekstra								
							No.: (505) 333-3							
Facility Nar	ne: Fred F	easel J # 1F	(30-045-	-33589)		Facility Typ	e: Gas Well (Ba	asin Da	kota/Oter	o Chacra)				
Surface Ow	ner: Feder	al		Mineral C	)wner:				Lease N	lo. NMSF-	04656	3		
		*		LOCA	TION	OF REI	LEASE							
Unit Letter	Section 34	Township 28N	Range	Feet from the		South Line FNL	Feet from the 1545	i	West Line FEL	County San Juan				
	1. 31	2011	1011	Latitude: 36	5.62414		e: -107.87864	I		Sunsum				
Type of Rele	ase: Produ	ced Water / C	ondensate				Release: Unknov	vn	Volume F	Recovered: 1	None			
Source of Re	lease: Belo	w Grade Tank				Date and I- Unknown	Hour of Dis	covery	8-20-20	)13				
Was Immedi	ate Notice (		Yes [	No ⊠ Not Re	equired	If YES, To	Whom?		8:00 am.			·		
By Whom?			-		•	Date and I-	lour							
	course Read	ched?					olume Impacting t	he Wat	ercourse.					
		<del>_</del>												
If a Watercou	ırse was Im	pacted, Descr	ibe Fully.	k			,							
The BGT cel The sample r 100 ppm TPI according to groundwater	lar beneath eturned result standard a the NMOC of 50 to 100	the BGT was ults below the at 27000 ppm D Guidelines 0 feet and a di	sampled f 'Pit Rule' via USEP for the Re stance to s	or TPH via USEF spill confirmatio A Method 418.1, mediation of Leak surface water of 2	PA Methorn standa confirmings, Spills 00 to 1,0	od 8015 and rds for benze ng that a rele and Release 000 feet and o	418.1, for BTEX ne, but above star case has occurred s. The site was rate	via USI ndards f at this lanked a 2	EPA Metho for total BT ocation. The 20 due to ar	d 8021, and EX at 389 ppersists of the site was the stimated of the stimated o	for tota pm, and en rank depth to	al chlorid d above the ked	des.	
impacted soil	l was hauled o further act	d to Envirotection is require	h land farı d reguardi	<ul> <li>n. Samples were on the samples were of the samples were determined.</li> </ul>	collected	from all fou	r walls and the bo	ottom an	d returned	results below	w the sp	oill rule		
are required to acceptance of and remediate	report and/o a C-141 repo contaminatio	r file certain rel rt by the NMOO on that pose a th	case notific CD marked reat to grou	ations and perform as "Final Report" do and water, surface w	corrective oes not re ater, hum	actions for re- lieve the opera an health or th	leases which may en tor of liability shoul e environment. In a d/or regulations.	ndanger pld their of addition,	public health perations ha NMOCD ac	or the enviro ve failed to ac ceptance of a	nment. lequatel C-141 re	The vinvestiga	ate	
							OIL CON	<u>SERV</u>	'ATION	DIVISIO	<u>N(</u>			
Unit Letter Section Township Range 665  B 34 28N 10W 665  Latitud  Type of Release: Produced Water / Condensate Source of Release: Below Grade Tank  Was Immediate Notice Given?					Approved by	District Supervis	or:							
Printed Nam	e: Kurt Hoe	kstra					· <u>-</u>							
Title: Enviro	nmental Co	ordinator				Approval Da	te:		Expiration	Date:				
E-mail Addre	ess: Kurt_H	oekstra@xtoe	nergy.con	n		Conditions o	f Approval:	Attached						
Date: 9 -	17-13	Phone: 505	5-333-3100	00										

		Quot	e Number							A	naly	SÍS			Lab Information
<b>XTO</b>			Contact	-		Page of XTO Contact Phor	<u> </u>								98031-0528
ENERGY	-	2332	-1	Email	Results	to:						Ì			
Western Divisio		\ \ \ -1\		س برس	- NEN		/							,	Office Abbreviations Farmington = FAR
Well Site/Location		KURT HOE	Number	JAME	5 M-1	Test Region	<u>מסאו</u> ד מ								Durango = DUR
FREN FEASEL J*	IF.	30045 Sam	33580	3	BGT								1		Bakken = BAK
Collected By		Sam	ples on Ice	•		Turnaround									Raton = RAT
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XTO		QA/QC	C Requeste	a		wo Day Kus	sit				) (E)				La Barge = LB
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Relinquished By: (Signature)			Date:		Time:	Received for Lab	by: (()gnai	are)		<i>7</i> ,4		Date 6//		ımı EZ	
Comments															

<sup>\*</sup> Sample ID will be the office and sampler-date-military time. FARJM-MMDDYY-1200



# **Analytical Report**

#### **Report Summary**

Client: XTO Energy Inc.

Chain Of Custody Number: 0418

Samples Received: 8/16/2013 12:30:00PM

Job Number: 98031-0528

Work Order: P308046

Project Name/Location: Fred Feasel J #1F

Entire Report Reviewed By:

Date: 8/20/13

Tim Cain, Laboratory Manager

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.





382 CR 3100 Aztec NM, 87410 Project Name:

Fred Feasel J #1F

Project Number: Project Manager: 98031-0528

Kurt Hoekstra

Reported:

20-Aug-13 08:01

# **Analyical Report for Samples**

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BGT Cellar	P308046-01A	Soil	08/16/13	08/16/13	Glass Jar, 4 oz.





Project Name:

Fred Feasel J #1F

382 CR 3100 Aztec NM, 87410 Project Number: Project Manager: 98031-0528 Kurt Hoekstra

Reported:

20-Aug-13 08:01

### BGT Cellar P308046-01 (Solid)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021						<u> </u>			
Benzene	3.63	0.10	mg/kg	2	1333020	16-Aug-13	19-Aug-13	EPA 8021B	
Toluene	8.75	0.10	mg/kg	2	1333020	16-Aug-13	19-Aug-13	EPA 8021B	
Ethylbenzene	19.2	0.10	mg/kg	2	1333020	16-Aug-13	19-Aug-13	EPA 8021B	
p,m-Xylene	279	0.10	mg/kg	2	1333020	16-Aug-13	19-Aug-13	EPA 8021B	
o-Xylene	79.1	0.10	mg/kg	2	1333020	16-Aug-13	19-Aug-13	EPA 8021B	
Total Xylenes	358	0.10	mg/kg	2	1333020	16-Aug-13	19-Aug-13	EPA 8021B	
Total BTEX	389	0.10	mg/kg	2	1333020	16-Aug-13	19-Aug-13	EPA 8021B	
Surrogate: Bromochlorobenzene		99.6 %	80-	120	1333020	16-Aug-13	19-Aug-13	EPA 8021B	
Surrogate: 1,4-Difluorohenzene		106 %	80-	120	1333020	16-Aug-13	19-Aug-13	EPA 8021B	
Surrogate: Fluorobenzene		98.4 %	80-	120	1333020	16-Aug-13	19-Aug-13	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	5490	4.99	mg/kg	1	1333021	16-Aug-13	19-Aug-13	EPA 8015D	
Diesel Range Organics (C10-C28)	1370	4.99	mg/kg	1	1333021	16-Aug-13	19-Aug-13	EPA 8015D	
GRO and DRO Combined Fractions	6860	4.99	mg/kg	1	1333021	16-Aug-13	19-Aug-13	EPA 8015D	
Total Petroleum Hydrocarbons by 418.1									
Total Petroleum Hydrocarbons	27000	200	mg/kg	10	1333029	16-Aug-13	16-Aug-13	EPA 418.1	
Cation/Anion Analysis									
Chloride	1430	10.0	mg/kg	1	1333028	16-Aug-13	16-Aug-13	EPA 300.0	





Project Name:

Fred Feasel J#1F

Spike

Level

382 CR 3100

Analyte

o-Xylene

Surrogate: Bromochlorobenzene Surrogate: 1,4-Difluorohenzene

Surrogate: Fluorobenzene

Project Number:

Reporting

Limit

Result

48.4

52.3

50.3

50.6

98031-0528

Reported:

Aztec NM, 87410 Project Manager: Kurt Hoekstra

Source

Result

%REC

%REC

Limits

46-148

80-120

80-120

80-120

95.9

105

101

101

RPD

20-Aug-13 08:01

RPD

Limit

Notes

#### Volatile Organics by EPA 8021 - Quality Control

#### **Envirotech Analytical Laboratory**

Units

Blank (1333020-BLK1)				Prepared: 1	5-Aug-13	Analyzed:	16-Aug-13	
Benzene	ND	0.05	mg/kg					
Toluene	ND	0.05	11					
Ethylbenzene	ND	0.05	п					
p,m-Xylene	ND	0.05	и					
o-Xylene	ND	0.05	11					
Total Xylenes	ND	0.05	"					
Total BTEX	ND	0.05	"					
Surrogate: Bromochlorobenzene	48.3		ug/L	50.0		96.6	80-120	
Surrogate: 1,4-Difluorohenzene	50.1		"	50.0		100	80-120	
Surrogate: Fluorohenzene	49.6		"	50.0		99.1	80-120	
Duplicate (1333020-DUP1)	Source	urce: P308037-01		Prepared: 1	5-Aug-13	16-Aug-13		
Benzene	ND	0.05	mg/kg		ND			30
Toluene	ND	0.05	11		ND			30
Ethylbenzene	ND	0.05	11		ND			30
p,m-Xylene	ND	0.05	u		ND			30
o-Xylene	ND	0.05	н		ND			30
Surrogate: Bromochlorobenzene	50.5		ug/L	50.0		101	80-120	
Surrogate: 1,4-Difluorohenzene	49.6		"	50.0		99.1	80-120	
Surrogate: Fluorobenzene	49.6		"	50.0		99.2	80-120	
Matrix Spike (1333020-MS1)	(1333020-MS1) Sour			Prepared: 1	5-Aug-13	Analyzed:	16-Aug-13	
Benzene	48.5		ug/L	50.0	0.50	96.1	39-150	
Toluene	48.6		"	50.0	0.54	96.2	46-148	
Ethylbenzene	48.4		"	50.0	0.32	96.1	32-160	
p,m-Xylene	96.6		0	100	0.62	95.9	46-148	

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50.0

50.0

50.0

50.0

0.44





Project Name:

Fred Feasel J#1F

Spike

Source

%REC

382 CR 3100 Aztec NM, 87410 Project Number: Project Manager:

Reporting

98031-0528 Kurt Hoekstra

Reported: 20-Aug-13 08:01

RPD

#### Nonhalogenated Organics by 8015 - Quality Control

#### **Envirotech Analytical Laboratory**

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 1333021 - GRO/DRO Extraction	EPA 3550C									
Blank (1333021-BLK1)				Prepared:	15-Aug-13	Analyzed:	16-Aug-13			
Gasoline Range Organics (C6-C10)	ND	5.00	mg/kg							
Diesel Range Organics (C10-C28)	ND	5.00	п							
GRO and DRO Combined Fractions	ND	5.00	11							
Duplicate (1333021-DUP1)	Sourc	5.00 5.00	01	Prepared:	15-Aug-13	Analyzed:	16-Aug-13			
Gasoline Range Organics (C6-C10)	ND	5.00	mg/kg		ND				30	
Diesel Range Organics (C10-C28)	13.4	5.00	"		12.6			6.20	30	
Matrix Spike (1333021-MS1)	Sourc	e: P308037-	01	Prepared: 15-Aug-13 Analyzed:			16-Aug-13			
Gasoline Range Organics (C6-C10)	268	5.26	mg/kg	263	ND	102	75-125			
Diesel Range Organics (C10-C28)	282	5.26	"	263	12.6	102	75-125			



Project Name:

Fred Feasel J #1F

382 CR 3100 Aztec NM, 87410 Project Number: Project Manager: 98031-0528 Kurt Hoekstra Reported:

20-Aug-13 08:01

#### **Total Petroleum Hydrocarbons by 418.1 - Quality Control**

#### **Envirotech Analytical Laboratory**

		Reporting		Spike	Source		%REC		RPD		
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes	
Batch 1333029 - 418 Freon Extraction											
Blank (1333029-BLK1)				Prepared &	Analyzed:	16-Aug-13					
Total Petroleum Hydrocarbons	ND	20.0	mg/kg								
Duplicate (1333029-DUP1)	Sourc	e: P308042-	01	Prepared &	Analyzed:	16-Aug-13					
Total Petroleum Hydrocarbons	ND	20.0	mg/kg		ND				30		
Matrix Spike (1333029-MS1)	Sourc	e: P308042-	01	Prepared &	Analyzed:	16-Aug-13					
Total Petroleum Hydrocarbons	1950	20.0	mg/kg	2000	ND	97.8	80-120				





XTO Energy Inc. 382 CR 3100

Aztec NM, 87410

Project Name:

Fred Feasel J #1F

Spike

Project Number: Project Manager:

Reporting

98031-0528

Kurt Hoekstra

Source

%REC

Reported:

20-Aug-13 08:01

RPD

#### Cation/Anion Analysis - Quality Control

#### **Envirotech Analytical Laboratory**

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 1333028 - Anion Extraction EPA 300.0										
Blank (1333028-BLK1)				Prepared &	k Analyzed:	16-Aug-13	3			
Chloride	ND	9.99	mg/kg							
Duplicate (1333028-DUP1)	Sourc	e: P308042-	01	Prepared &	k Analyzed:					
Chloride	ND	9.99	mg/kg		ND				30	



Project Name:

Fred Feasel J#1F

382 CR 3100 Aztec NM, 87410 Project Number: Project Manager: 98031-0528

Kurt Hoekstra

Reported:

20-Aug-13 08:01

#### **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

# XTO Energy Inc. San Juan Basin **Below Grade Tank Closure Report**

Lease Name: Fred Feasel J # 1F

API No.: 30-045-33589

Description: Unit B, Section 34, Township 28N, Range 10W, San Juan County

In accordance with Rule 19.15.17.13 NMAC the following information describes the closure requirements of below-grade tanks on XTO Energy Inc. (XTO) locations. This is XTO's standard procedure for all below-grade tanks. A separate plan will be submitted for any below-grade tank which does not conform to this plan.

#### General Plan

1. XTO will close below-grade tanks within the time periods provided in 19.15.17.13 NMAC, or by an earlier date that the division requires because of imminent danger to fresh water, public health or the environment.

Closure Date is September 3, 2013

- 2. XTO will close a below-grade tank that does not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC or is not included in Paragraph (5) of Subsection I of 19.15.17.11 NMAC within five years after June 16, 2008, if not retrofitted to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC.
  - Closure Date is September 3, 2013
- 3. XTO will close a permitted below-grade tank within 60 days of cessation of the below-grade tank's operation or as required by the transitional provisions of Subsection B of 19.15.17.17 NMAC in accordance with a closure plan that the appropriate division district office approves. The closure report will be filed on form C-144.

Required C-144 Form is attached to this document.

4. XTO will remove liquids and sludge from below-grade tanks prior to implementing a closure method and will dispose of the liquids and sludge in a division-approved facility. Approved facilities and waste streams include:

> Envirotech Permit No. NM01-0011 and IEI Permit No. NM 01-0010B Soil contaminated by exempt petroleum hydrocarbons Produced sand, pit sludge and contaminated bottoms from storage of exempt wastes

Basin Disposal Permit No. NM01-005

Produced water

All liquids and sludge were removed from the tank prior to closure activities.

5. XTO will remove the below-grade tank and dispose of it in a division approved facility or recycle, reuse, or reclaim it in a manner that the appropriate division district office approves. XTO has removed the below grade tank, and will dispose of it at a division approved facility, or recycle, reclaim or reuse it in a manner that is approved by the division.

6. XTO will remove any on-site equipment associated with a below-grade tank unless the equipment is required for some other purpose.

#### All equipment will remain on location for the continued production of oil and gas.

At a minimum 5 point composite sample will be collected along with individual grab samples from any area that is wet, discolored or showing other evidence of a release. Samples will be analyzed for BTEX, TPH and chlorides to demonstrate that the benzene concentration, as determined by EPA SW-846 methods 8021B or 8260B or EPA method that the division approves, does not exceed 0.2 mg/kg; total BTEX concentration, as determined by EPA SW-846 methods 8021B or 8260B or other EPA method that the division approves, does not exceed 50 mg/kg; the TPH concentration, as determined by EPA method 418.1 or other EPA method that the division approves, does not exceed 50 mg/kg; and the chloride concentration, as determined by EPA method 300.1 or other EPA method that the division approves, does not exceed 250 mg/kg, or the background concentration, whichever is greater. XTO will notify the division of its results on form C-141.

A five point composite sample was taken of the pit using sampling tools and all samples tested per Subsection B of 19.15.17.1 3(B)(1)(b). (Sample results attached).

Components	Test Method	Limit (mg/Kg)	Results (mg/Kg)
Benzene	EPA SW-846 8021B or 8260B	0.2	3.63 mg/kg
BTEX	EPA SW-846 8021B or 8260B	50	389 mg/kg
ТРН	EPA SW-846 418.1	100	27000 mg/kg
ТРН	EPA 8015	100	6860 mg/kg
Chlorides	EPA 300.1	250 or background	1430 mg/kg

8. If XTO or the division determines that a release has occurred, XTO will comply with 19.15.3.116 NMAC and 19.15.1.19NMAC as appropriate.

Due to TPH results of 27000 PPM, a release has been confirmed for this location. A C-141 Release Notification form will be sent outlining any remediation activities taken regarding this release.

9. If the sampling program demonstrates that a release has not occurred or that any release does not exceed the concentrations specified in Paragraph (4) of Subsection E of 19.15.17.13 NMAC, XTO will backfill the excavation with compacted, non-waste containing, earthen material; construct a division prescribed soil cover; recontour and re-vegetate the site.

The pit cellar was backfilled using compacted, non-waste containing earthen material, the pit tank was repaired and put back into service. This BGT will be registered according to the June 2013 pit rule.

- 10. Notice of Closure operations will be given to the Aztec Division District III office between 72 hours and one week prior to the start of closure activities via email or verbally.

  The notification will include the following:
  - i. Operator's name
  - ii. Well Name and API Number
  - iii. Location by Unit Letter, Section, Township, and Range

Notification was provided to Mr. Brandon Powell with the Aztec office of the OCD via email on August 19, 2013; see attached email printout.

The surface owner shall be notified of XTO's proposal to close the BGT as per the approved closure plan using certified mail, return receipt requested.

The surface owner was notified on August 19, 2013; see attached letter and return receipt.

11. Re-contouring of location will match fit, shape, line, form and texture of the surrounding area. Re-shaping will include drainage control, prevent ponding, and prevent erosion. Natural drainages will be unimpeded and water bars and/or silt traps will be placed in areas where needed to prevent erosion on a large scale. Final re-contour shall have a uniform appearance with smooth surface, fitting the natural landscape.

The location will be recontoured to match the above specifications after the well has been P & A'd.

12. A minimum of 4 feet of cover shall be achieved and the cover shall include 1 foot of suitable material to establish vegetation at the site, or the background thickness of topsoil, whichever is greater.

The excavation has been backfilled, the pit tank has been repaired and re-set in a metal cellar.

13. XTO will seed the disturbed areas the first growing season after the operator closes the pit. Seeding will be accomplished via drilling on the contour whenever practical or by other division-approved methods. BLM or Forest Service stipulated seed mixes will be used on federal lands. Vegetative cover will equal 70% of the native perennial vegetative cover (un-impacted) consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintain that cover through two successive growing seasons. Repeat seeding or planting will be continued until successful vegetative growth occurs.

#### The location will be reclaimed pursuant to the BLM MOU when P & A'd.

- 14. All closure activities will include proper documentation and be available for review upon request and will be submitted in closure report form to OCD within 60 days of closure of the below-grade tank. Closure report will be filed on form C-144 and incorporate the following:
  - i. Proof of closure notice to division and surface owner; attached
  - ii. Details on capping and covering, where applicable; per OCD Specifications
  - iii. Inspection reports; attached
  - iv. Confirmation sampling analytical results; attached
  - v. Disposal facility name(s) and permit number(s); see above
  - vi. Soil backfilling and cover installation; per OCD Specifications
  - vii. Re-vegetation application rates and seeding techniques, (or approved alternative to re-vegetation requirements if applicable); **Per BLM MOU**
  - viii. Photo documentation of the site reclamation, attached
- 15. The pit tank will be registered pursuant to the standards outlined in 19.15.17 NMAC.

From:

Hoekstra, Kurt

To:

Brandon Powell (brandon.powell@state.nm.us); Mark Kelly (Mark Kelly@blm.gov)

Cc:

McDaniel, James; Hixon, Logan

Subject:

**BGT Closure Notification** 

Date:

Monday, August 19, 2013 9:27:41 AM

#### Brandon & Mark,

Please accept this email as the required 48 hour notification for a leak in the the BGT at the Fred Feasel J # F well site API # (30-045-33589) located in Unit B, Section 34, Township 28N, Range10W, San Juan County, New Mexico. Production has indicated they are not sure how much produced water leaked from this BGT. Also please accept this notification for closure of this BGT due to integrity issues. Thank you.

Kurt Hoekstra
EHS Coordinator
XTO Energy
505-333-3202 Office
505-486-9543 Cell
Kurt\_Hoekstra@xtoenergy.com

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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

Logan Hixon XTO Energy - San Juan Division 382 County Road 3100 Aztec, NM 87410

#### Report Summary

Tuesday August 27, 2013

Report Number: L653880 Samples Received: 08/24/13 Client Project:

Description:

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 - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364

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.

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Logan Hixon XTO Energy - San Juan Division 382 County Road 3100 Aztec, NM 87410

August 27,2013

ESC Sample # : L653880-01

Date Received :

August 24, 2013

Description

FARLH-082213-1245

Sample ID

Site ID : Project # :

Collected By Collection Date :

08/22/13 12:45

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	89.9	0.100	ફે	2540 G-2011	08/26/13	1
Benzene	BDL	0.0028	mg/kg	8021/8015	08/25/13	5
Toluene	BDL	0.028	mg/kg	8021/8015	08/25/13	5
Ethylbenzene	BDL	0.0028	mg/kg	8021/8015	08/25/13	5
Total Xylene	BDL	0.0083	mg/kg	8021/8015	08/25/13	5
TPH (GC/FID) Low Fraction	BDL	0.56	mg/kg	GRO	08/25/13	5
Surrogate Recovery-%			5. 5			
a,a,a-Trifluorotoluene(FID)	98.9		% Rec.	8021/8015	08/25/13	5
a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021/8015	08/25/13	5
TPH (GC/FID) High Fraction Surrogate recovery(%)	BDL	4.4	mg/kg	3546/DRO	08/27/13	1
o-Terphenyl	65.7		% Rec.	3546/DRO	08/27/13	1

Results listed are dry weight basis. BDL - Below Detection Limit Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

August 27,2013

Logan Hixon XTO Energy - San Juan Division 382 County Road 3100 Aztec, NM 87410

ESC Sample # : L653880-02

Date Received Description

24, 2013 August

Site ID :

Sample ID

FARLH-082213-1300

Project # :

Collected By : Collection Date :

08/22/13 13:00

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	84.2	0.100	ક	2540 G-2011	08/26/13	1
Benzene	BDL	0.0030	mg/kg	8021/8015	08/25/13	5
Toluene	BDL	0.030	mg/kg	8021/8015	08/25/13	5
Ethylbenzene	BDL	0.0030	mg/kg	8021/8015	08/25/13	5
Total Xylene	BDL	0.0089	mg/kg	8021/8015	08/25/13	5
TPH (GC/FID) Low Fraction	$\mathtt{BDL}$	0.59	mg/kg	GRO	08/25/13	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	98.7		% Rec.	8021/8015	08/25/13	5
a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021/8015	08/25/13	5
TPH (GC/FID) High Fraction Surrogate recovery(%)	7.0	4.8	mg/kg	3546/DRO	08/27/13	1
o-Terphenyl	127.		% Rec.	3546/DRO	08/27/13	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: 08/27/13 15:52 Printed: 08/27/13 15:52



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REPORT OF ANALYSIS

August 27,2013

Logan Hixon XTO Energy - San Juan Division 382 County Road 3100 Aztec, NM 87410

August 24, 2013

Date Received : Description

Sample ID

FARLH-082213-1422

Collected By

Collection Date : 08/22/13 14:22 ESC Sample # : L653880-03

Site ID :

Project # :

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	87.5	0.100	8	2540 G-2011	08/26/13	1
Benzene	BDL	0.0028	mq/kq	8021/8015	08/25/13	5
Toluene	BDL	0.028	mg/kg	8021/8015	08/25/13	5
Ethylbenzene	BDL	0.0028	mg/kg	8021/8015	08/25/13	5
Total Xylene	BDL	0.0086	mg/kg	8021/8015	08/25/13	5
TPH (GC/FID) Low Fraction	BDL	0.57	mg/kg	GRO	08/25/13	5
Surrogate Recovery-%			•			
a,a,a-Trifluorotoluene(FID)	99.2		% Rec.	8021/8015	08/25/13	5
a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021/8015	08/25/13	5
TPH (GC/FID) High Fraction Surrogate recovery(%)	43.	4.6	mg/kg	3546/DRO	08/27/13	1
o-Terphenyl	66.5		% Rec.	3546/DRO	08/27/13	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: 08/27/13 15:52 Printed: 08/27/13 15:52



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REPORT OF ANALYSIS

August 27,2013

Logan Hixon XTO Energy - San Juan Division 382 County Road 3100 Aztec, NM 87410

ESC Sample # : L653880-04

Date Received :

24, 2013 August

Site ID :

Description Sample ID

FARLH-082213~1430

Project # :

Collected By : Collection Date :

08/22/13 14:30

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	81.6	0.100	ક	2540 G-2011	08/26/13	1
Benzene	BDL	0.0031	mg/kg	8021/8015	08/25/13	5
Toluene	BDL	0.031	mg/kg	8021/8015	08/25/13	5
Ethylbenzene	BDL	0.0031	mg/kg	8021/8015	08/25/13	5
Total Xylene	BDL	0.0092	mg/kg	8021/8015	08/25/13	5
TPH (GC/FID) Low Fraction	BDL	0.61	mg/kg	GRO	08/25/13	5
Surrogate Recovery-%			J. J		, ,	
a,a,a-Trifluorotoluene(FID)	98.8		% Rec.	8021/8015	08/25/13	5
a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021/8015	08/25/13	5
TPH (GC/FID) High Fraction Surrogate recovery(%)	18.	4.9	mg/kg	3546/DRO	08/27/13	1
o-Terphenyl	77.2		% Rec.	3546/DRO	08/27/13	1

Results listed are dry weight basis. BDL - Below Detection Limit Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

August 27,2013

Logan Hixon NOYALL RIXON
XTO Energy - San Juan Division
382 County Road 3100
Aztec, NM 87410

ESC Sample # : L653880-05

Date Received

August 24, 2013

Description

Site ID :

Sample ID

FARLH-082213-1445

Project # :

Collected By

Collection Date : 08/22/13 14:45

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	82.4	0.100	8	2540 G-2011	08/26/13	1
Benzene	BDL	0.0030	mg/kg	8021/8015	08/25/13	5
Toluene	BDL	0.030	mg/kg	8021/8015	08/25/13	5
Ethylbenzene	BDL	0.0030	mg/kg	8021/8015	08/25/13	5
Total Xylene	0.34	0.0091	mg/kg	8021/8015	08/25/13	5
TPH (GC/FID) Low Fraction	58.	6.1	mg/kg	GRO	08/26/13	50
Surrogate Recovery-%			5. 5			
a,a,a-Trifluorotoluene(FID)	98.5		% Rec.	8021/8015	08/26/13	50
a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021/8015	08/25/13	5
TPH (GC/FID) High Fraction Surrogate recovery(%)	22.	4.8	mg/kg	3546/DRO	08/27/13	1
o-Terphenyl	87.3		% Rec.	3546/DRO	08/27/13	1

Results listed are dry weight basis. BDL - Below Detection Limit Det. Limit - Practical Quantitation Limit(PQL) Note:

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# Summary of Remarks For Samples Printed 08/27/13 at 15:52:39

TSR Signing Reports: 288 R2 - Rush: Next Day

Domestic Water Well Sampling-see L609759 Lobato for tests  $\mbox{EDD's}$  on ALL projects  $\mbox{email}$  James, Kurt and Logan all reports

Sample: L653880-01 Account: XTORNM Received: 08/24/13 09:00 Due Date: 08/28/13 00:00 RPT Date: 08/27/13 15:52 Sample: L653880-02 Account: XTORNM Received: 08/24/13 09:00 Due Date: 08/28/13 00:00 RPT Date: 08/27/13 15:52 Sample: L653880-04 Account: XTORNM Received: 08/24/13 09:00 Due Date: 08/28/13 00:00 RPT Date: 08/27/13 15:52 Sample: L653880-05 Account: XTORNM Received: 08/24/13 09:00 Due Date: 08/28/13 00:00 RPT Date: 08/27/13 15:52



XTO Energy - San Juan Division Logan Hixon 382 County Road 3100

Aztec, NM 87410

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Quality Assurance Report Level II

L653880

August 27, 2013

Analyte	Result	Labora	tory#Blank ; % R		Limit '	Batch	Date Analyzed
Total Solids # #F7	3/21/U		W. S. S. S.			WG678700	08/26/13 11:16
Total Solids TPH (GC/FID) High Fraction	< .1 < 4	* mg/kg					08/26/13 11:25 08/26/13 08:48
o-Terphenyl Benzene Ethylbenzene	< .0005	% Rec mg/kg		.60	50-150	WG678709	08/26/13 08:48 08/25/13 15:15
Toluene: TPH (GC/FID) Low Fraction Total Xylene	< .0005 < .005 < .1 < .0015	mg/kg mg/kg mg/kg mg/kg				₩G678709 WG678709	08/25/13 15:15 08/25/13 15:15 08/25/13 15:15 08/25/13 15:15
a,a,a-Trifluorotoluene(FID) a,a,a-Trifluorotoluene(PID)		% Rec		. 20 (1) (1) . 0	54-144	WG678709	08/25/13 15:15 08/25/13 15:15
TPH (GC/FID) Low Fraction a,a,a-Trifluorotoluene(FID) a,a,a-Trifluorotoluene(FID)		% Rec % Rec	. 99	.40 .0	59-128 54-144	WG678782	08/26/13 14:21 08/26/13 14:21 08/26/13 14:21
Analyte	Units	Result	plicate Duplicate	RPD	Limit	Ref Samp	Batch
Total Solids (s)	8	90:.0	89.9	0.617	5	L653880	-01 WG678700
Total Solids	*	94.0	94.0	0.177	5	L653948	-06 WG678701
Analyte	Units	Laboratory Known Val		mple esult	% Rec	Limit	Batch
Total Solids	<b>*</b>	50, 4 (1)		0. [4]	100%	85-115	WG678700
Total Solids TPH (GC/FID) High Fraction o-Terphenyl	ቼ mg/kg	50 60	50. 45.		100. 75.5 76.70	85-115 50-150 50-150	WG678701 WG678752 WG678752
Benzene Ethylbenzene	mg/kg mg/kg	. 05 . 05	CARLEDDAY CHAIR CON LINE	471	96.3 94.2	70-130 70-130 70-130	WG678709 WG678709
Total Xylene a,a,a-Trifluorotoluene(PID) TPH_(GC/FID) Low Fraction	mg/kg mg/kg mg/kg	.15 .15	0.0		96.8 95.8 99.70 78.7	70-130 70-130 54-144 63:5-137	WG678709 WG678709 WG678709 WG678709
a,a,a-Trifluorotoluene(FID)  TPH (GC/FID) Low Praction (FID)  a,a,a-Trifluorotoluene(FID)	mg/kg;	5.5		4	98.90 69.77 98.90	59-128 63:5-137 59-128	WG678709 WG678782 WG678782

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



XTO Energy - San Juan Division Logan Hixon 382 County Road 3100

Aztec, NM 87410

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Quality Assurance Report Level II

L653880

August 27, 2013

Analyte	Units	Laborator Result	y Control Ref	Sample Dup %Rec	a vedanicus was seen as	nit	RPD	Limit	Batch
TPH (GC/FID) High Fraction o-Terphenyl	mg/kg	46.7/	45.3	清 78.10 78.10	Contract to the contract of th	-150 -150	3,06	20	WG678752 WG678752
Benzene Ethylbenzene	mg/kg mg/kg	0.0506 0.0495	0.0482 0.0471	99.0	70	130; 130	4.93 4.94	20 <b>3</b> 20	WG678709 WG678709
Toluene Total Xylene  a,a,a-Trifluorotoluene(PID)	mg/kg mg/kg	0.0504 0.151	0.0484 0.144	101. 	70	-130 -130 -144	4.02 4.61	20 20 - 20 ·	WG678709 WG678709 WG678709
TPH (GC/FID) Low Fraction a,a,a-Trifluorotoluene(FID)	mg/kg	4.18	4.33	76.0 1. 98 90	the comment of the comment of the	.5-137 -128	3.43	20	₩G678709 ₩G678709
TPH (GC/FID) Low Fraction a,a,a,Trifluorotoluene(FID)	mg/kg	4.07	3.84	74.0 99.10		.5-137 -128	5.95	20	WG678782 WG678782
Analyte	Units	MS Res	Matrix Ref F		% Rec	Limit		Ref Samp	Batch
Benzene Ethylbenzene	mg/kg mg/kg	0,229 0.227	0	.05	91.7	49%7- 40.8-	e Marchael Contraction of the March	L653752-01	₩G678709 ₩G678709
Toluene Total Xylene 3 a,a,a-Trifluorotoluene(PID)	mg/kg mg/kg	0.238 0.701	0 	.05	95.2 93.3 99.70	49.8- 41.2- 54-14	132 140	L653752-01 L653752-01	WG678709 WG678709 WG678709
TPH (GC/FID) Low Fraction a,a,a=Trifluorotoluene(FID)	mg/kg	18.2	0	5.5	99.70 66.1 98.30	28.5- 28.5- 259-12	138	L653752-01	WG678709 WG678709 WG678709
TPH (GC/FID) Low Fraction a,a,a-Triffuorotoluene(FID)	mg/kg	17.5	0 31:11:11:11	5.5	63.6 297.70	28.5- 59-12		L653513-07	WG678782 WG678782
TPH (GC/FID) High Fraction o-Terphenyl	mg/kg	45.4	2.43	60	71.6 84.40	50-15 30-15		L653880-01	WG678752 WG678752
Analyte .	Units	Mat MSD	rix/Spike Ref	Duplicate %Rec	Limit	RPD	Limit	Ref Samp	Batch
Benzene Ethylbenzene	mg/kg mg/kg	0.250 ( )	0.229	100.	49.7-127 40.8-141	8.65 7.63	23.5 23.8	L653752-01 ### L653752-01	
Toluene Total Xylene	mg/kg mg/kg	0.243 0.251 0.738	0.238 0.701	100. 198.2	49.8-141 49.8-132 41.2-140	7.63 5.42 [4]5.10	23.8 23.5 23.7	L653752-01	WG678709 WG678709
a,a,a-Trifluorotoluene(PID) TPH (GC/FID) Low Fraction a,a,a-Trifluorotoluene(FID)	mg/kg	19.2	18.2	100.0 69.7	54-144 28.5-138 59-128	5.26	23.6	L653752-01	WG678709 WG678709 WG678709
TPH (GC/FID) Low Fraction a,a,a-Trifluorotoluene(FID)	mg/kg	16.8	17.5	60.9 - ≵97.60	28.5-138 59-128)	4.35	23.6	L653513-07	WG678782 WG678782
TPH (GC/FID) High Fraction o-Terphenyl	mg/kg	47.0	45.4	74.3 85.70	50-150 50-150	3.46	20	L653880-01	WG678752 WG678752

Batch number /Run number / Sample number cross reference

WG678701: R2791401: L653880-01 02 03 WG678701: R2791422: L653880-04 05

WG678752: R2791442 R2793005: L653880-02 04 05 01 03

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

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



#### YOUR LABORNCHOICE

XTO Energy - San Juan Division Logan Hixon 382 County Road 3100

Aztec, NM 87410

WG678709: R2791922: L653880-01 02 03 04 05 WG678782: R2792320: L653880-05

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Est. 1970

August 27, 2013

\* 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.'

Quality Assurance Report Level II

L653880



XTO Energy - San Juan Division Logan Hixon 382 County Road 3100

Aztec, NM 87410

Quality Assurance Report Level II

L653880

August 27, 2013

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

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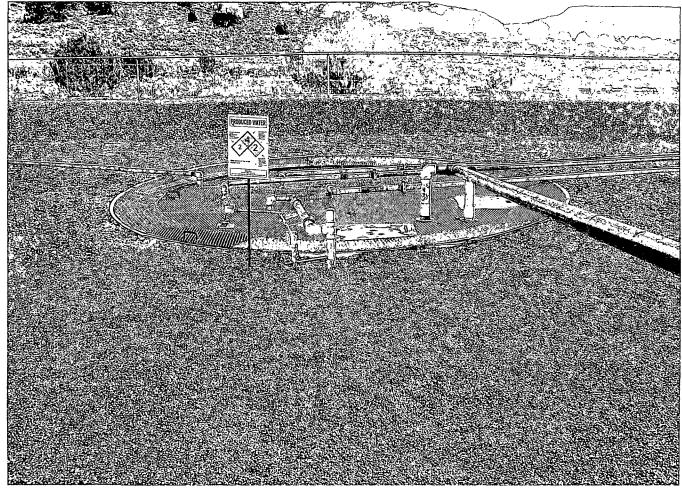
The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the 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.





09/11/2013

XTO

Division Denver

Dates

06/01/2008 - 09/01/2013

Type Route Stop

Type Value 1

RouteName DEN NM Run 44A		StopName FEASEL FRED J	001F	Pumper Fowler, Kelvin	Foreman Mulnix, John	WellName FRED FEASEL J	01F	APIWellNumber 3004533589			Section Range Township 34 10W 28N
InspectorName	Inspection Date	Inspection Time	Visible LinerTears	VisibleTankLeak Overflow	Collection OfSurfaceRun	Visible LayerOil	Visible Leak	Freeboard EstFT	PitLocation	PitType	Notes
K Fowler	07/28/2008	09:45	No	No	No	Yes	No	2			
K Fowler	08/21/2008	11:50	No	No	No	Yes	No	3			
K Fowler	09/22/2008	11:15	No	No	No	Yes	No	4			
K Fowler	10/25/2008	11:00	No	No	No	Yes	No	3	Compressor Water Pit	Above Ground	
K Fowler	11/29/2008	11:10	No	No	No	Yes	No ·	3	Compressor Water Pit	Above Ground	
K Fowler	12/27/2008	11:20	No	No	No	Yes	No	3	Compressor Water Pit	Above Ground	
K Fowler	01/26/2009	10:45	No	No	No	Yes	No	4	Compressor Water Pit	Above Ground	
J CHENAULT	02/16/2009	09:15	No	No	No	Yes	No	5	Compressor Water Pit	Above Ground	JC
J CHENAULT	03/12/2009	09:15	No	No	No	Yes	No	5	Compressor Water Pit	Above Ground	JC
J CHENAULT	04/29/2009	09:15	No	No	No	Yes	No	4	Compressor Water Pit	Above Ground	JC
J CHENAULT	05/04/2009	10:15	No	No	No	Yes	No	6	Compressor Water Pit	Below Ground	JC
J CHENAULT	06/02/2009	12:15	No	No	No	Yes	No	4	Compressor Water Pit	Below Ground	JC
J CHENAULT	07/07/2009	10:45	No	· No	No	Yes	No	2	Compressor Water Pit	Below Ground	JC
J CHENAULT	08/12/2009	10:15	No	No	No	Yes	No	1	Compressor Water Pit	Below Ground	JC .
J CHENAULT	10/29/2009	10:00	No	No	No	Yes	No	4	Compressor Water Pit	Below Ground	1C
KFOWLER	01/19/2010	10:00	No	No	No	Yes	No	4	Compressor Water Pit	Below Ground	KF
KFOWLER	03/24/2010	10:00	No	No	No	Yes	No	2	Compressor Water Pit	Below Ground	KF
LHOOVER	04/14/2010	09:15	No	No	No	Yes	No	3	Compressor Water Pit	Below Ground	Two 3" holes in expanded metal LH
LHOOVER	05/18/2010	09:15	No	No	No	Yes	No	3	Compressor Water Pit	Below Ground	LH
kfowler	11/17/2010	08:15	No	No	No	Yes	No	3	Compressor Water Pit	Below Ground	kf
kfowler	12/13/2010	09:15	No	No	No	Yes	No	3	Compressor Water Pit	Below Ground	kf
kfowler	01/06/2011	10:15	No	No	No	Yes	No	3	Compressor Water Pit	Below Ground	kf
kfowler	02/10/2011	10:45	No	No	No	Yes	No	4	Compressor Water Pit	Below Ground	kf
kfowler	03/28/2011	10:45	No	No	No	Yes	No	4	Compressor Water Pit	Below Ground	kf
kfowler	04/27/2011	09:45	No	No	No	Yes	No	4	Compressor Water Pit	Below Ground	kf
kfowler	05/12/2011	09:00	No	No	No	Yes	No	4	Compressor Water Pit	Below Ground	kf
kfowler	6/10/2011	10:00	No	No	No	Yes	No	3	Compressor Water Pit	Below Ground	kf
kfowler	7/29/2011	1:30	No	No	No	Yes	No	3	Compressor Water Pit	Below Ground	kf
kfowler	8/20/2011	1:00	No	No	No	Yes	No	3	Compressor Water Pit	Below Ground	kf
kfowler	9/15/2011	12:00	No	No	No	Yes	No	3	Compressor Water Pit	Below Ground	kf
kfowler	1/11/2012	12:00	No	No	No	Yes	No	3	Compressor Water Pit	Below Ground	kf
bg	5/30/2012	8:50	No	No	No	Yes	No	4	Compressor Water Pit	Below Ground	