District I 1625 N. Frence Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

#### State of New Mexico Energy Minerals and Natural Resources Department Oil Conservation Division 1220 South St. Francis Dr.

Santa Fe, NM 87505

Revised June 6, 2013

Form C-144

For temporary pits, below-grade tanks, and multi-well fluid management pits, submit to the appropriate NMOCD District Office.

For permanent pits submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

Pit, Below-Grad	
Type of action: Below grade tank registration  Permit of a pit or proposed alternation	Ve method
$45-06295$ $\square$ Closure of a pit, below-grade tank, a $\square$ Modification to an existing permit/of	or proposed alternative method NOV 1 3 2014
	existing permitted or non-permitted pit, below-grade tank,
or proposed alternative method	
Instructions: Please submit one application (Form C-144) per Please be advised that approval of this request does not relieve the operator of liability sh	
environment. Nor does approval relieve the operator of its responsibility to comply with	any other applicable governmental authority's rules, regulations or ordinances.
operator: XTO Energy Inc	OGRID#: <b>5380</b>
4.11 202 P. 1.2100 A.4. NP4.07440	
Facility or well name: <u>Jack Frost B #2</u>	
API Number: <u>30-045-06295</u> OCD Pe	
U/L or Qtr/Qtr: <u>D</u> Section <u>27</u> Township: <u>27</u>	
Center of Proposed Design: Latitude 36.550810 Longit	
Surface Owner: ☑ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotme	nt
☐ Pit:       Subsection F, G or J of 19.15.17.11 NMAC         Temporary:       ☐ Drilling       ☐ Workover         ☐ Permanent       ☐ Emergency       ☐ Cavitation       ☐ P&A       ☐ Multi-Well Fluid Mana         ☐ Lined       ☐ Unlined       Liner type: Thickness      mil       ☐ LLDPE       ☐ F         ☐ String-Reinforced	HDPE PVC Other
Below-grade tank: Subsection I of 19.15.17.11 NMAC	•
	ced Water
Tank Construction material: Steel	
<ul> <li>☐ Secondary containment with leak detection</li> <li>☐ Visible sidewalls, liner, 6-inc</li> <li>☐ Visible sidewalls and liner</li> <li>☐ Visible sidewalls only</li> <li>☐ Other</li> </ul>	·
Liner type: Thicknessmil  HDPE PVC Othe	
Emer type. Timeknessinit Tib/E Tve Gine	
Alternative Method:	
Submittal of an exception request is required. Exceptions must be submitted to the	e Santa Fe Environmental Bureau office for consideration of approval.
5.	
Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, tempor	
Chain link, six feet in height, two strands of barbed wire at top (Required if loc institution or church)	aiea wiinin 1000 jeel oj a permanent restaence, school, nospital,
☐ Four foot height, four strands of barbed wire evenly spaced between one and fo	our feet $\mathcal{O}(\mathcal{O})$
Alternate. Please specify	

Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)  Screen Netting Other	
☐ 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 19.15.16.8 NMAC	
Variances 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:  Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.  Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	
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 accematerial are provided below. Siting criteria does not apply to drying pads or above-grade tanks.	ptable source
General siting	
Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank.  - \[ \sum \text{NM Office of the State Engineer - iWATERS database search; } \sum \sum \sum \sum \text{USGS; } \sum \text{Data obtained from nearby wells} \]	Yes No
Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit.  NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	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. ( <b>Does not apply to below grade tanks</b> )  - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within the area overlying a subsurface mine. (Does not apply to below grade tanks)  - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area. (Does not apply to below grade tanks)  - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No
Within a 100-year floodplain. (Does not apply to below grade tanks) - FEMA map	Yes No
Below Grade Tanks	
Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;.  - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)	
Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.)  - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a occupied 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 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application.  NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No

	,
Within 100 feet of a wetland.  - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Temporary Pit Non-low chloride drilling fluid	
Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any 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 spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application;  - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet of a wetland.  - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Permanent Pit or Multi-Well Fluid Management Pit	
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 1000 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 spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application.  - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ 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
Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 Natractions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the docattached.  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. and 19.15.17.13 NMAC Previously Approved Design (attach copy of design) API Number:  or Permit Number:	NMAC 15.17.9 NMAC
II.	
Multi-Well Fluid Management Pit Checklist: Subsection B of 19.15.17.9 NMAC  Instructions: Each of the following items must be attached to the application.  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  A List of wells with approved application for permit to drill associated with the pit.  Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19 and 19.15.17.13 NMAC  Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC  Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC  Previously Approved Design (attach copy of design) API Number:  or Permit Number:	.15.17.9 NMAC

12.  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	daaumants ara
Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC	aveaments are
13.  Proposed Closure: 19.15.17.13 NMAC  Instructions: Places complete the applicable boxes. Poxes 14 through 18 in records to the proposed closure plan.	
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 Multi-well F 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) In-place Burial On-site Trench Burial Alternative Closure Method	luid Management Pit
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be 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 C 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 H of 19.15.17.13 NMAC  Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC	attached to the
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 soun provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. F 19.15.17.10 NMAC for guidance.	
Ground water is less than 25 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 between 25-50 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 ☐ 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 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, 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 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, 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
Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	
Within incorporated municipal houndaries or within a defined municipal fresh water well field covered under a municipal ordinance	Yes No

adopted pursuant to NMSA 1978 Section 3-27-3 as amended	
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 the area overlying a subsurface mine.  - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area.  - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	
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 closur by 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 E of 19.15.17.13 NMAC  Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K of 19.15  Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 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 19.15.17.13 NMAC  Waste Material Sampling Plan - based upon the appropriate requirements 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 of	.17.11 NMAC 19.15.17.11 NMAC
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 H of 19.15.17.13 NMAC Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC	
Operator Application Certification:  I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and	
Name (Print): Title:	<del></del>
Signature: Date:	
e-mail address:	
e-mail address:    Telephone:	ting the closure report.
e-mail address:    Telephone:	ting the closure report.
e-mail address:    Telephone:	ting the closure report. not complete this
e-mail address:    Telephone:	ting the closure report. not complete this 2010

Form C-144 Oil Conservation Division

Page 5 of 6

22. Operator Closure Certification:	
I hereby certify that the information and attachments submitted with this closure rep belief. I also certify that the closure complies with all applicable closure requirement	
Name (Print): James McDaniel	Title: EHS Supervisor
Signature:	Date: 11/11/19
e-mail address James McDaniel@xtoenergy.com	Telephone: (505) 333-3701
·	

<u>District 1</u> 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III
1000 Rio Brazos Road, Aztec, NM 87410 <u>District IV</u> 1220 S. St. Francis Dr., Santa Fe, NM 87505

#### State of New Mexico Energy Minerals and Natural Resources

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

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

Form C-141

Revised August 8, 2011

Release Notification and Corrective Action												
						OPE	RA	ГOR		☐ Initia	al Report 🛛 Final Report	
Name of Co	mpany: X	TO Energy	Inc.			Contac	t: Ja	mes McDaniel				
		100, Aztec, I		ico 87410				No.: (505) 333-3	3701			
Facility Nar								e: Gas Well (Ba		kota)		
						r donne,	1	e. eus wen (Be	25111 154	KOTU)		
Surface Ow	ner: BLM			Mineral C	Owner		<u> </u>			API No	. 30-045-06295	
					ATIO	N OF	REI	LEASE				
Unit Letter	Section	Township	Range	Feet from the	1	South I	line	Feet from the	1	Vest Line	County	
D	27	27N	10W	930	l	FNL	<u> </u>	1040	<u> </u>	FWL	San Juan	
			J		6.550810 CURE	_	]	: W <u>-107.8878.</u> E <b>ASE</b>	<u>30</u>			
		ed water w/ li		Oil		Volu	me of	Release: Unknov	vn	Volume R	lecovered: None	
Source of Re	lease: Histo	orical Earthen	Pit					lour of Occurrenc	e:		Hour of Discovery:	
Was Immedia	to Motion (	~ivon?	<del></del>	····			iown	W/L 0		5/12/2010		
was minieura	ne notice (		l Yes □	No 🗌 Not Re	eanired		don P	Whom? owell				
Dr. Whom?						l l					<del></del>	
By Whom? Was a Water	Nource Dead	ahad?				Date and Hour: 5/25/2010						
was a water	ourse Read		Yes [	l No		If YES, Volume Impacting the Watercourse. Unknown						
If a Waternan						Citation,						
		pacted, Descr em and Reme										
					alow ora	de tank	was t	ken out of carvio	a The	halow arad	e tank was located in the area	
											grade tank closure sample was	
											C-141 was approved by the	
								ed at this location		,	e i i i was approved by the	
		and Cleanup A										
					avation	Report	appro	ved by the NMO	CD on S	September 8	, 2010. A copy of the approved	
report is attac	hed to this	document for	your revie	w								
											uant to NMOCD rules and	
											eases which may endanger	
											eve the operator of liability	
											surface water, human health ompliance with any other	
		ws and/or regu		tance of a C-141	report de	Jes not	renev	e the operator of i	esponsi	Diffty for Co	omphance with any other	
roderar, state,		1/7	7					OIL CONS	SFRV	ATION	DIVISION	
Signature:	//		_ /					OIL COIN	JLIC V	MIIOIN	<u> DIVIBION</u>	
Printed Name	: James M	cDaniel				Approv	ed by	Environmental S	pecialist	:		
						ĺ					·	
Title: EHS St	ipervisor					<u>Approv</u>	al Dat	e:		Expiration I	Date:	
E-mail Addre	ss: James	McDaniel@>	ctoenergy.	com		 Conditi	ons of	`Approval:				
	, , , , , ,										Attached	

Phone: 505-333-3701

\* Attach Additional Sheets If Necessary

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

Lease Name: Jack Frost B #2 API No.: 30-045-06295

Description: Unit D, Section 27, Township 27N, 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 July 8, 2010

- 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 July 8, 2010
- 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-site for the continued production of oil and gas.
- 7. XTO will test the soils beneath the below-grade tank to determine whether a release has occurred. 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 100mg/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.

No sample was collected.

- 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.

  Please see the attached C-141 for remediation activities, and reference the previously submitted C-141 and Excavation Report approved on September 8, 2010.
- 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, with a division prescribed soil cover.

- 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
  - ii. Location by Unit Letter, Section, Township, and Range

Due to a historical remediation project occurring at this location, the proper BGT closure protocols were not followed for this particular BGT, and a notification was inadvertently not submitted.

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.

Due to a historical remediation project occurring at this location, the proper BGT closure protocols were not followed for this particular BGT, and a notification was inadvertently not submitted.

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 upon P&A.

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 site has been backfilled to match these specifications.

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 or planting will be continued until successful vegetative growth occurs.

The site will be reclaimed pursuant to the BLM MOU upon P&A.

- 14. All closure activities will include proper documentation and be available for review upon request and will be submitted in closure report form to  $\Phi$ CD 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; **Not made**
  - ii. Details on capping and covering, where applicable; per OCD Specifications
  - iii. Inspection reports; attached
  - iv. Confirmation sampling analytical results; NA
  - 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); **NA**
  - viii. Photo documentation of the site reclamation, attached
- 15. This closure report is being submitted after the 60 day deadline required by the 'Pit Rule' due to a misunderstanding of the 'Pit Rule' in 2010.



## Well Below Tank Inspection Report

RouteName		StopName		Pumper	Foreman	WellNam	е		APIWellNumber	Section	Range	Township
DEN NM Run 44B		FROST JA	CK B 002	Yancey, Dusten	Mulnix, John	JACK FR	OST B 02		3004506295	27,	10W	27N
InspectorName	Inspection Date	Inspection Time	Visible LinerTears	VisibleTankLeak Overflow	Collection OfSurfaceRun	Visible LayerOil	Visible Leak	Freeboard EstFT	PitLocation PitType	Notes		
Ken Mills	08/20/2008	11:25	No	Yes	No	Yes	No	2				
Ken Mills	09/11/2008	08:45	No	Yes	No	Yes	No	3				
ERIC SCHUSTER	10/28/2008	11:25	No	Yes	No	Yes	No	3				
ERIC SCHUSTER	11/22/2008	11:40	No	Yes	No	Yes	No	3	Well Water Below 0	Ground		
ERIC SCHUSTER	12/15/2008	12:15	No	Yes	No	Yes	No	4	Compressor Below C	Ground		
KEN MILLS	01/15/2009	09:15	No	Yes	No	Yes	No	4	Compressor Below C	Ground		
KEN MILLS	02/28/2009	08:40	No	Yes	No	Yes	No	3	Compressor Below C	Ground		
KEN MILLS	03/27/2009	11:10	No	Yes	No	Yes	No	3	Compressor Below C	Ground		
KEN MILLS	04/23/2009	08:45	No	Yes	No	Yes	No	3	Compressor Below C	Ground		
J CHENAULT	05/27/2009	11:30	No	Yes	No	Yes	No	2	Compressor Below C	Ground		
KEN MILLS	06/20/2009	10:25	No	Yes	No	Yes	No	4	Compressor Below C	Ground		
JC	07/31/2009	02:30	No	Yes	No	Yes	No	3	Compresso Below C	Ground		
JC	08/31/2009	02:10	No	Yes	No	Yes	No	3	Compressor Below C	Ground		
 JC	09/10/2009	01:55	No	Yes	No	Yes	No	2	Compresso Below C	Ground		
JC	10/15/2009	02:40	No	Yes	No	Yes	No	2	CompressorBelow-G	Ground———		
JC	11/20/2009	03:00	No	Yes	No	Yes	No	2	Compresso Below C	Ground		
JC	12/21/2009	10:50	No	Yes	No	Yes	No	3	Compresso Below C	Ground		
KM	01/08/2010	09:30	No	Yes	No	Yes	No	3	Compresso Below C	Ground		
KM	02/10/2010	09:20	No	Yes	No	Yes	No	2	Compresso Below C	Ground		
KM	03/22/2010	11:20	No	Yes	No	Yes	No	3	Compresso Below C	Ground		
KM	04/21/2010	12:50	No	Yes	No	Yes	No	0	Compresso Below G	work is being d	one on pit	
KM	05/28/2010	01:55	No	Yes	No	Yes	No	0	Compresso Below C			
KM	06/07/2010	08:05	No	Yes	No	Yes	No	5	Compresso Below C	work is being d	one on pit	
KM	07/07/2010	08:50	No	Yes	No	Yes	No	5	Compresso Below G	work is being d	one on pit	

# XTO Energy Inc. Jack Frost B #2 (30-045-06295) Section 27 (D), Township 27N, Range 10W

Closure Date: July 8, 2010

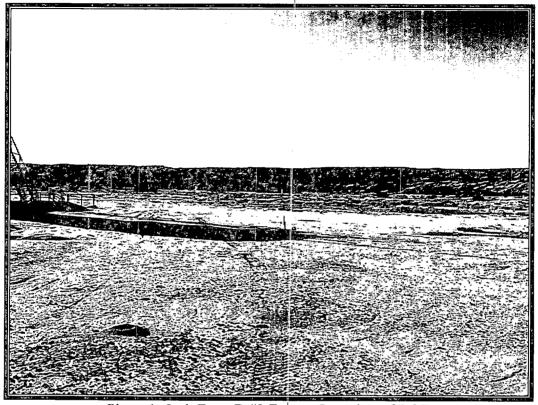


Photo 1: Jack Frost B #2 Former Location of BGT



Photo 2: Jack Frost B #2 Former Location of BGT

District 5
1625 N. French Dr., Holds, NM 88240
District II
1701 W. Grand Avenue, Artesia, NM 88210
District III
1600 Rio Brozos Read, Ardee, NM 87440
District IV
1720 S. St. Francis Dr., Santa Fe, NM 87305

Date: 8/16/2010

### 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 Oxober 10, 2003

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

1/220 S. St. Fran	eses Or., Sann,	1 Fa, NM 87300		Sa	ınta Fe	, NM	J 8751	05					इम्बट छ। मन्त्र
			Rele	ase Notific	cation	and	Co	rrective A	ctio	1			
						OPE	RAT	FOR		☐ laiti	ai Report	Ø	Final Report
Name of Co	опараду: Х	TO Energy,	Ine,					res McDaniel			:		
		00, Aztec, N						Ma.: (505) 333-1					
Facility Nat	me: Jack F	rost B #2 (3	0-045-06	295)		acitity	<u>∲Typ</u>	e: Gas Well (D	akota)				- <del>15</del> , - <del>10-</del>
Sarface Ow	ner: Feder	al	Mineral (	)waer:			F1051		Lease ?	Vo.:			
			ATION	.OF	REL	ÆASE							
Wait Letter	Section	Township	Range	Feet from the	North/9			Feet from the	Igagt/	West Line	County		No.
ם	27	27N	IOW	930		ľNI,	"	1040	]	fwi,	San Juan		
L	<u>}</u>	ll		<u> </u>	L		<u> </u>	<del></del>	li .		ECUD RUG	18"	<del>10</del>
				Latitude: 3	6 <u>.55094</u>	Long	gitude	e: <u>-107.88842</u>		Ī	DIL CONS		•
				NAT	TURE (	OF E	RELI	EASE			DIST.	3	
				Oil/Condensate	*****	Vein	mve of	Release: Unkrwy			Recovered:		
Source of Re	Conso: (Farth	ien Pit/Histori	cal Produc	aion Tack Overfl	low:		and H www	our of Occurren	ce:		Hour of Dis	covery	:
Was lawadi	ste Notice (	Given?		- water than the state of the s				Whom?		5/12/2011			
The state of the s	che i distre		Yes 📋	No 🗀 NorR	equired		don Pe						
By Whom? J	anses McDa	iniel		***************************************	Virginia de la composición dela composición de la composición de la composición de la composición de la composición dela composición de la composición dela composición de la			our 5/25/2010		0.000000000000000000000000000000000000	<b>*************************************</b>	TOPE	************
Was a Water	course Rea		34 C	) k:.			ES, Vo nown	dome Imparting	the Wat	lerggange,			
	***	Ø				Oligi	newn		<u></u>				
		pacted, Deser		anetivities. 15 bl	hallai matta anna		nev.e.e	والمتم الاستموميين	المعسمة	e a come madilion	سأحطيكم أممر	والمستوارة	n.a
				regulatory standa								egidi iikis	"6
		-			**************************************								
		em and Renser		n Taken." Tely 2 bbls of war	ter lend av	ചാഴിയാവ	ued fra	en the somethe wit	istok∈ (	In May 17	2010 escay	anion a	erivities
began to elea	n up the 2 t	obas rebense. I	he site ha	d been ranked pri	or to exc	a vati ģr	ո քյամն	iant to the NMO	CD Gui	delines for	the Remedia	ជាតិចេក ស ែ	Leaks, Spills
				n estimated depth									
				10 ppm between a discovered. The									
pit's operatio	a. On May	· 25 <sup>th</sup> , 2010, gr	oundwale	r was discovered	during ea	(cava)i	ion act	ivities, and Bran	don Per	vell, OCD /	Aztec Office	ุ กฅเรี №	tark Kelly,
				tcDaniel with XT									
		opies were col ivities is ambal		in the excavation or reference.	iriik retizi	ned re	SHEIN EI	caises the seffurne	GEV SIZIE	ziardş beter	BRIDER KAFARI	is saic.	er refrare
Ę.			<u>'</u>										
		and Cleanup / oleted by LT f		cen,* intal documenting	e onsite a	ctivitie	25.						
İ									······································			mark —	
I hereby certi	ify that the Removable	information gi	ven above	is true and comp adfor like certain (	Mete to th	e best Sistem	of my	knowledge and (	underst edios no	and that per Name for re-	saam to NM benoe selsich	OCD n umay é	pilos nisti istlemistr
public beafth	or the cavi	remment. The	ассернак	re of a C-141 rep	ort by the	NMO	CD m	urked as "Final I	Cepart"	dões not rei	lieve the ope	unter o	t Hability
should their o	operations I	rave lhilded to a	idequately	investigate and r	emediate	r çöndən	minati	on that pase a th	reat to g	greated water	r, surface w	aser, lin	man bealth
		ushnon, NMC ws and/op≠egr		nance of a C-141	vebart de	es not	, reinev	e line operator of	respens	adminy for c	omphoner (	wasi ang	y older
, icacca, mar		//	,	<i>f</i>				OIL CON	SER	VATION	DIVISIO	NC	
		Kant -	/	•				32					_
Signature:			/		<u>.</u> y	a maron	سطاليمي	Dieteier Samosis	ear D	, ,	1 11	, For	-: [
Printed Nam	g: James M	<u>çDaniel</u>			· ·	- Pitteria	een oy	District Supervis	· //	without a	mill		
Tiple: EH&S	Specialist							e: 9/8/10		Expiration			
			,						and the second of the second o		1		
E-mail Addr	esa: Jaimea	McDaniel@s	iochergy.t	oin	'	Londiti 	rons Ol	[Approval:			Anached		

Phone: 505-333-3701

#### **EXCAVATION REPORT**

JACK FROST B #2
SAN JUAN COUNTY, NEW MEXICO

August 12, 2010

Prepared for:

XTO ENERGY, INC Aztec, NM



## JACK FROST B #2

SAN JUAN COUNTY, NEW MEXICO

August 12, 2010

Prepared for:

XTO ENERGY, INC 382 CR 3100 Aztec, NM 87410

Prepared by:

LT ENVIRONMENTAL, INC. 2243 Main Avenue, Suite 3 Durango, Colorado 81301 (970) 385-1096



#### TABLE OF CONTENTS

EXECUTIV	E SUMMARY	<del></del>
SECTION 1.	0 INTRODUCTION	1-1
		1-1
•		-1  -1
SECTION 2.	0 SUMMARY OF FIELD ACTI	YITIES2-1
2.1	EXCAVATION ACTIVITIES	2-1
	2.1.1 Impacted Soil Removal 2.1.2 Impacted Groundwater Re	2-1 cmoval
SECTION 3.	0 ANALYTICAL RESULTS	3-1
SECTION 4.	0 SUMMARY AND CONCLUS	JONS4-1
	FIGUR	ES
	SITE LOCATION MAP EXCAVATION SITE MAP	
	TABL	ES
TABLE 1 TABLE 2	EXCAVATION SOIL ANALY LABORATORY RESULTS FR	TICAL RESULTS OM GROUNDWATER SAMPLES

#### APPENDIX

APPENDIX A LABORATORY REPORTS



#### **EXECUTIVE SUMMARY**

This report was prepared by LT Environmental, Inc. (LTE), on behalf of XTO Energy, Inc (XTO) to document remediation activities at the Jack Frost B #2 (Site). The Site is located in Unit D of Section 27 in Township 27 North and Range 10 West in San Juan County, New Mexico.

The scope of work for this project included mitigation of hydrocarbon impacts following a May 2010 release of condensate from a below grade pit tank at the Site. Soil impacted by this recent release was removed and disposed of along with historically impacted soil encountered in the subsurface. The perimeter of the final excavation was approximately 17,850 square feet. The excavation advanced to an average depth of 18 feet below ground surface (bgs) where groundwater was encountered. A vacuum truck was used to remove and dispose of impacted groundwater that profed within the open excavation. These activities contributed to overall remediation of the Site. A small, separate excavation was dug northwest of the primary excavation underneath the former location of a production tank. It consisted of removal of 161 cubic yards of soil. A final total of 7,233 cubic yards of impacted soil were excavated and transported to Envirotech Landfarm for disposal. Analytical results from soil confirmation samples indicated that the walls and floor of the excavation were remediated to below New Mexico Oil Conservation Division (NMOCD) standards. Analytical results from groundwater samples collected from the open excavation were below the New Mexico Water Quality Control Commission (NMWQCC) standard for benzene, toluene, ethylbenzene, and total xylenes (BTEX).



#### SECTION 1.0

#### INTRODUCTION

This report was prepared by LT Environmental, Inc. (LTE) for XTO Energy, Inc (XTO) to document excavation activities at the Jack Frost B #2 (Site). The purpose of this project was to remove hydrocarbon-impacted soils and groundwater from the Site.

#### 1.1 SITE DESCRIPTION

The Jack Frost B #2 is located in Unit D of Section 27 in Township 27 North and Range 10 West in San Juan County, New Mexico. The Site is situated near the headwaters of the Kutz Canyon arroyo of the San Juan River Drainage Basin. The production wellhead is approximately 90 feet northeast of the East Fork of Kutz Wash (Figure 1). Site geology is identified as Quaternary alluvium overlying the Nacimiento Formation and Ojo Alamo Sandstone. Shallow soils are composed of wind-blown alluvium, which are weathered from shale. Depth to groundwater at the site is less than 50 feet below ground surface (bgs) based on observations of groundwater pooling in the open excavation.

#### 1.2 SITE HISTORY

In May 2010, a small amount of produced water was released from a below ground storage tank situated in a wood cellar containment at the Site. The liquid overflowed into the bermed area and saturated the gravel containment area, XTO responded immediately and scheduled an excavation to remove impacted soil. XTO contracted LTE to oversee the excavation and collect confirmation samples for closure.

#### 1.3 SCOPE OF WORK

The scope of work for this remediation project included removal of impacted soil. Impacted soil was transported off site to the Envirotech Landfarm and replaced with clean fill from the Moss Pit. During on-site activities, LTE personnel conducted excavation oversight, collected soil and groundwater samples, field screened samples to segregate clean from impacted soils, monitored health and safety, and documented all field activities. A summary of field work, analytical results from soil and groundwater sampling, and conclusions are presented in the subsequent sections of this report.



#### SECTION 2.0

#### SUMMARY OF FIELD ACTIVITIES

#### 2.1 EXCAVATION ACTIVITIES

#### 2.1.1 Impacted Soil Removal

Excavation activities began on May 12, 2010. LTE was not on site from May 12, 2010 through June 8, 2010. During this time period, the soil immediately beneath the benned area was removed and XTO conducted field screening and sampling. On June 9, 2010, an LTE geologist took over excavation oversight from XTO personnel and noted evidence of impact within the existing pit beginning at approximately 6 feet bgs and extending to an average depth of 18 feet bgs. While excavating the primary release, soil impacted by other historical releases were identified and removed. Additional sources included a former earthen pit, one out-of-service below ground pipeline, and a production tank. The production tank had to be moved to allow for excavation of a separate, smaller area of impacted soil located beneath the tank.

During the excavation, LTE personnel conducted field screening of organic vapor concentrations with a photoionization detector (PID) according to New Mexico Oil Conservation Division (NMOCD) headspace techniques. LTE also collected confirmation samples of the side walls and floor of the excavation to document excavation activities.

Due to the duration and large size of the excavation, XTO worked with the NMOCD to subdivide the excavation and allow for backfilling portions shown to be clean prior to moving forward with additional soil removal. This strategy provided a larger and safer area for equipment operators to work.

The final dimensions of the primary excavation were approximately 170 feet long by 105 feet wide and the total depth of the excavation ranged from 15-19 feet bgs. The smaller hole was dug in the location of a former production tank immediately northeast. It was 25 feet wide by 35 feet long and 5 feet deep. A total estimated volume of 11,888 cubic yards of soil was excavated. Of that, 7,233 cubic yards of contaminated soil was transported to Envirotech Landfarm in Hilltop, New Mexico. The remainder was clean overburden that was used to backfill the hole.

Confirmation samples were collected for submittal to an analytical laboratory. Figure 2 presents the excavation extent and the location of composite soil samples collected from within the excavation. Composite soil samples were collected by depositing five aliquots of soil into plastic bags, thoroughly mixing the contents and sampling into four ounce glass jars. Samples were stored on ice and either dropped off at Envirotech Laboratory in Bloomfield, New Mexico or shipped to ESC Lab Sciences (ESC) in Nashville, Tennessee following strict chain-of-custody procedures. The soil samples were analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX) by U.S. Environmental



Protection Agency (USEPA) Method 8021 and total petroleum hydrocarbons (TPH) by USEPA Method 8015.

#### 2.1.2 Impacted Groundwater Removal

Approximately 15 barrels of impacted groundwater were pumped and transferred by Roberts Trucking to Basin Disposal SWD#1. Groundwater that pooled in excavation was sampled for BTEX by collecting a grab sample in a decontaminated pitcher or bailer and immediately filling three pre-cleaned and pre-preserved 40 milliliter (ml) glass vials with zero headspace to prevent degradation of the sample. The groundwater samples were shipped on ice to ESC and analyzed for BTEX according to USEPA Method 8021B.



#### SECTION 3.0

#### ANALYTICAL RESULTS

Results from laboratory testing of all soil samples collected during the excavation are listed on Table 1. Locations of soil samples collected for site closure are shown in Figure 2. Complete laboratory reports are included in Appendix A. Final laboratory analyses indicate that TPH concentrations in soils on the walls and the floor were beneath NMOCD standards for sites where groundwater is less than 50 feet deep.

Groundwater sampling results are presented in Table 2 and laboratory reports are in Appendix A. The groundwater sample collected from the excavation was below New Mexico Water Quality Control Commission (NMWQCC) standard for BTEX concentrations.



#### **SECTION 4.0**

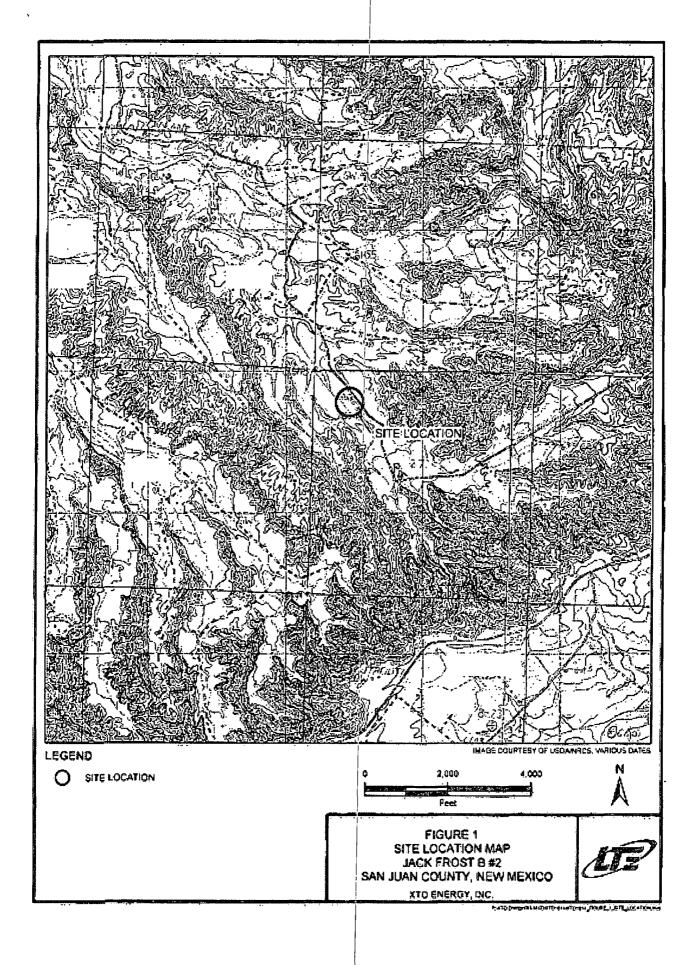
#### SUMMARY AND CONCLUSIONS

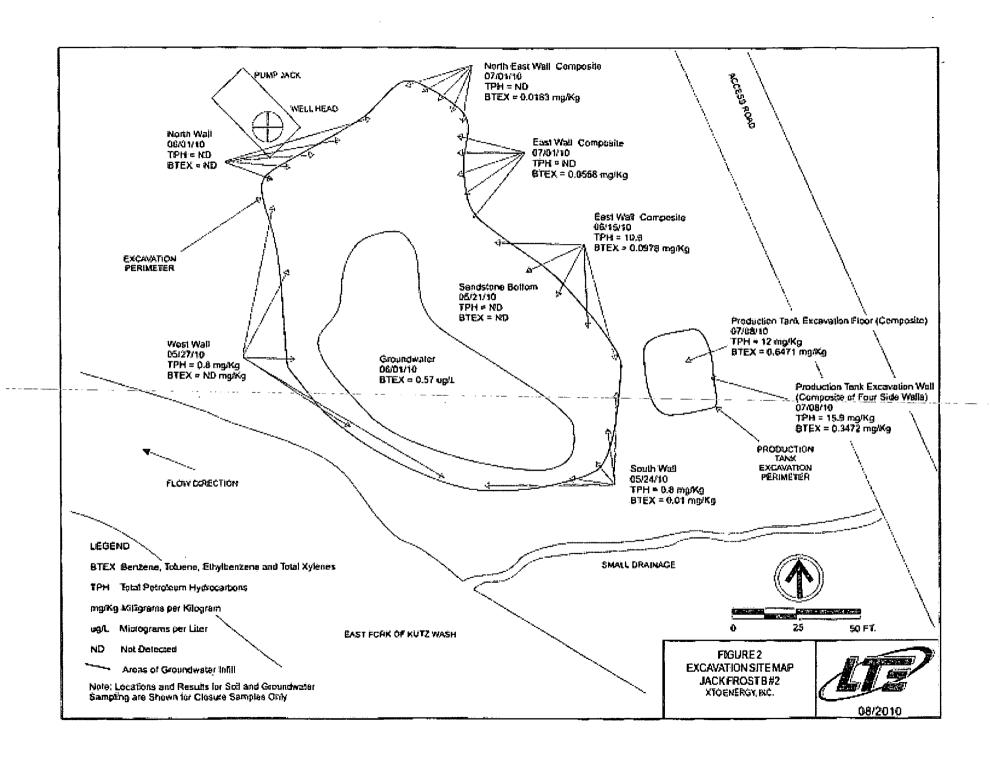
A total of 11,888 cubic yards of soil was excavated from the Site. Of those yards, 7,233 cubic yards were impacted by both the recent produced water release and by historical releases identified in the subsurface. Impacted soil was transported to the Envirotech Landfarm in Hilltop, New Mexico for disposal. XTO worked with the NMOCD to gain approval to backfill the excavation as progress was made towards ultimate removal of all impacted soil. Confirmation soil samples from the side walls and floor of the excavation were below NMOCD standards for BTEX and TPH concentrations. A vacuum truck collected 15 barrels of impacted groundwater, which was transported to Basin Disposal SWD #1 for proper disposal. BTEX concentrations in samples collected from pooling groundwater were below NMWQCC standards.



FIGURES







**TABLES** 



TABLE 1

#### SOIL ANALYTICAL RESULTS JACK FROST B #2 NTO ENERGY, INC.

Sample 0D	Date Satupled	Field Headspace Reading (ppm)	Betizene (mg/kg)	Tellurny (mg/kg)	Cthylbenzene (mg/kg)	Tesal Nylmes (mg/kg)	Lossi BLEX	DRO (mg/kg)	CRO (mg/kg)	TP86 देवासुरुस्
Sandylnac Borsom*	5/21/2010	- 1	<0,0023	40,028	<0.0023	₹0.0655	CIN	< 4.5	≤ (1,5¢)	ND
Sooth Walt*	5/24/2010 4		ēsco, d	0,3947	<0.0610	<0.032	0.01	63	0.5	63
Wost Wast	5/27/2010		<0.00090	<0.0010	<0.0010	<0.0021	NE)	-ti 1	0.8	0.3
North Waff*	6/1/2010		<0.0027	<0,022	< 0.6027	0.0052	ND	544	< 0.54	NEO
East Wall Composite*	6/15/2010	1	0,6524	0.0083	0.0109	0.0762	0.0978	60	4,9	10,9
North Wall Composite	6/36/2016	1700	0,036	0.152	0.608	5.371	5.997	10.9	195	105,9
North East Wat Compraire	7/1/2010	25	ម,អង2}	0,6025	0.0017	0.0120	0.0183	50 i	<0.2	ND
East Wall Composite*	7/1/2010	140	0.4039	0.0055	0.0035	0.6429	0.0568	<b>-50 š</b>	≪0.2	NZD
West Wall Comp*	7893010	21	0.0067	0.0078	<0.6610	0.6595	0.0240	503	80,2	KD
North Wall Comp*	788/2016	34.3	4,0299	0.0440	0.0097	0.6907	0.1741	14.3	154	39.7
Production Tank Exceptation Place"	7/8/2010	97	u,0024	0,0359	0.0254	U.3374	0.6473	6 ű	54	12,0
Production Tank Exercation Wall*	94892610	37.9	<्रा (159)	0.0015	0.0328	0.3229	0.3472	<03	154	15.9
NATOCO Standard	·		16	2-X112	1 0.032,0	V.2.2.7	Su	44,3		101

-Nutrice -

pera- pany per militar

ingite - malignam per kilograpi

BIEX . benerne, tolinine, ethylbentene, and istal sylener

BRO - Dienel Range Organies

GRO - Canaline Range Organies

s indicates result is terr than the stated laboratory method described large

ND - ner determen

olympa aciteralizatio kinil condital a \*

NATOCH - New Advices Od Conservation Commission

Buld fast indicates values expeciling NSORCE translates

TPH analysicating EPA Associated Meshest 80(5)

BTEX analyzed by EPA Method \$521

Missing fleid getreitete data represents a time getred when LTE was not in site fet enementoir uremight. Kit) entherent goil grantes disrang this time.



TABLE 2

## GROUNDWATER ANALYTICAL RESULTS JACK FROST B #2 XTO ENERGY, INC.

Sample 1D	Date Sumpled	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)
Groundwater	6/1/2010	0.57	<3.0	<0.5	<1.5
NMWOCC Standard	<u></u>	10	750	750	620

Notes:

ug/L - micrograms per titer

NMWQCC - New Mexico Water Quality Control Commission

< indicates result is less than the stated laboratory method detection limit

Benzene, tolome, ethylbenzene, and total xylenes analyzed by EPA Method 8021.