State of New Mexico District II 1625 N. French Dr., Hobbs, NM 88240 District III 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 E V D District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 2008 DEC 12 PN 4 13 State of New Mexico Energy Minerals and Natural Resources Department Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Santa Fe, NM 87505	Form C-14 July 21, 200 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 Bureau office and provide a copy to the appropriate NMOCD District Office.
Pit, Closed-Loop System, Below-Grade Troposed Alternative Method Permit or Closure In Type of action: Permit of a pit, closed-loop system, below-grade tank, or Description of a pit, closed-loop system, below-grade ta	Plan Application or proposed alternative method or proposed alternative method
Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system. Please be advised that approval of this request does not relieve the operator of liability should operations result is environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable go 1. Operator: XTO Energy, Inc. OGRID #:	in pollution of surface water, ground water or the overnmental authority's rules, regulations or ordinance
Address: #382 County Road 3100, Aztec, NM 87410 Facility or well name: _Texakoma Amoco A #1 API Number:	unty: San Juan
2. Pit: Subsection F or G of 19.15.17.11 NMAC Temporary:	ther I Dimensions: Lx Wx D
3. Closed-loop System: Subsection H of 19.15.17.11 NMAC	

Below-grade tank: Subsection I of 19.15.17.11 NMAC

Volume: 120 bbl Type of fluid:

Lined Unlined Liner type: Thickness

Liner Seams: Welded Factory Other

_bbl Type of fluid: _____Produced Water

Tank Construction material: Steel

Secondary containment with leak detection Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off

☐ Visible sidewalls and liner ☐ Visible sidewalls only ☒ Other Visible sidewalls, vaulted, automatic high-level shut off, no liner

Liner type: Thickness _____mil HDPE PVC Other

☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Haul-off Bins ☐ Other _

Alternative Method:

intent)

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

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

mil LLDPE HDPE PVC Other

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)	
Monthly hispections (it neutring of screening is not physically leastone)	
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	
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 accept material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate or may be considered an exception which must be submitted to 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 drying 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) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No ☑ NA
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 search; 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
Within an unstable area. - 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 FEMA map	☐ Yes ⊠ No

11.
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 Previously Approved Design (attach copy of design) API 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
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 Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Nuisance or Hazardous Odors, including H ₂ S, Prevention Plan Oil Field Waste Stream Characterization 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
Proposed Closure: 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) 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 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.	
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 <i>will not</i> be used for future ser Yes (If yes, please provide the information below) No	vice and operations?
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 G of 19.15.17.13 NMAC Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC	С
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. Justi 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 ☐ NA
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
 Within an unstable area. 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 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 plan 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 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 Subsection F 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 cannot 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	15.17.11 NMAC

Operator Application Certification:		
I hereby certify that the information submitted with this application is true, as		
		Environmental Representative
Signature: him (namplin	Date:	12-08-08
e-mail address: kim_champlin@xtoenergy.com	Telephone:	(505) 333-3100
20. OCD Approval: Permit Application (including closure plan) Closure	re Plan (only) 🔲 OCD	Conditions (see attachment)
OCD Representative Signature:		Approval Date: 11/30/2020
Title: Environmental Specialist	OCD Permit Num	aber: BGT 1
Closure Report (required within 60 days of closure completion): Subsect Instructions: Operators are required to obtain an approved closure plan prowed closure report is required to be submitted to the division within 60 days section of the form until an approved closure plan has been obtained and the	ior to implementing any of the completion of the	closure activities and submitting the closure report. closure activities. Please do not complete this been completed.
22.		
Closure Method: ☐ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alt ☐ If different from approved plan, please explain.	ternative Closure Method	Ⅱ Waste Removal (Closed-loop systems only)
23. Closure Report Regarding Waste Removal Closure For Closed-loop Syste Instructions: Please indentify the facility or facilities for where the liquids, two facilities were utilized.		
Disposal Facility Name:		Permit Number:
Disposal Facility Name:		Permit Number:
Were the closed-loop system operations and associated activities performed o Yes (If yes, please demonstrate compliance to the items below) No		be used for future service and operations?
Required for impacted areas which will not be used for future service and open Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique	erations:	
24. Closure Report Attachment Checklist: Instructions: Each of the following 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-site closure) □ Disposal Facility Name and Permit Number □ Soil Backfilling and Cover Installation □ Re-vegetation Application Rates and Seeding Technique □ Site Reclamation (Photo Documentation)	ire)	
On-site Closure Location: Latitude Lo	ongitude	NAD: L1927 L 1983
Operator Closure Certification: I hereby certify that the information and attachments submitted with this closure belief. I also certify that the closure complies with all applicable closure requirements. Name (Print):	irements and conditions	specified in the approved closure plan.
Signature:	Date: _	
e-mail address:		

DISTRICT

State of New Mexico Energy, Minerals and Natural Resources Department

Form C-102 Revised 1-1-39

OIL CONSERVATION DIVISION

P.O. Box 2088

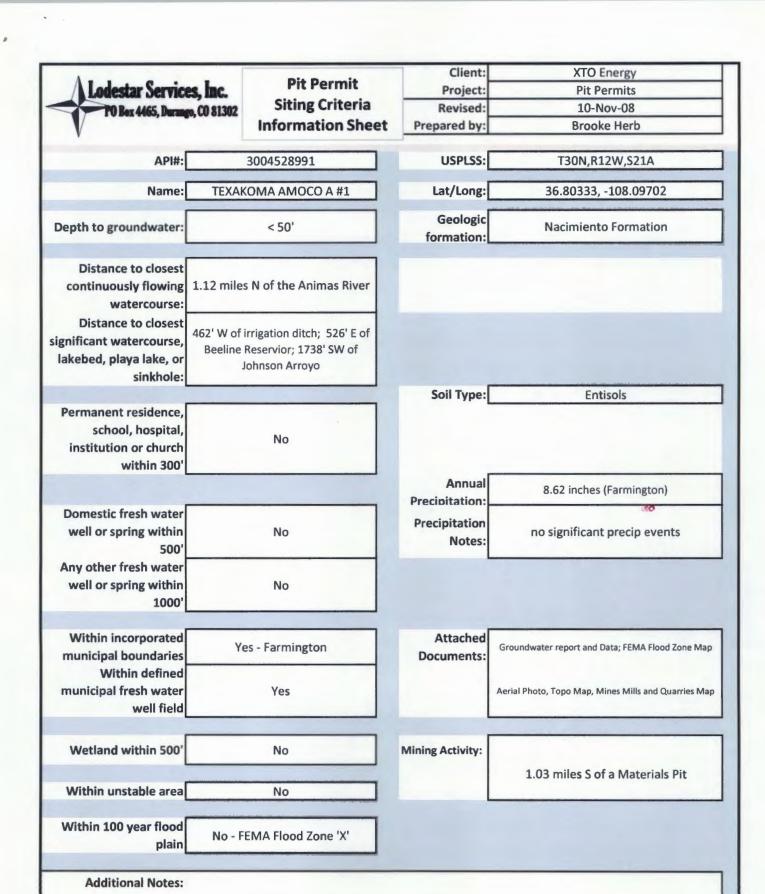
Santa Fe, New Mexico 87504-2088

DISTRICT II
P.O. Drawer DD, Anesia, NM 88210

P.O. But 1980, Hobbs, NM \$8240

DISTRICT III
1000 Ro Brillo Rd, Alles, NM 17410 · WELL LOCATION AND ACREAGE DEDICATION PLAT All Distances must be from the outer boundaries of the section

Орегыот . Т	BXAK	DMA O.	& G. COI	æ.	TEX	AKOMA-AMOC	0 A		wai # 1	_
Unit Letter A	Secuos	21	Townsup 30) N.	Range 12	w.	NMPM	County	N JUAN	
Actual Footage Loc.	of V		NORTH	line and		890	feet from	12.2	ST	
Ground level Elev. 5662		Producing	Formation		Pool				Deducated Acr	nge:
			and Coal	It has colored non	·	ruitland Coa			320	Acres
						enhip thereof (both 1s		ne interest a	nd musliwh	
					-	nterest of all owners be		_		
uniti 23	uioa, forc	e-pooling ac	7				×1 00130	manes by a	ANTENNUT TOOL,	
122mc	Yes r is "po" l	ist the owners		ioas which have		nsolidated. (Use rever	re side o	ſ		
	ı il secces vable will		the well until all	interests have b	een consolidated	(by communitization, t	2200	a. forced-poo	olian, or otherwise)	
or until a	1 000-stan	dard unit, elin	inating such inter	est, has been ap	proved by the Di	vision_		7		
							1	OPER	ATOR CERTIF	TCATION
						- 1			by exercify that crein in true and	- 1
	٠	1				04			owledge and belief	
	•	NM-02	24158			80		Signature _		`
		!			. 1	890	-를		to all	I fel
		Į.				890		rinted Nam		11.1010
 -		-		 -			-	A.R.	Kendrick	
		1						Position		
		i .				Fee	3	Agent Company		
		İ				`			oma Oil &	Gas Corp.
		I				}		Date		
E		!						Augus	t 19, 1993	<i>,</i>
Samma		i in name					唱	SURV	EYOR CERTI	FICATION
		i .			!			l hereby ce	rrify that the wel	ll location shown
		-			· · · · · · · · · · · · · · · · · · ·			on this pla	s was plosted fro	om field notes of
		1	•		(D) E U	EVE	ן ווח		reys made by m and that the so	
		4		1	M				the best of my	knowledge and
	•	Į			AUG	2 0 1993		belief.		
l L			,		OII_C	ON. DIV		Date Surve	AND A	2 7
				T		IST. 3		Signanar	A CONTRACT	Cal
		İ		-	•	, , , , , , , , , , , , , , , , , , ,	.	Profession	A CONTRACTOR	12/
11		1				I		E C	A DA A	
		ļ ,						1		18
		1				i		(8)		
						! 		Cerulicale	SEED LINE	7
			-	75-3			=		OVY	
0 230 660	990	1320 1650	1980 2310	26-10 2	000 1500	1000 500	0			



TEXAKOMA AMOCO A #1 Below Ground Tank Siting Criteria and Closure Plan

Well Site Location

Legals: T30N, R12W, Section 21, Quarter Section A Latitude/Longitude: approximately 36.80333, -108.09702

County: San Juan County, NM

General Description: near Beeline Reservoir

General Geology and Hydrology

The San Juan Basin is a typical Rocky Mountain basin with a gently dipping southern flank and a steeply dipping northern flank. Asymmetrically layered Tertiary sandstones and shales, along with Quaternary alluvial deposits dominate surficial geology (Dane and Bachman, 1965). The proposed below ground tank location will be located near Johnson Arroyo between the Farmington Glade and the Animas River near Flora Vista, New Mexico. The Nacimiento Formation of Tertiary Age is exposed, along with Quaternary alluvial and aeoloian sands within dry washes and arroyos.

Cretaceous and Tertiary sandstones, as well as Quaternary alluvial deposits serve as the primary aquifers in the San Juan basin (Stone et al., 1983). In most of the proposed area, the Nacimiento Formation lies at the surface. Thickness of the Nacimiento ranges from 418 to 2232 feet (Stone et al., 1983). Aquifers within the coarser and continuous sandstone bodies of the Nacimiento Formation are between 0 and 1000' deep in this section of the basin (Stone et al., 1983). Groundwater within these aquifers flows toward the nearby San Juan River and its tributaries.

The prominent soil type at the proposed site is entisols, which are defined as soils that do not show any profile development. Soils are basically unaltered from their parent rock. Miles of arroyos, washes and intermittent streams exist as part of the drainage network towards the La Plata River (www.emnrd.state.nm.us). These features often cut into soil and other unconsolidated materials, contributing to sedimentation downstream. The sudden influx of water from storm events easily erodes soils that cover the area.

The climate of the region is arid, averaging just over 8 inches of rainfall annually. As is typical of the southwestern United States monsoonal weather patterns, most precipitation falls from August through October. The heaviest rainfall occurs in the summer in isolated, intense cloudbursts. November through June is relatively dry. Snow generally falls from December to mid-February and averages less than one-half inch in depth. However, most recharge occurs during the winter months during snowmelt periods from the upper elevations (Western Regional Climate Center www.wrcc.dri.edu).

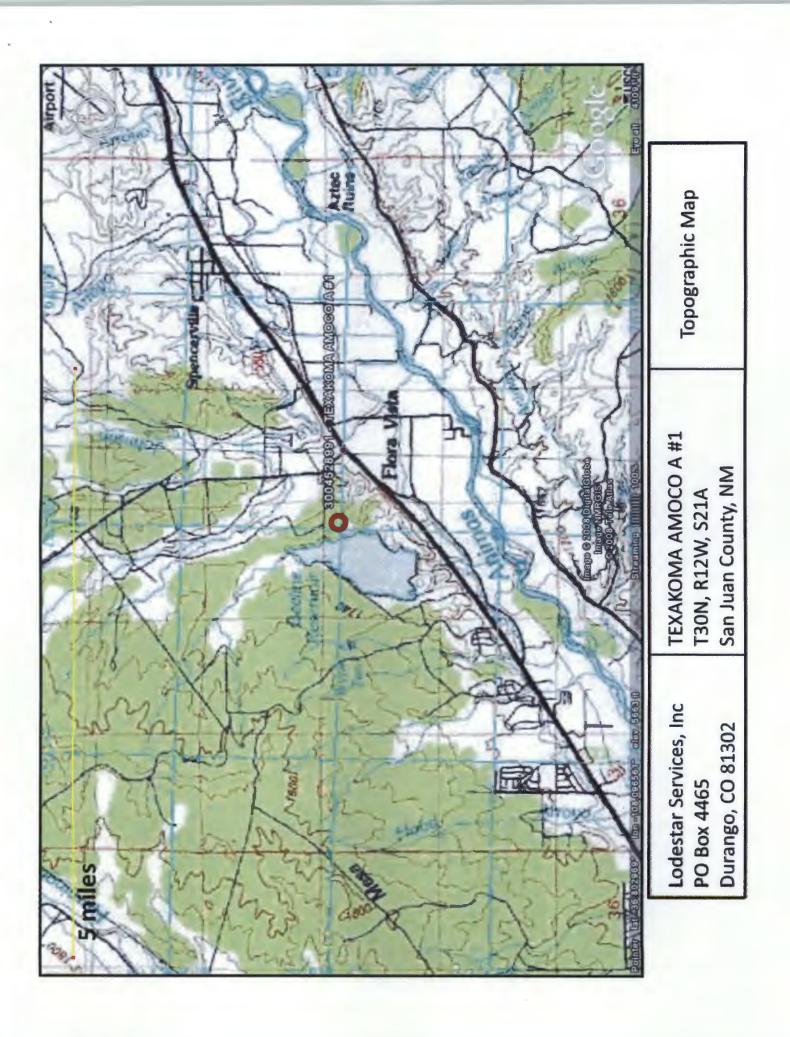
The predominant vegetation is sagebrush and grasses with a more restricted pinon-juniper association (Dick-Peddie, 1993).

Site Specific Hydrogeology

Depth to groundwater is estimated to less than 50 feet. This estimation is based on data from Stone and others, 1983 and depth to groundwater data published on the New Mexico State Engineer's iWaters Database website. Local topography and proximity to surface hydrologic features are also taken into consideration.

Local aquifers include sandstones within the Nacimiento Formation, which ranges from 0 to 1000 feet deep in this area, as well as shallow aquifers within Quaternary alluvial deposits (Stone et al., 1983). The 1000-foot depth range for Nacimiento aquifers covers an area over 20 miles wide, and depth decreases towards the margin of the San Juan Basin. The site in question is more centrally located, and depth to the aquifer is expected to be closer to 1000 feet. It is well known that groundwater close to the Animas River can be shallow, as the Quaternary deposits near the river itself form shallow aquifers. The proposed site is situated 1.12 miles to the northwest of the Animas River, and is approximately 200 feet higher in elevation (Google Earth).

Groundwater data available from the NM State Engineer's iWaters Database for wells near the proposed site are attached. A map showing the location of wells in reference to the proposed pit location is also included. Pinpoints show locations of wells and the labels for each pinpoint indicate depth to groundwater in feet. Wells are clustered to the south along the Animas River. Depth to groundwater within the nearby wells ranges from 12 feet to 100 feet below ground surface. The closest well to the proposed site is located approximately 1831 feet to the southeast, and is approximately 21 feet lower in topographic elevation (Google Earth). Depth to groundwater within the well is 50 feet below ground surface. A well to the northeast is approximately 34 feet lower in elevation then the proposed site. The depth to groundwater within the well is 19 feet below ground surface. This along with the close proximity to the Beeline Reservior suggests that the groundwater depth at the proposed site is less than 50 feet below ground surface.





Lodestar Services, Inc 15 PO Box 4465 Durango, CO 81302 Sa

TEXAKOMA AMOCO A #1 T30N, R12W, S21A San Juan County, NM

iWaters Groundwater Data Map

New Mexico Office of the State Engineer POD Reports and Downloads

Township: 30N Range: 12M Sections:

POD / Surface Data ReportAvg Depth to Water ReportWater Column Report

WATER COLUMN REPORT 10/15/2008

Water (in feet) Column Depth Water Depth Well 424400 2174000 (quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are biggest to smallest) Tws Rng Sec q q q Zone 3 195 Tws Rng Sec q q q 244 12W 21 12W 22 12W 2 30N 30N 30N 30N 30N 30N 30N 30N 30N 30N 30N 30N 30N 30N 30N 30N 30N 30N PCD Number SJ 02163 SJ 01152 SJ 01152 SJ 01297 SJ 03087 SJ 03056 SJ 03056 SJ 00695 SJ 00695 SJ 00695 SJ 00695 SJ 01273 SJ 00800 SJ 01684 SJ 03424 SJ 00950 SJ 03661

		1	1	1			1		
SJ 03607	SON	2M 2		7 7	264817	2109564	57	33	24
SJ 03101	30N	2W 2					74	12	62
SJ 03662	30N	2W 2	, ,				63	20	43
5J 03616	30N	12W 22					29	20	47
SJ 03059	30N	2W 2	63	2 2			61	24	37
SJ 03060	30N	N					57	21	36
SJ 03500	30N	2					56	24	32
SJ 03157	30N	2W 2		3			46	18	28
SJ 01312	30N	CA		4			38	20	18
SJ 00569	30N	2W 2		ej.			44	10	34
SJ 01165	30N	N		ej.			42	14	28
SJ 01393	30N	2W 2		7			39	12	27
SJ 03317	30N	2W 2		7			20		
SJ 02008	30N	211 2		-			42	7	32
SJ 01614	30N	2W 2	dle.	~9			45	~	89
SJ 02014	30N	2W 2	4	1			45		32
SJ 01301	30N	2W 2	er c	7			20	10	40
SJ 00460	30N	N	4	7			40		37
SJ 00224	30N	2W 2	다 스	2 1			48	22	26
SJ 02305	30N	N	4	2 1			41	20	21
SJ 02133	30N	2W 2	7	m			40	14	26
SJ 00903	30N	2W 2	4	3			45	10	35
SJ 01464	30N	2W 2	T)	en en			40	15	25
SJ 03473	30N	2W 2	ET C	3			40		
SJ 03233	30N	N	4	3			42	00	34
SJ 01340	30N	2W 2	막	di di			40		S.
SJ 01386	30N	2W 2	4	3 4			40	12	28
SJ 01860	30N	2	4	7			20	m	17
SJ 01980	30N	N	Pr C	4			20	Ŋ	15
SJ 02876	30N	12W 2	ST C	43			33	23	10
SJ 03397	30N	N	4	(C)			42	Ŋ	37
SJ 03038	30N	N	er o	3			30	'n	25
SJ 02387	30N	U	4	4 4			16	Ŋ	11
SJ 03041	30N	2W 2	4	4 4			43	භ	35
SJ 01168	30N	12W 23	~				33	13	20
SJ 00869	30N	N	-	1			42	12	30
SJ 02995	30N	12W 2:	7	11			62	24	38
SJ 02221	30N	2W 2	3 1	1 3			47	12	35
03	30N	2W 2	3	1 4			40	ന	37
SJ 01035	30N	7	~	7			ත ෆ	ø	ဗ

New Mexico Office of the State Engineer POD Reports and Downloads

Township: 30N Range: 12M Sections: 3.4,10,15,10,18

POD / Surface Data ReportAvg Depth to Water ReportWater Column Report

WATER COLUMN REPORT 09/16/2008

POD Number SJ 03767 POD1 SJ 03767 POD1 SJ 00945 SJ 00945 SJ 00421 SJ 00367 SJ 02168 SJ 03178 SJ 03401 SJ 01881	quarters Tws 30N 30N 30N 30N		are biggest to smallest	de	it 1	to SI	mallacti		-	77-1-6	Water	din.	I'm Fact
SJ 03767 POD1 SJ 03767 POD1 SJ 02128 SJ 00945 SJ 00421 SJ 00367 SJ 02168 SJ 01178 SJ 03401 SJ 01881			1	,			matten/		Depth	Deptu	TO COL	1	TOOL
SJ 03767 P0D1 SJ 02128 SJ 00945 SJ 00421 SJ 00367 SJ 02168 SJ 01178 SJ 03401 SJ 03401			Sec		9 9		Zone X	*	Well	Water	Column		
SJ 02128 SJ 00945 SJ 00421 SJ 00367 SJ 02168 SJ 01178 SJ 03401 SJ 01881		12H	10	7	7		265151	2121325	265	82	183		
SJ 00945 SJ 00421 SJ 00367 SJ 02168 SJ 01178 SJ 03401		12H	10		4				140	09	80		
SJ 00421 SJ 00367 SJ 02168 SJ 01178 SJ 03401 SJ 01881		12H	10	3	_				130	70	09		
SJ 00367 SJ 02168 SJ 01178 SJ 03401 SJ 01881		12H	10	7	-				126	43	83		
SJ 02168 SJ 01178 SJ 03401 SJ 01881		12H	15						9	50	45		
SJ 01178 SJ 03401 SJ 01881	30N	128	15						78	20	28		
SJ 03401 SJ 01881	30N	12H	15	-					110	80	30		
SJ 01881		12H	15	П	3				180	56	124		
		12H	15	N					157	100	57		
SJ 00817	30N	12W	15	N	4				96	53	43		
SJ 03108		12H	15	N	1				110	29	81		
SJ 03432	30N	12H	15	7	7				165	105	09		
SJ 00883	30N	12W	15	ന					75	35	40		
SJ 01162		12H	15	3					20				
SJ 00709		12H	15	m					52	20	82		
SJ 00145	30N	12H	15	(C)					165	9	105		
SJ 02120		12H	15	m					77	55	22		
SJ 00416		12H	15	מא					120	09	09		
SJ 02127	30N	12H	15	m	~				55	35	20		
SJ 03238		12W	15	m	7				75	30	45		
SJ 02760	30N	12H	15	m	2				20	21	29		
SJ 00717	30N	12H	15	3	-				100	09	40		
SJ 00684	30N	12H	15	3	_				73	30	43		

28	09	30	36	30	52	23	89	23	09	9	23	31	30	22	11	129	(D)	61		60
													20		00	75	98	300		0.0
	06												20			0	145		09	

073	000	UNG	15	ოო	444	
SJ 01438 SJ 00928	SON	12W	12 12	ოო	ਰਾ ਹਾ	
SJ 01215	30N	12W	15	m	4	
SJ 00714	30N	12W	13	m	4	
SJ 00828 (1)	30N	12W	15	m	4	
SJ 00829	30N	12W	13	m	4	
SJ 00816	0	C4		m	4	
SJ 00710	30N	12W	13	m	4	
SJ 00731	30N	12W	13	m	4	
	30N	12W	13	ო	4	
SJ 00828	30N	12W	15	m	4	
SJ 01037	30N	12W	13	m	d,	
SJ 00481	30N	12W	15	m	4	13
SJ 00516	0	12W	15	m	d,	m
SJ 00927	30N		15	<pr< th=""><th>Н</th><th>(1</th></pr<>	Н	(1
SJ 00594	30N		13	4	0	
SJ 00810	30N	12W	13	<pre>p</pre>	m	m
SJ 03159	30N	12W	13	<h< th=""><th>4</th><th>7</th></h<>	4	7
SJ 02514	30N	12W	13	₽	4	<j*< th=""></j*<>

	0.000		0	C	6	
UT40		MZT		V	1	т
SJ 01773	30N	O		a)		
J 0029	30N	CA	13	m	O	
SJ 00123	30N	12W		-4	-	_
J 008	30N	O	14	-	Z,	
SJ 00667	30N	12W	14	C1	CI	S.P
SJ 01161	30N	0.1	77	O	egr	
SJ 00105	30N	CA	14	m	Н	
J 0059	30N	O	14	m	Н	
SJ 00735	30N	CA	14	m	Н	m
7 0067	30N	OI	14	m	C1	
J 0057	30N	C1	77	m	O	
J 0331	30N	OI		m	m	NEP
SJ 00129	30N	12W		m	d,	
0012	30N	O	14	m	*CPF	
SJ 01674	SON		14	m	<pre>p</pre>	
SJ 00107	30N	12W	14	m	ZI.	
SJ 00271	30N	O	₩.T	m	<pre><pre>p</pre></pre>	-
SJ 00508	30N	CA		m	sch.	C)
SJ 00458	30N	ϵ_{4}	14	«Ju	н	
J 034	30N	0.4	14	<pre>p</pre>	01	Н
SJ 02739	30N	12W	14	eg.	CI.	C1
J 036	30N	$^{\rm cd}$	14	₽	CI.	SP
SJ 00290	30N	12W	14	<pre>// // // // // // // // // // // // //</pre>	m	
SJ 00482	30N	12W	다	<h< th=""><th>m</th><th></th></h<>	m	
	٠	į	•			



Aerial Photograph

Lodestar Services, Inc Durango, CO 81302 PO Box 4465

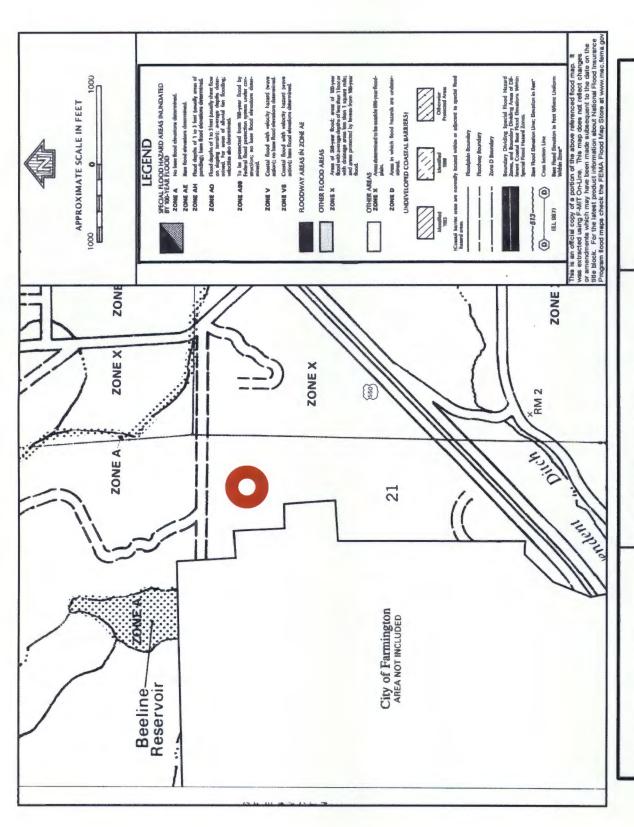
TEXAKOMA AMOCO A #1 T30N, R12W, S21A San Juan County, NM



Mines, Mills, and Quarries Map

Lodestar Services, Inc PO Box 4465 Durango, CO 81302

TEXAKOMA AMOCO A #1 T30N, R12W, S21A San Juan County, NM



Lodestar Services, Inc PO Box 4465 Durango, CO 81302 Sa

TEXAKOMA AMOCO A #1 T30N, R12W, S21A San Juan County, NM

FEMA Flood Zone Map

XTO Energy Inc. San Juan Basin (Northwest New Mexico) General Design and Construction Plan For Below-Grade Tanks

In accordance with Rule 19.15.17.11 NMAC the following information describes the design and construction 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.

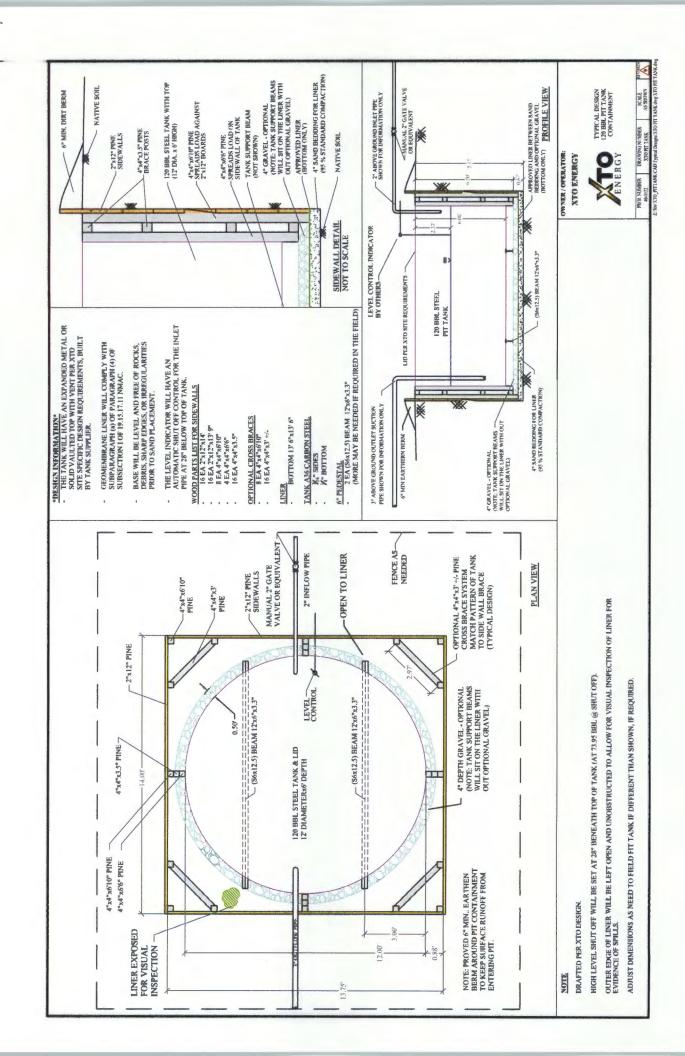
General Plan

- 1. XTO will design and construct below-grade tanks to contain liquids and solids and prevent contamination of fresh water and protect public health and environment.
- 2. XTO will post a well sign, in compliance with 19.15.3.103 NMAC, on the existing well site operated by XTO where the existing below-grade tank is located. The sign will list the Operator on record as the operator, the location of the well site by unit letter, section, township, range, and emergency telephone numbers.
- 3. XTO is requesting approval of an alternative fencing to be used on below-grade tank locations. Below-grade tank locations will be fenced utilizing 48" steel mesh field-fence (hogwire) with pipe railing along the top. A 6' chain link fence will be utilized around the well pad if the well site is within a city limits or ¼ mile of a permanent residence, school, hospital, institution or church. Below-grade tanks located within 1000' of a permanent residence, school, hospital, institution or church will be fenced by 6' chain link fence with at least two strands of barbed wire at the top. All gates associated with below-grade tanks will remain closed and locked when responsible individuals are not on site.
- 4. XTO shall construct below-grade tanks with an expanded metal covering or solid vaulted top on the top of the below-grade tank.
- 5. XTO will ensure that below-grade tanks are constructed of materials resistant to the below-grade tank's particular contents and resistant to damage from sunlight. Tanks will be constructed of A36 carbon steel with 3/16" sides and ½" bottom. (See attached drawing).
- 6. The below-grade tank system will have a properly constructed foundation consisting of a level base free of rocks, debris, sharp edges or irregularities to prevent punctures, cracks or indentations of the liner or tank bottom. Sand bedding (4") will be placed on top of a level foundation to ensure prevention of punctures, cracks or indentations of the liner or tank bottom.
- 7. XTO will construct a berm and/or diversion ditch in a manner that prevents the collection of surface water run-on. Below-grade tanks will be equipped with automatic high level shut-off devices as well as manually operated shut-off valves. (See attached drawing).
- 8. XTO will construct and use below-grade tanks that do not have double walls. The below-grade tank sidewalls will be open for visual inspection for leaks. The sidewalls of the cellar will be constructed with 2" X 12" pine sidewalls and 4" X 4" pine brace posts. The below-grade tank

XTO Energy Inc. San Juan Basin (Northwest New Mexico) General Design and Construction Plan For Below-Grade Tanks Page 2

bottom will be elevated a minimum of 6" above the underlying ground surface and the below-grade tank will be underlain with a geomembrane liner to divert leaked liquid to a location that can be visually inspected. (See attached drawing).

- 9. XTO will equip below-grade tanks designed in this manner with a properly functioning automatic high-level shut-off control device and manual controls to prevent overflows. (See attached drawing).
- 10. XTO will demonstrate to the OCD that the geomembrane liner complies with the specifications of Subparagraph (a) of Paragraph (4) of Subsection I of 19.15.17.11 NMAC and obtain approval from OCD prior to the installation of the design. The geomembrane liner shall have a hydraulic conductivity no greater than 1 x 10-9 cm/sec. The geomembrane liner shall be composed of an impervious, synthetic material that is resistant to petroleum hydrocarbons, salts and acidics and alkaline solutions. The liner material shall be resistant to ultraviolet light. Liner compatibility shall comply with EPA SW-846 method 9090A. (See attached drawing).
- 11. The general specifications for design and construction are attached.



XTO Energy Inc. San Juan Basin (Northwest New Mexico) General Maintenance and Operating Plan For Below-Grade Tanks

In accordance with Rule 19.15.17.12 NMAC the following information describes the operation and maintenance 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 operate and maintain below-grade tanks to contain liquids and solids, maintain the integrity of the liner and secondary containment system, prevent contamination of fresh water and protect public health and the environment. Fluid levels will be monitored weekly and high levels will be removed as necessary. Monthly inspections will be conducted to monitor integrity of below-grade tank systems and below-grade tanks will be equipped with automatic high-level shut-off devices.
- 2. XTO will not allow below-grade tanks to overflow and will use berms and/or diversion ditch to prevent surface run on to enter the below-grade tank. Below-grade tanks will be equipped with automatic high-level shut-off control devices as well as manually operated shut-off valves. See attached drawing for vault design and placement of diversion berms and shut-off devices.
- 3. XTO will continuously remove any visible or measurable layer of oil from the fluid surface of below-grade tanks in order to prevent significant accumulation of oil.
 - 4. XTO will inspect the below-grade tank monthly and maintain written records for five years. Monthly inspections will consist of documenting the following: (see attached template),

Well Name

API#

Sec., Twn., Rng.

XTO Inspector's name

Inspection date and time

Visible tears in liner

Visible signs of tank overflow

Collection of surface run on

Visible layer of oil

Visible signs of tank leak

Estimated freeboard

- 5. XTO will maintain adequate freeboard to prevent over topping of the below-grade tank. High level shut-off devices control the freeboard at an average of 28" beneath the top of the tank.
- 6. XTO will not discharge into or store any hazardous waste in any below-grade tank.
- 7. If a below-grade tank develops a leak, or if any penetration of a below-grade tank occurs below the liquids surface, XTO will remove all liquids above the damage or leak line within 48 hours,

XTO Energy Inc. San Juan Basin (Northwest New Mexico) General Maintenance and Operating Plan For Below-Grade Tanks Page 2

notify the appropriate division district office within 48 hours of the discovery and repair the damage or replace the below-grade tank. If an existing below-grade tank does not meet current requirements of Paragraphs 1-4 of Subsection I of 19.15.17.11 NMAC the tank will be modified or retrofitted to comply. If compliance can not be achieved XTO will implement the approved closure plan.

		MONTH	ILY BELO	MONTHLY BELOW GRADE TANK INSPECTION FORM	INSPECTIC	N FORM		
Well Name:	ne:				API No.:			
Legals	Sec:		Township:		Range:	:		
XTO Inspector's Name	Inspection	Inspection	Any visible liner	Any visible signs of tank overflows (Y/N)	Collection of surface run on (Y/N)	Visible layer of oil (Y/N)	Any visible signs of a tank leak (Y/N)	Freeboard Est. (ft)
				Manual Parameters and the Control of				
						3		
	 -							
Notes:	Provide De	Provide Detailed Description:	otion:					
Misc:								
and the second								

XTO Energy Inc. San Juan Basin (Northwest New Mexico) General Closure Plan For Below-Grade Tanks

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.
- 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.
- 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.
- 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

- 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 has approved prior to removal. Any associated liners will be removed, properly cleaned and disposed of per 19.15.9.712 NMAC at San Juan County Landfill. Documentation of the final disposition will be included in the closure report.
- 6. XTO will remove any on-site equipment associated with a below-grade tank unless the equipment is required for some other purpose.
- 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

XTO Energy Inc.
San Juan Basin (Northwest New Mexico)
General Closure Plan
For Below-Grade Tanks
Page 2

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.

- 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.
- 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.
- 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

The surface owner shall also be notified prior to the implementation of any closure operations of below-grade tanks as per the approved closure plan using certified mail, return receipt requested.

- 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.
- 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. Soil cover will be constructed to the site's existing grade and ponding of water and erosion of the cover material will be prevented with drainage control, natural drainages and silt traps where needed.
- 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.

XTO Energy Inc. San Juan Basin (Northwest New Mexico) General Closure Plan For Below-Grade Tanks Page 3

- 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;
 - ii. Details on capping and covering, where applicable;
 - iii. Inspection reports;
 - iv. Confirmation sampling analytical results;
 - v. Disposal facility name(s) and permit number(s);
 - vi. Soil backfilling and cover installation;
 - vii. Re-vegetation application rates and seeding techniques, (or approved alternative to re-vegetation requirements if applicable);
 - viii. Photo documentation of the site reclamation.