District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III Dood Artes NB4 97410

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State of New Mexico **Energy Minerals and Natural Resources** Department **Oil Conservation Division** (B)

1625 N. French Dr., Hobbs, NM 88240 <u>District II</u> 1301 W. Grand Avenue, Artesia, NM 88210 <u>District III</u> 1000 Rio Brazos Road, Aztec, NM 87410 <u>District IV</u> 1220 S. St. Francis Dr., Santa Fe, NM 87505	Energy Minerals and Natural Re Department Oil Conservation Division 1220 South St. Francis I Santa Fe, NM 87505	on Dr. Dr. Dr. Dr. Dr. Dr. Dr. Dr. Dr. Dr.
Pit, C	Closed-Loop System, Below-	Grade Tank, or
Proposed Alt	ernative Method Permit or C	losure Plan Application
Type of action: Perm Existing BGT Closu Modi Closu below-grade tank, or propo	it of a pit, closed-loop system, below-gr ire of a pit, closed-loop system, below-g fication to an existing permit ire plan only submitted for an existing p osed alternative method	ade tank, or proposed alternative method grade tank, or proposed alternative method permitted or non-permitted pit, closed-loop system,
Instructions: Please submit one applic	ation (Form C-144) per individual pit, clos	ed-loop system, below-grade tank or alternative request
Please be advised that approval of this request does renvironment. Nor does approval relieve the operator	tot relieve the operator of liability should operator of its responsibility to comply with any other	ations result in pollution of surface water, ground water or the applicable governmental authority's rules, regulations or ordinances.
1. Operator: XTO Energy, Inc.		OGRID #: 5380
Address: #382 County Road 3100, Aztec,	NM 87410	
Facility or well name: MCCOY GAS COM	D #3	
API Number: 30-045-31287	OCD Permit Numb	per:
U/L or Qtr/Qtr E Section 28	Township Range12W	County: San Juan
Center of Proposed Design: Latitude 36.7866		3 NAD: 🗌 1927 🛛 1983
Surface Owner: 🗌 Federal 🗌 State 🛛 Private	Tribal Trust or Indian Allotment	
2.		
<u>Pit</u> : Subsection F or G of 19.15.17.11 NM	IAC	
Temporary: Drilling Workover	1.0	
Permanent Emergency Cavitation] P&A	
Lined Unlined Liner type: Thickness	mil LLDPE HDPE	PVC Other
String-Reinforced		
Liner Seams: Welded Factory Other	r Volume:	bbl Dimensions: Lx Wx D
 3. Closed-loop System: Subsection H of 19. Type of Operation: P&A Drilling a new intent) Drying Pad Above Ground Steel Tanks Lined Unlined Liner type: Thickness_ Liner Seams: Welded Factory Other 	15.17.11 NMAC well Workover or Drilling (Applies to a Haul-off Bins Other	activities which require prior approval of a permit or notice of
Below-grade tank: Subsection I of 19.15. Volume: <u>120</u> bbl Type o Tank Construction material: Steel	17.11 NMAC f fluid:Produced Water	
Secondary containment with leak detection	Visible sidewalls liner 6-inch lift and	automatic overflow shut-off
Visible sidewalls and liner Visible side	ewalls only X Other Visible sidewalls	aulted, automatic high-level shut off, no liner
Liner type: Thickness	nil 🗌 HDPE 🗌 PVC 🗌 Other	
5. Alternative Method: Submittal of an exception request is required.	Exceptions must be submitted to the Santa F	e Environmental Bureau office for consideration of approval.

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, hospital, 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

7.

Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)

Screen Netting Other Expanded metal or solid vaulted top

Monthly inspections (If netting or screening is not physically feasible)

Signs: Subsection C of 19.15.17.11 NMAC

12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers

Signed in compliance with 19.15.3.103 NMAC

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 office for consideration of approval.

Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

10. 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 acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying pads or above-grade tanks associated with a closed-loop system.

 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 	🛛 Ye: 🗌 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
 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 imap 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

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
 Anachea. 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 19.15.17.12 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: or Permit Number:
 12. <u>Closed-loop Systems Permit Application Attachment Checklist</u>: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached. Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9 Siting Criteria Compliance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC
 Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
Previously Approved Design (attach copy of design) API Number:
Previously Approved Operating and Maintenance Plan API Number: (Applies only to closed-loop system that use
above ground steel tanks or haul-off bins and propose to implement waste removal for closure)
Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.
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) Image: Proposed Closure Method (Consideration)
 ^{15.} Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached. Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings) Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

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^{16.} Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.D) Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more facilities are required.	NMAC) ore than two
Disposal Facility Name: Disposal Facility Permit Number:	
Disposal Facility Name: Disposal Facility Permit Number:	
Will any of the proposed closed-loop system operations and associated activities occur on or in areas that <i>will not</i> be used for future service Yes (If yes, please provide the information below) No	ce 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 I of 19.15.17.13 NMAC Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC	
^{17.} <u>Siting Criteria (regarding on-site closure methods only)</u> : 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate distric considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justific demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.	e material are ct office or may be cations and/or
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. I - 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
 18. On-Site Closure Plan Clecküsit: (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 19.15.17.13 NMAC Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.13 NMAC Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC 	n. Please indicate, 5.17.11 NMAC t be achieved)

Site Reclamation Plan - based upon the appropriate requirements of Subsection 1 of 19.15.17.13 NMAC Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

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Operator Application Certification:I hereby certify that the information submitted with this application is true	, accurate and complete to the	ne best of my knowledge and belief.
Name (Print): Kim Champlin	Title:	Environmental Representative
Signature: Kim Chandlin	Date:	11-20-08
e-mail address: kim champlin@xtoenergy.com	Telephone:	(505) 333-3100
20. OCD Approval: Permit Application (including closure plan)	gure Plan (only) 🔲 OCD	Conditions (see attachment)
OCD Representative Signature:		Approval Date: 10/10/13
Title: Scalor Hydrologist	OCD Permit Num	ber:
^{21.} Closure Report (required within 60 days of closure completion): Subs Instructions: Operators are required to obtain an approved closure plan The 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	section K of 19.15.17.13 NM prior to implementing any ays of the completion of the the closure activities have	AC closure activities and submitting the closure report. closure activities. Please do not complete this been completed. pletion Date:
22.		
Closure Method: Waste Excavation and Removal On-Site Closure Method If different from approved plan, please explain.	Alternative Closure Method	Waste Removal (Closed-loop systems only)
^{23.} <u>Closure Report Regarding Waste Removal Closure For Closed-loop S</u> <i>Instructions: Please indentify the facility or facilities for where the liqui</i> <i>two facilities were utilized.</i>	vstems That Utilize Above ds, drilling fluids and drill d	Ground Steel Tanks or Haul-off Bins Only: cuttings were disposed. Use attachment if more than
Disposal Facility Name:	Disposal Facility P	ermit Number:
Disposal Facility Name:	Disposal Facility P	ermit Number:
Were the closed-loop system operations and associated activities performe Yes (If yes, please demonstrate compliance to the items below)	d on or in areas that will not No	be used for future service and operations?
Required for impacted areas which will not be used for future service and Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique	operations:	
24. Closure Report Attachment Checklist: Instructions: Each of the followmark 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)	wing items must be attached	d to the closure report. Please indicate, by a check
On-site Closure Location: Latitude	Longitude	NAD: 1927 1983
25. <u>Operator Closure Certification</u> : I hereby certify that the information and attachments submitted with this c belief. I also certify that the closure complies with all applicable closure re-	losure report is true, accurat equirements and conditions	e and complete to the best of my knowledge and specified in the approved closure plan.
Name (Print):	Title:	
Signature:	Date:	
e-mail address:	Telephone:	

Misteint II 811 South First, Artesia, NM 88210 Mutrict III 1000 Rio Brazos Rd., Aztec, NM 87410 OLL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505 Histrict IV 1220 S. St. Bruncis Dr., Santa Fe, NM 07506 WELL LOCATION AND ACREAGE DEDICATION PLAT Yod Code Pool Name API Munha 30-045-31287 BASIN FRUITLAND COAL 71629 Property Name MCCOY GAS COM D XTO Energy.Inc. ¹⁰Surface Location Township Range Lot Bin Feet from the North South line Feet from the 30N 12W 1600' NORTH 1070' WEST

State of New Mexico

Energy, Minerals & Natural Resources Department

Matrict I 1626 N. French Dr., Mob bs, NM 88240

Property Cole

OCRID No.

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5537 167067 UL or lot no. Section. East/West line Counds SAN JUAN Е 28 ¹¹Bottom Hole Location if Different From Surface UL ar lot no. County Sectio Lot Idn North/South line Feet from th Township Range Feet from the Jaint or Infill Delicatel Acres Order No Counds 320 ac N/2

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

1600'	OPERATOR CERTIFICATION I has aby carefy that the information contained has ain is true and complete to the best of my know ledge and belief
	Saganana Holly C. Perkins
~ 1070 - •	Printed Name Regulatory Compliance Tech
	10/1 3/2006
28	SURVEYOR CERTIFICATION I harsby certify that the well location shown on this plat was plotted fromfield notes of actual surveys made by me or under my supervision, and that the screw is two and correct to the best of my balief. 12/1 1/2002 Date of Survey
	Original Survey Signed By: DAVID A JOHNSON 14827 Cetticae Number

Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies AMENDED REPORT

Well Number

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Klev adies

Form C-102 Revised August 15, 2000

			Client:	XTO Energy
A Lodestar Service	es. Inc.	Pit Permit	Project:	Pit Permits
PO Roy A465 Durane	CO 81302	Siting Criteria	Revised:	13-Nov-08
I V DOX 4403, Dut ang	, CU 01JUZ	Information Sheet	Prepared by:	Brooke Herb
V				
API#:		3004531287	USPLSS:	T30N,R12W,S28E
Name:	MCC	OY GAS COM D #3	Lat/Long:	36.78667, -108.10833
Depth to groundwater:		< 50'	Geologic formation:	Nacimiento Formation
Distance to closest continuously flowing watercourse:	2098' 1	N of the Animas River		
Distance to closest significant watercourse, lakebed, playa lake, or sinkhole:	244'	N of irrigation ditch		
			Soil Type:	Entisols
Permanent residence, school, hospital, institution or church within 300'		No		
			Annual	8.21 inches (Farmington)
Domestic fresh water well or spring within 500'	Yes - 2	20' E of iWaters well SJ00122	Precipitation Notes:	no significant precip events
Any other fresh water well or spring within 1000'	Yes - 6 SJ01309; 8	73' NE of iWaters well 78' N of SJ01275; 877' NW of SJ02142		
Within incorporated municipal boundaries		No	Attached Documents:	Groundwater report and Data; FEMA Flood Zone Map
Within defined municipal fresh water well field		No		Aerial Photo, Topo Map, Mines Mills and Quarries Map
Wetland within 500'		No	Mining Activity:	
				1.95 miles N of Foutz Pit
Within unstable area		No		
Within 100 year flood plain	No - I	FEMA Flood Zone 'X'		
Additional Notes:				

MCCOY GAS COM D #3 Below Ground Tank Siting Criteria and Closure Plan

Well Site Location

Legals: T30N, R12W, Section 28, Quarter Section E Latitude/Longitude: approximately 36.78667, -108.10833 County: San Juan County, NM General Description: just north of the Animas River

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 just north of the Animas River and south of Flora Vista, New Mexico. Within the Farmington Glade area, the Tertiary Nacimiento Formation is exposed, along with Quaternary alluvial and aeoloian sands surrounding the center of the wash.

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 be 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 2098 feet to the north, and is 100 feet higher in elevation then the Animas River (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. Depth to groundwater within the surrounding wells ranges from 5 to 52 feet below ground surface. Elevation at the proposed site is approximately 5543 feet (Google Earth). The closest well to the proposed site is to the west at an approximate elevation of 5548 feet, and has a depth to groundwater of 40 feet below ground surface. A well to the south is at an approximate elevation of 5480 feet and has a depth to groundwater of 5 feet below ground surface. The close proximity to the Animas River suggests that groundwater at the proposed site is less than 50 feet below ground surface.





SJ 01215	30N	12W 15	3	4				60	30	30
SJ 01037	30N	12W 15	3	4				50	20	30
SJ 00829	30N	12W 15	3	4				68	30	38
SJ 00714	30N	12W 15	3	4				92	40	52
SJ 00730	30N	12W 15	3	4				90	30	60
SJ 00731	30N	12W 15	3	4				90	30	60
SJ 00912	30N	12W 15	3	4				58	35	23
SJ 01793	30N	12W 15	3	4				50	22	28
SJ 00828 (1)	30N	12W 15	3	4				43	20	23
SJ 00828	30N	12W 15	3	4				59	28	31
SJ 01438	30N	12W 15	3	4				96	66	30
SJ 00481	30N	12W 15	3	4 2				52	30	22
SJ 00516	30N	12W 15	3	4 3				55	8	47
SJ 00927	30N	121 15	4	1 2				204	75	129
SJ 00594	30N	12W 15	4	2				145	95	50
SJ 00810	30N	128 15	4	3 3				96	35	61
SJ 03159	30N	128 15	4	4 2				60		
SJ 02514	30N	121 15	4	4 4				57	25	32
SJ 01279	30N	128 16	4	4				200	100	100
SJ 00950	30N	12W 21	4	4				70	35	35
SJ 02163	30N	12W 21	4	4 4	W	424400	2174000	31	15	16
SJ 01877	30N	12W 22	1	1 2				94	66	28
SJ 01152	30N	12W 22	1	1 2				66	19	47
SJ 01297	30N	12W 22	1	2 2				67	30	37
SJ 00439	30N	12W 22	1	3				97	50	47
SJ 03087	30N	12W 22	1	3 4				40	21	19
SJ 00462	30N	12W 22	1	4				61	12	49
SJ 03056	30N	12W 22	1	4 1				88	30	58
SJ 00312	30N	12W 22	2					94	35	59
SJ 00695	30N	12W 22	2					70	29	41
SJ 00360	30N	12W 22	2	2				35	3	32
SJ 00746	30N	12W 22	2	2 2				42	6	36
SJ 01273	30N	12₩ 22	2	3				100	38	62
SJ 00800	30N	12W 22	2	3				79	27	52
SJ 01684	30N	12W 22	3	1				80	45	35
SJ 03424	30N	12W 22	3	2				64	24	40
SJ 03661	30N	12W 22	3	2 1				65	19	46
CT 02290	SON	128 22	3	2 1				70	19	51

SJ 03607	30N	12W 22	3	2 :	L	264817	2109564	57	33	24
SJ 03101	30N	12W 22	3	2 2	2			74	12	62
SJ 03662	30N	12W 22	3	2 2	2			63	20	43
SJ 03616	30N	12W 22	3	2 2	2			67	20	47
SJ 03059	30N	12W 22	3	2 3	2			61	24	37
SJ 03060	30N	12W 22	3	2 2	2			57	21	36
SJ 03500	30N	128 22	3	3	L			56	24	32
SJ 03157	30N	12W 22	3	3	2			46	18	28
SJ 01312	30N	12W 22	3	4				38	20	18
SJ 00569	30N	12W 22	3	4				44	10	34
SJ 01165	30N	12W 22	3	4				42	14	28
SJ 01393	30N	128 22	3	4				39	12	27
SJ 03317	30N	128 22	3	4	2			50		
SJ 02008	30N	128 22	4	1	-			42	7	35
SJ 01614	30N	12W 22	4	1				45	7	38
ST 02014	30N	121 22	A	1				45	10	35
ST 01301	301	121 22	A	2				50	10	40
ST 00460	30N	121 22	A	2				40	3	37
ST 00224	30N	121 22	4	2 .				48	22	26
ST 02305	30N	121 22	4	2	1			41	20	21
ST 02133	30N	121 22	1	2 .				40	14	26
SU 02133	30N	121 22	4	5 .	2			45	10	35
ST 01464	201	121 22	4	20	2			40	15	25
ST 03473	30N	128 22	4	2 .	2			40	10	20
50 03473	301	1207 22	**	2 .	2			40	0	24
50 03233	JUN	12W 22	4	3.	3			44	0	21
50 01340	301	12W 44	4	2 .	4			40	12	20
50 01386	301	14W 44	4	3 '	±			40	14	17
55 01060	JON	12W 22	4	4				20	3	15
50 01980	JUN	12W 22	4	4				20	5	15
SJ 02876	30N	12W 22	4	4	3			33	43	10
SJ 03397	30N	12W 22	4	4	3			42	5	37
SJ 03038	30N	12W 22	4	4 :	3			30	5	25
SJ 02387	30N	12W 22	4	4	1			16	5	11
SJ 03041	30N	12W 22	4	4	1			43	8	35
SJ 01168	30N	12W 23						33	13	20
SJ 00869	30N	12W 23	1	1				42	12	30
SJ 02995	30N	12W 23	1	1 .	L			62	24	38
SJ 02221	30N	12W 23	1	1 :	3			47	12	35
SJ 03510	30N	12W 23	1	1 .	1			40	3	37
SJ 01035	30N	12W 23	1	2				39	6	33

SJ	01148	30N	12W 2	3 4	1			
SJ	03380	30N	12W 2	3 4	1	1	1	
SJ	03375	30N	12W 2	3 4	1	1	1	
SJ	03664	30N	12W 2	3 4	4	1	3	
SJ	02653	30N	12W 2	3	1	1	3	
SJ	03665	30N	12W 2	3 .	4	1	3	
SĴ	03663	30N	12W 2	3	4	1	4	
SJ	01513	30N	12W 2	3	4	2		
SJ	01272	30N	12W 2	3	4	2	1	
SJ	03506	30N	12W 2	3 .	4	2	2	
SJ	03156	30N	12W 2	3	4	2	2	
SJ	00117	30N	12W 2	3	4	2	3	
SJ	00114	30N	121 2	3	4	2	3	
SJ	01381	30N	12W 2	3	4	3		
SJ	00111	30N	12W 2	3	4	3		
SJ	00896	30N	12W 2	3	4	4		
SJ	03638	30N	12W 2	3	4	4	1	
SJ	02032	30N	12W 2	7	1	2		
SJ	00127 X	30N	12W 2	7 3	1	2		
SJ	00127	30N	12W 2	7	1	2		
SJ	01646	30N	12W 2	27	1	3		
SJ	01599	30N	12W 2	7	1	3		
SJ	01617	30N	12W 2	7	1	3		
SJ	01239	30N	12W 2	7	1	3	3	
SJ	00963	30N	12W 2	7	1	4	2	
SJ	02829	30N	12W 2	7	1	4	2	
SJ	02700	30N	12W 2	7 :	2	1		
SJ	01530	30N	12W 2	7 :	2	1		
SJ	01694	30N	12W 2	7 :	2	1		
SJ	01988	30N	12W 2	7 :	2	1		
SJ	02620	30N	12W 2	7 3	2	1	1	
SJ	03254	30N	12W 2	7	Ż	1	1	
SJ	03243	30N	12W 2	7	2	1	2	
SJ	02784	30N	12W 2	7 3	2	1	2	
SJ	00276	30N	12W 2	7 :	2	1	2	
SJ	03433	30N	12W 2	7	2	1	2	
SJ	03496	30N	12W 2	.7 :	2	1	4	
SJ	03120	30N	12W 2	7 :	2	3	2	
SJ	02498	30N	12W 2	7 :	3	1	1	

14 8 38 20 1 40 20 2 29 10 1 28 18 1 40 20 2 38 10 2	0.0
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0157908664361059 2
25 50 10 4 70 21 5 1	0

SJ	00844	30N	12W	37	ŝ	1	2			31	12	19	
SJ	03761 POD1	30N	12W	17	З	3	1	154712	2103138	65	35	30	
SJ	03542	30N	12W	27	÷	Э	4			8	4	4	
SJ	01572	30N	12W	27	4					43	13	10	
SJ	03227	30N	12W	27	÷	1	3			70	55	15	
SJ	03641	30N	12W	27	4	З	2			60	28	35	
30	03041	001	120	-	-		-			01			

New Mexico Office of the State Engineer POD Reports and Downloads

Township: 30 Range: 12 Sections: 28.29.30.31,32,33

WATER COLUMN REPORT 11/13/2008

(quarters are 1=NW 2=NE 3=SW 4=SE)

(qu	arter	s are	e bi	gge	est	to	smal	lest)		Depth	Depth	Water	(in	feet)
POD Number	Tws	Rng	Sec	P	P	P	Zone		x	Y	Well	Water	Column		
SJ 00282	30N	12W	28								84	52	32		
SJ 00122 CLW283728	30N	12W	28	1	3						126	61	65		
SJ 01309	30N	12W	28	1	3						55	32	23		
SJ 00122	30N	12W	28	1	3	2					80	40	40		
SJ 02142	30N	12W	28	1	4						55	35	20		
SJ 01275	SON	12W	28	1	4	3					30	5	25		
SJ 02016	30N	12W	28	2	1						120	56	64		
SJ 01129	30N	12W	28	2	1	2					40	10	30		
SJ 03702	30N	12W	28	2	2	3					30	5	25		
SJ 03702 POD1	30N	12W	28	2	2	3					30	5	25		
SJ 00346	SON	12W	28	2	3	1					41	15	26		
SJ 03796 POD1	30N	12W	28	3	1	2		264	258	2104657	22	5	17		
SJ 02571	30N	12W	28	4	1	3					21	6	15		
SJ 03096	30N	12W	28	4	3	4					125				
SJ 00669	30N	12W	28	4	4						70	30	40		
SJ 02833	30N	12W	28	4	4	1					50				
SJ 03383	30N	12W	28	4	4	3					50	20	30		
SJ 03688	30N	12W	28	4	4	3					50	25	25		
SJ 03688 POD1	30N	12W	28	4	4	3					50	25	25		
SJ 02022	30N	12W	29	3							297	100	197		
SJ 03187	30N	12W	29	3	1	1					160	29	131		
SJ 02476	SON	12W	29	3	2	1					225	185	40		
SJ 03280	30N	12W	29	3	2	4					100				
SJ 03358	301	12W	29	3	3	1					100	60	40		
SJ 03278	30N	12W	29	3	3	3					120	40	BO		
SJ 03279	30N	12W	29	3	3	4					120	60	60		
SJ 00536	30N	12W	29	4							50	28	22		
SJ 02309	30N	121	29	4	1	2					50	27	23		

SJ 02306	30N	12W 29	4	4	1	44	25	19
SJ 01052	SON	12W 29	4	4	3	39	11	28
SJ 01006	30N	12W 30	1			38	16	22
SJ 01314	30N	12W 30	1	1	1	240	220	20
SJ 01637	30N	12W 30	3	3		127	52	75
SJ 01632	30N	12W 30	3	4	4	175	87	88
SJ 02219	30N	12W 30	4	4		240	80	160
SJ 03361	30N	12W 31	1	1	4	150		
SJ 03365	30N	12W 31	2	3	2	50		
SJ 03132	30N	12W 31	2	3	4	58	32	26
SJ 03145	30N	12W 31	2	3	4	49	32	17
SJ 00223	30N	12W 31	2	4		63	22	41
SJ 00170	30N	12W 31	2	4		45	20	25
SJ 03236	30N	12W 31	2	4	2	63	15	48
SJ 03174	30N	12W 31	2	4	2	60	46	14
SJ 03331	SON	12W 31	2	4	2	67	18	49
SJ 03161	30N	12W 31	2	4	3	62	47	15
SJ 03252	30N	12W 31	2	4	4	42	11	31
SJ 03237	30N	12W 31	2	4	4	70		
SJ 03150	30N	12W 31	2	4	4	53	30	23
SJ 01236	30N	12W 31	3	2		50	38	12
SJ 02815	30N	12W 31	3	4	2	30		
SJ 03148	30N	12W 31	4	1	1	56	34	22
SJ 03051	30N	12W 31	4	1	2	40	24	16
SJ 03147	30N	12W 31	4	1	2	49	28	21
SJ 02882	30N	12W 31	4	1	2	33	19	14
SJ 02867	30N	12W 31	4	1	2	28	14	14
SJ 02792	30N	12W 31	4	1	2	49	30	19
SJ 03296	30N	12W 31	4	1	2	56	30	26
SJ 03409	30N	12W 31	4	1	4	44	24	20
SJ 03099	30N	12W 31	4	1	4	34	9	25
SJ 02877	30N	12W 31	4	1	4	31	17	14
SJ 03602	30N	12W 31	4	1	4	31	7	24
SJ 03725 POD1	30N	12W 31	4	2	3	17	17	
SJ 03235	30N	12W 31	4	2	4	70	40	30
SJ 03122	301	12W 31	4	3	1	29	15	14
SJ 02965	30N	12W 31	4	3	3	35	14	21
SJ 02213	30N	12W 32	1			33	13	20
SJ 02208	30N	12W 32	1			25	4	21
SJ 02166	30N	12W 32	1			33	10	23

SJ	02207		30N	12W	32	1			
SJ	01664		30N	12W	32	1	1	1	
SJ	03516		30N	12W	32	1	1	2	
SJ	03523		30N	12W	32	1	1	2	
SJ	03610		30N	12W	32	1	1	2	
SJ	03517		30N	12W	32	1	1	2	
SJ	03520		30N	12W	32	1	1	4	
SJ	03522		30N	12W	32	1	1	4	
SJ	03515		30N	12W	32	1	1	4	
SJ	03521		30N	12₩	32	1	1	4	
SJ	03514		30N	12W	32	l	1	4	
SJ	03519		30N	129	32	1	1	4	
SJ	03518		30N	129	32	1	1	4	
SJ	03513		30N	12W	32	1	1	4	
SJ	03512		30N	12W	32	1	1	4	
SJ	03511		30N	12W	32	1	1	4	
SJ	03217		30N	12W	32	1	2	3	
SJ	03629		30N	12W	32	1	2	3	
SJ	03494		30N	12W	32	1	2	3	
SJ	03221		30N	12W	32	1	2	3	
SJ	02246		30N	12W	32	1	3		
SJ	02117		30N	12W	32	1	3		
SJ	02214 X		30N	12W	32	1	3		
SJ	02214		30N	12W	32	1	3		
SJ	02211		30N	12W	32	1	3		
SJ	02220		30N	12W	32	1	3		
SJ	01832		30N	12W	32	1	3		
SJ	02286		30N	12W	32	1	3		
SJ	02262		30N	12W	32	1	3		
SJ	02177		30N	12W	32	1	3		
SJ	02311		SON	12W	32	1	3		
SJ	02982		30N	12W	32	1	3	1	
SJ	03613		30N	12W	32	1	3	1	
ŞJ	02942		30N	12W	32	1	3	1	
SJ	03009		30N	12W	32	1	3	2	
SJ	03190		30N	12W	32	1	3	3	
SJ	03748 PO	D1	30N	12W	32	1	3	3	
SJ	02371		30N	12W	32	1	3	4	
SJ	00190		30N	12W	32	1	4		
SJ	02239		308	12W	32	2	1	2	

25	4	21
32	16	16
70	35	35
77	42	35
80	50	30
60	30	30
55	25	30
70	35	35
70	35	35
55	25	30
70	35	35
55	25	30
60	30	30
60	30	30
60	30	30
60	30	30
42	12	30
60	20	40
50		
50	12	38
19	9	10
40	19	21
31	15	16
30	12	18
25	11	14
28	10	18
41	10	31
40	18	22
35	11	24
34	11	23
36	10	26
70	20	50
35	19	16
37	10	27
25	8	17
31	11	20
34	15	19
65	17	48

SJ 03207	30N	12W 32	2	3	2			60	30	30
SJ 03206	30N	12W 32	2	3	2			60		
SJ 00116	30N	12W 32	2	3	3			25		
SJ 00116 S	30N	12W 32	2	3	3			25		
SJ 03606	30N	12W 32	3	4	3			67	49	18
SJ 02908	30N	12W 32	4	2	4			50		
SJ 03779 POD1	30N	12W 32	4	2	4	263644	2098600	26	8	18
SJ 02804	30N	12W 32	4	3	4			50		
SJ 00519	30N	12W 32	4	4	3			24	12	12
SJ 03349	30N	12W 33	1	2	1			55		
SJ 03143	SON	12W 33	1	2	3			97	60	37
SJ 03110	30N	12W 33	1	2	4			320	54	266
SJ 01174	30N	12W 33	1	3				36	19	17
SJ 01390	30N	12W 33	1	3				40	22	18
SJ 03143 POD2	301	12W 33	1	4	2			40	10	30
SJ 03133	30N	12W 33	1	4	4			39	20	19
SJ 00605	30N	12W 33	2	1	2			72	35	37
SJ 00606	30N	12W 33	2	1	2			104	35	69
SJ 02981	30N	12W 33	2	1	2			100	60	40
SJ 01072	30N	12W 33	2	2				110	50	60
SJ 01036	30N	12W 33	2	2				105	70	35
SJ 01045	30N	12W 33	2	2				73	45	28
SJ 03140	30N	12W 33	2	3	1			42	20	22
SJ 00474	30N	12W 33	2	3	3			104	60	44
SJ 03614	30N	12W 33	2	3	3			42	33	9
SJ 01256	30N	12W 33	2	4				250	160	90
SJ 00444	30N	12W 33	2	4				66	34	32
SJ 00505	30N	12W 33	2	4				85	45	40
SJ 01286	30N	12W 33	3					265	227	38
SJ 01118	30N	12W 33	3	2				32	10	22
SJ 00613	SON	12W 33	3	2	3			147	95	52
SJ 01633	30N	12W 33	3	3				280	240	40
SJ 02212	30N	12W 33	3	3				320	269	51
SJ 00447	30N	12W 33	4	1				104	65	39
SJ 00622	30N	12W 33	4	1	2			76	41	35
SJ 00590	30N	12W 33	4	1	3			98	60	38
SJ 00986	30N	12W 33	4	2				104	80	24
SJ 01231	30N	12W 33	4	2	3			246	161	85

Record Count: 146







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.
- 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 ¼" 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.
- 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 belowgrade 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.



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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

- 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.
 - 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.

MONTHLY BELOW GRADE TANK INSPECTION FORM											
Well Nan	ne:				API No.:						
Legals	Sec:		Township:		Range:						
XTO Inspector's Name	Inspection Date	Inspection Time	Any visible liner tears (Y/N)	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)			
Notes:	Provide De	tailed Descri	ption:				<u> </u>				
Misc:											
							·····	·····			
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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.
- 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

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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.
- 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 divisionapproved 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.

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- 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.