District I
1625 N French Dr , Hobbs, NM 88240
District II
1301 W Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S St Francis Dr , Santa Fe, NM 87505

. 1

State of New Mexico Energy Minerals and Natural Resources Department Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

For temporary pits, closed-loop, systems, and below-grade tanks, submit to the appropriate NMOCD District Office.
For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

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

Type of action: X Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method Modification to an existing permit Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system, below-grade tank, or proposed alternative method
Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request
Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances
Operator: XTO Energy, Inc. OGRID #: 5380
Address: #382 County Road 3100, Aztec, NM 87410
Facility or well name: Huerfano Unit #320 NMNM 03016
API Number: 30.045 - 345103 OCD Permit Number:
U/L or Qtr/Qtr A Section 14 Township 25N Range 9W County: San Juan
Center of Proposed Design: Latitude 36.40605 Longitude 107.75176 NAD: ☐ 1927 ☒ 1983
Surface Owner: X Federal X State Private Tribal Trust or Indian Allotment
Subsection F or G of 19.15.17.11 NMAC Temporary: Drilling Workover Permanent Emergency Cavitation P&A Lined Unlined Liner type: Thickness 20 mil LLDPE HDPE PVC Other String-Reinforced Liner Seams: Welded Factory Other Volume: bbl Dimensions: L 200 x W 80 x D 8-12
3. Closed-loop System: Subsection H of 19.15.17.11 NMAC
Type of Operation: P&A Drilling a new well Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent) Drying Pad Above Ground Steel Tanks Haul-off Bins Other Lined Unlined Liner type: Thickness mil LLDPE HDPE PVC Other Liner Seams: Welded Factory Other 4. Below-grade tank: Subsection I of 19.15.17.11 NMAC Volume: 120 bbl Type of fluid: Produced Water
Subsection I of 19.15.17.11 NMAC Subsection I o
5. Alternative Method:

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) Solvent Four foot height, four strands of barbed wire evenly spaced between one and four feet Alternate. Please specify	hospital,
Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks) Screen Netting Other Monthly inspections (If netting or screening is not physically feasible)	
8. 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 of consideration of approval. Fencing- Hogwire 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 all 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

;.

Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached. Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC Previously Approved Design (attach copy of design) API Number: or Permit Number:
Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached. Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9 Siting Criteria Compliance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC Previously Approved Design (attach copy of design) API Number: (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 Emergency Response 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 I of 19.15.17.13 NMAC ☑ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Instructions: Please indentify the facility or facilities for the disposal of liquids, 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 of Yes (If yes, please provide the information below) ☐ No	occur on or in areas that will not be used for future serv	vice and operations?			
Required for impacted areas which will not be used for future service and operation Soil Backfill and Cover Design Specifications based upon the appropriate Re-vegetation Plan - based upon the appropriate requirements of Subsection Site Reclamation Plan - based upon the appropriate requirements of Subsection	te requirements of Subsection H of 19.15.17.13 NMA n I 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 provided below. Requests regarding changes to certain siting criteria may required considered an exception which must be submitted to the Santa Fe Environmental demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC	ire administrative approval from the appropriate dist al Bureau office for consideration of approval. Justi	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; Da	ata obtained from nearby wells	Yes 🛛 No			
Ground water is between 50 and 100 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Da	ata 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					
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other signate (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	gnificant watercourse or lakebed, sinkhole, or playa	☐ Yes ☒ No			
Within 300 feet from a permanent residence, school, hospital, institution, or churc - Visual inspection (certification) of the proposed site; Aerial photo; Satellie		☐ Yes 🛛 No			
Within 500 horizontal feet of a private, domestic fresh water well or spring that le watering purposes, or within 1000 horizontal feet of any other fresh water well or NM Office of the State Engineer - iWATERS database; Visual inspection	spring, in existence at the time of initial application.	Yes X No			
Within incorporated municipal boundaries or within a defined municipal fresh was adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written appro	·	Yes 🛛 No			
Within 500 feet of a wetland US Fish and Wildlife Wetland Identification map; Topographic map; Visu	ual 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					
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geolog Society; Topographic map	gy & Mineral Resources; USGS; NM Geological	☐ Yes 🏿 No			
Within a 100-year floodplain FEMA map		☐ Yes ☒ No			

19,	
Operator Application Certification:	
I hereby certify that the information submitted with this application is true,	accurate and complete to the best of my knowledge and belief.
	Environmental Penrocentative
Name (Print): Kim Champlin	Title:
Signature: hum Mamplex	Date:August 19, 2008
e-mail address: kım_champlin@xtoenergy.com	Telephone: (505) 333-3100
20. OCD Approval: Permit Application (including closure plan) Clos	sure Plan (only) OCD Conditions (see attachment)
OCD Representative Signature: 51	Approval Date: 8-25-08
Title: Envirol Spec	OCD Permit Number:
21. Closure Report (required within 60 days of closure completion): Subset Instructions: Operators are required to obtain an approved closure plan of 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	orior to implementing any closure activities and submitting the closure report. ys of the completion of the closure activities. Please do not complete this the closure activities have been completed.
	Closure Completion Date:
Closure Method: Waste Excavation and Removal On-Site Closure Method A If different from approved plan, please explain.	Alternative Closure Method
23.	
Closure Report Regarding Waste Removal Closure For Closed-loop Sy	
	s, drilling fluids and drill cuttings were disposed. Use attachment if more than
two facilities were utilized.	
Disposal Facility Name:	Disposal Facility Permit Number:
Disposal Facility Name:	Disposal Facility Permit Number:
Were the closed-loop system operations and associated activities performed Yes (If yes, please demonstrate compliance to the items below)	
Required for impacted areas which will not be used for future service and o	perations:
Site Reclamation (Photo Documentation)	
Soil Backfilling and Cover Installation	
Re-vegetation Application Rates and Seeding Technique	
24. <u>Closure Report Attachment Checklist</u> : Instructions: Each of the follow mark in the box, that the documents are attached.	ing items must be attached to the closure report. Please indicate, by a check
☐ 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 clo	sure)
Disposal Facility Name and Permit Number	Suic)
☐ Soil Backfilling and Cover Installation	j
Re-vegetation Application Rates and Seeding Technique	
Site Reclamation (Photo Documentation)	and the state of t
On-site Closure Location: LatitudeI	ongitude NAD:
25.	
Operator Closure Certification: I hereby certify that the information and attachments submitted with this clobelief. I also certify that the closure complies with all applicable closure recomplies.	
Name (Print):	
Signature:	Date.
e-mail address:	Telephone:

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

Pit Permit Siting Criteria Information Sheet

Client:	XTO Energy
Project:	Pit Permits
Revised:	
Prepared by:	Ashley Ager

PO Box 4465, Durango, CO 81302 Information			Prepared by:	Ashley Ager
API#:	**************************************		USPLSS:	25N 09W 14A
Name:	HU	ERFANO No. 320	Lat/Long:	36.406270, -107.751820
Depth to groundwater:		>100'	Geologic formation:	Nacimiento Formation (Tn)
Distance to closest continuously flowing watercourse:	21.5 mi	les NNW to 'San Juan River'		
Distance to closest significant watercourse, lakebed, playa lake, or sinkhole:	wellhead 42	VSW to arroyo (from l); 1275' SSE to arroyo; 00' SE to 'Blanco Canyon/Wash'		
Darmanant rasidanas			Soil Type:	Entisols / Aridisols
Permanent residence, school, hospital, institution or church within 300'		NO		
			Annual Precipitation:	Otis: 10.41", Chaco: 8.73", Lybrook: 10.88
Domestic fresh water well or spring within 500'		NO	Precipitation Notes:	Historical 2.8" daily extreme max: Chac
Any other fresh water well or spring within 1000'		NO	· · · · · · · · · · · · · · · · · · ·	
Within incorporated municipal boundaries		NO	Attached Documents:	24N10W_iWaters pdf, 25N09W_iWaters pdf, 25N10W_iWaters pdf, 26N08W_iWaters pdf, 26N09W_iWaters pdf,
Within defined municipal fresh water well field		NO	FM3500640925B_H UERFANO-No-320	HUERFANO-320_topo-PLS jpg, HUERFANO-No- 320_gEarth-iWaters jpg, HUERFANO-No-320_gEarth PLS jpg,
Wetland within 500'		NO	Mining Activity:	None Near NM NRD-MMD MinesMillQuarries HUERFANO No
Within unstable area		NO		320 ppg
Within 100 year flood plain	NC) -FEMA Zone 'X'	,	

Additional Notes:

Pit location should be situated on far east side of well pad (at least 35' from wellhead location) to ensure pit is greater than 200' from arroyo.

Huerfano Unit #320 Below Ground Tank Hydrogeologic Report for Siting Criteria

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 pit location will be located in the southernmost Blanco Canyon region of the San Juan Basin southeast of the Huerfanito Mountains. The predominant geologic formation is the Nacimiento Formation of Tertiary age, which underlies surface soils and is often exposed (Dane and Bachman, 1965). Deposits of Quaternary alluvial and aeolian sands occur prominently near the surface of the area, especially near streams and washes.

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 and grades into the Animas Formation to the west. 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 San Juan River.

The prominent soil type at the proposed site are entisols and aridisols, which are defined as soils that exhibit little to no any profile development (www.emnrd.state.nm.us). Soils are basically unaltered from their parent rock. Miles of arroyos, washes and intermittent streams exist as part of the drainage network towards the San Juan River. These features often cut into soil and other unconsolidated materials, contributing to sedimentation downstream. The sudden influx of water from storm events easily erodes the soils that cover the area. The sudden influx of water from storm events easily erodes the soils that cover the area and prohibits effective recharge to the underlying aquifers.

Dry and arid weather further prohibit active recharge. 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 greater than 100 feet. This estimation is based on data from Stone and others (1983), the USGS Groundwater Atlas of the United States 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.

Beds of water-yielding sandstone are present in the Nacimiento Formation, which are fluvial in origin and are interbedded with siltstone, shale and coal. Porous sandstones form the principal aquifers, while relatively impermeable shales form confining units between the aquifers (Stone et al., 1983). Local aquifers exist within the Nacimiento Formation at depth s greater than 100 feet and thicknesses of the aquifer can be up to 3500 feet (USGS, Groundwater Atlas of the US).

The site in question is located on a relatively flat area at an elevation of approximately 6531 feet and approximately 4000 feet northwest of Blanco Canyon. Broad shalely hills are interspersed with occasional sandstone outcrops, and systems of dry washes and their tributaries are evident on the attached aerial image. Groundwater is expected to be shallow within Blanco Canyon. But an elevation difference between the site and the base of Blanco Canyon of almost 110 feet suggest groundwater is deeper at the proposed site.

Groundwater data available from the NM State Engineer's iWaters Database for wells near the proposed site are attached.

Wells located at similar elevations along Blanco Canyon contain groundwater greater than 200 feet deep. A map showing the location of wells in reference to the proposed pit location is attached.

DISTRICT I 1625 N. French Dr., Hobbs, N.M. 88240

DISTRICT II 1301 W. Grand Ave., Artesia, N.M. 88210

DISTRICT III 1000 Rio Brazos Rd , Aztec, N.M. 87410

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr. Santa Fe, NM 87505

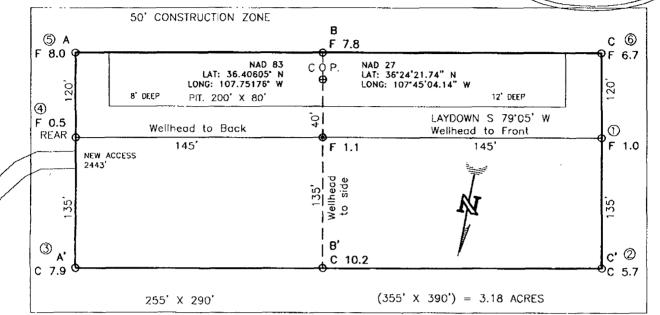
Form C-102 Revised October 12, 2005

Submit to Appropriate District Office State Lease - 4 Copies

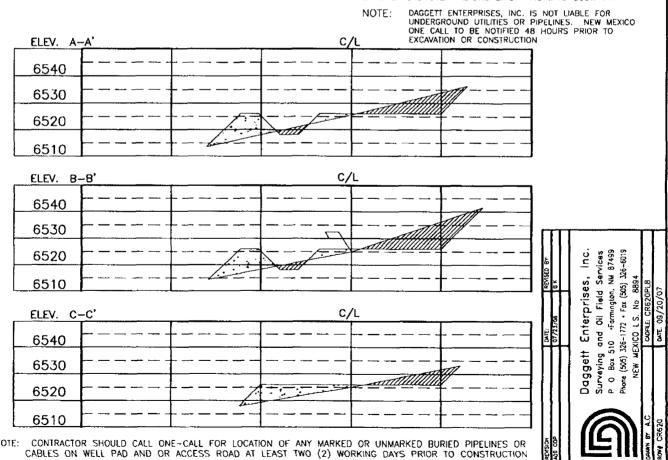
Fee Lease - 3 Copies

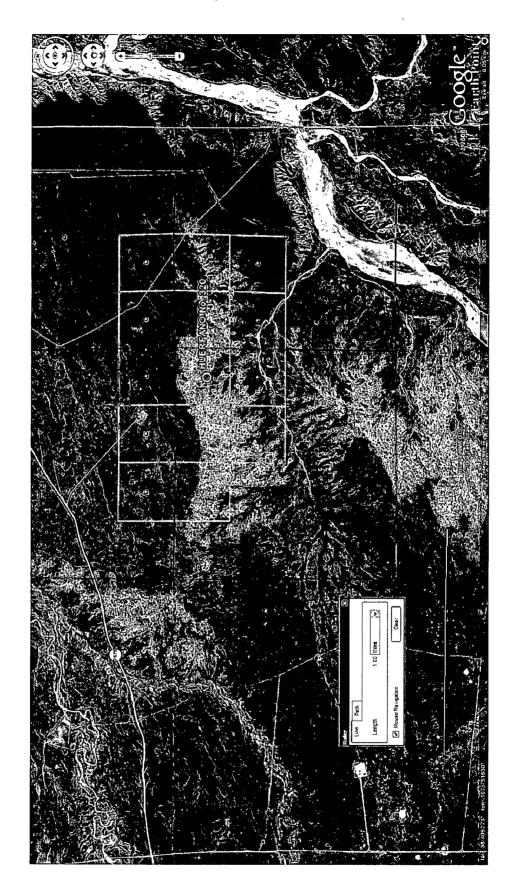
[‡] API	Number	WELL LOCATION AND ACREAGE DEDICATION PLA 2 Pool Code Pool Name										
*Property Co	de				®Property ∣	Name		Well Number				
,		HUERFANO								32	320	
70CRID No					*Operator	Nome				• Elev	ration	
					XTO ENERG	BY INC.			j	65	25'	
					¹⁰ Surface	Location						
or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	i	rom the	East/West lin		County	
A	14	25-N	9-W		765	NORTH		665	EAST		SAN JUAI	
			"Bott	om Hole		If Different F						
or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet	from the	East/West III	ne (County	
edicated Acres	<u> </u>	1	13 Joint or I	l l	14 Consolidation (Code	16 Orde	r No	<u> </u>			
					0.00							
O ALLOV	VABLE V					ION UNTIL ALL BEEN APPROVE				N CON	SOLIDA	
		·		LONG:	: 36.40627* (107.75182* \ AT: 36°24'22.5* :: 107°45'04.3*	N. (NAD 83) N. (NAD 83) N. (NAD 27)	S 00-40-55 W G 2630.60' (M)	right to d contract w interest, o		is location p such a mine pooling agre	ourouant to a rai or working omont or a	
				14		FD. 2 1/	2" BC.	18 5	URVEYOR	CERT	IFICATIO	
					•		, 610		ify that the well is from field notes o			

XTO ENERGY INC. HUERFANO No. 320, 765 FNL 665 FEL SECTION 14, T25N, R9W, N.M.P.M., SAN JUAN COUNTY, N. M. GROUND ELEVATION: 6525' DATE: JULY 31, 2007 NAD 83 LAT. = 36.40627" N LONG. = 107.75182" W NAD 27 LAT. = 36'24'22.5" N LONG. = 107'45'04.3" W

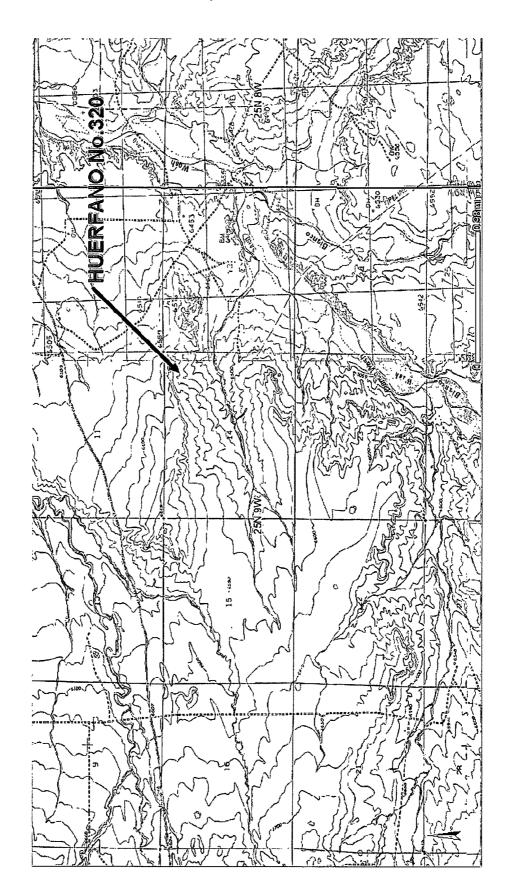


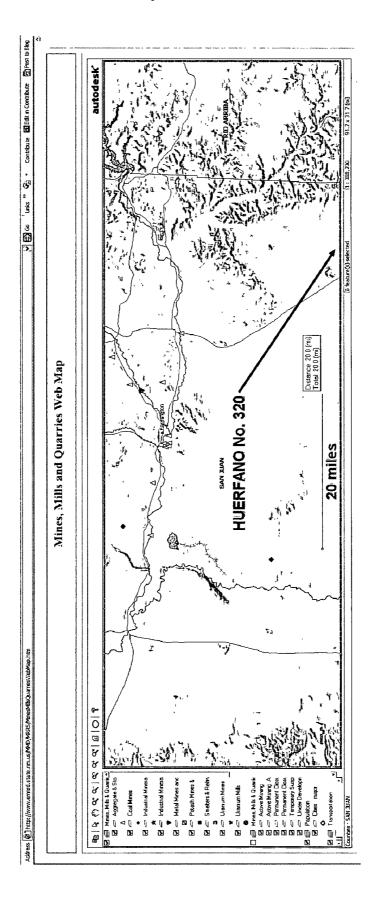
RESERVE PIT DIKE. TO BE 8' ABOVE DEEP SIDE (OVERFLOW - 3' WIDE AND 1' ABOVE SHALLOW SIDE).
BLOW PIT: OVERFLOW PIPE HALFWAY BETWEEN TOP AND BOTTOM AND TO EXTEND OVER PLASTIC LINER AND INTO BLOW PIT

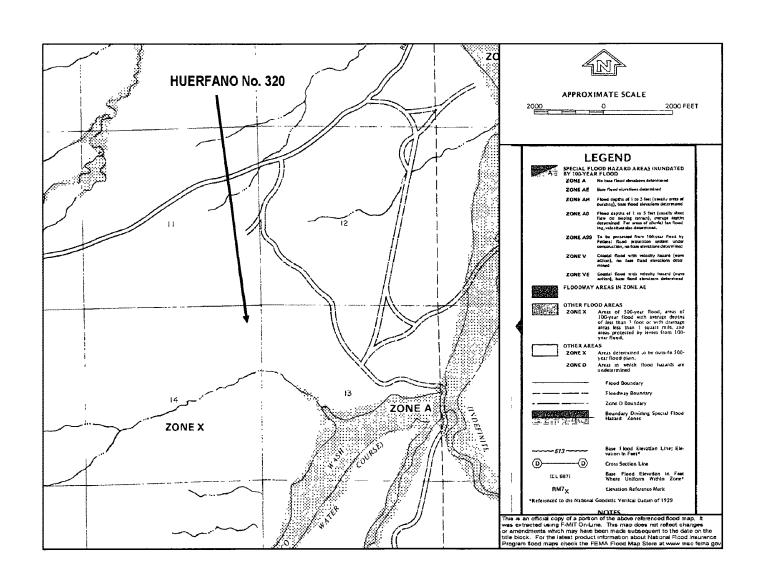












	Township: 26N Range: 10W Sections:
	NAD27 X: Y: Zone: Search Radius:
	County: Basin: Number: Suffix:
	Owner Name: (First) (Last) ONon-Domestic ODomestic @All
	POD / Surface Data Report
	Clear Form iWATERS Menu Help
	WATER COLUMN REPORT 08/08/2008
	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are biggest to smallest) Depth Depth Water (in feet)
POD Number SJ 00193 SJ 00194	Tws Rng Sec q q Zone X Y Well Water Column 26N 10W 13 4 2 2287 500 1787 26N 10W 25 4 1 2105 500 1605

	Township: 26N	Range: 09W	Sections:		
NA	D27 X:	Y:	Zone:	Search F	Radius:
County:	Basi	n:		Number:	Suffix:
Owner Name:	(First)	(Last)		Non-Don	nestic ODomestic @All
	POD / Surface Da	ta Report Avg D	epth to Water R	eport Water C	column Report
•		Clear Form	iWATERS Menu	ı Help	

WATER COLUMN REPORT 08/08/2008

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

•	(quarter	sar	e bi	gge	st	to:	smallest)			Depth	Depth	Water	(in	feet)
POD Number	Tws	Rng	Sec	q	q	q	Zone	х	Y	Well	Water	Column		
SJ 02961	26N	09W	01	2	2	3				1500				
SJ 02962	26N	09W	01	3	2	3				1500				
SJ 01756	26N	09W	11	2	2	3				75	40	35		
SJ 03811 POD1	26N	09W	12	3	3	3				348	175	173		
SJ 00412	26N	09W	16	4	2					202	65	137		
SJ 00214	26N	09W	26	2	4	2				946	230	716		
SJ 00064	26N	09W	26	4	2	1				490	215	275		
SJ 00063	26N	09W	26	4	2	3				479	234	245		

٠,٠

New Mexico Office of the State Engineer **POD Reports and Downloads**

	1 02 130ports with 2011 instant
	Township: 26N Range: 08W Sections:
	NAD27 X: Y: Zone: Search Radius:
	County:
	Owner Name: (First) (Last) Onn-Domestic Odomestic Odomes
	POD / Surface Data Report
	Clear Form iWATERS Menu Help
	WATER COLUMN REPORT 08/07/2008
	(quarters are 1=NW 2=NE 3=SW 4=SE)
	(quarters are biggest to smallest) Depth Depth Water (in feet)
POD Number	Tws Rng Sec q q q Zone X Y Well Water Column
SJ 02405	26N 08W 01 3 4 3 180 100 80
SJ 02411	26N 08W 01 4 4 1 6000
SJ 02407	26N 08W 01 4 4 1 2200

Record Count: 3

	Γownship: 26N	Range: 07W	Sections:		
NA	D27 X:	Y:	Zone:	Search	Radius:
County:	Bas	in:		Number:	Suffix:
Owner Name:	(First)	(Last)		ONon-Do	omestic ODomestic @All
	POD / Surface Da	ata Report Avg I	Depth to Water F	Report Water	Column Report
		Clear Form	iWATERS Men	u Help	

WATER COLUMN REPORT 08/06/2008

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

	(quarte	ers ar	e bi	gge	es 1	t to	smallest)			Depth	Depth	Water	(in fee
POD Number	Tws	Rng	Sec	q	q	q	Zone	X	Y	Well	Water	Column	
SJ 02409	261	1 07W	01	1	2	2				700	400	300	
SJ 02402	261	1 07W	05	3	3	2				36	18	18	
SJ 00071	261	1 07W	15	4	1	2				365	26	339	
SJ 00070	261	1 07W	15	4	2	3				335	22	313	
SJ 02406	261	1 07W	30	3	2	1				280	180	100	

	Township: 25N Ra	nge: 10W Sec	ctions:		
NA	D27 X:	Y:	Zone:	Search	Radius:
County:	Basin:			Number:	Suffix:
Owner Name:	(First)	(Last)		ONon-Doi	mestic ODomestic OAll
	POD / Surface Data Re	eport Avg Depth	n to Water Re	eport Water (Column Report
	_(Clear FormiWA	TERS Menu	Help	

WATER COLUMN REPORT 08/08/2008

	(quarter	s are 1=1 s are bi					Depth	Depth	Water	(in feet)
POD Number	Tws	Rng Sec	qqq	Zone	x	Y	Well	Water	Column	
RG 36933	25N	10W 11	3 2 2				180	60	120	
SJ 01715	25N	10W 22	4 4				637	250	387	

	•
	Township: 25N Range: 09W Sections:
	NAD27 X: Y: Zone: Search Radius:
	County: Number: Suffix:
	Owner Name: (First)
	POD / Surface Data Report Avg Depth to Water Report Water Column Report
	Clear Form iWATERS Menu Help
	WATER COLUMN REPORT 08/08/2008
POD Number SJ 01979	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are biggest to smallest) Tws Rng Sec q q q Zone X Y Well Water Column 25N 09W 32 2 3 1180 628 552

	Township: 25N Range: 06W Sections:
	NAD27 X: Zone: Search Radius:
	County: Basin: Number: Suffix:
	Owner Name: (First) (Last) Onn-Domestic Odmestic
	POD / Surface Data Report
	Clear Form iWATERS Menu Help
	WATER COLUMN REPORT 08/12/2008
	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are biggest to smallest) Depth Depth Water (in feet)
POD Number	Tws Rng Sec q q q Zone X Y Well Water Column
SJ 00201	25N 06W 03 4 1 1346 500 846

80

435

Record Count: 3

25N 06W 21 4 1 4

25N 06W 33 4 4 4

SJ 00681

SJ 00681 12

	Township: 24N Range:	10W Sections:		
NA	D27 X: Y:	Zone:	Search Rad	ius:
County:	Basin:		Number:	Suffix:
Owner Name:	(First)	(Last)	○Non-Domes	tic ODomestic @All
	POD / Surface Data Report	Avg Depth to Water Re	eport Water Colu	mn Report
	Clear	Form iWATERS Menu	Help	
		4	<u> </u>	

WATER COLUMN REPORT 08/07/2008

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

	(quarter					smalles	-		Depth	Depth	Water	(in feet)
POD Number	Tws	Rng	Sec	q q	q	Zone	x	Y	Well	Water	Column	
SJ 03141	24N	10W	29	1 2	3				640	595	45	
SJ 01713	24N	10W	33	4 4					373			
SJ 01714	24N	10W	36	4 3					442	284	158	

Record Count: 3

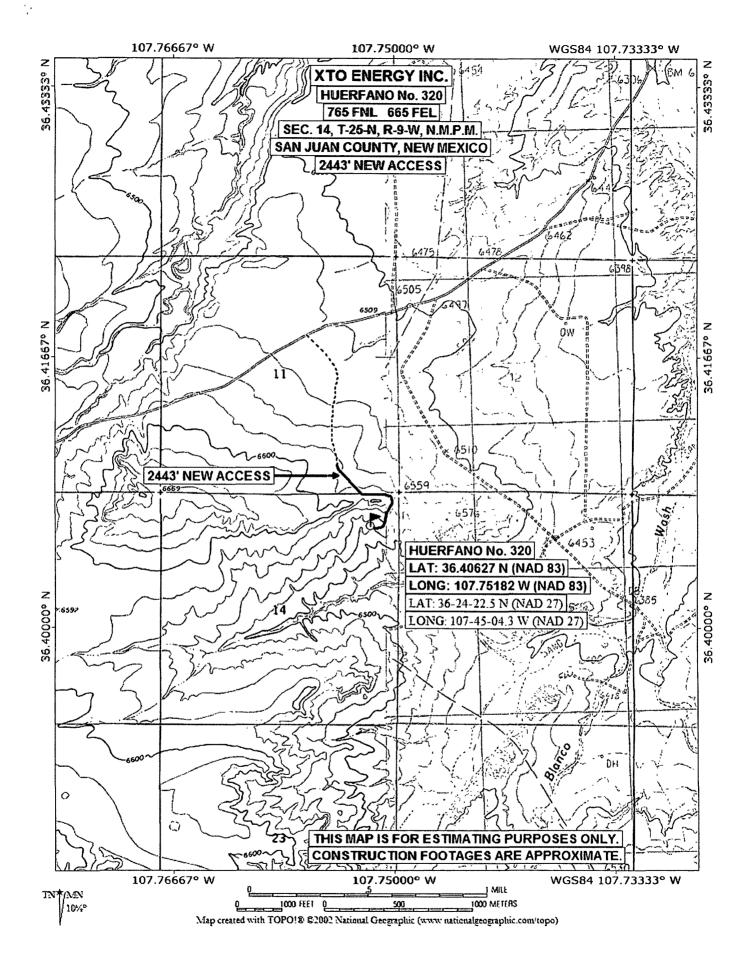
٠.٠

Tov	vnship: 24N Range:	09W Sections:		
NAD27	7 X: Y:	Zone:	Search R	adius:
County:	Basin:		Number:	Suffix:
Owner Name: (Fi	irst)	(Last)	ONon-Dom	estic ODomestic All
PC	DD / Surface Data Report	Avg Depth to Water R	eport Water Co	lumn Report
	Clear F	Form iWATERS Menu	Help	

WATER COLUMN REPORT 08/11/2008

	(quarter	s are 1=N	W 2=NE :	3=SW 4=S	E)					
	(quarter	s are big	gest to	smalles	t)		Depth	Depth	Water	(in feet)
POD Number	Tws	Rng Sec	ррр	Zone	x	Y	Well	Water	Column	
SJ 01255	24N	`09W 07	1 1				1100	1073	27	
SJ 01712	24N	09W 27	4 2				528	515	13	

NAD 83 XTO ENERGY INC. LAT. = 36.40627° N HUERFANO No. 320, 765 FNL 665 FEL LONG. = 107.75182° W SECTION 14, T25N, R9W, N.M.P.M., SAN JUAN COUNTY, N. M. NAD 27 GROUND ELEVATION: 6525' DATE: JULY 31, 2007 LAT. = 36°24'22.5" N LONG. = 107°45'04.3" 50' CONSTRUCTION ZONE В c 6 (5) A F 7.8 F 8.0 9 PF 6.7 NAD 83 LAT: 36.40605° N LONG: 107.75176° W NAD 27 LAT: 36'24'21.74" N LONG: 107'45'04.14" W C Q.P. 50, 8' DEEP 12' DEEP PIT. 200' X 80' LAYDOWN S 79'05' W 힑 F 0.5 Wellhead to Back 1 Wellhead to Front REAR (F 1.0 145 145 F 1.1 NEW ACCESS 2443' Wellhead to side 35 33 ③ _A, 8' c, (3) C 10.2 C 7.9 වීC 5.7 $(355' \times 390') = 3.18 \text{ ACRES}$ 255' X 290' RESERVE PIT DIKE: TO BE B' ABOVE DEEP SIDE (OVERFLOW - 3' WIDE AND 1' ABOVE SHALLOW SIDE).
BLOW PIT: OVERFLOW PIPE HALFWAY BETWEEN TOP AND BOTTOM AND TO EXTEND OVER PLASTIC LINER AND INTO BLOW PIT DAGGETT ENTERPRISES, INC. IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES. NEW MEXICO ONE CALL TO BE NOTIFIED 48 HOURS PRIOR TO EXCAVATION OR CONSTRUCTION NOTE: ELEV. A-A' 6540 6530 6520 6510 C/L ELEV. B-B 6540 6530 Daggett Enterprises, Inc. Surveying and Oil Field Services P. O. Box 510 Framington, NM 67499 Phone (505) 326-1772 • Fox (505) 326-6019 NEW MEXICO U.S. NO. 8894 6520 6510 C/L ELEV. C-C' 6540 6530 6520 6510 CONTRACTOR SHOULD CALL ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED BURIED PIPELINES OR CABLES ON WELL PAD AND OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION



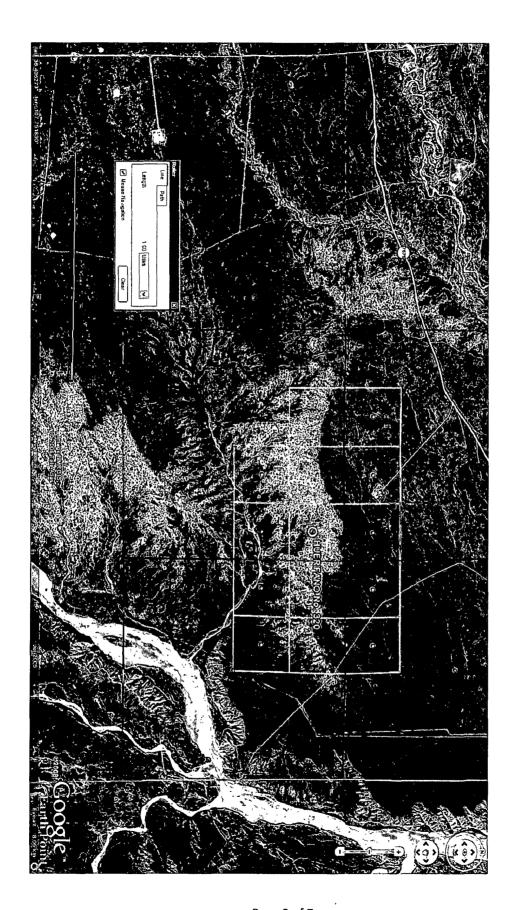
Lodestar Services, Inc. PO Box 4465, Durango, CO 81302

Pit Permit Siting Criteria

Client:	XTO Energy	
Project:	Pit Permits	
Revised:	16-Aug-08	
Prepared by:	Ashley Ager	

00 01302	Information She	et Prepared by:	Ashley Ager		
		USPLSS:	25N 09W 14A		
HUERFANO No. 320		Lat/Long:	36.406270, -107.751820		
>100'		Geologic formation:	Nacimiento Formation (Tn)		
21.5 miles NNW to 'San Juan River'					
176' WSW to arroyo (from wellhead); 1275' SSE to arroyo; 4200' SE to 'Blanco Canyon/Wash'					
		Soil Type:	Entisols / Aridisols		
	NO				
		Annual Precipitation:	Otis: 10.41", Chaco: 8.73", Lybrook: 10.88"		
	NO	Precipitation Notes:	Historical 2.8" daily extreme max: Chaco		
	NO	<u> </u>			
	NO	Attached Documents:	24N10W_iWaters.pdf, 25N09W_iWaters pdf, 25N10W_iWaters pdf, 26N08W_iWaters pdf, 26N09W_iWaters pdf,		
NO		FM3500640925B_H UERFANO-No-320	HUERFANO-320_topo-PLS jpg, HUERFANO-No- 320_gEarth-iWaters jpg, HUERFANO-No-320_gEarth- PLS jpg,		
	NO	Mining Activity:	None Near		
Wetland within 500' NO			NM_NRD-MMD_MinesMillQuarries_HUERFANO_No- 320.jpg		
	NO				
NC) -FEMA Zone 'X'				
	21.5 mi 176' V wellhead 42	HUERFANO No. 320 >100' 21.5 miles NNW to 'San Juan River' 176' WSW to arroyo (from wellhead); 1275' SSE to arroyo; 4200' SE to 'Blanco Canyon/Wash' NO NO NO NO NO NO NO	HUERFANO No. 320 >100' Call Juan Canyon/Wash' NO NO Annual Precipitation No NO Attached Documents: NO NO Mining Activity:		

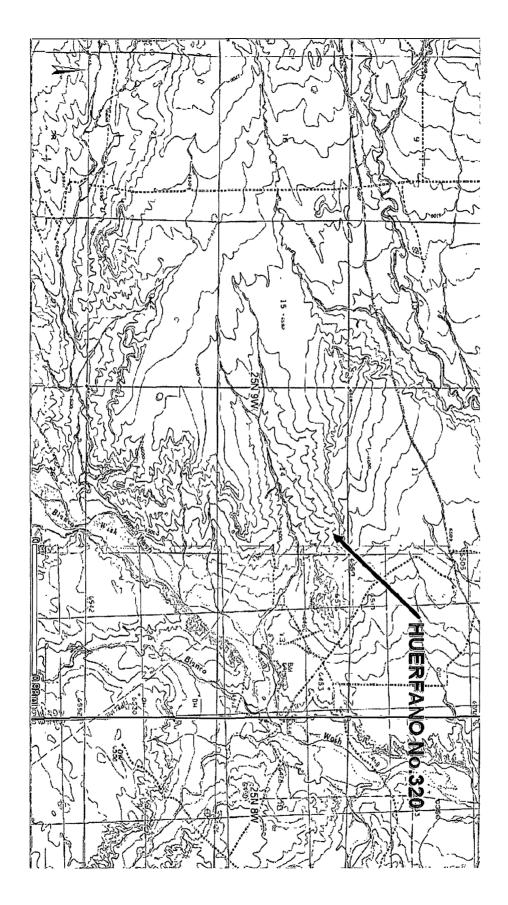
Pit location should be situated on far east side of well pad (at least 35' from wellhead location) to ensure pit is greater than 200' from arroyo.



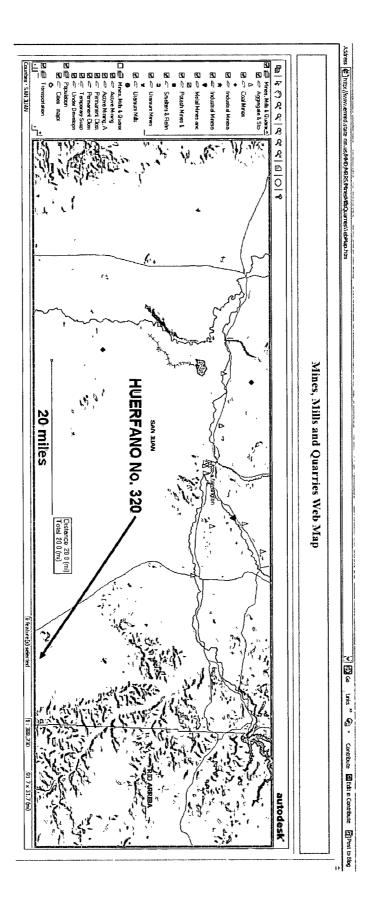
Page 2 of 7



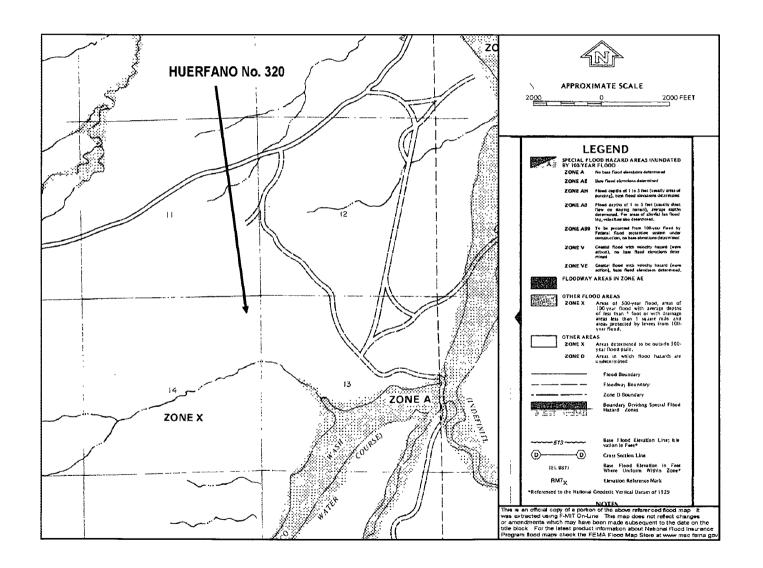
Page 3 of 7



Page 4 of 7



Page 5 of 7



	Township: 26N Range: 10W Sections:
	NAD27 X: Y: Zone: Search Radius:
	County: Basin: Number: Suffix:
	Owner Name: (First) (Last) ONon-Domestic ODomestic OAll
	POD / Surface Data Report
	Clear Form iWATERS Menu Help
	WATER COLUMN REPORT 08/08/2008
POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are biggest to smallest) Tws Rng Sec q q Zone X Y Well Water Column

2287

2105

500

500

1787

1605

Record Count: 2

Tws Rng Sec q q q

26N 10W 13 4 2

26N 10W 25 4 1

Zone

SJ 00193

SJ 00194

Township: 26N Range: 09W Sections:	
NAD27 X: Y: Zone: Search Radius:	
County: Basin: Number: Suffix:	
Owner Name: (First) (Last) Onn-Domestic Odomestic Odomes	
POD / Surface Data Report	
Clear Form iWATERS Menu Help	

WATER COLUMN REPORT 08/08/2008

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

	(quarter	s are	e biq	gge	st	: to	smallest)		Depth	Depth	Water	(in	feet)
POD Number	Tws	Rng	Sec	q	q	q	Zone	X	Y	Well	Water	Column		
SJ 02961	26N	09W	01	2	2	3				1500				
SJ 02962	26N	09W	01	3	2	3				1500				
SJ 01756	26N	09W	11	2	2	3				75	40	35		
SJ 03811 POD1	26N	09W	12	3	3	3				348	175	173		
SJ 00412	26N	09W	16	4	2					202	65	137		
SJ 00214	26N	09W	26	2	4	2				946	230	716		
SJ 00064	26N	09W	26	4	2	1				490	215	275		
SJ 00063	26N	09W	26	4	2	3				479	234	245		

	Township: 26N Range: 08W Sections:
	NAD27 X: Y: Zone: Search Radius:
	County: Basin: Number: Suffix:
	Owner Name: (First) (Last) ONon-Domestic ODomestic OAll
	POD / Surface Data Report Avg Depth to Water Report Water Column Report
	Clear Form iWATERS Menu Help
·	WATER COLUMN REPORT 08/07/2008
	(quarters are 1=NW 2=NE 3=SW 4=SE)
	(quarters are biggest to smallest) Depth Depth Water (in feet)
POD Number	Tws Rng Sec q q q Zone X Y Well Water Column
SJ 02405	26N 08W 01 3 4 3 180 100 80
SJ 02411	26N 08W 01 4 4 1 6000
SJ 02407	26N 08W 01 4 4 1 2200

Township: 26N Range: 07W Sections:	
NAD27 X: Y: Zone: Search Radius:	
County: Basin: Number: Suffix:	
Owner Name: (First) (Last) Onn-Domestic Odomestic Odomes	
POD / Surface Data Report	
Clear Form iWATERS Menu Help	

WATER COLUMN REPORT 08/06/2008

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

	(quarter	s are	e biq	gges	st to	smallest)	ı		Depth	Depth	Water	(in feet)
POD Number	Tws	Rng	Sec	qç	P	Zone	Х	Y	Well	Water	Column	
SJ 02409	26N	07W	01	1 2	2				700	400	300	
SJ 02402	26N	07W	05	3 3	3 2				36	18	18	
SJ 00071	26N	07W	15	4 1	. 2				365	26	339	
SJ 00070	26N	07W	15	4 2	3				335	22	313	
SJ 02406	26N	07W	30	3 2	1				280	180	100	

New Mexico Office of the State Engineer **POD Reports and Downloads**

	Township: 25N Range: 10W Sections:
	NAD27 X: Y: Zone: Search Radius:
	County: Basin: Number: Suffix:
	Owner Name: (First)
	POD / Surface Data Report
	Clear Form iWATERS Menu Help
	WATER COLUMN REPORT 08/08/2008
	(quarters are 1=NW 2=NE 3=SW 4=SE)
POD Number RG 36933	(quarters are biggest to smallest) Tws Rng Sec q q q Zone X Y Well Water Column 25N 10W 11 3 2 2 180 60 120

637

250

387

Record Count: 2

25N 10W 22 4 4

SJ 01715

New Mexico Office of the State Engineer POD Reports and Downloads

Township: 25N Range: 09W Sections:
NAD27 X: Y: Zone: Search Radius:
County:
Owner Name: (First) (Last) ONon-Domestic ODomestic OAll
POD / Surface Data Report
Clear Form iWATERS Menu Help
WATER COLUMN REPORT 08/08/2008
(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are biggest to smallest) POD Number Tws Rng Sec q q q Zone X Y Well Water Column SJ 01979 25N 09W 32 2 3 1180 628 552

New Mexico Office of the State Engineer POD Reports and Downloads

	•
	Township: 25N Range: 06W Sections:
	NAD27 X: Y: Zone: Search Radius:
	County: Basin: Number: Suffix:
	Owner Name: (First) (Last) Onn-Domestic Odomestic Odomes
	POD / Surface Data Report
	Clear Form iWATERS Menu Help
	WATER COLUMN REPORT 08/12/2008
	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are biggest to smallest) Depth Depth Water (in feet)
POD Number	Tws Rng Sec q q q Zone X Y Well Water Column
SJ 00201	25N 06W 03 4 1 1346 500 846
SJ 00681	25N 06W 21 4 1 4
SJ 00681 12	25N 06W 33 4 4 4 4 4 4 435

(in feet)

New Mexico Office of the State Engineer **POD Reports and Downloads**

Township: 24N Range: 10W Sections:
NAD27 X: Y: Zone: Search Radius:
County: Basin: Number: Suffix:
Owner Name: (First) (Last) Onn-Domestic Odmestic Odmestic
POD / Surface Data Report
Clear Form iWATERS Menu Help
WATER COLUMN REPORT 08/07/2008

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

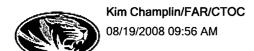
	(quarter	s are	e pro	gge	es 1	t to	smallest)			Depth	Depth	Water
POD Number	Tws	Rng	Sec	q	q	q	Zone	X	Y	Well	Water	Column
SJ 03141	24N	10W	29	1	2	3				640	595	45
SJ 01713	24N	10W	33	4	4					373		
SJ 01714	24N	10W	36	4	3					442	284	158

New Mexico Office of the State Engineer POD Reports and Downloads

·
Township: 24N Range: 09W Sections:
NAD27 X: Zone: Search Radius:
County:
Owner Name: (First) (Last) Onn-Domestic Odomestic Odomestic
POD / Surface Data Report
Clear Form iWATERS Menu Help
WATER COLUMN REPORT 08/11/2008

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

	(quarter	s are	e bi	gges	t to	smalles	t)		Depth	Depth	Water	(in feet)
POD Number	Tws	Rng	Sec	qq	P	Zone	х	Y	Well	Water	Column	
SJ 01255	24N	09W	07	1 1					1100	1073	27	
SJ 01712	24N	09W	27	4 2					528	515	13	



To mark_kelly@blm.gov

CC

bcc

Subject Notice- Huerfano Unit #320 Well Site

RE:

Huerfano Unit #320 Gas Well NMNM 03016 Sec. 14- T25N- R9W, San Juan County

Dear Mr. Kelly:

This submittal is pursuant to Rule 19.15.17.13 requiring operators to notify surface owners of on site burial of temporary pits. XTO Energy Inc. (XTO) is hereby providing written documentation of our intention to close the temporary pit associated with the aforementioned location by means of in place on site burial.

Should you have any questions or require additional information please feel free to contact me at your earliest convenience (505) 333-3100.

Kim Champlin Environmental Representative XTO Energy San Juan Division (505) 333-3207 Office (505)330-8357 Cell (505) 333-3280 Fax

XTO Energy Inc. San Juan Basin Pit Design and Construction Plan

In accordance with Rule 19.15.17.11 NMAC the following information describes the design and construction of temporary pits on XTO Energy Inc. (XTO) locations. This is XTO's standard procedure for all temporary pits. A separate plan will be submitted for any temporary pit which does not conform to this plan.

- XTO will design and construct a temporary pit to contain liquids and solids and prevent contamination of fresh water and protect public heath and environment.
- Prior to constructing the pit, topsoil will be stockpiled in the construction zone for later use in restoration.
- XTO will post a well sign, in compliance with 19.15.3.103 NMAC, on the well site prior to
 construction of the temporary pit. 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.
- 4. XTO shall construct all new fences utilizing 48" steel mesh field-fence (hogwire) on the bottom with a single strand of barbed wire on top. T-posts shall be installed every 12 feet and corners shall be anchored utilizing a secondary T-post. Temporary pits will be fenced at all times excluding drilling or workover operations, when the front side of the fence will be temporarily removed for operational purposes.
- 5. XTO shall construct the temporary pit so that the foundation and interior slopes are firm and free of rocks, debris, sharp edges or irregularities to prevent liner failure.
- XTO shall construct the pit so that the slopes are no steeper than two horizontal feet to one vertical foot.
- 7. Pit walls will be walked down by a crawler type tractor following construction.
- 8. All temporary pits will be lined with a 20-mil, string reinforced, LLDPE liner, complying with EPA SW-846 method 9090A requirements.
- Geotextile will be installed beneath the liner when rocks, debris, sharp edges or irregularities cannot be avoided.
- All liners will be anchored in the bottom of a compacted earth-filled trench at least 18 inches deep
- 11. XTO will minimize liner seams and orient them up and down, not across a slope. Factory seams will be used when possible. XTO will ensure all field seams are welded by qualified personnel. Field seams will be overlapped four to six inches and will be oriented parallel to the line of maximum slope. XTO will minimize the number of field seams in corners and irregularly shaped areas.
- 12. The liner shall be protected from any fluid force or mechanical damage through the use of mud pit slides, or a manifold system.
- 13. The pit shall be protected from run-off by constructing and maintaining diversion ditches around the location or around the perimeter of the pit in some areas.
- 14. The volume of the pit shall not exceed 10 acre-feet, including freeboard.

XTO Energy Inc. San Juan Basin Maintenance and Operating Plan

In accordance with Rule 19.15.17.12 NMAC the following information describes the operation and maintenance of temporary pits on XTO Energy Inc. locations. This is XTO's standard procedure for all temporary pits. A separate plan will be submitted for any temporary pit which does not conform to this plan.

- 1. XTO will operate and maintain a temporary pit to contain liquids and solids and prevent contamination of fresh water and protect public health and environment.
- XTO will conserve drilling fluids by transmitting liquids to pits ahead of the rigs whenever possible. All drilling fluids will be disposed at Basin Disposal Inc, Permit # NM-01-005.
- 3. XTO will not discharge or store any hazardous waste in any temporary pit.
- 4. If any pit liner integrity is compromised, or if any penetration of the liner occurs above the liquid surface, then XTO shall notify the Aztec Division office by phone or email within 48 hours of the discovery and repair the damage or replace the liner.
- 5. If a leak develops below the liquid level, XTO shall remove all liquids above the damaged liner within 48 hours and repair the damage or replace the liner. XTO shall notify the Aztec Division office by phone or email within 48 hours of the discovery for leaks less than 25 barrels. XTO shall notify the Aztec Division office as required pursuant to Subsection B of 19.15.3.116 NMAC within twenty-four (24) hours of discovery of leaks greater than 25 barrels. In addition, immediate verbal notification pursuant to Subsection B, Paragraph (1), and Subparagraph (d) of 19 15 3 116 NMAC shall be reported to the division's Environmental Bureau Chief.
- 6. The liner shall be protected from any fluid force or mechanical damage through the use of mud pits slides, or a manifold system.
- 7. The pit shall be protected from run-off by constructing and maintaining diversion ditches around the location or around the perimeter of the pit in some cases.
- 8. XTO shall immediately remove any visible layer of oil from the surface of the temporary pit after cessation of a drilling or workover operation. Oil absorbent booms will be utilized to contain and remove oil from pits surface. An oil absorbent boom will be stored on-site until closure of pit.
- Only fluids generated during the drilling or workover process will be discharged into a temporary pit.
- 10. XTO will maintain the temporary pit free of miscellaneous solid waste or debris.
- During drilling or workover operations, XTO will inspect the temporary pit at least once daily to ensure compliance with this plan. Inspections will be logged and logs maintained for review. XTO will file this log with the Aztec Division office upon closure of the pit.
- 12. After drilling or workover operations, XTO will inspect the temporary pit weekly so long as liquids remain in the temporary pit. A log of the inspections will be stored at XTO's office electronically and will be filed with the Aztec Division office upon closure of the pit.
- 13. XTO shall maintain at least two feet of freeboard for a temporary pit.
- 14. XTO shall remove all free liquids from a temporary pit within 30 days from the date the operator releases the drilling or workover rig.

XTO Energy Inc. San Juan Basin Closure Plan

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

All closure activities will include proper documentation and be available for review upon request and will be submitted to OCD within 60 days of pit closure. Closure report will be filed on C-144 and incorporate the following:

- Details on Capping and Covering, where applicable.
- Plot Plan (Pit Diagram)
- Inspection Reports
- Sampling Results
- C-105
- Copy of Deed Notice will be filed with County Clerk

- All free standing liquids will be removed at the start of the pit closure process from the pit and disposed of in a division-approved facility or recycled, reused, or reclaimed in a manner that the Aztec Division office approves.
- 2. The preferred method of closure for all temporary pits will be on-site, in-place burial, assuming that all criteria listed in sub-section (B) of 19.15.17.13 are met.
- 3. The surface owner shall be notified of XTO proposed closure plan using a means that provides proof of notice i.e., Certified mail, return receipt requested.
- Within 6 months of the Rig Off status occurring XTO will ensure that temporary pits are closed, re-contoured, and reseeded.
- 5. Notice of Closure will be given to the Aztec Division office between 72 hours and one week of closure via email, or verbally. The notification of closure will include the following:
 - i. Operators Name
 - ii. Location by Unit Letter, Section, Township, and Range. Well name and API number.
- 6. Liner of temporary pit shall be removed above "mud level" after stabilization. Removal of liner will consist of manually or mechanically cutting liner at mud level and removing all remaining liner. Care will be taken to remove "ALL" of the liner i.e., edges of liner entrenched or buried. All excessive liver will be disposed of at a licensed disposal facility.
- 7. Pit contents shall be mixed with non-waste containing, earthen material in order to achieve appropriate solidification. The solidification process will be accomplished using a combination of natural drying and mechanically mixing. Pit contents will be mixed with non-waste, earthen material to a consistency that is deemed a safe and stable. The mixing ratio shall not exceed 3 parts clean soil to 1 part pit contents.
- 8. A five point composite sample will be taken of the pit using sampling tools and all samples tested per Subsection B of 19.15.17.13(B)(1)(b). In the event that the criteria are not met, all contents will be handled per Subparagraph (a) of Paragraph (1) of Subsection B of 19.15.17.13 i.e., Dig and haul. Disposal facility to be utilized should this method be required will be Envirotech, Permit No. NM01-0011 or IEI, Permit No. NM01-0010B.

Components	Test Method	Limit (mg/Kg)
Benzene	EPA SW-846 8021B or 8260B	0.2
BTEX	EPA SW-846 8021B or 8260B	50
TPH	EPA SW-846 418.1	2500
GRO/DRO	EPA SW-846 8015M	500
Chlorides	EPA 300.1	500 or background

- 9. Upon completion of solidification and testing, the pit area will be backfield with compacted, non-waste containing, earthen material. A minimum of four feet of cover shall be achieved and the cover shall include one foot of suitable material to establish vegetation at the site, or the background thickness of topsoil, whichever is greater.
- 10. Re-contouring of location will match fit, shape, line, form and texture of the surrounding area. Re-shaping will include drainage control, ponding prevention, and erosion prevention. 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.
- 11. Notification will be sent to OCD when the reclaimed area is seeded.
- 12. XTO shall 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 of 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.
- 13. The temporary pit will be located with a steel marker, no less than four inches in diameter, cemented in a hole three feet deep in the center of the onsite burial upon the abandonment of all the wells on the pad. The marker will be flush with the ground to allow access of the active well pad and for safety concerns. The marker will include a threaded collar to be used for future abandonment. The top of the marker will contain a welded steel 12" square plate that indicates the onsite burial of the temporary pit. The plate will be easily removable and a four foot tall riser will be threaded into the top of the collar marker and welded around the base with the operator's information at the time all wells on the pad are abandoned. The operator's information will include the following: Operators Name, Lease Name, Well Name and Number, Unit Number, Section, Township, Range and an indicator that the marker is an onsite burial location.

XTO Energy Inc. San Juan Basin Below Grade Tank Design and Construction Plan

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 (BGT) which does not conform to this plan.

- 1. XTO will design and construct a BGT to contain liquids and solids and prevent contamination of fresh water and protect public heath and environment.
- 2. Prior to constructing the pit, topsoil will be stockpiled in the construction zone for later use in restoration.
- 3. XTO will post a well sign, in compliance with 19.15.3.103 NMAC, on the well site prior to construction of the BGT. 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.
- 4. XTO shall construct all new fences utilizing 48" steel mesh field-fence (hogwire) on the bottom with two strands of barbed wire on top, or with a pipe top rail. A 6' chain link fence topped with three stands of barbed wire will be used if the well location is within 1000' of a permanent residence, school, hospital, institution or church.
- 5. XTO shall construct an expanded metal covering on top of the BGT.
- 6. XTO will ensure that a BGT is constructed of materials resistant to the BGT's particular contents and resistant to damage from sunlight.
- The BGT 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.
- XTO will construct a berm and/or diversion ditch in a manner that prevents the collection of surface water run-on.
- 9. XTO will construct and use BGT that does not have double walls. The BGT sidewalls will be open for visual inspection for leaks, the BGT bottom will be elevated a minimum of 6" above the underlying ground surface and the BGT will be underlain with a geomembrane liner to divert leaked liquid to a location that can be visually inspected.
- 10. XTO will equip BGT's designed in this manner with a properly functioning automatic high-level shut-off control device and manual controls to prevent overflows.
- 11. The geomembrane liner shall consist of 30-mil flexible PVC or 60-mil HDPE liner, or an equivalent liner material that the appropriate division district office approves. The geomembrane liner shall have a hydraulic conductivity greater that 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 acidic and alkaline solutions. The liner material shall be resistant to ultraviolet light. Liner compatibility shall comply with EPA SW-846 method 9090A.
- 12. The general specifications for design and construction are attached.

XTO Energy Inc. San Juan Basin Below Grade Tank Maintenance and Operating Plan

In accordance with Rule 19.15.17.11 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 (BGT) which does not conform to this plan.

- 1. XTO will operate and maintain a BGT to contain liquids and solids and prevent contamination of fresh water and protect public health and the environment.
- 2. XTO will not allow a BGT to overflow and will use berms and/or diversion ditch to prevent surface run on to enter the BGT.
- 3. XTO will continuously remove any visible or measurable layer of oil from the fluid surface of a BGT in order to prevent significant accumulation of oil.
- 4. XTO will inspect the BGT monthly and maintain written records for five years.
- 5. XTO will maintain adequate freeboard to prevent over topping of the BGT.

XTO Energy Inc. San Juan Basin Below Grade Tank Closure Plan

In accordance with Rule 19.15.17.11 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 (BGT) which does not conform to this plan.

- XTO will close a BGT 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 an existing BGT 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 BGT within 60 days of cessation of the BGT'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 a BGT prior to implementing a closure method and will dispose of the liquids and sludge in a division-approved facility.
- 5. XTO will remove the BGT and dispose of it in a division approved facility or recycle, reuse, or reclaim it in a manner that the appropriate division district office approves.
- 6. XTO will remove any on-site equipment associated with a BGT unless the equipment is required for some other purpose.
- 7. XTO will test the solids beneath the BGT to determine whether a release has occurred. At a minimum 5 point composite sample will be collected along with individual grab samples from any area that is wet, discolored or showing other evidence of a release. Samples will be analyzed for BTEX, TPH and chlorides to demonstrate that the benzene concentration, as determined by EPA SW-846 methods 8021B or 8260B or EPA method that the division approves, does not exceed 0.2 mg/kg; total BTEX concentration, as determined by EPA SW-846 methods 8021B or 8260B or other EPA method that the division approves, does not exceed 50 mg/kg; the TPH concentration, as determined by EPA method 418.1 or other EPA method that the division approves, does not exceed 100mg/kg; and the chloride concentration, as determined by EPA method 300.1 or other EPA method that the division approves, does not exceed 250 mg/kg, or the background concentration, whichever is greater. XTO will notify the division of its results on form C-141.
- 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 will be given to the Aztec Division District III office between 72 hours and one week of closure via email or verbally. The notification will include the following:
 - i. Operator's name
 - Location by Unit Letter, Section, Township, and Range. Well name and API number.

- 11. All closure activities will include proper documentation and be available for review upon request and will be submitted to OCD within 60 days of closure of the BGT. Closure report will be filed on form C-144 and incorporate the following:
 - i. Details on capping and covering, where applicable
 - ii. Inspection reports
 - iii. Sampling results
- 12. 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.
- 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.
- 14. A minimum of 4' of cover shall be achieved and the cover shall include 1' of suitable material to establish vegetation at the site, or the background thickness of topsoil, whichever is greater.
- 15. The surface owner shall be notified of XTO's proposal to close the BGT as per the approved closure plan using certified mail, return receipt requested.