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

State of New Mexico Energy Minerals and Natural Resources Department Oil Conservation Division 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.

Proposed Alternative Method Permit or Closure Plan Application

Froposed Atternative Method Fernit of Closure Flan 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
lease 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 invironment. 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: Florance #75
API Number: 30-045-34500 OCD Permit Number:
U/L or Qtr/Qtr Section 20 Township 27N Range 8W County: San Juan
Center of Proposed Design: Latitude 36.56547 Longitude 107 70243 NAD: □1927 ☒ 1983
Surface Owner: X Federal T State Private Tribal Trust or Indian Allotment
2.
∑ <u>Pit</u> : Subsection F or G of 19.15.17.11 NMAC
Temporary: X Drilling Workover
Permanent Emergency Cavitation P&A
X Lined ☐ Unlined Liner type: Thickness 20 mil X LLDPE ☐ HDPE ☐ PVC ☐ Other
X String-Reinforced
Liner Seams: X Welded X 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: Thicknessmil LLDPE HDPE PVC Other 6 RECEIVED
Liner Seams: Welded Factory Other
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 Below-grade tank: Subsection I of 19.15.17.11 NMAC Volume: 120 bbl Type of fluid: Produced Water Tank Construction material: Steel Secondary containment with leak detection Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off Visible sidewalls and liner Visible sidewalls only Other
X Below-grade tank: Subsection I of 19.15.17.11 NMAC Produced Water
Volume: 120 bbl Type of fluid: Produced Water
Tank Construction material: Steel
Secondary containment with leak detection \(\bigcup \) Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
Visible statewards and finer
Liner type: Thickness 60 mil X HDPE PVC Other
s.
Alternative Method:
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe 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, institution or church) Tour 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)	
s. Signs: Subsection C of 19.15.17.11 NMAC 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers Signed in compliance with 19.15.3.103 NMAC	
Administrative Approvals and Exceptions: Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance. Please check a box if one or more of the following is requested, if not leave blank: Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau consideration of approval. 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 approoffice or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of a Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to dry above-grade tanks associated with a closed-loop system.	priate district pproval.
Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes 🛛 No
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (Applies to temporary, emergency, or cavitation pits and below-grade tanks) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	Yes 🗶 No
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. Mydrogeologic 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
and 19.15.17.13 NMAC Previously Approved Design (attach copy of design) API Number: or Permit Number:
Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC
Previously Approved Design (attach copy of design) API Number:
Previously Approved Operating and Maintenance Plan API Number:(Applies only to closed-loop system that use
above ground steel tanks or haul-off bins and propose to implement waste removal for closure)
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 G of 19.15.17.13 NMAC

Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Instructions: Please indentify the facility or facilities for the disposal of liquids, drillin facilities are required.		
•	osal Facility Permit Number:	
	osal Facility Permit Number:	
Will any of the proposed closed-loop system operations and associated activities occur of Yes (If yes, please provide the information below) No	<u> </u>	
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 I of 1 Re-vegetation Plan - based upon the appropriate requirements of Subsection G	9.15.17.13 NMAC	C
17. Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the closure provided below. Requests regarding changes to certain siting criteria may require admic considered an exception which must be submitted to the Santa Fe Environmental Bure demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidelines.	ninistrative approval from the appropriate disti au 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; Data obta	ined 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 obta	ined 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 obta	ined from nearby wells	X Yes □ No □ NA
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significal lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	nt watercourse or lakebed, sinkhole, or playa	Yes X No
Within 300 feet from a permanent residence, school, hospital, institution, or church in ex - 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 watering purposes, or within 1000 horizontal feet of any other fresh water well or spring. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification)	in existence at the time of initial application.	☐ Yes 🏿 No
Within incorporated municipal boundaries or within a defined municipal fresh water wel adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obt	·	☐ Yes 🗶 No
Within 500 feet of a wetland US Fish and Wildlife Wetland Identification map; Topographic map; Visual insp	pection (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 I	Mineral Division	☐ Yes 🏿 No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & M Society; Topographic map	lineral Resources; USGS; NM Geological	☐ Yes 🏿 No
Within a 100-year floodplain FEMA map		☐ Yes 🏿 No
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the folioby a check mark in the box, that the documents are attached. Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of Subs Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - Protocols and Procedures - based upon the appropriate requirements of 19.15.17.1 Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection Waste Material Sampling Plan - based upon the appropriate requirements of Subsection Soil Cover Design - based upon the appropriate requirements of Subsection H of I Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 1	ents of 19.15.17.10 NMAC ection F of 19.15.17.13 NMAC iate requirements of 19.15.17.11 NMAC based upon the appropriate requirements of 19. 3 NMAC ents of Subsection F of 19.15.17.13 NMAC ection F of 19.15.17.13 NMAC attings or in case on-site closure standards cann 9.15.17.13 NMAC	15.17.11 NMAC
Site Reclamation Plan - based upon the appropriate requirements of Subsection G		

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.
Name (Print): Kim Champlin Title: Environmental Representative
Signature: Nam Champlin Date: August 19, 2008
e-mail address: kim_champlin@xtoenergy.com Telephone: (505) 333-3100
20. OCD Approval: Permit Application (including closure plan) ☐ Closure Plan (only) ☐ OCD Conditions (see attachment)
OCD Representative Signature: Brand Sell. Approval Date: 8-25-08
Title: Enulys/Spec OCD Permit Number:
Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.
Closure Completion Date:
Closure Method: Waste Excavation and Removal On-Site Closure Method Alternative Closure Method Waste Removal (Closed-loop systems only) If different from approved plan, please explain.
23. <u>Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:</u> Instructions: Please indentify the facility or facilities for where the liquids, 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 on or in areas that will not be used for future service and operations? Yes (If yes, please demonstrate compliance to the items below) No
Required for impacted areas which will not be used for future service and operations: Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique
24. Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached. Proof of Closure Notice (surface owner and division) Proof of Deed Notice (required for on-site closure) Plot Plan (for on-site closures and temporary pits) Confirmation Sampling Analytical Results (if applicable) Waste Material Sampling Analytical Results (required for on-site closure) Disposal Facility Name and Permit Number Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique Site Reclamation (Photo Documentation)
On-site Closure Location: Latitude Longitude NAD: \[\Boxed{1927} \Boxed{1983}
Operator Closure Certification: I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.
Name (Print): Title:
Signature: Date:
e-mail address:

DISTRICT 1
1625 N. French Dr., Hobbs, N.M. 88240

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

DISTRICT III 1000 Rio Brazos Rd., Azlec, N.M. 87410 State of New Mexico Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION 1220 South St. Francis Dr.

1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-102 Revised October 12, 2005

Submit to Appropriate District Office

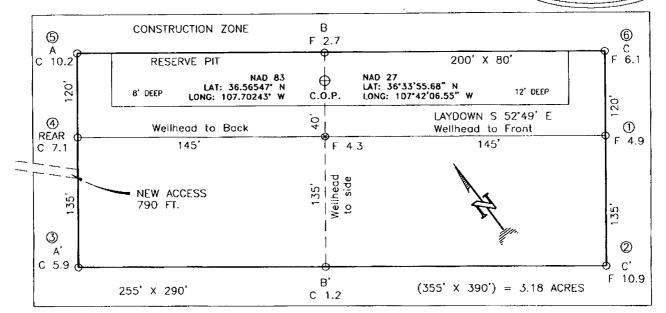
State Lease - 4 Copies

Fee Lease - 3 Copies

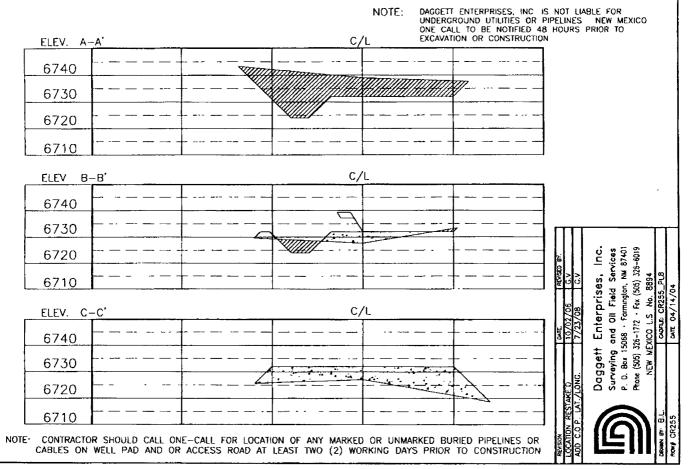
		٧	VELL L	OCATIO	N AND AC	REAGE DED	ICATION PL	_AT		
° API	Number			² Pool Code			³ Pool Name			· · · · · · · · · · · · · · · · · · ·
*Property Co	ode						6 We	fl Number		
		,						75		
OCRID No				·	*Operator *	Name			•	Elevation
					XTO ENERG	Y INC.				6732
					¹⁰ Surface		·			
Loriolno. B	Section 20	Township 27-N	Ronge 8-W	Lot Idn	Feet from the 705	North/South line NORTH	Feet from the	Eost/West lin	re	County
<u></u>	20	2, 14	L	om Hole	L	If Different Fr		L CA31		SAN JUAN
It or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West lie	ne	County
	<u> </u>									<u> </u>
Dedicated Acres	S		³³ Joint or I	niil	** Consolidation Ci	ode	Order No.			
		LONG: 107 LAT:	3' (M) 6.56530° 7.70260° 36'33'55. 07'42'07.2	N. (NAD W. (NAD 1" N. (NAD 2" W. (NAD	83) 27)	,	is true and belief, and if interest or including the right to drill confroct will interest, or		rest of m ion either sterest in hole too location his mini sting agre	ny knowledge and r owns a working i the fand cation or has a pursuant to a erot or working rement or a
•						FD. 3 1/4 1955 (B E.M. 18 C I hereby cerl was plotted me or under	ofy that the well to from field notes of my supervision, or to the best of my	cation st octual s	surveys mode by

XTO ENERGY INC.
FLORANCE No. 75, 705 FNL 1890 FEL
SECTION 20, T27N, R8W, N.M.P.M., SAN JUAN COUNTY, N.M.
GROUND ELEVATION: 6732' DATE: SEPTEMBER 19, 2006

NAD 83 LAT. = 36.56530° N LONG. = 107.70260° W NAD 27 LAT. = 36°33'55.1" N LONG. = 107°42'07.2" 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



Client: XTO Energy Pit Permit Lodestar Services, Inc. Pit Permits Project: **Siting Criteria** 16-Aug-08 PO Box 4465, Durango, CO 81302 Revised: Information Sheet Prepared by: Ashley Ager API#: **USPLSS:** 30-045-34500 27N 08W 20 Name: Lat/Long: Florance No. 075 36.565300, -107.702600 Geologic >100' San Jose Formation (Tsj) Depth to groundwater: formation: Distance to closest 12.25 miles NW to 'San Juan continuously flowing River' watercourse: Distance to closest 1140' ESE to arroyo('Largo significant watercourse, Canyon' tributary); 7600' WSW to lakebed, playa lake, or 'Blanco Wash' sinkhole: Soil Type: Rockland Permanent residence. school, hospital, NO institution or church within 300' Annual Governador: 11.98", Capulin Rgr Stn.: 14.98". Precipitation: Lybrook: 10.88", Otis: 10.41" Domestic fresh water Precipitation well or spring within NO no extreme historical precip. Events Notes Any other fresh water well or spring within NO 1000 26N07W_iWaters pdf, 26N08W_iWaters pdf, Attached 26N09W_iWaters pdf, 27N07W_iWaters pdf, **Documents**: NO 27N08W_iwaters pdf, 27N09W_iwaters pdf, Within incorporated 28N07W_iWaters pdf, 28N08W_iWaters pdf, municipal boundaries 28N09W iWaters pdf Within defined FLORANCE-No-075_gEarth-tWaters jpg, FLORANCE-No FM3500640750B_FL municipal fresh water NO 075_gEarth-PLS jpg, FLORANCE-No-075_topo-PLS jpg, ORANCE-No-075 jpg Florance #75 Revised cut&fill pdf well field NO **Mining Activity:** Wetland within 500' None Near NM NRD-MMD MinesMillQuarries FLORANCE no-075 jpg Within unstable area NO Within 100 year flood

Additional Notes:

plain

250' from cliff edge

NO-FEMA Zone 'X'

Florance #75 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 situated atop Blanco Mesa, which separates Largo and Blanco canyons in the San Juan Basin of northern New Mexico. Regional topography is composed of mesas dissected by deep, narrow canyons and arroyos. The cliff-forming sandstones are more resistant than the shales, but eventually weather into their composite sands; the shale weathers into silts and clays, resulting in a highly erodible landscape and an abundant sediment supply (Brister and Hoffman, 2002). Accumulations of talus and colluvial sediment at the base of the canyon walls form steep to gentle slopes that transition into flat-bottomed arroyos within the canyons. The predominant geologic formation at the proposed site is the San Jose Formation of Teritary Age, which is exposed as interbedded sandstones and mudstones (Dane and Bachman, 1965). Thickness of the San Jose Formation ranges from 200 to 2700 feet (Stone et al., 1983) and generally increases towards the center and eastern portions of the basin.

Cretaceous and Tertiary sandstones, as well as Quaternary alluvial deposits serve as the primary aquifers in the San Juan Basin (Stone et al., 1983). Aquifers within the San Jose Formation occur in alluvial and fluvial sandstone deposits. Reported discharge from 46 water wells completed in the San Jose Formation ranges from 0.15 to 61 gallons per minute, with a median of 5 gallons per minute (Stone et al., 1983). Most of the wells provide water for livestock and domestic use.

The prominent soil type at the proposed site is Rockland, meaning there is little to no soil development on the sandstone outcrops and it is basically unaltered from the parent rock material (www.emnrd.state.nm.us). What soil exists is very sandy, highly permeable and easily eroded. 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 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).

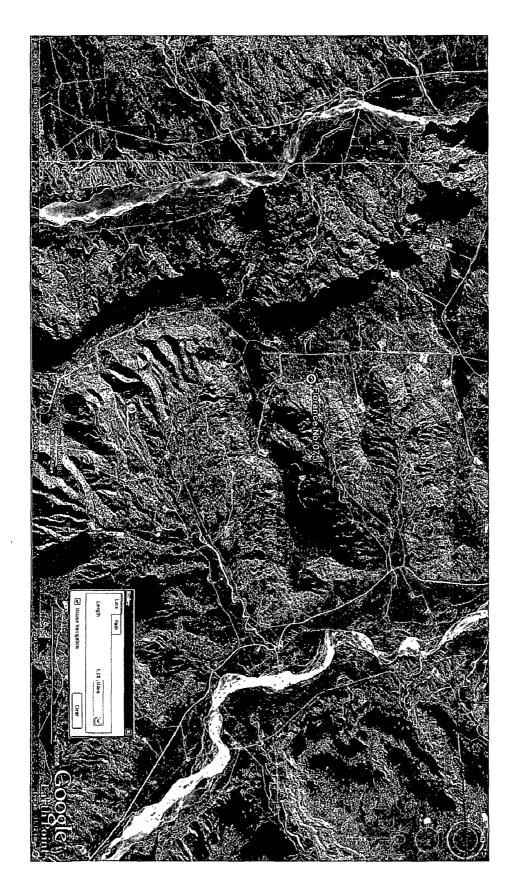
Site Specific Hydrogeology

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.

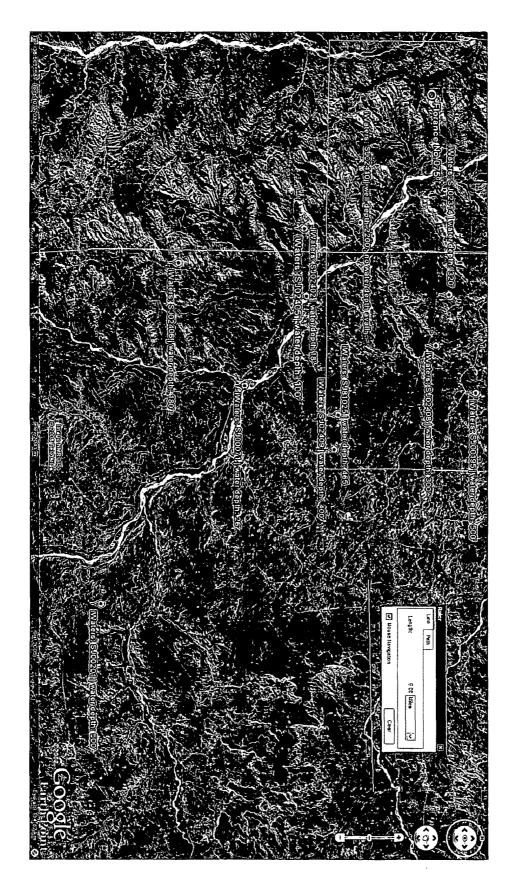
Beds of water-yielding sandstone are present in the San Jose Formation, which are fluvial and alluvial in origin and are interbedded with siltstone and mudstone. Porous sandstones form the principal aquifers, while relatively impermeable shales form confining units between the aquifers (Stone et al., 1983). Outcrops of sandstone are dissected by deep, narrow canyons and their tributaries, as shown on the attached aerial image.

This rural site location does not contain an abundant amount of groundwater elevation data. The closest public groundwater data exists approximately four miles away. Two data points from the NM State Engineer's Office iWaters database are located in comparable topographical areas as the proposed pit location. The points are plotted on an aerial photo attached to this pit permit. One site is located southeast of the proposed pit in the area separating Largo and Blanco washes. Depth to groundwater is 100' at that site and it is almost 400' lower in elevation than the proposed pit site. Another data point is located six miles away on the opposite side of Largo Wash, but at a similar site elevation. The depth to groundwater at that well is 300'.

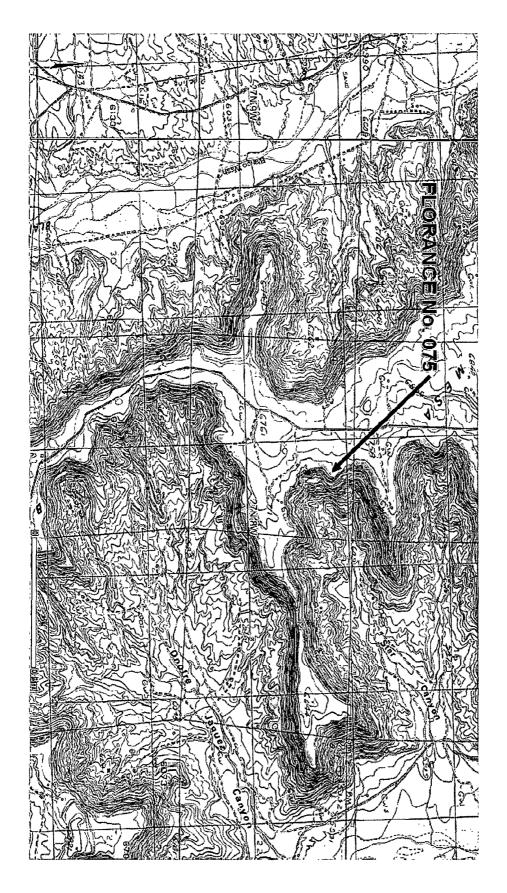
The site in question is located at an elevation of approximately 6790 feet. It is approximately 1.15 miles east of Blanco Canyon and 2 miles west of Largo Canyon. As shown on the topographic map, Largo Wash and Blanco Wash are the closest surface water (intermittent surface water) sources. Groundwater is estimated to be very near the ground surface within the washes. The elevation change between Blanco Wash and the proposed location is approximately 700 feet. The elevation change between the proposed site and Largo Wash is approximately 800'.



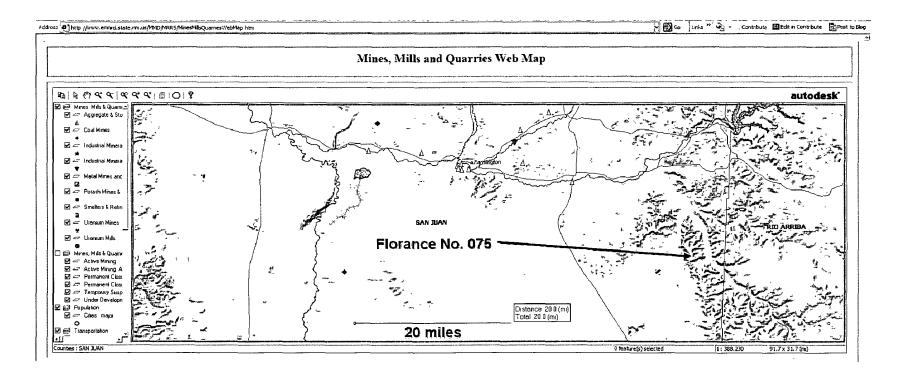
Page 2 of 7

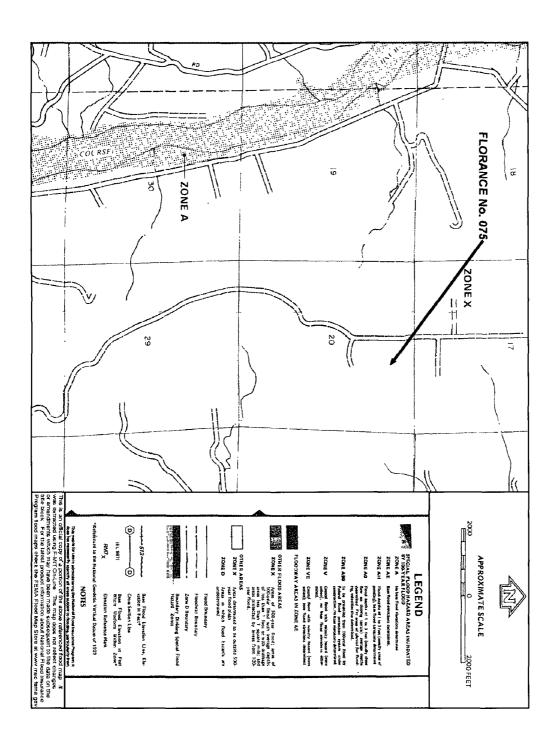


Page 3 of 7



Page 4 of 7





Township:	28N Range: 09W Se	ections:	Accession where the second sec
NAD27 X:	Y:	Zone:	Search Radius:
County:	Basin:	N	Number: Suffix:
Owner Name: (First)	(Last)		ONon-Domestic ODomestic OAll
POD / Sur	face Data Report Avg Depth	h to Water Repo	eport Water Column Report
	Clear Form iWA	ATERS Menu	Help

WATER COLUMN REPORT 08/06/2008

(quarters are 1=NW 2=NE 3=SW 4=SE) Water (in feet) (quarters are biggest to smallest) Depth Depth Column POD Number Tws Rng Sec qqq Zone Well Water SJ 03746 POD1 28N 09W 20 1 2 3 190 40 150 SJ 00018 28N 09W 20 3 1 4 135 71 64 SJ 02800 28N 09W 24 4 2 3 200

	Township: 28N F	Range: 08W	Sections:		
NA	D27 X:	Y:	Zone:	Searc	h Radius:
County:	Basin:			Number:	Suffix:
Owner Name:	(First)	(Last)		ONon-D	Oomestic ODomestic OAll
	POD / Surface Data	Report Avg D	epth to Water R	eport Wate	er Column Report
	•	Clear Form i	WATERS Menu	Help	

WATER COLUMN REPORT 08/04/2008

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

(qu	arter	s ar	e bi	gge	st	: to	smalles	t)		Depth	Depth	Water	(in	feet)
POD Number	Tws	Rng	Sec	q	q	q	Zone	x	Y	Well	Water	Column		
SJ 02283	28N	08W	14	4	2	1				540	480	60		
SJ 00209	28N	08W	17	3	2	1				15				
SJ 00209 -AMENDED-S	28N	08W	17	4	1	1				15				
SJ 00209 S	28N	08W	17	4	1	1				15		15		
SJ 00163 S	28N	08W	18	4	4	2				1450	800	650		

Township: 28N Range: 07W 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 08/11/2008
(quarters are 1=NW 2=NE 3=SW 4=SE)

	(quarter	rs are 1=NW 2=NE	3=SW 4=SE)						
	(quarter	rs are biggest t	o smallest)			Depth	Depth	Water	(in feet)
POD Number	Tws	Rng Sec qqq	Zone	X	Y	Well	Water	Column	
SJ 00002	28N	07W 14 1				375			
SJ 03116	28N	07W 21 3 3 3				98	20	78	

Township: 27	N 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 Avg De	pth to Water F	r Report Water Column Report
	Clear Form iV	WATERS Men	enu Help

WATER COLUMN REPORT 08/06/2008

	(quarter	s are I	L=NW Z=NE	3=SW 4=SE)	t					
	(quarter	s are b	piggest to	smallest))		Depth	Depth	Water	(in feet)
POD Number	Tws	Rng Se	eqqq	Zone	X	Y	Well	Water	Column	
SJ 00032	27N	10W 08	3 2 2 3				235	60	175	
SJ 00033	27N	10W 08	3 2 2 3				204			
SJ 00034	27N	10W 08	3 2 2 3				235	170	65	

New Mexico Office of the State Engineer POD Reports and Downloads
Township 77N Range 09W Sections
NAD27 X Y Zone Search Radius
County. Basin Number Suffix
Owner Name (First) (Last) Onon-Domestic Odomestic @All
POD / Surface Data Report Avg Depth to Water Report Water Column Report
Clear Form iWATERS Menu Help
POD / SURFACE DATA REPORT 08/12/2008 (quarters are 1=NW 2=NE 3=SW 4=SE) (acre ft per annum) (quarters are biggest to smallest X Y are in Feet UTM are in Meters) DB File Nbr Use Diversion Owner POD Number Source Tws Rng Sec q q Zone X Y UTM_Zone Easting Northing Date Date Well Water

No Records found, try again

8/12/2008 8:26 PM

	•
	Township: 27N Range: 08W 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 08/04/2008
	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are biggest to smallest) Depth Depth Water (in feet)
POD Number SJ 02410	Tws Rng Sec q Q Zone X Y Well Water Column 27N 08W 36 1 3 2 2200

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 08/04/2008

	· -					smallest)			Depth	Depth	Water	(in feet)
POD Number	Tws	Rng	Sec	qq	q	Zone	X	Y	Well	Water	Column	
RG 81025	27N	07W	35	4 3	3				560	465	95	
SJ 00195	27N	07W	15	2					1633	500	1133	
SJ 02314	27N	07W	17	3 3					355	320	35	
SJ 02408	27N	07W	21	2 1	3				400	300	100	
SJ 03274	27N	07W	35	3 4	4				450		•	
SJ 02404	27N	07W	35	4 3	3				550	250	300	

-	Township: 26N	Range: 09W	Sections:			
NA	D27 X:	Y:	Zone:	Search	Radius:	٠
County:	Basi	n:		Number:	Suffix:	-
Owner Name:	(First)	(Last)		ONon-Do	mestic ODomestic @	D AII
	POD / Surface Da	ta Report Avg	Depth to Water F	Report Water	Column Report	
		Clear Form	iWATERS Men	u Help		

WATER COLUMN REPORT 08/08/2008

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

	(quarter	sar	e bi	gge	st t	o smalle	st)		Depth	Depth	Water	(in	feet)
POD Number	Tws	Rng	Sec	q	PP	Zone	x	Y	Well	Water	Column		
SJ 02961	26N	09W	01	2 2	2 3				1500				
SJ 02962	26N	09W	01	3 2	2 3				1500				
SJ 01756	26N	09W	11	2 2	2 3				75	40	35		
SJ 03811 POD1	26N	09W	12	3 3	3 3				348	175	173		
SJ 00412	26N	09W	16	4 2	2				202	65	137		
SJ 00214	26N	09W	26	2 4	4 2				946	230	716		
SJ 00064	26N	09W	26	4 2	2 1				490	215	275		
SJ 00063	26N	09W	26	4 2	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 @All
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) Water (in feet) Depth Depth POD Number Tws Rng Sec q q q Zone Well Water Column SJ 02405 26N 08W 01 3 4 3 180 100 80 SJ 02411 6000 26N 08W 01 4 4 1 2200 SJ 02407 26N 08W 01 4 4 1

	Township: 26N Rang	e: 07W Sections:		
NAI	D27 X: Y:	Zone:	Search Radius:	
County:	Basin:		Number: Suffix:	
Owner Name:	(First)	(Last)	ONon-Domestic ODomestic @	ĐAII .
_	POD / Surface Data Repo	ort Avg Depth to Water F	Report Water Column Report	
	Cle	ar Form iWATERS Men	u Help	

WATER COLUMN REPORT 08/06/2008

	NW 2	=NE	3=SW 4=S	E)								
	(quarter	s are	e bi	ges	st to	smalles	t)		Depth	Depth	Water	(in feet)
POD Number	Tws	Rng	Sec	qq	PI	Zone	x	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	2 3				335	22	313	
SJ 02406	26N	07W	30	3 2	2 1				280	180	100	

	Township: 25N Range: 11W 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 08/11/2008
	(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 Zone X Y Well Water Column
SJ 00221	25N 11W 04 2 198 135 63

Townsh	nip: 25N Range: 10W	Sections:			
NAD27	X: Y:	Zone:	Search Radius:		
County:	Basin:	Numb	per: S	uffix:	
Owner Name: (First)	(Last)	0	Non-Domestic	ODomestic @All	
POD/	Surface Data Report Avg D	Depth to Water Report	Water Column F	Report	
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WATER COLUMN REPORT 08/08/2008

	•			smallest	=		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) (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 01979	Tws Rng Sec q Q Zone X Y Well Water Column 25N 09W 32 2 3 1180 628 552				

	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)				
POD Number	(quarters are biggest to smallest) Depth Depth Water (in feet) Tws Rng Sec 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

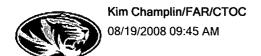
25N 06W 33 4 4 4

SJ 00681

SJ 00681 12

Township: 28N Range: 10W Sections:				
NAD27 X: Zone: Search Radius:				
County: Basin: Number: Suffix:				
Owner Name: (First) (Last) Onn-Domestic Odmestic @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 Tws Rng Sec q q q Zone X Y Well Water Column				

No Records found, try again



To mark_kelly@blm.gov

CC

bcc

Subject Notice-Florance #75 Well Site

RE:

Florance #75 Gas Well NMNM 03380 Sec. 20- T27N- R8W, 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.

- 1. 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.
- 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 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.
- 6. 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.
- 9. 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.
- 9. 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.

- XTO will design and construct a BGT 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.
- 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.
- 7. 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.
- 8. 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.

- 1. 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
 - ii. 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.