District I 625 N. French Dr., Hobbs, NM 88240 <u>District II</u> 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 <u>District IV</u> 1220 S. St. Francis Dr., Santa Fe, NM 87505

Ple

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 FelEnvironmental Bureau office and experience of the permanent of the propriet NMOCD. provide a copy to the appropriate NMOCD

Pit, Closed-Loop System, Below-Grade Tank, or
Proposed Alternative Method Permit or Closure Plan Application
Type of action: Existing BGT 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 ordinance
1. Operator: XTO Energy, Inc. OGRID #: 5380
Address: #382 County Road 3100, Aztec, NM 87410
Facility or well name:GALLEGOS COM #5E
API Number: 30-045-30560 OCD Permit Number:
U/L or Qtr/Qtr K Section 32 Township 26N Range 11W County: San Juan
Center of Proposed Design: Latitude 36.44142 Longitude 108.03062 NAD: ☐1927 ☑ 1983
Surface Owner: Federal State Private Tribal Trust or Indian Allotment
Pit: Subsection F or G of 19.15.17.11 NMAC Temporary: Drilling Workover Permanent Emergency Cavitation P&A Lined Unlined Liner type: Thickness mil LLDPE HDPE PVC Other String-Reinforced Liner Seams: Welded Factory Other Volume: bbl Dimensions: L x W x D
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
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
Tank Construction material: Steel

Alternative Method:

Liner type: Thickness

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

Form C-144
Oil Conservation Division
Page 1 of 5

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

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

mil HDPE PVC Other

16.	
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	l hamital
institution or church)	, nospuai,
Four foot height, four strands of barbed wire evenly spaced between one and four feet	
Alternate. Please specify Four foot height, steel mesh field fence (hogwire) with pipe top railing	
Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)	
☐ Screen ☐ Netting ☒ Other Expanded metal or solid vaulted top	
Monthly inspections (If netting or screening is not physically feasible)	
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	
9. 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 Burea	u office for
consideration of approval.	a office for
Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	
10. Siting Criteria (regarding permitting): 19.15.17.10 NMAC	
Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acc material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the application of the submitted to the Santa Fe Environmental Bureau office for consideration of Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drabove-grade tanks associated with a closed-loop system.	ropriate district approval.
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 🛛 1
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ⊠ 1
Within a 100-year floodplain FEMA map	☐ Yes ☑ 1
	2)
Form C-144 Oil Conservation Division Page 2 of	`5 §
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it. Temporary Pits, Emergency Pits, and Below-				
Instructions: Each of the following items must attached.	grade Tan be attache	ks Permit Application Attached to the application. Please in	ment Checkl	ist: Subsection B of 19.15.17.9 NMAC heck mark in the box, that the documents are
Hydrogeologic Report (Below-grade Tank Hydrogeologic Data (Temporary and Emer Siting Criteria Compliance Demonstration: Design Plan - based upon the appropriate r Operating and Maintenance Plan - based u	rgency Pits s - based u equiremen	s) - based upon the requirement pon the appropriate requirement ats of 19.15.17.11 NMAC	s of Paragraph ts of 19.15.17	(2) of Subsection B of 19.15.17.9 NMAC .10 NMAC
Closure Plan (Please complete Boxes 14 than 19.15.17.13 NMAC	pon the app rough 18,	if applicable) - based upon the	appropriate re	quirements of Subsection C of 19.15.17.9 NMA
Previously Approved Design (attach copy of	design)	API Number:		or Permit Number:
22. Closed-loop Systems Permit Application Attac Instructions: Each of the following items must attached.	chment Cl be attache	hecklist: Subsection B of 19.1 ed to the application. Please in	5.17.9 NMAC	heck mark in the box, that the documents are
Geologic and Hydrogeologic Data (only for Siting Criteria Compliance Demonstration Design Plan - based upon the appropriate of Operating and Maintenance Plan - based upon the appropriate of the Complex	ns (only for requirement on the ap	r on-site closure) - based upon to to of 19.15.17.11 NMAC oppropriate requirements of 19.1	he appropriate 5.17.12 NMA	requirements of 19.15.17.10 NMAC
Previously Approved Design (attach copy of				_
Previously Approved Operating and Mainter above ground steel tanks or haul-off bins and pre-				_ (Applies only to closed-loop system that use
3.				
Instructions: Each of the following items must ittached. Hydrogeologic Report - based upon the resting Criteria Compliance Demonstration Climatological Factors Assessment Certified Engineering Design Plans - base Dike Protection and Structural Integrity Design - based upon the all Liner Specifications and Compatibility As Quality Control/Quality Assurance Constrest Operating and Maintenance Plan - based upon the Plan Nuisance or Hazardous Odors, including Hemergency Response Plan Oil Field Waste Stream Characterization Monitoring and Inspection Plan Erosion Control Plan Closure Plan - based upon the appropriate Proposed Closure: 19.15.17.13 NMAC	quirements as - based u d upon the esign - bas ppropriate sessment - ruction and upon the ap an - based u d ₂ S, Preven	s of Paragraph (1) of Subsection apon the appropriate requirements of 19 sed upon the appropriate requirements of 19.15.17.11 No based upon the appropriate red Installation Plan appropriate requirements of 19.15 upon the appropriate requirements of Subsection C of 19.15.15	n B of 19.15.17 hts of 19.15.17 .15.17.11 NM ements of 19.1 MAC quirements of 1 5.17.12 NMAC nts of 19.15.17	7.9 NMAC 7.10 NMAC AC 5.17.11 NMAC 19.15.17.11 NMAC C 7.11 NMAC
nstructions: Please complete the applicable bo				-
☐ On-site Closure 1	n and Rem (Closed-lo Method (O			
Alternative Clos			d to the Santa	Fe Environmental Bureau for consideration)
Naste Excavation and Removal Closure Plan Iosure plan. Please indicate, by a check mark Protocols and Procedures - based upon the Confirmation Sampling Plan (if applicable Disposal Facility Name and Permit Number Soil Backfill and Cover Design Specification Plan based was the course	in the box, appropriate) - based user (for liquitions - based priate requi	that the documents are attach te requirements of 19.15.17.13 upon the appropriate requirement ids, drilling fluids and drill cutt d upon the appropriate requirent tirements of Subsection I of 19.	ed. NMAC Its of Subsection ings) Dents of Subsection 15.17.13 NMA	on F of 19.15.17.13 NMAC ction H of 19.15.17.13 NMAC
Site Reclamation Plan - based upon the appro	proprieto i			
Site Reclamation Plan - based upon the approximation Plan - based		Oil Conservation Division	1	Page 3 of 5

	ems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13 illities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if	
acilities are required.	дог оне маровы ој згрвиш, истту јеми ист ист Ситида. Озе инистист у	vic mun mv
Disposal Facility Name:	Disposal Facility Permit Number:	
Disposal Facility Name:	Disposal Facility Permit Number:	
Vill any of the proposed closed-loop system oper Yes (If yes, please provide the information	rations and associated activities occur on or in areas that will not be used for future set below) \square No	rvice and operation
Re-vegetation Plan - based upon the approp	ned for future service and operations: ons based upon the appropriate requirements of Subsection H of 19.15.17.13 NMA priate requirements of Subsection I of 19.15.17.13 NMAC propriate requirements of Subsection G of 19.15.17.13 NMAC	AC
rovided below. Requests regarding changes to	nonstration of compliance in the closure plan. Recommendations of acceptable sot certain siting criteria may require administrative approval from the appropriate dis ed to the Santa Fe Environmental Bureau office for consideration of approval. Jus	strict office or ma
Fround water is less than 50 feet below the bottom NM Office of the State Engineer - iWATI	m of the buried waste. ERS database search; USGS; Data obtained from nearby wells	Yes N
round water is between 50 and 100 feet below the NM Office of the State Engineer - iWATI	he bottom of the buried waste ERS database search; USGS; Data obtained from nearby wells	Yes N
oround water is more than 100 feet below the bot NM Office of the State Engineer - iWATI	ttom of the buried waste. ERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ N☐ NA
Vithin 300 feet of a continuously flowing watercoake (measured from the ordinary high-water mark Topographic map; Visual inspection (cert		Yes N
Vithin 300 feet from a permanent residence, scho - Visual inspection (certification) of the pro-	ool, hospital, institution, or church in existence at the time of initial application, oposed site; Aerial photo; Satellite image	☐ Yes ☐ N
atering purposes, or within 1000 horizontal feet	fresh water well or spring that less than five households use for domestic or stock of any other fresh water well or spring, in existence at the time of initial application. ERS database; Visual inspection (certification) of the proposed site	☐ Yes ☐ N
dopted pursuant to NMSA 1978, Section 3-27-3,	hin a defined municipal fresh water well field covered under a municipal ordinance, as amended. the municipality; Written approval obtained from the municipality	☐ Yes ☐ N
Vithin 500 feet of a wetland. - US Fish and Wildlife Wetland Identificati	tion map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ N
Vithin the area overlying a subsurface mine. - Written confirmation or verification or many	nap from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ N
Vithin an unstable area. - Engineering measures incorporated into the Society; Topographic map	the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological	☐ Yes ☐ N
Vithin a 100-year floodplain FEMA map		☐ Yes ☐ N
y a check mark in the box, that the documents a Siting Criteria Compliance Demonstrations Proof of Surface Owner Notice - based upo Construction/Design Plan of Burial Trench Construction/Design Plan of Temporary Pi Protocols and Procedures - based upon the Confirmation Sampling Plan (if applicable) Waste Material Sampling Plan - based upon Disposal Facility Name and Permit Numbe Soil Cover Design - based upon the approp Re-vegetation Plan - based upon the approp	NMAC) Instructions: Each of the following items must be attached to the closure pare attached. s - based upon the appropriate requirements of 19.15.17.10 NMAC on the appropriate requirements of Subsection F of 19.15.17.13 NMAC h (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC it (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.13 NMAC b) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC on the appropriate requirements of Subsection F of 19.15.17.13 NMAC er (for liquids, drilling fluids and drill cuttings or in case on-site closure standards can briate requirements of Subsection H of 19.15.17.13 NMAC priate requirements of Subsection I of 19.15.17.13 NMAC propriate requirements of Subsection I of 19.15.17.13 NMAC).15.17.11 NMA(
Form C-144	Oil Conservation Division Page 4	of 5

Environmental Representative Environmental Representative [
e:
OCD Conditions (see attachment) Approval Date: 04/05/2022 Number: BGT1 3 NMAC g any closure activities and submitting the closure report the closure activities. Please do not complete this have been completed. Completion Date:
OCD Conditions (see attachment) Approval Date:04/05/2022 Number:BGT1 3 NMAC 3 any closure activities and submitting the closure report the closure activities. Please do not complete this have been completed. Completion Date:ethod Waste Removal (Closed-loop systems only bove Ground Steel Tanks or Haul-off Bins Only: drill cuttings were disposed. Use attachment if more activity Permit Number:ethod where the closure report is the closure report the c
Approval Date: 04/05/2022 Number: BGT1 3 NMAC 3 any closure activities and submitting the closure report the closure activities. Please do not complete this have been completed. Completion Date:
Number: BGT1 3 NMAC g any closure activities and submitting the closure report the closure activities. Please do not complete this have been completed. Completion Date:
3 NMAC g any closure activities and submitting the closure report the closure activities. Please do not complete this have been completed. Completion Date: ethod
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drill cuttings were disposed. Use attachment if more in the control of the contro
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ill not be used for future service and operations?
eached to the closure report. Please indicate, by a che
curate and complete to the best of my knowledge and tions specified in the approved closure plan.
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DISTRICT | P.O. Box 1980, Hobbs, N.M. 88241-1980 State of New Mexico Energy, Minerals & Natural Resources Department

DISTRICT II P.O. Drower BO, Artesia, N.M. 88211-0719

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

DISTRICT IV PO Box 2088, Santa Fe, NM 67504-2088 OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, NM 87504—2088

Form C-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

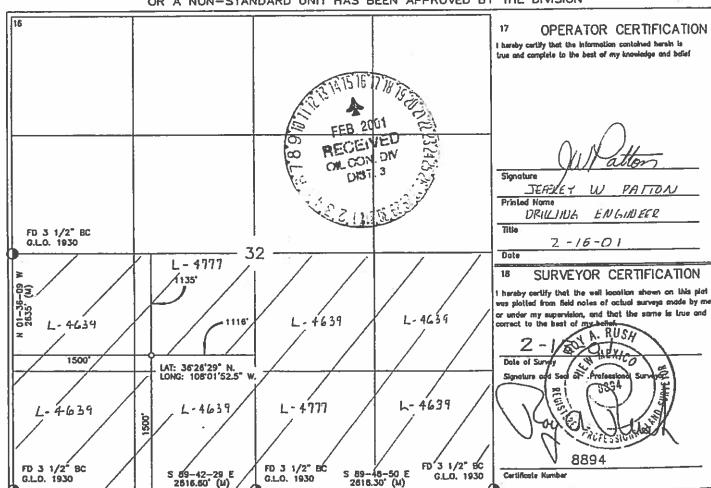
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

21-045	nber -20	560		*Pool Code 7/599	7	ВЛ	Pool Nam		2
Property Code	Ť	390			Property P	lame			Well Humber
25719	9				GALLEGOS	СОМ			5E
OGRID No.					*Operator I	Nome emot			* Elevation
16706	7			CRO	SS TIMBERS O	PERATING CO.			6277' -
	7				10 Surface	Location			
Ut. or lot no. S	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
				I .		COLORIA	45001	MCCT	CAN HIAN

SOUTH 1500 WEST SAN JUAN 32 26-N 11-W 1500' 11 Bottom Hole Location If Different From Surface Feet from the East/West line Lot Idn Feet from the North/South line County UL or lot no. ⁵⁴ Consolidation Code ¹³ Order No. 22 Dedicated Acres ¹³ Joint or Infill 2 I 320

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



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Lodestar Servic		Pit Permit Siting Criteria	Client: Project: Revised:	XTO Energy Pit Permits 11/11/2008
70 bez 4403, Duran	2 0, CU 0130Z	Information Sheet	11	Daniel Newman
API#:		3004530560	USPLSS:	T26N,R11W,32K
Name:	Ga	allegos Com #5E	Lat/Long:	36.44142 / -108.03062
Depth to groundwater:		>100'	Geologic formation:	Nacimiento Formation
Distance to closest continuously flowing watercourse:	17.19 mile	es south of the San Juan River		
Distance to closest significant watercourse, lakebed, playa lake, or sinkhole:	3,464'	west of an unnamed arroyo		
			Soil Type:	Entisols & Aridisols
Permanent residence, school, hospital, institution or church within 300'		No		
			Annual Precipitation:	8.71 inches average
Domestic fresh water well or spring within 500'		No	Precipitation Notes:	no significant precipatation events
Any other fresh water well or spring within 1000'		No		
Within incorporated municipal boundaries		No	Attached Documents:	
Within defined municipal fresh water well field		No		Topo map, ground water data map, ariel photo, mines and quarries map, FEMA map
Wetland within 500'		No	Mining Activity:	No
Within unstable area		No		
Within 100 year flood plain		Zone X		
Additional Notes:				

Received by OCD: 3/11/2022 1:56:13 PM

Gallegos Com #5E 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 Bisti region of the San Juan Basin within an area dominated by irrigated fields of the Navajo Indian Irrigation Project. 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). Aguifers 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 aguifers 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 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).

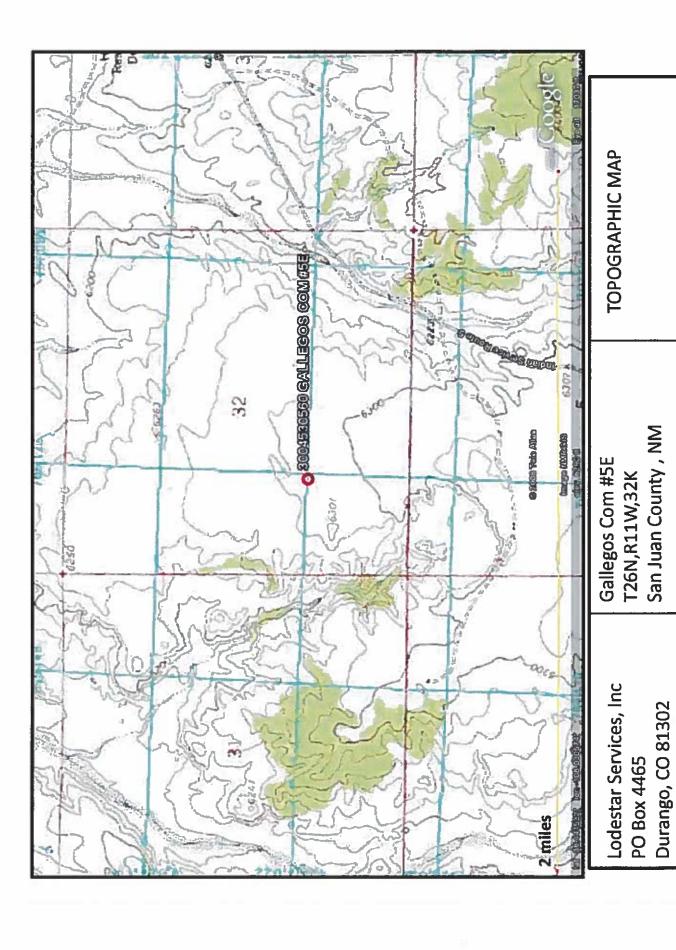
Site Specific Hydrogeology

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.

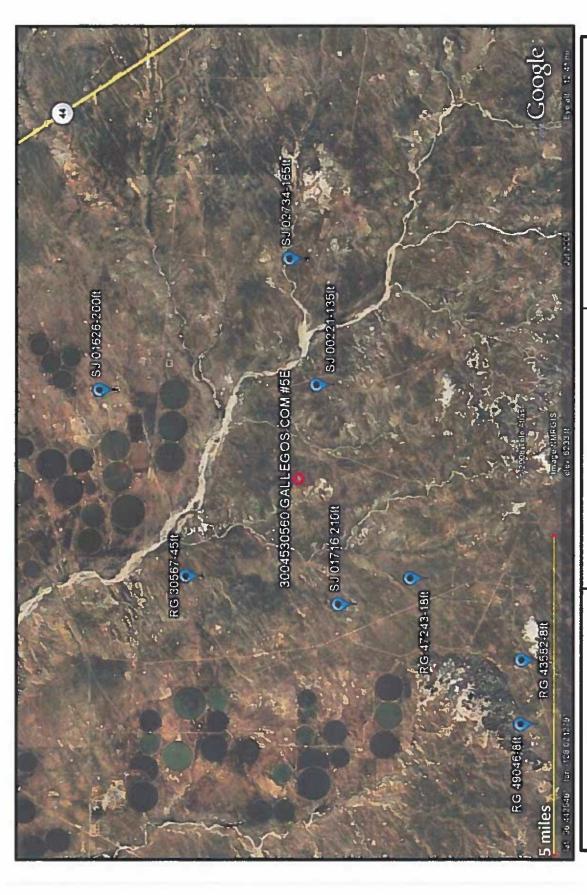
Beds of water-yielding sandstone are present in the Nacimiento Formation, which are fluvial in origin and are interbedded with siltstone, shale and coal. Porous sandstones form the principal aquifers, while relatively impermeable shales form confining units between the aguifers (Stone et al., 1983). Local aguifers 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 3,464 feet west of an unnamed arroyo, at an elevation of approximately 6,289 feet and approximately 1.36 miles south of the Gallegos 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 Gallegos Canvon. The floor of the Gallegos Canvon is at an elevation of approximately 6,122 feet approximately 150 feet lower in elevation.

Groundwater data available from the NM State Engineer's iWaters Database for wells near the proposed site are attached. A map showing the locations of wells in reference to the proposed pit location is also attached. Water drops show locations of wells and the labels for each water drop indicate depth to groundwater in feet. The closest well to the site is an elevation of approximately of 6,303 feet and is located 1.51 miles to the southeast this well puts groundwater at 135 feet below the surface. The observations made within this report suggest that groundwater is greater than 100 feet at the proposed location.



San Juan County, NM



San Juan County, NM Gallegos Com #5E T26N,R11W,32K Lodestar Services, Inc PO Box 4465 Durango, CO 81302

i-Waters Ground Water Data Map

AVERAGE DEPTH OF WATER REPORT 11/04/2008

Feet)	Avg	200	165
Water in	Маж	200	165
(Depth	Min	200	165
	Wells	⊣	Н
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	×		
	Zone		
	Sec	16	ອຍ
	Rng	111	11%
	TWS	26N	26N
	Bsn	35	30

AVERAGE DEPTH OF WATER REPORT 11/04/2008

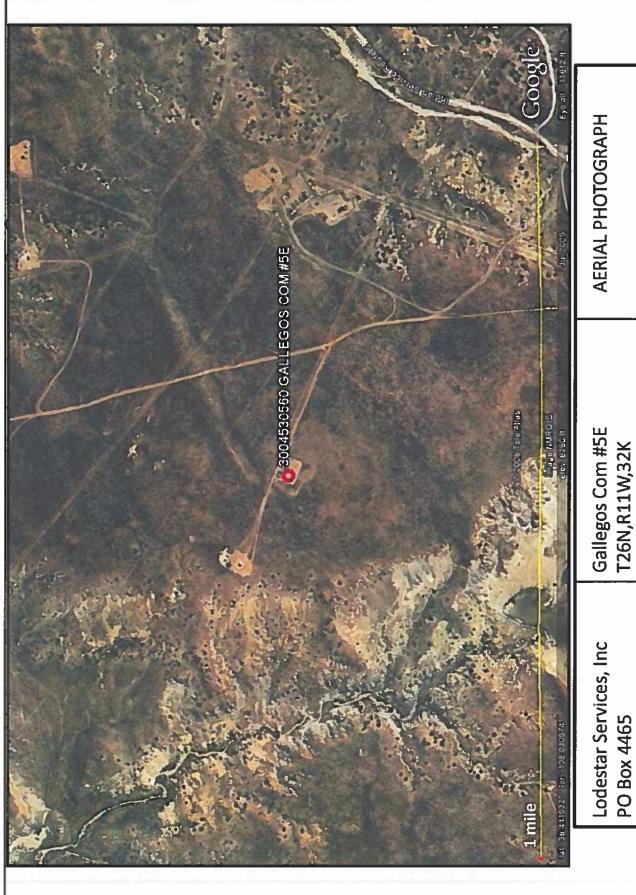
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AVERAGE DEPTH OF WATER REPORT 11/11/2008

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	Min	
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	Zone	
	Sec	04
	Rng Sec	113
	TWB	25N

Ben

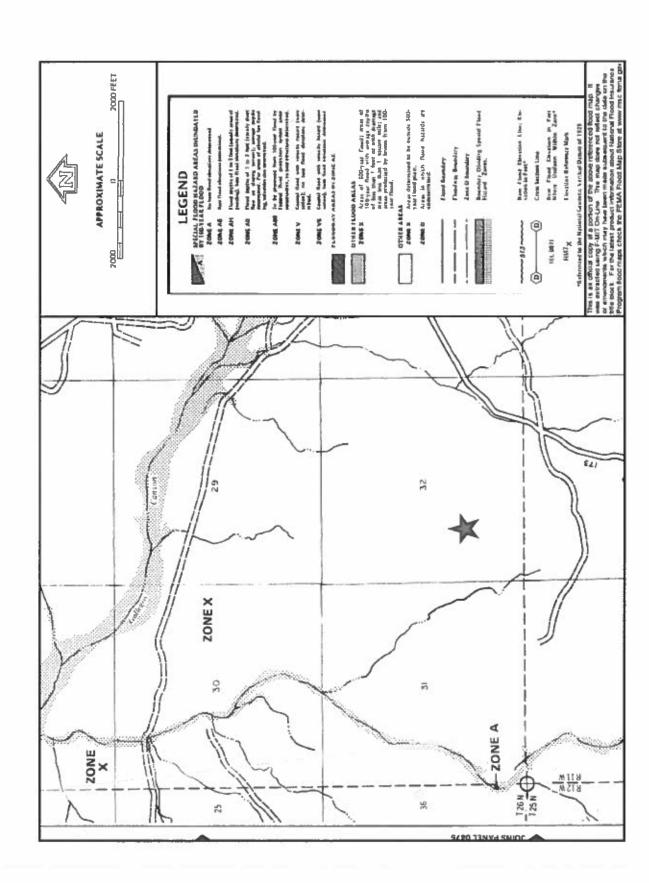
		AVER	d ast	EPTH C	F WATER	AVERAGE DEPTH OF WATER REPORT 11/09/2008	1/09/200	8		
								(Depth	Water in	Feet)
Bsn	Tws	Rng	Sea	Zone	×	K	Wells	Min	Max	Avg
RG	25N	12W	11	ပ	684250	1972400	r-l	13	19	19
RG	25N	12W	12				₩	18	18	18
RG	25N	12W	22				₹≓İ	Ф	80	6 0
RG	25N	1299	23				H	ထ	c	89
RG	25N	1299	27	ပ	678500	1958950	₽	50	50	50
RG	25N	129	31	υ	689100	1949800	H	30	30	30
5	25N	12W	0.1				- I	210	210	210



San Juan County, NM

Durango, CO 81302

San Juan County, NM Gallegos Com #5E T26N,R11W,32K Lodestar Services, Inc **Durango, CO 81302** PO Box 4465



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

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

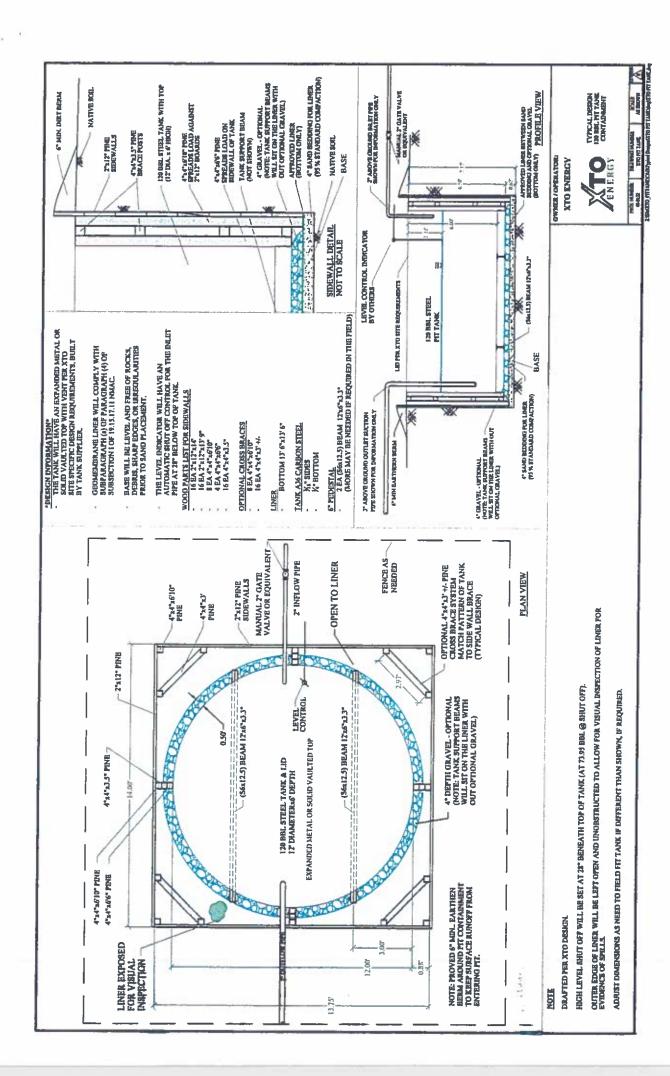
General Plan

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

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

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

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



XTO Energy Inc. San Juan Basin (Northwest New Mexico) General Maintenance and Operating Plan For Below-Grade Tanks Rule 19.15.17.12 NMAC the following information describes the o

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

General Plan

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

Well Name
API #
Sec., Twn., Rng.
XTO Inspector's name
Inspection date and time
Visible tears in liner
Visible signs of tank overflow
Collection of surface run on
Visible layer of oil
Visible signs of tank leak
Estimated freeboard

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

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

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

		MONT	1LY BELO	MONTHLY BELOW GRADE TANK INSPECTION FORM	INSPECTION	N FORM		
Well Name:					API No.:			
Legais	Sec:		Township:		Range:			
XTO Inspector's	Inspection	Inspection	Any visible liner	Any visible signs of	Collection of surface	Visible layer	Any visible signs	Freeboard
Name	Date		tears (Y/N)	tank overflows (Y/N)	run on (Y/N)	of oil (Y/N)	of a tank leak (Y/N)	Est. (ff)
sik								
						51		
Notes:	Provide De	Provide Detailed Description:	otion:					
				:				
Misc:								
			:	1				

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

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

General Plan

- XTO will close below-grade tanks within the time periods provided in 19.15.17.13 NMAC, or by an earlier date that the division requires because of imminent danger to fresh water, public health or the environment.
- 2. XTO will close a below-grade tank that does not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC or is not included in Paragraph (5) of Subsection I of 19.15.17.11 NMAC within five years after June 16, 2008, if not retrofitted to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC.
- 3. XTO will close a permitted below-grade tank within 60 days of cessation of the below-grade tank's operation or as required by the transitional provisions of Subsection B of 19.15.17.17 NMAC in accordance with a closure plan that the appropriate division district office approves. The closure report will be filed on form C-144.
- 4. XTO will remove liquids and sludge from below-grade tanks prior to implementing a closure method and will dispose of the liquids and sludge in a division-approved facility. Approved facilities and waste streams include:

Envirotech Permit No. NM01-0011 and IEI Permit No. NM 01-0010B Soil contaminated by exempt petroleum hydrocarbons Produced sand, pit sludge and contaminated bottoms from storage of exempt wastes

Basin Disposal Permit No. NM01-005 Produced water

- 5. XTO will remove the below-grade tank and dispose of it in a division approved facility or recycle, reuse, or reclaim it in a manner that the appropriate division district office has approved prior to removal. Any associated liners will be removed, properly cleaned and disposed of per 19.15.9.712 NMAC at San Juan County Landfill. Documentation of the final disposition will be included in the closure report.
- 6. XTO will remove any on-site equipment associated with a below-grade tank unless the equipment is required for some other purpose.
- 7. XTO will test the soils beneath the below-grade tank to determine whether a release has occurred. At a minimum 5 point composite sample will be collected along with individual grab samples from any area that is wet, discolored or showing other evidence of a release. Samples will be

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

analyzed for BTEX, TPH and chlorides to demonstrate that the benzene concentration, as determined by EPA SW-846 methods 8021B or 8260B or EPA method that the division approves, does not exceed 0.2 mg/kg; total BTEX concentration, as determined by EPA SW-846 methods 8021B or 8260B or other EPA method that the division approves, does not exceed 50 mg/kg; the TPH concentration, as determined by EPA method 418.1 or other EPA method that the division approves, does not exceed 100mg/kg; and the chloride concentration, as determined by EPA method 300.1 or other EPA method that the division approves, does not exceed 250 mg/kg, or the background concentration, whichever is greater. XTO will notify the division of its results on form C-141.

- 8. If XTO or the division determines that a release has occurred, XTO will comply with 19.15.3.116 NMAC and 19.15.1.19NMAC as appropriate.
- 9. If the sampling program demonstrates that a release has not occurred or that any release does not exceed the concentrations specified in Paragraph (4) of Subsection E of 19.15.17.13 NMAC, XTO will backfill the excavation with compacted, non-waste containing, earthen material; construct a division prescribed soil cover; recontour and re-vegetate the site.
- 10. Notice of Closure operations will be given to the Aztec Division District III office between 72 hours and one week prior to the start of closure activities via email or verbally. The notification will include the following:
 - i. Operator's name
 - ii. Well Name and API Number
 - iii. Location by Unit Letter, Section, Township, and Range

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

- 11. Re-contouring of location will match fit, shape, line, form and texture of the surrounding area.

 Re-shaping will include drainage control, prevent ponding, and prevent erosion. Natural drainages will be unimpeded and water bars and/or silt traps will be placed in areas where needed to prevent erosion on a large scale. Final re-contour shall have a uniform appearance with smooth surface, fitting the natural landscape.
- 12. A minimum of 4 feet of cover shall be achieved and the cover shall include 1 foot of suitable material to establish vegetation at the site, or the background thickness of topsoil, whichever is greater. Soil cover will be constructed to the site's existing grade and ponding of water and erosion of the cover material will be prevented with drainage control, natural drainages and silt traps where needed.
- 13. XTO will seed the disturbed areas the first growing season after the operator closes the pit.

 Seeding will be accomplished via drilling on the contour whenever practical or by other division-approved methods. BLM or Forest Service stipulated seed mixes will be used on federal lands.

 Vegetative cover will equal 70% of the native perennial vegetative cover (un-impacted) consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintain that cover through two successive growing seasons. Repeat seeding or planting will be continued until successful vegetative growth occurs.

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

- 14. All closure activities will include proper documentation and be available for review upon request and will be submitted in closure report form to OCD within 60 days of closure of the below-grade tank. Closure report will be filed on form C-144 and incorporate the following:
 - i. Proof of closure notice to division and surface owner;
 - ii. Details on capping and covering, where applicable;
 - iii. Inspection reports;
 - iv. Confirmation sampling analytical results;
 - v. Disposal facility name(s) and permit number(s);
 - vi. Soil backfilling and cover installation;
 - vii. Re-vegetation application rates and seeding techniques, (or approved alternative to re-vegetation requirements if applicable);
 - viii. Photo documentation of the site reclamation.

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720 District III

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170 1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS

Action 89707

QUESTIONS

Operator:	OGRID:
HILCORP ENERGY COMPANY	372171
1111 Travis Street	Action Number:
Houston, TX 77002	89707
	Action Type:
	[C-144] Legacy Below Grade Tank Plan (C-144LB)

QUESTIONS

Facility and Ground Water		
Please answer as many of these questions as possible in this group. More information will help us identify the appropriate associations in the system.		
Facility or Site Name	GALLEGOS COM 5E	
Facility ID (f#), if known	Not answered.	
Facility Type	Below Grade Tank - (BGT)	
Well Name, include well number	GALLEGOS COM 5E	
Well API, if associated with a well	30-045-30560	
Pit / Tank Type	Not answered.	
Pit / Tank Name or Identifier	Not answered.	
Pit / Tank Opened Date, if known	Not answered.	
Pit / Tank Dimensions, Length (ft)	Not answered.	
Pit / Tank Dimensions, Width or Diameter (ft)	Not answered.	
Pit / Tank Dimensions, Depth (ft)	Not answered.	
Ground Water Depth (ft)	Not answered.	
Ground Water Impact	No	
Ground Water Quality (TDS)	Not answered.	

Below-Grade Tank	
Subsection I of 19.15.17.11 NMAC	
Volume / Capacity (bbls)	120
Type of Fluid	Produced Water
Pit / Tank Construction Material	Steel
Secondary containment with leak detection	Not answered.
Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off	Not answered.
Visible sidewalls and liner	Not answered.
Visible sidewalls only	Not answered.
Tank installed prior to June 18. 2008	True
Other, Visible Notation. Please specify	Not answered.
Liner Thickness (mil)	Not answered.
HDPE (Liner Type)	Not answered.
PVC (Liner Type)	Not answered.
Other, Liner Type. Please specify (Variance Required)	Not answered.

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District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

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

QUESTIONS, Page 2

Action 89707

QUEST	IONS (continued)
Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171 Action Number: 89707
	Action Type: [C-144] Legacy Below Grade Tank Plan (C-144LB)
QUESTIONS	
Fencing	
Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tank	ks)
Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, hospital, institution or church)	Not answered.
Four foot height, four strands of barbed wire evenly spaced between one and four feet	Not answered.
Alternate, Fencing. Please specify (Variance Required)	4' steel mesh
Netting	
Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)	
Screen	Not answered.
Netting	Not answered.
Other, Netting. Please specify (Variance May Be Needed)	expanded metal or solid vaulted top
Signs	
Subsection C of 19.15.17.11 NMAC (If there are multiple operators at a site, each operator must have 12"x 24", 2" lettering, providing Operator's name, site location, and emergency	e their own sign in compliance with Subsection C of 19.15.17.11 NMAC.) Not answered.
telephone numbers Signed in compliance with 19.15.16.8 NMAC	True
orgined in compilative with 15.16.16.6 HWING	True
Variances and Exceptions	
Justifications and/or demonstrations ofequivalency are required. Please refer to 19.15.17 NMAC for Please check a box if one or more of the following is requested, if not leave blank:	guidance.
Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.	Not answered.
Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for	Not answered.

consideration of approval

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District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

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

QUESTIONS, Page 3

Action	89707

1220 C. Ct. Tanisio D.I., Canta T.O, Tim C. CCC	ı Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462	
QUESTI	ONS (continued)
Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171 Action Number: 89707
	Action Type: [C-144] Legacy Below Grade Tank Plan (C-144LB)
QUESTIONS	
Siting Criteria (regarding permitting) 19.15.17.10 NMAC	halow in the application. Decommondations of accentable source material are provided
below. Siting criteria does not apply to drying pads or above-grade tanks.	below in the application. Recommendations of acceptable source material are provided
Siting Criteria, General Siting	
Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank	No
NM Office of the State Engineer - iWATERS database search	True
USGS	Not answered.
Data obtained from nearby wells	Not answered.
Siting Criteria, Below Grade Tanks	
Within 100 feet of a continuously flowing watercourse, significant watercourse, lakebed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark)	No
Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption	No
Proposed Closure Method	
•	T
Below-grade Tank	Below Grade Tank - (BGT)
Waste Excavation and Removal	Not answered.
Alternate Closure Method. Please specify (Variance Required)	Not answered.

11/18/2008

Operator Application Certification Registered / Signature Date

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ACKNOWLEDGMENTS

Action 89707

ACKNOWLEDGMENTS

Operator:	OGRID:
HILCORP ENERGY COMPANY	372171
1111 Travis Street	Action Number:
Houston, TX 77002	89707
	Action Type:
	[C-144] Legacy Below Grade Tank Plan (C-144LB)

ACKNOWLEDGMENTS

V	I acknowledge that I have received prior approval from the OCD to submit documentation of a legacy below-grade tank on behalf of my operator.
V	I hereby certify that the information submitted with this documentation is true, accurate and complete to the best of my knowledge and belief.

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CONDITIONS

Action 89707

CONDITIONS

Operator:	OGRID:
HILCORP ENERGY COMPANY	372171
1111 Travis Street	Action Number:
Houston, TX 77002	89707
	Action Type:
	[C-144] Legacy Below Grade Tank Plan (C-144LB)

CONDITIONS

Created By		Condition Date
vvenegas	None	4/5/2022