District I 1625 N. Fr 1625 N. French Dr., Hobbs, NM 88240 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 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 2008 DEC 12 PM 4

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

Pit. Closed-Loop System, Below-Grade Tank, or

Dunnand Alternative Method Devices Of the District of						
Proposed Alternative Method Permit or Closure Plan Application						
BGT1 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						
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 nvironment. 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:MARTIN GAS COM B# 1E						
API Number: 30-045-24880 OCD Permit Number:						
U/L or Qtr/Qtr P Section 31 Township 28N Range 10W County: San Juan						
Center of Proposed Design: Latitude <u>36.61458</u> Longitude <u>107.93117</u> 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: Thicknessmil □ LLDPE □ HDPE □ PVC □ Other □ String-Reinforced Liner Seams: □ Welded □ Factory □ Other bbl Dimensions: Lx Wx 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						
Secondary containment with leak detection [Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off						
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☒ Other _ <u>Visible sidewalls</u> , vaulted, automatic high-level shut off, no liner						
Liner type: Thicknessmil						
5.						
Alternative Method:						

E3		
Fencing: Subsection D of 19.15.17.11 NMAC (Ap	oplies to permanent pits, temporary pits, and below-grade tanks)	
	rbed wire at top (Required if located within 1000 feet of a permanent residence, sch	ool, hospital,
institution or church) ☐ Four foot height, four strands of barbed wire even	renly spaced between one and four feet	
	•	
7.		
Netting: Subsection E of 19.15.17.11 NMAC (App	plies to permanent pits and permanent open top tanks)	
Screen Netting Other Expanded metal	l or solid vaulted top	
Monthly inspections (If netting or screening is r	not physically feasible)	
5.		
Signs: Subsection C of 19.15.17.11 NMAC	ma cita lagatian and amanagana talanhana numbara	
☐ 12 x 24 , 2 lettering, providing Operator's name☑ Signed in compliance with 19.15.3.103 NMAC	me, site location, and emergency telephone numbers	
Solghed in compliance with 15.15.5.165 NAIAC		
9. Administrative Approvals and Exceptions:		
Justifications and/or demonstrations of equivalency Please check a box if one or more of the following	y are required. Please refer to 19.15.17 NMAC for guidance.	
☐ Administrative approval(s): Requests must	be submitted to the appropriate division district or the Santa Fe Environmental Bur	eau office for
consideration of approval. Exception(s): Requests must be submitted	to the Santa Fe Environmental Bureau office for consideration of approval.	
10.		
material are provided below. Requests regarding of office or may be considered an exception which m	mpliance for each siting criteria below in the application. Recommendations of a changes to certain siting criteria may require administrative approval from the a nust be submitted to the Santa Fe Environmental Bureau office for consideration lease refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to system.	ppropriate district of approval.
	of the temporary pit, permanent pit, or below-grade tank. RS database search; USGS; Data obtained from nearby wells	☐ Yes ⊠ No
Within 300 feet of a continuously flowing watercoulake (measured from the ordinary high-water mark) Topographic map; Visual inspection (certif		☐ Yes ⊠ No
Within 300 feet from a permanent residence, schoo (Applies to temporary, emergency, or cavitation pit Visual inspection (certification) of the prop		☐ Yes ⊠ No
Within 1000 feet from a permanent residence, scho (Applies to permanent pits) - Visual inspection (certification) of the prop	ool, hospital, institution, or church in existence at the time of initial application.	☐ Yes ☐ No ☐ NA
Within 500 horizontal feet of a private, domestic frow watering purposes, or within 1000 horizontal feet o	esh 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. RS database search; Visual inspection (certification) of the proposed site	☐ Yes ☑ No
adopted pursuant to NMSA 1978, Section 3-27-3, a	n a defined municipal fresh water well field covered under a municipal ordinance as amended. he municipality; Written approval obtained from the municipality	☐ Yes ⊠ No
Within 500 feet of a wetland US Fish and Wildlife Wetland Identificatio	on 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	p from the NM EMNRD-Mining and Mineral Division	☐ Yes ☑ No
Within an unstable area. - Engineering measures incorporated into the Society; Topographic map	e design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological	☐ Yes ☑ No
Within a 100-year floodplain FEMA map		☐ Yes 🛭 No
Form C-144	Oil Conservation Division Page 2	of 5

*		
11. Temporary Pits, Emergency Pits, and Below-grade Instructions: Each of the following items must be atta attached. ☐ Hydrogeologic Report (Below-grade Tanks) - bas ☐ Hydrogeologic Data (Temporary and Emergency) ☐ Siting Criteria Compliance Demonstrations - base	sed upon the requirements of Paragraph (4) or Pits) - based upon the requirements of Paragraph	of Subsection B of 19.15.17.9 NMAC graph (2) of Subsection B of 19.15.17.9 NMAC
 ☑ Design Plan - based upon the appropriate requirer ☑ Operating and Maintenance Plan - based upon the ☑ Closure Plan (Please complete Boxes 14 through and 19.15.17.13 NMAC 	appropriate requirements of 19.15.17.12 N	MAC ate requirements of Subsection C of 19.15.17.9 NMAC
Previously Approved Design (attach copy of design	API Number:	or Permit Number:
12. Closed-loop Systems Permit Application Attachmen Instructions: Each of the following items must be atta attached. Geologic and Hydrogeologic Data (only for on-s Siting Criteria Compliance Demonstrations (only Design Plan - based upon the appropriate require Operating and Maintenance Plan - based upon th Closure Plan (Please complete Boxes 14 through and 19.15.17.13 NMAC	ite closure) - based upon the requirements of for on-site closure) - based upon the approprients of 19.15.17.11 NMAC e appropriate requirements of 19.15.17.12 N	y a check mark in the box, that the documents are f Paragraph (3) of Subsection B of 19.15.17.9 priate requirements of 19.15.17.10 NMAC
Previously Approved Design (attach copy of design		
Previously Approved Operating and Maintenance P	•	(Applies only to closed-loop system that use
above ground steel tanks or haul-off bins and propose t	o implement waste removal for closure)	
☐ Certified Engineering Design Plans - based upon ☐ Dike Protection and Structural Integrity Design - ☐ Leak Detection Design - based upon the appropri ☐ Liner Specifications and Compatibility Assessme ☐ Quality Control/Quality Assurance Construction ☐ Operating and Maintenance Plan - based upon th ☐ Freeboard and Overtopping Prevention Plan - base ☐ Nuisance or Hazardous Odors, including H₂S, Pr ☐ Emergency Response Plan ☐ Oil Field Waste Stream Characterization ☐ Monitoring and Inspection Plan ☐ Erosion Control Plan ☐ Closure Plan - based upon the appropriate require	based upon the appropriate requirements of ate requirements of 19.15.17.11 NMAC ent - based upon the appropriate requirement and Installation Plan e appropriate requirements of 19.15.17.12 Need upon the appropriate requirements of 19 evention Plan	T19.15.17.11 NMAC as of 19.15.17.11 NMAC IMAC .15.17.11 NMAC
14. <u>Proposed Closure</u> : 19.15.17.13 NMAC Instructions: Please complete the applicable boxes, B	oxes 14 through 18, in regards to the propa	osed closure plan.
☐ In-place Bu☐ Alternative Closure Me	Removal d-loop systems only) d (Only for temporary pits and closed-loop s rial On-site Trench Burial	
Waste Excavation and I Waste Excavation and I Waste Removal (Close On-site Closure Method In-place Bu Alternative Closure Method Alternative Closure Method In-place Bu Alternative Closure Plan Check Closure Plan Chec	list: (19.15.17.13 NMAC) Instructions: E box, that the documents are attached. priate requirements of 19.15.17.13 NMAC ed upon the appropriate requirements of Subliquids, drilling fluids and drill cuttings) based upon the appropriate requirements of Strequirements of Subsection I of 19.15.17.13	Subsection H of 19.15.17.13 NMAC NMAC
Form C-144	Oil Conservation Division	Page 3 of 5

The 1 Company of the 1997 and							
Disposal Facility Name:							
Disposal Facility Name:							
Yes (If yes, please provide the information be	ons and associated activities occur on or in areas that will not be used for future selow) \square No	rvice and operations					
Re-vegetation Plan - based upon the appropria	for future service and operations: s based upon the appropriate requirements of Subsection H of 19.15.17.13 NMA ate requirements of Subsection I of 19.15.17.13 NMAC priate requirements of Subsection G of 19.15.17.13 NMAC	AC					
provided below. Requests regarding changes to cer	nstration of compliance in the closure plan. Recommendations of acceptable solutain siting criteria may require administrative approval from the appropriate dis The Santa Fe Environmental Bureau office for consideration of approval. Jus	strict office or may b					
Ground water is less than 50 feet below the bottom o NM Office of the State Engineer - iWATER	of the buried waste. S database search; USGS; Data obtained from nearby wells	Yes No					
_	S database search; USGS; Data obtained from nearby wells	Yes No					
round water is more than 100 feet below the botton - NM Office of the State Engineer - iWATER	n of the buried waste. S 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							
 ithin 300 feet from a permanent residence, school, Visual inspection (certification) of the propo 	hospital, institution, or church in existence at the time of initial application. sed site; Aerial photo; Satellite image	Yes No					
atering purposes, or within 1000 horizontal feet of	sh water well or spring that less than five households use for domestic or stock any other fresh water well or spring, in existence at the time of initial application. S database; Visual inspection (certification) of the proposed site	Yes No					
dopted pursuant to NMSA 1978, Section 3-27-3, as	a defined municipal fresh water well field covered under a municipal ordinance amended. e municipality; Written approval obtained from the municipality	Yes No					
Vithin 500 feet of a wetland. - US Fish and Wildlife Wetland Identification	map; Topographic map; Visual inspection (certification) of the proposed site	Yes No					
	from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No					
/ithin an unstable area. - Engineering measures incorporated into the constant Society; Topographic map	design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological	Yes No					
Vithin a 100-year floodplain FEMA map		Yes No					
y a check mark in the box, that the documents are Siting Criteria Compliance Demonstrations - b Proof of Surface Owner Notice - based upon the Construction/Design Plan of Burial Trench (ii) Construction/Design Plan of Temporary Pit (for Protocols and Procedures - based upon the application Sampling Plan (if applicable) - b Waste Material Sampling Plan - based upon the Disposal Facility Name and Permit Number (for Soil Cover Design - based upon the appropriation Re-vegetation Plan - based upon the appropriation Plan - based upon	pased upon the appropriate requirements of 19.15.17.10 NMAC the appropriate requirements of Subsection F of 19.15.17.13 NMAC f applicable) based upon the appropriate requirements of 19.15.17.11 NMAC for in-place burial of a drying pad) - based upon the appropriate requirements of 19	.15.17.11 NMAC					

09. Operator Application Certification:		
I hereby certify that the information submitted with this	application is true, accurate and complete to the bes	st of my knowledge and belief.
		nvironmental Representative
17 . 3.		
Signature: Rim Champlin	Date:	11-25-08
e-mail address: kim_champlin@xtoenergy.com	Telephone:	505) 333-3100
29.		
OCD Approval: Permit Application (including clos	sure plan) 🔲 Closure Plan (only) 🔲 OCD Cone	ditions (see attachment)
OCD Representative Signature: Victoria Vene	gas	Approval Date: 06/02/2022
Environmental Consistist		
Title:Environmental Specialist	OCD Permit Number:	BG11
21. Closure Report (required within 60 days of closure confirmations: Operators are required to obtain an approach the closure report is required to be submitted to the divided to the form until an approved closure plan has been section of the form until an approved closure plan has been section.	oved closure plan prior to implementing any closu vision within 60 days of the completion of the closu been obtained and the closure activities have been	re activities. Please do not complete this completed.
	☐ Closure Completion	n Date:
22. Closure Method: Waste Excavation and Removal On-Site Closu If different from approved plan, please explain.	are Method	Waste Removal (Closed-loop systems only)
Closure Report Regarding Waste Removal Closure F Instructions: Please indentify the facility or facilities for two facilities were utilized.	or where the liquids, drilling fluids and drill cutting	gs were disposed. Use attachment if more than
Disposal Facility Name:		Number:
Disposal Facility Name:		Number:
Were the closed-loop system operations and associated a Yes (If yes, please demonstrate compliance to the		ed for future service and operations?
Required for impacted areas which will not be used for form Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Tech	•	
Closure Report Attachment Checklist: Instructions: 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 application Waste Material Sampling Analytical Results (required Disposal Facility Name and Permit Number Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Teclication Site Reclamation (Photo Documentation) On-site Closure Location: Latitude	on)) licable) sired for on-site closure)	e closure report. Please indicate, by a check NAD: 1927 1983
75. Operator Clasure Cartification		t
Operator Closure Certification: I hereby certify that the information and attachments sub- belief. I also certify that the closure complies with all ap	plicable closure requirements and conditions specifi	ied in the approved closure plan.
Name (Print):	Title:	
Signature:	Date:	
c-mail address:	l elephone:	
		3
Form C-144	Oil Conservation Division	Page 5 of 5

OIL CONSERVATION DIVISION

SANTA FE, NEW MEXICO 87501

Form C-107 Revised 10-1-78

Released to Imaging: 6/2/2022 4:38:34 PM

<u> </u>	All distances must be fo	um the cuter haunderles o	of the Section.	
Operator		Lease		Well No.
Unit Letter Section	Township	MARTIN GAS CO		1E
P31		Range	County	
Actual Footoge Location of Well:		<u> 104</u>	L San Juan	
1120 feet from the Ground Level Elev: Producting	South line and	1120 fee	from the Fast	line
5892 Cliffs	Formation Pictured / Dakota	Fulcher Kutz Basin Dakota	Pictured Class Ded	licated Acreages 60/ 320
1. Outline the acreage ded	icated to the subject w	ell by colored pencil o	or hachure marks on the	plat helow
If more than one lease interest and royalty).				•
3. If more than one lease o dated by communitization	different ownership is unitization, force-pooli	decicated to the well, ng. etc?	have the interests of al	l owners been consoli-
X Yes No I	answer is "yes," type o	f consolidation Com	munitization	
If answer is "no;" list the this form if necessary.)_				
No allowable will be assi forced-pooling, or otherwise	gned to the well until all	interests have been c	consolidated (by commun	itization militari
forced-pooling, or otherwise sion.	e) or until a non-standar	l unit, eliminating suc	h interests, has been ap	proved by the Commis-
				,
	and the second second second		CI	ERTIFICATION
1	24	1		
Dakota Dedication		1		ly that the information can- is true and complete to the
:		i ·	best of my kno	wiedge and beilef.
1		1		100
		1	Name	Leturo
		i	W. L. Pete	erson
		0	Position	
Amoco W	. I.		District E	ngineer
37.5%		1	Company Amoco Prod	uction Company
ា ់	ec.	1	Date	
i		100 100 100	November25	, 1980
ı				18
	31			fy that the well location
i	- 1	i	notes of actua	olat was platted from field I surveys made by me or
Water	\		under my super	vision, and that the same
i		`		prect to the best of my
<u> </u>			knowledge and	belief.
		1120	·	
1		0 2120	Date Surveyed	
Ctured Cliffa Dedicati	.on ———	1 2		1 -2 -0 -
3%			November Fralstered Press	
1		12(and Land Surve	
Ŏ I		1 -	delle	Kershill !
<u> </u>			Fred B. Ki	err Jr.
Received Sca	ls: l"=1000*		3950	
Rec	÷ +		-11	- AERA SFORM 24-11

Received by OCD: 3/25/2022 1:55:36 PM

à			Client:	XTO Energy
Lodestar Service	es. Inc.	Pit Permit	Project:	Pit Permits
PO Box 4465, Durang		Siting Criteria	Revised:	23-Oct-08
	10, 00 02002	Information Shee		Devin Hencmann
¥				
API#:		3004524880	USPLSS:	28N, 10W, 31P
Name:	MART	TIN GAS COM B #1E	Lat/Long:	36.61458/-107.93117
Depth to groundwater:		>100'	Geologic formation:	Naciemento
Distance to closest continuousiy flowing watercourse:	6.28 mi	les N to the 'San Juan River'		
Distance to closest significant watercourse, lakebed, playa lake, or sinkhole:	1.3 miles	W to Kutz Canyon wash		
			Soil Type:	Entisols
Permanent residence, school, hospital, institution or church within 300'		No		
			Annual Precipitation:	Bloomfield: 8.71", Farmington: 8.21", Otis: 10.41"
Domestic fresh water well or spring within 500'		No	Precipitation Notes:	Historical daily max: Bloomfield (4.19")
Any other fresh water well or spring within 1000'		No		
Within incorporated municipal boundaries		No	Attached Documents:	27N 11W i-Waters pdf,27N 12W i-Waters pdf
Within defined municipal fresh water well field		No		Topo map pdf, Aerial pdf, Mines and Quarries Map pdf,i-Waters Ground Water Data Map pdf, FEMA flood zone map pdf
Wetland within 500'		No	Mining Activity:	None
Within unstable area		No		
Within 100 year flood plain	No	o-FEMA Zone 'X'		
Additional Notes:				
Additional Notes.	•	NW to concrete lined rrigation canal		

MARTIN GAS COM B #1E 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 Kutz Canyon region of the San Juan Basin. The predominant geologic formation is the Nacimiento Formation of Tertiary age, which underlies surface soils and is often exposed (Dane and Bachman, 1965). Deposits of Quaternary alluvial and aeolian sands occur prominently near the surface of the area, especially near streams and washes.

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

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

Dry and arid weather further prohibit active recharge. The climate of the region is arid, averaging 8 to 12 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). However, vegetation is very sparse and discontinuous.

Released to Imaging: 6/2/2022 4:38:34 PM

Released to Imaging: 6/2/2022 4:38:34 PM

Site Specific Hydrogeology

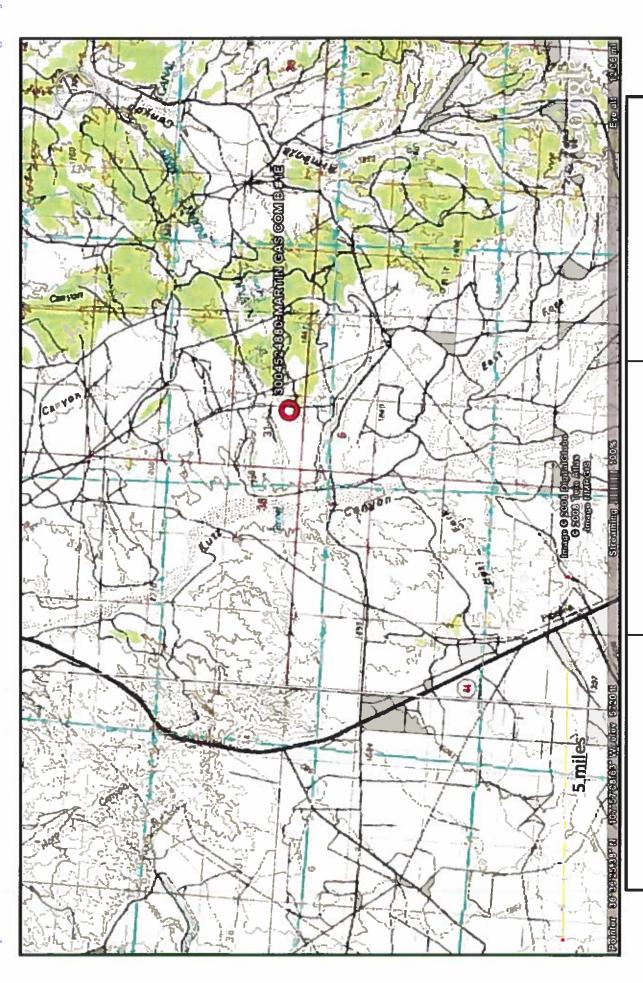
Depth to groundwater is estimated to be greater than 100'. This estimation is based on data from Stone and others (1983), the USGS Groundwater Atlas of the United States and depth to groundwater data published on the New Mexico State Engineer's iWaters Database website. Local topography and proximity to surface hydrologic features are also taken into consideration.

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

The site in question is located near the edge of Kutz Canyon, where deeply eroded sandstone-capped mesas and slope-forming mudstones occur in a sparsely vegetated and arid badlands-type setting. Broad shalely hills are interspersed with occasional sandstone outcrops, and systems of dry washes and their tributaries are evident on the attached aerial image.

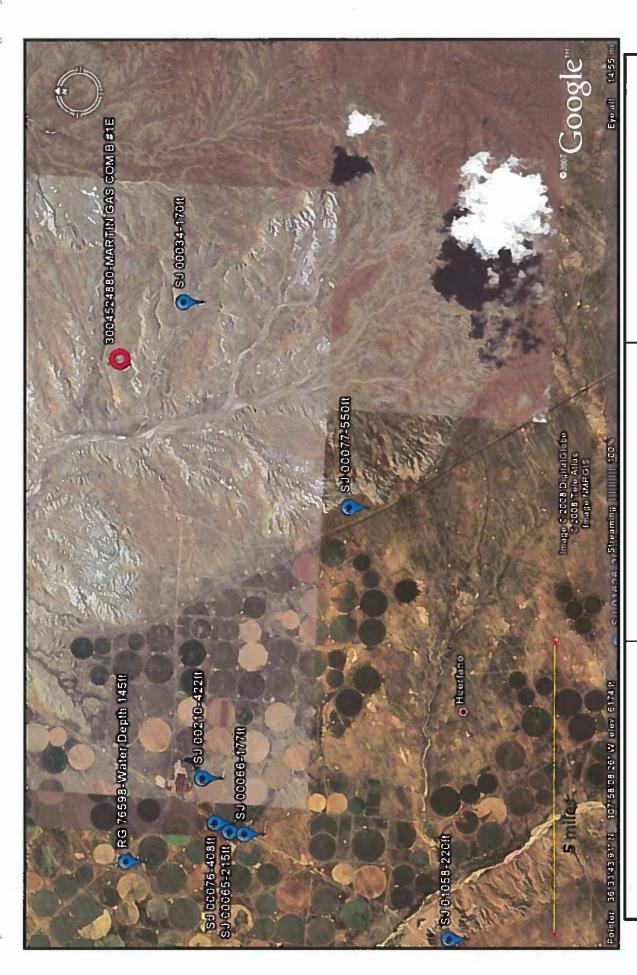
The pit will be located on a relatively flat mesa top at an elevation of approximately 5918 feet near the head of Kutz Wash. It will be approximately 190 feet from the Kutz Canyon tributary system and 1.3 miles east of Kutz Wash. Groundwater is expected to be shallow within Kutz Wash. But the significant distance between the Canyon and the site, as well as an elevation difference of over 200 feet suggest groundwater is greater than 100 feet at the proposed site.

State iWaters data points are sparsely distributed in this region, but there is an iWaters data point approximately 1.6 miles to the southeast of the site. Depth to groundwater at the site is 170 feet. A map showing the location of wells in reference to the proposed pit location is attached (SJ00034).



MARTIN GAS COM B #1E San Juan county, NM T28N, R10W, S31P Lodestar Services, Inc Durango, CO 81302 PO Box 4465

TOPOGRAPHIC MAP



Lodestar Services, Inc
PO Box 4465
Durango, CO 81302
San Juan county, NM

i-Waters Ground Water Data Map

New Mexico Office of the State Engineer POD Reports and Downloads

POD / Surface Data ReportAvg Depth to Water ReportWater Column Report

WATER COLUMN REPORT 03/22/2008

n feet)		
Water (in	Column	552
Depth		550
Depth	Well 650	1102
	Þi	
(quarters are 1=NW 2=NE 3=SW 4=SE)	Tws Rng Sec q q q Zone X 27H 11W 07 2 2	m
1=NW 2	ec q q	11W 26 2 1 3
s are	Rng S	11W 2
(quarter	Twee 27H	27W
	POD Number SJ 01787	sJ 00077

Record Count: 2

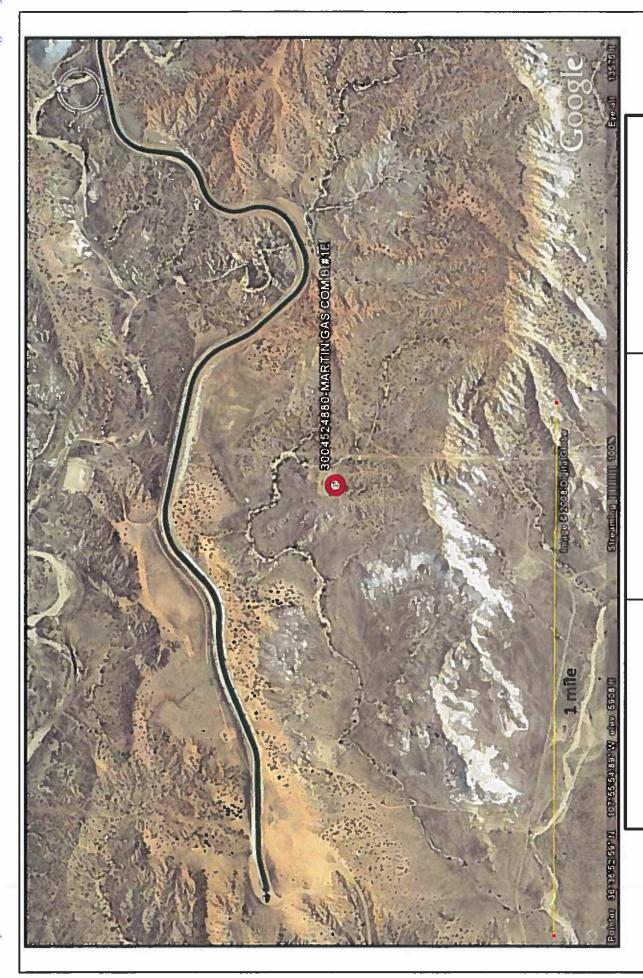
WATER COLUMN REPORT 09/23/2008

	Depth	Well Water Column	
		×	
(quarters are 1=NW 2=NB 3=SW 4=SB)	rs are biggest to smallest)	Rng Sec q q q Zone X	10W G8 223
uarte r	Darter	TWB	27N
5)	5)	POD Mumber	SJ 00034

New Mexico Office of the State Engineer POD Reports and Downloads

WATER COLUMN REPORT 08/22/2008

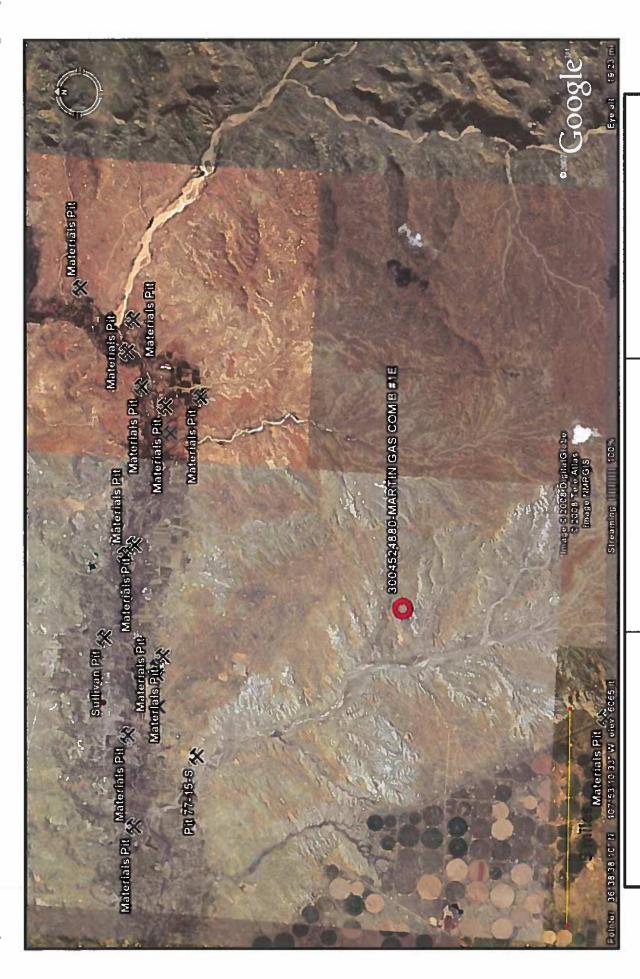
Record Count: 5



AERIAL PHOTOGRAPH

Lodestar Services, Inc PO Box 4465 Durango, CO 81302

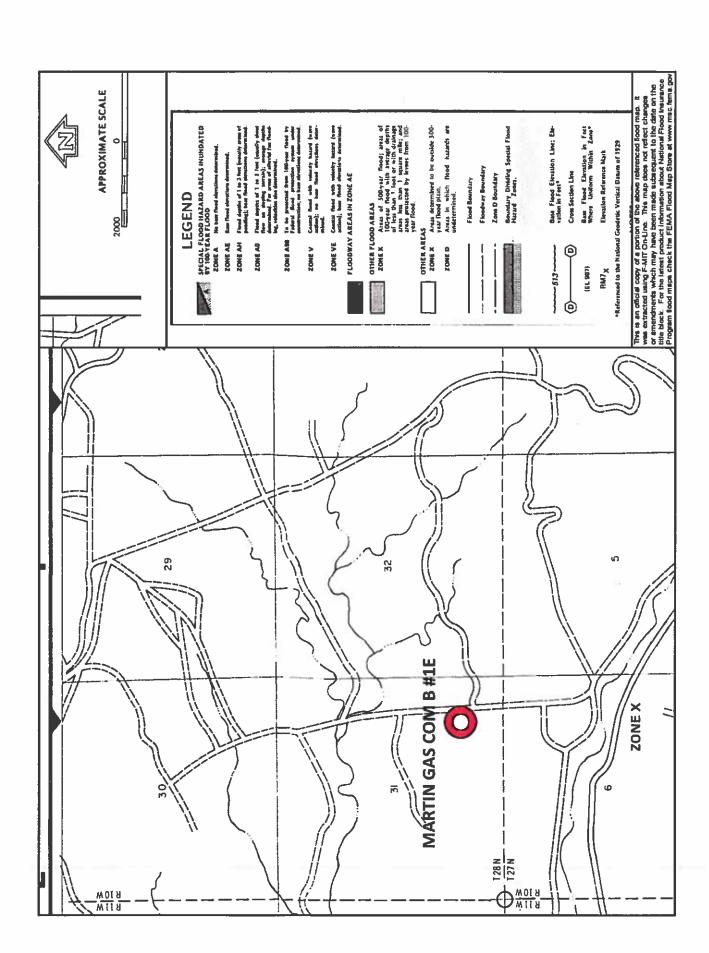
MARTIN GAS COM B #1E T28N, R10W, S31P San Juan county, NM



Lodestar Services, Inc MART PO Box 4465
Durango, CO 81302 San Ju

MARTIN GAS COM B #1E T28N, R10W, S31P San Juan county, NM

Mines and Quarries Map



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

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

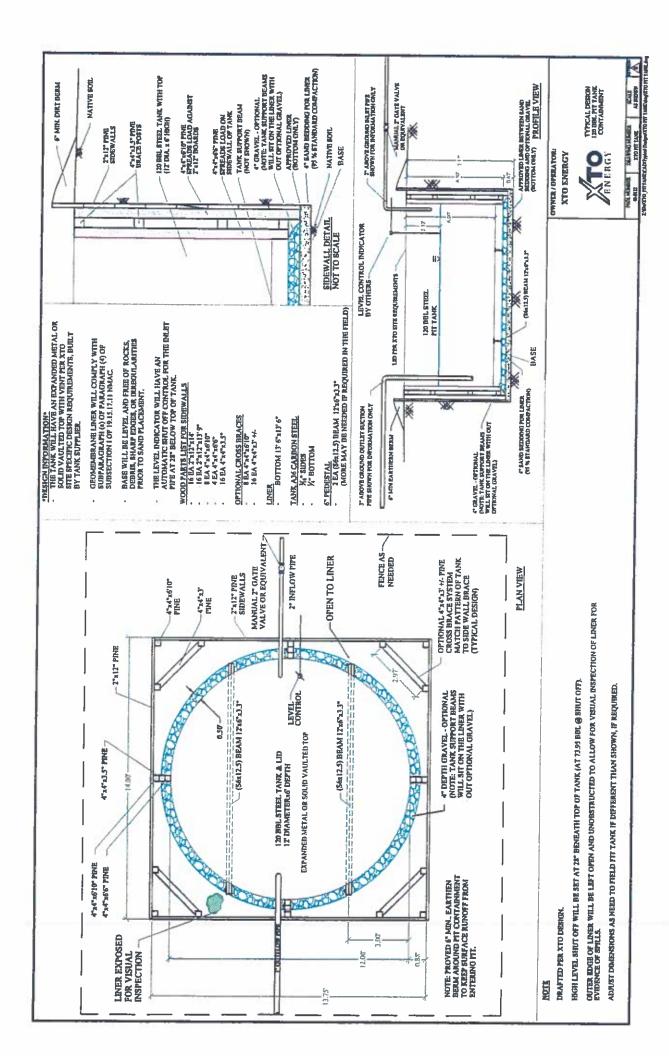
General Plan

- 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 ½ 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 \(\lambda'' \) 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

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.
 - 4. XTO will inspect the below-grade tank monthly and maintain written records for five years. Monthly inspections will consist of documenting the following: (see attached template),

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

- 5. XTO will maintain adequate freeboard to prevent over topping of the below-grade tank. High level shut-off devices control the freeboard at an average of 28" beneath the top of the tank.
- 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,

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.

> > Released to Imaging: 6/2/2022 4:38:34 PM

MONTHLY BELOW GRADE TANK INSPECTION FORM	API No.:	Township:	Any visible Any visible signs of surface Visible layer Any visible signs Freeboard tears (Y/N) tank overflows (Y/N) frun on (Y/N) of oil (Y/N) of a tank leak (Y/N) Fig. (#)								tion:				
CTION F	No.:	ange:								-					
IK INSPE		æ								-		,			
W GRADE TAN			Any visible signs (tank overflows (Y/)									:t			
1LY BELO		Township:	Any visible liner tears (Y/N)								ption:				
MONT			Inspection Time								Provide Detailed Description:				
	3	Sec:	Inspection Date								Provide De				
	Well Name:	Legals	XTO Inspector's Name								NOIGS.	¥	Misc;		

Received by OCD: 3/25/2022 1:55:36 PM

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

- L 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

- XTO will remove the below-grade tank and dispose of it in a division approved facility or 5. 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.
- XTO will test the soils beneath the below-grade tank to determine whether a release has occurred. 7. 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

Released to Imaging: 6/2/2022 4:38:34 PM

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.

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

District I
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 93195

QUESTIONS

Operator:	OGRID:
HILCORP ENERGY COMPANY	372171
1111 Travis Street	Action Number:
Houston, TX 77002	93195
	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	MARTIN GAS COM B 1E	
Facility ID (f#), if known	Not answered.	
Facility Type	Below Grade Tank - (BGT)	
Well Name, include well number	MARTIN GAS COM B 1E	
Well API, if associated with a well	30-045-24880	
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.

District I

1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720

<u>District II</u> 811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

<u>District III</u> 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, Page 2

Action 93195

QUESTIONS (continued)	
Operator:	OGRID:
HILCORP ENERGY COMPANY	372171
1111 Travis Street	Action Number:
Houston, TX 77002	93195
	A 22 - T

[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 tanks) Chain link, six feet in height, two strands of barbed wire at top (Required if located Not answered. within 1000 feet of a permanent residence, school, hospital, institution or church) Four foot height, four strands of barbed wire evenly spaced between one and four Not answered. feet 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 their own sign in compliance with Subsection C of 19.15.17.11 NMAC.) 12"x 24", 2" lettering, providing Operator's name, site location, and emergency Not answered. Signed in compliance with 19.15.16.8 NMAC True Variances and Exceptions Justifications and/or demonstrations ofequivalency 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 Requests must be submitted to the appropriate division district for consideration Not answered. of approval. Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for Not answered.

consideration of approval

District I
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, Page 3

Action 93195

QUESTIONS (continued)		
	OGRID:	
HILCORP ENERGY COMPANY	372171	
1111 Travis Street	Action Number:	
Houston, TX 77002	93195	

Action Type:

[C-144] Legacy Below Grade Tank Plan (C-144LB)

QUESTIONS

Operator:

Siting Criteria (regarding permitting) 19.15.17.10 NMAC

Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Siting criteria does not apply to drying pads or above-grade tanks.

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	
Below-grade Tank	Below Grade Tank - (BGT)
Waste Excavation and Removal	Not answered.
Alternate Closure Method. Please specify (Variance Required)	Not answered.

Operator Application Certification	
Registered / Signature Date	11/25/2008

District I
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**

ACKNOWLEDGMENTS

Action 93195

ACKNOWLEDGMENTS

Operator:	OGRID:
HILCORP ENERGY COMPANY	372171
1111 Travis Street	Action Number:
Houston, TX 77002	93195
	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.

District I
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**

CONDITIONS

Action 93195

CONDITIONS

Operator:	OGRID:
HILCORP ENERGY COMPANY	372171
1111 Travis Street	Action Number:
Houston, TX 77002	93195
	Action Type:
	[C-144] Legacy Below Grade Tank Plan (C-144LB)

CONDITIONS

Created By		Condition Date
vvenegas	None	6/2/2022