District I
26 1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico **Energy Minerals and Natural Resources** Department Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 2008 DEC 12 PM 4 01

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office.

For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

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

Proposed Alternative Method Permit of	or Closure Plan A	Application Application						
Type of action: Existing BGT Closure of a pit, closed-loop system, being Modification to an existing permit Closure plan only submitted for an exist below-grade tank, or proposed alternative method	ow-grade tank, or prop	posed alternative method						
Instructions: Please submit one application (Form C-144) per individual pit	, closed-loop system, belo	ow-grade tank or alternative request						
Please be advised that approval of this request does not relieve the operator of liability should environment. Nor does approval relieve the operator of its responsibility to comply with any								
Operator: XTO Energy, Inc.	OGRID #:	5380						
Address: #382 County Road 3100, Aztec, NM 87410								
Facility or well name:MARTIN GAS COM E # 1								
API Number: 30-045-06511 OCD Permit	Number:							
U/L or Qtr/QtrLSection15Township28NRange10WCounty:San Juan								
Center of Proposed Design: Latitude <u>36.57458</u> Longitude <u>107.88852</u> NAD: □1927 ☑ 1983								
Surface Owner: ☑ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment								
2.								
☐ 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 Volum	a. hhl Dima	angiong I w W w D						
	ebbi Dillie	SIISIOIIS. 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 (Application) Drying Pad Above Ground Steel Tanks Haul-off Bins Other Lined Unlined Liner type: Thickness mil LLDPE H Liner Seams: Welded Factory Other								
Below-grade tank: Subsection I of 19.15.17.11 NMAC Volume:	ills, vaulted, automatic hi	gh-level shut off, no liner						
5. Alternative Method:								
Submittal of an exception request is required. Exceptions must be submitted to the Sa	nta Fe Environmental Ru	reau office for consideration of approval.						
	v z.i. ii. viiiii viimi Du	tot antintaemeres se abby a tage						

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(6)		
Fencing: Subsection D of 19.15.17.11 NMAC (Apr	plies to permanent pits, temporary pits, and below-grade tanks)	
	ped wire at top (Required if located within 1000 feet of a permanent residence, school	, hospital,
institution or church)		
Four foot height, four strands of barbed wire eve		
Alternate. Please specify Four foot height, steel	mesh field fence (hogwire) with pipe top railing	
7.	lies to permanent pits and permanent open top tanks)	
Screen Netting Other Expanded metal		
☐ Monthly inspections (If netting or screening is n		
	or physically leastoney	
8. Signs: Subsection C of 19.15.17.11 NMAC		
12"x 24", 2" lettering, providing Operator's nam	ne, 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 Please check a box if one or more of the following	are required. Please refer to 19.15.17 NMAC for guidance.	
Administrative approval(s): Requests must l	be submitted to the appropriate division district or the Santa Fe Environmental Bureau	office for
consideration of approval. Exception(s): Requests must be submitted t	o the Santa Fe Environmental Bureau office for consideration of approval.	
10.		_
Siting Criteria (regarding permitting): 19.15.17.		
	upliance for each siting criteria below in the application. Recommendations of acce Thanges to certain siting criteria may require administrative approval from the appr	
office or may be considered an exception which mu	ust be submitted to the Santa Fe Environmental Bureau office for consideration of	approval.
Applicant must attach justification for request. Plantove-grade tanks associated with a closed-loop:	<i>ease refer to 19.15.17.10 NMAC for guidance</i> . Siting criteria does not apply to dr system.	ying pads or
	of the temporary pit, permanent pit, or below-grade tank.	☐ Yes ☑ No
	RS database search; USGS; Data obtained from nearby wells	
Within 300 feet of a continuously flowing watercou lake (measured from the ordinary high-water mark).	rse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa	☐ Yes ⊠ No
- Topographic map; Visual inspection (certifi		
	, hospital, institution, or church in existence at the time of initial application.	☐ Yes ☑ No ☐ NA
(Applies to temporary, emergency, or cavitation pit Visual inspection (certification) of the prop.		□ NA
	ol, hospital, institution, or church in existence at the time of initial application.	☐ Yes ☐ No
(Applies to permanent pits)	•	⊠ NA
- Visual inspection (certification) of the prop		☐ Yes ⊠ No
	sh water well or spring that less than five households use for domestic or stock fany other fresh water well or spring, in existence at the time of initial application.	
	RS database search; Visual inspection (certification) of the proposed site	
Within incorporated municipal boundaries or within adopted pursuant to NMSA 1978, Section 3-27-3, a	n a defined municipal fresh water well field covered under a municipal ordinance	☐ Yes ⊠ No
Water and market and an invite and an element	ne municipality; Written approval obtained from the municipality	
Within 500 feet of a wetland. US Fish and Wildlife Wetland Identification		☐ Yes ⊠ No
- US Fish and Wildlife Wetland Identification	n map; Topographic map; Visual inspection (certification) of the proposed site	
Within the area overlying a subsurface mine. Written confirmation or verification or man	from the NM EMNRD-Mining and Mineral Division	☐ Yes ⊠ No
Written confirmation or verification or map Within an unstable area. Engineering measures incorporated into the		☐ Yes ☑ No
- Engineering measures incorporated into the	design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological	L 162 [2] 140 (
Within a 100-year floodplain FEMA map Form C-144		☐ Yes ☑ No
		☐ Yes ☒ No ☐ Yes ☒ No ☐ Yes ☒ No
Form C-144	Oil Conservation Division Page 2 of	5

San II		
Instructions: Each of the following items must attached. Hydrogeologic Report (Below-grade Tank Hydrogeologic Data (Temporary and Eme Siting Criteria Compliance Demonstration Design Plan - based upon the appropriate Operating and Maintenance Plan - based upon the spropriate Design Plan - based upon the appropriate Design	the attached to the application. Please indexs) - based upon the requirements of Paragra regency Pits) - based upon the requirements as - based upon the appropriate requirements requirements of 19.15.17.11 NMAC upon the appropriate requirements of 19.15.1	of Paragraph (2) of Subsection B of 19.15.17.9 NMAC of 19.15.17.10 NMAC
	arough 18, if applicable) - based upon the ap	oppropriate requirements of Subsection C of 19.15.17,9 NMAC
☐ Previously Approved Design (attach copy o	f design) API Number:	or Permit Number:
attached. Geologic and Hydrogeologic Data (only in Siting Criteria Compliance Demonstration Design Plan - based upon the appropriate Operating and Maintenance Plan - based	for on-site closure) - based upon the requirer ins (only for on-site closure) - based upon the requirements of 19.15.17.11 NMAC upon the appropriate requirements of 19.15.	ments of Paragraph (3) of Subsection B of 19.15.17.9 e appropriate requirements of 19.15.17.10 NMAC
☐ Previously Approved Design (attach copy o	f design) API Number:	
☐ Previously Approved Operating and Mainte	nance Plan API Number:	(Applies only to closed-loop system that use
above ground steel tanks or haul-off bins and pr	opose to implement waste removal for closu	ire)
attached. Hydrogeologic Report - based upon the response Siting Criteria Compliance Demonstration Climatological Factors Assessment Certified Engineering Design Plans - based Dike Protection and Structural Integrity Design - based upon the a Liner Specifications and Compatibility A Quality Control/Quality Assurance Constoperating and Maintenance Plan - based Freeboard and Overtopping Prevention Polyman Nuisance or Hazardous Odors, including Emergency Response Plan Oil Field Waste Stream Characterization Monitoring and Inspection Plan Erosion Control Plan	equirements of Paragraph (1) of Subsection in sequirements of Paragraph (1) of Subsection in sequirements of 19.15 and the appropriate requirements of 19.15 appropriate requirements of 19.15.17.11 NM assessment - based upon the appropriate requirements of 19.15 and Installation Plan upon the appropriate requirements of 19.15.16 and - based upon the appropriate requirements of 19.15.16 and - based upon the appropriate requirements of 19.15.16 and - based upon the appropriate requirements of 19.15.16 and - based upon the appropriate requirements of 19.15 an	s of 19.15.17.10 NMAC 15.17.11 NMAC nents of 19.15.17.11 NMAC IAC nirements of 19.15.17.11 NMAC 17.12 NMAC ts of 19.15.17.11 NMAC
Proposed Closure: 19.15.17.13 NMAC Instructions: Please complete the applicable b	oxes, Boxes 14 through 18, in regards to th	ne proposed closure plan.
Alternative Proposed Closure Method: Waste Excavati Waste Removal On-site Closure In-p	on and Removal (Closed-loop systems only) Method (Only for temporary pits and closed place Burial On-site Trench Burial	Pit Below-grade Tank Closed-loop System d-loop systems) to the Santa Fe Environmental Bureau for consideration)
Closure plan. Please indicate, by a check mark ☐ Protocols and Procedures - based upon th ☐ Confirmation Sampling Plan (if applicabl ☐ Disposal Facility Name and Permit Numb ☐ Soil Backfill and Cover Design Specifica ☐ Re-vegetation Plan - based upon the appr	in the box, that the documents are attache e appropriate requirements of 19.15.17.13 N	IMAC s of Subsection F of 19.15.17.13 NMAC ngs) ents of Subsection H of 19.15.17.13 NMAC 5.17.13 NMAC
Form C-144	Oil Conservation Division	d-loop systems) to the Santa Fe Environmental Bureau for consideration) ions: Each of the following items must be attached to the ed. NMAC s of Subsection F of 19.15.17.13 NMAC ngs) ents of Subsection H of 19.15.17.13 NMAC 5.17.13 NMAC 19.15.17.13 NMAC

Disposal Facility Name:	Disposal Facility Permit Number:						
Disposal Facility Name:	·						
	ns and associated activities occur on or in areas that will not be used						
Re-vegetation Plan - based upon the appropriate	or future service and operations: based upon the appropriate requirements of Subsection H of 19.1: e requirements of Subsection I of 19.15.17.13 NMAC riate requirements of Subsection G of 19.15.17.13 NMAC	5.17.13 NMAC					
provided below. Requests regarding changes to cert	stration of compliance in the closure plan. Recommendations of a ain siting criteria may require administrative approval from the ap the Santa Fe Environmental Bureau office for consideration of ap	propriate district office	or may be				
Ground water is less than 50 feet below the bottom of - NM Office of the State Engineer - iWATERS	the buried waste. database search; USGS; Data obtained from nearby wells	☐ Yes					
Ground water is between 50 and 100 feet below the be - NM Office of the State Engineer - iWATERS	ottom of the buried waste database search; USGS; Data obtained from nearby wells	☐ Yes	_				
Ground water is more than 100 feet below the bottom - NM Office of the State Engineer - iWATERS	of the buried waste. I database search; USGS; Data obtained from nearby wells	☐ Yes ☐ NA					
Within 300 feet of a continuously flowing watercours ake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification)	e, or 200 feet of any other significant watercourse or lakebed, sinkhoation) of the proposed site	ole, or playa Yes	∏ No				
Vithin 300 feet from a permanent residence, school, b - Visual inspection (certification) of the propos	hospital, institution, or church in existence at the time of initial appliced site; Aerial photo; Satellite image	cation. Yes	No No				
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site							
idopted pursuant to NMSA 1978, Section 3-27-3, as a	a defined municipal fresh water well field covered under a municipal amended. municipality; Written approval obtained from the municipality	ordinance Yes	No				
Within 500 feet of a wetland US Fish and Wildlife Wetland Identification i	map; Topographic map; Visual inspection (certification) of the propo	osed site	□ No				
•	rom the NM EMNRD-Mining and Mineral Division	☐ Yes	No No				
Within an unstable area. - Engineering measures incorporated into the d Society; Topographic map	lesign; NM Bureau of Geology & Mineral Resources; USGS; NM G	eological Yes	No				
Within a 100-year floodplain. - FEMA map		☐ Yes	. □ No				
by a check mark in the box, that the documents are a Siting Criteria Compliance Demonstrations - ba Proof of Surface Owner Notice - based upon th Construction/Design Plan of Burial Trench (if Construction/Design Plan of Temporary Pit (fo Protocols and Procedures - based upon the appi Confirmation Sampling Plan (if applicable) - based upon the Waste Material Sampling Plan - based upon the Disposal Facility Name and Permit Number (fo Soil Cover Design - based upon the appropriate Re-vegetation Plan - based upon the appropriate	ased upon the appropriate requirements of 19.15.17.10 NMAC ne appropriate requirements of Subsection F of 19.15.17.13 NMAC applicable) based upon the appropriate requirements of 19.15.17.11 or in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11	NMAC rements of 19.15.17.11	NMAC				
		Dan 4 - 6 "					
Form C-144	Oil Conservation Division	Page 4 of 5					

Operator Application Certification:	
I hereby certify that the information submitted with this application is true, acc	arate and complete to the best of my knowledge and belief.
Name (Print): Kim Champlin	Title: Environmental Representative
Signature: Kim Champlin	Date:
	Telephone: (505) 333-3100
20.	
OCD Approval: X Permit Application (including closure plan) Closure	
OCD Representative Signature: Victoria Venegas	Approval Date: 06/03/2022
Title: Environmental Specialist	OCD Permit Number: BGT1
21. <u>Closure Report (required within 60 days of closure completion)</u> : Subsection Instructions: Operators are required to obtain an approved closure plan prion The closure report is required to be submitted to the division within 60 days of section of the form until an approved closure plan has been obtained and the	to implementing any closure activities and submitting the closure report. The completion of the closure activities. Please do not complete this
22.	-
Closure Method: ☐ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alter ☐ If different from approved plan, please explain.	native Closure Method
Closure Report Regarding Waste Removal Closure For Closed-loop System Instructions: Please indentify the facility or facilities for where the liquids, detwo facilities were utilized.	rilling fluids and drill cuttings were disposed. Use attachment if more than
Disposal Facility Name: Disposal Facility Name:	
Were the closed-loop system operations and associated activities performed on	
Yes (If yes, please demonstrate compliance to the items below) No	
Required for impacted areas which will not be used for future service and operation Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique	itions:
24. Closure Report Attachment Checklist: Instructions: Each of the following mark in the box, that the documents are attached. Proof of Closure Notice (surface owner and division) Proof of Deed Notice (required for on-site closure) Plot Plan (for on-site closures and temporary pits) Confirmation Sampling Analytical Results (if applicable) Waste Material Sampling Analytical Results (required for on-site closure) Disposal Facility Name and Permit Number Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique Site Reclamation (Photo Documentation) On-site Closure Location: Latitude	
25. Operator Closure Certification:	3
I hereby certify that the information and attachments submitted with this closure belief. I also certify that the closure complies with all applicable closure require	
Name (Print):	Title:
Signature:	Date:
e-mail address:	Telephone:
	No.

Form C-144 Oil Conservation Division Page 5 of 5

! MEXICO OIL CONSERVATION COMN. WELL LOCATION AND ACREAGE DEDICATION PLAT

SECTION A DATE: April 12, 1965 mpenator Pan American Petroleum Corporation LEASE Martin Gas Unit "E" UNIT SETTIF FIGURES 15 TOWNSHIP 27 North RANGE 10 West 2425 825 740 FEET FROM CHTADE : FLIT FROM South West LINE. LINE BOUNTY Sar Juan G. C. ELIVATION Report Later REDICATED ACREAGE 320 ACRES WANG OF BRODUCING FORMATORS Dakota 단어마다 Basin Dakota IT THE THE DEERANDS ONE ONCE OFFICE IN THE DEDICATED ACRESSES OUTLINED ON THE PLAT BELLW YER TO THE BUNEFUL BUTTON TO THE TONDS THEFT ME THE STATE BEEN CONFIDENCE BY BOMMO THE DATE OF STREET OF BURNISH YES X NO. IF ANSWER IS "YES," TYPE OF CONSULIDATION

Communitization and Operating Agreements circulating for signature--- all parties have previously agreed to join in the drilling of the well. HE THE AN IALR SEE BUILT IN THE E "NE" LIST ALL THE DWILEPS AND THEIR RESPECTIVE

DWNER

AFR 1 9 1965 CIL CON. COM DIST. 3

SECTION B.

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THIS IS TO CERTIFY THAT THE INFORMATION IN SECTION A ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

BELOW:

PAN AMERICAN PETROLEUM COPP.

fel the Ungovich THE RATES

F. H. Hollingsworth

HERMING STATIST P. O. Box 480

Fa mingcon, New Mexico

ADDRESS

THIS IS TO CERTIFY THAT THE WELL LOCATION SHOWN ON THE PLAT IN SECTION B WAS PLOT-TED FROM FIELD NOTES OF AC-TUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

DATE SURVEYED Jan. 13, 1965

FOUR STATES ENGINEERING CO.

FARMINGTON, NEW MEXICO

munes by Cuched has LAND SURVEYOR

3602 CERTIFICATE NO.

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Lodestar Service PO Box 4465, Duran		Pit Permit Siting Criteria Information Shee	Client: Project: Revised: Prepared by:	XTO Energy Pit Permits 23-Oct-08 Devin Hencmann
API#:		3004506511	USPLSS:	28N, 10W, 15L
Name:	MAR	TIN GAS COM E #1	Lat/Long:	36.57458/-107.88852
Depth to groundwater:		>100'	Geologic formation:	Naciemento
Distance to closest continuously flowing watercourse:	8.5 miles	N to the 'San Juan River'		
Distance to closest significant watercourse, lakebed, playa lake, or sinkhole:	1.3 mile	s W to the east fork of Kutz Canyon		
Permanent residence, schooi, hospital, institution or church within 300'		No	Soil Type:	Entisols
			Annual Precipitation:	Bloomfield: 8.71", Farmington: 8.21", Otis: 10.41"
Domestic fresh water weli or spring within 500'		No	Precipitation Notes:	Historical daily max: 8loomfield (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 municipai fresh water weli 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:				

MARTIN GAS COM E #1 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. 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.

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Site Specific Hydrogeology

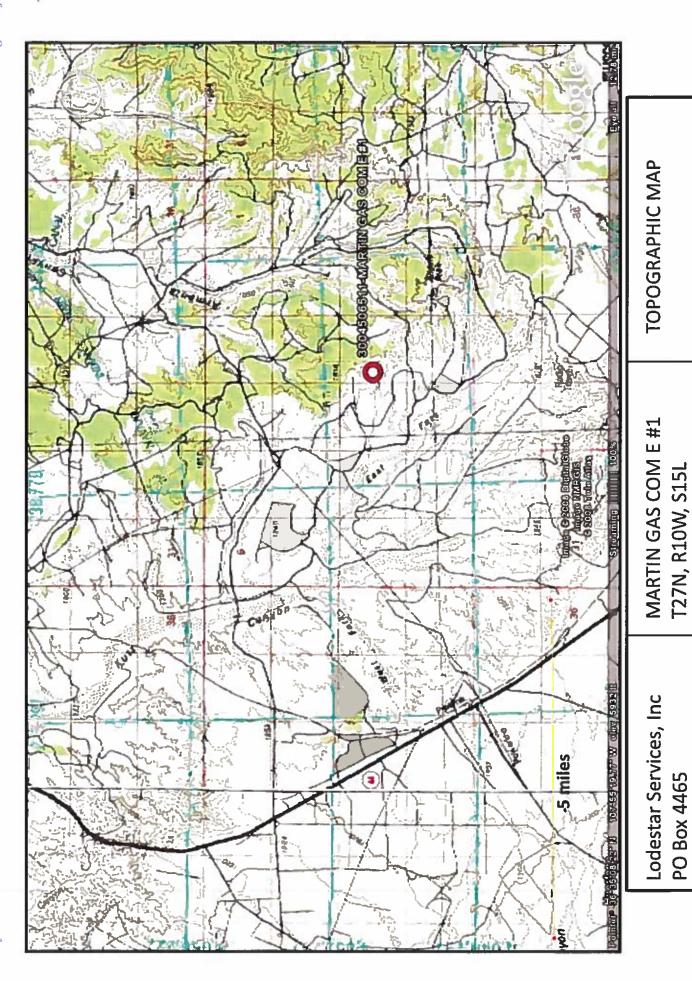
Depth to groundwater is estimated to be greater than 100'. This estimation is based on data from Stone and others (1983), the USGS Groundwater Atlas of the United States and depth to groundwater data published on the New Mexico State Engineer's iWaters Database website. Local topography and proximity 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 6120 feet near the head of Kutz Wash. It is located within the Kutz Canyon tributary system 1.3 miles east of the east fork 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 160 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 1.9 miles to the northwest of the site. Depth to groundwater at the site is 170feet. A map showing the location of wells in reference to the proposed pit location is attached (SJ00034).



PO Box 4465



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

MARTIN GAS COM E #1 T27N, R10W, S15L San Juan county, NM

i-Waters Ground Water Data Map

New Mexico Office of the State Engineer POD Reports and Downloads

POD / Surface Data Report Avg Depth to Water Report Water Column Report

WATER COLUMN REPORT 03/22/2008

	(in feet)			
	Water (in	Column		552
	Depth	Water		550
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(quarters are 1-NW 2-NE 3-SW 4-SE)	smallest	Zone		27N 11W 26 2 1 3
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WATER COLUMN REPORT 09/23/2008

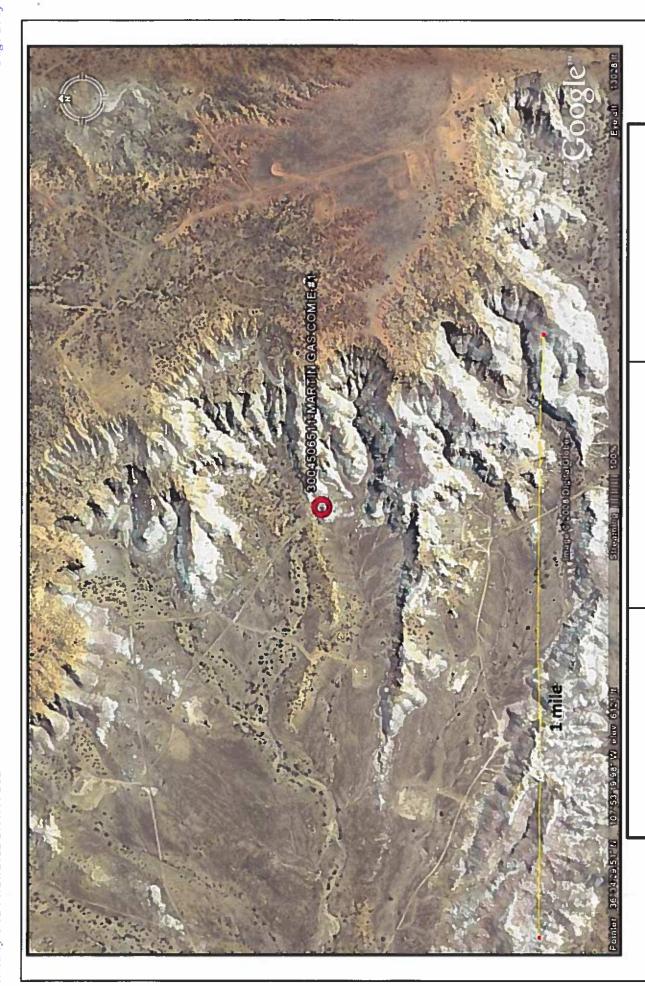
		Water	
	Depth	Well	235
		×	
ers are 1=NW 2=NB 3=SW 4=SB)	ers are biggest to smallest)	Tws Rng Sec q q q Zone X	N 10% 06 2 2 3
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New Mexico Office of the State Engineer POD Reports and Downloads

WAIER COLUMN REPORT 08/22/2008

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750 177		Z7N	12W	13	ന	3					177	573		

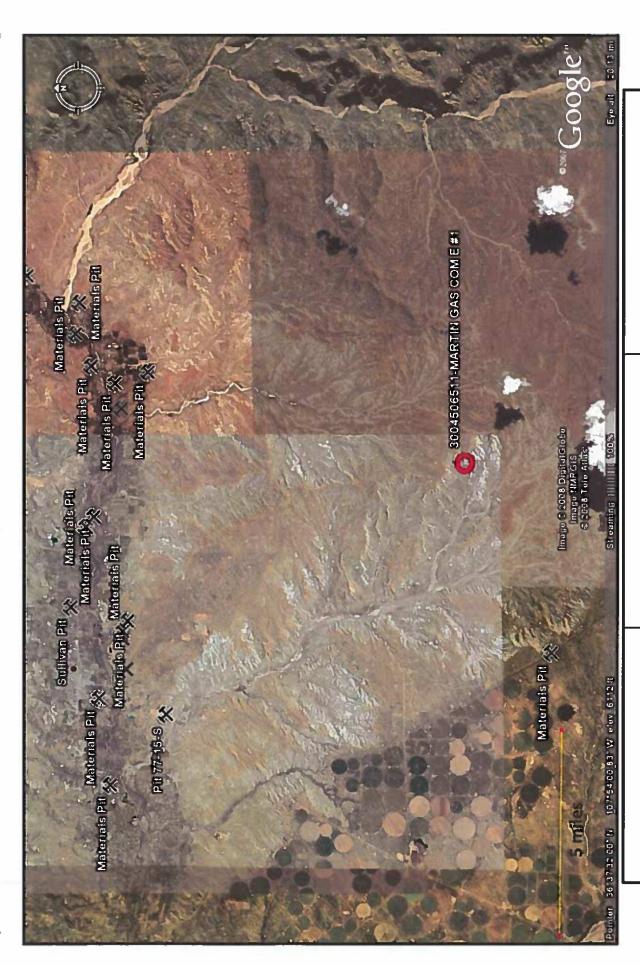
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San Juan county, NM Lodestar Services, Inc Durango, CO 81302 PO Box 4465

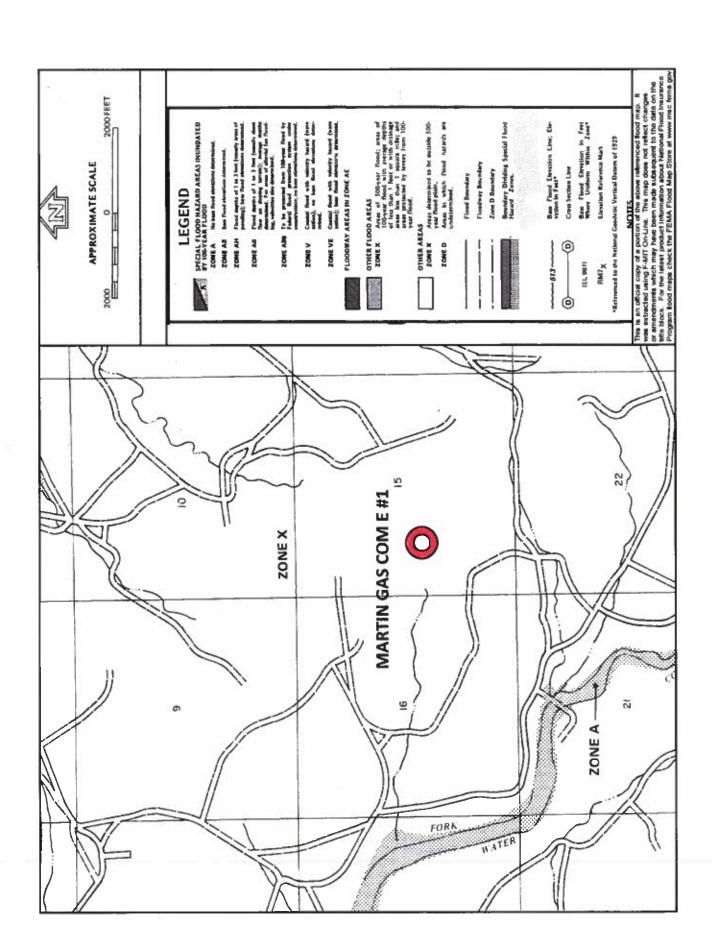
MARTIN GAS COM E #1 T27N, R10W, S15L

AERIAL PHOTOGRAPH



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

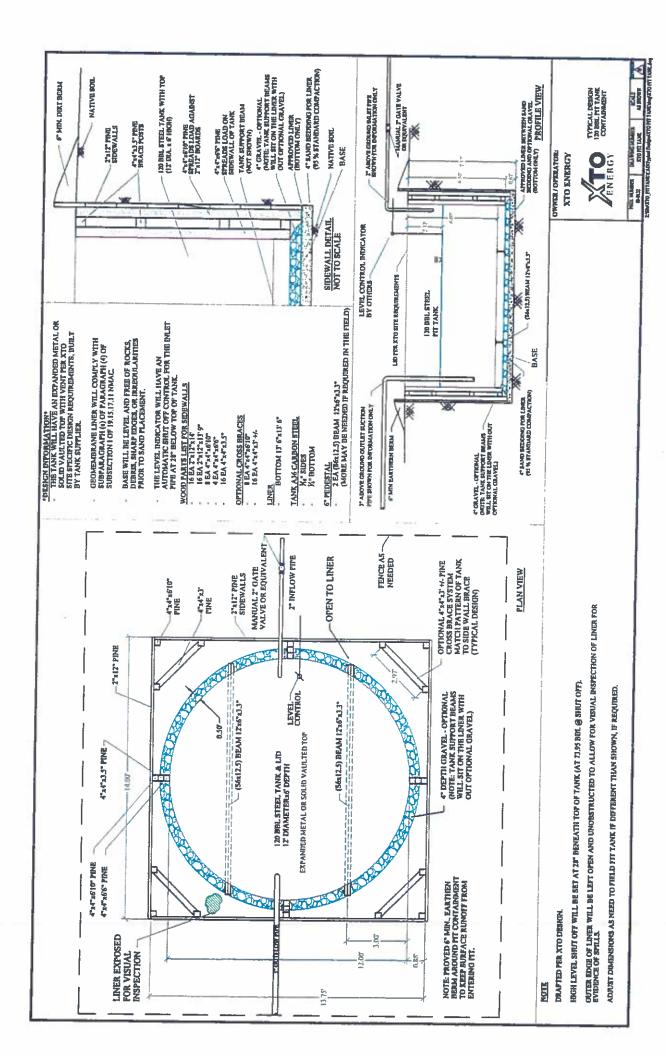
General Plan

- 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 '4" 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.



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

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

General Plan

- L 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 3. 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

- XTO will maintain adequate freeboard to prevent over topping of the below-grade tank. High 5. 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. 6.
- If a below-grade tank develops a leak, or if any penetration of a below-grade tank occurs below 7. the liquids surface, XTO will remove all liquids above the damage or leak line within 48 hours,

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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.

			Freeboard	Est. (ft)													
				of a tank leak (Y/N)													
N FORM				of oil (Y/N)													
INSPECTIO	API No.:	Range:	Collection of surface	run on (Y/N)									0,				
MONTHLY BELOW GRADE TANK INSPECTION FORM			Any visible signs of	tank overflows (Y/N)									5.5				
1LY BELO			Any visible liner	tears (Y/N)	3							ption:					
MONT			Inspection	Time								Provide Detailed Description:					
	32.2	Sec	Inspection	Date								Provide De					
	Well Name:	Legals	XTO Inspector's	Name Name								Notes:	-	Misc:			

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.
- 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 buttoms 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.

- 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.
- 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.

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For Below-Grade Tanks
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- 14. All closure activities will include proper documentation and be available for review upon request and will be submitted in closure report form to OCD within 60 days of closure of the below-grade tank. Closure report will be filed on form C-144 and incorporate the following:
 - Proof of closure notice to division and surface owner,
 - 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,
 - 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 93222

QUESTIONS

Operator:	OGRID:
HILCORP ENERGY COMPANY	372171
1111 Travis Street	Action Number:
Houston, TX 77002	93222
	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 E 1	
Facility ID (f#), if known	Not answered.	
Facility Type	Below Grade Tank - (BGT)	
Well Name, include well number	MARTIN GAS COM E 1	
Well API, if associated with a well	30-045-06511	
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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QUESTIONS (continued)

QUESTIONS, Page 2

Action	93222

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171 Action Number: 93222 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	(S)
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	e 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 telephone numbers	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 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 consideration of approval	Not answered.

USGS

Data obtained from nearby wells

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QUESTIONS, Page 3

Action 93222

QUEST	IONS (continued)
Operator: HILCORP ENERGY COMPANY	OGRID: 372171
1111 Travis Street Houston, TX 77002	Action Number: 93222
	Action Type: [C-144] Legacy Below Grade Tank Plan (C-144LB)
QUESTIONS	·
Siting Criteria (regarding permitting)	
19.15.17.10 NMAC	
Instructions: The applicant must demonstrate compliance for each siting criteria 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

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

Not answered.

Not answered.

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

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ACKNOWLEDGMENTS

Action 93222

ACKNOWLEDGMENTS

Operator:	OGRID:
HILCORP ENERGY COMPANY	372171
1111 Travis Street	Action Number:
Houston, TX 77002	93222
	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 93222

CONDITIONS

Operator:	OGRID:
HILCORP ENERGY COMPANY	372171
1111 Travis Street	Action Number:
Houston, TX 77002	93222
	Action Type:
	[C-144] Legacy Below Grade Tank Plan (C-144LB)

CONDITIONS

Created By	Condition	Condition Date
vvenegas	None	6/3/2022