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

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

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office.
For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

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

Type of action:	Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method
Existing BGT	Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method
BGT1	Modification to an existing permit
	Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system,
below-grade tanl	c, or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

Operator: XTO Energy, Inc.	OGRID#: 5380
Address: #382 County Road 3100, Aztec, NM 87410	
Facility or well name: _ Schwerdtfeger # 10	
	OCD Permit Number:
U/L or Qtr/Qtr <u>C</u> Section <u>16</u> Township <u>27N</u>	Range 11W County: San Juan
Center of Proposed Design: Latitude <u>36.5797</u>	Longitude108.01189 NAD: ☐1927 ☒ 1983
Surface Owner: ⊠ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian	1 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: Thicknessmil LLD	DPE HDPE PVC Other
☐ String-Reinforced	
Liner Seams: Welded Factory Other	Volume: bbl Dimensions: L x W x D
3. Closed-loop System: Subsection H of 19.15.17.11 NMAC  Type of Operation: P&A Drilling a new well Workover or Drintent)	Prilling (Applies to activities which require prior approval of a permit or notice
☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Haul-off Bins ☐ O	Other
Lined Unlined Liner type: Thicknessmil L	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     Tank Construction material: Steel	
Secondary containment with leak detection Visible sidewalls, lin	
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☒ Other _V	
Liner type: Thickness mil  HDPE PVC	
S. Alternative Method:	
	itted to the Santa Fe Environmental Bureau office for consideration of approva
)	
Form C-144 Oil Cons	nservation Division Page 1 of 5
ā	

Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks)  Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school institution or church)  Four foot height, four strands of barbed wire evenly spaced between one and four feet	l, hospital,
Alternate, Please specify Four foot height, steel mesh field fence (hogwire) with pipe top railing	
Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)	
Screen Netting Other Expanded metal or solid vaulted top	
Monthly inspections (If netting or screening is not physically feasible)	
Signs: Subsection C of 19.15.17.11 NMAC	
12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers	
⊠ Signed in compliance with 19.15.3.103 NMAC	
Administrative Approvals and Exceptions:  [ustifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.	
Please check a box if one or more of the following is requested, if not leave blank:	
Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau consideration of approval.  Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	u office for
0. Exception(s). Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	
Siting Criteria (regarding permitting): 19.15.17.10 NMAC Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acc naterial are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appr	
office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drabove-grade tanks associated with a closed-loop system.	approval. rying pads or
office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to dr	approval.  ying pads or  ☐ Yes 🗵
office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drabove-grade tanks associated with a closed-loop system.  Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.	approval. rying pads or
office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drabove-grade tanks associated with a closed-loop system.  Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.  NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells  Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa ake (measured from the ordinary high-water mark).	approval.  ying pads or  ☐ Yes 🗵
Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drabove-grade tanks associated with a closed-loop system.  Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.  NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells  Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa ake (measured from the ordinary high-water mark).  Topographic map; Visual inspection (certification) of the proposed site  Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  Applies to temporary, emergency, or cavitation pits and below-grade tanks)  Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  Applies to permanent pits)	approval.  ying pads or  Yes   Yes   Yes   Yes   Yes   Yes   Yes   Yes   ✓
Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drabove-grade tanks associated with a closed-loop system.  Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.  NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells  Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa ake (measured from the ordinary high-water mark).  Topographic map; Visual inspection (certification) of the proposed site  Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  Applies to temporary, emergency, or cavitation pits and below-grade tanks)  Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.	ying pads or  Yes  Yes  NA Yes  Yes
Applice or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drabove-grade tanks associated with a closed-loop system.  Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.  NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells  Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa ake (measured from the ordinary high-water mark).  Topographic map; Visual inspection (certification) of the proposed site  Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  Applies to temporary, emergency, or cavitation pits and below-grade tanks)  Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  Applies to permanent pits)  Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock vatering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.	Yes   Yes   NA   Yes   NA
inflice or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drabove-grade tanks associated with a closed-loop system.  Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.  NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells  Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa ake (measured from the ordinary high-water mark).  Topographic map; Visual inspection (certification) of the proposed site  Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. Applies to temporary, emergency, or cavitation pits and below-grade tanks)  Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. Applies to permanent pits)  Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock vatering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.  NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site  Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance delopted pursuant to NMSA 1978, Section 3-27-3, as amended.	Yes   Yes   NA   Yes
inflice or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to dreabove-grade tanks associated with a closed-loop system.  Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.  NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells  Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa ake (measured from the ordinary high-water mark).  Topographic map; Visual inspection (certification) of the proposed site  Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. Applies to temporary, emergency, or cavitation pits and below-grade tanks)  Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. Applies to permanent pits)  Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.  NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site  Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance deduced pursuant to NMSA 1978, Section 3-27-3, as amended.  Written confirmation or verification from the municipality; Written approval obtained from the municipality	approval.  ying pads or  Yes   Yes   Yes   NA  Yes   NA  Yes   NA  Yes   Yes
office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drebove-grade tanks associated with a closed-loop system.  Town of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells  Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa ake (measured from the ordinary high-water mark).  Topographic map; Visual inspection (certification) of the proposed site  Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. Applies to temporary, emergency, or cavitation pits and below-grade tanks)  Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. Applies to permanent pits)  Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock vatering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.  NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site  Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance idopted pursuant to NMSA 1978, Section 3-27-3, as amended.  Witten confirmation or verification from the municipality; Written approval obtained from the municipality  Within 500 feet of a wetland.  US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the pr	approval.  ying pads or  Yes ⊠  Yes ⊠  Yes ⊠  NA  Yes ⊠  NA  Yes □  Yes ⊠  Yes ⊠  Yes ⊠
office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to dribove-grade tanks associated with a closed-loop system.  Tround water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.  NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells  Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa ake (measured from the ordinary high-water mark).  Topographic map; Visual inspection (certification) of the proposed site  Within 300 feet for an a permanent residence, school, hospital, institution, or church in existence at the time of initial application. Applies to temporary, emergency, or cavitation pits and below-grade tanks)  Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. Applies to permanent pits)  Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock vatering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.  NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site  Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance dopted pursuant to NMSA 1978, Section 3-27-3, as amended.  Within 500 feet of a welland.  US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) o	approval.  ying pads or  Yes   Yes   Yes   NA  Yes   NA  Yes   Ye
Applies to temporary, emergency, or cavitation pits and below-grade tanks)  Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  Within 500 horizontal feet of a private, domestic fresh water well or spring that less the time of initial application.  Nithin 500 horizontal feet of a private, domestic fresh water well or spring that less the time of initial application.  Nithin 500 horizontal feet of a private, domestic fresh water well or spring, in existence at the time of initial application.  Nithin 500 horizontal feet of a private, domestic fresh water well or spring, in existence at the time of initial application.  Applies to temporary, emergency, or cavitation of the proposed site;  Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  Applies to temporary, emergency, or cavitation pits and below-grade tanks)  Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  Applies to permanent pits)  Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  Within 500 horizontal feet of a private, domestic fresh water well or spring, in existence at the time of initial application.  No Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site  Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance dopted pursuant to NMSA 1978, Section 3-27-3, as amended.  Withen confirmation or verification from the municipality; Written approval obtained from the municipality  Within 500 feet of a welland.  Within an unstable area.  Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	approval.  ying pads or  Yes  Yes  NA  Yes  NA  Yes  Yes  Yes  Yes  Yes  Yes  Yes  Yes
Applies to temporary, emergency, or cavitation pits and below-grade tanks)  Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  Within 500 horizontal feet of a private, domestic fresh water well or spring that less the time of initial application.  Nithin 500 horizontal feet of a private, domestic fresh water well or spring that less the time of initial application.  Nithin 500 horizontal feet of a private, domestic fresh water well or spring, in existence at the time of initial application.  Nithin 500 horizontal feet of a private, domestic fresh water well or spring, in existence at the time of initial application.  Applies to temporary, emergency, or cavitation of the proposed site;  Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  Applies to temporary, emergency, or cavitation pits and below-grade tanks)  Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  Applies to permanent pits)  Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  Within 500 horizontal feet of a private, domestic fresh water well or spring, in existence at the time of initial application.  No Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site  Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance dopted pursuant to NMSA 1978, Section 3-27-3, as amended.  Withen confirmation or verification from the municipality; Written approval obtained from the municipality  Within 500 feet of a welland.  Within an unstable area.  Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	approval.  ying pads or  Yes  Yes  NA  Yes  NA  Yes  Yes  Yes  Yes  Yes  Yes  Yes  Yes

Temporary Pits, Emergency Pits, and Below- Instructions: Each of the following items mus				
attached.  ☐ Hydrogeologic Report (Below-grade Tanl ☐ Hydrogeologic Data (Temporary and Emc ☐ Siting Criteria Compliance Demonstration ☐ Design Plan - based upon the appropriate ☐ Operating and Maintenance Plan - based u ☐ Closure Plan (Please complete Boxes 14 tand 19.15.17.13 NMAC	ergency Pits) - bases of the based upon the requirements of 1 upon the appropriate of the properties.	ed upon the requirements of appropriate requirements of 9.15.17.11 NMAC te requirements of 19.15.17	Paragraph (2) of Subsection E f 19.15.17.10 NMAC	3 of 19.15.17.9 NMAC
Previously Approved Design (attach copy of	f design) API N	lumber:	or Permit Number:	
12. Closed-loop Systems Permit Application Atta Instructions: Each of the following items mus attached.				x, that the documents are
Geologic and Hydrogeologic Data (only in Siting Criteria Compliance Demonstration Design Plan - based upon the appropriate Operating and Maintenance Plan - based Closure Plan (Please complete Boxes 14 and 19.15.17.13 NMAC	ns (only for on-site requirements of 1 upon the appropris	e closure) - based upon the a 9.15.17.11 NMAC ate requirements of 19.15.17	appropriate requirements of 19	.15.17.10 NMAC
Previously Approved Design (attach copy o	f design) API	Number:	( <u>†</u>	
Previously Approved Operating and Mainte	nance Plan AP	l Number:	(Applies only to c	losed-loop system that use
above ground steel tanks or haul-off bins and pr	opose to impleme	nt waste removal for closure	)	
Certified Engineering Design Plans - base Dike Protection and Structural Integrity D Leak Detection Design - based upon the a Liner Specifications and Compatibility A Quality Control/Quality Assurance Const Operating and Maintenance Plan - based Freeboard and Overtopping Prevention P Nuisance or Hazardous Odors, including Emergency Response Plan Oil Field Waste Stream Characterization Monitoring and Inspection Plan Erosion Control Plan Closure Plan - based upon the appropriate	Design - based upo appropriate require ssessment - based ruction and Install upon the appropria lan - based upon the H <sub>2</sub> S, Prevention P	in the appropriate requirements of 19.15.17.11 NMA upon the appropriate require ation Plan ate requirements of 19.15.17 ne appropriate requirements lan	nts of 19.15.17.11 NMAC C ements of 19.15.17.11 NMAC .12 NMAC of 19.15.17.11 NMAC	.C
Proposed Closure: 19.15.17.13 NMAC Instructions: Please complete the applicable b	ores. Rores 14 th	rough 18, in regards to the	proposed closure plan.	
Type: Drilling Workover Emergence				Closed-loop System
Proposed Closure Method: Waste Excavati Waste Removal On-site Closure	(Closed-loop sys Method (Only for	tems only) temporary pits and closed-l On-site Trench Burial	oop systems)	
			the Santa Fe Environmental E	Bureau for consideration)
Naste Excavation and Removal Closure Plan 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  Site Reclamation Plan - based upon the appr  Form C-144	in the box, that the e appropriate reque) - based upon the per (for liquids, dritions - based upon opriate requirement	the documents are attached, irements of 19.15.17.13 NM e appropriate requirements of the fluids and drill cutting the appropriate requirements of Subsection I of 19.15.	IAC of Subsection F of 19.15.17.13 s) ts of Subsection H of 19.15.17 17.13 NMAC	NMAC
Form C-144	(	Dil Conservation Division	****	Page 3 of 5

6. Waste Removal Closure For Closed-loop Syst	ems That Utilize Above Ground Steel Tanks or Haul-o	off Rins Only: (19 15 17 13 D NE	MAC)			
Waste Removal Closure For Closed-100p Syst Instructions: Please indentify the facility or fa facilities are required.	ems That Utilize Above Ground Steel Tanks or Haul-o cilities for the disposal of liquids, drilling fluids and drill					
Disposal Facility Name:	Disposal Facility Perm	nit Number:				
Disposal Facility Name:		nit Number:				
Will any of the proposed closed-loop system operations and associated activities occur on or in areas that will not be used for future service and operations  Yes (If yes, please provide the information below) No  Required for impacted areas which will not be used for future service and operations:						
Soil Backfill and Cover Design Specificat Re-vegetation Plan - based upon the appro	tions based upon the appropriate requirements of Subsepriate requirements of Subsection I of 19.15.17.13 NMAO propriate requirements of Subsection G of 19.15.17.13 NI	C				
provided below. Requests regarding changes to considered an exception which must be submitt	hods only): 19.15.17.10 NMAC monstration of compliance in the closure plan. Recomm o certain siting criteria may require administrative appro ted to the Santa Fe Environmental Bureau office for con lease refer to 19.15.17.10 NMAC for guidance.	val from the appropriate district of	office or may			
Ground water is less than 50 feet below the botto - NM Office of the State Engineer - iWA	om of the buried waste. FERS database search; USGS; Data obtained from nearby	wells	Yes □ No			
Ground water is between 50 and 100 feet below - NM Office of the State Engineer - iWA'	the bottom of the buried waste FERS database search; USGS; Data obtained from nearby	wells	Yes No			
	TERS database search; USGS; Data obtained from nearby		Yes □ N NA			
Within 300 feet of a continuously flowing water ake (measured from the ordinary high-water ma - Topographic map; Visual inspection (ce		lakebed, sinkhole, or playa	Yes □ N			
	ool, hospital, institution, or church in existence at the time roposed site; Aerial photo; Satellite image	of initial application.	Yes 🗌 N			
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						
dopted pursuant to NMSA 1978, Section 3-27-3	thin a defined municipal fresh water well field covered uno 3, as amended. In the municipality; Written approval obtained from the municipality;	.  -	Yes 🗌 N			
Within 500 feet of a wetland.  - US Fish and Wildlife Wetland Identification	tion map; Topographic map; Visual inspection (certificati	on) of the proposed site	Yes 🗌 N			
Within the area overlying a subsurface mine Written confirmation or verification or r	nap from the NM EMNRD-Mining and Mineral Division		Yes 🗌 N			
Vithin an unstable area.  - Engineering measures incorporated into Society; Topographic map	the design; NM Bureau of Geology & Mineral Resources;	USGS; NM Geological	Yes 🗌 N			
Vithin a 100-year floodplain FEMA map			Yes 🗌 N			
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan. Please indicate by a check mark in the box, that the documents are attached.						
Siting Criteria Compliance Demonstration Proof of Surface Owner Notice - based up Construction/Design Plan of Burial Trend Construction/Design Plan of Temporary F Protocols and Procedures - based upon the Confirmation Sampling Plan (if applicable) Waste Material Sampling Plan - based up Disposal Facility Name and Permit Numb Soil Cover Design - based upon the appro	has a based upon the appropriate requirements of 19.15.17.15 on the appropriate requirements of Subsection F of 19.15. On the appropriate requirements of Subsection F of 19.15. On the appropriate requirements of the first of the appropriate requirements of the appropriate requirements of 19.15.17.13 NMAC on the appropriate requirements of Subsection F of 19.15.15 or the appropriate requirements of Subsection F of 19.15.15 or the appropriate requirements of Subsection F of 19.15.17 or the appropriate requirements of Subsection H of 19.15.17.13 NMAC oppriate requirements of Subsection I of 19.15.17.13 NMAC oppropriate requirements of Subsection G of 19.15.17.13 NMAC oppropriate G	.17.13 NMAC of 19.15.17.11 NMAC propriate requirements of 19.15.1 n F of 19.15.17.13 NMAC 17.13 NMAC on-site closure standards cannot be C				
Form C-144	Oil Conservation Division	Page 4 of 5				

Decesion Application Certification:    Iherdry certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.   Name (Prior)   Kim Champlin			
Name (Print): Kim Champlin			
Signature	I hereby certify that the information submitted w	ith this application is true, accurate and complete to the bes	st of my knowledge and belief.
CODA paproval:   Permit Application (including closure plan)   Closure Plan (only)   OCD Conditions (see attachment)  OCD Representative Signature:   Jackeys   Bestelesse   Approval Date:   08/11/2022    Title:   Environmental Specialist-A   OCD Permit Number:   BGTT	Name (Print): Kim Champlin	Title: Er	nvironmental Representative
e-mail address: kim_champlin@xteenergy.com  Telephone: [5051333-3100]  SOCD Approval: [3] Permit Application (including closure plan)   Closure Plan (only)   OCD Conditions (see attachment)  OCD Representative Signature: **Jackeys*** Busiliary** Busiliary** Approval Date: **08/11/2022**  Title: **Environmental Specialist-A*** OCD Permit Number: BGT1  General Report (required within 60 days of closure commeton): Subsection K of 19.15.17.13 NMAC  Clasure Report in required to a busiliarito to the division within 60 days of the completion of the closure activities and submitting the closure food by any of the completion of the closure activities. Please do not complete section of the form until an approved closure plan has been obtained and the closure activities have been completed. Closure Method   Alternative Closure Method   Waste Removal (Closed-loop system to the form until an approved plan, please explain.  **Closure Report Report Report Report (Report) for facility or facilities for where the liquids, drilling hinks and drill cuttings were disposed. Use attachment if now facilities were utilized.  **Closure Report Report Bearding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins On Instructions: Heaves indentify the facility or facilities for where the liquids, drilling hinks and drill cuttings were disposed. Use attachment if now facilities were utilized.  **Signature Signature Signature Compliance to the licens below)   No Required for majested areas which will not be used for future service and operations:  **Signature Signature Signature Closure Report Attachment Checklist; Instructions: Each of the following items must be attached to the closure report. Please indicate, by mark in the box, that the documents are attached.  **Signature Signature Signature Compliance on the license submitted with this closure requirements and conditions specified in the approved closure plan.  **Title**  **Date: The Confirmation Application Results (if applicable) Longi	Kini / hama	1 in 2 1/01	- /2000
OCD Approval:  Permit Application (including closure plan)   Closure Plan (only)   OCD Conditions (see attachment) OCD Representative Signature:			
OCD Representative Signature:   Jacksps: Described   Approval Date:   O8/11/2022   Title: Environmental Specialist-A   OCD Permit Number:   BGT1	e-mail address: kim_champlin@xtoenergy.co	om telephone: L	505) 333-3100
Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins On Instructions: Please indicate, by mark in the Bock-loop system operations and associated activities performed on or in areas that will not be used for future service and operations?    Signature Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by mark in the box, that the documents are and execution of the foundation Sanghing Analytical Recults (Tapplication Recurred)    Signature   Disposal Facility Name:   Disposal Facility Permit Number:   Disposal Facility Permit P	OCD Approval: X Permit Application (include		
Closure Report Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins On Instructions: Please demonstrate complicates to the internations: Please demonstrate complicates to the internations of the form until an approved closure plan has been obtained and the closure activities and submitting the closure section of the form until an approved closure plan has been obtained and the closure activities have been completed.  Closure Method:  Closure Method:  Closure Report Regarding Waste Removal Closure Method   Alternative Closure Method   Waste Removal (Closed-loop system of different from approved plan, please explain.  Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins On Instructions: Please indentify the ficility or facilities for where the liquids, drilling fluids and drill cutings were disposed. Use attachment if two facilities were utilized.  Disposal Facility Name:  Disposal Facility Name:  Disposal Facility Name:  Disposal Facility Permit Number:  Disposal Facility Permit Number:  Soil Backfilling and Cover Installation   Soil Received Completed Complete Complete Completed Completed Complete Complete Complete Complete Complete Complet	OCD Representative Signature: Jaclyn	Burdine	Approval Date: 08/11/2022
Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC Interstuctions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closur The closure report is required to be submitted to the division within 60 days of the completion of the closure completed.    Closure Method:			
Closure Method:    Waste Excavation and Removal   On-Site Closure Method   Alternative Closure Method   Waste Removal (Closed-loop system   If different from approved plan, please explain.    Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins On Instructions: Please indentify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if the facility Name:    Disposal Facility Name:   Disposal Facility Permit Number:   Disposal Facility Nume and Permit Number:   Disposal Facility N	Closure Report (required within 60 days of clo Instructions: Operators are required to obtain a The closure report is required to be submitted to	in approved closure plan prior to implementing any closu the division within 60 days of the completion of the closu an has been obtained and the closure activities have been	re activities. Please do not complete this completed.
Closure Method:   Waste Exeavation and Removal   On-Site Closure Method   Alternative Closure Method   Waste Removal (Closed-loop system   Waste Transport   Waste Removal   Closure Report Reparding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins On Instructions: Please indentify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if the facility Name:   Disposal Facility Name:   Disposal Facility Permit Number:   Disposal Facility Name:   Disposal Facility Name:   Disposal Facility Permit Number:   Disposal Facility Permit Number:   Disposal Facility Permit Number:   Permit Numb		Closure complete	
Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins On Instructions: Please indentify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if no facilities were utilized.    Disposal Facility Name:	Closure Method:  ☐ Waste Excavation and Removal ☐ On-Site		Waste Removal (Closed-loop systems only)
Disposal Facility Name: Disposal Facility Permit Number: Disposal Facility Name: Disposal Facility Name: Disposal Facility Permit Number: Site Reclamation (Photo Documentation) No Required for impacted areas which will not be used for future service and operations: Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique  24.  Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by 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 Rev-vegetation Application Rates and Seeding Technique Site Reclamation (Photo Documentation) On-site Closure Location: Latitude Longitude NAD: 1927   1983	Closure Report Regarding Waste Removal Clo Instructions: Please indentify the facility or fact	osure For Closed-loop Systems That Utilize Above Grouilities for where the liquids, drilling fluids and drill cutting	ind Steel Tanks or Haul-off Bins Only: gs were disposed. Use attachment if more tha
Were the closed-loop system operations and associated activities performed on or in areas that will not be used for future service and operations?    Yes (If yes, please demonstrate compliance to the items below)   No   No   Required for impacted areas which will not be used for future service and operations:   Site Reclamation (Photo Documentation)   Soil Backfilling and Cover Installation   Re-vegetation Application Rates and Seeding Technique   Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by mark in the box, that the documents are attached.   Proof of Closure Notice (surface owner and division)   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 (required for on-site closure)   Site Redamation (Photo Documentation)   Re-vegetation Application Rates and Seeding Technique   Site Reclamation (Photo Documentation)   On-site Closure Location: Latitude	-	Disposal Facility Permit	Number:
Were the closed-loop system operations and associated activities performed on or in areas that will not be used for future service and operations?    Yes (If yes, please demonstrate compliance to the items below)   No   No   No   Required for impacted areas which will not be used for future service and operations:   Site Reclamation (Photo Documentation)   Soil Backfilling and Cover Installation   Re-vegetation Application Rates and Seeding Technique   Site Reclamation (Photo Documents)   Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by 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 (required for on-site closure)   Disposal Facility Name and Permit Number   Soil Backfilling and Cover Installation   Re-vegetation Application Rates and Seeding Technique   Site Reclamation (Photo Documentation)   On-site Closure Location: Latitude   Longitude   NAD:   1927   1983   1985	Disposal Facility Name:	Disposal Facility Permit	Number:
Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique  24.  Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by mark in the box, that the documents are attached. Proof of Closure Notice (surface owner and division) Proof of Deed Notice (required for on-site closure) Plot Plan (for on-site closures and temporary pits) Confirmation Sampling Analytical Results (if applicable) Waste Material Sampling Analytical Results (required for on-site closure) Disposal Facility Name and Permit Number Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique Site Reclamation (Photo Documentation) On-site Closure Location: Latitude Longitude NAD: 1927   1983  28.  Operator Closure Certification: I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.  Name (Print):  Signature: Date: Date:	Were the closed-loop system operations and associated	ciated activities performed on or in areas that will not be us	sed for future service and operations?
Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by mark in the box, that the documents are attached.    Proof of Closure Notice (curace 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	☐ Site Reclamation (Photo Documentation) ☐ Soil Backfilling and Cover Installation		
Operator Closure Certification:  I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.  Name (Print):  Signature:  Date:  Telephone:	Closure Report Attachment Checklist: Instruct mark in the box, that the documents are attached.  Proof of Closure Notice (surface owner and Proof of Deed Notice (required for on-site Plot Plan (for on-site closures and tempora Confirmation Sampling Analytical Results Waste Material Sampling Analytical Results Disposal Facility Name and Permit Numbers Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seedi	ed. d division) closure) ary pits) s (if applicable) lts (required for on-site closure) er ing Technique	
I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.  Name (Print):			
Name (Print):	I hereby certify that the information and attachme	ents submitted with this closure report is true, accurate and th all applicable closure requirements and conditions specified.	complete to the best of my knowledge and fied in the approved closure plan.
Signature: Date:e-mail address: Telephone:			
e-mail address:Telephone:	Signature:	Date:	
Form C-144 Oil Conservation Division Page 5 of 5			Page 5 of 5
	Form C-144	Oil Conservation Division	Page 5 of 5

## NEW MEXICO OIL CONSERVATION COMMISSION

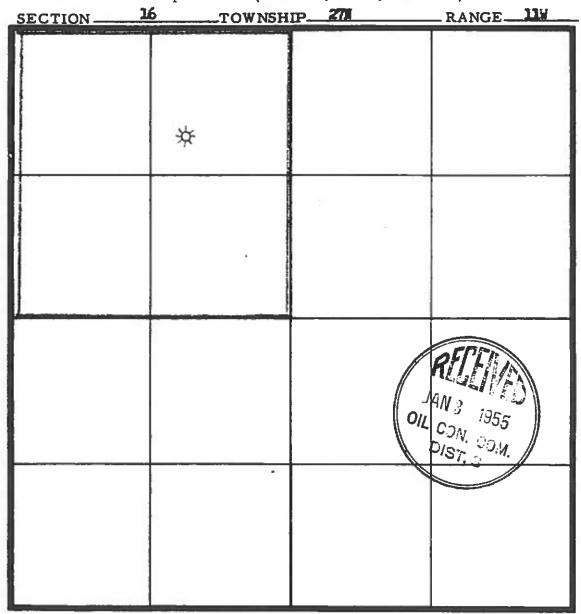
Gas Well Plat

Date December 13, 1954

The Frontier R_fining Co.	Schwerdtfeger	10
Operator	Lease	Well No.

Name of Producing Formation Pictured Cliffs Pool West Kuts Pictured Cliffs

No. Acres Dedicated to the Well 160 / Indicate Land Ownership Status. (Federal, State Person)



I hereby certify that the information given above is true and complete to the best of my knowledge.

ORIGINAL SIGNED

Name BENH. PARKER

Position Ben H. Parker, Vice President

Representing The Frontier Refining Co.

Address 410 Boston Bldg., Denver, Colo.

Released to Imaging: 8/11/2022 3:17:02 PM

(over)

Lodestar Service TO Box 4465, Duran		Pit Permit Siting Criteria Information Sheet	Client: Project: Revised: Prepared by:	12/28/2008	
API#:		0-045-06583	USPLSS:	T27N,R11W,16C	
Name:	Sch	werdtfeger #10	Lat/Long:	36.5797 / -108.01189	
Depth to groundwater:		>100'	Geologic formation:	Nacimiento Formation	
Distance to closest continuously flowing watercourse:	8.26 mile:	south of the San Juan River			
Distance to closest significant watercourse, lakebed, playa lake, or sinkhole:	irrigation	eet northwest of an canal supplying water earby agriculture			
Permanent residence, school, hospital, institution or church within 300'		No	Soil Type:	Entisols & Aridisols	
	V and Th		Annual Precipitation:	8.71 inches average	
Domestic fresh water well or spring within 500'	well or spring within No		Precipitation Notes:	no significant precipatation events	
Any other fresh water well or spring within 1000'		No			
Within incorporated municipal boundaries		No	Attached Documents:		
Within defined municipal fresh water well field	No No			Topo map, ground water data map, ariel photo, mines and quarries map, FEMA map	
Wetland within 500'		No	Mining Activity:	No	
Within unstable area		No			
Within 100 year flood plain		Zone X			
Additional Notes:					

## Schwerdtfeger #10 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 northernmost Bisti region of the San Juan Basin within an area dominated by irrigated fields of the Navajo Indian Irrigation Project. The predominant geologic formation is the Nacimiento Formation of Tertiary age, which underlies surface soils and is often exposed (Dane and Bachman, 1965). Deposits of Quaternary alluvial and aeolian sands occur prominently near the surface of the area, especially near streams and washes.

Cretaceous and Tertiary sandstones, as well as Quaternary alluvial deposits serve as the primary aquifers in the San Juan basin (Stone et al., 1983). In most of the proposed area, the Nacimiento Formation lies at the surface and grades into the Animas Formation to the west. Thickness of the Nacimiento ranges from 418 to 2232 feet (Stone et al., 1983). 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 climate of the region is arid, averaging just over 8 inches of rainfall annually. As is typical of the southwestern United States monsoonal weather patterns, most precipitation falls from August through October. The heaviest rainfall occurs in the summer in isolated, intense cloudbursts. November through June is relatively dry. Snow generally falls from December to mid-February and averages less than one-half inch in depth. However, most recharge occurs during the winter months during snowmelt periods from the upper elevations (Western Regional Climate Center www.wrcc.dri.edu).

The predominant vegetation is sagebrush and grasses with a more restricted pinon-juniper association (Dick-Peddie, 1993).

Released to Imaging: 8/11/2022 3:17:02 PM

## Site Specific Hydrogeology

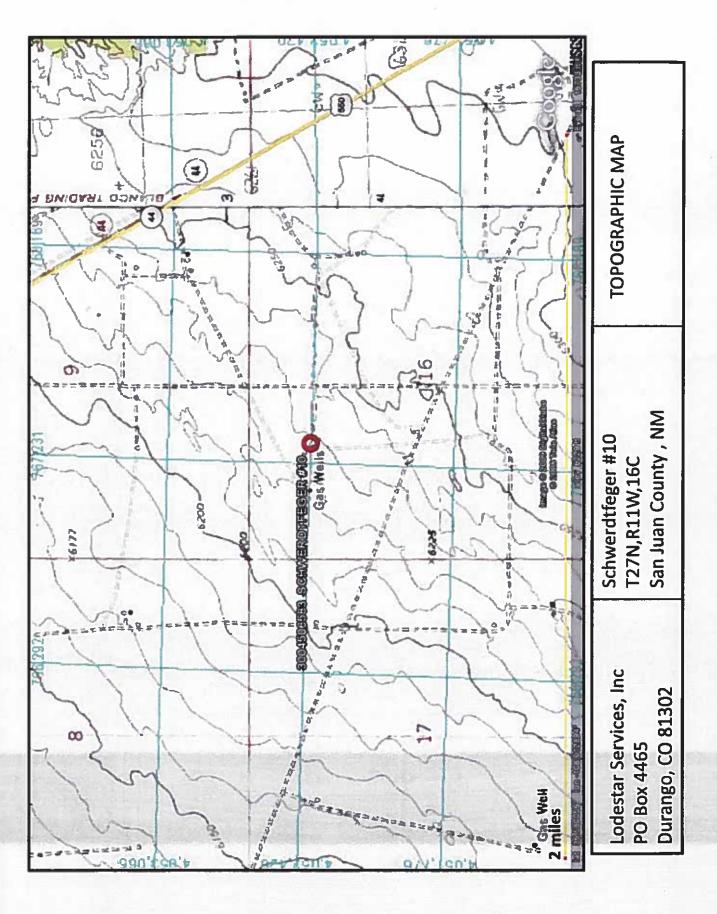
Depth to groundwater is estimated to be greater than 100 feet. This estimation is based on data from Stone and others (1983), the USGS Groundwater Atlas of the United States and depth to groundwater data published on the New Mexico State Engineer's iWaters Database website. Local topography and proximity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

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

The site in question is located on the relatively flat mesa top at an elevation of approximately 6,231 feet and approximately 7.29 miles east of Gallegos Canyon. Broad shalely hills are interspersed with occasional sandstone outcrops, and systems of dry washes and their tributaries are evident on the attached aerial image. Groundwater is expected to be shallow within Gallegos Canyon. The floor of Gallegos Canyon sits at 5,739 feet, an elevation difference of approximately 490 feet exists between the site and the floor of Gallegos Canyon. The significant distance of 7.29 miles between Gallegos Canyon and the site, as well as an elevation difference of almost 490 feet suggest groundwater is greater than 100 feet at the proposed site.

Lined channels associated with the Navajo Irrigation Project supply water for the fields surrounding the proposed site, which are characterized by center-pivot irrigation patterns. During spring and summer, irrigation practices often produces shallow perched aquifers that are not defined in published literature. These shallow zones of water are not continuous and are not saturated year round.

Groundwater data available from the NM State Engineer's iWaters Database for wells near the proposed site are attached. A map showing the locations of wells in reference to the proposed pit location is also attached. Water drops show locations of wells and the labels for each water drop indicate depth to groundwater in feet. The closest well that is representative of the site is at an elevation of approximately of 6,078 feet and is located 2.48 miles to the northwest this well puts groundwater at 422 feet below the surface. This data further backs up the estimate of groundwater being greater than 100 feet at the proposed site. The observations made within this report suggest that groundwater is greater than 100 feet deep at the proposed location.





Map San Juan County, NM Schwerdtfeger #10 T27N,R11W,16C Lodestar Services, Inc Durango, CO 81302 PO Box 4465

i-Waters Ground Water Data Map

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

2008
/110/
1
REPORT
WATTER
OF
DEPTH
AVERAGE

Avg	115
Max	170
Min	09
Wells	CI
×	
×	
Zone	
Sec	90
Rng	10W
Tws	27N
	Rng Sec Zone X Y

Bsn

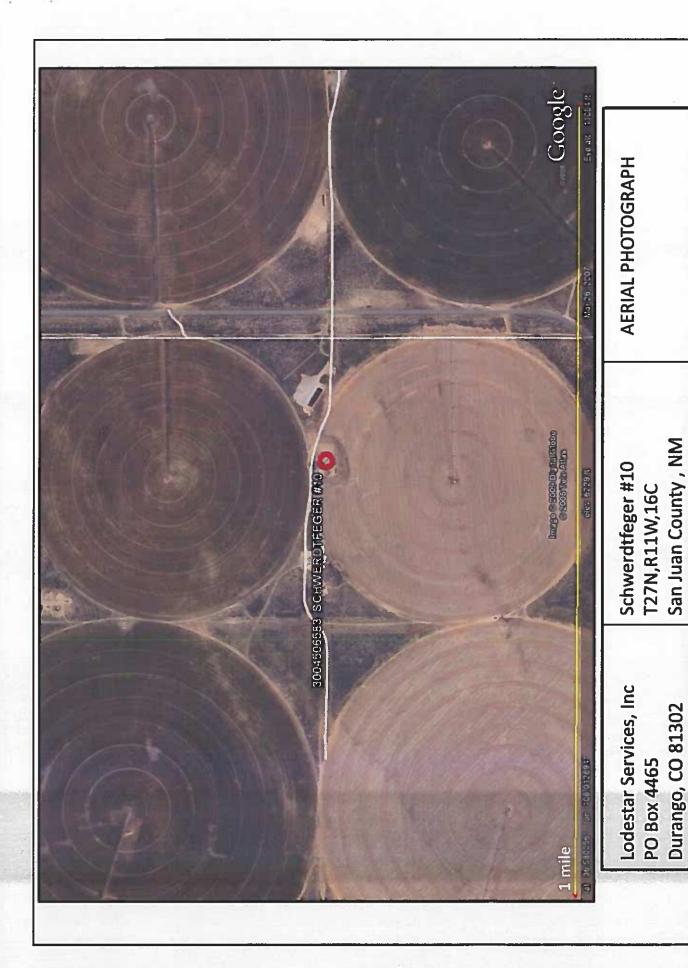
# New Mexico Office of the State Engineer POD Reports and Downloads

AVERAGE DEPTH OF WATER REPORT 11/03/2008

				1	1	1444444	ייי יייי און אין אין אין אין אין אין אין אין אין אי	204 200 243			
									(Depth	Water in	Feet
Bsn	TWS	Tws Rng Sec	Sec	S Zone	90	×	¥	Wells	Min		AV
SJ	27N	11W	26					$\leftrightarrow$	550	550	55

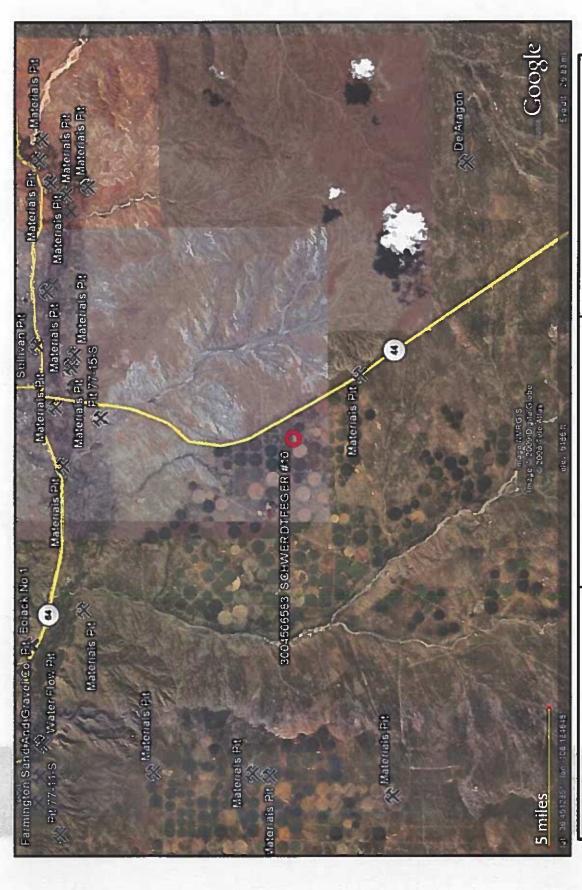
## New Mexico Office of the State Engineer POD Reports and Downloads

	Feet)	Avg	145	306
	Water in	Max	145 145 145	422
800	(Depth	Min	145	177
REPORT 11/03/2008		Wells	1	41
REPORT		×		
WATER		×		
DEPTH OF		0		
DEPT		Zone		
VERAGE		Sec	02	13
AVE		Rng	12W	12W
		TWS	27N	27N
		Ben	RG	30



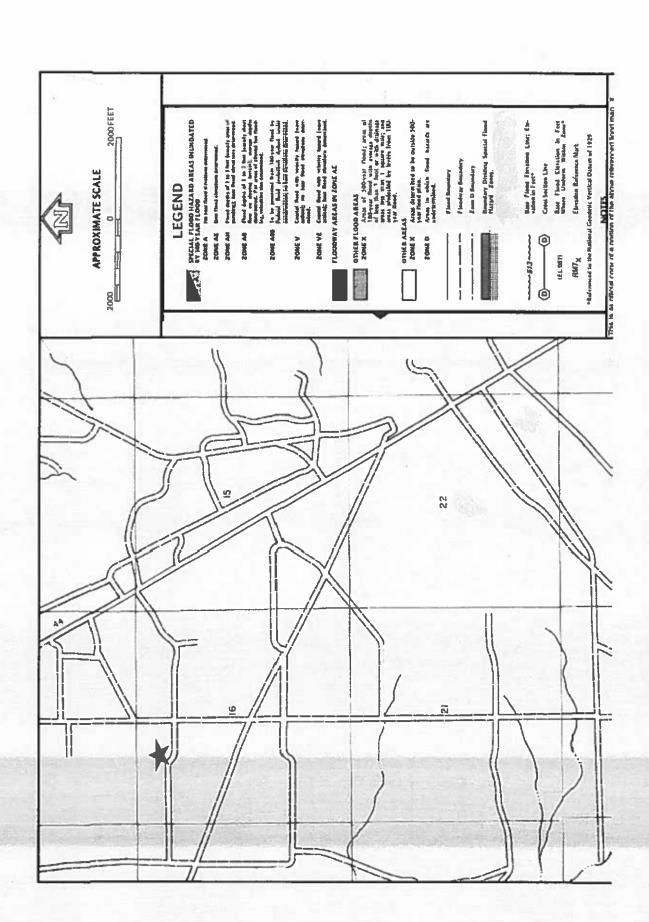
Released to Imaging: 8/11/2022 3:17:02 PM

3



San Juan County, NM Schwerdtfeger #10 T27N,R11W,16C Lodestar Services, Inc Durango, CO 81302 PO Box 4465

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.

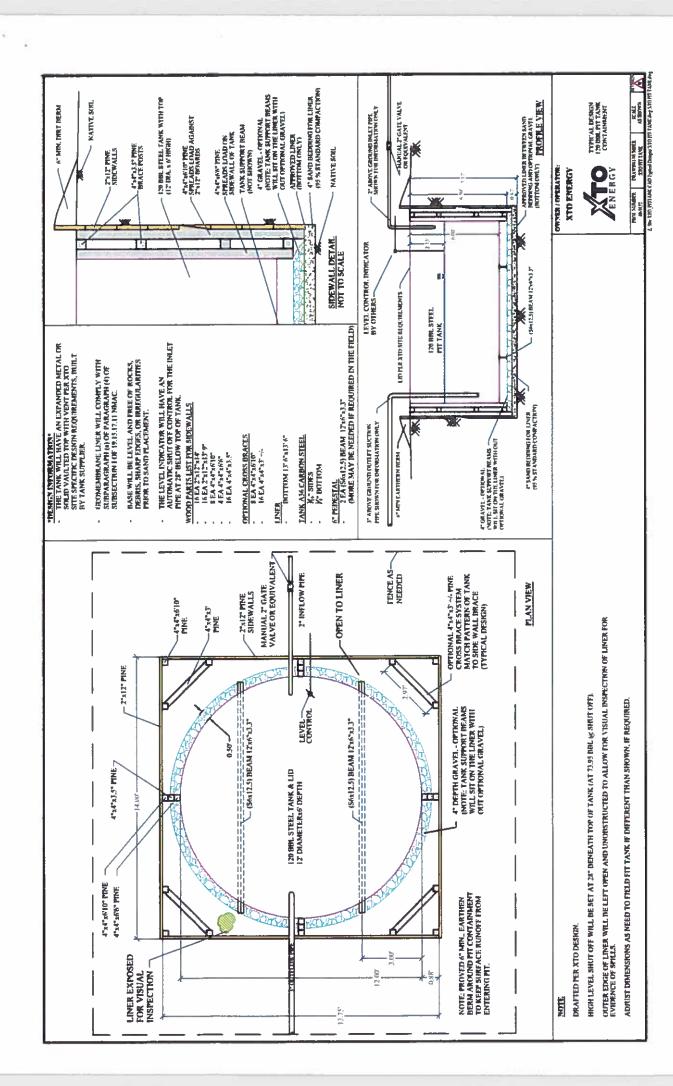
## General Plan

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

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

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

- 9. 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

- 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.
- 3. 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.
- 6. XTO will not discharge into or store any hazardous waste in any below-grade tank.
- 7. 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.

Released to Imaging: 8/11/2022 3:17:02 PM

Released to Imaging: 8/11/2022 3:17:02 PM

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.

MONTHLY BELOW GRADE TANK INSPECTION FORM	API No.:	Township:	Any visible liner Any visible signs of surface Visible layer	tears (Y/N) tank overflows (Y/N) run on (Y/N) of oil (Y/N) of a tank leak (Y/N) Est. (ft)								Jescription:			
<b>HONTHLY BELOW GRADE TANK</b>		Township:	Any visible									Lescription:			
2	Well Name:	Legals Sec:	's Inspection	Name Date T								Notes: Provide Defailed Description:			

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

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

## **General Plan**

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

Envirotech Permit No. NM01-0011 and IEI Permit No. NM 01-0010B

Soil contaminated by exempt petroleum hydrocarbons

Produced sand, pit sludge and contaminated bottoms from storage of exempt wastes

Basin Disposal Permit No. NM01-005 Produced water

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

Released to Imaging: 8/11/2022 3:17:02 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.

Released to Imaging: 8/11/2022 3:17:02 PM

Released to Imaging: 8/11/2022 3:17:02 PM

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

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

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 108954

## **QUESTIONS**

Operator:	OGRID:
HILCORP ENERGY COMPANY	372171
1111 Travis Street	Action Number:
Houston, TX 77002	108954
	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	Schwerdtfeger 10				
Facility ID (f#), if known	Not answered.				
Facility Type	Below Grade Tank - (BGT)				
Well Name, include well number	Schwerdtfeger 10				
Well API, if associated with a well	30-045-06583				
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	Not answered.				
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	visible sidewalls, vaulted, automatic high-level shut off, no liner
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 **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 2

Action 108954

QUESTIONS (continued)					
Operator:	OGRID:				
HILCORP ENERGY COMPANY	372171				
1111 Travis Street	Action Number:				
Houston, TX 77002	108954				

## 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 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' hogwire 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 Variance(s): 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

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

QUESTIONS, Page 3

Action 108954

Santa Fe, NM 87505
OUTOTIONO (southward)

Phone:(505) 476-3470 Fax:(505) 476-3462		
QUESTI	IONS (continued	)
Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	·	OGRID:
QUESTIONS		[C-144] Legacy Below Grade Tank Plan (C-144LB)
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 applic	ation. Recommendations of acceptable source material are provided
Siting Criteria, General Siting		
Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank	No	
NM Office of the State Engineer - iWATERS database search	True	
USGS	Not answered.	
Data obtained from nearby wells	Not answered.	
Siting Criteria, Below Grade Tanks		
Within 100 feet of a continuously flowing watercourse, significant watercourse, lakebed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark)	No	
Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption	No	
Proposed Closure Method		
Below-grade Tank	Below Grade Tan	k - (BGT)
Waste Excavation and Removal	True	
Alternate Closure Method. Please specify (Variance Required)	Not answered.	

01/05/2009

Operator Application Certification Registered / Signature Date

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 108954

## **ACKNOWLEDGMENTS**

Operator:	OGRID:
HILCORP ENERGY COMPANY	372171
1111 Travis Street	Action Number:
Houston, TX 77002	108954
	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 108954

## **CONDITIONS**

Operator:	OGRID:
HILCORP ENERGY COMPANY	372171
1111 Travis Street	Action Number:
Houston, TX 77002	108954
	Action Type:
	[C-144] Legacy Below Grade Tank Plan (C-144LB)

## CONDITIONS

Created B	y Condition	Condition Date
jburdine	None	8/11/2022