State of New Mexico 1625 N. French Dr., Hobbs, NM 88240 **Energy Minerals and Natural Resources** District II 1301 W. Grand Avenue, Artesia, NM 88210 Department District III 1000 Rio Brazos Road, Aztec, NM 87410 DEIVE Pil Conservation Division 220 South St. Francis Dr.

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

1220 S. St. Franci	is Dr., Santa Fe, NM 87	505 DEC 12 PI	ባ ዛ 11 ^s	Santa F	e, NM 87	505	provid Distri	le a copy to the et Office.	e appropriate	NMOCD
			sed-Loo	p Syst	em, Bel	ow-Gra	de Tank,		<u>on</u>	
BGT1	Type of action: Existing BGT below-grade tan	☐ Modifica	of a pit, clos ation to an e plan only su	ed-loop xisting p bmitted	system, bel ermit	ow-grade	ank, or prop		ive method	system,
Instruc	tions: Please submi	t one applicatio	n (Form C-1	44) per ir	idividual pit	closed-loo	p system, belo	w-grade tank	or alternative	e request
	that approval of this r does approval relieve									
i. Operator: XT	O Energy, Inc.					OGRII	D#:	5380		
Address: #382 County Road 3100, Aztec, NM 87410										
Facility or well name:JICARILLA APACHE # 3										
	30-039-06260									
	D Section									
101 %	1,53,53		70 NO		20	151	70000			
Center of Proposed Design: Latitude 36.44783 Longitude 108.3517 NAD: ☐1927 ☐ 1983 Surface Owner: ☐ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment										
2.										
	ction F or G of 19.1	5.17.11 NMAC								
Temporary:	Drilling Worko	ver								
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A										
Lined Unlined Liner type: Thickness mil LLDPE HDPE PVC Other										
☐ String-Reinf										
	☐ Welded ☐ Facto	ry 🔲 Other			Volume	9:	bbl Dimer	nsions: L	_ x W	_ x D
3,							_			
1	System: Subsecti	on H of 19.15.1	7.11 NMAC							
Type of Operati	ion: P&A D	illing a new wel	ll 🔲 Workov	ver or Dri	lling (Applie	s to activiti	es which requ	ire prior appro	val of a perm	it or notice of
intent)	_	_					•		•	

Liner Seams: Welded Factory Other	
4. Subsection I of 19.15.17.11 NMAC	27.41
Volume: 120 bbl Type of fluid: Produced Water	0:00:
Tank Construction material: Steel	22 10
☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off	20.
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☒ Other _Visible sidewalls, vaulted, automatic high-level shut off, no liner	/22/

mil LLDPE HDPE PVC Other

5. Alternative Method:

Liner type: Thickness

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

mil HDPE PVC Other

☐ Lined ☐ Unlined Liner type: Thickness ___

☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Haul-off Bins ☐ Other

Form C-144

3 of 38		
Page 3		
attached. ☐ Hydrogeologic Report (Below-grade Tanks) ☐ Hydrogeologic Data (Temporary and Emerging Siting Criteria Compliance Demonstrations) ☐ Design Plan - based upon the appropriate re ☐ Operating and Maintenance Plan - based up ☐ Closure Plan (Please complete Boxes 14 throand 19.15.17.13 NMAC	be attached to the application. Please indicate) - based upon the requirements of Paragraph (4 gency Pits) - based upon the requirements of Pa - based upon the appropriate requirements of 1 quirements of 19.15.17.11 NMAC on the appropriate requirements of 19.15.17.12 rough 18, if applicable) - based upon the approp	the by a check mark in the box, that the documents are 4) of Subsection B of 19.15.17.9 NMAC aragraph (2) of Subsection B of 19.15.17.9 NMAC 9.15.17.10 NMAC
attached. Geologic and Hydrogeologic Data (only for Siting Criteria Compliance Demonstrations Design Plan - based upon the appropriate room Operating and Maintenance Plan - based upon	r on-site closure) - based upon the requirements (only for on-site closure) - based upon the requirements (only for on-site closure) - based upon the appequirements of 19.15.17.11 NMAC poon the appropriate requirements of 19.15.17.12	s, by a check mark in the box, that the documents are s of Paragraph (3) of Subsection B of 19.15.17.9 propriate requirements of 19.15.17.10 NMAC
☐ Previously Approved Design (attach copy of a ☐ Previously Approved Operating and Maintene above ground steel tanks or haul-off bins and projections.)	ance Plan API Number:	(Applies only to closed-loop system that use
attached. Hydrogeologic Report - based upon the req Siting Criteria Compliance Demonstrations Climatological Factors Assessment Certified Engineering Design Plans - based Dike Protection and Structural Integrity De Leak Detection Design - based upon the ap Liner Specifications and Compatibility Ass Quality Control/Quality Assurance Constrution Operating and Maintenance Plan - based up Freeboard and Overtopping Prevention Plan Nuisance or Hazardous Odors, including H Emergency Response Plan Oil Field Waste Stream Characterization Monitoring and Inspection Plan Erosion Control Plan Closure Plan - based upon the appropriate response Plan	the attached to the application. Please indicates the attached to the application. Please indicates the properties of Paragraph (1) of Subsection B of a based upon the appropriate requirements of 19.15.17 sign - based upon the appropriate requirements propriate requirements of 19.15.17.11 NMAC designs - based upon the appropriate requirements of 19.15.17.12 non the appropriate requirements of	19.15.17.10 NMAC 2.11 NMAC 3 of 19.15.17.11 NMAC 3 ents of 19.15.17.11 NMAC 2 NMAC 19.15.17.11 NMAC
On-site Closure M	Cavitation P&A Permanent Pit and Removal (Closed-loop systems only) Method (Only for temporary pits and closed-loop see Burial On-site Trench Burial	Below-grade Tank Closed-loop System
Waste Excavation and Removal Closure Plan Cosure plan. Please indicate, by a check mark in ☐ Protocols and Procedures - based upon the ☐ Confirmation Sampling Plan (if applicable) ☐ Disposal Facility Name and Permit Number ☐ Soil Backfill and Cover Design Specification ☐ Re-vegetation Plan - based upon the appropriate ☐ Re-vegetation Plan - based upon the appropriate ☐ Cosure Plan - Co	Checklist: (19.15.17.13 NMAC) Instructions: in the box, that the documents are attached. appropriate requirements of 19.15.17.13 NMAC be based upon the appropriate requirements of S r (for liquids, drilling fluids and drill cuttings) cons - based upon the appropriate requirements of	Each of the following items must be attached to the C Subsection F of 19.15.17.13 NMAC of Subsection H of 19.15.17.13 NMAC 13 NMAC
Form C-144	Oil Conservation Division	Page 3 of 5

Waste Removal Closure For Closed-loop System Instructions: Please indentify the facility or facilities are required.			
Disposal Facility Name:		Disposal Facility Permit Number:	
Disposal Facility Name:			
Will any of the proposed closed-loop system opera Yes (If yes, please provide the information		ccur on or in areas that will not be used for futu	re service and operations
Required for impacted areas which will not be use Soil Backfill and Cover Design Specification Re-vegetation Plan - based upon the approp Site Reclamation Plan - based upon the app	ons based upon the appropriat riate requirements of Subsection	e requirements of Subsection H of 19.15.17.13 n I of 19.15.17.13 NMAC	NMAC
17. Siting Criteria (regarding on-site closure methor Instructions: Each siting criteria requires a dem provided below. Requests regarding changes to considered an exception which must be submitted demonstrations of equivalency are required. Plea	onstration of compliance in the certain siting criteria may requi I to the Santa Fe Environmenta	re administrative approval from the appropria il Bureau office for consideration of approval.	te district office or may b
Ground water is less than 50 feet below the bottom - NM Office of the State Engineer - iWATE		ta obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is between 50 and 100 feet below th - NM Office of the State Engineer - iWATE		ta obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is more than 100 feet below the bott - NM Office of the State Engineer - iWATE		ta obtained from nearby wells	Yes No
Within 300 feet of a continuously flowing waterco lake (measured from the ordinary high-water mark - Topographic map; Visual inspection (certi-	:).	gnificant watercourse or lakebed, sinkhole, or p	laya Yes No
Within 300 feet from a permanent residence, scho- Visual inspection (certification) of the pro			☐ Yes ☐ No
Within 500 horizontal feet of a private, domestic f watering purposes, or within 1000 horizontal feet NM Office of the State Engineer - iWATE	of any other fresh water well or	spring, in existence at the time of initial applica	
Within incorporated municipal boundaries or with adopted pursuant to NMSA 1978, Section 3-27-3, Written confirmation or verification from	as amended.	_	nce Yes No
Within 500 feet of a wetland.		nal inspection (certification) of the proposed site	Yes No
Within the area overlying a subsurface mine. - Written confirmation or verification or ma	p from the NM EMNRD-Minin	g and Mineral Division	☐ Yes ☐ No
Within an unstable area. - Engineering measures incorporated into the Society; Topographic map	e design; NM Bureau of Geolog	gy & Mineral Resources; USGS; NM Geologica	ai Yes No
Within a 100-year floodplain FEMA map			Yes No
ts. On-Site Closure Plan Checklist: (19.15.17.13 N by a check mark in the box, that the documents a		he following items must be attached to the clos	ure plan. Please indica
☐ Siting Criteria Compliance Demonstrations ☐ Proof of Surface Owner Notice - based upor ☐ Construction/Design Plan of Burial Trench ☐ Construction/Design Plan of Temporary Pit ☐ Protocols and Procedures - based upon the a ☐ Confirmation Sampling Plan (if applicable) ☐ Waste Material Sampling Plan - based upon	- based upon the appropriate red in the appropriate requirements of (if applicable) based upon the a (for in-place burial of a drying pappropriate requirements of 19.1 - based upon the appropriate red the appropriate requirements of (for liquids, drilling fluids and riate requirements of Subsection riate requirements of Subsection	f Subsection F of 19.15.17.13 NMAC ppropriate requirements of 19.15.17.11 NMAC pad) - based upon the appropriate requirements 5.17.13 NMAC quirements of Subsection F of 19.15.17.13 NMAC f Subsection F of 19.15.17.13 NMAC drill cuttings or in case on-site closure standard H of 19.15.17.13 NMAC it of 19.15.17.13 NMAC	of 19.15.17.11 NMAC
Form C-144	Oil Conservation	Division Pa	ge 4 of 5

*							
19. Operator Application Certification:							
I hereby certify that the information submitted with this a	pplication is true, accurate and complete to the	e best of my knowledge and belief.					
Name (Print): Kim Champlin	Title:	Environmental Representative					
Signature: Kim Champlin	Date:	11.25-08					
e-mail address: kim_champlin@xtoenergy.com		(505) 333-3100					
20.							
OCD Approval: Permit Application (including closu	-						
OCD Representative Signature: Victoria Vene	egas	Approval Date: 0//22/2022					
Title: Environmental Specialist	OCD Permit Numb	er: BGT1					
Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.							
	Closure Comp	letion Date:					
22. Closure Method: Waste Excavation and Removal On-Site Closure If different from approved plan, please explain.	e Method	☐ Waste Removal (Closed-loop systems only)					
23. Closure Report Regarding Waste Removal Closure Fo Instructions: Please indentify the facility or facilities for two facilities were utilized.							
Disposal Facility Name:	Disposal Facility Pe	rmit Number:					
Disposal Facility Name:		rmit Number:					
Were the closed-loop system operations and associated ac Yes (If yes, please demonstrate compliance to the it		be used for future service and operations?					
Required for impacted areas which will not be used for full Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Techn	·						
24. Closure Report Attachment Checklist: Instructions: E mark in the box, that the documents are attached. Proof of Closure Notice (surface owner and division Proof of Deed Notice (required for on-site closure) Plot Plan (for on-site closures and temporary pits) Confirmation Sampling Analytical Results (if application Waste Material Sampling Analytical Results (required Disposal Facility Name and Permit Number Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technology.	n) cable) red for on-site closure) nique						
On-site Closure Location: Latitude	Longitude	7					
Operator Closure Certification: I hereby certify that the information and attachments submobelief. I also certify that the closure complies with all appoints (Print):	licable closure requirements and conditions sp						
100 mm - 100		/22/20					
Signature:							
e-mail address:	Telephone:	58.					
		Ima					
ed by		id to					
Form C-144	Oil Conservation Division	Released to Imaging:					

District I

PO Box 1980, Hobbs, NM 88241-1980

District II

811 S. 1st Street, Artesia, NM 88210-2834

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fe, NM 87505

Form C-102 Revised October 18, 1994 Instructions on back

Submit to Appropriate District Office State Lease - 4 Copies

Fee Lease - 3 Copies

\neg		
	AMENDED	DEBODT
1	WATELLAND	REPURI

WELL LOCATION AND ACREAGE DEDICATION PLAT

1	API Numbe	г		² Pool Code			³ Pool Nan	ne			
30	-039-062	260	72	72439 PICTURED C				LIFFS	IFFS		
⁴ Property	Code			5 Property Name				⁶ Well Number			
643	4				JICARILLA A	PACHE			# 3		
7 OGRID	No.			8 Operator Name					⁹ Elevation		
14021 Marathon Oil Company 654						6547 '					
¹⁰ Surface Location											
UL or lot no.	Section	Township	iship Range Lot Idn Feet from the North/South Line Feet from the East/West line County					line County			
"D"	34	26-N	5-W	i-W 990' NORTH 990' WEST RIO ARRIBA							
Bottom Hole Location If Different From Surface											
UL or lot no.	Section	Township Range Lot Idn Feet from the North/South Line Feet from the East/West line County					line County				
12 Dedicated Acre	s ¹³ Joint	t or Infili 146	Consolidation	n Code 15 Ord	er No.						
NO ALLO	WABLE					UNTIL ALL INT			ONSOLIDATED		

			THE DIVISION
990'	Dedicated Acreage		OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.
990'	A	JUN 2000	
			Signature JERRY FLETCHER Printed Name
	169		ENGINEER TECH.
			18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by
			me or under my supervision, and that the same is true and correct to the best of my belief. N/A
1:10:44P			Date of Survey Signature and Seal of Professional Surveyer:
4/5/2022			
- CD			Certificate Number

A Ladacton Comicae Inc		Pit Permit		Client:	X10 Enoigy
Lodestar Services, Inc. PO Box 4465, Durango, CO 81302				Project:	Pit Permits
		Siting Criteria Information Sheet		Revised:	10/8/2008
				Prepared by:	Daniel Newman
· · · · · · · · · · · · · · · · · · ·					
APi#:		3003906260		USPLSS:	T26N,R5W,34D
Name:	JICA	RILLA APACHE #3		Lat/Long:	36.44783 / -107.3517
Depth to groundwater:	> 100'			Geologic formation:	
Distance to closest continuously flowing watercourse:	32.3 mile	es north west to the San Juan River			
Distance to ciosest significant watercourse, lakebed, piaya lake, or sinkhole:	2,600' n	ortheast of a 1st order ary of Tapicito Creek			
				Soil Type:	Entisols
Permanent residence, school, hospital, institution or church within 300'		No			
				Annuai Precipitation:	10.88" Lybrook, NM
Domestic fresh water well or spring within 500'		No		Precipitation Notes:	i / 'I'u'' iardesi daliv raintali on record il
Any other fresh water well or spring within 1000'		No			
Within incorporated municipal boundaries		No		Attached Documents:	
Within defined municipal fresh water well field	i e	No			Topo map, ground water data map, ariel photo, mines and quarries map,
Wetland within 500'		No		Mining Activity:	No
Within unstable area		No			
Within 100 year flood plain	No L	EMA data available			
Additional Notes:					
	T	d township/range from 26N,R5W,34A to 126N,R5W,34D			

Jicarilla Apachie #3 Below Grade 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 San Juan Basin on the Jicarilla Apache Indian Reservation near Tapicito Creek. The predominant geologic formation is the San Jose 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 San Jose Formation lies at the surface and overlies the Nacimiento Formation. Thickness of the San Jose ranges from 200 to 2700 feet, thickening from west to east across the region of interest (Stone et al., 1983). Aquifers within the coarser and continuous sandstone bodies of the San Jose Formation are between 0 and 2700' deep in this section of the basin (Stone et al., 1983). Groundwater within these aquifers flows north, toward the San Juan River. Little specific hydrogeologic data is available for the San Jose Formation system, but "numerous well and springs used for stock and domestic supplies" draw their water from the San Jose Formation (Stone et al, 1983).

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

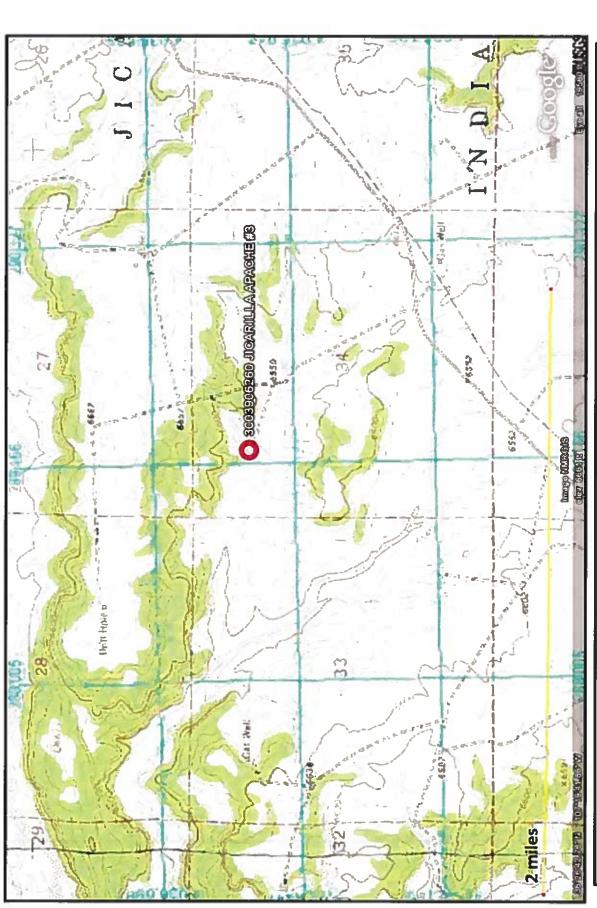
Dry and arid weather further prohibit active recharge. The climate of the region is arid, averaging just over 12 inches of rainfall annually. As is typical of the southwestern United States monsoonal weather patterns, most precipitation falls from August through October. The heaviest rainfall occurs 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).

Site Specific Hydrogeology

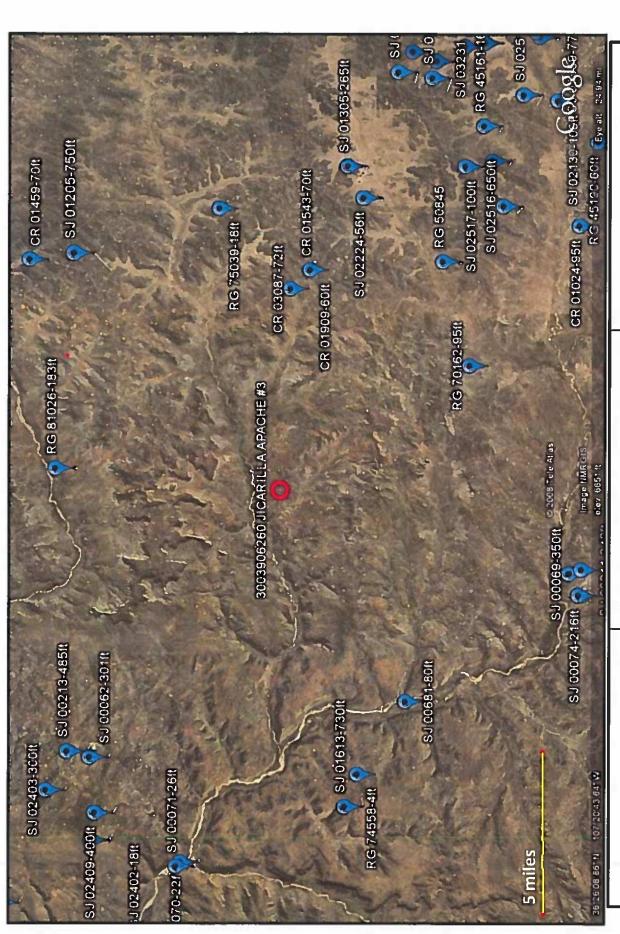
Depth to groundwater is estimated to be greater than 100 feet. This estimation is based on data from Stone and others (1983), the USGS Groundwater Atlas of the United States and depth to groundwater data published on the New Mexico State Engineer's iWaters Database website. Local topography and proximity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

Beds of water-yielding sandstone are present in the San Jose Formation, which are fluvial in origin and are interbedded with mudstone, siltstone and shale. "Extensive intertonguing" of different members of this formation is reported (Stone et al, 1983). Porous sandstones form the principal aquifers, while relatively impermeable shales and mudstones form confining units between the aquifers (Stone et al., 1983). Local aquifers exist within the San Jose Formation at depths greater than 100 feet and thicknesses of the aquifer can be up to several hundred feet (USGS, Groundwater Atlas of the US; Stone et al, 1983). The site in question is located on top of a large mesa at an elevation of approximately 6500 feet. This region is deeply incised by canyons, washes, gullies and arroyos, with Tapicito Creek being the predominant topographic feature. The mesas are composed of cliff-forming sandstone, and these are dissected by systems of dry washes and their tributaries evident on the attached aerial image. Groundwater is expected to be shallow within Tapicito Creek and within the surrounding tributary systems. However, an elevation difference between the site and the base of Tapicito Creek of over one hundred feet suggests groundwater at the proposed site is deeper. The nearest dry tributary is approximately eighty feet lower in elevation.

Groundwater data available from the NM State Engineer's iWaters Database for wells near the proposed site are attached. A map showing the location of wells in reference to the proposed pit location is attached. Water drops show locations of wells and the labels for each water drop indicate depth to groundwater in feet. The nearest water well is approximately six and half miles to the southwest, and sits approximately two hundred feet lower in elevation. This well site identifies groundwater at eighty feet below the ground surface. The observations made within this report suggest that groundwater is between 50 and 100 feet deep at the pit location.



TOPOGRAPHIC MAP JICARILLA APACHE #3 RIO ARRIBA, NM T26N,R5W,34D Lodestar Services, Inc Durango, CO 81302 PO Box 4465



JICARILLA APACHE #3 RIO ARRIBA, NM T26N,R5W,34D Lodestar Services, Inc

i-Waters Ground Water Data Map

Durango, CO 81302

PO Box 4465

New Mexico Office of the State Engineer POD Reports and Downloads

	AVER	4GE	DEPTH	OF	WATER	AVERAGE DEPTH OF WATER REPORT 10/07/2008	10	/07/200	8(
									(Depth	Water in	Feet)
Tws	Rng	Sec	Zone	45	×	Ħ		Wells	Min	Max	Avg
24N	0314	12						тH	140	140	140
24N	MEO	21						Ø	60	182	121
24N	03W	03						¢1	650	650	650
24N	0374	0.5						тH	120	120	120
24N	03W	90						СЛ	650	650	650
24N	03W	12						т - I	140	140	140
24N	03W	15						el	100	100	100
24N	03W	21						т	200	200	200

New Mexico Office of the State Engineer POD Reports and Downloads

8
0
0
Ŋ
1
0
\geq
9
Н
REPORT
WATER
OF
DEPTH
AVERAGE

Feet)	Avg	257
fater ir	Max	350
(Depth	Min	216
	Wells	4
	Ħ	
	×	
	Zone	
	y Sec	18
	Rng	050
	Tws	24N
	Bsn	s C

New Mexico Office of the State Engineer POD Reports and Downloads

Feet)	Avg	125	165	18	245	265	225	56	850	75	127	110	650	100	110	30	73
Water in	Max	125	165	18	245	265	225	56	850	75	160	110	650	100	110	30	75
(Depth	Min	125	165	18	245	265	225	56	850	75	90	110	650	100	110	30	7.0
	Wells	rt	тH	, − I	ıН	 1	т	H	сī	H	က	ᠸ┤	0	C 1	-1	H	¢1
	×																
	×																
	Zone																
	Sec	24	33	36	0.1	08	13	18	22	23	25	26	27	32	33	35	36
	Rng	0.3W	03W	03W	03W	03W	0314	03W	03W	033	03W	030	03W	03W	03W	03W	0314
	TWB	25N	25N	25N	25N	25N	25N	25N	25N	25N	25N	25N	25N	25N	25N	25N	25N
	Bsn	RG	RG	RG	in Ci	ھ در	ه در	<u>ရာ</u>	ه در	9 D	а Д	37	9 D	ಚಿಗ	37	ھ ت	B D

New Mexico Office of the State Engineer POD Reports and Downloads

	Feet)	Avg	135
	(Depth Water in	Max	135
80	(Depth	Min	135
10/01/200		Wells	н
OF WATER REPORT		Ħ	
WATER		×	
AVERAGE DEPTH OF		Zone	
GE 1		Sea	26
AVERA		Rng	04W
		Tws	25N
		Bsn	RG

New Mexico Office of the State Engineer POD Reports and Downloads

	Feet)	Avg	200	90
	Water in		200	
8	(Depth	Min	200	80
09/30/2008		Wells	н	H
		Ħ		
REPO				
WATER REPORT		×		
DEPTH OF		Zone		
		Sec	03	21
AVERAGE		Rng	OEW	0 6W
1.4		Tws	25N	25N
		Bsn	က က	מ כן

New Mexico Office of the State Engineer POD Reports and Downloads

09/30/2008
REPORT
F WATER
DEPTH OF
AVERAGE

Feet)	Avg	730
Water in	Min Max	730
(Depth		
	Wells	H
	¥	
	×	
	Zone	
	Sec	12
	Rng	07W 12
	Tws	25N
	Bsn	50

New Mexico Office of the State Engineer POD Reports and Downloads

09/30/2008	
REPORT	
WATER	
EPTH OF	
AVERAGE DI	

Feet)	Avg	400	18	2.4	180
Water in			18		
(Depth	Min	400	18	61 61	180
	Wells	₹÷I	 1	(1)	el
	Ħ				
	×				
	Zone				
	Sec	01	0.5	15	30
	Rng	0.70	0.70	07W	07W
	Tws	26N	26N	26N	26N
	Bsn	3.J	а. П	В	ಚಿರ

New Mexico Office of the State Engineer POD Reports and Downloads

10/04/2008	
REPORT	
WATER	
TH OF	
E DEPTH	
AVERAGE	

ממר)	Avg	750
MALEE IN I	Max Av	750
(nebru	Min	750
	Wells	Н
	¥	
	×	
	Zone	
	Sec	34
	Rng	04W 34
	IMS	27N
		50

New Mexico Office of the State Engineer POD Reports and Downloads

04/2008
10/
H
REPORT
WATER
-
OF
DEPTH
AVERAGE

reer	Avg	186	260	
water In	Max	186 186	260	
			260	
	Wells	1	1	
	Ħ			
	×			
	Zone			
	Sec	27	04	
		058	05W	
	TWS	27N	27N	
	Bsn	RG	а _Л	

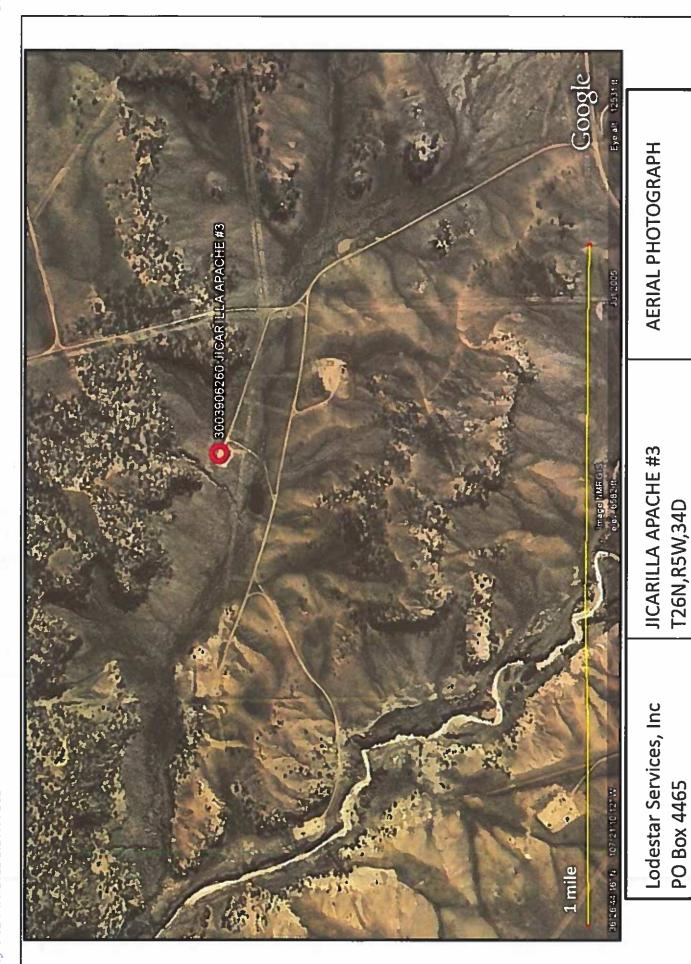
Record Count: 2

New Mexico Office of the State Engineer POD Reports and Downloads

	Feet)	Avg	41	300	362
	Water in	Max	4	300	485
8((Depth	Min	4.	300	301
09/30/2008		Wells	ਜ	Н	ო
OF WATER REPORT (¥			
WATER		×			
AVERAGE DEPTH OF		Zone			
GE		Sec	0.7	30	(I)
AVERA		Rng	0.6W	0.6W	0.6W
		Tws	27N	27N	27N
		Bsn	အ ဌာ	۵ ر	B D

New Mexico Office of the State Engineer POD Reports and Downloads

	Feet)	Avg	465	200	320	300	250
	Water in	Max	465	500	320	300	250
_	(Depth	Min	465	200	320	300	250
09/30/2008		Wells	еl	гI	러	гI	r- l
REPORT (Ħ					
WATER		×					
VERAGE DEPTH OF WATER REPORT		Zone					
GE I		Sea	35	15	17	21	35
AVERA			07W	07W	WL0	07W	07W
		TWS	27N	27N	27N	27N	27N
		Bsn	RG	s D	8.J	s D	89

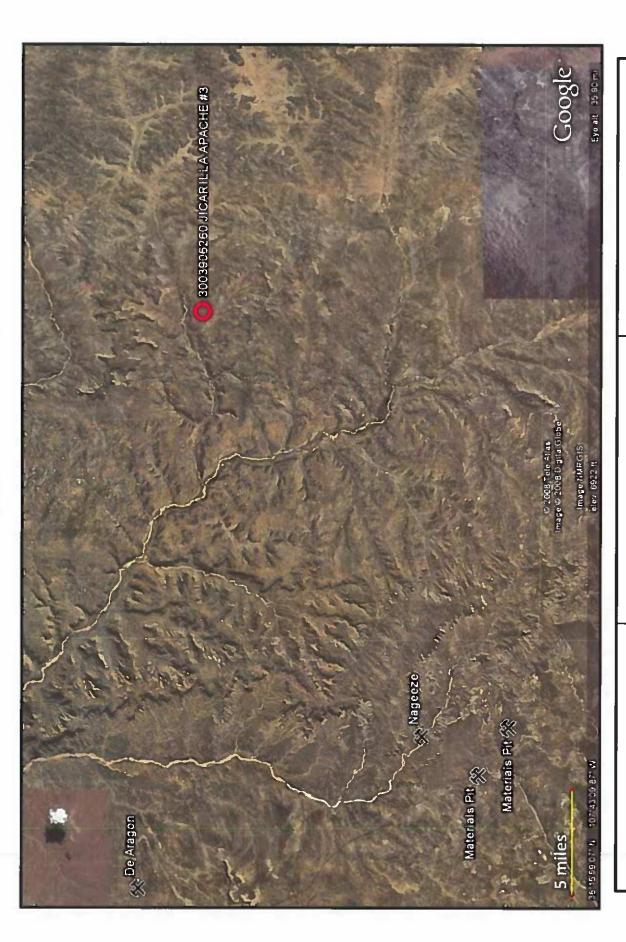


AERIAL PHOTOGRAPH

Durango, CO 81302

PO Box 4465

RIO ARRIBA, NM



Lodestar Services, Inc
PO Box 4465
Durango, CO 81302

ICARILLA APACHE #3
T26N,R5W,34D
RIO ARRIBA, NM

Mines and Quarries Map

Received by OCD: 4/5/2022 1:10:44 PM

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

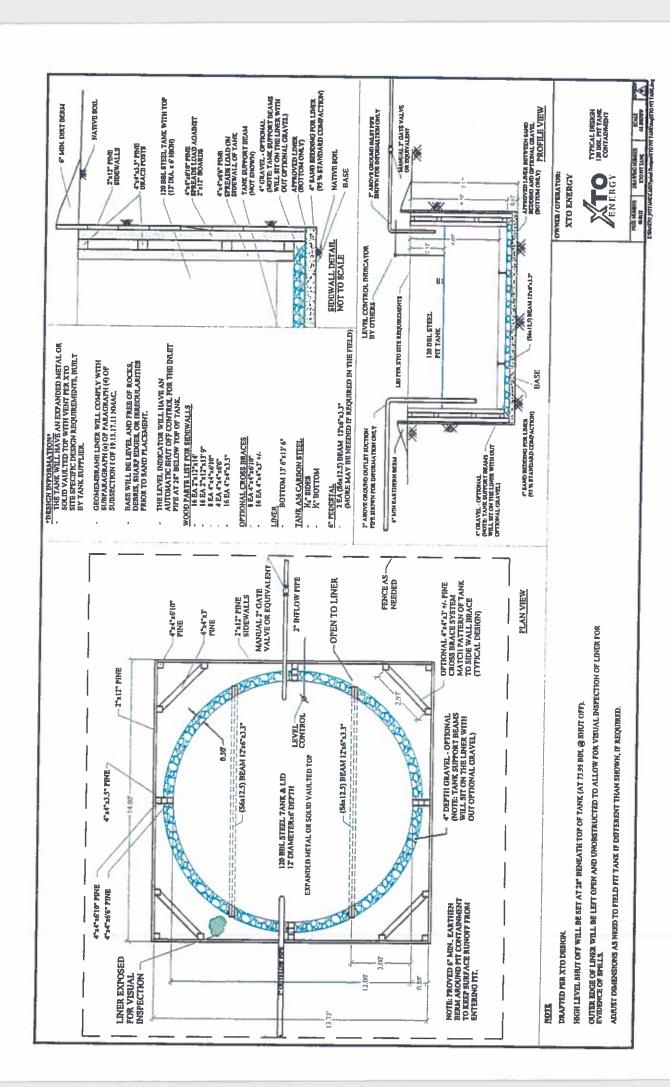
- L XTO will design and construct below-grade tanks to contain liquids and solids and prevent contamination of fresh water and protect public health and environment.
- 2. XTO will post a well sign, in compliance with 19.15.3.103 NMAC, on the existing well site operated by XTO where the existing below-grade 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 1/4 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.
- XTO will ensure that below-grade tanks are constructed of materials resistant to the below-grade 5. tank's particular contents and resistant to damage from sunlight. Tanks will be constructed of A36 carbon steel with 3/16" sides and 1/4" 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

Released to Imaging: 7/22/2022 10:09:27 AM

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).
- XTO will demonstrate to the OCD that the geomembrane liner complies with the specifications of Subparagraph (a) of Paragraph (4) of Subsection I of 19.15.17.11 NMAC and obtain approval from OCD prior to the installation of the design. The geomembrane liner shall have a hydraulic conductivity no greater than 1 x 10-9 cm/sec. The geomembrane liner shall be composed of an impervious, synthetic material that is resistant to petroleum hydrocarbons, salts and acidics and alkaline solutions. The liner material shall be resistant to ultraviolet light. Liner compatibility shall comply with EPA SW-846 method 9090A. (See attached drawing).
- 11. The general specifications for design and construction are attached.



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

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

General Plan

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

Well Name API #

Sec., Twn., Rng.

XTO Inspector's name

Inspection date and time

Visible tears in liner

Visible signs of tank overflow

Collection of surface run on

Visible layer of oil

Visible signs of tank leak

Estimated freeboard

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

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

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

Released to Imaging: 7/22/2022 10:09:27 AM

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 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: 7/22/2022 10:09:27 AM

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

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

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

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

- 11. Re-contouring of location will match fit, shape, line, form and texture of the surrounding area. Re-shaping will include drainage control, prevent ponding, and prevent erosion. Natural drainages will be unimpeded and water bars and/or silt traps will be placed in areas where needed to prevent erosion on a large scale. Final re-contour shall have a uniform appearance with smooth surface, fitting the natural landscape.
- 12. A minimum of 4 feet of cover shall be achieved and the cover shall include 1 foot of suitable material to establish vegetation at the site, or the background thickness of topsoil, whichever is greater. Soil cover will be constructed to the site's existing grade and ponding of water and erosion of the cover material will be prevented with drainage control, natural drainages and silt traps where needed.
- 13. XTO will seed the disturbed areas the first growing season after the operator closes the pit. Seeding will be accomplished via drilling on the contour whenever practical or by other division-approved methods. BLM or Forest Service stipulated seed mixes will be used on federal lands. Vegetative cover will equal 70% of the native perennial vegetative cover (un-impacted) consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintain that cover through two successive growing seasons. Repeat seeding or planting will be continued until successful vegetative growth occurs.

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

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

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

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

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

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS

Action 96102

QUESTIONS

Operator:		OGRID:
HILCORP ENE	RGY COMPANY	372171
1111 Travis Str	reet	Action Number:
Houston, TX 7	7002	96102
		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	JICARILLA APACHE 3	
Facility ID (f#), if known	Not answered.	
Facility Type	Below Grade Tank - (BGT)	
Well Name, include well number	JICARILLA APACHE 3	
Well API, if associated with a well	30-039-06260	
Pit / Tank Type	Not answered.	
Pit / Tank Name or Identifier	Not answered.	
Pit / Tank Opened Date, if known	Not answered.	
Pit / Tank Dimensions, Length (ft)	Not answered.	
Pit / Tank Dimensions, Width or Diameter (ft)	Not answered.	
Pit / Tank Dimensions, Depth (ft)	Not answered.	
Ground Water Depth (ft)	Not answered.	
Ground Water Impact	No	
Ground Water Quality (TDS)	Not answered.	

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

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

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

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

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS, Page 2

Action 96102

QUESTI	ONS (continued)	
Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002		OGRID: 372171 Action Number: 96102 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	rs)	
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 me		
Netting		
Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)	1	
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 complia	ance 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.		

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

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

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

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS, Page 3

Action 96102

QUESTIONS (continued)		
Operator: HILCORP ENERGY COMPANY	OGRID: 372171	
1111 Travis Street Houston, TX 77002	Action Number: 96102	
	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 in the application. Recommendations of acceptable source material are provided below. Siting criteria does not apply to drying pads or above-grade tanks.

Siting Criteria, General Siting		
Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank	Yes	
NM Office of the State Engineer - iWATERS database search	True	
USGS	Not answered.	
Data obtained from nearby wells	Not answered.	

Siting Criteria, Below Grade Tanks		
Within 100 feet of a continuously flowing watercourse, significant watercourse, lakebed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark)	No	
Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption	No	

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

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

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

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

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

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

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

ACKNOWLEDGMENTS

Action 96102

ACKNOWLEDGMENTS

Operator:	OGRID:
HILCORP ENERGY COMPANY	372171
1111 Travis Street	Action Number:
Houston, TX 77002	96102
	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 96102

CONDITIONS

Operator:	OGRID:
HILCORP ENERGY COMPANY 1111 Travis Street	372171 Action Number:
Houston, TX 77002	96102
	Action Type:
	[C-144] Legacy Below Grade Tank Plan (C-144LB)

CONDITIONS

Created By	Condition	Condition Date
vvenegas	None	7/22/2022