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
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.

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
	Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method
	☐ Modification to an existing permit
	Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop
	system, below-grade tank, or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tan, 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: Elm Ridge Exploration OGRID #: 149052	
Address: P.O. Box 156; Bloomfield, NM 87413	
Facility or well name: Tonkin 4 – BGT 1	
API Number: <u>3003921958</u> OCD Permit Number:	
U/L or Qtr/QtrE Section17 Township24N Range3W County:Rio Arriba	
Center of Proposed Design: Latitude <u>36.313009</u> Longitude <u>-107.186385</u> NAD: □1927 ⊠ 1983	
Surface Owner: Federal State Private Tribal Trust or Indian Allotment	
2.	
Pit: Subsection F or G of 19.15.17.11 NMAC	
Temporary: Drilling Workover	
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A	
☐ Lined ☐ Unlined Liner type: Thicknessmil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other	
☐ String-Reinforced	
Liner Seams: Welded Factory Other Volume: bbl Dimensions: L x W x D	
3.	
Closed-loop System: Subsection H of 19.15.17.11 NMAC	
Type of Operation: P&A Drilling a new well Workover or Drilling (Applies to activities which require prior approval of a permit or notic intent)	e of
Drying Pad Above Ground Steel Tanks Haul-off Bins Other	
Lined Unlined Liner type: Thicknessmil LLDPE HDPE PVC Other	
Liner Seams:	
4.	
Volume: 13 bbl Type of fluid: Produced water	
Tank Construction material: Steel tank	
☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off	
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other <u>Single-walled tank</u>	
Liner type: Thicknessmil	
5. Alternative Method:	

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

D

Page 1 of 5

· · ·	
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)	hospital,
Four foot height, four strands of barbed wire evenly spaced between one and four feet	
☐ Alternate. Please specify 4' tall hogwire fencing with pipe railing	
7. Notation Submitting English For FIG. 15-17-11 NIMAG (Analisa of management site and	
Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks) Screen Netting Other	
Monthly inspections (If netting or screening is not physically feasible)	
8.	
Signs: Subsection C of 19.15.17.11 NMAC	
☑ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers	
⊠ Signed in compliance with 19.15.3.103 NMAC	
9. Administrative Approvals and Exceptions: Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.	
Please check a box if one or more of the following is requested, if not leave blank: Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau	office for
consideration of approval. 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 accept material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the approoffice or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of a Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to dry above-grade tanks associated with a closed-loop system.	priate district pproval. ing pads or
Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. The attached iWATERS database search indicates a nearby water well that has a depth to water of 100 feet. The well is approximately 2.5 miles to the east and 28 feet higher in elevation from the well site. This indicates that groundwater is greater than 50 feet from the bottom of the BGT at this site.	☐ Yes ⊠ No
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). The nearest watercourse is 1,574.0 ft. north per attached topographic map. A visible sighting of Largo wash may indicate that it is within 1000 feet, but no measurement was taken to prove distance. These findings are reflected by the attached visual inspection sheet.	☐ Yes ⊠ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. The attached aerial photograph and visual inspection sheet indicate that the well site is greater than 1000 feet from the above mentioned.	☐ Yes ☒ No ☐ NA
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (Applies to permanent pits)	☐ Yes ☐ No ⊠ NA
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. The attached iWATERS database search and visual inspection sheet indicate that the well site is not within 1000 feet of any water wells.	☐ Yes ⊠ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. The attached topographic map and visual inspection sheet indicate that the well site is not within municipal boundaries.	☐ Yes ⊠ No
Within 500 feet of a wetland. The USFWS data file, WetlandsData.kmz, dated July 2, 2008, was opened using Google Earth. Electronic data was not available. Wetland-type vegetation was not noted during the site visit.	☐ Yes ⊠ No
Within the area overlying a subsurface mine. The NM EMNRD web map was reviewed and attached, the well is not in an area overlying a subsurface mine.	☐ Yes ⊠ No
Within an unstable area. The attached topographic map and visual inspection indicate that the site is not in an unstable area.	☐ Yes ⊠ No
Within a 100-year floodplain. The attached FEMA map indicates that the site is not within a 100-year flood plain.	☐ Yes ⊠ No

· /
Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached. Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Design Plan - based upon the appropriate requirements of 19.15.17.12 NMAC Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached. Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9 Siting Criteria Compliance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
Previously Approved Design (attach copy of design) API Number:
Previously Approved Operating and Maintenance Plan API Number:(Applies only to closed-loop system that use
above ground steel tanks or haul-off bins and propose to implement waste removal for closure)
13. Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached. Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Cimatological Factors Assessment Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC Quality Control/Quality Assurance Construction and Installation Plan Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Nuisance or Hazardous Odors, including H ₂ S, Prevention Plan Emergency Response Plan Oil Field Waste Stream Characterization Monitoring and Inspection Plan Erosion Control Plan Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
Proposed Closure: 19.15.17.13 NMAC Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan. Type: Drilling Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Closed-loop System Alternative Proposed Closure Method: Waste Excavation and Removal Waste Removal (Closed-loop systems only) On-site Closure Method (Only for temporary pits and closed-loop systems) In-place Burial On-site Trench Burial Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)
Waste Excavation and Removal 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. ☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC ☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC ☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings) ☐ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC ☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC ☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

16. Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:	(19.15.17.13.D NMAC)
Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use facilities are required.	
Disposal Facility Name: Disposal Facility Permit Number:	
Disposal Facility Name: Disposal Facility Permit Number:	
Will any of the proposed closed-loop system operations and associated activities occur on or in areas that <i>will not</i> be use Yes (If yes, please provide the information below) No	d for future service and operations?
Required for impacted areas which will not be used for future service and operations: Soil Backfill and Cover Design Specifications based upon the appropriate requirements of Subsection H of 19. Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC	15.17.13 NMAC
Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of provided below. Requests regarding changes to certain siting criteria may require administrative approval from the a considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.	appropriate district office or may be
Ground water is less than 50 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is between 50 and 100 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	Yes No
Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	Yes No
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkle lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	hole, or playa Yes No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial app - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	lication. Yes No
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domest watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	al ordinance Yes No
Within 500 feet of a wetland US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the pro-	posed site Yes No
Within the area overlying a subsurface mine Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geology; Topographic map	Geological Yes No
Within a 100-year floodplain FEMA map	☐ Yes ☐ No
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to by a check mark in the box, that the documents are attached. Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.13 NMAC Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC	1 NMAC nirements of 19.15.17.11 NMAC 7.13 NMAC

<u> </u>	
Operator Application Certification:	
I hereby certify that the information submitted with this application is true, accurate a	and complete to the best of my knowledge and belief.
Name (Print): Ms Amy Mackey Title:	Administrative Manager
Signature: Date:	3/2/09
E-mail address: amackey1@elmridge.net Telepl	none: <u>505-632-3476 Ext. 201</u>
20. OCD Approval: Permit Application including closure plan) X Closure Plan (only) OCD Conditions (see attachment)
OCD Representative Signature:	Approval Date: 4/2/19
Title: Environmental Specalist O	CD Permit Number:
Closure Report (required within 60 days of closure completion): Subsection K of Instructions: Operators are required to obtain an approved closure plan prior to in The closure report is required to be submitted to the division within 60 days of the consection of the form until an approved closure plan has been obtained and the closure	opplementing any closure activities and submitting the closure report. ompletion of the closure activities. Please do not complete this
22.	•
Closure Method: ☐ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative ☐ If different from approved plan, please explain.	Closure Method Waste Removal (Closed-loop systems only)
23. Closure Report Regarding Waste Removal Closure For Closed-loop Systems Th.	at Utilize Above Cround Steel Tanks or Haul off Rins Only
Instructions: Please indentify the facility or facilities for where the liquids, drilling	
two facilities were utilized.	
Disposal Facility Name: D	isposal Facility Permit Number:
Disposal Facility Name: Disposal Facility Permit Number:	
Were the closed-loop system operations and associated activities performed on or in a Yes (If yes, please demonstrate compliance to the items below) No	reas that will not be used for future service and operations?
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 a check
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)	N. D. 171027 17 1002
On-site Closure Location: Latitude Longitude	NAD: □1927 □ 1983
25. Operator Closure Certification:	
I hereby certify that the information and attachments submitted with this closure repo	t is true, accurate and complete to the best of my knowledge and
belief. I also certify that the closure complies with all applicable closure requirements	
Name (Print):	Title:
Signature:	Date:
E-mail address:	Telephone:

New Mexico Office of the State Engineer Point of Diversion Summary

Back

(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are biggest to smallest)

POD Number Tws Rng Sec q q q Zone X Y

SJ 02130 24N 03W 15 2 2

Driller Licence: 733 MO-TE DRILLING, INC.

Driller Name: MOBLEY, KENT Source: Shallow
Drill Start Date: 06/11/1987 Drill Finish Date: 06/15/1987

Log File Date: 06/22/1987 PCW Received Date:
Pump Type: Pipe Discharge Size:
Casing Size: 5 Estimated Yield:
Depth Well: 273 Depth Water: 100

Water Bearing Stratifications: Top Bottom Description

180 195 Sandstone/Gravel/Conglomerate 210 225 Sandstone/Gravel/Conglomerate

Casing Perforations: Top Bottom 210 273

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

Township: 24N Range: 03W

Sections: 17,18

NAD27 X:

Y:

Zone:

Search Radius:

County:

Basin:

Number:

Suffix:

Owner Name: (First)

(Last)

Non-Domestic Domestic All

Clear Form iWATERS Menu Help

POD / SURFACE DATA REPORT 10/30/2008

(acre ft per annum)
Use Diversion Owner

POD Number

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are biggest to smallest X Y are in Feet
Source Tws Rng Sec q q q Zone X Y

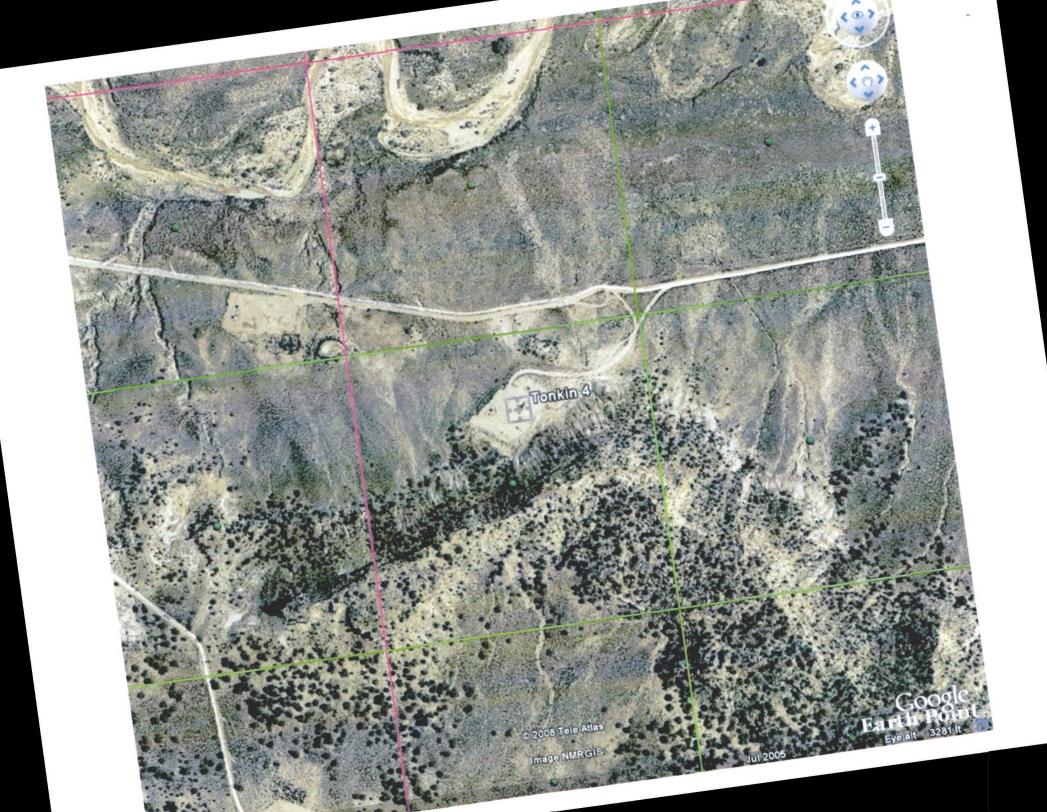
UTM_Zone

No Records found, try again

1" = 2,604.2 ft

Data Zoom 12-6

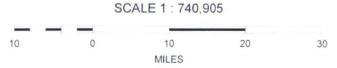
www.delorme.com



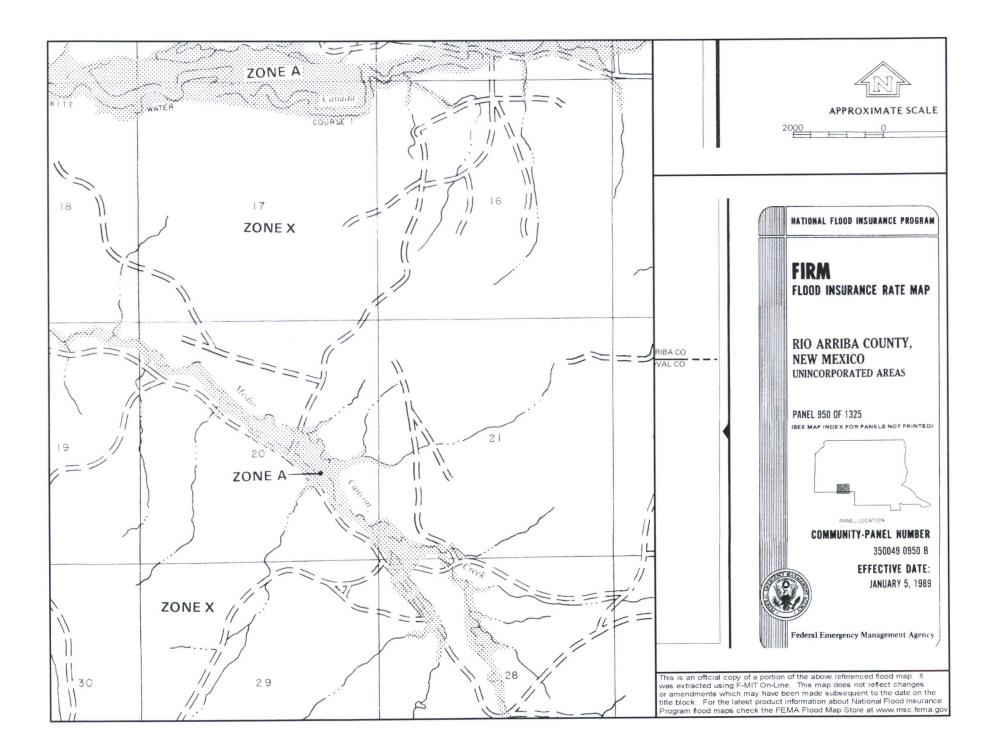
Elm Ridge Exploration Mine Map

Mines, Mills & Quarries Commodity Groups **Aggregate & Stone Mines Coal Mines Industrial Minerals Mines Industrial Minerals Mills Metal Mines and Mill Concentrate Potash Mines & Refineries** Smelters & Refinery Ops. **Uranium Mines Uranium Mills** Mines, Mills & Quarries Status **Active Mining** Active Mining, Active Reclamation Permanent Closure, Active Reclamation Permanent Closure, Reclaimed Awaiting Bond Release **Temporary Suspension**

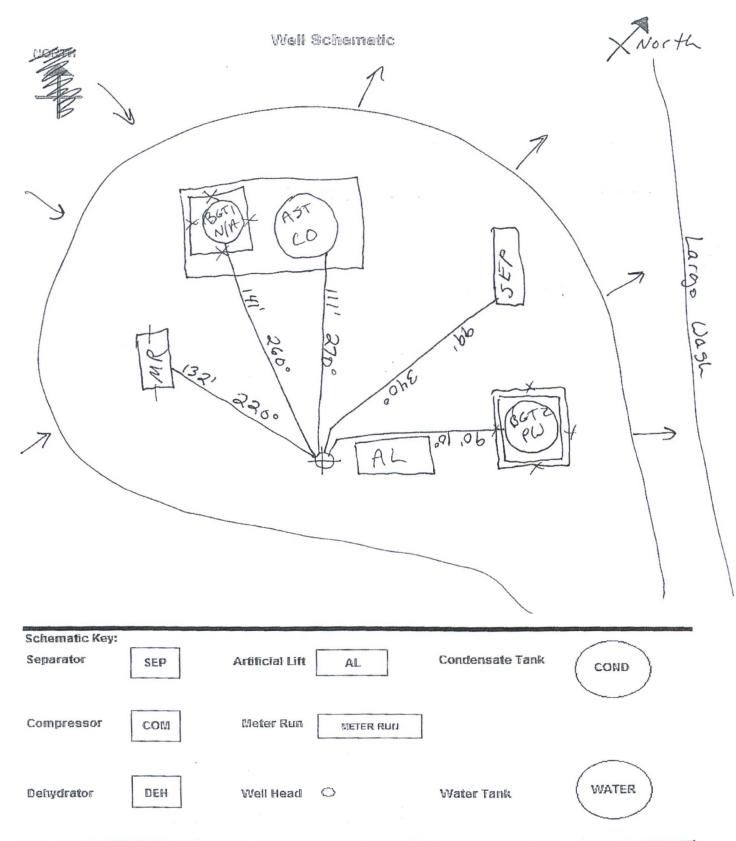








	1/2
	Elm Ridge Site Inventory Sheet 18 2
0	Date: 9/9/8 Initials: 500 Time: Started: 10:25 Ended: (0:57
0	Well Name & Number: Toulein 004
٥	API#: 3003921958
0	Lease #: 5F 086 472 A
0	Quarter/Quarter: E Section: 17 Township: 24 N Range: 3 W Lat: 36.313009° Long: 707.186385° GPS Point ID: T4
0	Lat: 36.313009° Long: 707.186385° GPS Point ID: T4
	A (; 1A-
0	Pit Tank #1: Manufacturer:
9	Serial #: N/W DOM: N/A Size N/A bbl
	o If N/A – Dimensions: Diameter 6 Height 2, 5
٥	Material: Steel Galvanized Fiberglass
•	Tank Configuration: Double Wall Single Wall (Buried_X or Exposed)
•	Visible Walls: Y N Leak Detection: Y N
•	Contents: Produced Water_W/A Condensate_W/A Recycled Oil_W/A
•	Tank Top Covering: Solid/Cone-top Netting (Solid Fiber) No Cover
•	Secondary Containment: Yes_X_ No
۰	Fencing around berm: Yes_X No
	o Fence Type: Cattle Panel Field Fence Barbwire
	Daily III
\·	Pit Tank #2: Manufacturer:
	Pit Tank #2: Manufacturer: Serial #: DOM:bbl
`.	Pit Tank #2: Manufacturer: Serial #: DOM: Sizebbl O If-N/A - Dimensions: Diameter Height
•	Pit Tank #2: Manufacturer: Serial #: DOM: Size bbl O If-N/A - Dimensions: Diameter Height Material: Steel Galvanized Fiberglass
	Pit Tank #2: Manufacturer: Serial #: DOM: Size bbl o
	Pit Tank #2: Manufacturer: Serial #: DOM: Size bbl o
	Pit Tank #2: Manufacturer: Serial #: DOM: Size bbl o
•	Pit Tank #2: Manufacturer: Serial #: DOM: Size bbl o
•	Pit Tank #2: Manufacturer: Serial #: DOM: Size bbl Olf-N/A - Dimensions: Diameter Height Material: Steel Galvanized Fiberglass Tank Configuration: Double Wall Single Wall (Buried or Exposed) Visible Walls: Y N Leak Detection: Y N Contents: Produced Water Condensate Recycled Oil Tank Top Covering: Solid/Cone-top Netting (Solid Fiber) Secondary Containment: Yes No
•	Pit Tank #2: Manufacturer: Serial #: DOM: Size bbl o
•	Pit Tank #2: Manufacturer: Serial #: DOM: Size bbl Olf-N/A - Dimensions: Diameter Height Material: Steel Galvanized Fiberglass Tank Configuration: Double Wall Single Wall (Buried or Exposed) Visible Walls: Y N Leak Detection: Y N Contents: Produced Water Condensate Recycled Oil Tank Top Covering: Solid/Cone-top Netting (Solid Fiber) Secondary Containment: Yes No
	Pit Tank #2: Manufacturer: Serial #:
•	Pit Tank #2: Manufacturer: Serial #: DOM: Size bbl o
	Pit Tank #2: Manufacturer: Serial #: DOM: Size bbl o
	Pit Tank #2: Manufacturer: Serial #:
	Pit Tank #2: Manufacturer: Serial #: DOM: Size bbl o



Measure any distance 1000ft or less of the following:

· From wellhead to any continuous flowing or significant water course. Largo wash is a fitting 1000 Ft - unable to obtain me as mement

From below-grade tanks to any permanent residence, school, church, hospital, etc.

		Elm Ridge Site In	ventory Sheet	2872
o Dat	e:	Initials:	Time: Started:	Ended:
• We	Il Name & Number:	Toukin	004	
o API				
• Lea	se#:			
• Qua	arter/Quarter:	Section:	Township:	Range:
• Lat		Long:		GPS Point ID:
• Pit	Tank #1: Manufacturer:	NIV	+	
Ser	ial#:	DOM: N/	U	Size N/A bbl
	o If N/A - Dimensions: Di			~ 1
• Mat		Galvanized		4
• Tan	k Configuration: Double W	all Sing	le Wall(I	Buried X or Exposed)
• Cor	ible Walls: Y N N	Condensate 1	Recycled Oil	NA
				ber_) Chicken Wire
	condary Containment: Yes_		/	
• Fer	icing around berm: Yes	No		
	o Fence Type: Cattle Pan	el Field Fer	nce Barby	vire
(= :	And the state of t			
1	Tank #2: Manufacturer:	DOM:		Sizebbt
• Ser	o If N/A – Dimensions: Di			Height
o Ma	terial: Steel			perglass
	nk Configuration: Double W			Buried or Exposed)
	ible Walls: YN		ction: Y N	
	ntents: Produced Water		Recycled Oi	
	nk Top Covering: Solid/Con		g (Solid F	
	condary Containment: Yes_			
• Fe	ncing around berm: Yes_			
	o Fence Type: Cattle Par	nel Field Fe	nice Barby	wire
• Ab	ove-Ground Tank #1: Manu	facturer:		
∘ Se	rial #:	DOM:		Sizebbl
	o Jf N/A - Dimensions: D	Diameter	Height_	
• Ma	aterial: Steel	Galvanized	Fibergl	ass
. 6	ontents: Produced Water	Condensate_	(State #	Recycled Oil
o Se	econdary Containment: Yes	No		

MORTH

Schematic Key: Separator	SEP	Artificial Lift	AL	Condensate Tank	COND
Compressor	COM	Neter Run	METER RUII		
Dehydrator	DEH	Well Head	0	Water Tank	WATER
Weasure any d	istance 1000	ft or less of the fo	ollowing:		
· From wellhe	ad to any co	ntinuous flowing	ı or significant wa	ter course	<u> </u>
Erom bolow	orado tanko	to one pormore	nt racidores - ashr	and observe bassical	

BELOW GRADE TANK (BGT) CLOSURE PLAN

SITE NAME:

TONKIN 4 – BGT 1
UNIT LETTER E, SECTION 17, TOWNSHIP 24N, RANGE 3W
RIO ARRIBA COUNTY, NEW MEXICO
LATITUDE 36.313009 LONGITUDE -107.186385

SUBMITTED TO:

MR. WAYNE PRICE
NEW MEXICO OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DRIVE
SANTA FE, NEW MEXICO 87505
(505) 476-3490

SUBMITTED BY:

MS. AMY MACKEY
ELM RIDGE EXPLORATION
P.O. BOX 156
BLOOMFIELD, NEW MEXICO 87413
(505) 632-3476 EXT. 201

FEBRUARY 2009

BELOW GRADE TANK (BGT) CLOSURE PLAN ELM RIDGE EXPLORATION TONKIN 4 RIO ARRIBA COUNTY, NEW MEXICO

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REPORTING	.3

INTRODUCTION

Elm Ridge Exploration would like to submit a closure plan for the below grade tank (BGT) at the Tonkin 4 well site located in the SW ¼ NW ¼ of Section 17, Township 24N, Range 3W, Rio Arriba County, New Mexico. This closure plan has been prepared in conformance with the closure requirements of 19.15.17.13 NMAC.

SCOPE OF CLOSURE ACTIVITIES

The purpose of this closure plan is to provide the details of activities involved in the closure of the BGT at the Tonkin 4 well site. The following scope of closure activities has been designed to meet this objective:

- 1) Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will close all of the BGTs currently in service within the five (5) years allotted. Elm Ridge Exploration does not operate any BGTs which would qualify to be upgraded or retrofitted; as such, they will be closing all their current BGTs and replacing them with above ground storage tanks.
- 2) Elm Ridge Exploration will close BGTs deemed to be an imminent danger to fresh water, public health, or the environment by an earlier date that the division requires as specified in Subsection A of 19.15.17.13 NMAC.
- 3) Elm Ridge Exploration will close any BGT which demonstrates a compromise of integrity before the five (5) years allotted by the division per Paragraph (6) of Subsection I of 19.15.17.11 NMAC.
- 4) Elm Ridge Exploration will close any BGT within 60 days of cessation of the BGTs operation per Subsection A of 19.15.17.13 NMAC.
- 5) No less than 72 hours and no greater than one (1) week prior to BGT removal Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will provide written notification to the appropriate division district office as well as a schedule of on-site activities, as in accordance with 19.15.17.13 Subsection J Paragraph (2) NMAC. Written notification will include the name of the well operator, the well's API number, the well's name and number, and the well's unit letter, section, township, and range.
- 6) No less than 24 hours and no greater than one (1) week prior to beginning BGT closure activities Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will provide written notification to the appropriate surface owner, as in accordance with 19.15.17.13 Subsection J Paragraph (1) NMAC. Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will notify the surface owner by certified mail, return receipt requested, that the operator plans to close a below-grade tank. The return receipt will be used to ensure that the surface owner has received written notification no less than 24 hours and no greater than one (1) week prior to the beginning of BGT closure activities. Evidence of mailing of the notice to the address of the surface owner shown in the county tax records is sufficient to demonstrate compliance with this requirement. Closure activities that will take place on tribal land will have notifications sent by certified mail, return

receipt requested, to the appropriate tribal office. Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will notify the Bureau of Land Management (BLM) of closure activities for wells located on federal land per a Sundry Notice, as in accordance with 19.15.17.13 Subsection J Paragraph (1) NMAC. All notices will be sent in such a way that the surface owner received notice at least 24 hours prior to the beginning of closure activities.

- 7) Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will remove all liquids, and/or sludge, if applicable, prior to closure. Material will be disposed of at Envirotech's Landfarm #2, Permit # NM-01-0011, TNT Environmental Inc. Landfarm, Permit # NM-01-0008, Industrial Ecosystems Inc. (IEI) Landfarm, Permit # NM-01-0010B or Basin Disposal, Permit # NM-01-0005, depending on the consistence of the material removed, as in accordance with 19.15.17.13 Subsection E Paragraph (1) NMAC.
- 8) Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will remove all on-site equipment associated with this BGT that is no longer required for some other purpose, as in accordance with 19.15.17.13 Subsection E Paragraphs (3) NMAC.
- 9) If applicable, any liners or leak detection systems removed from a BGT closure will be cleaned off and disposed of at San Juan County Regional Landfill in accordance with Subparagraph (m) of Paragraph (1) of Subsection D of 19.15.9.712 NMAC.
- 10) Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will obtain prior approval from the OCD to dispose, recycle, reuse, or reclaim the BGT. Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will provide the OCD with documentation concerning the final disposition of the BGT with the closure report.
- 11) Once the BGT is removed a five (5)-point composite sample will be collected from directly below the tank or below the leak detection system if present. Grab samples will be collected from any areas that are wet, discolored, or showing other evidence of a release. All samples being collected will be analyzed for benzene and total BTEX via USEPA Method 8021B, TPH via USEPA Method 418.1, and chlorides via USEPA 300.1, as in accordance with 19.15.17.13 Subsection E Paragraph (4) NMAC.
- 12) Depending on soil sample results, the area will be either backfilled or the area will be excavated.
 - a. If soil samples do not exceed the regulatory standards of 0.2 mg/kg benzene, 50 mg/kg BTEX, 100 mg/kg TPH, and 250 mg/kg or background concentration of chlorides, as in accordance with 19.15.17.13 Subsection E Paragraph (4) NMAC.
 - i. Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, shall submit a Form C-141 with the laboratory results so that the division may review the results to determine if additional delineation is required in accordance with Paragraph (5) of Subsection E of 19.15.17.13 NMAC.
 - ii. Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will backfill the excavation or impacted area with non-waste containing, earthen material, in accordance with 19.15.17.13

Subsection E Paragraph (6) NMAC. A soil cover shall be installed for all backfilled excavations consisting of the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater in accordance with Subsections H of 19.15.17.13 NMAC. The operator shall construct the soil cover to the site's existing grade and prevent ponding of water and erosion of the cover material.

- iii. All areas of the well site that are no longer utilized on a day to day basis for the production of oil and/or gas, Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will substantially restore, re-contour, and re-vegetate the areas, in accordance with 19.15.17.13 Subsections G and I NMAC. The operator shall notify the division when it has been re-seeded and when it has achieved successful re-vegetation. For re-vegetation methods, please see attached re-vegetation plan.
- b. If soil samples exceed the regulatory standards stated above.
 - i. Elm Ridge Exploration will submit a Release Notification by Form C-141 with the appropriate analytical laboratory results to the appropriate division district office, in accordance with 19.15.17.13 Subsection E Paragraph (4) NMAC.
 - ii. In accordance with Paragraph (5) of Subsection E of 19.15.17.13 NMAC, once the operator or the OCD has determined that a release has occurred, Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will comply with rule 19.15.3.116 NMAC and 19.15.1.19 NMAC as appropriate.

REPORTING

Elm Ridge Exploration will submit a closure report within 60 days following the BGT closure. The closure report will consist of a form C-144 with all supporting data, and a form C-141 with all supporting data. The supporting data will include proof of closure notice to the surface owner and the OCD, confirmation sampling analytical results, a site diagram, soil backfilling and cover installation, re-vegetation rates, re-seeding techniques, and site reclamation photo documentation, if applicable, along with all other information related to the onsite activities.

We appreciate the opportunity to be of service. If you have any questions or require further information, please do not hesitate to contact our office at (505) 632-3476 Ext. 201.

Respectfully Submitted:

Elm Ridge Exploration

Amy Mackey

Elm Ridge Exploration

Elm Ridge Exploration

Re-Seeding Techniques and Seed Mixture Ratios

These applied practices by Elm Ridge Exploration will at a minimum comply with the New Mexico Oil Conservation Divisions rule 19.15.17.13, Subsection I NMAC. Elm Ridge Exploration has adopted these re-seeding application techniques, ratios, and mixtures as their standard operating procedures.

- 1. The first growing season after closure of a below grade tank or pit, all areas of the well site not utilized for the production of oil and/or gas on a daily basis will be re-seeded with the specified seed mixture.
- 2. The seed mixture used will be certified with no primary or secondary noxious weeds in seed mixtures. The seed labels from each bag shall be available for inspection while seed is being sown.
- 3. The operator shall accomplish seeding by drilling on the contour whenever practical or by other division-approved methods. The operator shall obtain vegetative cover that equals 70% of the native perennial vegetative cover (un-impacted by overgrazing, fire or other intrusion damaging to native vegetation) 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. During the two growing seasons that prove viability, there shall be no artificial irrigation of the vegetation.
- 4. Hand seeding with hydro-mulch, excelsior netting, or mulch with netting is required on the cut/fill slopes. Mulch will be spread at a rate of 2,000-3,000 pounds per acre.
- 5. Compacted areas determined by visual inspection will be ripped to a depth of 12 inches below ground surface and disked to a depth of six (6) inches before seeding. Seeding shall be done with a disk type drill with two (2) boxes for various seed sizes. The drill rows shall be eight (8) to ten (10) inches apart. Seed shall be planted at no less than one-half (1/2) inch deep or more than one (1) inch deep. The seeder shall be followed with a drag, packer, or roller to ensure uniform coverage of the seed and adequate compaction. Drilling shall be done on the contour where possible, but not up and down the slope.
- 6. Where slopes are too steep for contour drilling, a hand seeder shall be used. Seed shall be covered to the depth stated above by whatever means is practical. If the seed is unable to be covered by the means listed above, the prescribed seed mixture amount will be doubled.

- 7. Elm Ridge Exploration shall repeat seeding or planting until it successfully achieves the required vegetative cover of 70% of the native perennial vegetation cover.
- 8. Upon abandonment of a well site, if the retention of the access road is not considered necessary for the management and multiple uses of the natural resources, or by the surface owner, it will be ripped a minimum of 12 inches in depth. After ripping, water bars will be installed. All ripped surfaces will be protected from vehicular travel by construction of a dead end ditch and earthen barricade at the entrance to these ripped areas. Re-seeding of areas affected by the ditch and barriers will be re-seeded if necessary.
- 9. Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will inform the division once successful re-vegetation has occurred.

Elm Ridge Exploration

San Juan Basin

Below Grade Tank Maintenance and Operating Plan

In accordance with Rule 19.15.17 the following information describes the operation and maintenance of a Below Grade Tank (BGT) on Elm Ridge Exploration locations. Elm Ridge Exploration will close this BGT within five (5) years, or upon failure of integrity, and replacing it with an above ground storage tank.

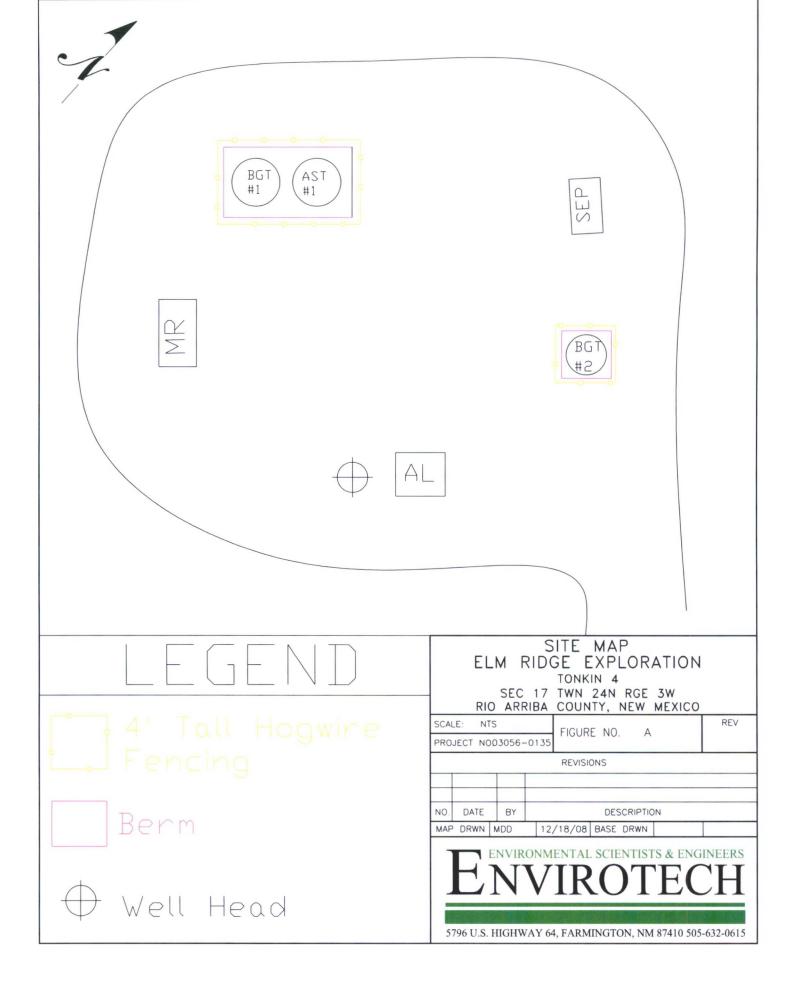
GENERAL PLAN:

- 1. Elm Ridge Exploration, or a contractor representing Elm Ridge Exploration, will operate and maintain a BGT to contain liquids and solids to prevent contamination of fresh water and to protect public health and the environment. This will be accomplished by performing monthly inspections of the BGT, any liners or leak detection, if applicable, netting, secondary containment, fencing, and maintaining adequate freeboard.
- 2. Elm Ridge Exploration, or a contractor representing Elm Ridge Exploration, shall not allow a BGT to overflow or allow surface water run-on to enter the BGT. This will be accomplished by a secondary containment consisting of a soil berm around the BGT that will be monitored by monthly inspections. Overflowing will be prevented by maintaining an adequate freeboard of eight (8) inches, maintained by monthly inspections. This process will be performed on the current BGT located at this well site.
- 3. Elm Ridge Exploration, or a contractor representing Elm Ridge Exploration, shall continuously remove any visible or measurable layer of oil from the fluid surface of a BGT in an effort to prevent the accumulation of oil over time.
- 4. Elm Ridge Exploration, or a contractor representing Elm Ridge Exploration, shall inspect the BGT at least once monthly and maintain a written record of each inspection for at least five (5) years. The monthly inspection form to be used by Elm Ridge Exploration is attached to this document.
- 5. Elm Ridge Exploration, or a contractor representing Elm Ridge Exploration, shall maintain adequate freeboard to prevent overtopping of the BGT. The standard freeboard to be maintained by Elm Ridge Exploration is eight (8) inches.

- 6. Elm Ridge Exploration, or a contractor representing Elm Ridge Exploration, shall maintain an expanded metal covering on the BGT.
- 7. Elm Ridge Exploration will not discharge into or store any hazardous wastes in the BGT.
- 8. If Elm Ridge Exploration, or a contractor representing Elm Ridge Exploration, determines that a BGT has developed a leak below the liquid's surface, then Elm Ridge Exploration, or a contractor representing Elm Ridge Exploration, will notify the appropriate division office within 48 hours of discovering the leak. Elm Ridge Exploration, or a contractor representing Elm Ridge Exploration, shall remove all liquids above the damage or leak line within 48 hours in accordance with Subsection A of 19.15.17.12 NMAC. The damaged tank will then be removed and closure activities will begin in accordance with the submitted closure plan.
- 9. Elm Ridge Exploration will close any BGT within 60 days of cessation of the BGTs operation per Subsection A of 19.15.17.13 NMAC.
- 10. Elm Ridge Exploration, or a contractor representing Elm Ridge Exploration, will close the BGT within the NMOCD allotted five (5) years, within 60 days of cessation of operation of the BGT or upon failure of integrity, and put into service an above ground storage tank to meet the needs previously fulfilled by the BGT.

Figure A, Site Map

Attachment 1, Monthly BGT Inspection Form



Elm Ridge Exploration, LLC

Monthly Below Grade Tank Inspection Form

Inspec	ction Performed B	y:		_ Date:	
	Well Site	Name:			-
Unit:	Section:	Township:	Range:	County	y:
	Quarter	Footage:			
	Latitude:		Longitude:		
Below Grade	Tank				
Construction Mat	terial of BGT (circ	le one): Steel Fibe	rglass Galvani	zed Other:	
Tank Capacity (E	BBLS):				
Status of Tank (c	ircle one):	A poor fair	good	excellent	
Leaks Detected (circle one):	Yes No	Unknown		
Liquid level in ta	nk from the top:				
Recent overflow	detected (circle or	ne): Yes No	Unknown		
BGT Cover prese	ent: Yes	No NA			
Cover Type (circ	le one): wire	mesh steel mesh	fibrous net	ting other:	
Berm Present (cir	rcle one):	Yes No			
Secondary Co	ontainment				
Type of secondar	ry containment:				
Status of seconda	ary containment (c	ircle one): NA	poor fai	r good	excellent
Fencing					
Fencing Present	(circle one):	Yes No			
Describe Fencing	g:				
Status of Fencins	(circle one):	NA poor f	air good	excellent	

^{*}Maintain this document on record for a minimum of five (5) years from the date performed.

OCD Aztec District III ELM RIDGE Checklist Below Grade Tank Closure Plans

19.15.17.9 Permit application
Signed C-144 (Page 5 of C-144)
Site Specific Hydrogeology (Iwaters)
19.15.17.10 Siting requirements
Proximity to watercourses (Topo map)
Proximity to Permanent Structure (Aerial Map)
Proximity to Flood Plain Map (Aerial Map)
Proximity to Subsurface Mines Map (Aerial Map)
19.15.17.13 Closure Plan
Below Grade Tank Closure Plan
19.15.17.12 Operating and Maintenance Plan
Below Grade Tank Operating and Maintenance Plan
Requirements: (Application Marked Closure Plan Only
•
Registration Date: VF CS