

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

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

Form C-144  
July 21, 2008

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

1557  
**Pit, Closed-Loop System, Below-Grade Tank, or  
Proposed Alternative Method Permit or Closure Plan Application**

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

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

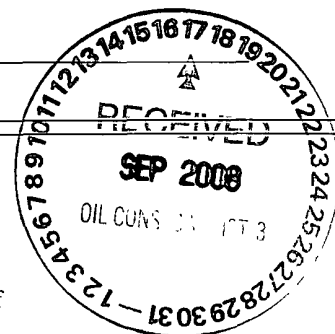
Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's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

Operator: Kimbell Oil Company OGRID #: 12683  
Address: 777 Taylor St., Suite P-IIA; Fort Worth, TX 76102  
Facility or well name: Warren Federal 2E  
API Number: 3003923618 OCD Permit Number: Not Applicable  
U/L or Qtr/Qtr H Section 35 Township 25N Range 6W County: Rio Arriba  
Center of Proposed Design: Latitude 36.359507 Longitude -107.431404 NAD: ☐ 1927 ☒ 1983  
Surface Owner: ☒ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

2. ☐ **Pit:** Subsection F or G of 19.15.17.11 NMAC  
Temporary: ☐ Drilling ☐ Workover  
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A  
☐ Lined ☐ Unlined Liner type: Thickness \_\_\_\_\_ mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other \_\_\_\_\_  
☐ String-Reinforced  
Liner Seams: ☐ Welded ☐ Factory ☐ Other \_\_\_\_\_ 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 notice of intent)  
☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Haul-off Bins ☐ Other \_\_\_\_\_  
☐ Lined ☐ Unlined Liner type: Thickness \_\_\_\_\_ mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other \_\_\_\_\_  
Liner Seams: ☐ Welded ☐ Factory ☐ Other \_\_\_\_\_

4. ☒ **Below-grade tank:** Subsection I of 19.15.17.11 NMAC  
Volume: 40 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 \_\_\_\_\_  
Liner type: Thickness \_\_\_\_\_ mil ☐ HDPE ☐ PVC ☐ Other \_\_\_\_\_



☐ **Alternative Method:**

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

**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, hospital, institution or church*)

☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet

☒ Alternate. Please specify 4 foot tall hog wire fencing with pipe railing

**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)

**Signs:** Subsection C of 19.15.17.11 NMAC

☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers

Signed in compliance with 19.15.3.103 NMAC

**Administrative Approvals and Exceptions:**

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 acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying pads or above-grade tanks associated with a closed-loop system.

Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.

- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

Enclosed is a C-144 document for Well Site Warren Federal #2 which is 2698.4 feet to the south. The OCD approved depth to groundwater for Warren Federal #2 is over 100 feet. It is reasonable to assume that the distance to groundwater at Warren Federal #2E is over 50 feet based on this information.

☐ Yes ☒ No

Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).

- Topographic map, Visual inspection (certification) of the proposed site (**The nearest watercourse is located 1,842.2 ft. west of the well site per the attached aerial.**)

☐ Yes ☒ No

Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application (*Applies to temporary, emergency, or cavitation pits and below-grade tanks*)

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

Visual inspections indicate none of the above mentioned locations exist within 300 feet of the well site.

☐ 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*)

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

☐ 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.

- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

According to the iWATERS database search, no water wells exist within 500 feet.

☐ 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.

- Written confirmation or verification from the municipality; Written approval obtained from the municipality

According to the topographic map, the well site is not within the defined boundaries of a municipality or a fresh water well field.

☐ Yes ☒ No

Within 500 feet of a wetland.

- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site (The USFWS data file, WetlandsData.kmz, dated July 2, 2008 was opened using Google Earth. The nearest wetlands were 1,842.2 ft. west of the well site. See the attached aerial.)

☐ Yes ☒ No

Within the area overlying a subsurface mine.

- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division  
The included NM EMNRD map shows that the well site is not in an area overlying a subsurface mine.

☐ Yes ☒ No

Within an unstable area.

- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society, Topographic map  
The included topographical map shows no fault lines close to the site which would make the site unstable.

☐ Yes ☒ No

Within a 100-year floodplain.

- FEMA map  
The included FEMA map shows that the site is not within a 100 year flood plain.

☐ Yes ☒ No

1.

**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 19.15.17.11 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: \_\_\_\_\_ or Permit Number: \_\_\_\_\_

**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
- ☐ Climatological 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
- ☐ Liner Specifications and Compatibility Assessment - 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<sub>2</sub>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

4.

**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  
☐ AlternativeProposed 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)

15

**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

6.

**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 identify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two 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 *will not* be used for future service and operations?☐ Yes (If yes, please provide the information below) ☐ No

Required for impacted areas which will not be used for future service and operations.

- ☐
- Soil Backfill and Cover Design 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

7.

**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 acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.

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  
☐ NA

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  
☐ NA

Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).

- Topographic map; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

☐ Yes ☐ No

Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.

- NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site

☐ 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.

- Written confirmation or verification from the municipality; Written approval obtained from the municipality

☐ Yes ☐ No

Within 500 feet of a wetland.

- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

Within the area overlying a subsurface mine.

- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division

☐ Yes ☐ No

Within an unstable area.

- Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS, NM Geological Society; Topographic map

☐ Yes ☐ No

Within a 100-year floodplain.  
- FEMA map

☐ Yes ☐ No

18. **On-Site Closure Plan Checklist:** (19.15.17.13 NMAC) *Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.*

- ☐ Siting Criteria Compliance 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 19.15.17.11 NMAC
- ☐ Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 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
- ☐ Waste Material Sampling Plan - 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 standards cannot be achieved)
- ☐ 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
- ☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

19. **Operator Application Certification:**

I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): Jon Stickland

Title: Engineer

Signature: J. M. Stickland

Date: 9/15/2008

e-mail address: jms@kimbelloil.com

Telephone: (817) 335-2591 x 30

20. **OCD Approval:** ☒ Permit Application (including closure plan) ☐ Closure Plan (only) ☐ OCD Conditions (see attachment)

OCD Representative Signature: Jonathan Kelly

Approval Date: 3/09/2012

Title: Compliance Officer

OCD Permit Number: \_\_\_\_\_

21. **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 Completion Date: \_\_\_\_\_

22. **Closure Method:**

- ☐ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-loop systems only)
- ☐ If different from approved plan, please explain.

23. **Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:**

*Instructions: Please identify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.*

Disposal Facility Name: \_\_\_\_\_ Disposal Facility Permit Number: \_\_\_\_\_

Disposal Facility Name: \_\_\_\_\_ Disposal Facility Permit Number: \_\_\_\_\_

Were the closed-loop system operations and associated activities performed on or in areas that will not be used for future service and operations?

☐ Yes (If yes, please demonstrate compliance to the items below) ☐ No

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)

On-site Closure Location: Latitude \_\_\_\_\_ Longitude \_\_\_\_\_ NAD ☐ 1927 ☐ 1983

15.

**Operator Closure Certification:**

I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print): \_\_\_\_\_ Title: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

e-mail address: \_\_\_\_\_ Telephone: \_\_\_\_\_

**Attachments:**

C144 for Warren Federal #2 & Topographical Map

Aerial Map

iWaters Database Search

Topographical Map

NM EMNRD Map

FEMA Map

Below Grade Tank Design and Construction Plan

Below Grade Tank Maintenance and Operating Plan

Below Grade Tank Closure Plan

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

Form C-144  
June 1, 2004

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

For drilling and production facilities, submit to  
appropriate NMOCD District Office  
For downstream facilities, submit to Santa Fe  
office

**Pit or Below-Grade Tank Registration or Closure**

Is pit or below-grade tank covered by a "general plan"? Yes ☒ No ☐

Type of action Registration of a pit or below-grade tank ☐ Closure of a pit or below-grade tank ☒

Operator <u>Kimbrell Oil Company of Texas</u>		Telephone <u>(817) 335-2593</u>	e-mail address <u>jms@kimbelloil.com</u>
Address <u>777 Taylor Street, Suite P-IIA, Fort Worth, Texas 76102</u>			
Facility or well name <u>Warren Federal #2</u>	API # <u>3003905714</u>	U/L or Qtr/Qtr <u>O</u>	Sec <u>35</u> T <u>25N</u> R <u>6W</u>
County <u>Rio Arriba</u>	Latitude <u>36 352462</u>	Longitude <u>-107 43409</u>	NAD 1927 <input checked="" type="checkbox"/> 1983 <input type="checkbox"/>
Surface Owner: Federal <input checked="" type="checkbox"/> State <input type="checkbox"/> Private <input type="checkbox"/> Indian <input type="checkbox"/>			
<b>Pit</b>		<b>Below-grade tank</b>	
Type Drilling <input type="checkbox"/> Production <input checked="" type="checkbox"/> Disposal <input type="checkbox"/> Workover <input type="checkbox"/> Emergency <input type="checkbox"/> Lined <input type="checkbox"/> Unlined <input checked="" type="checkbox"/> Liner type Synthetic <input type="checkbox"/> Thickness _____ mil Clay <input type="checkbox"/> Pit Volume _____ bbl		Volume _____ bbl Type of fluid _____ Construction material Earth Pit Double-walled, with leak detection? Yes <input type="checkbox"/> If not, explain why not _____	
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water)		Less than 50 feet (20 points) 50 feet or more, but less than 100 feet (10 points) 100 feet or more (0 points)	0
Wellhead protection area (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources)		Yes (20 points) No (0 points)	0
Distance to surface water (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)		Less than 200 feet (20 points) 200 feet or more, but less than 1000 feet (10 points) 1000 feet or more (0 points)	20
		<b>Ranking Score (Total Points)</b>	20

**(this is a pit closure:** (1) Attach a diagram of the facility showing the pit's relationship to other equipment and tanks (2) Indicate disposal location (check the onsite box if you are burying in place) onsite ☐ offsite ☐ If offsite, name of facility \_\_\_\_\_. (3) Attach a general description of remedial action taken including remediation start date and end date (4) Groundwater encountered No ☒ Yes ☐ If yes, show depth below ground surface \_\_\_\_\_ ft and attach sample results.

5) Attach soil sample results and a diagram of sample locations and excavations

Additional Comments
Auger refusal at 4' BGS, encountered sandstone Sample at 1' below tank was within the 8015 standard of 100 ppm for TPH and OVM standard of 100 ppm
95 barrel steel tank installed

I hereby certify that the information above is true and complete to the best of my knowledge and belief I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.

Date 12/17/07

Printed Name/Title Mr Jonathan Stickland

Signature J.M. Stickland

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations

Approval

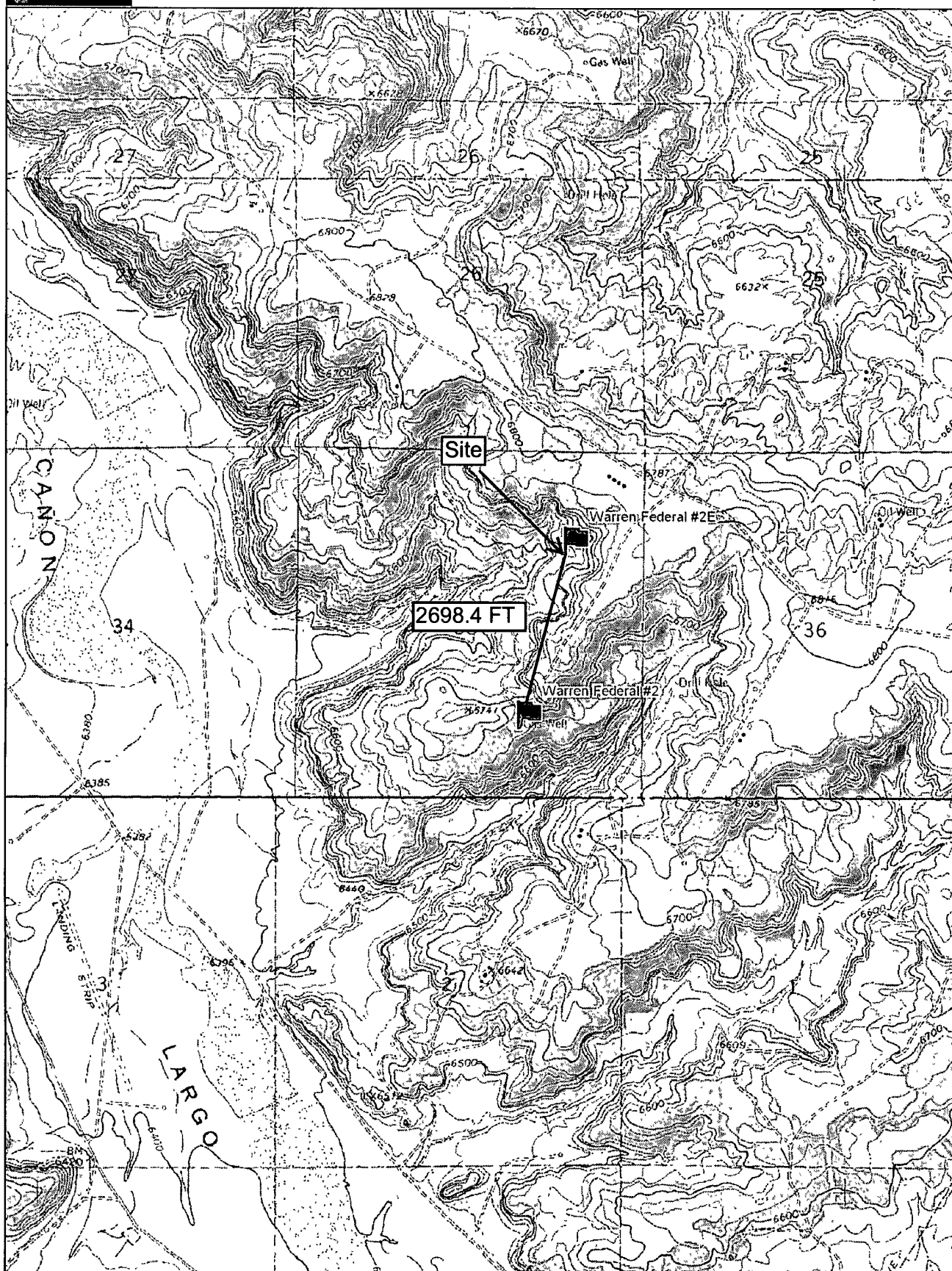
Printed Name/Title PUTY OIL & GAS INSPECTOR, DIST. #3

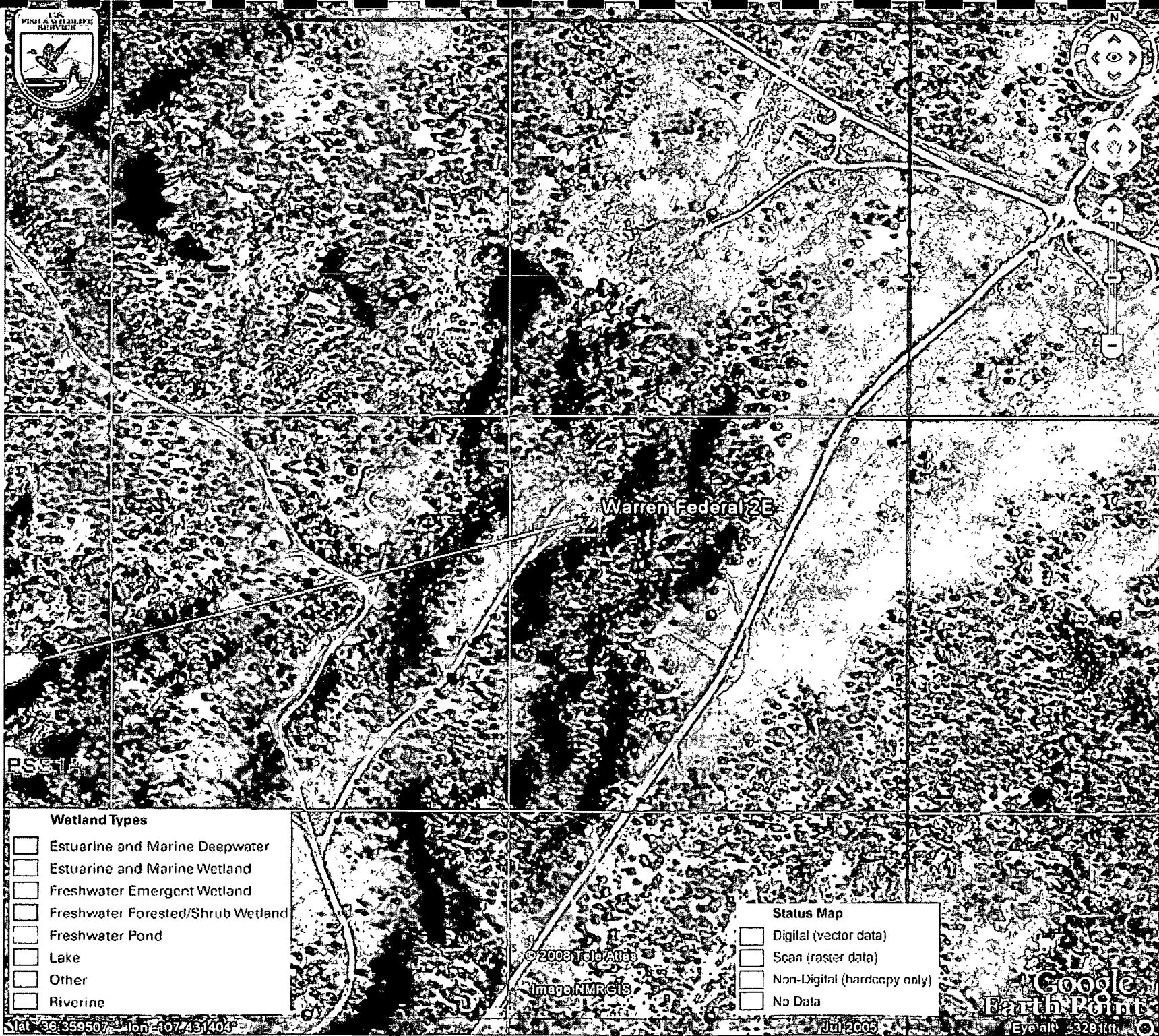
Signature [Signature]

Date

JAN 08 2008







Warren Federal 2E

PS 51

**Wetland Types**

- ☐ Estuarine and Marine Deepwater
- ☐ Estuarine and Marine Wetland
- ☐ Freshwater Emergent Wetland
- ☐ Freshwater Forested/Shrub Wetland
- ☐ Freshwater Pond
- ☐ Lake
- ☐ Other
- ☐ Riverine

**Status Map**

- ☐ Digital (vector data)
- ☐ Scan (raster data)
- ☐ Non-Digital (hardcopy only)
- ☐ No Data

© 2008 Tele Atlas  
Image MRCIS

Google  
Earth Point

lat: 38.359507 lon: -107.431404

Jul 2005

Eye alt: 3281m

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

---

Township: 25N Range: 06W Sections: 35

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) ☐ Non-Domestic ☐ Domestic ☐ All

POD / Surface Data Report

Avg Depth to Water Report

Water Column Report

Clear Form

iWATERS Menu

Help

---

**AVERAGE DEPTH OF WATER REPORT 09/04/2008**

Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	(Depth Water in Feet)		
								Min	Max	Avg

No Records found, try again

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

Township: 25N Range 06W Sections 35  
NAD27 X Y Zone Search Radius  
County Basin Number: Suffix  
Owner Name: (First) (Last) ☐ Non-Domestic ☐ Domestic ☐ All

[POD / Surface Data Report](#) [Avg Depth to Water Report](#) [Water Column Report](#)

[Clear Form](#) [WATERS Menu](#) [Help](#)

POD / SURFACE DATA REPORT 09/04/2008

(acre ft per annum)  
DB File Nbr 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 are in Meters)

UTM\_Zone Easting Northing

Start

Date

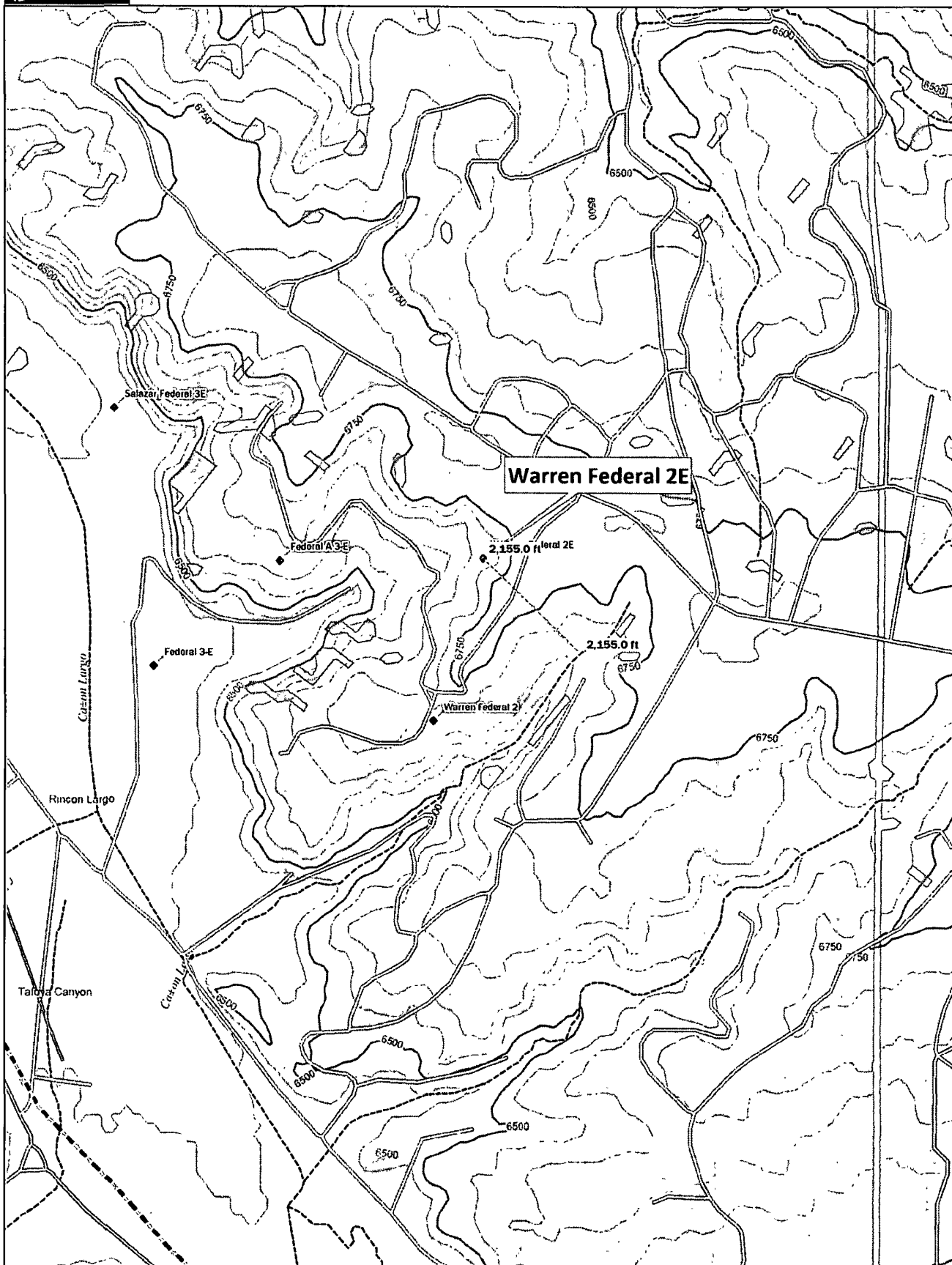
Finish

Date

Depth Depth (in feet)

Well Water

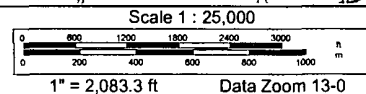
No Records found, try again



Data use subject to license.

© DeLorme. DeLorme Topo USA® 7.0

www.delorme.com



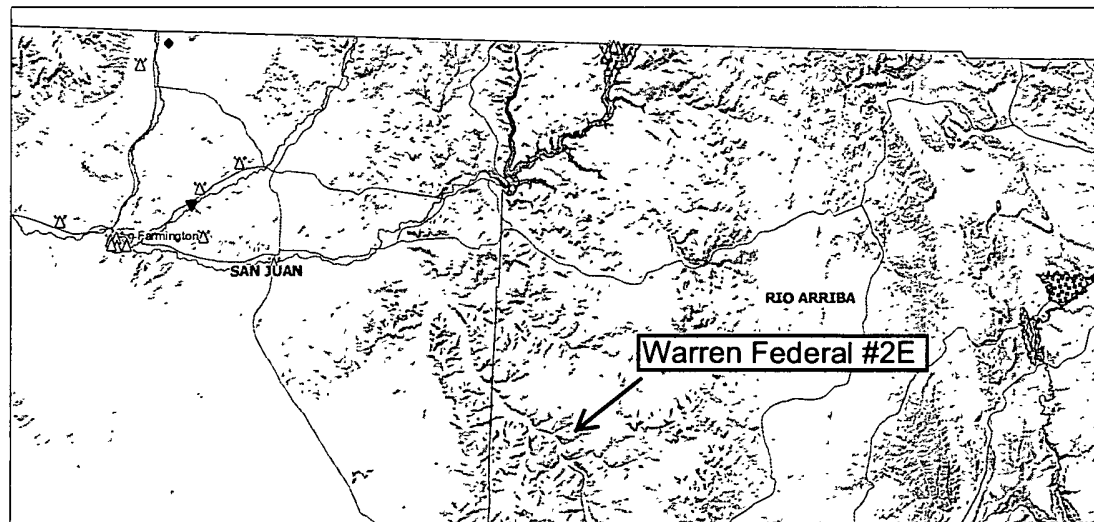
# San Juan Basin Mines

## Mines, Mills & Quarries Commodity Groups

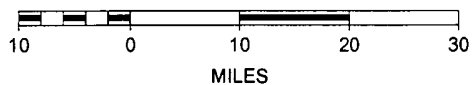
- △ Aggregate & Stone Mines
- ◆ Coal Mines
- ★ Industrial Minerals Mines
- ▼ Industrial Minerals Mills
- ☐ Metal Mines and Mill Concentrate
- Potash Mines & Refineries
- ⌘ Smelters & Refinery Ops.
- ✦ Uranium Mines
- ⊕ Uranium Mills

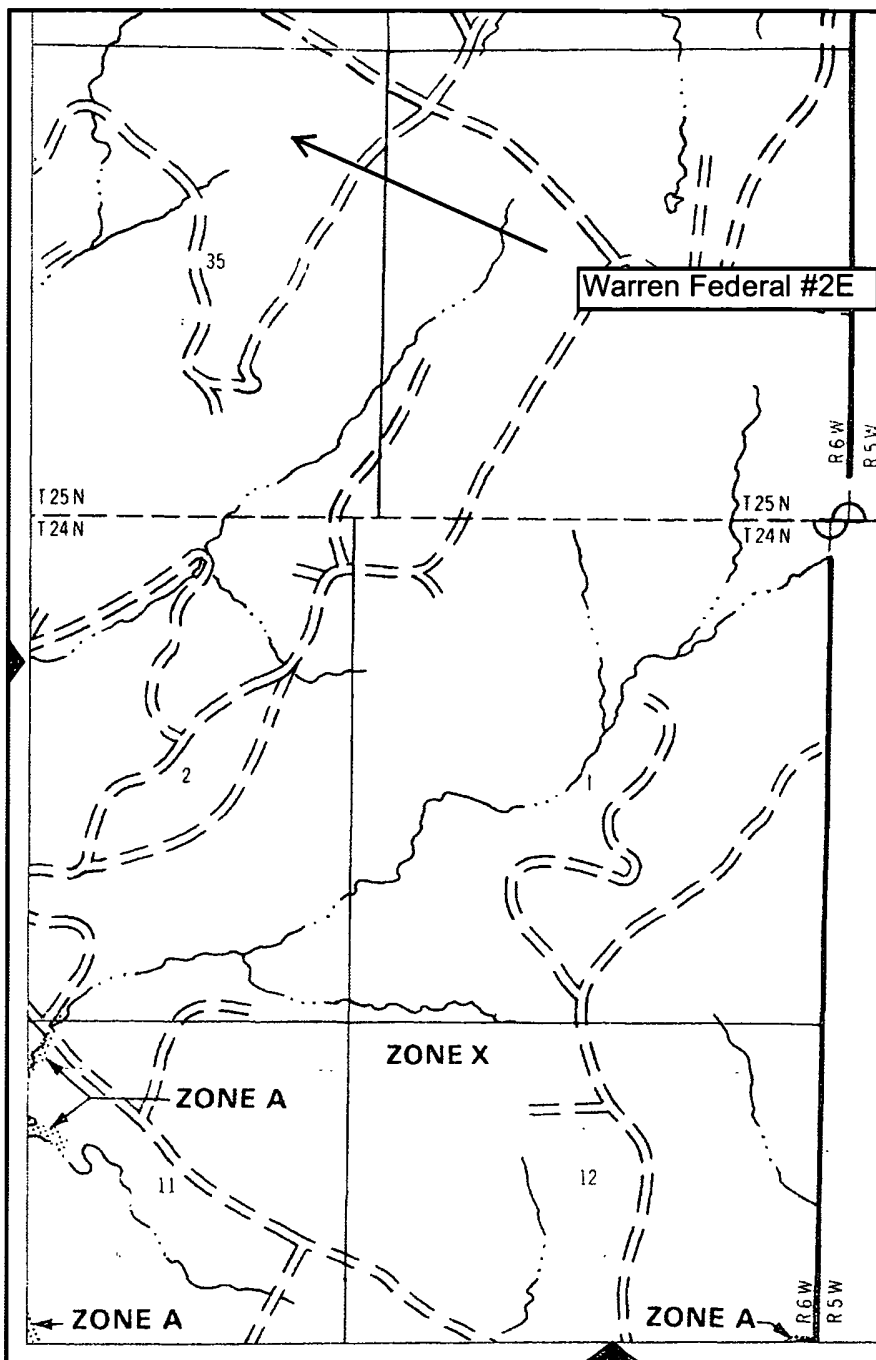
## Mines, Mills & Quarries Status

Active Mines

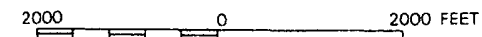


SCALE 1 : 1,041,908





APPROXIMATE SCALE



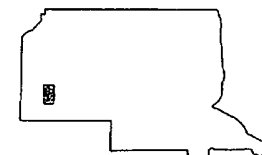
NATIONAL FLOOD INSURANCE PROGRAM

# **FIRM** FLOOD INSURANCE RATE MAP

**RIO ARRIBA COUNTY,  
NEW MEXICO  
UNINCORPORATED AREAS**

PANEL 750 OF 1325

(SEE MAP INDEX FOR PANELS NOT PRINTED)



PANEL LOCATION

**COMMUNITY-PANEL NUMBER**

350049 0750 B

**EFFECTIVE DATE:**

JANUARY 5, 1989



Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at [www.msc.fema.gov](http://www.msc.fema.gov)

JOINS PANEL 09

## **Kimbell Oil Company of Texas**

### **San Juan Basin**

#### **Below Grade Tank Design and Construction Plan**

In accordance with Rule 19.15.17 the following information describes the design and construction of below grade tanks (BGTs) on Kimbell Oil Company of Texas locations. This will be Kimbell Oil Company of Texas' standard procedure for all BGTs. A separate plan will be submitted for any BGT which does not conform to this plan.

#### **GENERAL PLAN:**

1. Kimbell Oil Company of Texas, or a contractor representing Kimbell Oil Company of Texas, will design and construct a BGT to contain liquids and solids to prevent contamination of fresh water and to protect public health and environment.
2. Kimbell Oil Company of Texas will use a general location sign posted on location. If no general sign is posted, a separate sign at the location of the BGT will be provided.
3. Kimbell Oil Company of Texas, or a contractor representing Kimbell Oil Company of Texas, shall construct fencing around the BGT using a four (4) foot hog wire fencing topped with two (2) strands of barbed wire, or with a pipe top rail. A six (6) foot chain link fence topped with three (3) strands of barbed wire will be used if the well location is within 1000 feet of a permanent residence, school, hospital, institution or a church.
4. Kimbell Oil Company of Texas, or a contractor representing Kimbell Oil Company of Texas, will construct an expanded metal covering on the top of the BGT.
5. Kimbell Oil Company of Texas, or a contractor representing Kimbell Oil Company of Texas, shall ensure that a BGT is constructed of materials resistant from damage by sunlight and the BGT's particular contents.
6. Kimbell Oil Company of Texas, or a contractor representing Kimbell Oil Company of Texas, shall ensure that the BGT system has 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.



7. Kimbell Oil Company of Texas, or a contractor representing Kimbell Oil Company of Texas, shall not allow a BGT to overflow or allow surface water run-on to enter the BGT.
8. Kimbell Oil Company of Texas, or a contractor representing Kimbell Oil Company of Texas, will construct and use a BGT that does not have double walls. The BGT side walls will be open for visual inspection for leaks. The BGT bottom is elevated a minimum of six inches above the underlying ground surface and the BGT is underlain with a geomembrane liner to divert leaked liquid to a location that can be visually inspected.
9. Kimbell Oil Company of Texas, or a contractor representing Kimbell Oil Company of Texas, shall equip BGTs designed in this manner with a properly operating automatic high level shut-off control device and manual controls to prevent overflow.
10. Kimbell Oil Company of Texas, or a contractor representing Kimbell Oil Company of Texas, will ensure that the geomembrane liner consists of 30-mil flexible PVC or 60-mil HDPE liner, or an equivalent liner material that the appropriate division district office approves. The geomembrane liner shall have a hydraulic conductivity no greater than  $1 \times 10^{-9}$  cm/sec. The geomembrane liner shall be composed of an impervious, synthetic material that is resistant to petroleum hydrocarbons, salts and acidic and alkaline solutions. The liner material shall be resistant to ultraviolet light. Liner compatibility shall comply with EPA SW-846 Method 9090A.
11. The general specification for design and construction is attached as ***Figure C, BGT Design and Construction***

# **Kimbell Oil Company of Texas**

## **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 Kimbell Oil Company of Texas locations. This is Kimbell Oil Company of Texas standard procedure for all BGTs. A separate plan will be submitted for any BGT that Kimbell Oil Company of Texas possesses, which does not conform to this particular plan.

#### **GENERAL PLAN:**

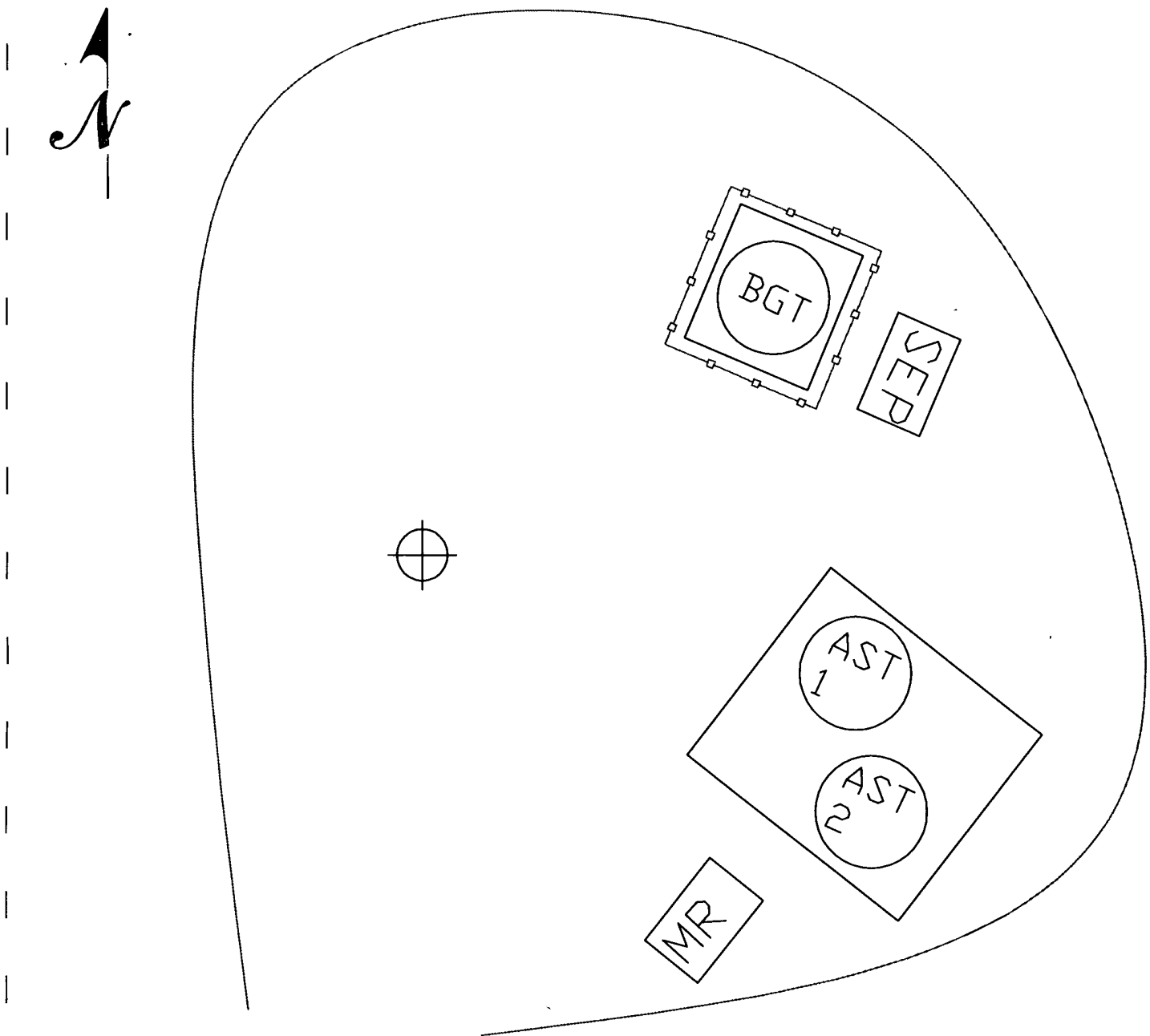
1. Kimbell Oil Company of Texas, or a contractor representing Kimbell Oil Company of Texas, will operate and maintain a BGT to contain liquids and solids to prevent contamination of fresh water and to protect public health and environment.
2. Kimbell Oil Company of Texas, or a contractor representing Kimbell Oil Company of Texas, shall not allow a BGT to overflow or allow surface water run-on to enter the BGT. ***Figure A, Site Map*** and ***Figure B, Design Plan*** can be referenced for a visual representation of how this will be accomplished.
3. Kimbell Oil Company of Texas, or a contractor representing Kimbell Oil Company of Texas, 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. Kimbell Oil Company of Texas, or a contractor representing Kimbell Oil Company of Texas, shall inspect the BGT at least once monthly and maintain a written record of each inspection for at least five (5) years.
5. Kimbell Oil Company of Texas, or a contractor representing Kimbell Oil Company of Texas, shall maintain adequate freeboard to prevent overtopping of the BGT.
6. Kimbell Oil Company of Texas, or a contractor representing Kimbell Oil Company of Texas, shall perform upgrades on the BGT in order to bring it to compliance with Rule 19.15.17, see ***Figure C, Below Grade Tank Design and Construction***

7. Kimbell Oil Company of Texas, or a contractor representing Kimbell Oil Company of Texas, shall maintain an expanded metal covering on the BGT.

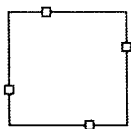
***Figure A, Site Map***

***Figure B, Design Plan***

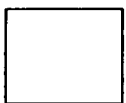
***Figure C, Below Grade Tank Design and Construction***



# LEGEND



Field Fencing



Berm



Well Head

**SITE MAP**  
**KIMBELL OIL COMPANY OF TEXAS**  
 WARREN FEDERAL #2E  
 SEC 35 TWN 25N RGE 6W  
 RIO ARRIBA COUNTY, NEW MEXICO

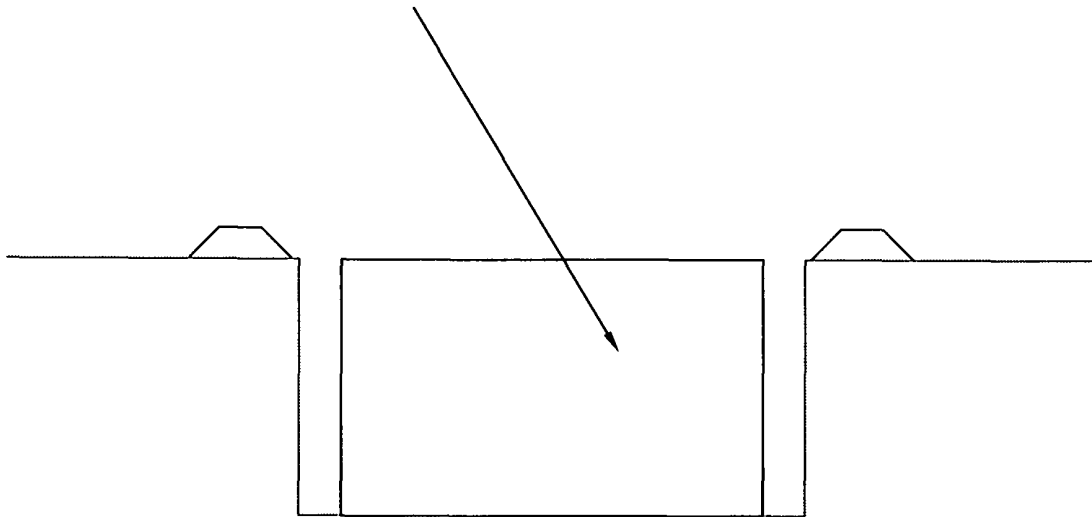
SCALE: NTS	FIGURE NO. A	REV
PROJECT N006011-0009		

REVISIONS			
NO.	DATE	BY	DESCRIPTION
MAP DRWN	JPM	9/12/08	BASE DRWN

ENVIRONMENTAL SCIENTISTS & ENGINEERS  
**ENVIROTECH**

5796 U.S. HIGHWAY 64, FARMINGTON, NM 87410 505-632-0615

40 BBL  
Tank



\*Berm completed around  
BGT

# LEGEND



Berm

DESIGN PLAN  
KIMBELL OIL COMPANY OF TEXAS  
WARREN FEDERAL #2E  
SEC 35 TWN 25N RGE 6W  
RIO ARRIBA COUNTY, NEW MEXICO

SCALE: NTS

PROJECT NOD6011-0009

FIGURE NO. B

REV

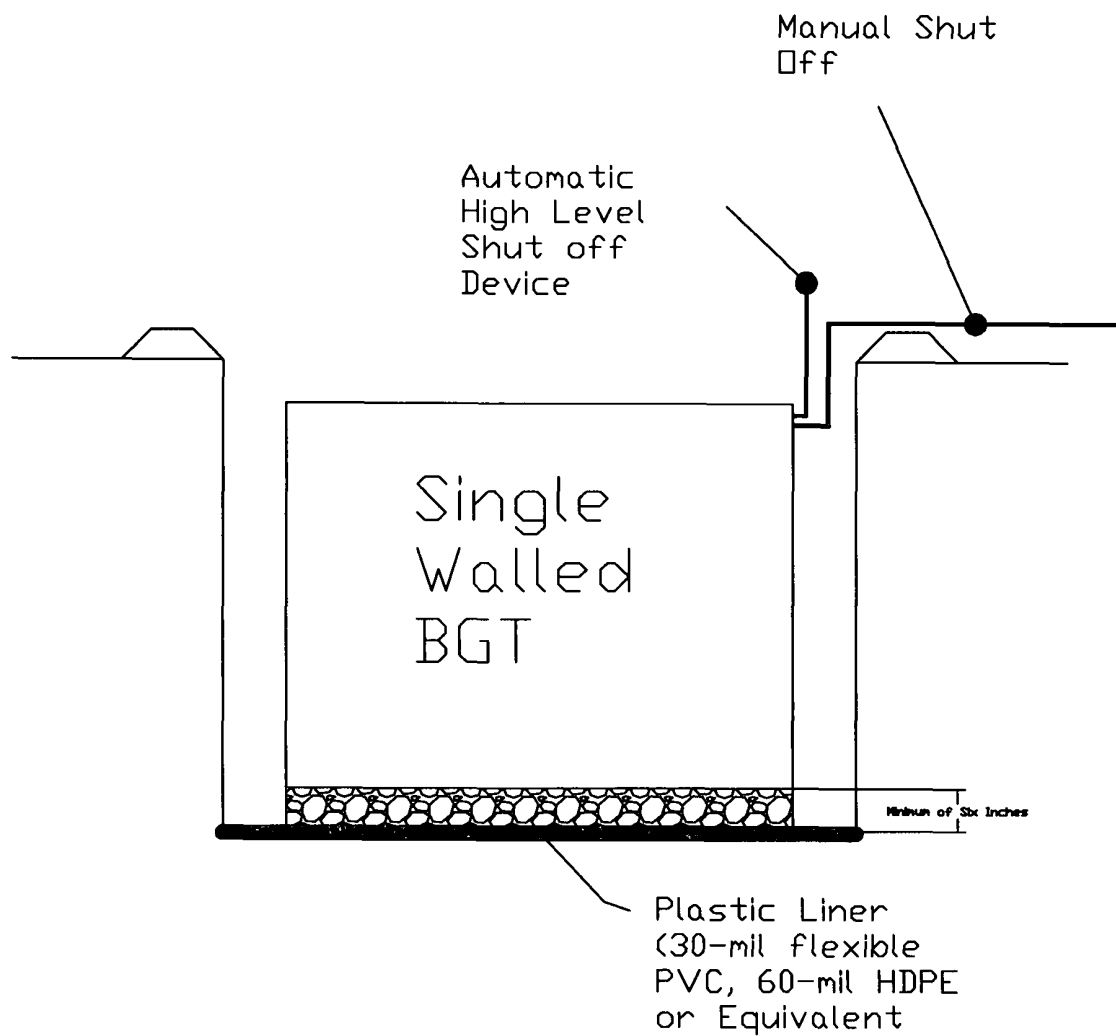
## REVISIONS

NO.	DATE	BY	DESCRIPTION

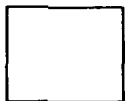
MAP DRWN	JPM	9/11/08	BASE DRWN	
----------	-----	---------	-----------	--

ENVIRONMENTAL SCIENTISTS & ENGINEERS  
**ENVIROTECH**

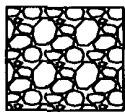
5796 U.S. HIGHWAY 64, FARMINGTON, NM 87410 505-632-0615



# LEGEND



Berm



Gravel

## GENERAL BGT DESIGN AND CONSTRUCTION PLAN KIMBELL OIL COMPANY OF TEXAS

SCALE: NTS

PROJECT NOD6011-0009

FIGURE NO. C

REV

### REVISIONS

NO.	DATE	BY	DESCRIPTION
MAP DRWN	JPM	9/11/08	BASE DRWN

ENVIRONMENTAL SCIENTISTS & ENGINEERS  
**ENVIROTECH**

5796 U.S. HIGHWAY 64, FARMINGTON, NM 87410 505-632-0615

# **BELOW GRADE TANK (BGT) CLOSURE PLAN**

**SITE NAME:**

**WARREN FEDERAL #2E  
UNIT LETTER H, SECTION 35, TOWNSHIP 25N, RANGE 6W  
RIO ARriba COUNTY, NEW MEXICO  
LATITUDE N 36.35907 LONGITUDE W 107.431404**

**SUBMITTED TO:**

**MR. BRANDON POWELL  
NEW MEXICO OIL CONSERVATION DIVISION  
1000 RIO BRAZOS ROAD  
AZTEC, NEW MEXICO 87410  
(505) 334-6178 EXT 15**

**SUBMITTED BY:**

**MR. JON STICKLAND  
KIMBELL OIL COMPANY OF TEXAS  
777 TAYLOR STREET, SUITE P-IIA  
FORT WORTH, TX 76102  
(817) 335-2591**

**SEPTEMBER 2008**

**BELOW GRADE TANK (BGT) CLOSURE PLAN**  
**KIMBELL OIL COMPANY OF TEXAS**  
**WARREN FEDERAL #2E**  
**RIO ARRIBA COUNTY, NEW MEXICO**

**TABLE OF CONTENTS**

INTRODUCTION..... 3

SCOPE OF CLOSURE ACTIVITIES..... 3

REPORTING..... 4



## **INTRODUCTION**

Kimbell Oil Company of Texas is submitting this closure plan for the below grade tank (BGT) at the Warren Federal #2E located in the SE ¼ NW ¼ of Section 35, Township 25N, Range 6W, Rio Arriba County, New Mexico. This closure plan has been prepared in conformance with New Mexico Oil Conservation Division (NMOCD) procedures.

## **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 Hanson #1 well site. The following scope of closure activities has been designed to meet this objective:

- 1) Kimbell Oil Company of Texas or a contractor acting on behalf of Kimbell Oil Company of Texas shall submit a closure plan to the division's environmental bureau. Upon receipt of this plan the division shall review the current closure plan for adequacy and accordance with 19.15.17.9 Subsection C NMAC and 19.15.17.13 NMAC.
- 2) No less than 72 hours and no greater than one (1) week prior to BGT removal, Kimbell Oil Company of Texas or a contractor acting on behalf of Kimbell Oil Company of Texas 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.
- 3) Kimbell Oil Company of Texas or a contractor acting on behalf of Kimbell Oil Company of Texas shall provide written notification to the surface owner no later than 72 hours prior to BGT removal by certified mail. BLM will receive notification per a Sundry Notice, as in accordance with 19.15.17.13 Subsection J Paragraph (1) NMAC.
- 4) Kimbell Oil Company of Texas or a contractor acting on behalf of Kimbell Oil Company of Texas will remove all liquids, and/or sludge, if applicable, prior to closure. Material will be disposed of at Envirotech Landfarm #2, Permit # NM-01-0011, or with Basin Disposal for Water Disposal, depending on the consistence of the material removed, as in accordance with 19.15.17.13 Subsection E Paragraph (1) NMAC.
- 5) Kimbell Oil Company of Texas or a contractor acting on behalf of Kimbell Oil Company of Texas will remove the BGT and all on-site equipment associated with the BGT, that cannot or will not be reused on-site, as in accordance with 19.15.17.13 Subsection E Paragraphs (2) and (3) NMAC.
- 6) 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. An additional discrete sample will be collected from any area that is wet, discolored, or showing other evidence of a release. All samples being collected will be analyzed for benzene and total BTEX via USEPA Method 8021, 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.

- 7) The area will be either backfilled or the area will be excavated, in accordance with the following:
- a. If soil samples pass the regulatory standards of 0.2 ppm benzene, 50 ppm BTEX, 100 ppm TPH, and 250 ppm or background concentration of chlorides, as in accordance with 19.15.17.13 Subsection E Paragraph (4) NMAC, then:
    - i. Kimbell Oil Company of Texas or a contractor acting on behalf of Kimbell Oil Company of Texas 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.
    - ii. Upon decommissioning of the well site Kimbell Oil Company of Texas or a contractor acting on behalf of Kimbell Oil Company of Texas will construct a division-prescribed soil cover, substantially restore, recontour and re-vegetate the site, in accordance with 19.15.17.13 Subsections G, H, and I NMAC. The soil cover for closures, where the operator has removed the pit contents or remediated the contaminated soil to the division's satisfaction, shall consist of the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater. The operator shall construct the soil cover to the site's existing grade and prevent ponding of water and erosion of the cover material. The operator shall notify the division when it has been re-seeded and when it has achieved successful re-vegetation.
  - b. If soil samples exceed the regulatory standards stated above.
    - i. Kimbell Oil Company of Texas will submit a Release Notification by Form C-141 to the appropriate division district office, in accordance with 19.15.17.13 Subsection E Paragraph (4) NMAC.
    - ii. Activities beyond this point will be in accordance with 19.15.3.116 NMAC and 19.15.11.19 NMAC.

### **REPORTING**

Reporting will occur within 60 days following the BGT closure and will consist of a form C-144 with all supporting data, and a form C-141 with all supporting data, if necessary. The supporting data will include analytical results, a site diagram, a copy of the site owner notification, and 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) 632-0615.

Respectfully Submitted:

**Kimbell Oil Company of Texas**