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 APR 3 0 2009

Form C-144 July 21, 2008

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

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

Type of action:  Permit of a pit, closed-loop s  Closure of a pit, closed-loop  Modification to an existing p  Closure plan only submitted below-grade tank, or proposed alternative method	system, below-grade tank, or permit	r proposed alternative me	ethod
Instructions: Please submit one application (Form C-144) per in Please be advised that approval of this request does not relieve the operator of lie environment. Nor does approval relieve the operator of its responsibility to com	ability should operations result in	pollution of surface water, gr	ound water or the
ı, Operator: Mewbourne Oil Co.	OGRID #:	14744	1
Address: PO Box 5270, Hobbs, NM 88241			
Facility or well name: Orca "11" Federal #1			
API Number: <u>30-015-37009</u>	OCD Permit Number:		
U/L or Qtr/Qtr C Section 11 Township			
Center of Proposed Design: Latitude N32°51'12"	Longitude <u>W104°02'49"</u>	NAD:	⊠1927 □ 1983
Surface Owner: X Federal X State Private Tribal Trust or Indian	Allotment		
☑ Pit: Subsection F or G of 19.15.17.11 NMAC   Temporary: ☑ Drilling ☐ Workover   ☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A   ☑ Lined ☐ Unlined Liner type: Thickness 20 mil ☑ LLDPE ☐ HDPE ☐ PVC ☐ Other   ☑ String-Reinforced Liner Seams: ☑ Welded ☑ Factory ☐ Other ☐ Volume: 16000 bbl Dimensions: L 120 x W 85 x D 12    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			
Below-grade tank: Subsection I of 19.15.17.11 NMAC			
Volume:bbl Type of fluid:			
Tank Construction material:			
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: Thicknessmil	Other		
5.  Alternative Method:  Submittal of an exception request is required. Exceptions must be submitted.		,	ration 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 institution or church)	!, hospital,		
Four foot height, four strands of barbed wire evenly spaced between one and four feet  Alternate. Please specify			
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			
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 consideration of approval.  Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	office for		
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 accematerial 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 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.	opriate district approval.		
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	☐ 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	☐ 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	Yes No		
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	☐ 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		
<ul> <li>Within an unstable area.</li> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological Society; Topographic map</li> </ul>	☐ Yes ☑ No		
Within a 100-year floodplain FEMA map	□ Vas □ Na		

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)				
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				
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				
<ul> <li>✓ Waste Removal (Closed-loop systems only)</li> <li>✓ On-site Closure Method (Only for temporary pits and closed-loop systems)</li> </ul>				
☐ 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 NIMAC				

Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13 Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if facilities are required.		
Disposal Facility Name: CRI Disposal Facility Permit Number: R9166		
Disposal Facility Name: Lea Land Disposal Facility Permit Number:WM-1-0	035	
Will any of the proposed closed-loop system operations and associated activities occur on or in areas that will not be used for future see 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	.c	
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 sou provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate disconsidered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Just demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.	trict 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 ☐ 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	
<ul> <li>Within an unstable area.</li> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological Society; Topographic map</li> </ul>	☐ 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 public a check mark in the box, that the documents are attached.  Stiling Criticals Compliance Demonstrations based upon the convenience acquirements of 10.15.17.10 NMAC.	lan. Please indicate,	
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		

<u>,</u>		
Operator Application Certification:  I hereby certify that the information submitted with this application is true, a	ccurate and complete to the	e best of my knowledge and belief.
Name (Print): Charles Martin	Title:	Engineer
Signature: Charles & Martin	Date:	04/20/2009
e-mail address: cmartin@mewbourne.com	Telephone:	575-393-5905
OCD Approval: Permit Application (including closure plan) Closu	re Plan (only) X OCD	Conditions (see attachment)
OCD Representative Signatuseigned By Miles Branches		Approval Date: WAT 0 5 2009
Title: LAN. SPEC.	OCD Permit Numb	er: 0209288
Closure Report (required within 60 days of closure completion): Subsections: Operators are required to obtain an approved closure plan properties required to be submitted to the division within 60 days section of the form until an approved closure plan has been obtained and the	ior to implementing any co of the completion of the c e closure activities have b	losure activities and submitting the closure report. losure activities. Please do not complete this
Closure Method:  Waste Excavation and Removal On-Site Closure Method Alt  If different from approved plan, please explain.	ernative Closure Method	☐ Waste Removal (Closed-loop systems only)
Closure Report Regarding Waste Removal Closure For Closed-loop Syst Instructions: Please indentify the facility or facilities for where the liquids, two facilities were utilized.		
Disposal Facility Name:	Disposal Facility Per	mit Number:
Disposal Facility Name:		mit Number:
Were the closed-loop system operations and associated activities performed on Yes (If yes, please demonstrate compliance to the items below)	n or in areas that will not b	e used for future service and operations?
Required for impacted areas which will not be used for future service and ope  Site Reclamation (Photo Documentation)  Soil Backfilling and Cover Installation  Re-vegetation Application Rates and Seeding Technique	rations:	
25.		
Operator Closure Certification:  I hereby certify that the information and attachments submitted with this closure belief. I also certify that the closure complies with all applicable closure requi	re report is true, accurate a rements and conditions spo	and complete to the best of my knowledge and ecified in the approved closure plan.
Name (Print):	Title:	
Signature:	Date:	

e-mail address:\_

Telephone:

#### **Bill Richardson**

Governor

Joanna Prukop Cabinet Secretary Reese Fullerton Deputy Cabinet Secretary Mark Fesmire
Division Director
Oil Conservation Division



## Conditions of approval for a drilling pit w/onsite disposal

Notify NMOCD District 2 office 48 hours prior to construction of pit.

Notify NMOCD District 2 office 48 hours prior to commencement of closure of pit.

Notify NMOCD District 2 office 48 hours prior to obtaining samples of pit contents.

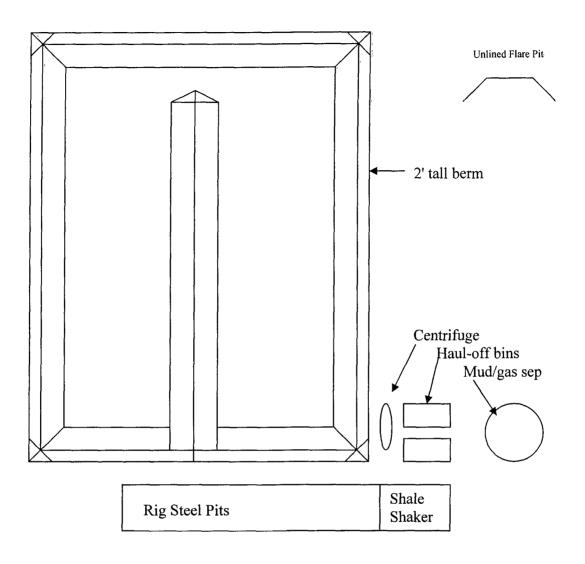
Sample analyses of pit contents are to be submitted to NMOCD and approval obtained prior to commencement of onsite disposal operations. In the event analytical requirements are not met, the alternative closure method will be required.

Notify NMOCD District 2 office 48 hours prior to obtaining samples of pit bottom where applicable.

Approval valid only if all conditions of 19.15.17 [NMAC] are met and adhered to.



## **Temporary Pit Design and Construction**



Pit Dimensions:

Peak Width: 100'. Floor Width: 76' Peak Length: 120' Floor Length: 96'

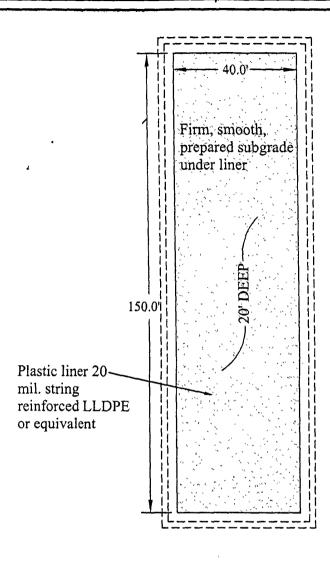
Floor is 6' below GL.

Perimeter berm is 2' above GL. All walls are built with 2:1 slope.

Pit is fenced on 3 sides with barbed wire before & during drilling operations. Fourth side will be installed after drilling operations are completed.

Pit is lined with 20 mil string reinforced LLDPE installed with 18" anchor trench.

Approximate volume including 2' freeboard: 16,000 bbl.



## Site Overhead View



Date: 07/22/2008

Scale: Not To Scale

Drawn By: SJA

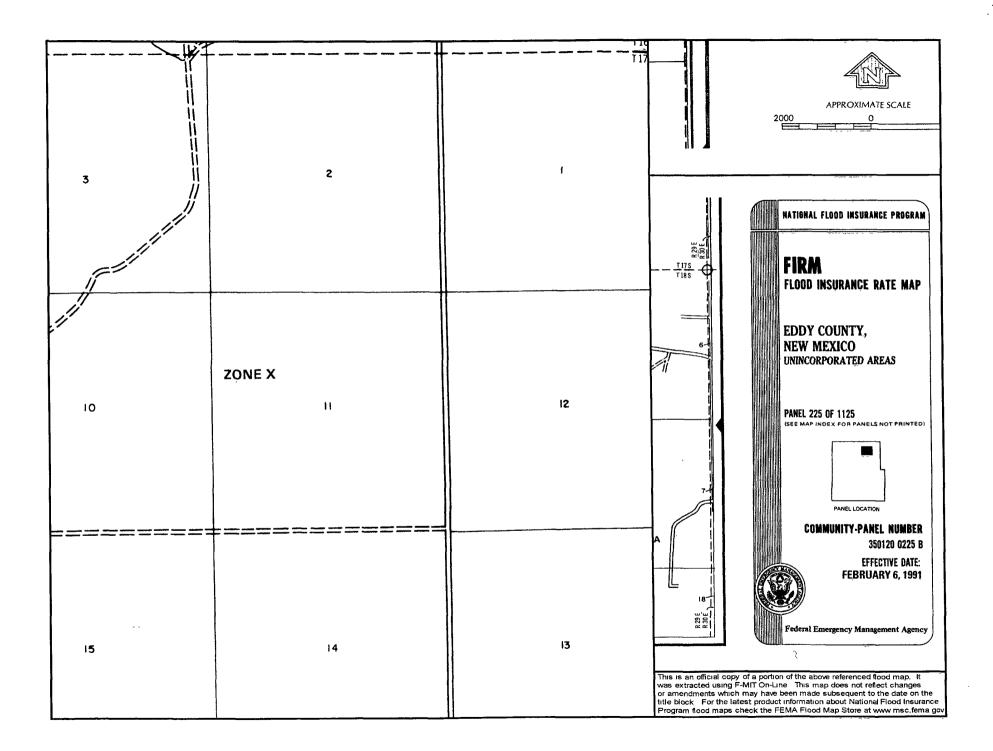
Mewbourne Oil Company
Bradley 6 Federal 1
Eddy County, New Mexico
Pit Liner Site Plain

### Temporary Pit Operating and Maintenance and Closure Plan

Temporary pit will be built in a single horse shoe as shown in the attached drawing. The pit will only be utilized for "fresh" water-based fluids. Brine water fluids will be hauled off location and disposed of in an approved facility. Drilling cuttings in the high chloride sections of the well will collect in haul-off bins and will be disposed at either Lea Land or CRI. Drilling cuttings in the low chloride sections of the well will collect in the temporary pit. The temporary pit will be dewatered. Drill cuttings will be solidified with native soil at a ratio not exceeding 3:1 and solids will be buried in place.

#### Contingency-

If the temporary pit does not meet the required specifications to bury on site, material will be disposed of at Lea Land Farm or CRI.



#### On-Site Closure Plan

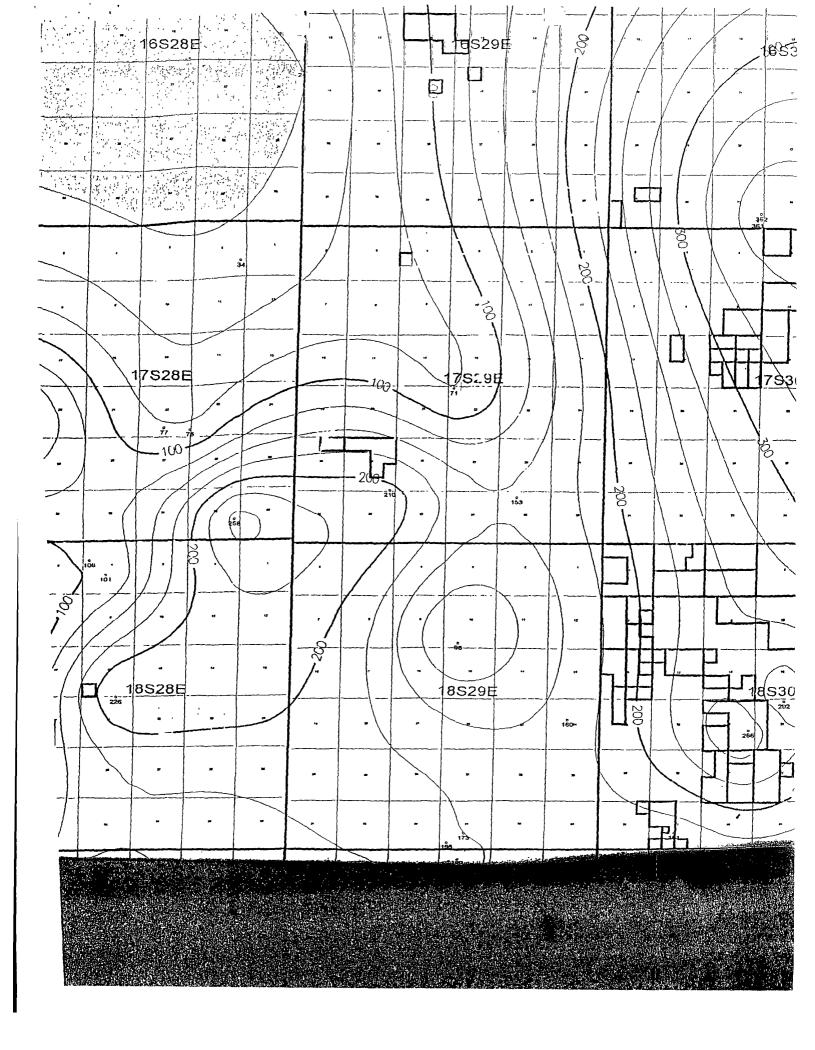
- Siting Criteria: See attachments.
- Proof of Surface Owner Notice: A BLM approved APD will serve as notice.
- Construction/Design Plan of Temporary Pit: See attachment.
- Sampling Plan: In compliance with Subsection F of 19.15.17.13 NMAC a five point composite sample will be taken from the pit contents.
- Soil Cover Design: In compliance with Subsection H of 19.15.17.13 NMAC, any portion of the pit area not used for future service or operations, three foot of native material will be placed over the pit area with one foot of top soil to ensure re-vegetation.
- Re-vegetation Plan: In compliance with Subsection I of 19.15.17.13 NMAC, any portion of the pit area not used for future service or operations will be re-seeded with a native vegetation of BLM's choice.
- Site Reclamation Plan: In compliance with Subsection I of 19.15.17.13 NMAC the impacted and disturbed area will be re-contoured to surrounding terrain.
- Marker: A marker will be placed over the buried material. The permanent marker will have all required information permanently listed on it.
- **Deed:** This well is on federal land and is not deeded.

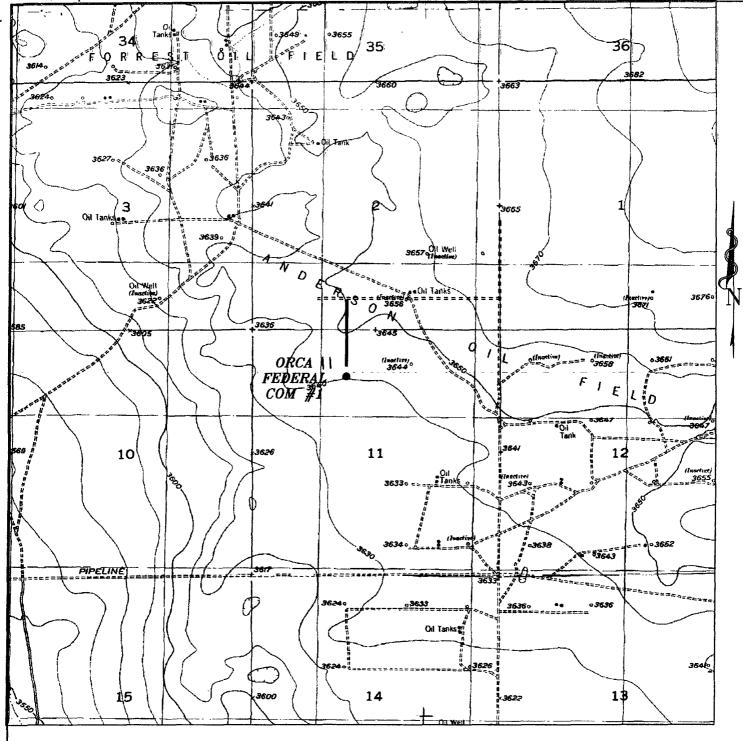
On the 3<sup>rd</sup> day of Febuaryry, 2009 Mewbourne Oil Co. visually inspected the Orca "11" Fed Com #1 location in Unit Letter C of Sec 11, T 17 S, R 29 E, of Eddy County, NM.

This is to certify that upon visual inspection of the above mentioned location there are no permanent residences, schools, hospitals, institutions or churches within 300 feet. The location is not within 500 feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, nor within 1000 horizontal feet of any other fresh water well or spring, nor within 500 feet of a wetland, nor within 300 feet of a continuously flowing water course, nor within 200 feet of any other significant watercourse or lakebed, sinkhole or playa lake (measured from the ordinary high-water mark).

Signature: Charles L. Martin

Date: 02/13/2009





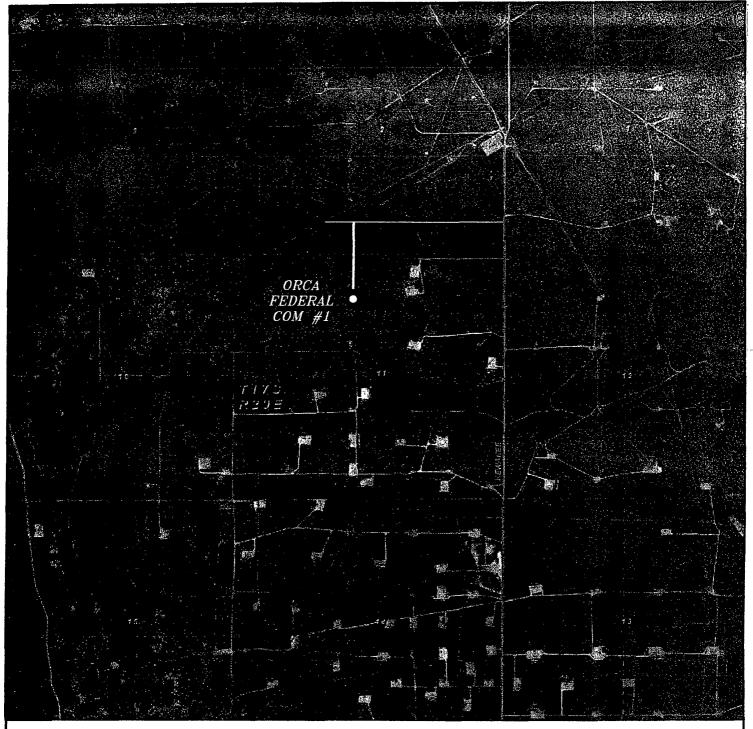
PROPOSED LEASE ROAD TO THE ORCA 11 Federal COM #1 Section 11, Township 17 South, Range 29 East, N.M.P.M., Eddy County, New Mexico.



P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241 (575) 393—7316 — Office (575) 392—2206 — Fax basinsurveys.com

W.O. Number:	21108 JMS	
Survey Date:	02-06-2009	
Scale: 1" = 2000'		
Date: 02-09-2009		

MEWBOURNE OIL CO.



ORCA FEDERAL COM #1 Located 990' FNL and 1980' FWL Section 11, Township 17 South, Range 29 East, N.M.P.M., Eddy County, New Mexico.



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(575) 392-2206 - Fax basinsurveys.com ----

W.O. Number:

Scale: 1" = 2000'

YELLOW TINT — USA LAND BLUE TINT — STATE LAND NATURAL COLOR — FEE LAND

21108 JMS

MEWBOURNE OIL CO.



