Form 50-3 (September 2001)

UNITED STATES

N.M. Oil Cons. DIV-Dist. 2 1301 W. Grand Avenue

Artesia, NM 88210 DEPARTMENT OF THE INTERIOR

FORM APPROVED OMB No. 1004-0136 Expires January 31, 2004

DEPARTMENT OF THE INC. BUREAU OF LAND MANAGE	7/	169)	5. Lease Serial No. NM-065680		
APPLICATION FOR PERMIT TO DRI	•	R		6. If Indian, Allottee	or Tribe Name	
la. Type of Work: DRILL REENTER		<u> </u>			eement, Name and No	o.
1b. Type of Well: Oil Well Gas Well Other	☐ Single Zone	Multi	ple Zone	8. Lease Name and W Geronimo 24 Feder		* <i>l</i>
2. Name of Operator				9. API Well No.	15-345	
Mewbourne Oil Company - 14744 3a. Address	3b. Phone No. (include	area code)		10 First and Pool or		<u> </u>
	505-393-5905	ui ca coacy		Undes Morrow	A 2	~~
4. Location of Well (Report location clearly and in accordance with an		RECEIV	EŪ 	11. Sec., T., R., M., or	Blk. and Survey or A	Area
At surface 1980' FSL & 1850' FWL Unit Letter K	y state requirements.	/ . npo 0. d.:	2005		•	
	•	DEC 2,1	(100)			
At proposed prod. zone	Q	OD:API		Sec 24-T18S-R31E 12. County or Parish	13. State	
14. Distance in miles and direction from nearest town or post office*9 1/2 miles south of Maljamar, NM				Eddy	NM	
15. Distance from proposed* location to nearest property or lease line, ft.	16. No. of Acres in lea	ase	17. Spacin	g Unit dedicated to this		
18. Distance from proposed location* to nearest well, drilling, completed, applied for on this lease ft	19. Proposed Depth		20. BLM/I	BIA Bond No. on file Nationwide		
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date	work will s	<u> </u>	23. Estimated duration	on	
3706' GL	ASAP			35		
	24. Attachments					
The following, completed in accordance with the requirements of Onshore	Oil and Gas Order No.	l, shall be att	ached to thi	s form:		
 Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest System L SUPO shall be filed with the appropriate Forest Service Office). 	4. Bon Iter 5. Ope: 6. Sucl	d to cover th m 20 above). rator certific	e operation ation. pecific info	s unless covered by an primation and/or plans a	· ·	•
25. Signature Frutti Glen	Name (Printed/I	Typed)			Date 11/14/05	
Title		·			-	
Hobbs Regulatory						
Approved by (Signature) Joe G. Lara	Name (Printed/)	Typed) Joe (Lar	' 9	DEC 1 9 20	005
Title ACTINGIELD MANAGER	Office	RLSBA		LD OFFICE		

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

APPROVAL FOR 1 YEAR

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*(Instructions on reverse)

Cashan Campaled Water New

Witness Surface Casing

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND ECIAL STIPULATIONS ATTACHED

DISTRICT I 1625 M. French Dr., Hobbs, NM 88240 DISTRICT II 811 South First, Artesia, NM 88210 State of New Mexico

Form C-102 Revised March 17, 1999

Revised March 17, 1999

Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410

2040 South Pacheco, Santa Fe, NM 87505

DISTRICT IV

OIL CONSERVATION DIVISION

2040 South Pacheco Santa Fe. New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 85300		Pool Name Undes Morrow	
Property Code	•	GERONIMO 24 FEDERAL COM		
OGRID No.	Oper	Klevation		
14744	MEWBOURNE	3706'		

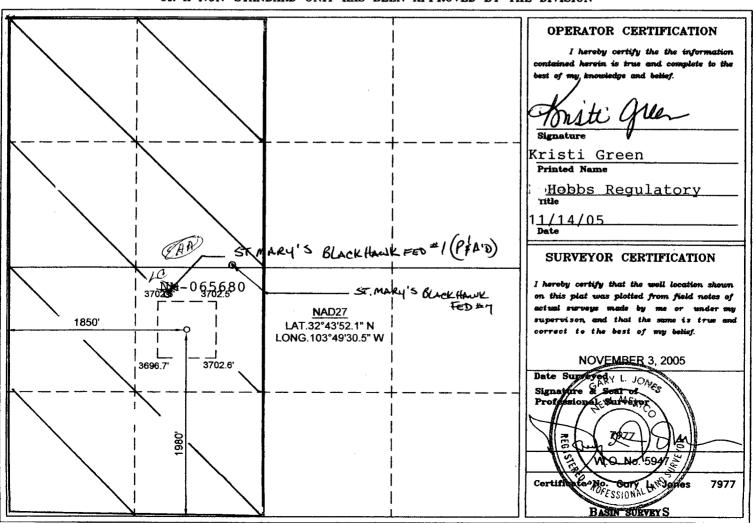
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
κ	24	18-S	31-E		1980	SOUTH	1850	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint or	Infill Co	nsolidation (Code Ore	der No.	<u> </u>			L

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



MULTI-POINT SURFACE USE AND OPERATIONS PLAN MEWBOURNE OIL COMPANY

Geronimo 24 Federal Com #1 1980' FSL & 1850' FWL Sec 24-T18S-R31E Eddy, New Mexico

This plan is submitted with Form 3160-3, Application for Permit to Drill, Covering the above described well. The purpose of this plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of the surface disturbance involved, and the procedures to be followed in restoring the surface so that a complete appraisal can be made of the environmental impact associated with the proposed operations.

1. Existing Roads:

- A. Exhibit #3 is a road map showing the location of the proposed well. Exhibit #3A is a topographic map showing the location of the proposed well and access road. Existing roads are highlighted in red and proposed roads are highlighted in yellow.
- B. Directions to location From Hobbs from the intersection of Hwy 529 and CR126. Turn south and continue approx 7 miles. Turn right on existing lease road. Go 1.4 miles and turn right. Go 4/10 mile and turn left. Continue south 0.2 miles thru old location to new location.

2. Proposed Access Road:

- A 300' of new road will be needed.
- B. The access to the location will be limited to 16' in width and will adequately drain runoff and control erosion as presently constructed.

3. Location of Existing Wells:

There are producing wells within the immediate vicinity of this well site shown on Exhibit 4.

4. Location of Existing and/or Proposed Facilities:

- A. There are no production facilities on this lease at the present time.
- B. In the event that the well is productive, production facilities will be located on the well pad.
- C. All production vessels left on location will be painted to conform with BLM painting stipulations within 180 days of installation.

5. Location and Type of Water Supply

The well will be drilled with a combination of fresh water and brine water based mud systems. The water will be obtained from commercial suppliers in the area and/or hauled to the location by transport trucks over existing and proposed roads as indicated in Exhibit #3.

6. Source of Construction Materials

All material required for construction of the drill pad and access roads will be obtained from private, state, or federal pits. The construction contractor will be solely responsible for securing construction materials required for this operation and paying any royalties that may be required on those materials.

7. Methods of Handling Waste Disposal:

- A. Drill cuttings not retained for evaluation purposed will be disposed of in the reserve pit.
- B. Drilling fluids will be allowed to evaporate in the reserve pit prior to closure.
- C. Water produced during operations will be disposed of in the reserve pit.
- D. If any liquid hydrocarbons are produced during operations, those liquids will be stored in suitable tanks until sold.
- E. Current regulations regarding the proper disposal of human waste will be followed.
- F. All trash, junk, and other waste materials will be stored in proper containers to prevent dispersal and will be removed to an appropriate facility within one week of cessation of drilling and completion activities.

8. Ancillary Facilities

There are no ancillary facilities within the immediate vicinity of the proposed well site.

9. Well Site Layout

- A diagram of the drill pad is shown in Exhibit #5. Dimensions of the pad, pits, and location of major rig components are shown.
- B. The reserve pit will be lined with a high quality plastic sheeting to prevent migration of fluids.
- C. The pad dimension of 400' X 250' has been staked and flagged.
- D. An archaeological survey has been conducted on the proposed access road and location pad.

10. Plans for Restoration of Surface

- A. Upon cessation of the proposed operations, if the well is abandoned, the location and road will be ripped and re-seeded. The reserve pit area, after allowing to dry will be leveled. The entire location will be restored to the original contour as much as reasonable possible. All trash, garbage, and pit lining will be hauled to appropriate disposal to assure the location is aesthetically pleasing as reasonable possible. All restoration work will be completed within 180 days of cessation of activities.
- B. The disturbed area will be restored by re-seeding during the proper growing season.
- C. Three sides of the reserve pit will be fenced prior to and during drilling operations. The reserve pit will be fenced on the fourth side after the drilling rig is removed to prevent the endangerment of livestock. The fence will remain in place until the pit area has been leveled and restored.

MULTI-POINT SURFACE USE AND OPERATIONS PLAN MEWBOURNE OIL COMPANY

Geronimo 24 Federal Com #1 Page 3

D. Upon cessation of the proposed operations, if the well is not abandoned, the reserve pit area will be restored as per BLM/OCD guidelines. Any additional caliche required for production facilities will be obtained from a source as described in Section 6.

E. Within 90 days of cessation of drilling and completion operations, all equipment not necessary for production operations will be removed. The location will be cleaned of all trash and junk to assure the well site is left as aesthetically pleasing as reasonably possible.

11. Surface Ownership:

The surface is owned by:

USA

12. Other Information:

A. Topography: Refer to the archaeological report for a detailed description of flora, fauna, soil characteristics, dwellings, and historical or cultural sites.

B. The primary use of the surface at the location is for grazing of livestock.

13. Operator's Representative:

A. Through APD approval, drilling, completion and production operations:

N.M. Young, District Manager Mewbourne Oil Company PO Box 5270 Hobbs, NM 88241 505-393-5905

14. Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by Mewbourne Oil Company, its contractors and subcontractors, in accordance with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Date:_____11/14/05______ Signature:_______

N.M. Young, District Manager Mewbourne Oil Company PO Box 5270 Hobbs, NM 88241 (505) 393-5905

<u>Drilling Program</u> Mewbourne Oil Company

Geronimo 24 Federal Com #1 1980' FSL & 1850' FWL Section 24-T18S-R31E Eddy County, New Mexico

1. The estimated top of geological markers are as follows:

Delaware	4780'
Bonespring	6663'
Wolfcamp	9832'
Strawn	10890'
Atoka	11210'
Morrow	11540'

2. Estimated depths of anticipated fresh water, oil, or gas:

Water

Below 200'

Hydrocarbons

All zones below Delaware

3. Pressure control equipment:

A 2000# working pressure annular BOP will be installed on the 13 %" surface casing. A 5000# WP Double Ram BOP and a 3000# WP Annular will be installed after running 9 %" casing. Pressure tests will be conducted prior to drilling out under all casing strings. BOP controls will be installed prior to drilling under surface casing and will remain in use until completion of drilling operations. BOP's will be inspected and operated daily to insure mechanical integrity and the inspection will be recorded on the daily drilling report.

Kelly cock and a sub equipped with a full opening valve sized to fit the drill pipe and collars will be available on the rig floor in the open position when the kelly is not in use.

4. Proposed casing and cementing program:

A. Casing Program:

Hole Size	Casing	Wt/Ft.	<u>Grade</u>	Depth 0.500'
17-1/2"	13-3/8"	48#	H40	0-500'
12-1/4"	9-5/8"	40#	N80/J55	0-4500'
8-3/4"	5-1/2"	17#	P110/N80	0-12,400'

Minimum casing design factors: Collapse 1.2, Burst 1.1, Tensile strength 2.0.

B. Cementing Program

- Surface Casing: 300 sacks Class C light cement containing ½#/sk cellophane flakes, 2% CaCl, 5#/sk gilsonite. 200 sks Class C cement containing 2% CaCl
- ii <u>Intermediate Casing:</u> 900 sacks 35:65 pozmix cement containing 6% gel, 5#/sack gilsonite. 400 sacks Class C cement containing 2% CaCl.
- iii. Production Casing: 600 sacks Class H cement containing fluid loss additive, friction reducer additive, compressive strength enhancer, and NaCl. Shallower productive zones may be protected by utilizing a multiple stage cementing tool in the production casing below potentially productive zones and cementing with a light cement slurry.

*Mewbourne Oil Company reserves the right to change cement designs as hole conditions may warrant.

Drilling Program Geronimo 24 Fed Com #1 Page 2

5. Mud Program:

Interval	Type System	Weight	<u>Viscosity</u>	Fluid Loss
0'-500'	FW spud mud	8.6-9.4	32-34	NA
500'-4500'	Brine water	10.0-10.2	28-30	NA
4500'-11200'	Cut brine water	8.8-9.2	28-30	NA
11200'-12400'	Cut brine water	9.2-9.8	32-42	8-12

(Note: Any Weight Above 8.6#/gallon would be to hold back Wolfcamp shale, rather than abnormal BHP.)

6. Evaluation Program:

Samples:

10' samples from intermediate casing to TD

Logging:

Compensated density and dual laterlog from intermediate casing

to TD

Coring:

As needed for evaluation

Drill Stem Tests:

As needed for evaluation

7. Downhole Conditions

Zones of abnormal pressure:

None anticipated

Zones of lost circulation:

Anticipated in surface and intermediate holes

Maximum bottom hole temperature:

180 degree F

Maximum bottom hole pressure:

9.0 lbs/gal gradient or less

8. Anticipated Starting Date:

Mewbourne Oil Company intends to drill this well as soon as possible after receiving approval with approximately 45 days involved in drilling operations and an additional 10 days involved in completion operations on the project.

Hydrogen Sulfide Drilling Operations Plan

Mewbourne Oil Company

Geronimo 24 Federal Com #1 1980' FSL & 1850' FWL Sec 24-T18S-R31E Eddy, New Mexico

1. General Requirements

Rule 118 does not apply to this well because MOC has researched this area and no high concentrations of H2S were found. MOC will have on location and working all H2S safety equipment before the Yates formation @ 2450' for purposes of safety and insurance requirements.

2. Hydrogen Sulfide Training

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will have received training from a qualified instructor in the following areas prior to entering the drilling pad area of the well:

- 1. The hazards and characteristics of hydrogen sulfide gas.
- 2. The proper use of personal protective equipment and life support systems.
- 3. The proper use of hydrogen sulfide detectors, alarms, warning systems, briefing areas, evacuation procedures.
- 4. The proper techniques for first aid and rescue operations.

Additionally, supervisory personnel will be trained in the following areas:

- The effects of hydrogen sulfide on metal components. If high tensile tubular systems are utilized, supervisory personnel will be trained in their special maintenance requirements.
- 2 Corrective action and shut in procedures, blowout prevention, and well control procedures while drilling a well.
- The contents of the Hydrogen Sulfide Drilling Operations Plan.

There will be an initial training session prior to encountering a know hydrogen sulfide source. The initial training session shall include a review of the site specific Hydrogen Sulfide Drilling Operations Plan.

3. Hydrogen Sulfide Safety Equipment and Systems

All hydrogen sulfide safety equipment and systems will be installed, tested, and operational prior to drilling below the intermediate casing.

1. Well Control Equipment

- A. Flare line with automatic igniter or continuous ignition source.
- B. Choke manifold with minimum of one adjustable choke.
- C. Blowout preventers equipped with blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit
- D. Auxiliary equipment including rotating head and annular type blowout preventer.

2. Protective Equipment for Essential Personnel

Thirty minute self contained work unit located at briefing area as indicated on wellsite diagram.

Hydrogen Sulfide Drilling Operations Plan Mewbourne Oil Company Geronimo 24 Federal Com #1 Page 2

3. Hydrogen Sulfide Protection and Monitoring Equipment

Two portable hydrogen sulfide monitors positioned on location for optimum coverage and detection. The units shall have audible sirens to notify personnel when hydrogen sulfide levels exceed 20 ppm.

4. Visual Warning Systems

- A. Wind direction indicators as indicated on the wellsite diagram.
- B. Caution signs shall be posted on roads providing access to location. Signs shall be painted a high visibility color with lettering of sufficient size to be readable at reasonable distances from potentially contaminated areas.

4. Mud Program

The mud program has been designed to minimize the amount of hydrogen sulfide entrained in the mud system. Proper mud weight, safe drilling practices, and the use of hydrogen sulfide scavengers will minimize hazards while drilling the well.

5. Metallurgy

All tubular systems, wellheads, blowout preventers, drilling spools, kill lines, choke manifolds, and valves shall be suitable for service in a hydrogen sulfide environment when chemically treated.

6. Communications

State & County Officials phone numbers are posted on rig floor and supervisors trailer. Communications in company vehicles and toolpushers are either two way radios or cellular phones.

7. Well Testing

Drill stem testing is not an anticipated requirement for evaluation of this well. A drill stem test is required, it will be conducted with a minimum number of personnel in the immediate vicinity. The test will be conducted during daylight hours only.

United States Department of the Interior Bureau of Land Management Roswell Field Office 2909 West Second Street Roswell, New Mexico 88201-1287

Statement Accepting Responsibility for Operations

Operator Name:

Mewbourne Oil Company

Street or Box:

P.O. Box 5270

City, State:

Hobbs, New Mexico

Zip Code:

88241

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted of the leased land or portion thereof, as described below. (EAH)

Lease Number:

Lease Number #NM-065680

Legal Description of Land:

Unit K, Section 24, T-18S, R-31E Eddy County, New Mexico.

Location @ 1980' FSL & 1850' FWL.

Formation (if applicable):

Bond Coverage:

\$150,000

BLM Bond File:

NM1693, Nationwide

Authorized Signature:

he: NM (Micky) Young Title: District Manager

Date: November 14, 2005

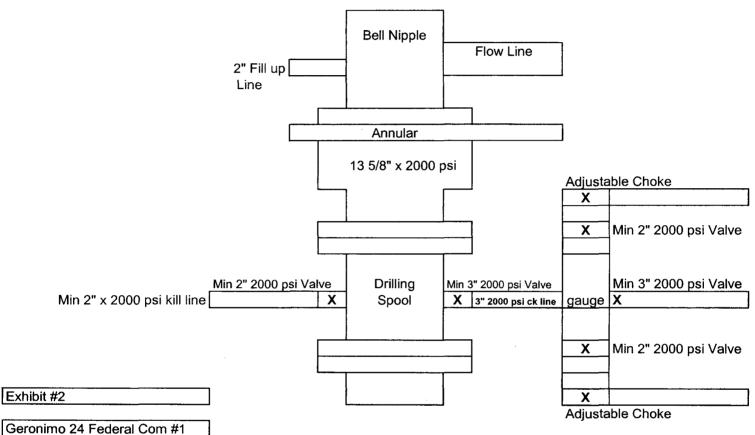
Notes Regarding Blowout Preventer Mewbourne Oil Company

Geronimo 24 Federal Com #1 1980' FSL & 1850' FWL Sec 24-T18S-R31E Eddy, New Mexico

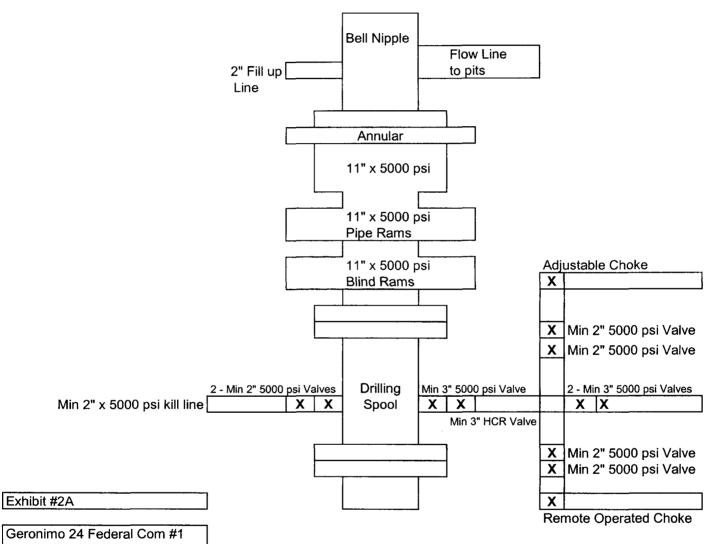
- I. Drilling nipple (bell nipple) to be constructed so that it can be removed without the use of a welder through the opening of the rotary table, with minimum internal diameter equal to blowout preventer bore.
- II. Blowout preventer and all fittings must be in good condition with a minimum 5000 psi working pressure.
- III. Safety valve must be available on the rig floor at all times with proper connections to install in the drill string. Valve must be full bore with minimum 5000 psi working pressure.
- IV. Equipment through which bit must pass shall be at least as large as internal diameter of the casing.
- V. A kelly cock shall be installed on the kelly at all times.

Blowout preventer closing equipment to include and accumulator of at least 40 gallon capacity, two independent sources of pressure on closing unit, and meet all other API specifications.

Mewbourne Oil Company BOP Scematic for 12 1/4" Hole



Geronimo 24 Federal Com #1 1980' FSL & 1850' FWL Sec 24-T18S-R31E Eddy, County New Mexico



Geronimo 24 Federal Com #1 1980' FSL & 1850' FWL Sec 24-T18S-R31E Eddy, County New Mexico

Exhibit #4 Status of Wells in Immediate Vicinity

Mewbourne Oil Company
Geronimo 24 Federal Com #1
1980' FSL & 1850' FWL
Sec 24-T18S-R31E
Eddy, New Mexico

Section 24-T18S-R31E

Operator:

St Mary Land & Exploration

Well Name:

Arco Federal #1

Unit letter:

E

Status:

Producing

Field:

Shugart Queen

Section 24-T18S-R31E

Operator:

St Mary Land & Exploration

Well Name:

Blackhawk Federal #2

Unit letter:

F

Status:

Producing

Field:

Shugart Yates Seven Rivers

Section 24-T18S-R31E

Operator:

St Mary Land & Exploration

Well Name:

Blackhawk Federal #3

Unit letter:

 \mathbf{L}

Status:

Producing

Field:

Shugart Yates Seven Rivers

CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Well Name & No.

Mewbourne Oil Company Geronimo 24 Federal Com #1

Location:

1980' FSL, 1850' FWL, Section 24, T. 18 S., R. 31 E., Eddy County, New Mexico

Lease:

LC-065680

I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822 for wells in Eddy County in sufficient time for a representative to witness:

A. Well spud

9/4 (52)

B. Cementing casing: 13-3/8 inch 8-5/8 inch 5-1/2 inch

C. BOP tests

- 2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
- 3. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15 day time frame.
- 4. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.
- 5. A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales.

II. CASING:

- 1. The <u>13-3/8</u> inch surface casing shall be set at <u>approximately 500 feet or 25 feet into the top of the Rustler anhydrite and cement circulated to the surface</u>. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.
- 2. The minimum required fill of cement behind the <u>9-5/8</u> inch intermediate casing is <u>to be sufficient to circulate to the surface</u>.
- 4. The minimum required fill of cement behind the <u>5-1/2</u> inch production casing is <u>to be sufficient to reach at</u> least 500 feet above the top of the uppermost hydrocarbon productive interval.

III. PRESSURE CONTROL:

- 1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the <u>13-3/8</u> inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.
- 2. Minimum working pressure of the blowout preventer and related equipment (BOPE) shall be **2000** psi.
- 3. Minimum working pressure of the blowout preventer and related equipment (BOPE) below the 9-5/8 inch intermediate casing shall be <u>5000</u> psi.
- 4. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.

- The tests shall be done by an independent service company.
- The results of the test shall be reported to the appropriate BLM office.
- Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.
- Testing must be done in a safe workman-like manner. Hard line connections shall be required.

IV. DRILLING MUD:

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the **Wolfcamp** formation, and shall be used until production casing is run and cemented. Monitoring equipment shall consist of the following:

- Recording pit level indicator to indicate volume gains and losses.
- Mud measuring device for accurately determining the mud volumes necessary to fill the hole during trips.
- Flow-sensor on the flow-line to warn of abnormal mud returns from the well.

11/21/05 acs