

N.M. Oil Cons. DIV-Dist. 2
1301 W. Grand Avenue
Artesia, NM 88210

Form 3160-3
(April 2004)



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

JUL 12 2007
OCD-ARTESIA

FORM APPROVED
OMB NO. 1004-0137
Expires: March 31, 2007

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM-28171
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator Yates Petroleum Corporation 25575		7. If Unit or CA Agreement, Name and No.
3a. Address 105 South Fourth Street, Artesia New Mexico 88210		8. Lease Name and Well No. Spear OA Federal Com #9 29701
3b. Phone No. (include area code) (505) 748-1471		9. API Well No. 30-005-63957
4. Location of well (Report location clearly and in accordance with any State requirements. *) At surface 1980' FSL and 1980' FWL, Unit K, NESW At proposed prod. zone same as above		10. Field and Pool, or Exploratory Undesignated Four Ranch; Pre-Permian
14. Distance in miles and direction from the nearest town or post office*		11. Sec, T, R, M., or Blk. And Survey or Area Section 4, T9S-R26E
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. unit line, if any) 660'	16. No. of acres in lease 1399.95	12. County or Parish Chaves County
17. Spacing Unit dedicated to this well 320 - W/2	13. State NM	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 2640'	19. Proposed Depth 6380'	20. BLM/ BIA Bond No on file NATIONWIDE BOND #NMB000434
21. Elevations (Show whether DF RT, GR, etc.) 3812' GL	22. Approximate date work will start* ASAP	23. Estimated duration 30 Days
24. Attachments		

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1 shall be attached to this form

- | | |
|---|--|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by existing bond on file (see item 20 above) |
| 2. A Drilling Plan | 5. Operator certification |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/ or plans as may be required by the authorized officer |

25. Signature 	Name (Printed/ Typed) Debbie L. Caffall	Date 6/7/2007
Title Regulatory Agent		

Approved By (Signature) /s/ Angel Mayes	Name (Printed/ Typed) /s/ Angel Mayes	Date JUL 10 2007
Title Assistant Field Manager, Lands And Minerals	Office ROSWELL FIELD OFFICE	APPROVED FOR 2 YEARS

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 cc operations thereon

Conditions of approval, if any, are attached.

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 page 2)

If earthen pits are used in association with the drilling of this well, an OCD pit permit must be obtained prior to pit construction.

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

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number		² Pool Code 76730		³ Pool Name Undesignated Four Ranch, Pre-Permian	
⁴ Property Code 29701		⁵ Property Name SPEAR OA FEDERAL COM			⁶ Well Number 9
⁷ OGRID No. 025575		⁸ Operator Name YATES PETROLEUM CORPORATION			⁹ Elevation 3812'

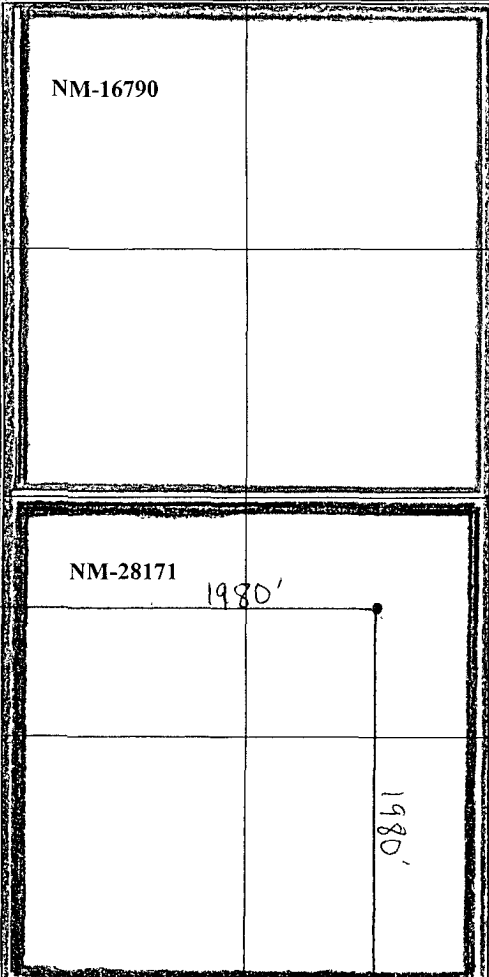
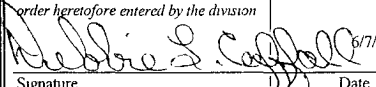
¹⁰ Surface Location

UL or lot no. K	Section 4	Township 9S	Range 26E	Lot 1dn	Feet from the 1980	North/South line SOUTH	Feet from the 1980	East/West line WEST	County CHAVES
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¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot 1dn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Dedicated Acres 320 W/2		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.			

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.

	¹⁷ OPERATOR CERTIFICATION <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division</i>  Signature _____ Date 6/7/07 Debbie L. Caffall Printed Name Regulatory Agent Title	
	¹⁸ SURVEYOR CERTIFICATION <i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief</i> Date of Survey _____ Signature and Seal of Professional Surveyor REFER TO ORIGINAL PLAT Certificate Number _____	

DISTRICT II

811 South First, Artesia, NM 88210

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV

2040 South Pacheco, Santa Fe, NM 87505

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name	
		Wildcat Precambrian	
Property Code	Property Name	Well Number	
	SPEAR "OA" FEDERAL COM.	9	
OGRID No.	Operator Name	Elevation	
025575	YATES PETROLEUM CORPORATION	3812	

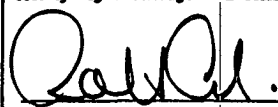

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	4	9S	26E		1980	SOUTH	1980	WEST	CHAVES

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	Consolidation Code	Order No.						
320									

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

<div style="border: 2px solid black; padding: 10px;"> <div style="border: 1px solid black; padding: 5px;"> NM-16790 </div> <div style="border: 1px solid black; padding: 5px;"> N.33°33'36.2" W.104°18'16.8" N.931242.8 E.508893.8 (NAD-27) </div> </div>	<div style="border: 1px solid black; padding: 5px;"> NM-28171 </div> <div style="border: 1px solid black; padding: 5px;"> <div style="position: relative; width: 100px; height: 100px; margin: 0 auto;"> <div style="position: absolute; top: 0; left: 0;">3805</div> <div style="position: absolute; top: 0; right: 0;">3817</div> <div style="position: absolute; bottom: 0; left: 0;">3804</div> <div style="position: absolute; bottom: 0; right: 0;">3817</div> <div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%);"> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 0 auto;"></div> </div> </div> </div>	<div style="border: 1px solid black; padding: 5px;"> 1980' </div> <div style="border: 1px solid black; padding: 5px;"> 1980' </div>	OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief. <div style="border: 1px solid black; padding: 5px;">  Signature Robert Asher Printed Name Regulatory Agent Title 6/9/2005 Date </div>
			SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. 3/09/2005 Date Surveyed <div style="border: 1px solid black; padding: 5px;">  Signature Professional Surveyor 3640 Certificate No. Herschel RLS 3640 GENERAL SURVEYING COMPANY </div>

0 330' 660' 990' 1650' 1980' 2310' 2310' 1980' 1650' 990' 660' 330' 0'

YATES PETROLEUM CORPORATION
Spear OA Federal Com. #9
 1980' FSL and 1980' FWL
 Section 4-T9S-R26E
 Chaves County, New Mexico

1. The estimated tops of geologic markers are as follows:

Queen	400'	Wolfcamp	4970'
Penrose	505'	WC B Zone	5065'
Grayburg	680'	Spear Zone	5320'
San Andres	915'	Cisco	5570'
Glorieta	1990'	Strawn	5695'
Yeso	2105'	Mississippian	5885'
Tubb	3550'	Siluro-Devonian	6000'
Abo	4290'	Precambrian	6230'
		TD	6380'

2. The estimated depths at which anticipated water, oil or gas formations are expected to be encountered:

Water: 150'-200'
 Oil or Gas: All potential zones.

3. Pressure Control Equipment: BOPE will be installed on the 8 5/8" casing and rated for 2000 BOP systems will be consistent with API RP 53. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. Blowout Preventor controls will be installed prior to drilling the surface plug and will remain in use until the well is completed or abandoned. Preventors will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. See Exhibit B.

Auxiliary Equipment:

- A. Auxiliary Equipment: Kelly cock, pit level indicators, flow sensor equipment and a sub with full opening valve to fit the drill pipe and collars will be available on the rig floor in the open position at all times for use when kelly is not in use.

4. THE PROPOSED CASING AND CEMENTING PROGRAM:

- A. Casing Program: (All New)

<u>Hole Size</u>	<u>Casing Size</u>	<u>Wt./Ft</u>	<u>Grade</u>	<u>Coupling</u>	<u>Interval</u>
12 1/4"	8 5/8"	24#	J-55	ST&C	0-1100'
7 7/8"	5 1/2"	15.5#	J-55	ST&C	0-6380'

1. Minimum Casing Design Factors: Collapse 1.125, Burst 1.0, Tensile Strength 1.8

A. CEMENTING PROGRAM:

Surface Casing: 450 sx Lite "C" (YLD 2.0 WT 12.5). Tail in with 200 sx "C" with 2% CaCL₂ (YLD 1.33 WT 15.6).

Production Casing: 650 sx Pecos Valley Lite (YLD 1.41 WT 13.0). TOC: See COA's.

5. MUD PROGRAM AND AUXILIARY EQUIPMENT:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0-1100'	FW GEL,Paper,LCM	8.6 - 9.5	32-34	N/C
1100'-4200'	Brine	10.0 -10.2	28	N/C
4200'-6380'	Starch/Salt Gel/4-6% KCL	9.3 -10.2	32-40	<6cc

Sufficient mud material(s) to maintain mud properties, control lost circulation and contain a blow out will be available at the well site during drilling operations. Mud will be checked hourly by rig personnel.

6. EVALUATION PROGRAM:

Samples: 10' samples out from under surface casing.

Logging: CNL/LDT/NGT TD-Surf Csg; with CNL/GR TD – Surf Csg;
DLL/MSFL TD-Surf Csg; BHC Sonic TD-Surf Csg
FMI TD to top of Wolfcamp.

Coring: None

DST's: None

7. ABNORMAL CONDITIONS, BOTTOM HOLE PRESSURE, AND POTENTIAL HAZARDS:

Anticipated BHP:

From: 0	TO: 1100'	Anticipated Max. BHP: 550 PSI
From: 1100'	TO: 6380'	Anticipated Max. BHP: 3250 PSI

Abnormal Pressures Anticipated: None

Lost Circulation Zones Anticipated: None.

H₂S Zones Anticipated: None Anticipated

Maximum Bottom Hole Temperature: 110 F

8. ANTICIPATED STARTING DATE:

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 25 days to drill the well with completion taking another 20 days.

MULTI-POINT SURFACE USE AND OPERATIONS PLAN
YATES PETROLEUM CORPORATION
Spear OA Federal Com. #9
1980' FSL and 1980' FWL
Section 4-T9S-R26E
Chaves County, 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 rehabilitating the surface after completion of the operations, so that a complete appraisal can be made of the environmental effect associated with the operations.

1. EXISTING ROADS:

Exhibit A is a portion of the BLM map showing the well and roads in the vicinity of the proposed location. The proposed well site is located approximately 20 miles northeast of Roswell, New Mexico and the access route to the location is indicated in green (existing) and red (new) on Exhibit A.

DIRECTIONS:

Drive northeast of Roswell on Highway 70 for approximately 14 miles to Magdalena Road (across from Acme schoolhouse). Turn right (south) on Magdalena and drive approximately 4.3 miles, existing lease road is on the left, turn left (northeast), continue northeast for approximately 1.1 miles, the road curves to the left (north), continue north for approximately 0.2 of a mile to an existing lease road on the left (west), continue on lease road for approximately 0.6 of a mile (passing the Engwall RL Federal #1 well) to the Engwall RL Federal #4 well location, the new road is staked on the northwest corner of the pad, follow staking for new road west approximately 0.3 of a mile to the southeast corner of the well location.

2. PLANNED ACCESS ROAD:

- A. The proposed new access will be approximately 1,362' in length from the point of origin (NW corner of the Engwall RL Federal #4 location) to the southeast corner of the drilling pad. Approximately 856' of the new access is off lease in the SE/4 of Section 4, T9S-R26E. The road will lie in a east to west direction.
- B. The new road will be 14 feet in width (driving surface) and will be adequately drained to control runoff and soil erosion.
- C. Existing roads will be maintained in the same or better condition.

3. LOCATION OF EXISTING WELL:

- A. There is drilling activity within a one-mile radius of the well site.
- B. Exhibit D shows existing wells within a one-mile radius of the proposed well site.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

- A. There are production facilities on this lease at the present time.
- B. In the event that the well is productive, the necessary production facilities will be installed on the drilling pad. If the well is productive oil, a gas or diesel self-contained unit will be used to provide the necessary power. No power will be required if the well is productive of gas.

5. LOCATION AND TYPE OF WATER SUPPLY:

- A. It is planned to drill the proposed well with a fresh water system. The water will be obtained from commercial sources and will be hauled to the location by truck over the existing and proposed roads shown in Exhibit A.

6. SOURCE OF CONSTRUCTION MATERIALS:

Dirt contractor will locate nearest pit and obtain any permits and materials needed for construction.

7. METHODS OF HANDLING WASTE DISPOSAL:

- A. Drill cuttings will be disposed of in the reserve pits.
- B. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry.
- C. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or separate disposal application will be submitted.
- D. Oil produced during operations will be stored in tanks until sold.
- E. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- F. All trash, junk, and other waste materials will be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not approved.

8. ANCILLARY FACILITIES: NONE

9. WELLSITE LAYOUT:

- A. Exhibit C shows the relative location and dimensions of the well pad, the reserve pits, the location of the drilling equipment, rig orientation and access road approach.
- B. Yates Petroleum Corporation is in full compliance with the OCD General Plan for Drilling Pits, approved on April 15, 2004. The reserve pits will be plastic lined (12 mil. thick with an estimated volume of 24,000 bbls).
- C. A 600' x 600' area has been staked and flagged.

10. PLANS FOR RESTORATION:

- A. After finishing drilling and/or completion operations, all equipment and other material not needed for further operations will be removed. The location will be cleaned of all trash and junk to leave the well site in as aesthetically pleasing a condition as possible.
- B. Unguarded pits, if any, containing fluids will be fenced until they have dried and been leveled.
- C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management will be complied with and will be accomplished as expeditiously as possible. All pits will be filled level after they have evaporated and dried.

11. SURFACE OWNERSHIP: Bureau of Land Management, Roswell, New Mexico.

12. OTHER INFORMATION:

- A. Topography: Refer to the existing archaeological report for a description of the topography, flora, fauna, soil characteristics, dwellings, historical and cultural sites.
- B. The primary surface use is for grazing.

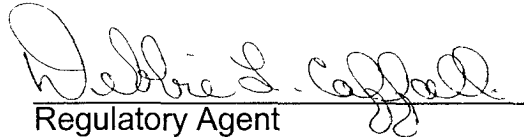
13. OPERATOR'S REPRESENTATIVE:

- | | |
|---|--|
| A. Through A.P.D. Approval:
Debbie L. Caffall, Regulatory Agent
Yates Petroleum Corporation
105 South Fourth Street
Artesia, New Mexico 88210
Phone (505) 748-1471 | B. Through Drilling, Completions & Prod.
Ray Stall, Operations Manager
Yates Petroleum Corporation
105 South Fourth Street
Artesia, New Mexico 88210
Phone (505) 748-1471 |
|---|--|

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 presently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Yates Petroleum Corporation and its contractors and subcontractors in conformity 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.

06/07/07


Regulatory Agent



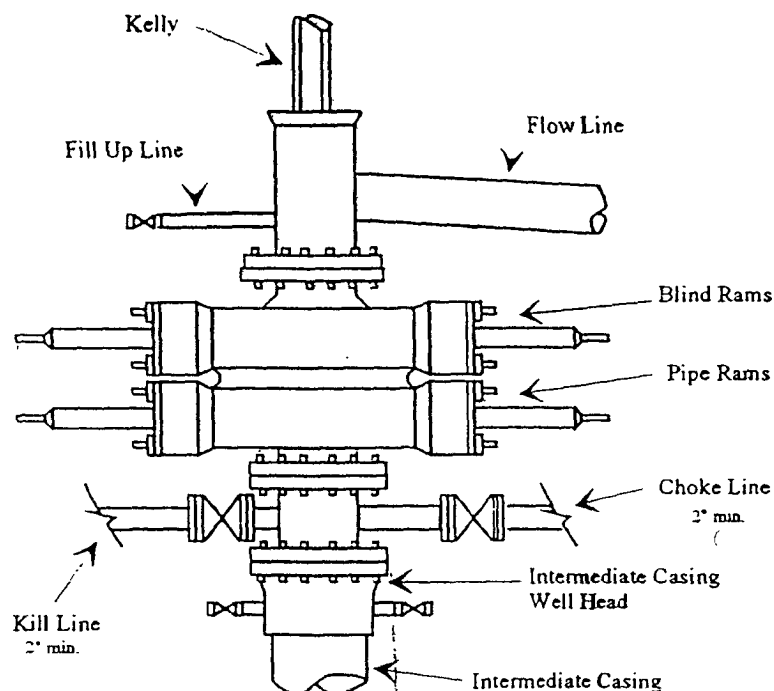
Yates Petroleum Corporation

BOP-2

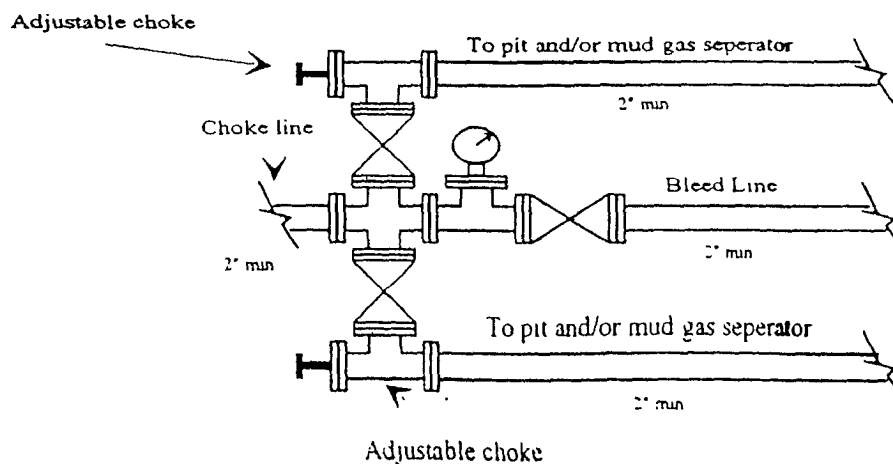
Typical 2,000 psi Pressure System Schematic

Double Ram Preventer Stack

Yates Petroleum Corporation
Spear OA Federal Com. #9
1980' FSL and 1980' FWL
Section 4, T9S-R26E
Chaves County, New Mexico
Exhibit "B"



Typical 2,000 psi choke manifold assembly with at least these minimum features



WELL DRILLING REQUIREMENTS

3 of 5 pages

III. DRILLING OPERATION REQUIREMENTS:

A. GENERAL DRILLING REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Roswell Field Office, 2909 West Second St., Roswell NM 88201, (505) 627-0272 in sufficient time for a representative to witness:

A. Spudding B. Cementing casing: 8 $\frac{1}{8}$ inch 5 $\frac{1}{2}$ 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.

B. CASING:

1. The 8 $\frac{1}{8}$ inch surface casing shall be set at 1100' and cement circulated to the surface. 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 5 $\frac{1}{2}$ inch intermediate casing is cement shall extend upward a minimum of 200 feet above the Glorieta formation.

C. 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 8 $\frac{1}{8}$ 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. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.

- A. The results of the test shall be reported to the appropriate BLM office.
- B. Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures.
- C. Use of drilling mud for testing is not permitted since it can mask small leaks.
- D. Testing must be done in a safe workman-like manner. Hard line connections shall be required.
- E. BOPE shall be tested before drilling into the Wolfcamp formation.

D. 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:

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