

3160-3  
(August 1999)

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

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

RECEIVED

SEP 28 2005

OCU-ARTESIA

0  
OMB No. 1004-0136  
Expires November 30, 2000

Lease Serial No.

NM-13979

5. If Indian, Allottee or Tribe Name

Not Applicable

7. If Unit or CA Agreement, Name and No.

Not Applicable

8. Lease Name and Well No.

Dekalb PG Federal Com. #2

9. API Well No.

30-005-63774

10. Field and Pool, or Exploratory

Wildcat; Grains 96542

11. Sec., T., R., M., or Blk, and Survey or Area

Section 25, T10S-R25E

12. County or Parish

Chaves County

13. State

NM

1a. Type of Work: ☒ DRILL ☐ REENTER

b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone

2. Name of Operator

Yates Petroleum Corporation

3A. Address 105 South Fourth Street  
Artesia, New Mexico 88210

3b. Phone No. (include area code)  
(505) 748-1471

4. Location of Well (Report location clearly and in accordance with any State requirements. \*)

At surface 1980' FNL and 660' FWL, SWNW  
At proposed prod. Zone same as above

14. Distance in miles and direction from nearest town or post office\*

Approximately ten (10) miles east of Roswell, NM

15. Distance from proposed\*  
location to nearest  
property or lease line, ft.  
(Also to nearest drig. unit line, if any)

660'

16. No. of Acres in lease

800.00

17. Spacing Unit dedicated to this well

320 acres

18. Distance from proposed location\*  
to nearest well, drilling, completed,  
applied for, on this lease, ft.

5940'

19. Proposed Depth

5,625'

20. BLM/BIA Bond No. on file

NM-2811

21. Elevations (Show whether DF, KDB, RT, GL, etc.)

3749' 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.
2. A Drilling Plan.
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.

4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be required by the authorized office.

25. Signature

Name (Printed/Typed)

Date

Robert Asher

9/14/2005

Title:

Regulatory Agent

Approved by (Signature)

/S/LARRY D. BRAY

Name (Printed/Typed)

/S/LARRY D. BRAY

Date

SEP 23 2005

Title

Assistant Field Manager,  
Lands And Minerals

Office

ROSWELL FIELD OFFICE

APPROVED FOR 1 YEAR

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.

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 reverse)

79.5

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS ATTACHED

NM 88210

Razas 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

☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 96542	Pool Name Wildcat
Property Code	Property Name DEKALB "PG" FEDERAL COM.	Well Number 2
OGRID No. 025575	Operator Name YATES PETROLEUM CORPORATION	Elevation 3749

## Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	25	10S	25E		1980	NORTH	660	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 320	Joint or Infill	Consolidation Code	Order No.
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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

	NM-13979		NM-15290
	N.33°25'05.8" W.104°21'42.3" N.879663.1 E.491489.9 (NAD-27)		

**OPERATOR CERTIFICATION**

I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.

Signature

Robert Asher

Printed Name

Regulatory Agent

Title

9/14/2005

Date

**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.

6/21/2005

Date Surveyed

Signature of Surveyor

Professional Surveyor

Certification No. Herschel Jones RLS 3640

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

State of New Mexico  
Energy Minerals and Natural Resources

Form C-144  
March 12, 2004

10666, NM 88240  
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

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

105 South Fourth Street, Artesia, NM 88210

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

Is pit or below-grade tank covered by a "general plan"? Yes ☒ CheckBox1

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

Operator: Yates Petroleum Corporation Telephone: 505-748-4376 e-mail address: boba@ypcnm.com  
Address: 104 South 4<sup>th</sup> Street, Artesia, New Mexico 88210  
Facility or well name: Dekalb PG Federal Com. #2 API #: 30-005-63774 U/L or Qtr/Qtr SWNW Sec 25 T 10S R 25E  
County: Chaves Latitude: N.33°25'05.8" Longitude: W.104°21'42.3" NAD: 1927 ☒ 1983 ☐ Surface Owner: Federal ☒ State ☐ Private ☐ Indian ☐

**Pit**

Type: Drilling ☒ Production ☐ Disposal ☐  
Workover ☐ Emergency ☐

Lined ☒ Unlined ☐

Liner type: Synthetic ☒ Thickness 12 mil Clay ☐ Volume  
         bbl

**Below-grade tank**

Volume:          bbl Type of fluid:         

Construction material:         

Double-walled, with leak detection? Yes ☐ If not, explain why not. **RECEIVED**

**JUL 06 2005**

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)

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)

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)

**Ranking Score (Total Points)**

**10**

**If 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:

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.

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: 7/5/2005


Printed Name/Title Robert Asher/Regulatory Agent

Signature 

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:

Date: **JUL 7 2005** Field Supervisor

Printed Name/Title          Signature 

**YATES PETROLEUM CORPORATION**

**Dekalb PG Federal Com. #2**

1980' FNL and 660' FWL

Section 25, T10S-R25E

Chaves County, New Mexico

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

Queen	190'	Wolfcamp	4785'
Penrose	275'	WC B Zone	4870'
Grayburg	465'	Spear Zone	5135'
San Andres	705'	Cisco	5360'
Glorieta	1785'	Strawn	5495'
Yeso	1920'	Precambrian	5525'
Tubb	3345'	TD	5625'
Abo	4100'		

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

Water: 150'-300'  
Oil or Gas: All potential formations.

3. Pressure Control Equipment: BOPE will be installed on the 11 3/4" 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>
14 3/4"	11 3/4"	42#	H-40	ST&C	0-650'
11"	*8 5/8"	24#	J-55	ST&C	0-1600'
7 7/8"	5 1/2"	15.5#	J-55	LT&C	0-5625'

\*8 5/8" casing will only be set if lost circulation is encountered.

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

B. CEMENTING PROGRAM:

Surface Casing: 275 sx Lite "C" (YLD 2.1 WT 12.6). Tail w/200 sx C with 2% CaCL<sub>2</sub> (YLD 1.32 WT 14.8).

Intermediate Casing: 400 sx Lite C (YLD 2.1 WT 12.6). Tail in w/200 sx Class C with 2% CaCL<sub>2</sub> (YLD 1.32 WT 14.8).

Production Casing: 500 sx Pecos Valley Lite (YLD 1.41 WT 13.0). TOC=3600'

5. MUD PROGRAM AND AUXILIARY EQUIPMENT:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0-650'	FW Gel/Paper/LCM	8.5 - 9.5	32-34	N/C
650'-1600'	Fresh Water	8.4	28	N/C
1600'-4050'	Brine	9.5 - 10.0	28	N/C
4050'-5625'	Starch/Salt Gel/4-6% KCL	9.6 - 9.8	45-55	<6/cc

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, surface casing to TD.

Logging: Platform Express: CNL/LDT/NGT TD-Surf csg; CNL/GR TD-Surf; DLL/MSFL TD - Surf csg; BHC Sonic TD-Surf csg;

Coring: None

DST's: None.

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

Anticipated BHP:

From: 0 TO: 650' Anticipated Max. BHP: 320 PSI

From: 650' TO: 1600' Anticipated Max. BHP: 700 PSI

From: 1600' TO: 5625' Anticipated Max. BHP: 2870 PSI

Abnormal Pressures Anticipated: None

Lost Circulation Zones Anticipated: None.

H<sub>2</sub>S Zones Anticipated: None Anticipated

Maximum Bottom Hole Temperature: 145 F

8. ANTICIPATED STARTING DATE:

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

## **MULTI-POINT SURFACE USE AND OPERATIONS PLAN**

### **Dekalb PG Federal Com. #2**

1980' FNL and 660' FWL

Section 25, T10S-R25E

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 10 miles east of Roswell, New Mexico and the access route to the location is indicated in red (new) and green (existing) on Exhibit A.

#### **DIRECTIONS:**

Drive east of Roswell on Hwy 380, approximately 6.5 miles to Arlene Road on the left side of the highway. Turn left on Arlene Road, go through cattle guard and continue north for approximately 0.9 mile to a old two track road (NE) turn right and continue northeast for approximately 1.0 miles, the new lease road is staked on the right (SE), turn right follow staking southeast for approximately 0.1 of a mile to the NE corner of the location.

#### **2. PLANNED ACCESS ROAD:**

- A. The proposed new access will be approximately 609' in length from the point of origin (old two-track road) to the northeast corner of the drilling pad. The road will lie in a northwest to southeast 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.



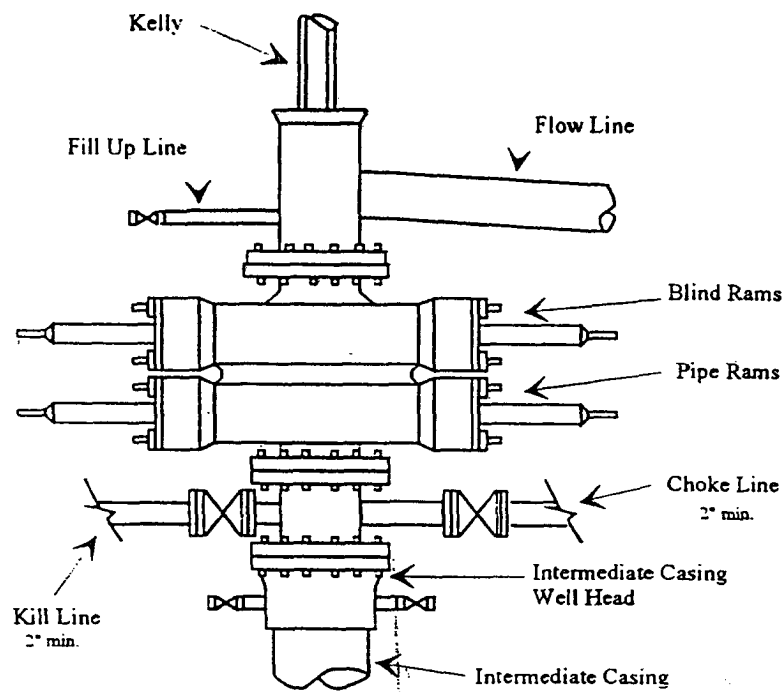
# Yates Petroleum Corporation

BOP-2

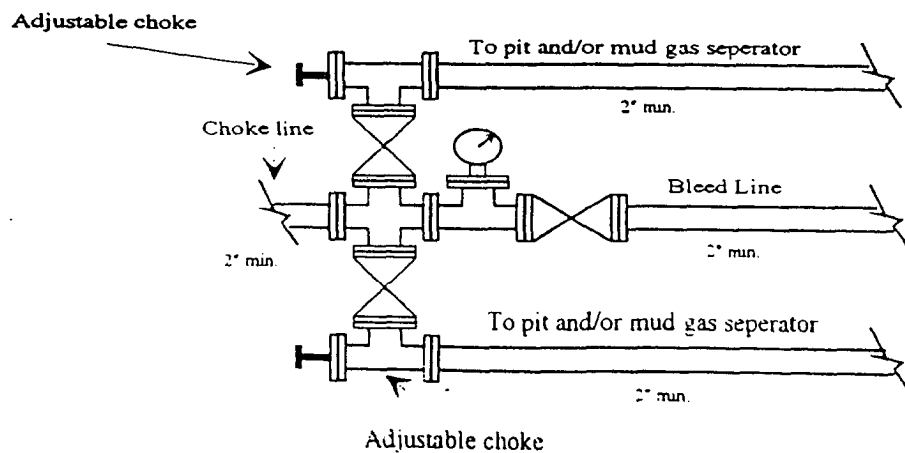
## Typical 2,000 psi Pressure System Schematic

### Double Ram Preventer Stack

Yates Petroleum Corporation  
DeKalb PG Federal Com. #2  
1980' FNL and 660' FWL  
Section 25, T10S-R25E  
Chaves County, New Mexico  
Exhibit "B"

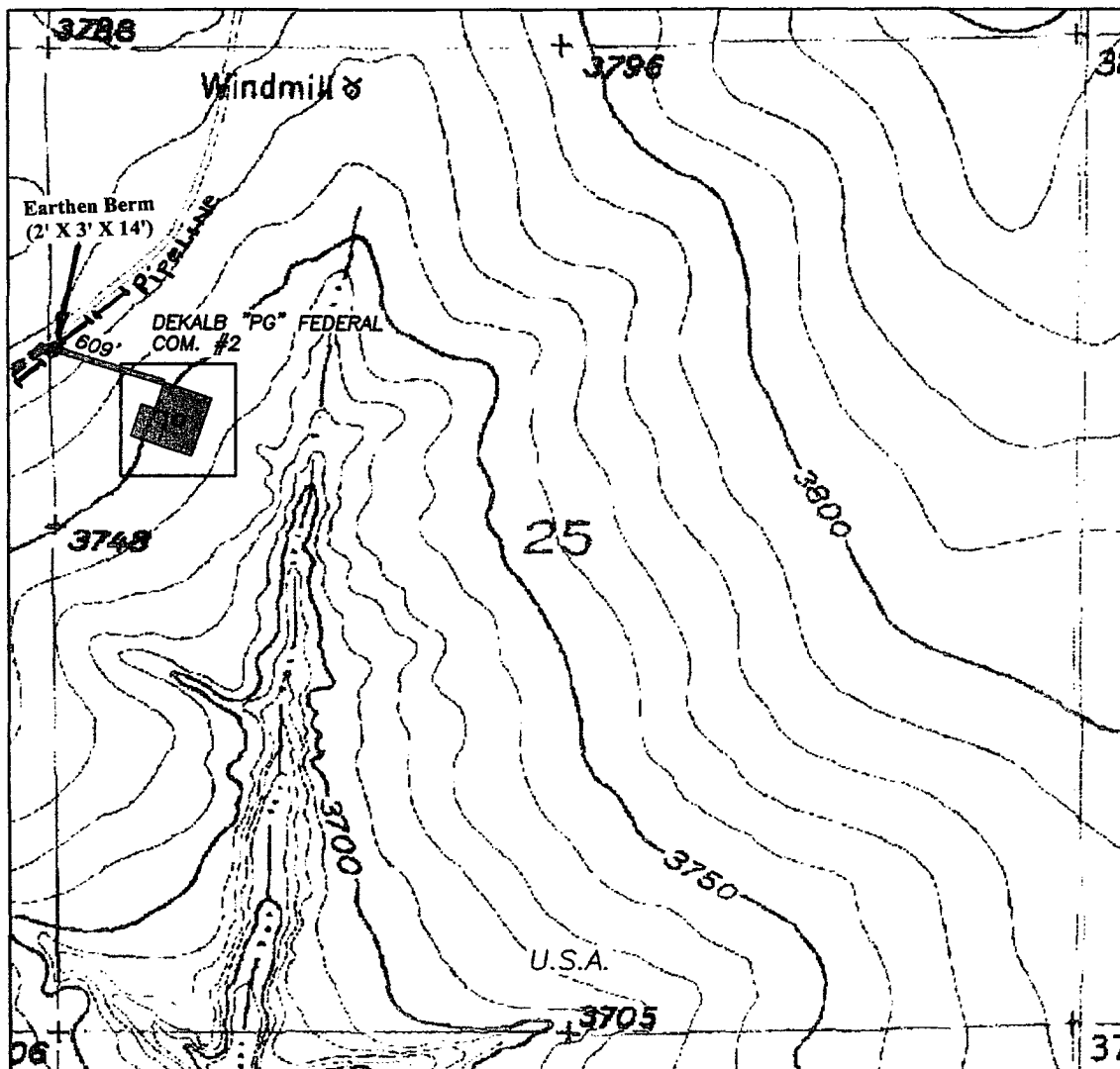


Typical 2,000 psi choke manifold assembly with at least these minimum features



# EXHIBIT A

OPERATORS NAME: Yates Petroleum Corporation LEASE NO.: NM-13979  
WELL NAME & NO: Dekalb "PG" Federal Com. #2  
QUARTER/QUARTER & FOOTAGE: SW $\frac{1}{4}$ NW $\frac{1}{4}$  - 1980' FNL & 660' FWL  
LOCATION: Section 25, T. 10 S., R. 25 E., NMPM  
COUNTY: Chaves County, New Mexico





**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: 11¼ inch 8¾ inch 5½ 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 11¼ inch surface casing shall be set at 650' 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 8¾ inch intermediate casing if run is with sufficient amount of cement bring it up at least 200 above shoe.

3. The minimum required fill of cement behind the 5½ inch production 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 11¼ 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. Use of drilling mud for testing is not permitted since it can mask small leaks.
- C. Testing must be done in a safe workman-like manner. Hard line connections shall be required.
- D. 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.