CCD-ARTESIA

1 orm 3160-3 (February 2005)

RESUBMITTAL



Split Estate Expire Lease Serial No UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

6 If Indian, Allottee or Tribe Name

DEC 17 2007 7 If Unit of CA Agreement, Name and No X DRILL REENTER Type of Work OCD-ARTESIA Lease Name and Well No Oil Well X Gas Well Single Zone Multiple Zone Type of Well Gumby BAG Federal #2 Name of Operator Yates Petroleum Corporation 025575 3a Address 3b Phone No (include area code) 10 Field and Pool, or Exploratory Wıldcat Mississippian 105 South Fourth Street, Artesia, NM 88210 505-748-1471 11 Sec, T, R, M, or Blk. And Survey or Area Location of well (Report location clearly and In accordance with any State requirements \*) At surface 660' FSL and 1100' FWL, Unit M Section 17, T19S-R23E At proposed prod zone Distance in miles and direction from the nearest town or post office\* 12 County or Parish 13 State Approximately 40 miles northwest of Carlsbad, NM NM 15 Distance from proposed\* 16 No of acres in lease 17 Spacing Unit dedicated to this well location to nearest property or lease line, ft 660' 1268.40 (Also to nearest drlg unit line, if any) 320 acres S/2 Distance from proposed location\* 19. Proposed Depth 20. BLM/ BIA Bond No on file to nearest well, drilling, completed, 3000 8050 NATIONWIDE BOND #NMB000434 applied for, on this lease, ft Elevations (Show whether DF, KDB, RT, GL, etc.) Aproximate date work will start\* Estimated duration 4045' GL **ASAP** 45 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 Well plat certified by a registered surveyor 4 Bond to cover the operations unless covered by existing bond on file(see A Drilling Plan item 20 above) A Surface Use Plan ( if the location is on National Forest System Lands, the Operator certification SUPO must be filed with the appropriate Forest Service Office) 6 Such other site specific information and/ or plans as may be required by the

Regulatory Agen

Name (Printed/ Typed)

Date

Cy Cowan

10/22/2007

Approved By (Signal James Stoval)

Typed James Stovall

DEC 1 1 2007

Tıtle

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 co operations thereon APPROVAL FOR TWO YEARS

Conditions of approval, if any, are attached

Fitle 18 U S C Section 1001 and Title 43 U.S C. Section 1212, make it a crime for any person knowingly and wilfully 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

25 Signature

Title

Previously Approved SEE ATTACHED FOR CONDITIONS OF APPROVAL

Roswell Controlled Water Basin

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS **ATTACHED** 

/District 1 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

<sup>1</sup> API Number

State of New Mexico

Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION 1220 South St. Francis Dr.

Santa Fe, NM 87505

<sup>2</sup> Pool Code

97338

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

3 Pool Name

Wildcat Mississippian

Certificate Number

<sup>4</sup> Property Code		<sup>5</sup> Property Name							<sup>6</sup> Well Number	
29641		GUMBY BAG FFDFRAL							2	
OGRID No		<sup>8</sup> Operator Name							" Elevation	
025575	5575			YA	YATES PETROLEUM CORPORATION				4045`	
					<sup>10</sup> Surface	Location				
UL or lot no	Section	Township	Range	Lot I		North/South line	Feet from the	East/Wes	st line County	
М	17	198	23E		660	SOUTH	1100	WEST	EDDY	
		1	11 R	ottom I	Hole Location I	f Different From	n Surface			
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12 Dedicated Acres	13 Joint o	<u> </u>	14.6	C , 115	Order No.					
320 S/2	Joint o	r Intill	<sup>14</sup> Consolidation	Code	Order No.					
320 8/2										
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							to the best of t	ny knowledge and beli	ef and that this organization either	
							owns a workar	ng intrest or unleased	mineral interest in the land including	
							II -		r has a right to drill this well at this	
							11		an owner of such a mineral or working	
									greement or a compulsory pooling	
							order hereto	bre enfered by the divis	<b>.</b>	
		ļ						14 U	0 VM 10/22/07	
							Signature		Date	
		İ					Cy Cowan	•		
							Printed Nam	e		
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							Regulatory Title	Agent		
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							211		ell location shown on this	
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							REFER TO	ORIGINAL PLAT	I	
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DISTRICT I TISES M. French Br., Robbs, NR 88848 DISTRICT II DISTRICT III 1000 Rio Brazon Rd., Aztoc. NM 87410

DISTRICT IV 2049 South Pacheco, Santa Fe, NM 57505

660, 990,

330

1650' 1980' 2310'

# State of New Mexico Energy, Ninerals and Pateral Resources Department

Form C-103 Revised March 17, 1900 hadraction on back Salenit to Appropriate District Office State Lease - 4 Confer

State Lease - 4 Copées Poe Lease - 3 Copées

### OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Pe, New Mexico 87504-2088

☐ AMENDED REPORT

API Nu	ата рез									
Property Co.			9606	Pool Code			Pool Name			
Property Co.				8			Wildcat Mississippian			
	Property Code			<b>હા</b>	Property Nex			Well No	Well Humber 2	
0 <b>CRID No.</b> 025575					Operator Nas			Eleval	ion	
			<del></del>	YAI	ES PETROLEUM C	ORPORATION		4045		
					Surface Loc	ation				
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990, 330,

### YATES PETROLEUM CORPORATION

Gumby "BAG" Federal #2 660' FSL & 1130' FWL Section 17, T19S-R23E Eddy County, New Mexico

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

Glorietta	2093'	Oil Pay	Strawn	7207'	Gas Pay
Upper Yeso	2205'	Oil Pay	Atoka	7565'	Gas Pay
Tubb	2850'	Oil Pay	Middle Morrow	7768'	Gas Pay
Lower Yeso	2987'	Oil Pay	Lower Morrow	7828'	Gas Pay
Abo	3507'	Oıl Pay	Base of Morrow	7883'	Gas Pay
Wolfcamp	4721'	Gas Pay	TD	8050'	Gas Pay
Cisco	6007'	Gas Pav			·

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

Water:

250' - 350'

Oil or Gas: All potential zones.

3. Pressure Control Equipment: BOPE will be installed on the 13 3/8" casing and rated for 3000 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:

- 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)

Hole Size	Casing Size	Wt./Ft	<u>Grade</u>	Coupling	<u>Interval</u>	<u>Length</u>
17 1/2	13 3/8"	48#	H-40	ST&C	0-350'	350'
12 1/4"	9 5/8"	36#	J-55	ST&C	0-2150'	2150'
8 3/4"	5 1/2"	17#	J-55	LT&C	0-100'	100'
8 3/4"	5 1/2"	15.5#	J-55	LT&C	100-6800'	6700'
8 3/4"	5 1/2"	17#	L-80	LT&C	6800'-8050'	-2850'/250'

7" casing may be set at 7300' if lost circulation in encountered.

Yates Petroleum Corporation requests a variance to install a rotating head on the surface casing strings when intermediate casing will be set. If a BOP system is required then we wish to install a 2M system and receive a varience to test the system to 1000# using the rig pumps. The test will be held for 30 minutes on each system component. Components to be tested include pipe rams, blind rams, and annular preventer.

Minimum Casing Design Factors: Collapse 1.125, Burst 1.0, Joint Strength 1.8

#### Gumby "BAG" Federal #2 Page 2

B. Cementing Program:

Surface Casing: 200 sx Class C (YLD 1.52 WT 14 6). Tail in with 400 sx Class C (YLD 1.34 WT 14.8) Surface.

Intermediate Casing. 700 sx Lite (YLD 2.0 WT 12.5) Tail in with 200 sx "C" (YLD 1.33 WT 14.8) Surface

Production Casing TOC 1000', 700 sx Lite (YLD 2 0 WT 12 5) Tail in with 1200 sx Class C (YLD 1 60 WT 1 32). TOC 1000'

#### 5. MUD PROGRAM AND AUXILIARY EQUIPMENT:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0-350'	FW/Air Mist	8.4	28	N/C
350'-2150'	FW	8.4	28	N/C
2150'-3450'	Cut Brine	8.6-9.2	28	N/C
3450'-7200'	Cut Brine/6%KCL	9.2-9.8	28	N/C
7200'-TD	Salt Gel/Starch	9.6-9.9	32-38	<12cc

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 from intermediate casing.

Logging: Platform Express/HALS/Sonic, Possible FMI.

Coring: Rotary sidewall cores

DST's: As warranted.

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

Anticipated BHP:

TO: 350' Anticipated Max. BHP: **PSI** From: 175 350' 2150' Anticipated Max. BHP: 950 **PSI** From: TO: Anticipated Max. BHP: From: 2150' TO: 8050' 4150 **PSI** 

Abnormal Pressures Anticipated: None

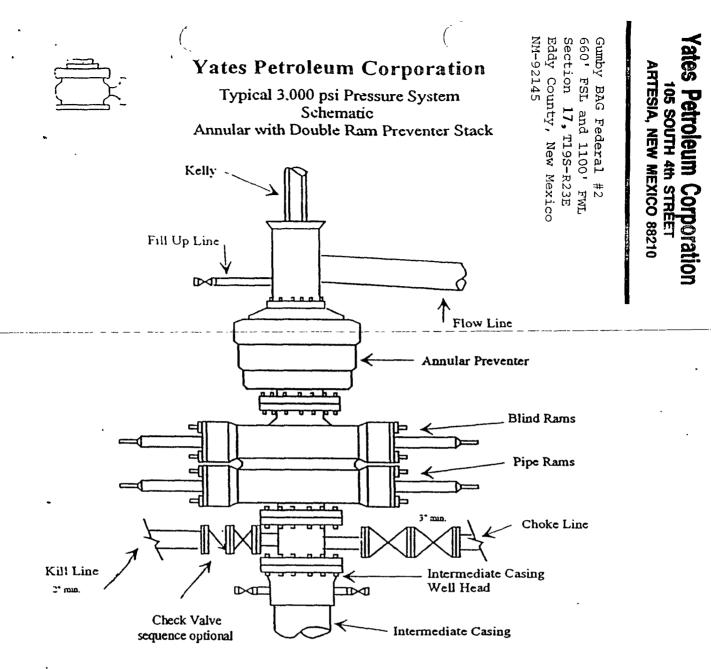
Lost Circulation Zones Anticipated: Possible in surface and intermediate holes.

H2S Zones Anticipated: Possible Canyon

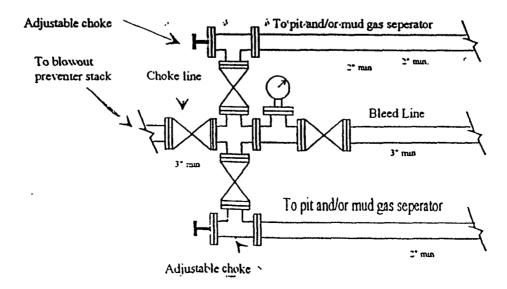
Maximum Bottom Hole Temperature: 153 F

#### 8. ANTICIPATED STARTING DATE:

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 30 days to drill the well with completion taking another 15 days.



Typical 3,000 psi choke manifold assembly with at least these minimum features



# **Yates Petroleum Corporation**

105 S. Fourth Street Artesia, NM 88210

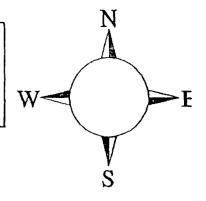
# Hydrogen Sulfide (H<sub>2</sub>S) Contingency Plan

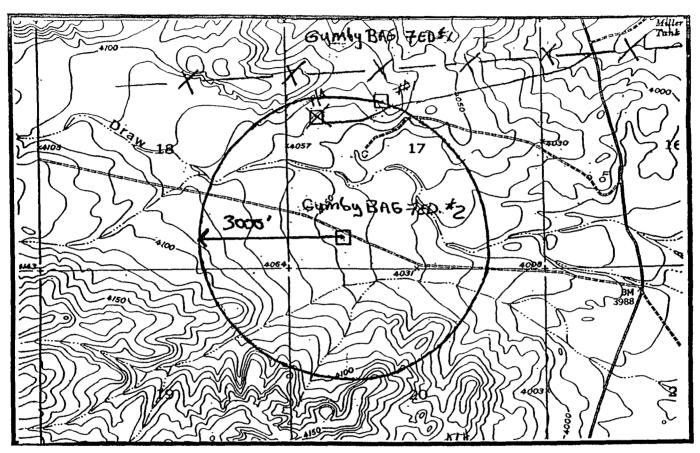
For

Gumby BAG Federal #2 660' FSL, 1100' FWL Sec-17, T-19S, R-23E Eddy County NM

### Gumoy BAG Federal #2 Location

This is an open drilling site. H<sub>2</sub>S monitoring equipment and emergency response equipment will be used within 500' of zones known to contain H<sub>2</sub>S, including warning signs, wind indicators and H<sub>2</sub>S monitor.





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# Yates Petroleum Corporation Phone Numbers

YPC Office	(505) 748-1471
Pinson McWhorter/Operations Manager	
Darrel Atkins/Production Manager	` ,
Ron Beasley/Prod Superintendent	
Al Springer/Drilling	` ,
Paul Hanes/Prod. Foreman/Roswell	` /
Jim Krogman/Drilling Superintendent	
Artesia Answering Service	
(During non-office hours)	(2.27), 22
Agency Call List	
Eddy County (505)	
Artesia	
State Police.	746-2703
City Police	
Sheriff's Office	
Ambulance	
Fire Department	746-2701
LEPC (Local Emergency Planning Committee)	
NMOCD	748-1283
Carlsbad	
State Police	
City Police	
Sheriff's Office	
Ambulance	
Fire Department	
LEPC (Local Emergency Planning Committee)	
US Bureau of Land Management	887-6544
New Mexico Emergency Response Commission (Santa Fe) 24 HR	
National Emergency Response Center (Washington, DC)	(800) 424-8802
reactional Emergency Response Contor (washington, De)	(000) 121 0002
Other	
Boots & Coots IWC1-800-256-9688 or (281) 931-8884 Cudd Pressure Control(915) 699-0139 or (915) 563-3356 Halliburton(505) 746-2757 B. J. Services(505) 746-3569	
Flight For Life -4000 24th St, Lubbock, TX	(806) 747-8923 (505) 842-4433

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

Yates Petroleum Corporation Gumby "BAG" Federal #2 660' FSL & 11/0' FWL Section 17, T19S-R23E Eddy 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

#### 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 40 miles northwest of Carlsbad, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

#### **DIRECTIONS:**

Go south of Artesia on Highway 285 to Rocking R Red Road (CR-21). Turn west on Rocking R Red Road and go approximately 18 miles to Armstrong Road (CR-12). Turn south on Armstrong Road and go approx. 2.5 miles to a cattleguard on Armstrong Road. Turn right on north side of cattleguard on existing two track road. Follow two track west for approx. 1.1 miles. The new road will start here going southwest.

#### PLANNED ACCESS ROAD

The new access will be approximately 200 feet in length from the point of origin to the southeast corner of the well pad.

#### 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:

The dirt contractor will locate closest pit and will obtain any permits and materials needed for construction.

## Gumby "BAG" Federal #2 Page 2

- 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. The reserve pits will be plastic lined.
    - C. A 400' x 400' 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: Please be advised that Yates Petroleum Corporation has made a surface damage agreement with the Frank Runyan Trust, which represents the Private Surface Owners on whose private land the captioned well is located. 1-505-627-7329- Wells Fargo Bank Trustee for Ranch pur Cy Corvention 24-07 Drivate for Ranch

#### 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.

# CERTIFICATION YATES PETROLEUM CORPORATION Gumby BAG Federal #2

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and federal laws applicable to this operation, that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Executed this	22th	day of	October				
Printed Name	Øyc	owan					
Signature	Cy	Gra					
Position Title	Regulat	ory Agent		ANNO DE AFFERDE STREET, LE CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE L			
Address 105 So	Address 105 South Fourth Street, Artesia, NM 88210						
Telephone 505	Telephone 505-748-4372						
Field Representative (if not above signatory) Jim Krogman							
Address (if different from above) Same							
Telephone (if different from above) 505-748-4215							
E-mail (optional) cy@ypcnm.com							

#### VII. DRILLING

#### A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 2 hours in advance for a representative to witness:

- a. Spudding well
- b. Setting and/or Cementing of all casing strings
- c. BOPE tests

### **Eddy County**

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822

- 1. A Hydrogen Sulfide (H2S) Drilling Plan should be activated 500 feet prior to drilling into the Canyon formation. Please report any measured amounts to the BLM.
- 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. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

#### B. CASING

- 1. The 13-3/8 inch surface casing shall be set at approximately 350 feet and cemented to the surface. Fresh water/air mist approved, but not air drilling.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
  - b. Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement).

- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial action will be done prior to drilling out that string.

#### Medium cave/karst.

Possible lost circulation in the San Andres, Glorietta, and Wolfcamp formations. Possible high pressure gas bursts in the Wolfcamp and over pressure in the Pennsylvanian section.

- 2. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:
  - Cement to surface. If cement does not circulate see B.1.a-d above.

If a 7" casing string is required, submit sundry with casing and cement details. Approved sundry must be at rig prior to setting casing.

- 3. The minimum required fill of cement behind the 5-1/2 inch production casing is:
  - Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification.
- 4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

#### C. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
- 2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 2000 (2M) psi.
- 3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 9-5/8" intermediate casing shoe shall be 3000 (3M) psi.
- 4. The appropriate BLM office shall be notified a minimum of 2 hours in advance for a representative to witness the tests.

- a. The tests shall be done by an independent service company.
- b. The results of the test shall be reported to the appropriate BLM office.
- c. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- d. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.
- e. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.
- f. A variance to test the surface casing and BOP/BOPE to the reduced pressure of 1000 psi with the rig pumps is approved.

#### 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.

#### E. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

Engineer on call phone (after hours): Carlsbad: (575) 706-2779

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