Form 3160-3 (September 2006)

UNITED STATES

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

DEPARTMENT OF THE IN	ĮŽERIO I)	5. Lease Serial No.	
BUREAU OF LAND MANAC				NM-7752 6. If Indian, Allottee	or Tribe Name
APPLICATION FOR PERMIT TO DE	1,5.7			o. Il Indian, Anottee	or tribe ivaline
la. Type of Work: DRILL REENTE	R (5.55)	402122334		7. If Unit or CA Agre	ement, Name and No.
1b. Type of Well: Oil Well Gas Well Other		Single Zone	ple Zone	8. Lease Name and We Six-Pack Federal Co	2 - 2 2 -
2. Name of Operator				9. API Well No.	26 12 1
Marbob Energy Corporation 14049	lai Di	N 6 1 1		30-015-	
3a. Address	ı	No. (include area code)	Un	10. Field and Pool, or Morrow	
P.O. Box 227, Artestia, NM 88211-0227 4. Location of Well (Report location clearly and in accordance with a	505-748		76437		Blk. and Survey or Area
At surface 1980' FNL & 1980' FWL	iny State re	l d			
	111	<i>()</i>			_
At proposed prod. zone				Sec. 6, T-17S R-301	13. State
14. Distance in miles and direction from nearest town or post office*				Eddy County	NM
15. Distance from proposed* location to nearest property or lease line, ft.	16. No. 6	of Acres in lease	17. Spacin	g Unit dedicated to this v	
(Also to nearest drig. unit line, if any)			320		
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Prop	osed Depth	20. BLM/E	BIA Bond No. on file	
	11,200'		NM-2056	100 B # 11 #	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3685'	1	roximate date work will st 27, 2006	tart*	23. Estimated duration 45 Days	n
	1. ·	ttachments	·	140 Days	
The following, completed in accordance with the requirements of Onsho			ached to this	s form	
 Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office). 		4. Bond to cover th Item 20 above). 5. Operator certification	e operations ation. pecific info	s unless covered by an	existing bond on file (see
25. Signature MM T DNHMA	Na	ame (Printed Typed)			Date
- Turus 1. Duna	Na	ncy T. Bratcher			7/27/06
Title (
Approved by (Signature)s/ Tony J. Herrell	N	ame (Printed Typed) /S/ Tony	I Hon		Date AUG 2 9 2006
FIELD MANAGER	Ot	er		IELD OFFIC	
Application approval does not warrant or certify that the applicant holds operations thereon. Conditions of approval, if any, are attached.	legal or equ	•	-	lease which would entitl	• •
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make i States any false, fictitious or fraudulent statements or representations as	t a crime fo to any matt	or any person knowingly ar er within its jurisdiction.	nd willfully	to make to any departme	nt or agency of the United
*(Instructions on reverse)					
•					

APPROVAL SUBJECT TO General requirements and special stipulations ATTACHED

Roswell Controlled Water Basin

Witness Surface Casing

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 1625 N. FRENCH DR., HOBBS, NM 88240

State of New Mexico

Energy, Minerals and Natural Resources Department

DISTRICT II 1301 W. GRAND AVENUE, ARTESIA, NM 68210 OIL CONSERVATION DIVISION 1220 SOUTH ST. FRANCIS DR.

Form C-102
Revised Cropes 12, 2905
Submit to Appropriate District Office
State Lease - 4 Copies
Rev Lease - 3 Copies

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410	Santa Fe, New Mexico 87505
DISTRICT IV	WELL LOCATION AND ACREAGE DEDICATION PLAT

	1220 S. ST. FRANCIS DR., SANTA FE, NM 87505	WELL LOCATION AND	ACREAGE DEDICATION	PLA1 C'EZAMENDED RÉPORT
1	API Number	Pool Code		Pool Name
		97149	Heushaw;	T-MORROW 5 - LT hung ST
	Property Code	Prop	Well Number	
		SIX-PAC	CK FEDERAL	. 1
	OGRID No.	Oper	ator Name	Elevation
	14049	MARBOB ENER	GY CORPORATION	3685'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	6	17-S	30-E		1980	NORTH	1980	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 o	r Infill	Consolidation (Code Or	der No.	· · · · · · · · · · · · · · · · · · ·			
320									

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT WAS BEEN APPROVED BY THE DIVISION ~ŁOT^{"Ľ}3 COT OPERATOR CERTIFICATION I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. 36.82 AC 39.78 AC 39.63 AC 39.48 AC LOT 5 GEODETIC COORDINATES 3686.2 3687.9 NAD 27 NME 7/28/06 Signature Y=678628.4 N 600, 100, Nancy T. Bratcher 1980 X=598454.2 E Printed Name 600 LAT.=32.865221° N 3681.6 3682.4 LONG. = 104.012687° W 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. JULY 25, 2006 Date Surveyed LA 37.17 AC Signature & Seal of LOT 7 Professional Surveyor 06.11Certificate, No. GARY EIDSON Minimum PROFESSION RONALD EDSON 37.31 AC

MARBOB ENERGY CORPORATION DRILLING AND OPERATIONS PROGRAM

Six-Pack Federal Com #1 1980' FNL & 1980' FWL, Unit F Section 6, T17S, R30E Eddy County, New Mexico

In conjunction with Form 3160-3, Application for Permit to Drill subject well, Marbob Energy Corporation submits the following ten items of pertinent information in accordance with BLM requirements.

- 1. The geological surface formation is Permian.
- 2. The estimated tops of geologic markers are as follows:

Queen	2000	Wolfcamp	7450
San Andres	2750	Cisco	8800
Glorieta	4200	Strawn	10000
Tubb	5600	Atoka	10250
Abo	6300	Morrow	10750
		TD	11200

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

San Andres	2700'	Oil
Glorieta	4000'	Oil
Strawn	9900'	Gas
Morrow	10750′	Gas

No other formations are expected to give up oil, gas, or fresh water in measurable quantities. The surface fresh water sands will be protected by setting 13 3/8" casing at 400' and circulating cement back to surface. Any shallower zones above TD which contain commercial quantities of oil and/or gas will have cement circulated across them by inserting a float shoe joint into the 13 3/8 production casing which will be run at TD.

4. Proposed Casing Program:

Hole Size	Interval	OD	Wt	Grade	
		Casing			
17 1/2"	400	13 3/8"	48#	H-40 STC	_
12 ¼"	2700	9 5/8"	36#	J-55 STC	
8 3/4"	11200	5 ½"	17#	P-110 STC	

Proposed Cement Program:

13 3/8" Surface Casing:

Cement w/ 400 sx Class C. Circulate to surface.

9 5/8" Intermediate Casing: Cement w/ 750 sx Class C. Circulate to surface.

5 1/2" Production Casing: Cemented sufficient to cover 200' above all oil & gas

horizons.

5. Pressure Control Equipment:

See Exhibit #1. Marbob proposes to nipple up on the 13 3/8" casing with a 2M system, testing it to 1000# with rig pumps, then nipple up on the 9 5/8" casing with a 5M system, tested to 5000# before drilling out.

6. Mud Program: The applicable depths and properties of this system are as follows:

			Weight	Viscosity	Waterloss
ŀ	Depth	Type	(ppg)	(sec)	_(cc)
	400	Fresh Wtr (spud)	8.5	28	N.C.
	2700	Brine	9.8-10.2	40-45	N.C.
	11200	Cut Brine	8.6-9.4	28-36	N.C.

- 7. Auxiliary Equipment: Kelly Cock; Sub with full opening valve on floor; and drill pipe connections.
- 8. Testing, Logging and Coring Program:

No drillstem tests are anticipated.

The electric logging program will consist of Dual Laterolog Micro SFL, Spectral Density Dual Spaced Neutron Csng Log, and Depth Control Log. No conventional coring is anticipated.

- 9. No abnormal pressures or temperatures are anticipated.
- 10. Anticipated starting date: As soon as possible after approval.

MARBOB ENERGY CORPORATION MULTI-POINT SURFACE USE AND OPERATIONS PLAN

Six-Pack Federal Com #1 1980' FNL & 1980' FWL, Unit F Section 6, T17S, R30E 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.

1. EXISTING ROADS:

Exhibit 2 is a portion of a topo map showing the well and roads in the vicinity of the proposed location. The proposed wellsite and the access route to the location are indicated in red on Exhibit 2.

DIRECTIONS:

From the intersection of U.S. hwy. #83 and Co. rd. #217 go North on Co. rd. #217 approx. 3.5 miles. Turn left on Co. rd. #257 and go West approx. 1.5 miles. Turn left and go South approx. 0.5 miles. This location is approx. 250 feet East.

2. PLANNED ACCESS ROAD:

An existing access road is already in place. The road is constructed as follows:

- A. The maximum width of the running surface will be 10'. The road will be crowned and ditched and constructed of 6" of rolled and compacted caliche. Ditches will be at 3:1 slope and 4 feet wide. Water will be diverted where necessary to avoid ponding, prevent erosion, maintain good drainage, and to be consistent with local drainage patterns. BLM may specify any additions or changes during the onsite inspection.
- B. The average grade will be less than 1%.
- C. No turnouts are planned.
- D. No culverts, cattleguard, gates, low-water crossings, or fence cuts are necessary.
- E. Surfacing material will consist of native caliche. Caliche will be obtained from the nearest BLM-approved caliche pit. Any additional materials that are required will be purchased from the dirt contractor.
- F. The proposed access road as shown in Exhibit 2 has been centerline flagged by John West Engineering.

3. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

A. Marbob Energy Corporation proposes a collection facility, if well is productive, to be located on Six-Pack Federal Com #1 well pad.

4. METHODS OF HANDLING WASTE DISPOSAL:

- A. Drill cuttings will be disposed of in the lined pit.
- B. Drilling fluids will be allowed to evaporate in the lined pit until the pit is dry.
- C. Water produced during completion may be disposed into the lined reserve pit.
- D. All trash and debris will be removed from the wellsite within 30 days after finishing drilling and/or completion operations. All waste material will be contained to prevent scattering by the wind.

5. WELLSITE LAYOUT:

- A. Exhibit 3 shows the relative location and dimensions of the well pad, the pit.
- B. The reserve pit will be lined with high quality plastic sheeting.

6. 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 wellsite in as aesthetically pleasing a condition as possible.
- B. Reserve pit will be fenced until they have dried and been leveled.
- C. All rehabitation and/or vegetation requirements of the BLM will be complied with and will be accomplished as expeditiously as possible. All pits will be filled level within 90 days after abandonment.

7. SURFACE OWNERSHIP:

The well site and lease are located on Federal surface

- A. The area around the well site is grassland and the top soil is sandy. The vegetation is native scrub grasses with abundant oakbrush, sagebrush, yucca, and prickly pear.
- B. A Cultural Resources Examination has been requested and will be forwarded to your office in the near future.

8. 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.

9. OPERATOR'S REPRESENTATIVE:

A. Through A.P.D. Approval:

Dean Chumbley, Landman Marbob Energy Corporation P. O. Box 227 Artesia, NM 88211-0227 Phone (505)748-3303 Cell (505)748-5988 B. Through Drilling Operations

Sheryl Baker, Drilling Supervisor Marbob Energy Corporation P. O. Box 227 Artesia, NM 88211-0227 Phone (505)748-3303 Cell (505)748-5489

10. CERTIFICATION:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite 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 Marbob Energy 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.

Date

Nancy T. Bratcher Land Department

Marbob Energy Corporation

MARBOB ENERGY CORPORATION

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

I. HYDROGEN SULFIDE TRAINING

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

- A. The hazards and characteristics of hydrogen sulfide (H_2S) .
- B. The proper use and maintenance of personal protective equipment and life support systems.
- C. The proper use of H₂S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
- D. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

- A. The effects of H₂S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
- B. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
- C. The contents and requirements of the H₂S Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H₂S zone (within 3 days or 500 feet) and weekly H₂S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H₂S Drilling Operations Plan and the Public Protection Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

II. H2S SAFETY EQUIPMENT AND SYSTEMS

Note: All H₂S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonably expected to contain H₂S.

A. Well Control Equipment:

Flare line.

Choke manifold.

Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.

Auxiliary equipment to include: annular preventer, mud-gas separator, rotating head.

B. Protective equipment for essential personnel:

Mark II Surviveair 30-minute units located in the dog house and at briefing areas.

C. H₂S detection and monitoring equipment:

2 - portable H₂S monitor positioned on location for best coverage and response. These units have warning lights and audible sirens when H₂S levels of 20 ppm are reached.

D. Visual warning systems:

Caution/Danger signs shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used, when appropriate. See example attached.

E. Mud Program:

The mud program has been designed to minimize the volume of H₂S circulated to the surface.

F. Metallurgy:

All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H₂S service.

G. Communication:

Company vehicles equipped with cellular telephone and 2-way radio.

WARNING

YOU ARE ENTERING AN H₂S AREA AUTHORIZED PERSONNEL ONLY

- 1. BEARDS OR CONTACT LENSES NOT ALLOWED
- 2. HARD HATS REQUIRED
- 3. SMOKING IN DESIGNATED AREAS ONLY
- 4. BE WIND CONSCIOUS AT ALL TIMES
- 5. CK WITH MARBOB FOREMAN AT MAIN OFFICE

MARBOB ENERGY CORPORATION

1-505-748-3303

STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the leased land or portion thereof, as described below:

Date:

July 27, 2006

Lease #:

Legal Description:

SENW Sec. 6-T17S-R30E

Eddy County, New Mexico

Formation(s): Permian

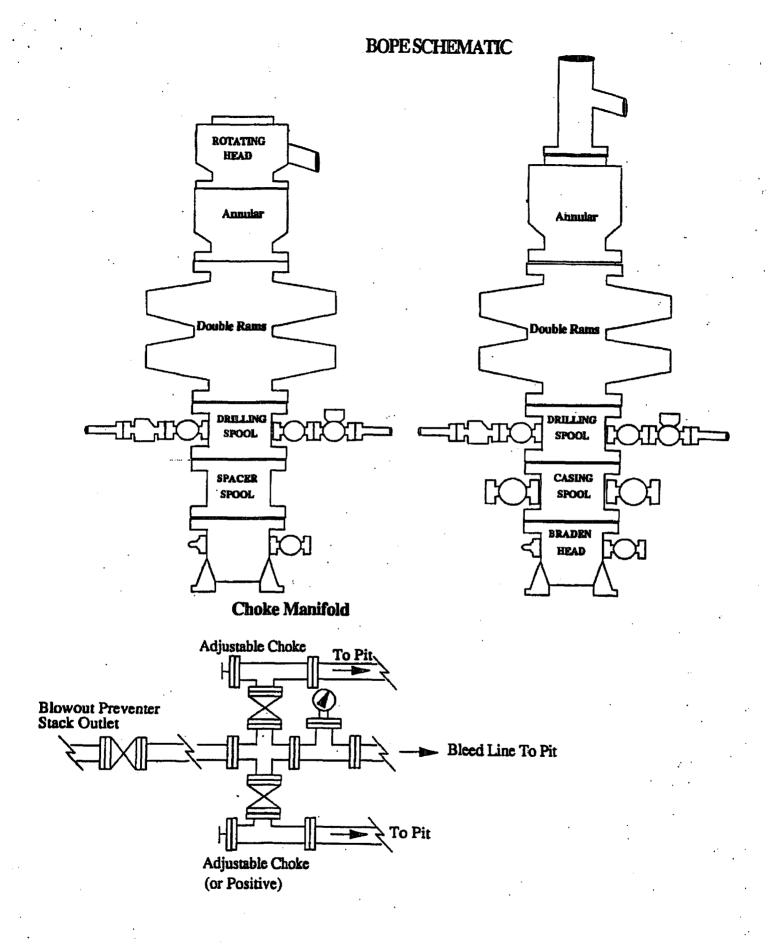
Bond Coverage: Statewide

BLM Bond File #: NM 2056

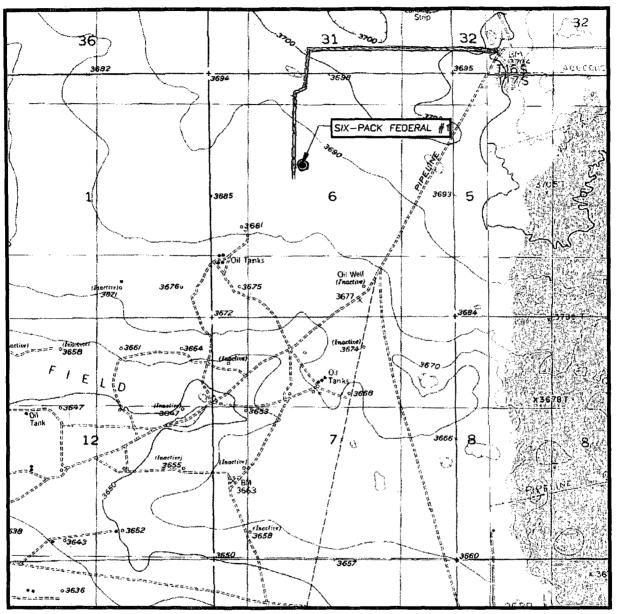
Marbob Energy Corporation

Nancy T. Bratcher

Land Department



LOCATION VERIFICATION MAP



SCALE: 1'' = 2000'

CONTOUR INTERVAL: RED LAKE SE, N.M. - 10'

SEC. 6 TWP. 17-S RGE. 30-E

SURVEY N.M.P.M.

COUNTY : EDDY STATE NEW MEXICO

DESCRIPTION 1980' FNL & 1980' FWL

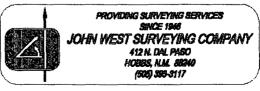
ELEVATION 3685'

MARBOB ENERGY
OPERATOR CORPORATION

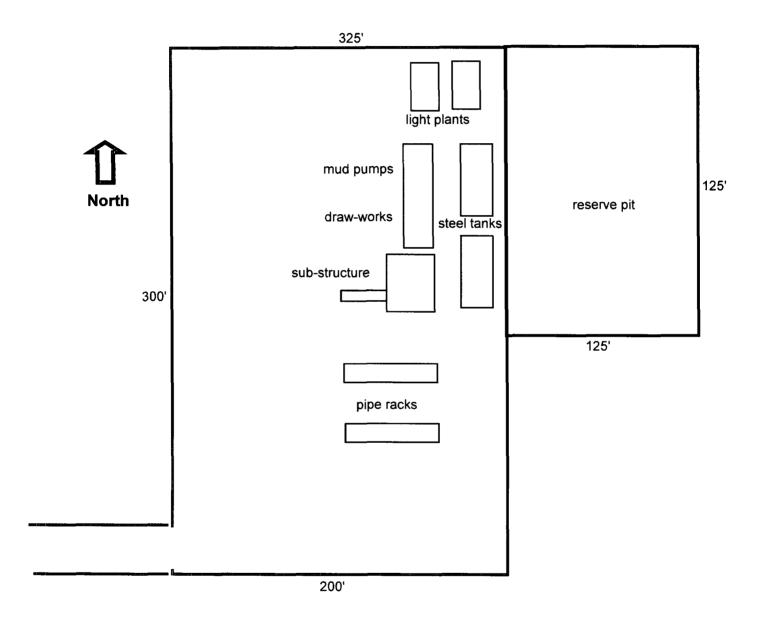
LEASE SIX-PACK FEDERAL

U.S.G.S. TOPOGRAPHIC MAP
RED LAKE SE, N.M.

EXISTING ROADS







Six-Pack Federal Com #1 1980' FNL & 1980' FWL Unit F, Sec 6-T17S-R30E Eddy County, New Mexico

CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Well Name & No.

Marbob Energy Corporation
Six Pack Federal Com #1

Location:

1980' FNL, 1980' FWL, Section 6, T. 17 S., R. 30 E., Eddy County, New Mexico

Lease:

NM-7752

I. DRILLING OPERATIONS REQUIREMENTS:

- 1. The Bureau of Land Management (BLM) is to be notified at the Carlsbad Resource Area 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
 - B. Cementing casing: <u>13-3/8</u> inch <u>9-5/8</u> inch <u>5-1/2</u> inch.
 - C. BOP testing
- 2. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.
- 3. A Hydrogen Sulfide (H2S) Drilling Operation Contingency Plan shall be activated prior to drilling into the **Queen** formation. A copy of the plan shall be posted at the drilling site.
- 4. 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.
- 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> surface casing shall be set at <u>approximately 400 feet or 25 feet into the Rustler Anhydrite or in the case the salt occurs at a shallower depth, above the top of the salt. The surface casing shoe shall be set in the anhydrite to ensure adequate sealing. The operator is required to use an excess of 100% cement volume to fill the annulus. If cement does not circulate to the surface the operator may then use ready-mix cement to fill the remaining annulus.</u>
- 2. The <u>9-5/8</u> inch intermediate casing shall be set at approximately <u>2700</u> feet and cement circulated to the surface.
- 3. The minimum required fill of cement behind the <u>5-1/2</u> inch production casing is to be sufficient to place the top of the cement 200 feet above the top of the uppermost hydrocarbon bearing interval or to the base of the salt.

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.

NOTE: Operator plans to use a 2000 psi BOP on the 13-3/8" casing. A variance for testing to 1000 psi with the rig pumps is 8/7/2006

approved.

- 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.

8/7/2006 acs