## WELL DRILLING REQUIREMENTS

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# 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: \_\_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 minimum required fill of cement behind the 5½ inch intermediate casing shall extend upwards a minimum of 200 feet above the top of 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% 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 tests shall be done by an independent service company.
- B. The results of the test shall be reported to the appropriate BLM office.
- C. 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.
- D. Testing must be done in a safe workman-like manner. Hard line connections shall be required.

## D. DRILLING MUD:

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the <u>WOLFCAMP</u> 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.