

30-005-29199

**PECOS DISTRICT - RFO
CONDITIONS OF APPROVAL**

HOBBS OCD

DEC 19 2011

OPERATORS NAME: Cimarex Energy Co. of Colorado
LEASE NO.: NMLC-060850
WELL NAME & NO: Boxer 3 Federal Com No. 2
SURFACE HOLE FOOTAGE: 1190' FNL & 330' FEL
BOTTOM HOLE LOCATION: 990' FNL & 330' FWL
LOCATION: Section 3, T. 15 S., R. 31 E., NMPM
COUNTY: Chaves County, New Mexico

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V. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

1. Call the Roswell Field Office, 2909 West Second St., Roswell, NM 88201. During office hours call (575) 627-0205 or after office hours call (575) 420-2832. Engineer on call during office hours call (575) 627-0275 or after office hours call (575) 626-5749.
2. The BLM is to be notified a minimum of 24 hours in advance for a representative to witness:
 - a. Spudding well
 - b. Setting and/or Cementing of all casing strings
 - c. BOPE Tests

A follow-up report on Form 3160-5 confirming the date and time of the actual spud shall be submitted to this office within 5 working days from the date of spud.

3. 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.
4. Include the API Number assigned to well by NMOCDC 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.
6. **The operator will accurately measure the drilling rate in ft/min to set the base of the usable water protection casing string(s) opposite competent rock. The record of the drilling rate along with the caliper-gamma ray-neutron well log run to surface will be submitted to this office as well as all other logs run on the borehole 30 days from completion.**
7. Fresh water will be used to drill to the base of the usable water protection casing string(s).
Drilling the surface hole polymers may be used if they are water based and non-toxic.

B. CASING

1. The 13-3/8 inch usable water protection casing string(s) shall be set at approximately 365 feet opposite competent bedrock.

If not competent the operator is required to set usable water protecting casing in the next thick competent bedding (i.e. 15 to 25 feet or greater) encountered and cemented to the surface.

a. If cement does not circulate to the surface, the Roswell Field 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 or 500 pounds compression 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 compression strength, whichever is greater.

d. If cement falls back, remedial action will be done prior to drilling out that string.

2. The minimum required fill of cement behind the 9-5/8 inch optional intermediate casing is **sufficient to circulate to the surface (TOC at 0 feet)**. If cement does not circulate see B.1.a-d above.

3. The minimum required fill of cement behind the 7 inch production casing is **sufficient to tie back 200 feet into the 9-5/8 inch optional intermediate casing set at approximately 3950 feet (TOC would be at approximately 3750 feet)**. If cement does not circulate to the surface, 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.

4. There is no required fill of cement behind the 4-1/2 inch production casing since a Peak Systems Iso-Pak liner will be used for lateral and will not require cementing.

5. 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.

6. All casing shall be new or reconditioned and tested casing and meet API standards for new casing. The use of reconditioned and tested casing shall be subject to approval by the authorized officer. Approval will be contingent upon the wall thickness of any casing being verified to be at least 87-1/2 per cent of the nominal wall thickness of new casing.

C. PRESSURE CONTROL:

1. Before drilling below the 13-3/8 inch surface casing shoe, 9-5/8 inch optional intermediate casing shoe and the 7 inch production casing shoe, the blowout preventer assembly shall consist of a minimum of One Annular Preventer, Two Ram-Type Preventers, and a Kelly Cock/Stabbing Valve.

2. Before drilling below the 13-3/8 inch surface casing shoe, 9-5/8 inch optional intermediate casing shoe and the 7 inch production casing shoe, minimum working pressure of the blowout preventer and related equipment (BOPE) shall be **3000** psi.

3. The BOPE shall be installed before drilling below the 13-3/8 inch surface casing, the 9-5/8 inch optional intermediate casing, and the 7 inch production casing and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

- a. The BLM Roswell Field office shall be notified a minimum of 24 hours in advance for a representative to witness the tests.
- b. The tests shall be done by an independent service company.
- c. 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.
- d. 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 BLM Roswell Field Office at 2909 West Second Street, Roswell, New Mexico 88201.
- e. 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.
- f. Testing must be done in a safe workman like manner. Hard line connections shall be required.

D. MUD PROGRAM REQUIREMENTS:

The drilling operations of this well will be conducted in accordance with the Onshore Oil and Gas Order No. 2 as provided in 43 CFR 3164.1. This includes well control equipment and its testing, mud system and associated equipment, and the casing and cementing.

- a. Sufficient quantities of mud materials shall be maintained at the well site, at all times, for the purpose of assuring well control.
- b. A mud test shall be performed at least every 24 hours after mudding up to determine, as applicable density, viscosity, gel strength, filtration, and PH.
- c. Visual mud monitoring equipment shall be in place to detect volume changes indicating loss or gain of circulating fluid volume.

E. SPECIAL STIPULATION:

If frac ponds are necessary submit for approval a right-of-way application or sundry notice (Form 3160-5) to the BLM, Roswell Field Office 2909 West Second, Roswell, NM 88201. If frac pond is located on private/State surface and support the enhanced production of federal minerals BLM approval is necessary.

The frac pond will only be authorized to contain freshwater and testing of water quality is required. Additives are not allowed without consent of the authorized officer. If at any time the water in the frac pond becomes polluted with salts or other contaminants, use of the frac pond will cease and desist, and all liquids will be removed from the frac pond and disposed of properly. Mineral materials extracted during construction of the frac pond will be stored on-location and/or used for constructing the frac pond.