

UNITED STATES  
DEPARTMENT OF THE INTERIOR **OCD Artesia**  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0135  
Expires July 31, 1996

**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or to re-enter an  
abandoned well. Use form 3160-3 (APD) for such proposals.*

**SUBMIT IN TRIPLICATE - Other instructions on reverse side**

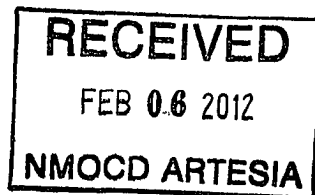
|  |   |   |
|--|---|---|
| 1. Type of Well<br><input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other |   | 5. Lease Serial No.<br><b>NM-14124</b>                                  |
| 2. Name of Operator<br>Cimarex Energy Co. of Colorado  |   | 6. If Indian, Allottee or Tribe Name                                    |
| 3a. Address<br>PO Box 140907; Irving, TX 75014-0907  | 3b. Phone No. (include area code)<br>972-401-3111 | 7. If Unit or CA/Agreement, Name and/or No                              |
| 4. Location of Well (Footage, Sec.; T., R., M., or Survey Description)<br>150 FSL 1650FEL<br>Section 1-T25S-R26E                 |   | 8. Well Name and No<br><b>Marquardt 1 Federal 13</b>                    |
|  |   | 9. API Well No.<br><b>30-015-37382</b>                                  |
|  |   | 10. Field and Pool, or Exploratory Area<br><b>Black River; Delaware</b> |
|  |   | 11. County or Parish, State<br><b>Eddy County, NM</b>                   |

**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

| TYPE OF SUBMISSION                                   | TYPE OF ACTION                                |   |  |   |
|--|---|---|--|---|
| <input checked="" type="checkbox"/> Notice of Intent | <input type="checkbox"/> Acidize              | <input type="checkbox"/> Deepen           | <input type="checkbox"/> Production (Start/Resume) | <input type="checkbox"/> Water Shut-Off                           |
| <input type="checkbox"/> Subsequent Report           | <input type="checkbox"/> Alter Casing         | <input type="checkbox"/> Fracture Treat   | <input type="checkbox"/> Reclamation               | <input type="checkbox"/> Well Integrity                           |
| <input type="checkbox"/> Final Abandonment Notice    | <input type="checkbox"/> Casing Repair        | <input type="checkbox"/> New Construction | <input type="checkbox"/> Recomplete                | <input checked="" type="checkbox"/> Other <u>Permit extension</u> |
|  | <input type="checkbox"/> Change Plans         | <input type="checkbox"/> Plug and Abandon | <input type="checkbox"/> Temporarily Abandon       |   |
|  | <input type="checkbox"/> Convert to Injection | <input type="checkbox"/> Plug Back        | <input type="checkbox"/> Water Disposal            |   |

13. Describe Proposed or Completed Operation (clearly state all pertinent details, included estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleting horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

The APD for this well is due to expire on 11/05/11. Cimarex requests an extension due to rig scheduling.



Accepted for record  
NMOC D

TOS  
2/8/2012

APPROVED FOR 24 MONTH PERIOD  
ENDING 11/05/2013

14. I hereby certify that the foregoing is true and correct  
Name (Printed/Typed)

Carolyn Larson

Signature

Title

Regulatory Analyst

Date

November 4, 2011

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

**/s/ Don Peterson**

Title

**FIELD MANAGER**

Date

**FEB 1 2012**

Conditions of Approval, if any, are attached. Approval of this notice 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.

Office

**CARLSBAD FIELD OFFICE**

Title 18 U.S.C. Section 1001, makes 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)

**PECOS DISTRICT  
CONDITIONS OF APPROVAL**

|                       |                                   |
|-----------------------|-----------------------------------|
| OPERATOR'S NAME:      | Cimarex Energy Co. of Colorado    |
| LEASE NO.:            | NM-14124                          |
| WELL NAME & NO.:      | Marquardt 1 Federal 13            |
| SURFACE HOLE FOOTAGE: | 0150' FSL & 1650' FEL             |
| BOTTOM HOLE FOOTAGE   | 0330' FNL & 2080' FEL             |
| LOCATION:             | Section 1, T.25 S., R.26 E., NMPM |
| COUNTY:               | Eddy County, New Mexico           |

**The previously approved Conditions of Approval for the approved APD dated 11/05/2009 still apply. Any additions to the originally approved COAs will be addressed below.**

☒ **Drilling**

H2S requirements

Logging requirements

Waste Material and Fluids

**Centralizers required on surface casing per Onshore Order 2.III.B.1.f.**

**Wait on cement (WOC) time prior to drilling out 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 for all casing strings. DURING THIS WOC TIME, NO DRILL PIPE, ETC. SHALL BE RUN IN THE HOLE. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. See individual casing strings for details regarding lead cement slurry requirements.**

**No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.**

**Medium cave/karst.**

**Possible lost circulation in the Delaware.**

1. The **9-5/8** inch surface casing shall be set at **approximately 440** feet and cemented to the surface.
  - 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 surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
  - b. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.**
  - 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 cementing will be done prior to drilling out that string.
2. The minimum required fill of cement behind the **7** inch intermediate casing is:
  - ☒ Cement to surface. If cement does not circulate see B.1.a, c-d above.  
**Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst concerns. Additional cement will be needed as excess cement calculates to a negative 8%.**

3. The minimum required fill of cement behind the **4-1/2** inch production casing is:
- ☒ Cement not required – using Peak System completion assembly. **Completion assembly to be set a minimum of 100' inside 7" casing.**

**Contingency Casing Plan For Surface Casing**

4. The **13-3/8** inch surface casing shall be set at **approximately 370** feet and cemented to the surface. **Additional cement may be required as the excess calculates to less than 50%.**
- 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 surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
  - b. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.**
  - 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.
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.

**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 **3000 (3M) psi. Operator installing 5M system and testing as 3M.**

3. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips or where the float does not hold, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
  - b. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**.
  - c. The results of the test shall be reported to the appropriate BLM office.
  - 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 appropriate BLM office.**
  - e. 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.
  - f. **Effective November 1, 2008, no variances will be granted on reduced pressure tests on the surface casing and BOP/BOPE. Onshore Order 2 requirements will be in effect.**

#### **D. DRILL STEM TEST**

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

## **E. WASTE MATERIAL AND FLUIDS**

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

**WWI 011612**