Form 3160-5 (Fèbruary 2005)

**UNITED STATES** DEPARTMENT OF THE INTERIOR

FORM APROVED OMB NO. 1004-0135

| BUREAU OF L    | AND  | MANAGE  | MENT   |     |
|----------------|------|---------|--------|-----|
| CUMPBY NOTICES | ANID | DEDADTE | ONIMEL | 1 4 |

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|----------|----|----------------|
|          | 5. | Lease Serial   |
|          | '  | 1              |
| 0.0.2010 | 6. | t Indian, Allo |
|          |    |                |

EXPIRES: March 31, 2007 No.

| Do not use this form for proposals to drill or to re  |                                       | HEUL   |  |                                   | NM-012121   |  |
|---|---------------------------------------|--|--|-----------------------------------|---|--|
| abandoned well. Use Form 3160-3 (APD) for suc   | cn proposais                          | MAR 0  | <del>3 5010</del>                        | 6. If Indian, Allottee            | e or Tribe Name   |  |
| SUBMIT IN TRIPLICATE  1a. Type of Well Oll Well Gas Well Other  |                                       | NMOCD  | ARTES                                    | A Unit or CA Agre                 | eement Name and No.   |  |
| Tal. Type of Well Soll Well Gas Well Golden   |                                       | 11111  |  | 8 Well Name and                   | No.   |  |
| 2. Name of Operator   |                                       |  |  | Cotton Draw 26 Federal 2H         |   |  |
| DEVON ENERGY PRODUCTION COMPANY, LP   |                                       | 9. API Well No.  |  |                                   |   |  |
| 3. Address and Telephone No.  | }                                     | 30-015-37447   |  |                                   |   |  |
| 20 N. Broadway, Oklahoma City, Ok 73102-8260  |                                       | 10. Field and Pool, or Exploratory                                 |  |                                   |   |  |
| <ol> <li>Location of Well (Report location clearly and in accordance with Fe<br/>330' FNL 800' FEL A SEC 26 T24S R31E</li> </ol>  | -                                     | Poker Lake South; Delaware  11. County or Parish State             |  |                                   |   |  |
| BHL: 330' FSL & 660' FEL PP: 330' FNL & 660' FEL  |                                       |  |  | Eddy NM                           |   |  |
| 12. CHECK APPROPRIATE BOX(s) TO TYPE OS SUBMISSION  | O INDICATE N                          |  |  | T, OR OTHER DA                    | TA  |  |
|   |                                       |  | OF ACTION                                |                                   |   |  |
| ✓ Notice of Intent  ✓ Notice of Intent  ✓ Acidize  ✓ Alter Casing   | Deepe                                 | en<br>Ire Treat  | Production Reclamation                   | n (Start/Resume)                  | ☐ Water Shut-Off<br>☐ Well Integrity  |  |
| Subsequent Report Casing Repair   | =                                     | Construction   | Recomplet                                |                                   | ☑ Other BOP   |  |
| Final Abandonment Notice Change Plans   | _ ~                                   | nd Abandon   |  | ily Abandon                       |   |  |
| Convert to Injection Describe Proposed or Completed Operations (Clearly state all pertinent details, and g  | Plug E                                |  | Water Dispate of starting and            |                                   | roximate duration thereof If the proposal   |  |
| Devon Energy Production Company L. P. respectful follows:  The BOP system used to drill the intermediate hole will system will be tested as per BLM Onshore Oil and Gas.  The BOP system used to drill the production hole will consistent will be tested as per BLM Onshore Oil and Gas.  The BOP system used to drill the production hole will consistent will be tested as per BLM Onshore Oil and Gas shoe. | Ily requests I consist of a Order No. | s to revise th<br>a 13-5/8" 5M L<br>2 as a 3M sys<br>13-5/8" 5M Do | e BOP sys<br>Double Ran<br>Item prior to | n and Annular of drilling out the | original APD to read as preventer. The BOP e surface casing shoe. reventer. The BOP |  |
| Signed Nam Title  |                                       | i <b>dy A. Barnett X</b><br>Regulatory Analy                       |  | Date                              | 2/1/2010  |  |
| (This space for Federal or State Office use)  |                                       |  | ·  |                                   |   |  |
| Approved by Title Conditions of approval, if any:   |                                       |  |  | Date                              |   |  |
| Thile to U.S.C. Section 1001, makes it a crime for any person knowlingly and willingly to mak   | within its iii                        |  | a states arry raise                      | , notitious or traudulent s       | laternesits of representations to any matter  |  |

\*See Instruction on Reverse Side

SEE ATTACHED FOR CONDITIONS OF APPROVAL



# PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME: | Devon Energy Production Company, LP

**LEASE NO.: NM-012121** 

WELL NAME & NO.: | Cotton Draw 26 Federal 2H

SURFACE HOLE FOOTAGE: 330' FNL & 800' FEL BOTTOM HOLE FOOTAGE 330' FSL & 660' FEL

LOCATION: Section 26, T. 24 S., R 31 E., NMPM

**COUNTY:** Eddy County, New Mexico

## I. DRILLING

# A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 4 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. Although Hydrogen Sulfide has not been reported in this section, it is always a potential hazard. If Hydrogen Sulfide is encountered, please report measured amounts and formations 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

Changes to the approved APD casing and cement program require submitting a sundry and receiving approval prior to work. Failure to obtain approval prior to work will result in an Incident of Non-Compliance being issued.

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

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 for all casing strings. 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.

Possible water flows in the Castile, Salado, Delaware and Bone Spring Formations. Possible lost circulation in the Delaware and Bone Spring Formations.

- 1. The 13-3/8 inch surface casing shall be set at approximately 750 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) 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 a 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 9-5/8 inch intermediate casing is: Set this casing in the Lamar Limestone.
  - ☐ Cement to surface. If cement does not circulate see B.1.a, c-d above.

Formation below the 9-5/8" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe (not the mud weight required to prevent dissolving the salt formation) and the mud weight for the bottom of the hole. Report results to BLM office.

Centralizers required on horizontal leg, must be type for horizontal service and minimum of one every other joint.

- 3. The minimum required fill of cement behind the 5-1/2 inch production easing is:
  - a. First stage to DV tool, cement shall:
  - Ement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job.
  - b. Second stage above DV tool, cement shall:
  - Cement should tie-back at least 500 feet into previous casing string. Operator shall provide method of verification. May require additional cement as the excess calculates to < 20%.
- 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 **3000 (3M)** psi.
  - a. **For surface casing only:** If the BOP/BOPE is to be tested against casing, the wait on cement (WOC) time for that casing is to be met (see WOC statement at start of casing section). Independent service company required.
- 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 5000 (5M) psi. 5M system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.

- 4. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - a. Casing cut-off and BOP installation will not be initiated until the cement has had 4-6 hours of setup time in a water basin and 12 hours in the potash areas. This time will start after the cement plug is bumped. Testing the BOP/BOPE against a plug can commence after meeting the above conditions plus the BOP installation time.
  - b. The tests shall be done by an independent service company utilizing a test plug.
  - 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.

## D. DRILL STEM TEST

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

MAK 022610