Form 3160-5 (June 2015)

# UNITED STATES DEPARTMENT OF THE INTERIOR AND STATES BUREAU OF LAND MANAGEMENT RY NOTICES AND REPORTS ON WELLS UNITED STATES OTICEORM APPROVED O

|    | SUN | 1DR   | Y N  | OTIC | ES.   | AND   | REF  | ORTS     | ON    | WELL   | .S\_#  |  |
|----|-----|-------|------|------|-------|-------|------|----------|-------|--------|--------|--|
| Do | not | use t | this | form | for p | oropo | sals | to drill | or to | re-ent | ter an |  |
|    |     |       |      |      |       |       |      |          |       |        |        |  |

| abandoned we   | II. Use form 3160-3 (APD) for su   | ich proposals.  | 6. If Indian, Allottee                                    | or Tribe Name                               |  |
|--|--|---|---|---|--|
| SUBMIT IN  | TRIPLICATE - Other instructions  | s on page 2   | 7. If Unit or CA/Agr                                      | reement, Name and/or No.                    |  |
| 1. Type of Well  |  |   | 8. Well Name and No                                       | ).<br>1 12 EED 722H                         |  |
| ☑ Oil Well ☐ Gas Well ☐ Ot   |  | TOMB RAIDER 1-12 FED 732H   |   |   |  |
| 2. Name of Operator DEVON ENERGY PRODUCT   | 9. API Well No.<br>30-015-45979-   | 30-015-45979-00-X1  |   |   |  |
| 3a. Address<br>333 WEST SHERIDAN AVEN<br>OKLAHOMA, OK 73102  |  | ne No. (include area code)<br>05-552-6560   | 10. Field and Pool of<br>WC-015G-08 S                     | r Exploratory Area<br>S233102C-WOLFCAMP     |  |
| 4. Location of Well (Footage, Sec., 1  | T., R., M., or Survey Description)   |   | 11. County or Parish                                      | , State                                     |  |
| Sec 1 T23S R31E 210FNL 22<br>32.340141 N Lat, 103.732841   |  |   | EDDY COUNT  | Y, NM                                       |  |
| 12. CHECK THE A  | PPROPRIATE BOX(ES) TO IND  | ICATE NATURE O  | F NOTICE, REPORT, OR OT                                   | HER DATA                                    |  |
| TYPE OF SUBMISSION   |  | TYPE OF   | ACTION  |   |  |
| ☑ Notice of Intent   | ☐ Acidize ☐  | Deepen  | ☐ Production (Start/Resume)                               | ☐ Water Shut-Off                            |  |
| •  | ☐ Alter Casing ☐   | Hydraulic Fracturing  | ☐ Reclamation   | ■ Well Integrity                            |  |
| ☐ Subsequent Report  | _  | New Construction  | Recomplete  | ☑ Other<br>Change to Original A<br>PD       |  |
| ☐ Final Abandonment Notice   | ☐ Change Plans   | Plug and Abandon  | ☐ Temporarily Abandon                                     |   |  |
|  | ☐ Convert to Injection ☐   | Plug Back   | ■ Water Disposal  |   |  |
| hole location and the bottom he FWL, 1-23S-31E and will char 20 FSL, 2600 FWL, 12-23S-3 the originally permitted well pachanged. Please see attached revised pages.  | Electronic Submission #472779 ve   | ntly permitted at 210 li-31E. The BHL is curion FWL, 12-23S-31E. is required. Lease num  Thank you. | rently permitted at Locations remain on bers have not JUI | ECENED L 2 3 20 HARTESIAS POR US OF APPROVA |  |
| Con Name (Printed/Typed) JENNIFEI  | For DEVON ENERGY PRODU<br>nmitted to AFMSS for processing by   | JUANA MEDRÁNO on  |   | /eT   |  |
| A STATE OF THE PARTY OF THE PAR | X I I/ II AIM O  | 1,500   | TOTAL OCIVIL EIGHOL ANALI                                 | <u> </u>                                    |  |
| Signature (Electronic S  | Submission)  | Date 07/10/20   | 19  |   |  |
|  | THIS SPACE FOR FEDI  | ERAL OR STATE (   | OFFICE USE  | -   |  |
| Approved By Carol  | 1 Wyte   | Title M   | nelfM   | Bate 7/6/2014                               |  |
|  | d. Approval of this notice does not warran<br>nitable title to those rights in the subject lead<br>act operations thereon. |   |   |   |  |
|  | U.S.C. Section 1212, make it a crime for a   |   | willfully to make to any department of                    | r agency of the United                      |  |

(Instructions on page 2)
\*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\*

Ref 10-21-19

#### Revisions to Operator-Submitted EC Data for Sundry Notice #472779

**Operator Submitted** 

**BLM Revised (AFMSS)** 

Sundry Type:

**APDCH** 

Lease:

NMNM22080

APDCH NOI

NMNM22080

Agreement:

Operator:

DEVON ENERGY PRODUCTION COMPAN 333 WEST SHERIDAN AVENUE OKLAHOMA CITY, OK 73102-5015 Ph: 405-552-6560

DEVON ENERGY PRODUCTION COM LP 333 WEST SHERIDAN AVENUE OKLAHOMA, OK 73102 Ph: 405 552 6571

JENNIFER HARMS REGULATORY COMPLIANCE ANALYST E-Mail: jennifer.harms@dvn.com

Ph: 405-552-6560

JENNIFER HARMS REGULATORY COMPLIANCE ANALYST E-Mail: jennifer.harms@dvn.com

Ph: 405-552-6560

Tech Contact:

Admin Contact:

JENNIFER HARMS

REGULATORY COMPLIANCE ANALYST E-Mail: jennifer.harms@dvn.com

Ph: 405-552-6560

JENNIFER HARMS REGULATORY COMPLIANCE ANALYST E-Mail: jennifer.harms@dvn.com

Ph: 405-552-6560

Location:

State: County: **EDDY** 

Field/Pool:

WC-015 G-08 S233102C

EDDY

WC-015G-08 S233102C-WOLFCAMP

Well/Facility:

TOMB RAIDER 1-12 FED 732H Sec 1 T23S R31E NENW 210FNL 2229FWL

TOMB RAIDER 1-12 FED 732H Sec 1 T23S R31E 210FNL 2229FWL 32.340141 N Lat, 103.732841 W Lon

# PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: | Devon Energy Production Company LP

LEASE NO.: | NMNM022080

WELL NAME & NO.: | Tomb Raider 1-12 Fed 732H

**SURFACE HOLE FOOTAGE:** 210'/N & 2229'/W **BOTTOM HOLE FOOTAGE** 20'/S & 2600'/W

**LOCATION:** Section 1, T.23 S., R.31 E., NMPM

**COUNTY:** Eddy County, New Mexico

COA

| H2S                  | C Yes           | No     No                   |              |
|----------------------|-----------------|-----------------------------|--------------|
| Potash               | None            | © Secretary                 | C R-111-P    |
| Cave/Karst Potential | • Low           | ← Medium                    | C High       |
| Variance             | None            | Flex Hose                   | C Other      |
| Wellhead             | Conventional    | <ul><li>Multibowl</li></ul> | Both         |
| Other                | √ 4 String Area | Capitan Reef                | □ WIPP       |
| Other                | Fluid Filled    | ▼ Cement Squeeze            | ☐ Pilot Hole |
| Special Requirements | Water Disposal  | ГСОМ                        | 「 Unit       |

## All Previous COAs Still Apply

#### A. CASING

#### **Primary Casing Design:**

- 1. The 13-3/8 inch surface casing shall be set at approximately 791 feet (a minimum of 70 feet (Eddy County) 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 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 will be a minimum of **24 hours in the Potash Area** or 500 pounds compressive 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 compressive strength,

whichever is greater.

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

Intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.

2. The minimum required fill of cement behind the 7-5/8 inch intermediate casing is:

### **Option 1 (Single Stage):**

• 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 or potash.

#### Option 2:

Operator has proposed a DV tool, the depth may be adjusted as long as the cement is changed proportionally. The DV tool may be cancelled if cement circulates to surface on the first stage.

- a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
- b. Second stage above DV tool:
  - Cement to surface. If cement does not circulate, contact the appropriate BLM office.

Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.

Operator has proposed to pump down 13-3/8" X 7-5/8" annulus. Operator must run a CBL from TD of the 7-5/8" casing to surface. Submit results to BLM.

- 3. The minimum required fill of cement behind the 5-1/2 inch production casing is:
  - Cement should tie-back at least 500 feet into previous casing string. Operator shall provide method of verification.

Cement excess is less than 25%, more cement might be required.

#### **Alternate Casing Design:**

- 4. The 13-3/8 inch surface casing shall be set at approximately 791 feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite and above the salt) and cemented to the surface.
  - e. 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.
  - f. Wait on cement (WOC) time for a primary cement job will be a minimum of **24 hours in the Potash Area** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
  - g. 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.
  - h. If cement falls back, remedial cementing will be done prior to drilling out that string.

Intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.

5. The minimum required fill of cement behind the 8-5/8 inch intermediate casing is:

#### **Option 1 (Single Stage):**

• 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 or potash.

#### Option 2:

Operator has proposed a DV tool, the depth may be adjusted as long as the cement is changed proportionally. The DV tool may be cancelled if cement circulates to surface on the first stage.

- c. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
- d. Second stage above DV tool:

• Cement to surface. If cement does not circulate, contact the appropriate BLM office.

Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.

Operator has proposed to pump down 13-3/8" X 8-5/8" annulus. Operator must run a CBL from TD of the 8-5/8" casing to surface. Submit results to BLM.

- 6. The minimum required fill of cement behind the 5-1/2 inch production casing is:
  - Cement should tie-back at least 500 feet into previous casing string.
     Operator shall provide method of verification.
     Cement excess is less than 25%, more cement might be required.

# GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
  - c. BOPE tests (minimum of 4 hours)
    - Chaves and Roosevelt Counties
      Call the Roswell Field Office, 2909 West Second St., Roswell NM 88201.
      During office hours call (575) 627-0272.
      After office hours call (575)
    - Eddy County
       Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822
    - ✓ Lea CountyCall the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575)393-3612
- 1. 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.
  - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
  - b. When the operator proposes to set surface casing with Spudder Rig
    - Notify the BLM when moving in and removing the Spudder Rig.
    - Notify the BLM when moving in the 2<sup>nd</sup> Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
    - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
- 2. 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.

3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

#### A. CASING

- 1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
- 2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log.
- 3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements.
- 4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
- 5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
- 6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
- 7. 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.

8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

# B. 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.