

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

NMOCD  
Artesia

FORM APPROVED  
OMB NO. 1004-0137  
Expires: January 31, 2018

**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.*

5. Lease Serial No.  
NMNM012121

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.  
COTTON DRAW UNIT 291H

9. API Well No.  
30-015-44106

10. Field and Pool or Exploratory Area  
PADUCA;BONE SPRING

11. County or Parish, State  
EDDY COUNTY, NM

**SUBMIT IN TRIPLICATE - Other instructions on page 2**

1. Type of Well  
 Oil Well  Gas Well  Other

2. Name of Operator  
DEVON ENERGY PRODUCTION CO. LP  
Contact: BRITTNEY WHEATON  
Email: brittney.wheaton@dvn.com

3a. Address  
333 W. SHERIDAN AVE  
OKLAHOMA CITY, OK 73102

3b. Phone No. (include area code)  
Ph: 405-228-2810

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
Sec 25 T24S R31E Mer NMP SWSE 230FSL 1845FEL

**12. CHECK THE 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"/> Hydraulic Fracturing | <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 |
|  | <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, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete 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 must 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 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

Upon review of the CBL, the TOC does not meet COA requirements. As per the COA the TOC needs to be 4137', Isolation Scanner Cement Evaluation Log shows the TOC to be 4725'. The intermediate shoe is at 4337'. After discovering the low TOC on the cement evaluation log we attempted to establish injection down the 5-1/2"x9-5/8" annulus. We were able to achieve an injection rate of 5 bpm and 650 psi. Indicating that we will be able to perform a bradenhead squeeze down the 5-1/2"x9-5/8" annulus to remediate the low TOC. Attached is the Isolation Scanner Log and procedure to remediate the TOC with a bradenhead squeeze.

DC 1-10-18  
Accepted for record - NMOCD

submit subsequent report w/ new TOC

BLM OIL CONSERVATION  
ARTESIA DISTRICT  
JAN 09 2018

RECEIVED

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #396286 verified by the BLM Well Information System  
For DEVON ENERGY PRODUCTION CO. LP, sent to the Carlsbad  
Committed to AFMSS for processing by JENNIFER SANCHEZ on 11/30/2017 ( )

Name (Printed/Typed) BRITTNEY WHEATON Title REGULATORY PROFESSIONAL

Signature (Electronic Submission) Date 11/29/2017

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

APPROVED

NOV 30 2017

Approved By \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_

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 BUREAU OF LAND MANAGEMENT  
CARLSBAD FIELD OFFICE

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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.

# CDU 291H – Bradenhead Squeeze Procedure

API: 3001544106

WBS: XX-113761.01.CMP

SHL: Sec 25 of 24S-321E

Eddy County, NM

## Objective:

1. The CDU 291H was drilled within the 2<sup>nd</sup> Bone Spring Sand and cased off with a 5-1/2" production casing string.
2. Attempt to establish injection rate down the 5-1/2"x9-5/8" annulus.
3. Perform bradenhead squeeze down the 5-1/2"x9-5/8" annulus to remediate top of cement on the production string. Bring TOC from 4725' to 3300'.
4. Run CBL to verify new TOC.

GL - 3,513.8'  
TD - 15,473'

KB - 3,539.8' (26')  
PBTD - 15,385' (FC)

| Casing       | OD      | WT/FT | Grade   | Top (ftKB) | Bottom (ftKB) | 80% Collapse (psi) | 80% Burst (psi) |
|--------------|---------|-------|---------|------------|---------------|--------------------|-----------------|
| Surface      | 13-3/8" | 54.5# | J-55    | 26'        | 772'          |                    |                 |
| Intermediate | 9-5/8"  | 40#   | J-55    | 26'        | 4,337'        |                    |                 |
| Production   | 5-1/2"  | 17#   | P-110RY | 26'        | 15,473'       | 5,968              | 8,512           |

## Capacity:

5-1/2 17# Casing – (0.0232 bbl/ft)

5-1/2 17# Casing X 9-5/8 40# Casing – (0.0464 bbl/ft)

5-1/2 17# Casing X 8-3/4 Open Hole – (0.045 bbl/ft)

## EHS:

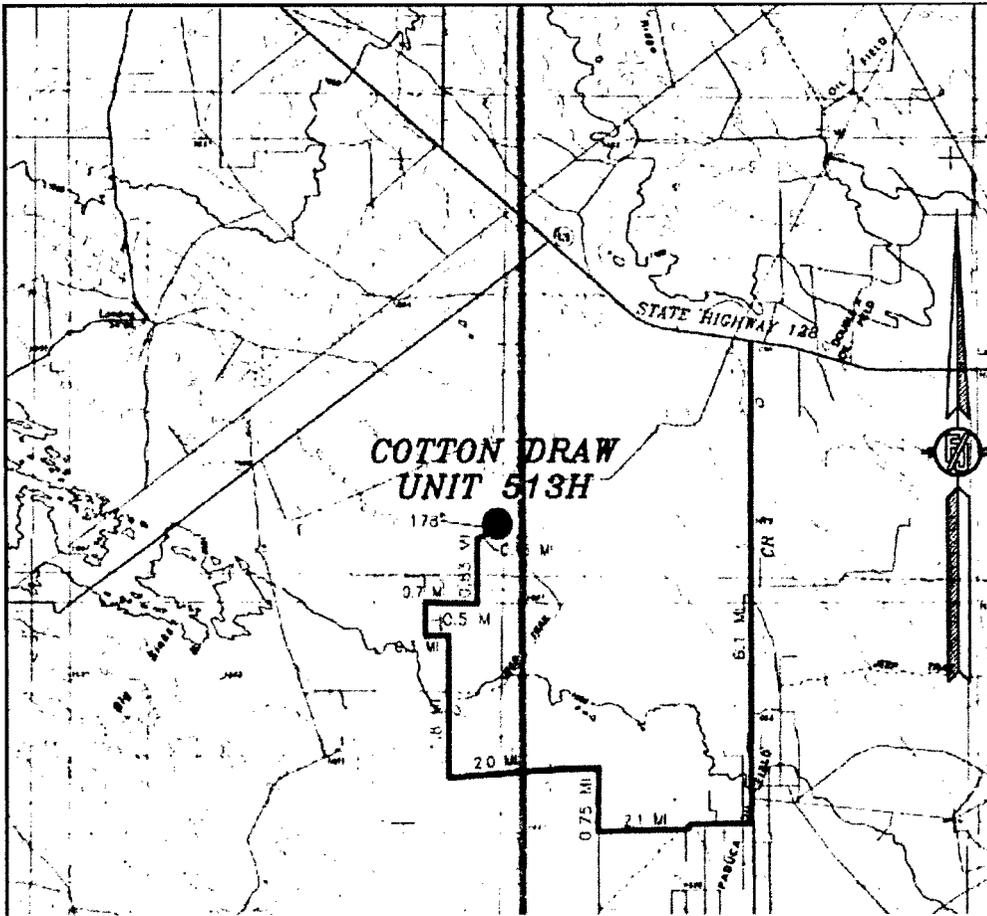
- All personnel will wear hard hats, safety glasses (side shields), FRC, and steel-toed boots while on location and follow all company policies
- Hold PJSM with all vendors on location discussing matters of safety, job procedure, and procedure execution contingencies. For any scope change or shift change, safety meetings need to be held with all personnel on location. Ensure safety shower is set on location and appropriate containments are set prior to start of frac.

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**Directions:**

**DIRECTIONS TO LOCATION**

FROM STATE HIGHWAY 128 AND CR 1 (ORLA ROAD) GO SOUTH ON CR 1 6.1 MILES, TURN RIGHT ON CALICHE ROAD (MONSANTO ROAD) AND GO WEST 2.1 MILES, TURN RIGHT AND GO NORTH 0.75 OF A MILE, TURN LEFT AND GO WEST 2.0 MILES, TURN RIGHT AND GO NORTH 1.8 MILES, TURN LEFT AND GO WEST 0.3 OF A MILE, TURN RIGHT AND GO NORTH 0.5 OF A MILE, TURN RIGHT AND GO EAST 0.7 OF A MILE, TURN LEFT AND GO NORTH 0.83 OF A MILE, TURN RIGHT AND GO NORTHEAST 0.15 OF A MILE TO EXISTING CDU 99H PAD. FROM NORTHEAST PAD CORNER FOLLOW ROAD SURVEY FLAGS NORTH 178' TO THE SOUTHWEST PAD CORNER FOR THIS LOCATION.



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Nick Ashley, Completions Engineer  
405-552-4641 [office]  
405-465-2076 [cell]  
[Nick.Ashley@dvn.com](mailto:Nick.Ashley@dvn.com)

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**Devon Contacts**

| <b>Devon Contacts</b> | <b>Contact</b>  | <b>Office</b> | <b>Office Phone</b> | <b>Cell Phone</b> | <b>E-mail Address</b>  |
|-----------------------|-----------------|---------------|---------------------|-------------------|--|
| CMP Engineer          | Nick Ashley     | OKC           | 405-552-4641        | 1(405)465-2076    | <a href="mailto:Nick.Ashley@dvn.com">Nick.Ashley@dvn.com</a>         |
| Foreman CMP           | Kelly Whitehead | Artesia       | 1(575)748-1834      | 1(575)513-4657    | <a href="mailto:Kelly.Whitehead@dvn.com">Kelly.Whitehead@dvn.com</a> |
| Foreman CMP           | Danny Velo      | Artesia       | 1(575)746-5572      | 1(575)703-3360    | <a href="mailto:Danny.Velo@dvn.com">Danny.Velo@dvn.com</a>           |
| Sand Coordinator      | Mark Briney     | OKC           | (405)552-4504       | (405)833-4771     | <a href="mailto:Mark.Briney@dvn.com">Mark.Briney@dvn.com</a>         |
| CMP Manager           | Dan Wood        | OKC           | (405)288-8514       | (405)974-0892     | <a href="mailto:Dan.Wood@dvn.com">Dan.Wood@dvn.com</a>               |

**Completion Notes:**

- **Previous Operations:**
  - o **CBL already ran and TOC at 4725'.**
  - o **Tied into 9-5/8" x 5-1/2" annulus and able to establish an injection rate of 5 bpm at 650 psi.**
  - o **Production casing tested to 8500 psi for 30 min and Toe sleeve opened.**
- **All water pumped into the well must be treated with biocide and if fresh water is used it needs to be treated with 2% KCL substitute.**

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Nick Ashley, Completions Engineer  
405-552-4641 [office]  
405-465-2076 [cell]  
[Nick.Ashley@dvn.com](mailto:Nick.Ashley@dvn.com)

## PROCEDURE:

1. MIRU cement truck and associated equipment. Tie into 9-5/8"x5-1/2" annulus.
2. Establish an injection rate. Verify injection rate of 5 bpm without exceeding 1500 psi. Monitor 5-1/2" casing pressure and the 13-3/8"x9-5/8" annulus pressure during injection. If able to establish an injection rate of 5 bpm without exceeding 1500 psi and no pressure communication was observed on the production and surface casing then proceed with the procedure.
3. Pump 20 BBL fresh water ahead.
4. Mix and pump 71 bbls of 12.9 lb/gal 35/65 Poz Class "C" w/ 6% bentonite. Cement volume includes 30% excess for the open hole section.

NOTE: Ensure lab testing with slurry has been completed and results sent to engineer. Verify thickening time meets job requirements.

5. Displace with 153 bbl of fresh water.
  - A. New TOC should be +/- 3300'

**NOTE: Verify volumes with engineer before pumping**
6. Monitor annulus pressure for 15 min. If well goes on vacuum call foreman and engineer.
7. Shut well in, RD from well and wait on cement for 48 hrs.
8. MIRU wireline, crane, lubricator. RIH with RCBL and log from 6,000' to 500' above where TOC is seen with 2000 psi on well. Well should have ~2000 psi on the well from open toe sleeve. Confirm new TOC and let engineer know TOC.
9. RDMO wireline, crane, lubricator. Secure Wellhead.
10. Have CBL and cement report sent to Nick Ashley ([Nick.Ashley@dvn.com](mailto:Nick.Ashley@dvn.com)) and [DCWellFileWestern@dvn.com](mailto:DCWellFileWestern@dvn.com).

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