

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

OCD Artesia

FORM APPROVED  
OMB NO. 1004-0135  
Expires: July 31, 2010**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 <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. NMNM89052
2. Name of Operator DEVON ENERGY PRODUCTION CO		6. If Indian, Allottee or Tribe Name
Contact: ERIN L WORKMAN Email: ERIN.WORKMAN@DVN.COM		7. If Unit or CA/Agreement, Name and/or No.
3a. Address 333 WEST SHERIDAN AVE OKLAHOMA CITY, OK 73102	3b. Phone No. (include area code) Ph: 405-552-7970	8. Well Name and No. APACHE 25 FED 17H
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 25 T22S R30E NESE 1450FSL 730FEL		9. API Well No. 30-015-41116-00-X1
		10. Field and Pool, or Exploratory LOS MEDANOS
		11. County or Parish, and State EDDY COUNTY, NM

**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
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Change to Original APD
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

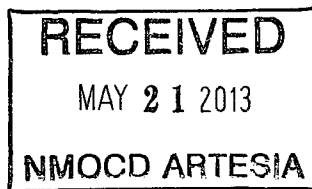
13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths 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 recompleat 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.)

Per discussion with Wesley Ingram

Devon Energy respectfully requests to change the casing and cement designs from a 8.75" production hole with a 5.5" production longstring to 7" intermediate II and a 4.5" liner due to loss of circulation while drilling the lateral.

*RD cele 5/24/13*  
Accepted for record  
NMOC

Attachment: Drilling Plan

**SEE ATTACHED FOR  
CONDITIONS OF APPROVAL**

14. I hereby certify that the foregoing is true and correct. Electronic Submission #207448 verified by the BLM Well Information System For DEVON ENERGY PRODUCTION CO LP, sent to the Carlsbad Committed to AFMSS for processing by KURT SIMMONS on 05/15/2013 (13KMS6058SE)	
Name (Printed/Typed) ERIN L WORKMAN	Title REGULATORY COMPLIANCE ASSOC.
Signature (Electronic Submission)	Date 05/14/2013

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

Approved By <u>WESLEY INGRAM</u>	Title <u>PETROLEUM ENGINEER</u>	Date <u>05/18/2013</u>
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 <u>Carlsbad</u>

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.

**\*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\***

APACHE 25 FED 17H- APD DRILLING PLAN  
SKS 6.28.12

**Casing Program**

<u>Hole Size</u>	<u>Hole Interval</u>	<u>OD Csg</u>	<u>Casing Interval</u>	<u>Weight</u>	<u>Collar</u>	<u>Grade</u>
8 - 3/4"	0 - 13,638	7"	0 - 11,350	29#	DWC/C	P110 EC
6 1/8"	13,638	4.5	10,000-15,165	13.5	BTC	P110

MAX TVD: 10,940 FT

**Design Factors**

<u>Casing Size</u>	<u>Collapse Design Factor</u>	<u>Burst Design Factor</u>	<u>Tension Design Factor</u>
7" 29# VMS P110 EC DWC/C	1.68	2.24	5.47
4.5" 13.5# P110	2.08	2.42	2.16

NOTE REGARDING COLLAPSE DESIGN FACTOR FOR INTERMEDIATE CASING: The maximum possible collapse load that the intermediate casing will experience will result from evacuated casing with the pore pressure exerting a collapse load at TD. While running the intermediate II casing, the casing string will never be completely evacuated.

**Mud Program**

<u>Depth</u>	<u>Mud Wt.</u>	<u>Visc.</u>	<u>Fluid Loss</u>	<u>Type System</u>
0 - 13638	9.2-10	30 - 34	N/C	FW
13638	10	30-34	N/C	FW

**Pressure Control Equipment**

The BOP system used to drill the intermediate hole will consist of a 13-5/8" 3M Triple Ram and Annular preventer. The BOP system will be tested as per BLM Onshore Oil and Gas Order 2 as a **3M system** prior to drilling out the surface casing shoe.

The BOP system used to drill the production hole will consist of a 13-5/8" 3M Triple Ram and Annular preventer. The BOP system will be tested as per BLM Onshore Oil and Gas Order 2 as a **3M system** prior to drilling out the intermediate casing shoe.

The pipe rams will be operated and checked as per Onshore Order No 2. A 2" kill line and 3" choke line will be incorporated into the drilling spool below the ram BOP. In addition to the rams and annular preventer, additional BOP accessories include a kelly cock, floor safety valve, choke lines, and choke manifold rated at **3,000 psi WP**.

Devon requests a variance to use a flexible line with flanged ends between the BOP and the choke manifold (choke line). The line will be kept as straight as possible with minimal turns.

## Cementing Program (cement volumes based on at least 25% excess)

7" Intermediate II

### 1<sup>st</sup> Stage

**Lead:** 420 sacks (35:65) Poz (Fly Ash):Class H Cement + 3% bwow Sodium Chloride + 0.1% bwoc R-3 + 0.125 lbs/sack Cello Flake + 0.7% bwoc FL-52 + 0.3% bwoc ASA-301 + 6% bwoc Bentonite + 105.6% Fresh Water, 12.5 ppg

**Yield:** 2.01 cf/sk

**Tail:** 300 sacks (50:50) Poz (Fly Ash):Class H Cement + 5% bwow Sodium Chloride + 0.1% bwoc R-3 + 0.3% bwoc CD-32 + 0.5% bwoc FL-25 + 0.5% bwoc FL-52 + 0.25% bwoc Sodium Metasilicate + 57.1% Fresh Water, 14.2 ppg

**Yield:** 1.28 cf/sk

**DV TOOL at 6300 ft**

### 2<sup>nd</sup> Stage

**Lead:** 280 sacks (60:40) Poz (Fly Ash):Class C Cement + 0.2% bwoc R-3 + 0.125 lbs/sack Cello Flake + 0.25% bwoc FL-52 + 1% bwoc Sodium Metasilicate + 3 lbs/sack LCM-1 + 5% bwow Sodium Chloride + 89.6% Fresh Water, 12.6 ppg

**Yield:** 1.73 cf/sk

**Tail:** 150 sacks (60:40) Poz (Fly Ash):Class C Cement + 5% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 0.5% bwoc BA-10A + 4% bwoc MPA-5 + 65.1% Fresh Water, 13.8 ppg

**Yield:** 1.37cf/sk

**DV TOOL at 4000 ft**

### 3<sup>rd</sup> Stage

**Lead** 350 sacks (60:40) Poz (Fly Ash):Class C Cement + 5% bwow Sodium Chloride + 1% bwoc Sodium Metasilicate + 0.25% bwoc FL-52 + 0.1% bwoc R-3 + 3 lbs/sack LCM-1 + 0.125 lbs/sack Cello Flake + 89.6% Fresh Water, 12.6 ppg

**Yield:** 1.73 cf/sk

**Tail:** 100 sacks (60:40) Poz (Fly Ash):Class C Cement + 0.125 lbs/sack Cello Flake + 5% bwow Sodium Chloride + 0.5% bwoc BA-10A + 0.3% bwoc Sodium Metasilicate + 4% bwoc MPA-5 + 65.2% Fresh Water, 13.8 ppg

**Yield:** 1.38cf/sk

**TOC @ Surface ft**

4.5" Liner

**Lead:** 960 sacks (50:50) Poz (Fly Ash):Class H Cement + 5% bwow Sodium Chloride + 0.1% bwoc R-3 + 0.3% bwoc CD-32 + 0.5% bwoc FL-25 + 0.5% bwoc FL-52 + 0.25% bwoc Sodium Metasilicate + 57.1% Fresh Water, 14.2 ppg

**Yield:** 1.28 cf/sk

### TOC for All Strings:

Intermediate II:	0
Liner:	10,000

**ACTUAL CEMENT VOLUMES WILL BE ADJUSTED BASED ON FLUID CALIPER AND CALIPER LOG DATA.**

**Apache 25 Fed 17H  
30-015-41116  
Devon Energy Production Co.  
May 18, 2013  
Conditions of Approval**

1. The minimum required fill of cement behind the 7 inch production casing is:
  - a. First stage to DV tool at 6300':  
☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job. Operator should have plans as to how they will achieve circulation on the next stage.
  - b. Second stage above DV tool at 6300':  
☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with third stage cement job. Operator should have plans as to how they will achieve circulation on the next stage.
  - c. Third stage above DV tool at 4000':  
☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office. **Additional cement may be required as excess calculates to 17%.**
2. The minimum required fill of cement behind the 4-1/2 inch production liner is:  
☒ Cement to top of liner. If cement does not circulate, contact the appropriate BLM office

**WWI 051813**