

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM 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.***SUBMIT IN TRIPLICATE - Other instructions on page 2**

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. NMNM0544986
2. Name of Operator DEVON ENERGY PRODUCTION COMPANY Contact: JENNIFER HARMS Email: jennifer.harms@devon.com		6. If Indian, Allottee or Tribe Name
3a. Address 333 WEST SHERIDAN AVENUE OKLAHOMA, OK 73102	3b. Phone No. (include area code) Ph: 405-552-6560	7. If Unit or CA/Agreement, Name and/or No.
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 36 T23S R31E SWSE 330FSL 1636FEL 32.254574 N Lat, 103.728271 W Lon		8. Well Name and No. TODD 36-25 STATE FED COM 235H
		9. API Well No. 30-015-45910-00-X1
		10. Field and Pool or Exploratory Area WILDCAT
		11. County or Parish, State EDDY COUNTY, NM

**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	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 recomple 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 recomple 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.

Devon Energy Production Co., L.P. (Devon) respectfully requests to have the option to move intermediate casing down to 9000'. Please see revised drill plan. Thank you.

**NM OIL CONSERVATION**  
ARTESIA DISTRICT

AUG 21 2019

**Carlsbad Field Office**  
**OCD Artesia****RECEIVED**  
**SEE ATTACHED FOR**  
**CONDITIONS OF APPROVAL***All Previous COAs still exist, except for the following: [Signature]*

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

**Electronic Submission #475502 verified by the BLM Well Information System**  
**For DEVON ENERGY PRODUCTION COMPANY LP, sent to the Carlsbad**  
**Committed to AFMSS for processing by PRISCILLA PEREZ on 07/29/2019 (19PP2868SE)**

Name (Printed/Typed) JENNIFER HARMS	Title REGULATORY COMPLIANCE ANALYST
Signature (Electronic Submission)	Date 07/29/2019

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

Approved By JEROMY PORTER	Title PETROLEUM ENGINEER	Date 07/29/2019
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

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.

(Instructions on page 2)

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

Rd 10-25-19

## Revisions to Operator-Submitted EC Data for Sundry Notice #475502

	Operator Submitted	BLM Revised (AFMSS)
Sundry Type:	APDCH NOI	APDCH NOI
Lease:	NMNM0544986	NMNM0544986
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
Admin Contact:	JENNIFER HARMS REGULATORY COMPLIANCE ANALYST E-Mail: jennifer.harms@dvsn.com  Ph: 405-552-6560	JENNIFER HARMS REGULATORY COMPLIANCE ANALYST E-Mail: jennifer.harms@dvsn.com  Ph: 405-552-6560
Tech Contact:	JENNIFER HARMS REGULATORY COMPLIANCE ANALYST E-Mail: jennifer.harms@dvsn.com  Ph: 405-552-6560	JENNIFER HARMS REGULATORY COMPLIANCE ANALYST E-Mail: jennifer.harms@dvsn.com  Ph: 405-552-6560
Location:		
State:	NM	NM
County:	EDDY	EDDY
Field/Pool:	SAND DUNES; BONESPRING	WILDCAT
Well/Facility:	TODD 36-25 STATE FED COM 235H Sec 36 T23S R31E SWSE 330FSL 1636FEL	TODD 36-25 STATE FED COM 235H Sec 36 T23S R31E SWSE 330FSL 1636FEL 32.254574 N Lat, 103.728271 W Lon

## Devon Energy, Todd 36-25 State Fed Com 235H Sundry

### 1. Geologic Formations

TVD of target	10,570'	Pilot hole depth	N/A
MD at TD:	20,908'	Deepest expected fresh water:	

### Basin

Formation	Depth (TVD) from KB
Rustler	811
Salado	1146
Base of Salt	4445
Delaware	4506
L Brushy Canyon	8056
Bone Spring	8386
Leonard 'A'	8486
Leonard 'B'	8971
Leonard 'C'	9136
2nd BSPG Lime	9871
2nd BSPG Sand	10036
L 2nd BSPG Sand	10536
Landing Point	10560

\*H<sub>2</sub>S, water flows, loss of circulation, abnormal pressures, etc.

## Devon Energy, Todd 36-25 State Fed Com 235H Sundry

### 2. Casing Program

Hole Size	Casing Interval		Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
	From	To							
17.5"	0	836 TVD	13.375"	48	H-40	STC	1.125	1.25	1.6
9.875"	0	9000 TVD	8.625"	32	P110EC	TLW	1.125	1.25	1.6
7.875"	0	TD	5.5"	17	P110	CDC-HTQ	1.125	1.25	1.6

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h 97

Rustler top will be validated via drilling parameters (i.e. reduction in ROP) and surface casing setting depth revised accordingly if needed.

Variance requested to drill 10.625" hole instead of 9.875" for intermediate 1, the 8.625" connection will change from TLW to BTC.

A variance is requested to wave the centralizer requirement for the 8-5/8" casing in the 9-7/8" hole and the 5-1/2" casing in the 7-7/8" hole.

8-5/8" Intermediate casing will be kept fluid filled.

### 3. Cementing Program

Casing	# Skis	TOC	Wt. lb/gal	Yld ft3/sack	Slurry Description
Surface	449.7	Surf	14.8	1.34	Tail: Class H Cement + additives
Int	473.1	Surf	9.0	3.3	Lead: Class C Cement + additives
	103	500' above shoe	14.8	1.34	Tail: Class H Cement + additives
Intermediate (Bradenhead)	1144	Surf	14.8	1.34	Class H Cement + additives
Production	309	500' tieback	10.8	1.41	Lead: Class H/C + additives
	2584	KOP	13.8	1.18	Tail: Class H/C + additives

If a DV tool is used, depth(s) will be adjusted based on hole conditions and cement volumes will be adjusted proportionally. DV tool will be set a minimum of 50 feet below previous casing and a minimum of 200 feet above current shoe. Lab reports with the 500 psi compressive strength time for the cement will be onsite for review.

Casing String	% Excess
Surface	50%
Intermediate	30%
Production	10%

Devon Energy, Todd 36-25 State Fed Com 235H Sundry

4. Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From	To				
0	836'	FW	8.33	28	NC
836'	9,000'	Cut/Saturated Brine	9.4 -10.5	28-34	N/C
9,000'	TD	Cut Brine / DBE	9.2 – 9.7	30-40	30-40

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

What will be used to monitor the loss or gain of fluid?	PVT/Pason/Visual Monitoring
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## PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Devon Energy Production Company LP
LEASE NO.:	NMNM0544986
WELL NAME & NO.:	Todd 36-25 State Fed Com 235H
SURFACE HOLE FOOTAGE:	330'/S & 1636'/E
BOTTOM HOLE FOOTAGE:	20'/N & 400'/E
LOCATION:	Section 36, T.23 S., R.31 E., NMPM
COUNTY:	Eddy County, New Mexico

COA

H2S	<input type="radio"/> Yes	<input checked="" type="radio"/> No	
Potash	<input type="radio"/> None	<input checked="" type="radio"/> Secretary	<input type="radio"/> R-111-P
Cave/Karst Potential	<input checked="" type="radio"/> Low	<input type="radio"/> Medium	<input type="radio"/> High
Variance	<input type="radio"/> None	<input checked="" type="radio"/> Flex Hose	<input type="radio"/> Other
Wellhead	<input type="radio"/> Conventional	<input type="radio"/> Multibowl	<input checked="" type="radio"/> Both
Other	<input type="checkbox"/> 4 String Area	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> WIPP
Other	<input checked="" type="checkbox"/> Fluid Filled	<input checked="" type="checkbox"/> Cement Squeeze	<input type="checkbox"/> Pilot Hole
Special Requirements	<input type="checkbox"/> Water Disposal	<input checked="" type="checkbox"/> COM	<input type="checkbox"/> Unit

**All Previous COAs Still Apply, Except for the Following:**

### A. CASING

1. The 13-3/8 inch surface casing shall be set at approximately **836 feet** (a minimum of 70 feet into the Rustler Anhydrite and above the salt) and cemented to the surface.  
**Excess cement calculates to 4%, additional cement might be required.**
  - 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 8-5/8 inch intermediate casing shall be set at approximately 9000 feet 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.**  
**Excess cement calculates to 19%, additional cement might be required.**

**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. Excess cement calculates to 19%, additional cement might be required.**

**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.**

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.

JJP07292019

## 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 County

Call 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. 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. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
3. 5M or higher 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. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
  - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
5. 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, 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. In potash areas, 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. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time.
- c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- e. The results of the test shall be reported to the appropriate BLM office.
- f. 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.
- g. 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. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.