Form 3160-5 (June 2015)

## **UNITED STATES** DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB NO. 1004-0137

		January		l
ease Se	rial No.			•

BUNEAU OF LAIND MANAGEMENT	ロコ		5. Leas	e Serial No.
JINDRY NOTICES AND REPORTS ON WELLS LAOF		- 10	NM	NM86153
t use this form for proposals to drill or to re-enter an	. 4 *	1 3013	6 If In	dian Allotte

SUNDRY Do not use thi abandoned wel	NOTICES AND REPO is form for proposals to ii. Use form 3160-3 (AP	RTS ON WELLS C drill or to re-enter an D) for such proposals.	APR 11 2019	6. If Indian, Allottee o	r Tribe Name
SUBMIT IN 1	TRIPLICATE - Other ins	tructions on page 2	SECEIV	7. If Unit or CA/Agree	ement, Name and/or No.
1. Type of Well  2 Oil Well Gas Well Oth	ier		-	8. Well Name and No.	21 STATE FED COM 216H
2. Name of Operator DEVON ENERGY PRODUCT		JENNIFER HARMS rms@dvn.∞m		9. API Well No.	F-45728
3a. Address 333 WEST SHERIDAN AVEN OKLAHOMA CITY, OK 73102	10. Field and Pool or I SAND DUNES-	Exploratory Area BONE SPRING, SOUTH			
4. Location of Well (Footage, Sec., T.		)		11. County or Parish,	State
Sec 16 T23S R32E NWSE 23 32.303715 N Lat, 103.678040				LEA COUNTY,	NM
12. CHECK THE AF	PPROPRIATE BOX(ES)	TO INDICATE NATUR	E OF NOTICE,	REPORT, OR OTH	IER DATA
TYPE OF SUBMISSION		ТҮР	E OF ACTION		
Notice of Intent	☐ Acidize	Deepen	☐ Producti	on (Start/Resume)	■ Water Shut-Off
Notice of Intent	☐ Alter Casing	☐ Hydraulic Fractu	ring 🔲 Reclama	ation	■ Well Integrity
☐ Subsequent Report	□ Casing Repair	■ New Construction	n 🗖 Recomp	lete	<b>⊠</b> Other
☐ Final Abandonment Notice	☐ Change Plans	☐ Plug and Abando	n 🗖 Tempor	arily Abandon	Change to Original A PD
	Convert to Injection	☐ Plug Back	☐ Water D	isposal	10
Attach the Bond under which the wor following completion of the involved testing has been completed. Final Abdetermined that the site is ready for fine Devon Energy Production Co. intermediate casing down to 8 Delaware producers, primarily 6,960 to 8,570. Setting our int loss zones. This will allow us to production hole, allowing us to the lateral. This is a contingen Thank you.	operations. If the operation re pandonment Notices must be fil inal inspection.  I.P. (Devon) respectfull 880 due to the close pro- the Tomcat wells. The T termediate string deeper o increase mud weight as better handle any well c	sults in a multiple completion of ed only after all requirements, if y requests to have the op- kimity of depletion from momcat wells have perforal will allow for us to case of s necessary for well cond- ontrol issues that may ari	or recompletion in a mincluding reclamation of the move sultiple active tions varying fron ff potential itions in the se while drilling	ew interval, a Form 316 a, have been completed a	0-4 must be filed once and the operator has
	# Electronic Submission For DEVON ENER Imitted to AFMSS for proc	458631 verified by the BLM SY PRODUCTION COMPAN essing by PRISCILLA PER	l, sent to the Hob EZ on 03/20/2019	bs (19PP1388SE)	
Name (Printed/Typed) JENNIFEF	RHARMS	Title RE	GULATORY CO	MPLIANCE ANALY	<u>SI</u>
Signature (Electronic S	Submission)	Date 03/	20/2019		<del>.</del>
	THIS SPACE FO	OR FEDERAL OR STA	TE OFFICE U	SE	
Approved By LQNG VO  Conditions of approval, if any, are attached certify that the applicant holds legal or equivalent would entitle the applicant to condu	iitable title to those rights in the	not warrant or	OLEUM ENGINE	EER	Date 03/02/2019
Title 18 U.S.C. Section 1001 and Title 43				ke to any department or	agency of the United

# PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

**OPERATOR'S NAME:** Devon Energy Production Company LP

LEASE NO.: | NMNM086153

WELL NAME & NO.: | Fluffy Cat 16-21 State Fed Com 216H

**SURFACE HOLE FOOTAGE:** 2314'/S & 2154'/E **BOTTOM HOLE FOOTAGE** 330'/S & 2240'/E

LOCATION: | Section 16, T.23 S., R.32 E., NMPM

**COUNTY:** Lea County, New Mexico

COA

H2S	• Yes	C No	
Potash	© None	C Secretary	C R-111-P
Cave/Karst Potential	e rom	← Medium	↑ High
Variance	None	Flex Hose	○ Other
Wellhead	Conventional		<b>☞</b> Both
Other	□ 4 String Area	Capitan Reef	<b>□</b> WIPP
Other	Fluid Filled	Cement Squeeze	Pilot Hole
Special Requirements	☐ Water Disposal	<b>▼</b> COM	□ Unit

#### All Previous COAs Still Apply

#### A. CASING

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

1. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:

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

• Cement to surface. If cement does not circulate see B.1.a, c-d above. Cement excess is less than 25%, more 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.
    - 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
- 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.

## Devon Energy, Fluffy Cat 16-21 State Fed Com 216H

## 1. Geologic Formations

TVD of target	10,640'	Pilot hole depth	N/A
MD at TD:	17,150'	Deepest expected fresh water:	

## Basin

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Rustler	1215		
Salado	1560		
Delaware	4800		
L.Brushy	7020		
1st BSPG Lime	8700		
1st BSPG Sand	9855		
2nd BSPG Lime	10170		
2nd BSPG Sand	10455		
2nd BSPG Target	10600		

<sup>\*</sup>H2S, water flows, loss of circulation, abnormal pressures, etc.

### Devon Energy, Fluffy Cat 16-21 State Fed Com 216H

Hole Size	asing Pro Casing	gram Interval	Csg.	Weight	Grade	Conn	SF	SF Burst	SF
	From	To	Size	(lbs)			Collapse		Tension
40050	0	4,500'	9.625"	40	J-55	BTC	1.15	1.77	4.10
12.25"	4,500	8,800'	9.625"	40	HCK-55	BTC	1.18	1.32	3.75
	•	•	•	BLM Min	imum Safet	y Factor	1.125	1.00	1.6 Dry

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

3. Mud Pr	ogram				V surfa
D	epth	Туре	Weight (ppg)	Viscosity	Water Loss
From	То	· .			
1,200'	8,800'	Cut/Saturated Brine	9.4 -10.5	28-34	N/C

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	PVT/Pason/Visual Monitoring
of fluid?	

## 6. Logging and Testing Procedures

Log	Logging, Coring and Testing.				
X	Will run GR/CNL from TD to surface (horizontal well – vertical portion of hole).				
	Stated logs run will be in the Completion Report and submitted to the BLM.				
	No Logs are planned based on well control or offset log information.				
	Drill stem test? If yes, explain				
	Coring? If yes, explain				
	We plan to conduct whole cores through the Leonard Formation				

Add	litional logs planned	Interval
	Resistivity	Int. shoe to KOP
	Density	Int. shoe to KOP
	CBL	Production casing
X	Mud log	Intermediate shoe to TD
	PEX	