Form 3160-5 (June 2015)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 201

5. Lease Serial No.

SUNDRY NOTICES AND REPORTS ON WELLS  Do not use this form for proposals to drill or to re-enter an					NMNM95642	
abandoned we	6. If Indian, Allottee or	Tribe Name				
SUBMIT IN	TRIPLICATE - Other ins	tructions on	HOBBS	QCD.	7. If Unit or CA/Agreen	nent, Name and/or No.
I. Type of Well Gas Well Oth	8. Well Name and No. GRUMPY CAT 15-2	22 FED COM 211H				
Name of Operator     DEVON ENERGY PRODUCT	Contact: ION CONTRAM: jennifer.ha		ARMS APR 1	1 Sna	9. API Well No.	5-48730
3a. Address 333 WEST SHERIDAN AVEN OKLAHOMA CITY, OK 73102		3b. Phone No. Ph: 405-55	(include area code) 2-6560 REC	EIVEL	10. Field and Pool or Ex SAND DUNES-B	ploratory Area ONE SPRING, SOUTH
4. Location of Well (Footage, Sec., T.	, R., M., or Survey Description	)			11. County or Parish, State	
Sec 15 T23S R32E NWNW 47 32.310600 N Lat, 103.667175					LEA COUNTY, N	M
12. CHECK THE AF	PPROPRIATE BOX(ES)	TO INDICA	TE NATURE OI	F NOTICE,	REPORT, OR OTHE	ER DATA
TYPE OF SUBMISSION			TYPE OF	ACTION		
■ Notice of Intent	☐ Acidize	☐ Deep	pen	□ Product	ion (Start/Resume)	■ Water Shut-Off
_	☐ Alter Casing	☐ Hyd	raulic Fracturing	☐ Reclama	ation	■ Well Integrity
☐ Subsequent Report	Casing Repair	□ New	Construction	☐ Recomp	lete	<b>⊠</b> Other
☐ Final Abandonment Notice	□ Change Plans	Plug	and Abandon	□ Tempor	arily Abandon	Change to Original A PD
	Convert to Injection	Plug	Back	☐ Water D	isposal	
testing has been completed. Final At determined that the site is ready for final Devon Energy Production Co. intermediate casing down to 8 Delaware producers, primarily 6,960 to 8,570. Setting our intermediate casing down to 8 production hole, allowing us to the lateral. This is a contingen Thank you.	inal inspection.  , L.P. (Devon) respectfull 750 due to the close proy the Tomcat wells. The To termediate string deeper to increase mud weight as better handle any well c	y requests to kimity of deple omcat wells h will allow for u s necessary fo ontrol issues to	have the option to tion from multiple ave perforations is to case off potor well conditions that may arise will elease see attach	to move e active varying fror ential s in the hile drilling nment.		TTT CA
14. I hereby certify that the foregoing is	true and correct. Electronic Submission # For DEVON ENERC mitted to AFMSS for proc	SY PRODUCT()	ON COMPAN, sei	nt to the Hob	bs	
Name (Printed/Typed) JENNIFER HARMS Title REGULATORY C					MPLIANCE ANALYS	Τ
Signature (Electronic S	Submission)		Date 03/20/20	019		
	THIS SPACE FO	OR FEDERA	L OR STATE	OFFICE U	SE	
Approved By J ONG VO			TitlePETROLE	LIM ENGINE	ED	Date 03/21/2019
Approved By _LQNG_VO			 	AM PHAIM	<del></del>	, 33,21,2310
certify that the applicant holds legal or equ which would entitle the applicant to condu	itable title to those rights in the	subject lease	Office Hobbs	·		
Title 18 U.S.C. Section 1001 and Title 43 States any false, fictitious or fraudulent s	U.S.C. Section 1212, make it a statements or representations as	crime for any pe to any matter w	rson knowingly and ithin its jurisdiction.	willfully to ma	ike to any department or ag	gency of the United

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



- 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
  - ✓ 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.

#### Devon Energy, Grumpy Cat 15-22 Fed Com 211H

# 1. Geologic Formations

TVD of target	10,714'	Pilot hole depth	N/A
MD at TD:	20,350'	Deepest expected fresh water:	

# Basin

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Rustler	1180	· · · · · · · · · · · · · · · · · · ·	
Salado	1595		
Delaware	4850		
L.Brushy	7025		
1st BSPG Lime	8720		
1st BSPG Sand	9885		
2nd BSPG Lime	10190		
2nd BSPG Sand	10495		
2nd BSPG Target	10640		

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

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2. Casing Program

Hole Size	le Size   Casing Interval		Csg.	Weight	Grade	Conn	SF Collapse	SF Burst	SF Tension
	From	To	Size	Size (lbs)					
10.05"	0	4,500'	9.625"	40	J-55	BTC	1.15	1.77	4.10
12.25"	4,500	8,750'	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 Program

Depth
Type
Weight (ppg)
Viscosity
Water Loss

Depth		Туре	Weight (ppg)	Viscosity	Water Loss
From	To				
1,200'	8,750'	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	