Form 3160-5 (February 2005)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

RECEIVED

FORM APPROVED OMB No 1004-0137 Expires March 31, 2007

APR 21 2010 5 Lease Serial No

NMNM-54856

SUNDRY NOTICES AND REPORTS ON WELLS

6. If Ildian, Allottee or Tribe Name

Do not use this f abandoned well.	orm for proposals t Use Form 3160-3 (A	to drill or to le	hAHIES Is.	SIA		
SUBMIT IN TRIPLICATE – Other instructions on page 2.				7 If Unit of CA/Agreement, Name and/or No		
I Type of Well						
✓ Oil Well ☐ Gas Well ☐ Other				8 Well Name and No Dickens 29 Federal 1H		
2. Name of Operator Devon Energy Production Co., LP				9. API Well No 30-	-015-37385	
3a Address		3b Phone No. (include area code)		10. Field and Pool or Exploratory Area		
20 North Broadway OKC, OK 73102		(405)-552-7802		Dog Ca	anyon; Wolfcamp	
4 Location of Well (Footage, Sec., T.,R.,M., or Survey Description) SESE SL 170' FSL & 790' FEL BHL, 330' FSL & 330' FWL Sec 29-T16S-R28E				11 Country or Parish, State Eddy County, NM		
12. CHEC	K THE APPROPRIATE BO	DX(ES) TO INDICATE NATUR	E OF NOTIC	E, REPORT OR OTHE	ER DATA	
TYPE OF SUBMISSION	UBMISSION TYPE OF AG			TION		
Notice of Intent	Acidize	Deepen	Produ	oduction (Start/Resume) Water Shut-Off		
	Alter Casing	Fracture Treat	Recla	Reclamation Well Integrity		
<u></u>	Casing Repair	New Construction	Reco	Recomplete		
Subsequent Report	Change Plans	Plug and Abandon	Temp	oorarily Abandon	Drilling Program	
Final Abandonment Notice	Convert to Injection	Plug Back	☐ Wate	ater Disposal		
13. Describe Proposed or Completed Op the proposal is to deepen directions Attach the Bond under which the w following completion of the involve testing has been completed. Final, determined that the site is ready for	ally or recomplete horizontal work will be performed or pr ed operations. If the operation Abandonment Notices must	lly, give subsurface locations and ovide the Bond No on file with ton results in a multiple completi	l measured an BLM/BIA R on or recomp	d true vertical depths of equired subsequent rep- letion in a new interval,	f all pertinent markers and zones orts must be filed within 30 days a Form 3160-4 must be filed once	
Devon Energy Production Co., LP re	espectfully requests appro	oval to deviate from the origina	al approved	APD and revise the d	rilling program per the attached:	
Note Please see sundry document	ation for the Shakespeare	e 20 Fed Com 3H API# 30-01	5-37193; apj	proved by the BLM 11	1/27/2009 & OCD 12/04/2009	

SUBJECT TO LIKE APPROVAL BY STATE

(Instructions on page 2)

OHC behind pipe

SEE ATTACHED FOR CONDITIONS OF APPROVAL

14 I hereby certify that the foregoing is true and correct Name (Printed/Typed) Stephanie A. Ysasaga	Title Sr. Staff Engineering T	echnician
Signature // //	Date 04/16/2010	ADDROVED
/ THIS SPACE	CE USE ATTIOVED	
Approved by	Title	. Date APR 2 0 2010
Conditions of approval, if any, are attached Approval of this notice do that the applicant holds legal or equitable title to those rights in the subjentitle the applicant to conduct operations thereon		Vs/ Chris Walls BUREAU OF LAND MANAGEMENT
Title 18 U S C Section 1001 and Title 43 U S C Section 1212, make it fictitious or fraudulent statements or representations as to any matter w	a crime for any person knowingly and willfully to mouthin its jurisdiction	ake to any department of agency of the United States any false



April 16, 2010

United States
Department of The Interior
Carlsbad, New Mexico
Re: Dickens 29 Fed 1H
Sec 29-T165-R28E
Eddy County, New Mexico
API # 30-015-37385

Devon Energy would like to make the following changes to the approved drilling design for the above referred well.

- Teferenced ;; 590'

 1. The 17 1/2 hole to be drilled to ~600' (as per BLM COA) and at set 13 3/8" 48# H-40 ST&C casing. Cement to surface with 375 sacks 35:65 Pox Class C yield 1.96 cuft/sk and 250 sacks of Class C yield 1.34 cuft/sk.
 - 2. The 12 ¼" hole to be drilled to-2300' and set 9 5/8" 36# J-55 LT&C casing. Cement to surface with: Lead with 600 sx 35:65 Poz Class C Yield 1.97 cf/sk and Tail with 350 sx Class C Yield 1.35 cf/sk.
 - 3. This well will have a **PILOT HOLE**. The 7" and $4\frac{1}{2}$ " casing described in the approved APD will only be rarrif hole conditions deteriorate and this will be considered as a option.
 - 4. An 8 ¾" hole will be drilled from 2300' to the TMD ~ 10,500. 10,475′ Per HPD
 - 5. The current proposed production casing will be 5 ½" 17# BT&C & LT&C P110 HC and will be ram with a Packer type completion system with Swell Packers for isolation in the lateral to a MTD of ~10500".

 See COH

 DHC
 - 6. A Port Collar (PC) will be placed in the 5 $\frac{1}{2}$ " casing at KOP (~5900') while running the casing.
 - 7. Once the casing with the completion system is ran, tubing will be ran to open the PC (5900') and the 5 ½" casing be cemented from 5900'to surface. Cement volume will be 985 sacks 35:65 Poz Class C with a yield of 1.96 cuft/sk and 380 sacks of Class C with a yield of 1.34 cuft/sk.
 - 8. Data for 5 ½" casing: -5000' of 17# P110'BT&C and ~5950' of 17# P 110 LT&C. Safety factors are: Collapse 2.93, Burst 4.01 and Tensile 2.37.

Devon Energy reserves the right to change the tubular design as the well is being drilled and will inform the Carlsbad New Mexico, BLM office within 24 hours of any changes which may occur.

COM

Regards
Pat Brown
Drilling Engineer
Devon Energy
Western Region USA
Office: 405-228-8511

CONDITIONS OF APPROVAL

OPERATOR'S NAME: | Devon Energy Production Company, LP

LEASE NO.: | NM103873

WELL NAME & NO.: Dickens 29 Federal 1H SURFACE HOLE FOOTAGE: 170' FSL & 790' FEL BOTTOM HOLE FOOTAGE 330' FSL & 330' FWL

LOCATION: Section 29, T. 16 S., R 28 E., NMPM

COUNTY: | Eddy County, New Mexico

I. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

- a. Spudding well
- b. Setting and/or Cementing of all casing strings
- c. BOPE tests

Eddy County

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822

- 1. Although there are no measured amounts of Hydrogen Sulfide reported, it is always a potential hazard. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.
- 2. 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.
- 3. 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.

4. The record of the drilling rate along with the CAL/GR/N well log run from TD to surface will 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.

B. CASING

Changes to the approved APD casing and cement program require submitting a sundry and receiving approval prior to work. Failure to obtain approval prior to work will result in an Incident of Non-Compliance being issued.

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. See individual casing strings for details regarding lead cement slurry requirements.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

High cave/karst.

Possible lost circulation in the Grayburg and San Andres formations. Possible high pressure gas bursts in the Wolfcamp.

- 1. The 13-3/8 inch surface casing shall be set at approximately 590 feet in the Seven Rivers formation and cemented to the surface. Fresh water mud is to be used to setting depth.
 - 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 is to include the lead cement slurry.
 - 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 action will be done prior to drilling out that string. 2. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is: 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 high cave/karst. This casing is to be set above the Slaughter Zone of the San Andres formation. Formation below the 9-5/8" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe and the mud weight for the bottom of the hole. Report results to BLM office. Pilot hole plug is to have a plug at the bottom and must be 170' in length. Plug to be tagged prior to setting second plug. Report tag depth on subsequent report. Operator can set a single plug from the bottom of the hole to the kick-off point and avoid a tag. 3. The minimum required fill of cement behind the 5-1/2 inch production casing is: Cement to surface. If cement does not circulate see B.1.a, c-d above. The placement of the ported collar may result in downhole commingling behind the casing and as a result is subject to like approval by State. The operator has provided documentation from offsetting wells that indicates that production does not exist in the portion of the hole that could have commingling issues and based on that data, the BLM is approving the set point for the ported collar. **Contingency casing program:** 4. The minimum required fill of cement behind the 7 inch second intermediate casing is: 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 high cave/karst. Formation below the 7" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the

5. The minimum required fill of cement behind the 4-1/2 inch production casing is:

the hole. Report results to BLM office.

pore pressure of the formation below the shoe and the mud weight for the bottom of

☐ Cement not required – operator using Peak System Iso-pack liner.

6. 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.

C. 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. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **2000 (2M)** psi.
 - a. **For surface casing only:** If the BOP/BOPE is to be tested against casing, the wait on cement (WOC) time for that casing is to be met (see WOC statement at start of casing section). Independent service company required.
- 3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 9-5/8" intermediate casing shoe shall be 5000 (5M) psi. 5M 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. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. Casing cut-off and BOP installation will not be initiated until the cement has had a minimum of 8 hours setup time for a water basin. The casing shall remain stationary and under pressure for at least eight hours after the operator places the cement. In the potash area, the minimum time is 12 hours and the casing shall remain stationary and under pressure during this time period. Casing shall be under pressure if the operator uses some acceptable means of holding pressure or if the operator employs one or more float valves to hold the cement in place. Testing the BOP/BOPE against a plug can commence after meeting the above conditions plus the BOP installation time.
 - b. The tests shall be done by an independent service company utilizing a test plug.
 - c. The results of the test shall be reported to the appropriate BLM office.
 - d. 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.

- e. 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.
- f. 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.
- g. Effective November 1, 2008, no variances will be granted on reduced pressure tests on the surface casing and BOP/BOPE. Onshore Order 2 requirements will be in effect.

D. 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.

E. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

CRW 042010