# **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	

5. Lease Serial No

SUNDRY Do not use the abandoned we	NMNM036379  MM 0 37489  6. If Indian, Allottee or Tribe Name						
SUBMIT IN TRI	7. If Unit or CA/Agreement, Name and/or No.						
1. Type of Well		8. Well Name and No. COTTON DRAW UNIT 117H					
Oil Well Gas Well Oth			UNII 1176				
2. Name of Operator DEVON ENERGY PRODUCT	9. API Well No. 30-015-38434						
			o. (include area cod 52-4524	le)	10. Field and Pool, or Exploratory WC; UPPER PENN SHALE (G)		
4 Location of Well (Footage, Sec., 1			11 County or Parish,	and State			
Sec 34 T24S R31E 160FSL 1	EDDY COUNTY, NM						
12. CHECK APP	ROPRIATE BOX(ES) T	O INDICATI	E NATURE OF	NOTICE, RE	PORT, OR OTHE	R DATA	
TYPE OF SUBMISSION	TYPE OF SUBMISSION			OF ACTION	( •	( •	
Notice of Intent	Acidize	□ Dec	epen	□ Producti	on (Start/Resume)	☐ Water Shut-Off	
<b>-</b>	☐ Alter Casing	□ Fra	cture Treat	☐ Reclama	tion	■ Well Integrity	
☐ Subsequent Report	☐ Casing Repair	□ Ne	☐ New Construction		ete	Other	
Final Abandonment Notice	☐ Change Plans ☐ P		g and Abandon	☐ Tempora	rily Abandon		
	Convert to Injection		g Back	■ Water Disposal			
If the proposal is to deepen direction Attach the Bond under which the wo following completion of the involve testing has been completed. Final Adetermined that the site is ready for for Devon Energy Production Co. approved APD. The original approved APD.	rk will be performed or provid operations If the operation reparts on the comment Notices shall be final inspection.)  LP respectfully requests	te the Bond No. of esults in a multiplied only after all only after all only after all only after expenses a two year of the second of the sec	on file with BLM/B ole completion or re requirements, inclu- extension for the	IA. Required sub ecompletion in a n uding reclamation previously	sequent reports shall be ew interval, a Form 316 i, have been completed,	filed within 30 days 0-4 shall be filed once	
Thank you eDade 10/30/12  RECE  NOTE  OCT 2  Lines - ad 10/91/72  Eng. (eviewe) 10/21/12 CRW  NMOCD			APPROVED FOR MONTH PERIOD ENDING 9/8/2014				
14. Thereby certify that the foregoing is	Electronic Submission #	#149083 verifie	d by the BLM W	ell Information	System		
	TION CO LP, sent to the Hobbs by KURT SIMMONS on 09/20/2012 ()						
Name (Printed/Typed) MELANIE A CRAWFORD			Title REGULATORY ANALYST				
Signature (Electronic Submission)			Date 09/06/2012				
	THIS SPACE F	OR FEDER	AL OR STATE	OFFICE US	E		
Approved By  Conditions of approval of any, are attacked	Title 7	FM		Date 25/6			
Conditions of approval, if any, are attached certify that the applicant holds legal or equivalent would entitle the applicant to condition to condition the applicant to condition the applicant to condition the applicant to condition the applicant to conditions the applicant to condition the applicant to condition the applicant to conditions the applicant the applicant to conditions the applicant to conditions the applicant to conditions the applicant to conditions the applicant the applicant to conditions the applicant the appli	uitable title to those rights in th	he subject lease	Office	CARLSBAD	FIELD OFFICE		

# PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME: DEVON ENERGY

LEASE NO.: NM036379

WELL NAME & NO.: | 117H-COTTON DRAW UNIT

SURFACE HOLE FOOTAGE: | 160'/S. & 1980'/E.

BOTTOM HOLE FOOTAGE

LOCATION: Section 34, T. 24 S., R. 31 E., NMPM

COUNTY: | Eddy County, New Mexico

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The previously approved APD with conditions of approval dated 09/09/2010 apply to this APD extension. Any deviations to the previously approved APD are as follows:

Special Requirements

□ Drilling

Logging Requirements
Waste Material and Fluids

## I. SPECIAL REQUIREMENT(S)

### **Commercial Well Determination**

Well is not in a participating area. A commercial well determination shall be submitted.

### Plan of Development

Operator is to submit a Unit Plan of Development (UPOD) annually to the BLM. Guidelines for UPOD are available upon request at the BLM Carlsbad Field Office.

### II. 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 Hydrogen Sulfide has not been reported in this section, it is always a potential hazard. If Hydrogen Sulfide is encountered, please report measured amounts 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. If the drilling rig is removed without approval an Incident of Non-Compliance will be written and will be a "Major" violation.
- 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 GR/N well log run from TD to surface (horizontal well vertical portion of hole) 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. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

### B. CASING

Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size. 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.).

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

Wait on cement (WOC) time prior to drilling out 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. DURING THIS WOC TIME, NO DRILL PIPE, ETC. SHALL BE RUN IN THE HOLE. 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.

### Secretary's Potash

Possible water and brine flows in the Salado, Castile, Delaware and Bone Spring. Possible lost circulation in the Delaware and Bone Spring groups.

- 1. The 20 inch surface casing shall be set at approximately 1000 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface. Additional cement may 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 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 cementing will be done prior to drilling out that string.
- 2. The minimum required fill of cement behind the 13-3/8 inch intermediate casing is:

Cement to surface. If cement does not circulate see B.1.a, c-d above. Casing should be set in the Lamar at approximately 4335 feet.

Formation below the 13-3/8" 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 (not the mud weight required to prevent dissolving the salt formation) and the mud weight for the bottom of the hole. Report results to BLM office.

NOTE: 9-5/8 inch intermediate casing shall be kept fluid filled while running into the hole.

- 3. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:
  - a. First stage to DV tool, cement shall:
  - 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, cement shall:
  - Cement should tie-back at least 500 feet into previous casing string. Operator shall provide method of verification.

Open Hole Plug: Approved as proposed.

Centralizers required on horizontal leg, must be type for horizontal service and minimum of one every other joint.

- 4. 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.
- 5. 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. Variance approved to use flex line from BOP to choke manifold. 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. If the BLM inspector questions the straightness of the hose, a BLM engineer will be contacted and will review in the field or via picture supplied by inspector to determine if changes are required (operator shall expect delays if this occurs).
- 3. 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.
- 4. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 13-3/8 intermediate casing shoe shall be 10,000 (10M) psi. 10M 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.
- 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

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- hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
- b. 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 (18 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).
- 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.

### D. DRILL STEM TEST

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

### E. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

### **CRW 100112**