# Form 3160-5 AS OCT (August 2007)

### OCD-HOBBS OCD

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

MAR 2 2 2012

FORM APPROVED OMB No 1004-0137 Expires: July 31, 2010

5. Lease Serial No NM112730 19143

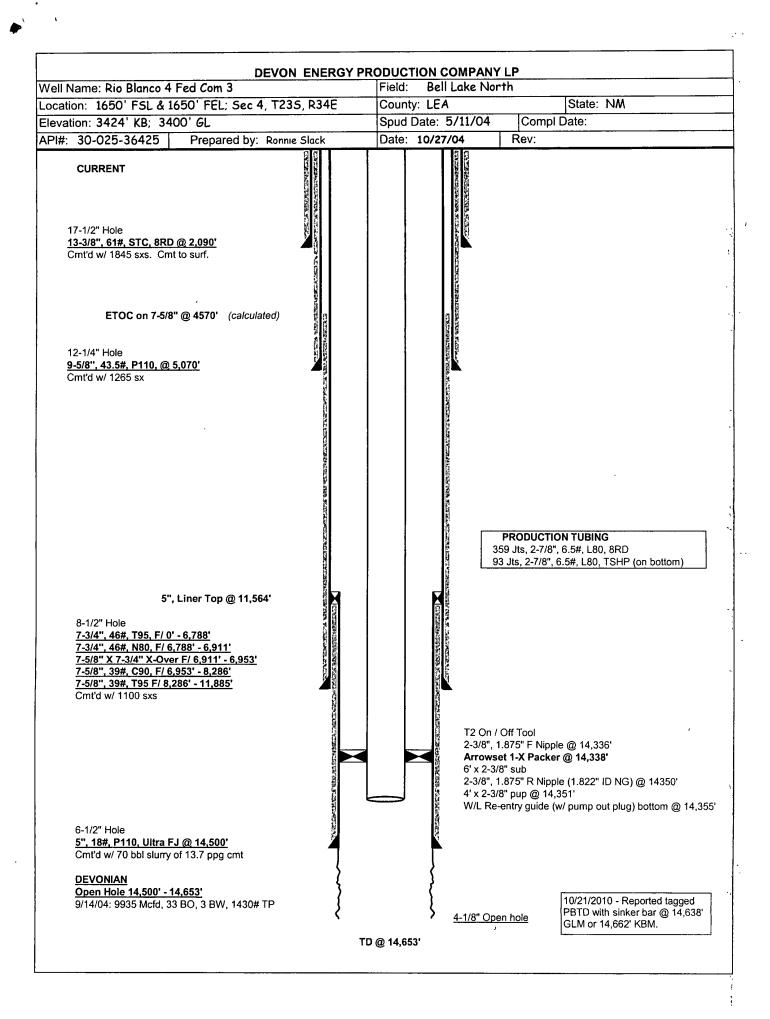
6. If Indian, Allottee or Tribe Name

MAR 2 6 2012

## SUNDRY NOTICES AND REPORTS ON WELLS Do notise this form for proposals to drill or to re-energy ED

abandoned well. Use Form 3160-3 (APD) for such proposals.								
SUBMIT IN TRIPLICATE – Other instructions on page 2.					7. If Unit of CA/Agreement, Name and/or No.			
1. Type of Well					NM112730,			
Oil Well Gas Well Other					8. Well Name and No. Rio Blanco 4 Fed Com 3			
2. Name of Operator Devon Energy Production Company, L.P.					9. API Well No 30-025-36425			
3a. Address 20 N Broadway, Oklahoma City, OK 73102-8260  4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description)			ne No. (include area code) 5-3611		10 Field and Pool or Exploratory Area NE BELL LAKE; DEVONIAN  11. Country or Parish, State			
								1650 FSL & 16150 FEL . J 4 T23S R34E
12 CHEC	K THE APPROPRIATE BO	X(ES) TO IND	ICATE NATUR	E OF NOTIC	E, REPORT OR OTHI	ER DATA	400	
TYPE OF SUBMISSION	OF SUBMISSION			TYPE OF ACTION				
Notice of Intent	Acidize Alter Casing	Deep  Fract	en ure Treat	Production (Start/Resume)  Reclamation		=	Water Shut-Off Well Integrity	
Subsequent Report	Casing Repair	New New	Construction	Reco	Recomplete Other			
	Change Plans			Temp	porarily Abandon			
Final Abandonment Notice			Back		te of any proposed work and approximate duration thereof			
Attach the Bond under which the w following completion of the involvitesting has been completed. Final adetermined that the site is ready for Devon Energy Production Company and approved by the BLM:  1. Notify BLM prior to initiation of wo 2. Test and/or install and test anchor Record pressures on tbg, and csg. F. 3. Top kill tbg (if necessary) w/ 2% K. ND 10K Tree. NU 10K BOPE, w/15. Unset pkr @ 14,338'. RU PU. Cir enough fluid going dn csg during all 6. Drop pkr dn ~ 14,430' KBM. CK fc. T. TOOH w/ 2-7/8'tbg & pkr  8. TOOH, decision will be made whe If so, TIH with 4-1/8" bit, 2- jts 2-7/8 Hydrotest tbg 7,500 psi below slips w 9. TIH w/ RBP 5' HD pkr for 5'', 18# 10. Pull 5" HD pkrr up 30'. LH and ci at surface for 30 min. Drop dn & retriese attached)	ed operations. If the operation Abandonment Notices must be final inspection.  L. P. respectfully request rk  rs. MIRU WSU. Spot neckly Harding the safety trailer, equically trailer, equically harding expension of the safety trailer, equically harding and the safety trailer, equically harding expension of the safety harding events to low restrictions prior TOOH. The safety harding expension of the safety hard	on results in a nobe filed only after the following essary enclose ipment and pethod in BHP ~ 6 us 1 set 2-7/8" the control of the first	ed tanks, gas be rsonnel.  6,125 psi @ 14.  1 tbg rams on to (flare stack) an urf to workable quired to be set the true of the	on or recomplets, including referenced in uster with flating 577': 8.1 pp. Test BOI y/all H2S galevels. It at a lower of test 7/8" tbg collates 7/8" tbg collates 17.3/4"/70 pkr & RBP.	etion in a new interval, reclamation, have been a conditions of approver e stack and temporary equivalent). Use 1 PE. s returned to surf through the stack and existing plans in liner) to 14,500 while TIH) & set RBP. 1-5/8" csgs, liner lap & (Ck tog for NORM proclams in the stack of the second stack of the	a Form 3160-4 must completed and the complete substance and substance are substance are substance and substance are substance are substance and substance are substance and substance are substa	uipment.  lote: Keep  of 5" csg shoe).	
Name ( <i>Printed/Typed)</i> ludy A. Barnett			SEE ATTACHED FOR					
Signature Juck	Date 03/12/20	CONDITIONS OF APPROVAL,						
	THIS SPACE	FOR FEDE	RAL OR ST	ATE OFF	ICE AUSEPRO	OVED		
Approved by	-						1. 1	
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable titles those rights in the subject lease which would entitle the applicant to conduct operations the conduct of the con					MIL	<sup>2ate</sup> 2012	, , , , , , ,	
Title 18 U.S.C. Section 1001 and Title 43 Unfictitious or fraudulent statements or repres	J.S.C. Section 1212, make it a entations as to any matter wit	crime for any pe hin its jurisdiction	erson knowingly a	nd willfully to	make MarySiepartment PETROLEUM	d Seney of the Uni ENGINEER	ted States any false,	
(Instructions on page 2)								

- 11. Pull 5" HD pkr  $\sim$  11,590' KBM (+/- 30' below top of liner) & set pkr. Test 5" liner from 14,430' to 11,590' w/ 1,000 psi.
- 12. Unset 5" HD pkr @ ~ 11,590' KBM. Drop dn & retrv RBP @ 14,430'KB & pull to ~11,650' KBM & set RBP. Pull 5" HD pkr 30' and set pkr. Test RBP to 1,000 psi. If ok, unset packer and TOOH w/ 2-7/8" tbg & 5" HD pkr. Leave 5" RBP @ ~ 11,650'KBM.
- 13. TIH w/ 7-5/8" HD compression packer (Weatherford in Artesia measured packer OD at 6-3/8" or 6.375"; Concern is 7-3/4", 46.10# csg has 6.435" drift) and 2-7/8" tbg to ~ 11,550' & set pkr. Test liner lap to 1,000 psi, 30 min. If ok, pull 7-5/8" HD compression pkr UH and isolate any/all leak(s). Notify OKC engineering of results for repair procedure.
  - Once all production csg & liner tests good & well has all tubulars removed, <u>NU 10K ram (for 3-1/2" tbg)</u> on top BOPE and test to Devon specifications for running of 2-7/8"/ 3-1/2" tbg.
- 14. RU Western Falcon & Weatherford. TIH w/ 2-3/8" WLEG, 2-3/8" x 1.87" "R" internally Nickel coated landing nipple, 8' 2-3/8", 4.7# L-80 internally Nickel coated tubing sub, 5" x 2-3/8" internally Nickel coated Weatherford Arrowset IXX Packer, 2-3/8" x 1.87" internally Nickel coated "F" Seal Nipple, 4-1/2" x 2-3/8" Type T-2 On/Off Tool internally Nickel coated, 2-7/8" (eue 8rd w/SC) x 2-3/8" (eue 8rd) pin internally Nickel coated x-over, 2,000' of 2-7/8", ~7#, L-80, Ultratube lined tbg (eue 8rd w/SC), 1-2' 2-7/8", ~7#, L-80, Enertube lined tbg (eue 8rd w/SC) tubing sub, 1,000' of 2-7/8", ~7#, L-80, Enertube lined tbg (eue 8rd) Enertube lined x-over and ~11,400' of 3-1/2", ~10#, L-80, Enertube lined tbg (eue 8rd) to +/- 14,420'KBM. (Note: String will likely weigh ~ 135,000 lbs in air. 3-1/2" jt yld is 207,200 lbs @ 100%).
- 15. R.U Pumping Services. Test lines. Reverse CH w/ ~ 380 bbls 2% KCL containing corrosion inhibitor (corrosion inhibitor ppm per Baker Petrolite recommendation).
- 16. Space out and set Weatherford 5" Arrowset Packer @ ~ 14,424' KBM (NMOCD requires pkr to be set within 100' of injection zone).
- 17. Run MIT on tbg x csg annulus. Run test / MP of 800 psi @ surf, 30 min w/ chart recorder. Max allowable pressure loss is 10% (80 psi) in 30 min. If successful, go to step 18. If not, notify OKC engineering to discuss next step.
- 18. ND BOPE & NU 5K tree assy w/ sour trim (will require change fr 2-7/8" to 3-1/2" tbg at surf) and test.
- 19. RDMO WSU. Rlse all rental equipment. Install surf facilities for disposal.
- 20. Notify and set up NMOCD & BLM for an official MIT w/chart recorder. Once MIT is approved and NMOCD ok's injection, initiate Disposal into Devonian. **Do not exceed** a maximum surface pressure of **2,900 psig (per NMOCD Order)**.



#### Rio Blanco 4 Fed Com 3 30-025-36425 Devon Energy Production Company, L.P. March 20, 2012 Conditions of Approval

- 1. Surface disturbance beyond the originally approved pad must have prior approval.
- 2. Closed loop system required.
- 3. Operator to have H2S monitoring equipment on location.
- 4. A minimum of a 10,000 (10M) BOP to be used. All blowout preventer (BOP) and related equipment (BOPE) shall comply with reasonable well control requirements. A two ram system with a blind ram and a pipe ram designed for the size of the work string shall be adequate. Tapered work strings will require an additional pipe ram. The manifold shall comply with Onshore Oil and Gas Order #2 Attachment I (2M Diagrams of Choke Manifold Equipment). The accumulator system shall have an immediately available power source to close the rams and retain 200 psi above precharge. The pre-charge test shall follow requirements in Onshore Order #2.
- 5. 10M BOP system requires two independent power sources, one of which may be nitrogen bottles (three minimum) maintaining a charge equal to the manufacturer's recommendations.
- 6. All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of work over 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.
- 7. Casing shall be tested to 1000 psi in all cases. Step 10 had 800 psi, but if that failed, the plan was to test to 1000 psi. Therefore, all tests prior to installing the tubing shall be performed at 1000 psi.
- 8. Following are the required items for future operations and Best Management Practices for a well with a packer.

#### **Future operations:**

- 1) Conduct a Mechanical Integrity Test of the tubing/casing annulus after a tubing, packer or casing seal is established. Repair that seal any time more than five barrels of packer fluid is replaced within 30 days.
  - a) The minimum test pressure should be 500 psig for 30 minutes or 300 psig for 60 minutes, with 200 psig differentials between tubing and casing pressure (at test time) but no more than 70% of casing burst pressure as described by Onshore Order 2.III.B.1.h. (The tubing or reservoir pressure may need to be reduced). An alternate method for a BLM approved MIT is to have the fluid filled system open to atmospheric pressure and have a loss of less than five barrels in 30 days witnessed by a BLM authorized officer.

- b) Document the pressure test on a calibrated recorder chart registering within 25 to 85 per cent of its full range. Greater than 10% pressure leak off will be viewed as a failed MIT. Less than 10% pressure leak off will be evaluated site specifically and may restrict injection approval.
- c) At least 24 hours prior to the test, notify the BLM: In Eddy County, email Paul R. Swartz pswartz@blm.gov, (phone 575-200-7902). If there is no response, call 575-361-2822. In Lea County, email Andy Cortez acortez@blm.gov, (phone 575-393-3612 or 575-631-5801). Note the contact notification method, time, & date in your subsequent report.
- d) Submit a subsequent Sundry Form 3160-5 relating the MIT activity. Include a copy of the recorded MIT pressure chart. List the name of the BLM witness, or the notified person and date of notification. NMOCD is to retain the original recorded MIT chart.
- e) Use of tubing internal protection and tubing on/off equipment just above the packer are required. An inline tubing check valve below the packer or between the on/off tool and packer is strongly recommended as a **Best Management Practice**. The setting depths and descriptions of each are to be included in the subsequent sundry. List (by date) descriptions of daily activity of any previously unreported wellbore work over.
- f) Submit the original subsequent sundry along with three copies to BLM Carlsbad.
- 2) Compliance with a NMOCD Administrative Order is required, submit documentation of that authorization.
  - a) Approved injection pressure compliance is required.
  - b) If injection pressure exceeds the approved pressure you are required to reduce that pressure and notify the BLM within 24 hours:
  - c) When injection pressure is within 50 psig of the maximum pressure, install automation equipment that will prevent exceeding that maximum.
    - i) Submit a subsequent report (Sundry Form 3160-5) describing the installed automation equipment within 30 days.
- 3) Other unexplained significant variations of rate or pressure to be reported within 5 days of notice.
- 4) The casing/tubing annulus is required to be monitored for communication with injection fluid or loss of casing integrity.
- 5) Submit a subsequent report (Sundry Form 3160-5) describing the monitoring system installed.
- 6) Also submit to this office, a (Sundry Form 3160-5) Notice of Intent (NOI) for planned well work involving a formation change, casing repair/replacement, and any injection well stimulation treatment for approval by BLM and NMOCD. Verbal approval for the plan may be given by a BLM authorized officer, with the NOI filed within five business days. Packer and tubing repair (normal maintenance procedures) do not require a NOI, but a subsequent sundry shall be filed. <a href="http://www.blm.gov/nm/st/en/prog/energy/oil\_and\_gas.html">http://www.blm.gov/nm/st/en/prog/energy/oil\_and\_gas.html</a> (see CFR § 3162.3-2 43 & CFR § 3160.0-9 (c)(1)).

a) Submit a (Sundry Form 3160-5) subsequent report (daily reports) describing all wellbore activity and Mechanical Integrity Test as per item 1) above. Include the date(s) of the well work, and the setting depths of required equipment: internally corrosive protected tubing and tubing on/off equipment just above the packer. An inline tubing check valve below the packer or between the on/off tool and packer is strongly recommended as a **Best Management Practice**. The setting depths and descriptions of each are to be included in the subsequent sundry. List (by date) descriptions of daily activity of any previously unreported wellbore work.

#### **Best Management Practices:**

The Best Management Practice by an operator of an injection well is to keep pressure off of the tubing/casing annulus as the fluctuating pressure fatigues the casing. The following practices will eliminate or greatly reduce subsurface spills and are detailed below:

- A. The annulus shall be maintained full of packer fluid at atmospheric pressure. Installation of equipment that will display on site, continuous open to the air fluid level is required. A BLM inspector may request verification of this fluid level at any time.
- B. Submit a subsequent report (Sundry Form 3160-5) describing the installation of packer fluid level monitoring equipment within 30 days of beginning injection.
- C. The operator shall keep monthly records documenting that the casing annulus is fluid filled. A suggested format for these records is available from the BLM Carlsbad Field Office. Copies of those records shall be furnished at the request of a BLM authorized officer.
- D. Loss of packer fluid above five barrels per month requires notification of the BLM authorized officer within 5 days.
- E. Gain of annular fluid requires notification within 24 hours. Cease injection and maintain a production casing pressure of 0psia. Notify the BLM's authorized officer (Paul R. Swartz <u>paul swartz@blm.gov</u> phone 575-200-7902). If there is no response phone 575-361-2822.