

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

OCD-HOBBS

MAR 06 2012

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

**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter abandoned well. Use Form 3160-3 (APD) for such proposals.**

5. Lease Serial No.  
NM-101610

6. If Indian, Allottee or Tribe Name

**SUBMIT IN TRIPLICATE** – Other instructions on page 2.

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator  
Devon Energy Production Company, L.P.

3a. Address  
20 N. Broadway, Oklahoma City, OK 73102-8260

3b. Phone No. (include area code)  
405-235-3611 228-8699

7. If Unit of CA/Agreement, Name and/or No.

8. Well Name and No.  
Miro 35 Federal 1

9. API Well No.  
30-025-34897

10. Field and Pool or Exploratory Area  
Wolfcamp

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
1250 FNL & 1000 FWL SEC 35 T26S R 35E

11. Country or Parish, State  
Lea County, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other RC to Lower Brushy Canyon
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleation in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Devon Energy Production Company L. P. proposes to recompleate well to the Lower Brushy Canyon; see attached procedures.

**SEE ATTACHED FOR  
CONDITIONS OF APPROVAL**

(Attached Procedure)

14. I hereby certify that the foregoing is true and correct.  
Name (Printed/Typed)

Title Regulatory Specialist

Signature

Date 12/06/2011

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

**APPROVED**

**FEB 29 2012**

**/s/ Chris Walls**

**BUREAU OF LAND MANAGEMENT**

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

**DVN: MIRO 35 Fed # 1****API #30-025-34897****1,250' FNL & 1,000' FWL****Sec 35-T26S-R35E****Lea County, NM****11/17/11****AFE # 203254****Purpose: Recomplete Lower Brushy (Version 1)****GLM: 3,040' KBM: 3,066' KB: 26' AGL****T.D. - 16,500' PBTD - ~14,930' cement plug.****Casing and Tubing Data: Drilled - July 2000**

Size	Wt. lb/ft	Grade	Interval	(.70 S. F.) Collapse	(.70 S. F.) Burst	Drift	Capacity (bbls/ft)
13-3/8"	54.5	J-55	0 - 1,035'	-	-	-	-
10-3/4"	60.7	P-110	0 - 5,150'	-	6,832	-	-
7-5/8"	33.7 & 39	P-110	0 - 12,998'	5,495 7,742	7,602 8,834	6.640" 6.500"	0.0444 0.0426
5"	21.08	P-110	12,759' - 16,496'	11,543	10,997	4.001"	0.0170
2-7/8"	7.9	P-110	0 - 12,755'	14,584*	14,120*	2.229"	0.00524

\* - 80%

5" liner was likely 21.4# with premium thread cut to reduce to 21.08#

2-7/8" by 7-5/8" - 0.0364 bbls/ft

**Top of Cement (outside 7-5/8" csg.): Reported @ 5,110' Temp Survey****DV Tool: 7,521'**

**Production tubing detail** (top down): 1 jt 2-7/8" 7.9# P-110 (31.60'), x/o (1'), 401 jts 2-7/8", 7.9# P-110 tbg (12,656'), x/o (1'), O/O tool w/1.81" F nipple (2'), **7-5/8" x 10K Arrowset 1X Packer** (8'), x/o (1'), 2-3/8" x 10' 4.7# P-110 tbg sub, 2-3/8" x 1.81" R nipple w/1.76" NG (1'), WLEG (1'). Note: tubing was Hydro tested to 10,000 psi (12/8/2010). **Packer set @ 12,692' KBM; EOT @ 12,712' KBM.** Note: 2-7/8" P-110 tbg has PH-6 threads.

**Current Perfs:**

<b>Wolfcamp</b>	<b>13,026' - 13,290' (OA)</b>	<b>47 holes</b>
<b>Strawn</b>	<b>14,245' - 14,841' (OA)</b>	<b>150 holes</b>

**Safety:** All personnel will wear hard hats, safety glasses with side shields, and steel toed boots while on location. Assess wellhead working height for safety. If needed, use work platform or man-lift for fall protection. H2S monitoring equipment is required by BLM to be on location.

## MIRO 35 Fed # 1

### Procedure:

1. **Notify all regulatory agencies prior to move in (if required).** Hold tailgate safety meetings prior to R.U., each morning and before each operational change or event. Test and/or install and test anchors. MIRU DDCU. Spot necessary tanks and temporary flow lines to tanks. Record pressures on tbg, csg and 7-5/8" by 10-3/4" annulus. Blow down tbg and csg. Top kill tbg and csg with 2% KCL (use 10 ppg Nadine Brine if necessary).
2. ND wellhead (Tree) and send in for service/maintenance - Record/report wellhead & valve(s) rating in Wellview. NU 10,000 psi BOPE, w/1 set of blind rams on bottom plus 1 set of 2-7/8" tbg rams on top. Test BOPE to Devon guidelines.
3. Unset 7-5/8" Arrowset 1X Packer (10K) @ 12,692' KBM. T.O.H. with production string (see detail above). Lay down ~ 3,000' of 2-7/8" tubing (install thread protectors and save tubing for later use on this well). Send in Packer to be checked & re-dressed.
4. R.U. Wireline Service Co. with full lubricator. Test lubricator to Devon's guidelines. T.I.H. with 7-5/8", 26# - 39#, 300 series Weatherford (8K) Frac Guard Composite B'Plug. Set CBP @ ~ 9,500' KBM.
5. Load 7-5/8" casing with 2% KCL. Test 7-5/8" csg & CBP to 1,500 psi with 2% KCL for 30 min.
6. If casing tested ok. Run GR-CCL-CBL from ~ 9,500' to TOC (estimated TOC @ 5,110'). **Correlate GR-CCL-CBL to Schlumberger Three Detector Litho Density Compensated Neutron-GR, dated July 30<sup>th</sup>, 2000.**
7. If bond log looks good above and below planned perforated intervals, perforate the Lower Brushy Delaware as follows: Perforate using 3-1/8" slick guns (4" charge loading) – 0.40" EHD. **Correlate to: Schlumberger Three Detector Litho Density Compensated Neutron-GR, dated July 30<sup>th</sup>, 2000.**

Top Shot	Bottom Shot	Feet	Phasing	SPF	Holes
8,836'	8,838'	2	120	2	4
8,842'	8,846'	4	120	2	8
8,935'	8,940'	5	120	2	10
8,947'	8,957'	10	120	2	20
Total Feet		21'		Total Holes	42

8. T.I.H. with redressed 7-5/8" Arrowset 1X Packer (10K) from Step 3, 1.81" F nipple and 2-7/8", 7.9# P-110 tubing. Hydro test tubing while TIH below slips) to 8,500 psi. Set 7-5/8" Packer @ ~ 8,750' KBM.
9. RU B.J. or approved acid service co. Close pipe rams and/or Hydril and chain down 2-7/8" tubing. Put 500 psi on 7-5/8" x 2-7/8" annulus. Monitor 7-5/8" x 2-7/8" annulus during Acid job. Install a pressure relief valve to annulus and pipe any released pressure above 500 psi to divert to flowback tank during job. **Breakdown & Acidize Delaware perfs 8,836' – 8,957' (OA) per BJ proposal 690850712B with total of ~ 2,500 gals 7.5% HCL Acid containing 32 Bio ball sealers.** Flush acid with ~ 60 bbls 2% KCL. (Record avg. treating pressure, rates and total load to recover along with ISIP, 5, 10 & 15 min shut-in pressures.) **SI well 1 hr.**
10. Surge back balls. Flow back and/or swab back job load. Swab test Lower Brushy Delaware perfs for 1- 2 days to determine viability to frac Lower Brushy Delaware.

Miro 35 Fed # 1  
Recompletion Procedure (cont)

11. **If swab test was favorable, R.U. BJ Services. Test lines.** Close pipe rams and/or Hydril and chain down 2-7/8" tubing. Put 500 psi on 7-5/8" x 2-7/8" annulus. Monitor 7-5/8" x 2-7/8" annulus during Acid job. Install a pressure relief valve to annulus and pipe any released pressure above 500 psi to divert to flowback tank during job. **Fracture Stimulate the Lower Brushy Delaware perfs from 8,836' - 8,957' (OA) per BJ proposal 690850714A. Top surface pressure 7,500 psi.**

**20 BPM**

**1,500 gals 25# Linear Gel**

**49,000 gals Spectra Frac 2500 (25# gel system)**

**2,130 gals 10# Linear Gel**

**24,000 lbs Super LC 20/40 sand (4 ppg)**

**49,500 lbs 20/40 white sand (0.5 – 3 ppg)**

**3 - Frac tanks required**

(Record average treating pressure, rates and job load along with ISIP, 5, 10 & 15 min readings)

12. RD BJ Services. Flow well back immediately at ½ bpm the first 12 hours, then 1 bpm the next 12 hours, and then not to exceed 2 bpm until the well dies.
13. Once well dies, unset treating packer and T.O.H. with 2-7/8" tubing and 7-5/8" treating packer.
14. T.I.H. with BP, 4 Jts tubing MA (~120'), Wirewrap Screen (24') HDSN (~1'), 400' (~13 jts) 2-7/8", 7.9#, P-110 tubing, 7-5/8", (26# to 39#) x 2-7/8" TAC (~3') and ~8,600' (~ 273 jts) 2-7/8", 7.9#, P-110 tubing. Place SN @ ~ 9,000' KBM and set T.A.C.
15. N.D. BOPE and N.U. wellhead. Install rod rams.
16. T.I.H. with New rod string. Space and seat pump. An initial design for the 9,000' is : Run 1-1/4" x 18' Stanly Filter, 1-1/4" x 40' Dip Tube, 1-1/2" x 24' pump, 40 (1,000') – 1" Norris D rods, 40 (1,000') – 3/4" Norris 96s, 94 (2,350') – 7/8" Norris 96s and ~ 124 (4,650') – 1-1/4" Fibercom fiberglass rods (37.5' ea). Install PR with PR coupling. Well design listed is for 8.75 spm with a 1-1/2" pump ~ 350 btfpd
17. R.D.M.O. DDCU and release all rentals.
18. Transfer, deliver, set and level 912-365-168 pumping unit with gas engine (put unit initially in the 1st hole). Return well to production. May need propane initially to establish a gas production volume to run pumping unit.
19. Report daily production rates for 2 weeks after load recovery.

**Once the Lower Brushy has been sufficiently tested and total production drops below 175 btfpd (could be 2 months or more). ~~Then proceed to below procedure to add Wolfeamp/Strawn production.~~**

**MIRO 35 Fed # 1**  
**Procedure to drill out composite and commingle Lower Brushy with**  
**Wolfcamp/Strawn**

20. **Notify all regulatory agencies prior to move in (if required).** Hold tailgate safety meetings prior to R.U., each morning and before each operational change or event. Test and/or install and test anchors. MIRU DDCU. Spot necessary tanks and temporary flow lines to tanks. Record pressures on tbg and csg. Blow down tbg and csg. Top kill tbg and csg with 2% KCL (use 10 ppg Nadine Brine if necessary during cleanout).
21. NU rod rams. Pull rods and pump.
22. ND wellhead. NU 10,000 psi BOPE, w/1 set of blind rams on bottom plus 1 set of 2-7/8" tbg rams on top. Test BOPE to Devon guidelines.
23. Unset tbg anchor, TOH with production tbg.
24. TIH with 6-1/4" bit, 6 (2-7/8") drill collars, bumper sub and 2-7/8" tbg.
25. Drill out composite bridge plug @ 9,500' KBM. Continue TIH (pick up, talley & rabbit) with ~ 3,000' of 2-7/8", 7.9#, P-110 tbg that was laid down in Step 3 (from above) to top of 5" liner @ ~ 12,759'. TOH. Note: Roundtrip 3-7/8" bit (go inside liner) if after drilling out the composite there is believed to be a large enough piece of composite left to obstruct 5" liner.
26. TIH with production tubing set up as before (same srt up at in Step 14). However, place SN @ 12,500' KBM and set TAC @ 8,600' KBM (due to Lower Brushy perfs).
27. N.D. BOPE and N.U. wellhead. Install rod rams.
28. T.I.H. with previous rod string. Space and seat pump. An initial design for the 12,500' is : Run 1-1/4" x 18' Stanly Filter, 1-1/4" x 40' Dip Tube, 1-1/2" x 24' pump, 40 (1,000') - 1" Norris D rods, 80 (2,000' - adding 1,000' from before) - 3/4" Norris 96s, 194 (4,850' - adding 2,500' from before) - 7/8" Norris 96s and ~ 124 (4,650') - 1-1/4" Fibercom fiberglass rods (37.5' ea). Install PR with PR coupling. Well design listed is for 8.75 spm with a 1-1/2" pump ~ 230 btfd
29. R.D.M.O. DDCU and release all rentals.

Contact	Company	Office #	Mobile #
Ron Hays	Devon (engr)	405-552-8150	405-464-4214
Mike Sarabia	B.J. Services (stim)		575-513-2293
Mitch Johnson	Weatherford (Pkr)		575-746-7079
Lloyd Warden	J-W Wireline	575-393-9200	575-706-0339

**Miro 35 Fed 1**  
**30-025-34897**  
**Devon Energy Production Co.**  
**February 28, 2012**  
**Conditions of Approval**

**Approved only for the Delaware test, and not to downhole commingle (DHC) the Delaware/Wolfcamp/Strawn. Submit a NOI Sundry with supporting data for the downhole commingle (i.e. pressure data, evidence that product will not be lost, gravity for all zones, etc). Due to the amount of separation between the proposed commingled zones a dual completion may be required**

- 1. Notify the BLM (575-393-3612) a minimum of 24 hours prior to plug back procedure.**
- 2. Surface disturbance beyond the originally approved pad must have prior approval.**
- 3. Closed loop system required.**
- 4. 5000 (5M) 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 pre-charge. The pre-charge test shall follow requirements in Onshore Order #2.  
5M systems shall require two independent power sources, one of which may be nitrogen bottles (three minimum) maintaining a charge equal to the manufacturer's recommendations.**
- 5. Operator to have H2S monitoring equipment on location as H2S has been reported from wells in the area.**
- 6. Completion report and subsequent sundry with wellbore schematic required.**

**At final abandonment or when the Strawn /Wolfcamp perms are abandoned the following plugs will be required:**

- 1. Top of the Morrow. (260' plug required)**
- 2. CIBP over Strawn perms w/ 35' cmt bailed on top.**
- 3. CIBP over Wolfcamp perms w/ 35' cmt bailed on top.**
- 4. Top of liner and 7-5/8" shoe plug.**
- 5. Top of Wolfcamp. (230' plug required)**
- 6. Top of Bone Spring. (200' plug required)**

**CRW 022812**