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1000 Rio Brazos Rd., Aztec, NM 87410
District IV – (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
Revised July 18, 2013

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-025-34767 ✓
1. Type of Well: Oil Well <input checked="" type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other <input type="checkbox"/>		5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
2. Name of Operator Devon Energy Production Company, LP ✓		6. State Oil & Gas Lease No.
3. Address of Operator 333 West. Sheridan Avenue Oklahoma City, OK 73102-5015 405-552-7848		7. Lease Name or Unit Agreement Name Thistle Unit ✓
4. Well Location Unit Letter/Lot <u>O</u> : <u>660</u> feet from the <u>S</u> line and <u>1560</u> feet from the <u>E</u> line Section <u>34</u> Township <u>23S</u> Range <u>33E</u> NMPM <u>Lea</u> County <u>✓</u>		8. Well Number 6 ✓
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3648' GR		9. OGRID Number 6137 ✓
		10. Pool name or Wildcat Triple X; Bone Spring (59900) ✓

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:
PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐
DOWNHOLE COMMINGLE ☐
CLOSED-LOOP SYSTEM ☐
OTHER: Proposed Uphole Testing ☒

SUBSEQUENT REPORT OF:
REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐
OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Devon Energy Production Co., L.P. respectfully requests approval to continue moving uphole with testing in the Thistle Unit 6 in order to further evaluate the optionality of future development in undeveloped zones. The proposed activity is as follows:

1. RIH with workstring to 9,502', latch on to RBP, move RBP to 10,950' (50' above "Upper" 2BSSS perforations. RBP to provide isolation from lower perforations in order to test interval above RBP.
 2. Pressure test casing to 7,500psi for 30 minutes to ensure RBP is holding and validate casing integrity.
 3. RIH with perforation guns, perforate 1st BSSS interval.
 4. Pump DFIT on 1st BSSS perforations.
 5. Shut well in for 2-3 weeks recording pressure fall-off.
 6. Pump fracture stimulation down 7" with tracer fluid and tracer proppant.
 7. Log fracture stimulated reservoir with GR and temperature logs.
 8. Flow back well long enough to bleed down pressure.
 9. RIH with workstring to retrieve RBP @ 10,950'. Move RBP uphole to 10,570' (50' above 1st BSSS perforations).
 10. Repeats steps 2-9 for remaining intervals.
- Please see the attached procedure and wellbore schematic for more details.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE [Signature] TITLE: Regulatory Specialist DATE 07/07/2016

Type or print name: David H. Cook E-mail address: david.cook@dmn.com PHONE: 405-552-7848

For State Use Only

APPROVED BY: [Signature] TITLE Petroleum Engineer DATE 07/12/2016

Conditions of Approval (if any):

KZ

Thistle Unit 6 – Test Uphole Potential for Future Development

The Thistle Unit 6 was previously plugged back from the Wolfcamp formation in order to re-complete the 2BSS formation. All of the work outlined in the approved C101 from 2015 has been completed. However, the “Upper” 2BSS was also perforated and tested for deliverability via DFIT, which was not outlined in the scope of the work on the approved C101. The well has been shut in since 1/7/2016 with a RBP placed above the perforations in the 7” casing (see attached schematic).

Devon Energy proposes to continue moving uphole with testing in the Thistle Unit 6 in order to further evaluate the optionality of future development in undeveloped zones. The two main test types to be conducted are Diagnostic Fracture Injection Tests (DFITs) and limited entry fracture stimulations with tracer fluid and proppant. The DFIT test consists of a small, low rate pump-in followed by pressure monitoring as the pressure falls off. The DFIT will be followed by a monitoring period, and then a small frac job will be placed on the interval. Tracers will be run during the frac job, and logs will be run post-job in order to better understand the fracture geometries, assess potential barriers, and provide the information to improve our development plans (vertical and lateral spacing of horizontals).

The uphole zones of interest are as follows:

Zone	Perforation Plan
1st BSSS	10,614' - 10,624'
Leonard "C"	9,995'-10,005'
Leonard "B"	9,680' - 9,690'
Leonard "A"	9,500' - 9,510'

The general scope of work to be done is as follows:

1. RIH with workstring to 9,502', latch on to RBP, move RBP to 10,950' (50' above “Upper” 2BSSS perforations. RBP to provide isolation from lower perforations in order to test interval above RBP.
2. Pressure test casing to 7,500psi for 30 minutes to ensure RBP is holding and validate casing integrity.
3. RIH with perforation guns, perforate 1st BSSS interval.
4. Pump DFIT on 1st BSSS perforations.
5. Shut well in for 2-3 weeks recording pressure fall-off.
6. Pump fracture stimulation down 7” with tracer fluid and tracer proppant.
7. Log fracture stimulated reservoir with GR and temperature logs.
8. Flow back well long enough to bleed down pressure.
9. RIH with workstring to retrieve RBP @ 10,950'. Move RBP uphole to 10,570' (50' above 1st BSSS perforations).
10. Repeats steps 2-9 for remaining intervals.

The TVD of the lowest set of existing perforations in the 2BSSS is 11,230'. The uppermost planned perfs (Leonard A) are at a TVD of 9,500'. The TVD difference between upper and lower most perforations is 1,730'.

After all formation testing has been completed, viability of commingling all tested intervals will be evaluated. After internal evaluation, Devon will sundry the Thistle Unit 6 to propose to either produce the well, evaluate further testing/re-completion, or to plug and abandon the wellbore.

DEVON ENERGY PRODUCTION COMPANY LP

Well Name: THISTLE UNIT 6		Field: JOHNSON RANCH	
Location: 660' FSL & 1560' FEL; SEC 34-T23S-R33E		County: LEA	State: NM
Elevation: 3666' KB; 3648' GL; 18' KB-GL		Spud Date: 2/21/00	Compl Date: 5/6/00
API#: 30-025-34767	Prepared by: Ronnie Slack	Date: 7/23/08	Rev: 7/8/16 - Epperson

Wellbore as of 7/8/2016

17-1/2" Hole
13-3/8", 61#, J55, STC, @ 585'
Cemented w/600 Sx

12-1/4" Hole
9-5/8", 40#, S95 & J55, @ 5053'
Cemented w/1300 Sx

TOC @ 7,130' (USIT)

Upper "A" 2nd BSS Perfs 11,000'-11,006'

Lower 2nd BSS Perfs 11,227'-11,230'

12,288' KBM P8TD

4-1/2" Liner Top @ 12,401'

8-3/4" Hole
7", 26#, P110, LTC, @ 12,629'
Cemented w/1300 Sx

Top of Wolfcamp @ ~12,400'

WOLFCAMP
13,445' - 13,583'

6-1/8" Hole
4-1/2", 13.5#, P110, @ 13,773'
Cemented w/175 Sx CI H

7" RBP set @ 9,502'
1/7/2016 - Well SI

162' class H neat cement (27 sks)
covers csg shoe & liner top
Tagged TOC @ 12,288'
4-1/2" 10K CIBP @ 12,450' KBM

90' class H neat cement (7 sks)
Tagged TOC @ 12,590'
4-1/2" 10K CIBP @ 12,680' KBM

94' class H neat cement (7 sks)
Tagged TOC @ 12,806'
4-1/2" 10K CIBP @ +/- 12,900' KBM

Left in the Hole (jet cut):
Top of tbg @ +/- 12,960'
~20' 2-3/8" 4.7# P-110 tbg
4 1/2' x 11.5 - 13.6# 2 3/8 10K v1 pkr
1 -10' tubing sub
1.81" F Nipple
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WLRG

13,775' TD

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