

Submit 1 Copy To Appropriate District Office
District I - (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II - (575) 748-1283
811 S. First St., Artesia, NM 88210
District III - (505) 334-6178
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.) 1. Type of Well: Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> | | WELL API NO. 30-025-42754 5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/> 6. State Oil & Gas Lease No. |
| 2. Name of Operator Devon Energy Production Company, LP | 7. Lease Name or Unit Agreement Name Bell Lake 19 State | |
| 3. Address of Operator 333 West. Sheridan Avenue Oklahoma City, OK 73102-5015 405-552-7848 | 8. Well Number 7H | |
| 4. Well Location Unit Letter/Lot <u>P</u> : <u>200</u> feet from the <u>S</u> line and <u>550</u> feet from the <u>E</u> line Section <u>19</u> <u>24S</u> Township <u>33E</u> Range <u>NMPM</u> Lea County | 9. OGRID Number 6137 10. Pool name or Wildcat WC-025 G-06 S253201M; Upper BS | |
| 11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3540.8' GR | | |

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

| NOTICE OF INTENTION TO: | | SUBSEQUENT REPORT OF: | |
|--|--|--|--|
| PERFORM REMEDIAL WORK <input type="checkbox"/> | PLUG AND ABANDON <input type="checkbox"/> | REMEDIAL WORK <input type="checkbox"/> | ALTERING CASING <input type="checkbox"/> |
| TEMPORARILY ABANDON <input type="checkbox"/> | CHANGE PLANS <input checked="" type="checkbox"/> | COMMENCE DRILLING OPNS. <input type="checkbox"/> | P AND A <input type="checkbox"/> |
| PULL OR ALTER CASING <input type="checkbox"/> | MULTIPLE COMPL <input type="checkbox"/> | CASING/CEMENT JOB <input type="checkbox"/> | |
| DOWNHOLE COMMINGLE <input type="checkbox"/> | | | |
| CLOSED-LOOP SYSTEM <input type="checkbox"/> | | | |
| OTHER: <input type="checkbox"/> | | OTHER: <input type="checkbox"/> | |

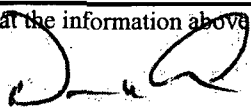
13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Devon respectfully requests to change the surface hole location from 200 FSL & 525 FEL to 200 FSL & 550 FEL, Sec. 19, T24S, R33E.

Please see the attached revised C-102, Drilling Plan & Directional Survey.

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

SIGNATURE



TITLE: Regulatory Specialist

DATE 03/21/2016

Type or print name: David H. Cook

E-mail address: david.cook@dmn.com

PHONE: 405-552-7848

For State Use Only

APPROVED BY: 

TITLE

Petroleum Engineer

DATE

03/24/16

Conditions of Approval (if any):

MAR 24 2016

Devon Energy, Bell Lake 19 State 7H

1. Geologic Formations

| | | | |
|---------------|---------|-------------------------------|-----|
| TVD of target | 9,640' | Pilot hole depth | N/A |
| MD at TD: | 14,140' | Deepest expected fresh water: | |

Basin

| Formation | Depth (TVD) from KB | Water/Mineral Bearing Target Zone? | Hazards |
|-------------------|------------------------|---------------------------------------|---------|
| Rustler | 1140 | | |
| Top of Salt | 1465 | | |
| Base of Salt | 4940 | | |
| Delaware | 5042 | | |
| Cherry Canyon | 6014 | | |
| Brushy Canyon | 7476 | | |
| Madera | 8635 | | |
| 1st BSPG Lime | 9045 | | |
| U Leonard shale | 9230 | | |
| Base U Leonard sh | 9460 | | |
| M Leonard shale | 9540 | | |
| Base M Leonard sh | 9775 | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

*H2S, water flows, loss of circulation, abnormal pressures, etc.

Devon Energy, Bell Lake 19 State 7H

2. Casing Program

| Hole Size | Casing Interval | | Csg Size | Weight | Grade | Conn | Safety Factors | | |
|---------------------------|-----------------|--------|----------|--------|-------|------|----------------|----------|-------------------|
| | From | To | | | | | Burst | Collapse | Tensio |
| 17 1/2 | 0 | 1,200 | 13 3/8 | 54.5 | J55 | BTC | 1.81 | 2.16 | 5.4 |
| 12 1/4 | 0 | 4,300 | 9 5/8 | 40 | J55 | BTC | 1.44 | 1.24 | 2.3 |
| | 4,300 | 5,000 | 9 5/8 | 40 | HCK55 | BTC | 2.04 | 1.24 | 5.4 |
| 8 3/4 | 0 | 14,140 | 5 1/2 | 17 | P110 | BTC | 1.19 | 1.62 | 2.2 |
| BLM Minimum Safety Factor | | | | | | | 1.00 | 1.125 | 1.6 Dry 1.8 We |

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

Must have table for contingency casing

| | Y or N |
|--|--------|
| Is casing new? If used, attach certification as required in Onshore Order #1 | Y |
| Does casing meet API specifications? If no, attach casing specification sheet. | Y |
| Is premium or uncommon casing planned? If yes attach casing specification sheet. | N |
| Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria). | Y |
| Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing? | Y |
| Is well located within Capitan Reef? | N |
| If yes, does production casing cement tie back a minimum of 50' above the Reef? | |
| Is well within the designated 4 string boundary. | |
| Is well located in SOPA but not in R-111-P? | N |
| If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back 500' into previous casing? | |
| Is well located in R-111-P and SOPA? | N |
| If yes, are the first three strings cemented to surface? | |
| Is 2 nd string set 100' to 600' below the base of salt? | |
| Is well located in high Cave/Karst? | N |
| If yes, are there two strings cemented to surface? | |
| (For 2 string wells) If yes, is there a contingency casing if lost circulation occurs? | |
| Is well located in critical Cave/Karst? | N |
| If yes, are there three strings cemented to surface? | |

Devon Energy, Bell Lake 19 State 7H

3. Cementing Program

| Casing | # Sks | Wt. lb/gal | H ₂ O gal/sk | Yld ft ³ /sack | 500# Comp. Strength (hours) | Slurry Description |
|--------------------------|------------------|------------|-------------------------|---------------------------|-----------------------------|---|
| 13-3/8" Surface | 530 | 12.9 | 9.81 | 1.85 | 14 | Lead: (65:35) Class C Cement: Poz (Fly Ash): 6% BWOC Bentonite + 5% BWOW Sodium Chloride + 0.125 lbs/sack Poly-E-Flake |
| | 550 | 14.8 | 6.32 | 1.33 | 6 | Tail: Class C Cement + 0.125 lbs/sack Poly-E-Flake |
| 9-5/8" Inter. | 1050 | 12.9 | 9.81 | 1.85 | 14 | Lead: (65:35) Class C Cement: Poz (Fly Ash): 6% BWOC Bentonite + 5% BWOW Sodium Chloride + 0.125 lbs/sack Poly-E-Flake |
| | 430 | 14.8 | 6.32 | 1.33 | 6 | Tail: Class C Cement + 0.125 lbs/sack Poly-E-Flake |
| 5-1/2" Prod Two Stage | 680 | 11.9 | 12.89 | 2.31 | n/a | 1 st Stage Lead: (50:50) Class H Cement: Poz (Fly Ash) + 10% BWOC Bentonite + 1 lb/sk of Kol-Seal + 0.3% BWOC HR-601 + 0.5lb/sk D-Air 5000 |
| | 1110 | 14.5 | 5.31 | 1.2 | 25 | 1 st Stage Tail: (50:50) Class H Cement: Poz (Fly Ash) + 0.5% bwoc HALAD-344 + 0.4% bwoc CFR-3 + 0.2% BWOC HR-601 + 2% bwoc Bentonite |
| | DV Tool = 5050ft | | | | | |
| | 20 | 11 | 14.81 | 2.55 | 22 | 2 nd Stage Lead: Tuned Light® Cement + 0.125 lb/sk Pol-E-Flake |
| | 30 | 14.8 | 6.32 | 1.33 | 6 | 2 nd Stage Tail: Class C Cement + 0.125 lbs/sack Poly-E-Flake |
| 5-1/2" Prod Single Stage | 710 | 11.9 | 12.89 | 2.31 | n/a | Lead: (50:50) Class H Cement: Poz (Fly Ash) + 10% BWOC Bentonite + 1 lb/sk of Kol-Seal + 0.3% BWOC HR-601 + 0.5lb/sk D-Air 5000 |
| | 1110 | 14.5 | 5.31 | 1.2 | 25 | Tail: (50:50) Class H Cement: Poz (Fly Ash) + 0.5% bwoc HALAD-344 + 0.4% bwoc CFR-3 + 0.2% BWOC HR-601 + 2% bwoc Bentonite |

DV tool depth(s) will be adjusted based on hole conditions and cement volumes will be adjusted proportionally. DV tool will be set a minimum of 50 feet below previous casing and a minimum of 200 feet above current shoe. Lab reports with the 500 psi compressive strength time for the cement will be onsite for review.

| Casing String | TOC | % Excess |
|--|--|----------|
| 13-3/8" Surface | 0' | 100% |
| 9-5/8" Intermediate | 0' | 75% |
| 5-1/2" Production Casing Two Stage Option | 1 st Stage = 5050ft / 2 nd Stage = 4800' | 25% |
| 5-1/2" Production Casing Single Stage Option | 4800' | 25% |

Devon Energy, Bell Lake 19 State 7H

4. Pressure Control Equipment

| | |
|---|--|
| N | A variance is requested for the use of a diverter on the surface casing. See attached for schematic. |
|---|--|

| BOP installed and tested before drilling which hole? | Size? | Min. Required W.P. | Type | ✓ | Tested to: |
|--|---------|--------------------|------------|---|-------------------------|
| 12-1/4" | 13-5/8" | 3M | Annular | x | 50% of working pressure |
| | | | Blind Ram | | 3M |
| | | | Pipe Ram | | |
| | | | Double Ram | x | |
| | | | Other* | | |
| 8-3/4" | 13-5/8" | 3M | Annular | x | 50% of working pressure |
| | | | Blind Ram | | 3M |
| | | | Pipe Ram | | |
| | | | Double Ram | x | |
| | | | Other* | | |
| | | | Annular | | |
| | | | Blind Ram | | |
| | | | Pipe Ram | | |
| | | | Double Ram | | |
| | | | Other* | | |

*Specify if additional ram is utilized.

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.

| | |
|---|---|
| Y | Formation integrity test will be performed per Onshore Order #2. On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i. |
|---|---|

Devon Energy, Bell Lake 19 State 7H

| | |
|---|--|
| Y | A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart. |
| Y | Are anchors required by manufacturer? |
| Y | <p>A multibowl wellhead may be used. The BOP will be tested per Onshore Order #2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested.</p> <p>Devon proposes using a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 3000 (3M) psi.</p> <ul style="list-style-type: none"> Wellhead will be installed by wellhead vendor representatives. If the welding is performed by a third party, the wellhead representative will monitor the temperature to verify that it does not exceed the maximum temperature of the seal. Wellhead representative will install the test plug for the initial BOP test. Wellhead will install a solid steel body pack-off to completely isolate the lower head after cementing intermediate casing. After installation of the pack-off, the pack-off and the lower flange will be tested to 5M, as shown on the attached schematic. Everything above the pack-off will not have been altered whatsoever from the initial nipple up. Therefore the BOP components will not be retested at that time. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head will be cut and top out operations will be conducted. Devon will pressure test all seals above and below the mandrel (but still above the casing) to full working pressure rating. Devon will test the casing to 0.22 psi/ft or 1500 psi, whichever is greater, as per Onshore Order #2. <p>After running the 13-3/8" surface casing, a 13-5/8" BOP/BOPE system with a minimum rating of 3M will be installed on the wellhead system and will undergo a 250 psi low pressure test followed by a 3,000 psi high pressure test. The 3,000 psi high and 250 psi low test will cover testing requirements a maximum of 30 days, as per Onshore Order #2. If the well is not complete within 30 days of this BOP test, another full BOP test will be conducted, as per Onshore Order #2.</p> <p>After running the 9-5/8" intermediate casing with a mandrel hanger, the 13-5/8" BOP/BOPE system with a minimum rating of 3M will already be installed on the wellhead.</p> <p>The pipe rams will be operated and checked each 24 hour period and each time the drill pipe is out of the hole. These tests will be logged in the daily driller's log. A 2" kill line and 3" choke line will be incorporated into the drilling spool below the ram BOP. In addition to the rams and annular preventer, additional BOP accessories include a kelly cock, floor safety valve, choke lines, and choke manifold rated at 3,000 psi WP.</p> |

Devon Energy, Bell Lake 19 State 7H

| | |
|--|--|
| | Devon requests a variance to use a flexible line with flanged ends between the BOP and the choke manifold (choke line). The line will be kept as straight as possible with minimal turns |
| | See attached schematic. |

5. Mud Program

| Depth | | Type | Weight (ppg) | Viscosity | Water Loss |
|--------|---------|-----------------|--------------|-----------|------------|
| From | To | | | | |
| 0 | 1,200' | FW Gel | 8.6-8.8 | 28-34 | N/C |
| 1,200' | 5,000' | Saturated Brine | 10.0-10.2 | 28-34 | N/C |
| 5,000' | 14,140' | Cut Brine | 8.5-9.3 | 28-34 | N/C |

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

| | |
|---|-----------------------------|
| What will be used to monitor the loss or gain of fluid? | PVT/Pason/Visual Monitoring |
|---|-----------------------------|

6. Logging and Testing Procedures

| Logging, Coring and Testing | |
|-----------------------------|---|
| x | Will run GR/CNL from TD to surface (horizontal well – vertical portion of hole). Stated logs run will be in the Completion Report and submitted to the BLM. |
| | No Logs are planned based on well control or offset log information. |
| | Drill stem test? If yes, explain |
| | Coring? If yes, explain |

| Additional logs planned | Interval |
|-------------------------|-------------------------|
| Resistivity | Int. shoe to KOP |
| Density | Int. shoe to KOP |
| CBL | Production casing |
| X Mud log | Intermediate shoe to TD |
| PEX | |

Devon Energy, Bell Lake 19 State 7H

7. Drilling Conditions

| Condition | Specify what type and where? |
|----------------------------|------------------------------|
| BH Pressure at deepest TVD | 4,662 psi |
| Abnormal Temperature | No |

Mitigation measure for abnormal conditions. Describe. Lost circulation material/sweeps/mud scavengers.

Hydrogen Sulfide (H₂S) monitors will be installed prior to drilling out the surface shoe. If H₂S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.

| | |
|---|--------------------------------|
| N | H ₂ S is present |
| Y | H ₂ S Plan attached |

8. Other facets of operation

Is this a walking operation? Yes.

Will be pre-setting casing? No.

Attachments

☒ Directional Plan

☐ Other, describe