State of New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez

Governor

David Martin Cabinet Secretary-Designate

Brett F. Woods, Ph.D. Deputy Cabinet Secretary **Jami Bailey, Division Director**Oil Conservation Division



New Mexico Oil Conservation Division approval and conditions listed below are made in accordance with OCD Rule 19.15.7.11 and are in addition to the actions approved by BLM on the following 3160-4 or 3160-5 form.

| and a | | | on to the actions a owing <u>3160-4 or 3</u> | | | • | | on | the | 2 | | | |
|------------------------|-----------|-----------|---|--------------------------|------|--|---------------------|-------------|-----|------|-------|--------------|-----|
| Operator Sigr | ature Da | te: N | 1arch 24 th , 2014 | | | | | | | | | | |
| Application T | • • | | Drilling/Casing | Ch | an | ge [| Rec | or | np | lete | e/C | Н | C |
| | Location | on (| Change Dothe | er: | | | | | | | | | |
| Well informa | | | | O M ANAMAN (Name) | | ······································ | • | *********** | | | | Allennonthon | |
| API WELL# | Well Name | Well # | Ôperator Name | Туре | Stat | County | Surf <u>*</u> Owner | UL | Sec | Twp | V/S R | ≀ng | W/E |
| 30-039-05381-00- 00 | LYBROOK | 004 | ENCANA OIL & GAS (USA) INC. | O | A | Rio Arriba | F | J | 22 | 24 [| 7 | 7 | W |
| Conditions of | Approva | ıl: | | | | | | | | | | | |
| Notify NMO | CD 24hrs | prio | to beginning operation | S | | | | | | | | | |
| Add Chacra p | lug from | 2560 |)-2460 | | | | | | | | | | |

NMOCD Approved by Signature

4-1-2014 Date Form 3160-5 (August 2007)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

RECEIVED

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

MAR 26

5. Lease Serial No. NMSF-078562

SUNDRY NOTICES AND REPORTS ON WELLS: armington Fie of Mindian, Allottee or Tribe Name

| Do not use this f abandoned well. | orm for proposals to Use Form 3160-3 (A | o drill or to re-enter an PD) for such proposals | Land Managemer | b. | | | |
|---|--|--|--|--|--|--|--|
| SUBMIT | IN TRIPLICATE – Other | 7. If Unit of C | 7. If Unit of CA/Agreement, Name and/or No. | | | | |
| I. Type of Well ✓ Oil Well ☐ Gas W | ell Other | | 8. Well Name and No. Lybrook 4-22 | | | | |
| 2. Name of Operator Encana Oil & Gas (USA) Inc. | | 9. API Well N 30-039-0538 | 9. API Well No. 30-039-05381 | | | | |
| 3a. Address 370 17th Street, Suite 1700 Denver, Colorado, 80202 | | 3b. Phone No. (include area coa 720-876-3989 | (e) 10. Field and I Escrito Gallu | Pool or Exploratory Area pp | | | |
| 4. Location of Well (Footage, Sec., T., 1850' FSL, 1650' FEL, SE Section 22, Township | R.,M., or Survey Description) 24N, Range 7W |) | 11. Country of Rio Arriba G | r Parish, State County, New Mexico | | | |
| 12. CHEC | K THE APPROPRIATE BO | X(ES) TO INDICATE NATURE | OF NOTICE, REPORT C | OR OTHER DATA | | | |
| TYPE OF SUBMISSION | | TYF | PE OF ACTION | | | | |
| Notice of Intent Subsequent Report Final Abandonment Notice | Acidize Alter Casing Casing Repair Change Plans Convert to Injection | Deepen Fracture Treat New Construction Plug and Abandon Plug Back | Production (Start/Re: Reclamation Recomplete Temporarily Abando Water Disposal | Well Integrity Other | | | |
| following completion of the involv | ed operations. If the operation Abandonment Notices must be final inspection.) | on results in a multiple completion be filed only after all requirements | n or recompletion in a new s, including reclamation, ha | juent reports must be filed within 30 days interval, a Form 3160-4 must be filed once ave been completed and the operator has ek of April 7, 2014. | | | |
| | Notify NMO prior to be | CD 24 hrs | RCVD MAR 28'14 | | | | |
| | | prior to be operal | tions | OIL COMS. DIV. | | | |
| | | | | DIST.3 | | | |
| 14. I hereby certify that the foregoing is to Name (Printed/Typed) Brenda R. Linster | rue and correct. | Title Regulato | ry Lead | | | | |
| Signature Mag | KENR | Date 03/24/20 | 14 | | | | |
| | THIS SPACE | FOR FEDERAL OR STA | ATE OFFICE USE | | | | |
| Approved by Original Si | gned: Stephen Mason | Title | | MAR 2 6 2014 | | | |
| Conditions of approval, if any, are attached hat the applicant holds legal or equitable t entitle the applicant to conduct operations | itle to those rights in the subjec | s not warrant or certify | | | | | |
| Title 18 U.S.C. Section 1001 and Title 43 | U.S.C. Section 1212, make it a | a crime for any person knowingly an | d willfully to make to any d | epartment or agency of the United States any false | | | |

fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

PLUG AND ABANDONMENT PROCEDURE

March 20, 2014

Lybrook 004-22

Escrito Gallup 1850' FSL &1650' FEL, Section 22, T-24-N, R-7-W, Rio Arriba County, NM

| | API 30-039-05381 / Long: / Lat: |
|-------|---|
| Note: | All cement volumes use 100% excess outside pipe and 50' excess inside. The stabilizing wellbore fluid will be 8.3 ppg, sufficient to balance all exposed formation pressures. All cement will be Class B, mixed at 15.6 ppg with a 1.18 cf/sx yield. |
| 1. | This project will use a closed loop system, steel waste pit(s), to handle waste fluids circulated from the well and cement wash up. |
| 2. | Install and test location rig anchors. Comply with all NMOCD, BLM, and Operator safety regulations. MOL and RU daylight pulling unit. Conduct safety meeting for all personnel on location. Record casing, tubing and bradenhead pressures. NU relief line and blow down well. Kill well with water as necessary and at least pump tubing capacity of water down the tubing. ND wellhead and NU BOP. Function test BOP. |
| 3. | Rods: Yes, NoX, Unknown Tubing: YesX, No, Unknown, Size1-1/2", Length5557' Packer: Yes, No, Unknown, Type TOH and inspect the 1-1/2" tubing from well. Prepare approximately 1000' of 1-1/4" IJ tubing workstring. To set plugs use a tapered string with the 1-1/4 " IJ below the 1-1/2" wells tubing. Round trip 2-7/8" wireline gauge ring to 5130'. |
| 4. | Plug #1 (Gallup perforations and top, 5628' – 5050'): Note: due to the placement of the 2-7/8" tubing that was cemented in place we are unable to spot a CR 50' above perforations as normal. Approved with S. Mason, BLM to set 2-7/8" CR in tubing 250' above perfs and squeeze cement below CR to isolate the Gallup perforations. RIH and set a 2-7/8" wireline cement retainer at 5100'. TIH with tapered workstring and sting into CR. Establish rate into the Gallup perforations. Pressure test casing to 800 PSI. If casing does not test, then spot or tag subsequent plug as appropriate. Mix and pump 43 sxs Class B cement, squeeze 38 sxs below CR to isolate the Gallup interval and leave 5 sxs above CR. Pull up to 4800' and reverse circulate the well clean. TOH with tubing and WOC. TIH and tag cement. |
| 5. | Plug #2 (Mancos top, 4628' – 4528'): Perforate 6 HSC squeeze holes at 4628'. Establish rate into squeeze holes. Mix and pump 46 sxs Class B cement down the 2-7/8" casing; displace to 4400'; this squeezes 39 sxs into 4.5" x 7-7/8" annulus and leaves 7 sxs inside the casing to cover the Mancos top. Drop a rubber plug and displace to 4400'. Depending on work schedule: 1) |

lubricate a 2-7/8" CIBP into well and set at 4400' just above rubber plug; or 2) WOC and then tag

cement with wireline. Top of the cement must be at least at 4528'. Pressure test casing.

- 6. **Plug #3 (Mesaverde top, 2904' 2804'):** TIH with tapered workstring to 2904'. Mix 10 sxs Class B cement and spot a balanced plug inside the casing to cover the Mesaverde top.
- 7. Plug #4 (Pictured Cliffs and Fruitland tops, 2080'- 1766'): Perforate 6 HSC squeeze holes at 2080'. Mix 140 sxs Class B cement, squeeze 122 sxs into 4.5" x 7-7/8" annulus and leave 18 sxs inside the casing to cover Pictured Cliffs and Fruitland tops; drop rubber plug and displace to 1550'. Depending on work schedule: 1) lubricate a 2-7/8" CIBP into well and set at 1550' or just above rubber plug; or 2) WOC and then tag cement with wireline. Top of the cement must be at least at 1766'. Pressure test casing. WOC and tag cement.
- 8. Plug #5 (Kirtland and Ojo Alamo tops, 1610' 1342'): Perforate 6 HSC squeeze holes at 1610'.. Establish rate into squeeze holes. Mix 119 sxs Class B cement, squeeze 104 sxs into 4.5" x 7-7/8" annulus and leave 15 sxs inside the casing to cover the Kirtland and Ojo Alamo tops; drop rubber plug and displace to 1200'. Depending on work schedule: 1) lubricate a 2-7/8" CIBP into well and set at 1200' or just above rubber plug; or 2) WOC and then tag cement with wireline. Top of the cement must be at least at 1342'. WOC and tag cement.
- 9. **Plug #6 (8.625" Surface casing shoe, 222' to Surface)**: Perforate 6 HSC squeeze holes at 222'. Establish rate into squeeze holes. Mix and pump approximately 65 sxs Class B cement down 2-7/8" casing and circulate good cement out the 4.5" x 8-5/8" bradenhead annulus valve. SI well and WOC.
- 10. ND BOP and cut off wellhead below surface casing flange. Install P&A marker with cement to comply with regulations. Record GPS coordinate for P&A marker on tower report. Photograph P&A marker in place. RD, MOL and cut off anchors. Restore location per BLM stipulations.

Lybrook 004-22

Proposed P&A

Escrito Gallup

1850' FSL & 1650' FEL, Section 22, T-24-N, R-7-W Rio Arriba County, NM / API #30-039-05381

Today's Date: 3/18/14

Spud: 3/13/61 Comp: 3/30/61

Elevation: 6750' GL

6752' KB

12.25" Hole

Ojo Alamo @ 1392

Kirtland @ 1560'

Fruitland @ 1816'

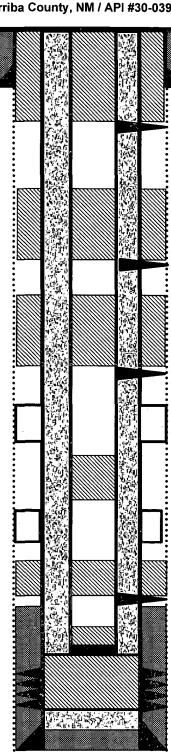
Pictured Cliffs @ 2030'

Mesaverde @ 2854'

Mancos @ 4578'

Gallup @ 5380'

7.875" Hole



TD 5663' PBTD 5592'

BLM Approved Tops

Circulate 65 bbls of cement to surface

8.625" 23# Casing set @ 172' 125 sxs cement, circulated to surface

Perforate @ 222'

Plug #6: 222' - 0' Class B cement, 65 sxs

Plug #5: 1610' - 1342' Class B cement, 119 15 sxs in 2.875" and 104 sxs in 4.5" x 7-7/8" annulus

Perforate @ 1610'

Plug #4: 2080'- 1766' Class B cement, 140 18 sxs in 2.875" and 122 sxs in 4.5" x 7-7/8" annulus

Perforate @ 2080'

Holes in casing 2925' and at 4000'. Squeeze 400 sxs Class B cement with fluid lost additive. DO and P/T to 850 PSI. (Sept '72)

> Plug #3: 2904' – 2804' Class B cement, 10 sxs balanced plug in 2.875"

Plug #2: 4628' – 4528' Class B cement, 46 sxs 7 sxs in 2.875" and 39 sxs in 4.5" x 7-7/8" annulus

TOC @ 4899' (Calc, 75%)

Perforate @ 4628'

Set CR @ 5100'

Plug #1: 5628' - 5050' Class B cement, 43 sxs 38 below and 5 above

2.875" Tubing at 5130'

Gallup Perforations: 5380' - 5628'

4.5" 11.6#, J-55 Casing @ 5663' Cemented with 150 sxs (232 cf)