

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

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 an abandoned well. Use Form 3160-3 (APD) for such proposals.*

MAY 22 2014

Field Office  
Bureau of Land Management

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

|  |   |  |
|--|---|--|
| 1. Type of Well<br><input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other   |   | 5. Lease Serial No.<br>NMNM 8005                             |
| 2. Name of Operator<br>Encana Oil & Gas (USA) Inc.   |   | 6. If Indian, Allottee or Tribe Name<br>N/A                  |
| 3a. Address<br>370 17th Street, Suite 1700, Denver, CO 80202   | 3b. Phone No. (include area code)<br>720-876-3533 | 7. If Unit of CA/Agreement, Name and/or No.<br>N/A           |
| 4. Location of Well (Footage, Sec., T., R., M., or Survey Description)<br>SHL: 1417' FSL, 267' FWL Section 10, Township 23N, Range 9W<br>BHL: 430' FSL, 330' FWL Section 9, Township 23N, Range 9W |   | 8. Well Name and No.<br>Good Times L10-2309 03H              |
|  |   | 9. API Well No.<br>Pending 30-0821-35547                     |
|  |   | 10. Field and Pool or Exploratory Area<br>South Bisti Gallup |
|  |   | 11. Country or Parish, State<br>San Juan County, New Mexico  |

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 <u>Update Drilling Plan and Wellbore Diagram</u> |
|  | <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 recompleat 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 recompleat 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.)

Encana Oil & Gas (USA) Inc. (Encana) is submitting the following information for the Good Times L10-2309 03H APD package:

1. Drilling Plan - Updated to include the correct depth for the 7" casing. The previously submitted Drilling Plan did not match the information on the Directional Drilling Plan. The plan was also updated with the correct cement volumes.
2. Wellbore Diagram - Updated to include the correct depth for the 7" casing. The previously submitted Wellbore Diagram did not match the information on the Directional Drilling Plan or Form 3160-3. The diagram was also updated with the correct cement volumes.

Please attach these updates to the Good Times L10-2309 03H APD package.

OIL CONS. DIV DIST. 3

JUL 31 2015

|  |  |                          |
|--|--|--------------------------|
| 14. I hereby certify that the foregoing is true and correct.<br>Name (Printed/Typed)<br>Katie Wegner |  | Title Regulatory Analyst |
| Signature <i>Katie Wegner</i>  |  | Date 05/21/2014          |

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

|   |            |              |
|---|------------|--------------|
| Approved by <i>[Signature]</i>  | Title AFM  | Date 7/29/15 |
| 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 FFO |              |

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)

NMCO

Good Times L10-2309 03H  
 SHL: NWSW 10 23N 9W  
 1417 FSL 267 FWL  
 BHL: SWSW 9 23N 9W  
 430 FSL 330 FWL  
 San Juan, New Mexico

**Encana Oil & Gas (USA) Inc.  
 Drilling Plan**

**1. ESTIMATED TOPS OF GEOLOGICAL MARKERS (TVD)**

The estimated tops of important geologic markers are as follows:

| <b>Formation</b>    | <b>Depth (TVD) units = feet</b> |
|---------------------|---------------------------------|
| Ojo Alamo Ss.       | 465                             |
| Kirtland Shale      | 593                             |
| Fruitland Coal      | 860                             |
| Pictured Cliffs Ss. | 1,105                           |
| Lewis Shale         | 1,295                           |
| Cliffhouse Ss.      | 1,845                           |
| Menefee Fn.         | 2,582                           |
| Point Lookout Ss.   | 3,550                           |
| Mancos Shale        | 3,690                           |
| Mancos Silt         | 4,222                           |
| Gallup Fn.          | 4,495                           |

The referenced surface elevation is 6754', KB 6770'

**2. ESTIMATED DEPTH OF POTENTIAL WATER, OIL, GAS, & OTHER MINERAL BEARING FORMATIONS**

| <b>Substance</b> | <b>Formation</b>    | <b>Depth (TVD) units = feet</b> |
|------------------|---------------------|---------------------------------|
| Water/Gas        | Fruitland Coal      | 860                             |
| Oil/Gas          | Pictured Cliffs Ss. | 1,105                           |
| Oil/Gas          | Cliffhouse Ss.      | 1,845                           |
| Gas              | Menefee Fn.         | 2,582                           |
| Oil/Gas          | Point Lookout Ss.   | 3,550                           |
| Oil/Gas          | Mancos Shale        | 3,690                           |
| Oil/Gas          | Mancos Silt         | 4,222                           |
| Oil/Gas          | Gallup Fn.          | 4,495                           |

All shows of fresh water and minerals will be reported and protected.

**3. PRESSURE CONTROL**

- a) Pressure control equipment and configuration will be designed to meet 2M standards.
- b) Working pressure on rams and BOPE will be 3,000 psi.
- c) Function test and visual inspection of the BOP will be conducted daily and noted in the IADC Daily Drilling Report.
- d) The Annular BOP will be pressure tested to a minimum of 50 percent of its rated working pressure.
- e) Blind and Pipe Rams/BOP will be tested against a test plug to 100 percent of rated working pressure.
- f) Pressure tests are required before drilling out from under all casing strings set and cemented in place.

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- g) BOP controls must be installed prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned.
- h) BOP testing procedures and testing frequency will conform to Onshore Order No. 2.
- i) BOP remote controls shall be located on the rig floor at a location readily accessible to the driller. Master controls shall be on the ground at the accumulator and shall have the capability to function all preventers.
- j) The kill line shall be 2-inch minimum and contain two kill line valves, one of which shall be a check valve.
- k) The choke line shall be a 2-inch minimum and contain two choke line valves (2-inch minimum).
- l) The choke and manifold shall contain two adjustable chokes.
- m) Hand wheels shall be installed on all ram preventers.
- n) Safety valves and wrenches (with subs for drill string connections) shall be available on the rig floor at all
- o) Inside BOP or float sub shall also be available on the rig floor at all times.

Proposed BOP and choke manifold arrangements are attached.

#### 4. CASING & CEMENTING PROGRAM

The proposed casing and cementing program has been designed to protect and/or isolate all usable water zones, potentially productive zones, lost circulation zones, abnormally pressured zones, and any prospectively valuable deposits of minerals. Any isolating medium other than cement shall receive approval prior to use. The casing setting depth shall be calculated to position the casing seat opposite a competent formation which will contain the maximum pressure to which it will be exposed during normal drilling operations. All indications of useable water shall be reported.

- a) The proposed casing design is as follows:

| Casing           | Depth (MD)  | Hole Size | Csg Size | Weight | Grade         |
|------------------|-------------|-----------|----------|--------|---------------|
| Conductor        | 0'-60'      | 30"       | 20"      | 94#    |               |
| Surface          | 0'-500'     | 12 1/4"   | 9 5/8"   | 36#    | J55, STC New  |
| Intermediate     | 0'-5235'    | 8 3/4"    | 7"       | 26#    | J55, LTC New  |
| Production Liner | 5035'-9958' | 6 1/8"    | 4 1/2"   | 11.6#  | B80*, LTC New |

| Casing String |              |       |            | Casing Strength Properties |             |                   | Minimum Design Factors |       |         |
|---------------|--------------|-------|------------|----------------------------|-------------|-------------------|------------------------|-------|---------|
| Size          | Weight (ppf) | Grade | Connection | Collapse (psi)             | Burst (psi) | Tensile (1000lbs) | Collapse               | Burst | Tension |
| 9 5/8"        | 36           | J55   | STC        | 2020                       | 3520        | 394               | 1.125                  | 1.1   | 1.5     |
| 7"            | 26           | J55   | LTC        | 4320                       | 4980        | 367               | 1.125                  | 1.1   | 1.5     |
| 4.5"          | 11.6         | B80   | LTC        | 6350                       | 7780        | 201               | 1.125                  | 1.1   | 1.5     |

\*B80 pipe specifications are attached

Casing design is subject to revision based on geologic conditions encountered

All casing strings below the conductor shall be pressure tested to 0.22 psi per foot of casing string length or 1,500 psi, whichever is greater, but not to exceed 70 percent of the minimum internal yield. If pressure declines more than 10 percent in 30 minutes, corrective action shall be taken.

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b) The proposed cementing program is as follows

| Casing           | Depth (MD)  | Cement Volume (sacks)   | Cement Type & Yield  | Designed TOC | Centralizers                                 |
|------------------|-------------|---|--|--------------|--|
| Conductor        | 0'-60'      | 100 sks   | Type I Neat 16 ppg   | Surface      | None   |
| Surface          | 0'-500'     | 314 sks   | HALCEM™ SYSTEM + 2% CaCl2 + 0.125lbm/sk Poly-E-Flake. 15.8 ppg, 1.174 cuft/sk  | Surface      | 1 per joint on bottom 3 joints               |
| Intermediate     | 0'-5235'    | 30% open hole excess<br>Stage 1 Lead: 258 sks<br>Stage 1 Tail: 439 sks<br>Stage 2 Lead: 128 sks | Stage 1 Lead: HALCEM™ SYSTEM + 0.2% HR-5 + 5lbm/sk Kol-Seal + 0.125lbm/sk Poly-E-Flake. 12.3 ppg, 1.948 cuft/sk<br>Stage 1 Tail: VARICEM™ CEMENT + .15% CFR-3 + 5lbm/sk Kol-Seal + 0.125% Poly-E-Flake. 13.5 ppg, 1.308 cuft/sk.<br>Stage 2 Contingency: HALCEM™ SYSTEM + 5lbm/sk Kol-Seal + 0.125lbm/sk Poly-E-Flake. 12.3 ppg, | Surface      | 1 every 3 joints through water bearing zones |
| Production Liner | 5035'-9958' | None - External Casing Packers  | N/A  | N/A          | N/A  |

\*Production liner clarification: Utilizing external swell casing packer system for zonal isolation will not use cement in the production liner

Actual volumes will be calculated and determined by conditions onsite. All cement slurries will meet or exceed minimum BLM and New Mexico Oil Conservation Division requirements. Slurries used will be the slurries listed above or equivalent slurries depending on service provider selected. Cement yields may change depending on slurries selected

All waiting on cement times shall be a minimum of 8 hours or adequate to achieve minimum of 500 psi compressive strength at the casing shoe prior to drilling out.

**5. WELL PLAN & DIRECTIONAL DRILLING PROGRAM**

The proposed horizontal well will have a kick off point of 2300'. Directional plans are attached.

| Description           | Proposed Depth (TVD/MD) | Formation |
|-----------------------|-------------------------|-----------|
| Horizontal Lateral TD | 4773'/9958'             | Gallup    |

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**6. DRILLING FLUIDS PROGRAM**

a) Surface through Intermediate Casing Point:

| Holie Size (in) | Depth (TVD/MD)        | Mud Type         | Density (ppg) | Viscosity (sec/qt) | Fluid Loss (cc) |
|-----------------|-----------------------|------------------|---------------|--------------------|-----------------|
| 30"             | 0-60'/60'             | Fresh Water      | 8.3-9.2       | 38-100             | 4-28            |
| 12 1/4"         | 0'-500'/500'          | Fresh Water      | 8.3-10        | 60-70              | NC              |
| 8 3/4"          | 500'/500'-4774'/5235' | Fresh Water LSND | 8.3-10        | 40-50              | 8-10            |

b) Intermediate Casing Point to TD:

| Holie Size (in) | Depth (TVD/MD)              | Mud Type         | Density (ppg) | Viscosity (sec/qt) | Fluid Loss (cc) |
|-----------------|-----------------------------|------------------|---------------|--------------------|-----------------|
| 6 1/8"          | 4774'/5235'-<br>4773'/9958' | Fresh Water LSND | 8.3-10        | 15-25              | <15             |

- c) There will be sufficient mud on location to control a blowout should one occur. Mud flow and volume will be monitored both visually and with electronic pit volume totalizers. Mud tests shall be performed every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, filtration, and pH.
- d) A closed-loop system will be used to recover drilling fluid and dry cuttings in both phases of the well and on all hole intervals. Above-ground tanks will be utilized to hold cuttings and fluids for rig operations. A frac tank will be on location to store fresh water. Waste will be disposed of properly at an EPA-approved hazardous waste facility. Fresh water cuttings will be disposed of at Basin Disposal, Inc. and/or Industrial Ecosystems, Inc. The location will be lined in accordance with the Surface Use Plan of Operations.

**7. TESTING, CORING, & LOGGING**

- a) Drill Stem Testing - None anticipated.
- b) Coring - None anticipated.
- c) Mudd Logging - Mud loggers will be on location from kick off point to TD.
- d) Logging - See below

Cased Hole:  
 CBL/CCL/GR/VDL will be run as needed for perforating control

**8. ABNORMAL PRESSURES & HYDROGEN SULFIDE**

The anticipated bottom hole pressure is +/- 2238 psi based on a 9.0 ppg at 4782' TVD of the horizontal lateral target. No abnormal pressure or temperatures are anticipated.

No hydrogen sulfide gas is anticipated, however, if H<sub>2</sub>S is encountered, the guidelines in Onshore Order No. 6 will be followed.

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## **9. ANTICIPATED START DATE AND DURATION OF OPERATIONS**

Drilling is estimated to commence on January 25, 2015. It is anticipated that completion operations will begin within 30 days after the well has been drilled depending on fracture treatment schedules with various pumping service companies.

It is anticipated that the drilling of this well will take approximately 20 days.

| MWD   |         | OPEN HOLE         | DEPTH   |   | HOLE SIZE               | CASING SPECS   | MW MUD TYPE             | DEVIATION INFORMATION                                |
|---|---------|-------------------|---|---|-------------------------|--|-------------------------|--|
| LWD   | LOGGING | FORM              | TVD   | MD  |                         |  |                         |  |
|   |         |                   | 60  | 60'   | 30                      | 20" 94#<br>100sx Type I Neat 16.0ppg cmt   | Fresh wtr<br>8.3-9.2    |  |
| Multi-Well pad - take survey every stand and run anti-collision report prior to spud  |         | None              |   |   | 12 1/4                  | 9 5/8" 36ppf J55 STC<br><br>TOC Surface with 100% OH Excess: 314 sks of HALCEM™ SYSTEM + 2% CaCl2 + 0.125lbm/sk Poly-E-Flake. Mixed at 15.8 ppg. Yield 1.174 cutt/sk.  | Fresh wtr<br><br>8.3-10 | Vertical<br><1°                                      |
| Survey Every 60'-120', updating anticollision report after surveys. Stop operations and contact drilling engineer if separation factor approaches 1.5 |         | No OH logs        | Ojo Alamo Ss.<br>Kirtland Shale<br>Fruitland Coal<br>Pictured Cliffs Ss.<br>Lewis Shale<br>Cliffhouse Ss.<br>Menefee Fn.<br>Point Lookout Ss.<br>Mancos Shale | 465<br>593<br>860<br>1,105<br>1,295<br>1,845<br>2,582<br>3,550<br>3,690 |                         | 7" 26ppf J55 LTC<br><br>TOC @ surface (30% OH excess)<br>Stage 1 Total: 698sks<br>If necessary, Stage 2 Total: 128sks<br><br>Stage 1 Lead: 259 sks HALCEM™ SYSTEM + 0.2% HR-5 + 5lbm/sk Kol-Seal + 0.125lbm/sk Poly-E-Flake. Mixed at 12.3 ppg. Yield 1.948 cutt/sk.<br><br>Stage 1 Tail: 439 sks VARICEM™ CEMENT + .15% CFR-3 + 5lbm/sk Kol-Seal + 0.125% Poly-E-Flake. Mixed at 13.5 ppg. Yield 1.308 cutt/sk.<br><br>Stage 2: 128 sks HALCEM™ SYSTEM + 5lbm/sk Kol-Seal + 0.125lbm/sk Poly-E-Flake. Mixed at 12.3 ppg. Yield 1.946 cutt/sk. | Fresh Wtr<br><br>8.3-10 | Vertical<br><1°                                      |
| Surveys every 30' through the curve   |         | Mud logger onsite | KOP<br>Mancos Silt<br>Gallup Fn.<br>7" Csg  | 2,300<br>4,222<br>4,495<br>4,774  | 2,300<br><br><br>5,235' |  |                         |  |
| Surveys every stand to TD unless directed otherwise by Geologist  |         | No OH Logs        | Horizontal Target TD<br>Base Gallup   | 4,782<br>4,773<br>4,870   | 9,958                   | 6 1/8<br><br>4723' Drilled Lateral   |                         | Horz Inc/TVD<br>90.1deg/4782ft<br><br>TD = 9957.7 MD |
| MWD Gamma Directional   |         |                   |   |   |                         | 4 1/2" 11.6ppf SB80 LTC<br><br>Running external swellable csg packers for isolation of prod string<br>Plan on setting top packer within 100' of intermediate casing shoe   | WBM<br>8.3-10           |  |

**NOTES:**

- 1) Drill with 30" bit to 60', set 20" 94# conductor pipe
- 2) Drill surface to 500', R&C 9 5/8" casing
- 3) N/U BOP and surface equipment
- 4) Drill to KOP of 2300', 8 3/4 inch holedsize
- 5) PU directional tools and start curve at 10deg/100' build rate
- 6) Drill to csg point of 5235' MD
- 7) R&C 7" csg, circ cmt to surface, switch to WBM
- 8) Land at 90 deg, drill lateral to 9958' run 4 1/2 inch liner with external swellable csg packers