

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

David Martin
Cabinet Secretary

Brett F. Woods, Ph.D.
Deputy Cabinet Secretary

David R. Catanach 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 3160-3 APD form.

Operator Signature Date: 3-2-15

Well information;

Operator Encana, Well Name and Number Escrito N19 2408 #1H

API# 30-045-35652, Section 19, Township 24 N/S, Range 08 E/W

Conditions of Approval:

(See the below checked and handwritten conditions)

- ☒ Notify Aztec OCD 24hrs prior to casing & cement.
- ☒ Hold C-104 for directional survey & "As Drilled" Plat
- ☒ Hold C-104 for NSL NSP, DHC
- ☐ Spacing rule violation. Operator must follow up with change of status notification on other well to be shut in or abandoned
- ☐ Regarding the use of a pit, closed loop system or below grade tank, the operator must comply with the following as applicable:
 - A pit requires a complete C-144 be submitted and approved prior to the construction or use of the pit, pursuant to 19.15.17.8.A
 - A closed loop system requires notification prior to use, pursuant to 19.15.17.9.A
 - A below grade tank requires a registration be filed prior to the construction or use of the below grade tank, pursuant to 19.15.17.8.C
- ☐ Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string
- ☒ Regarding Hydraulic Fracturing, review EPA Underground Injection Control Guidance 84
- ☒ Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.
- ☒ Well-bore communication is regulated under 19.15.29 NMAC. This requires well-bore Communication to be reported in accordance with 19.15.29.8.

APD Held for corrected C-102 rec'd on 1-27-16

Charles
NMOCD Approved by Signature

2-5-16
Date

OIL CONS. DIV DIST. 3

SEP 23 2015

Form 3160-3
(March 2012)

RECEIVED

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

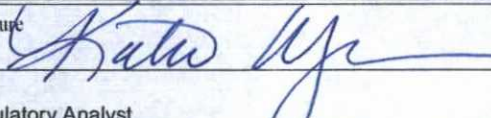
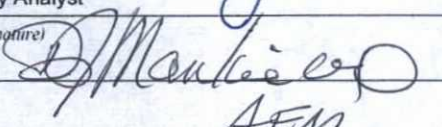
APPLICATION FOR PERMIT TO DRILL OR REENTER

| | | |
|---|--|--|
| 1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER | | 5. Lease Serial No. NM 54981, NM 54980 |
| 1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone | | 6. If Indian, Allottee or Tribe Name N/A |
| 2. Name of Operator Encana Oil & Gas (USA) Inc. | | 7. If Unit or CA Agreement, Name and No. Pending - NMNM130591 |
| 3a. Address 370 17th Street, Suite 1700 Denver, CO 80202 | | 8. Lease Name and Well No. Escrito N19-2408 01H |
| 3b. Phone No. (include area code) 720-876-3533 | | 9. API Well No. 30-045-35652 |
| 4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface 1085' FSL, 2095' FWL, Section 19, T24N, R8W SSW At proposed prod. zone 2198' FSL, 330' FEL, Section 30, T24N, R8W NESE | | 10. Field and Pool, or Exploratory Basin Mancos |
| 14. Distance in miles and direction from nearest town or post office* +/- 37.3 miles South from the intersection of HWY 64 & US HWY 550 in Bloomfield, NM | | 11. Sec., T. R. M. or Blk. and Survey or Area Section 19, T24N, R8W NMPM Sec 30, T24N, R8W |
| 15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) BHL is 330 FEL Section 30, T24N, R8W | 16. No. of acres in lease NM 54981- 321.16 acres NM 54980- 320 acres | 17. Spacing Unit dedicated to this well 641.16 acres- Section 30, T24N, R8W |
| 18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. SHL is +/- 30' East of Escrito N19-2408 02H | 19. Proposed Depth 5320' TVD, 9780' MD | 20. BLM/BIA Bond No. on file COB-000235 |
| 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6792' GL; 6808' KB | 22. Approximate date work will start* 08/25/2015 | 23. Estimated duration 20 days |

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the BLM.

| | | |
|---|--------------------------------------|-----------------|
| 25. Signature  | Name (Printed/Typed) Katie Wegner | Date 3/2/15 |
| Title Regulatory Analyst | | |
| Approved by (Signature)  | Name (Printed/Typed) AFM | Date 9/17/15 |
| Title AFM | Office FFO | |

Application approval 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.
Conditions of approval, if any, are attached.

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.

(Continued on page 2)

BLM'S APPROVAL OR ACCEPTANCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS

*(Instructions on page 2)

DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS"

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

NMCD TV

District I
1625 N. French Dr., Hobbs, NM 88240
Phone (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S St. Francis Dr., Santa Fe, NM 87505
Phone (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | |
|---|---|--|
| ¹ API Number 30,045-35052 | ² Pool Code 97232 | ³ Pool Name BASIN MANCOS GAS |
| ⁴ Property Code 315289 | ⁵ Property Name ESCRITO N19-2408 | ⁶ Well Number 01H |
| ⁷ OGRID No. 282327 | ⁸ Operator Name ENCANA OIL & GAS (USA) INC. | ⁹ Elevation 6792.4' |

¹⁰ Surface Location

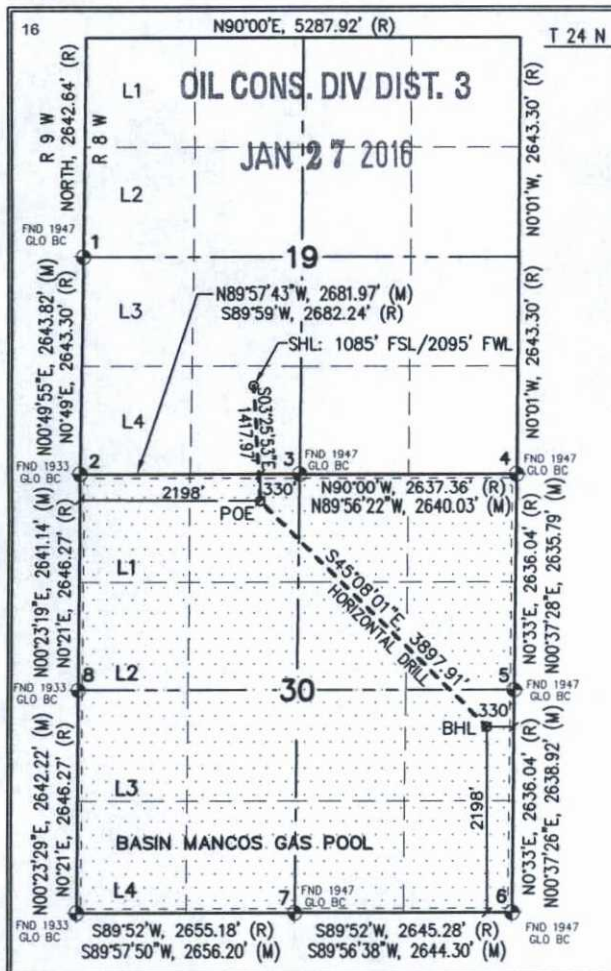
| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West Line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|----------|
| N | 19 | 24N | 8W | | 1085 | SOUTH | 2095 | WEST | SAN JUAN |

¹¹ Bottom Hole Location If Different From Surface

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West Line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|----------|
| I | 30 | 24N | 8W | | 2198 | SOUTH | 330 | EAST | SAN JUAN |

| | | | | |
|---|--------------|-------------------------------|----------------------------------|-------------------------|
| ¹² Dedicated Acres 641.16 640 ACRES - ALL SECTION 30 | PROJECT AREA | ¹³ Joint or Infill | ¹⁴ Consolidation Code | ¹⁵ Order No. |
|---|--------------|-------------------------------|----------------------------------|-------------------------|

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



ESCRITO N19-2408 01H WELL
SHL (WELL FLAG)
LAT. 36.295559° N (NAD83)
LONG. 107.724820° W (NAD83)
LAT. 36.295547° N (NAD27)
LONG. 107.724207° W (NAD27)
POE (POINT OF ENTRY)
LAT. 36.291673° N (NAD83)
LONG. 107.724527° W (NAD83)
LAT. 36.291661° N (NAD27)
LONG. 107.723914° W (NAD27)
BHL (BOTTOM HOLE LOCATION)
LAT. 36.284130° N (NAD83)
LONG. 107.715147° W (NAD83)
LAT. 36.284117° N (NAD27)
LONG. 107.714535° W (NAD27)

SECTION CORNERS

- LAT. 36.299838° N (NAD83)
LONG. 107.731856° W (NAD83)
LAT. 36.299824° N (NAD27)
LONG. 107.731243° W (NAD27)
- LAT. 36.292577° N (NAD83)
LONG. 107.731976° W (NAD83)
LAT. 36.292565° N (NAD27)
LONG. 107.731363° W (NAD27)
- LAT. 36.292580° N (NAD83)
LONG. 107.722879° W (NAD83)
LAT. 36.292567° N (NAD27)
LONG. 107.722266° W (NAD27)
- LAT. 36.292579° N (NAD83)
LONG. 107.713924° W (NAD83)
LAT. 36.292567° N (NAD27)
LONG. 107.713312° W (NAD27)
- LAT. 36.285342° N (NAD83)
LONG. 107.714013° W (NAD83)
LAT. 36.285329° N (NAD27)
LONG. 107.713401° W (NAD27)
- LAT. 36.278096° N (NAD83)
LONG. 107.714102° W (NAD83)
LAT. 36.278083° N (NAD27)
LONG. 107.713490° W (NAD27)
- LAT. 36.278082° N (NAD83)
LONG. 107.723070° W (NAD83)
LAT. 36.278069° N (NAD27)
LONG. 107.722457° W (NAD27)
- LAT. 36.285324° N (NAD83)
LONG. 107.732027° W (NAD83)
LAT. 36.285312° N (NAD27)
LONG. 107.731414° W (NAD27)

17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature: *Katie Wegner* Date: 11/19/16
Printed Name: Katie Wegner
E-mail Address: Katie.Wegner@encana.com

18 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

January 12, 2016

Date of Survey

Signature and Seal of Professional Surveyor:

Richard L. Mulliken
RICHARD L. MULLIKEN
NEW MEXICO
16873
1-13-16
PROFESSIONAL SURVEYOR
Certificate Number 16873

Escrito N19-2408 01H

SHL: 1085' FSL, 2095' FWL, Sec 19, T24N R8W

BHL: 2198' FSL, 330' FEL, Sec 30, T24N R8W

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:

| Formation | Depth (TVD) units = feet |
|---------------------|---------------------------------|
| San Jose Fn. | n/a |
| Nacimiento Fn. | surface |
| Ojo Alamo Ss. | 962 |
| Kirtland Shale | 1,189 |
| Fruitland Coal | 1,444 |
| Pictured Cliffs Ss. | 1,728 |
| Lewis Shale | 1,822 |
| Cliffhouse Ss. | 2,565 |
| Menefee Fn. | 3,232 |
| Point Lookout Ss. | 4,129 |
| Mancos Shale | 4,352 |
| Mancos Silt | 4,844 |
| Gallup Fn. | 5,122 |
| Base Gallup | 5,453 |

The referenced surface elevation is 6792', KB 6808'

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

| Substance | Formation | Depth (TVD) units = feet |
|------------------|---------------------|---------------------------------|
| Water/Gas | Fruitland Coal | 1,444 |
| Oil/Gas | Pictured Cliffs Ss. | 1,728 |
| Oil/Gas | Cliffhouse Ss. | 2,565 |
| Gas | Menefee Fn. | 3,232 |
| Oil/Gas | Point Lookout Ss. | 4,129 |
| Oil/Gas | Mancos Shale | 4,352 |
| Oil/Gas | Mancos Silt | 4,844 |
| Oil/Gas | Gallup Fn. | 5,122 |

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

Escrito N19-2408 01H

SHL: 1085' FSL, 2095' FWL, Sec 19, T24N R8W

BHL: 2198' FSL, 330' FEL, Sec 30, T24N R8W

San Juan, New Mexico

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.
- 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 times.
- 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' | 26" | 16" | 42.09# | |
| Surface | 0'-500' | 12 1/4" | 9 5/8" | 36# | J55, STC New |
| Intermediate | 0'-5488' | 8 3/4" | 7" | 26# | J55, LTC New |
| Production Liner | 5388'-9780' | 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

Escrito N19-2408 01H

SHL: 1085' FSL, 2095' FWL, Sec 19, T24N R8W

BHL: 2198' FSL, 330' FEL, Sec 30, T24N R8W

San Juan, New Mexico

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.

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' | 228 sks | Type III Cement + 1% bwoc Calcium Chloride + 0.25 lbs/sack Cello Flake + 0.2% bwoc FL-52A + 58.9% Fresh Water | Surface | 1 per joint on bottom 3 joints |
| Intermediate | 0'-5488' | 100% open hole excess Stage 1 Lead: 511 sks Stage 1 Tail: 390 sks | Lead: PremLite + 3% CaCl + 0.25lb/sk CelloFlake + 5lb/sk LCM, 12.1ppg 2.13cuft/sk Tail: Type III Cmt + 1% CaCl + 0.25lb/sk Cello Flake 14.5ppg 1.38cuft/sk | Surface | 1 every 3 joints through water bearing zones |
| Production Liner | 5388'- 9780' | 50% OH excess Stage 1 Blend Total: 251sks | Blend: Premium Lite High Strength FM + 0.7% bwoc R-3 + 3% bwow Potassium Chloride + 0.25lbs/sack Cello Flake + 0.5% bwoc CD-32 + 1.15% bwoc FL- 52A + 60 lbs/sack Calcium Carbonate + 124.4% Fresh Water. Yield 2.63 cuft/sk | Liner Hanger | N/A |

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 600'. Directional plans are attached.

| Description | Proposed Depth (TVD/MD) | Formation |
|-----------------------|-------------------------|-----------|
| Horizontal Lateral TD | 5320'/9780' | Gallup |

Escrito N19-2408 01H
SHL: 1085' FSL, 2095' FWL, Sec 19, T24N R8W
BHL: 2198' FSL, 330' FEL, Sec 30, T24N R8W
San Juan, New Mexico

6. DRILLING FLUIDS PROGRAM

a) Surface through Intermediate Casing Point:

| Hole 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'-5246'/5488' | Fresh Water LSND | 8.3-10 | 40-50 | 8-10 |

b) Intermediate Casing Point to TD:

| Hole Size (in) | Depth (TVD/MD) | Mud Type | Density (ppg) | Viscosity (sec/qt) | Fluid Loss (cc) |
|----------------|-----------------------------|------------------|---------------|--------------------|-----------------|
| 6 1/8" | 5246'/5488'- 5320'/9780' | 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 +/- 2514 psi based on a 9.0 ppg at 5372' TVD of the horizontal lateral target. No abnormal pressure or temperatures are anticipated.

No hydrogen sulfide gas is anticipated, however, if H₂S is encountered, the guidelines in Onshore Order No. 6 will be followed.

9. ANTICIPATED START DATE AND DURATION OF OPERATIONS

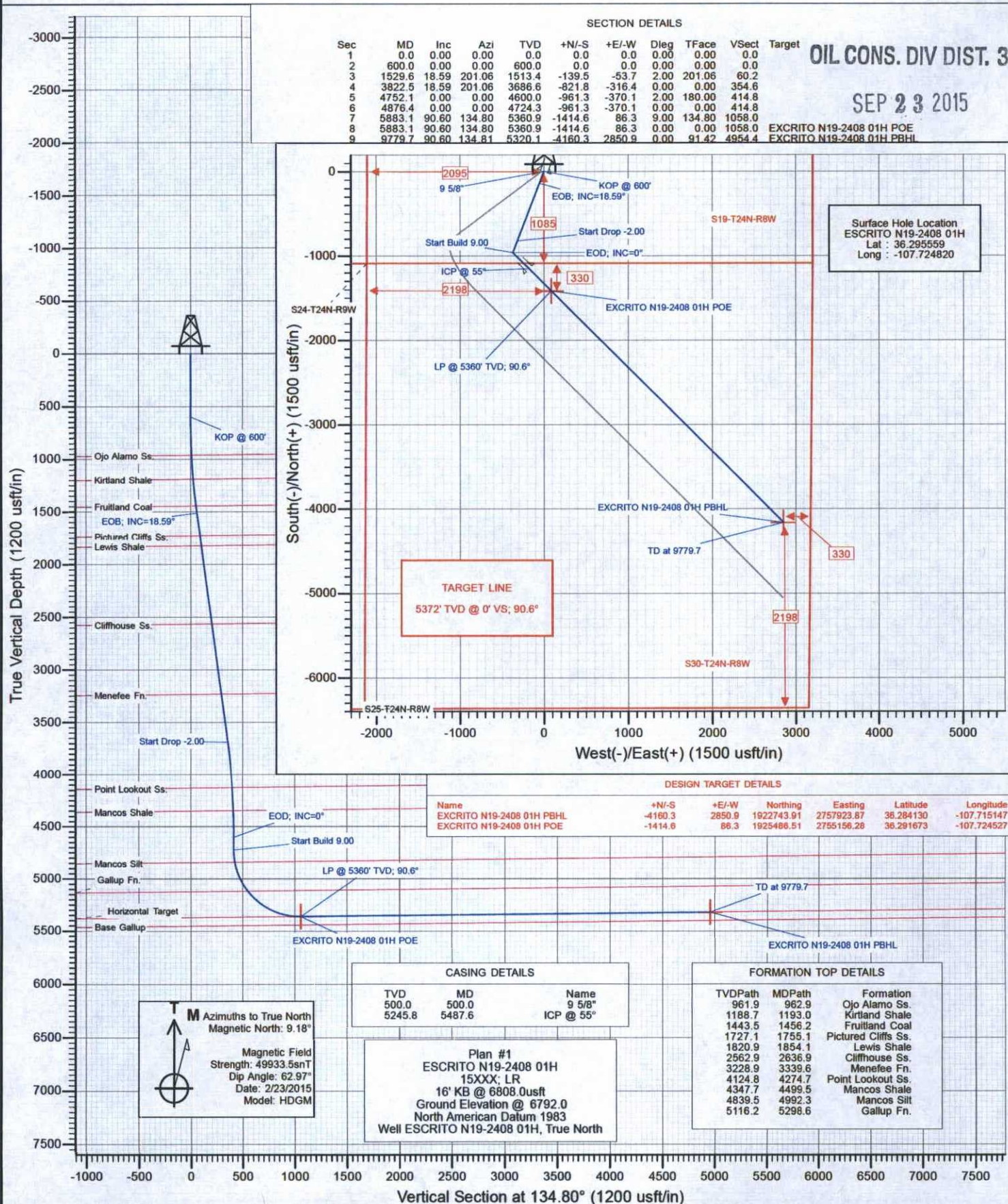
Drilling is estimated to commence on August 25, 2015. It is anticipated that completion operations will begin within 30 days after the well has been drilled depending on fracture treatment schedules with various pumping service companies.

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

| LOC: 1085° FSL, 2095° FWL, Sec 19, T24N R8W | | | Encana Natural Gas | | | ENG: David Scadden 3/2/15 | | |
|---|-------------------|----------------------|--------------------|--------|------|--|----------------------|--------------------------------|
| County: San Juan | | | WELL SUMMARY | | | RIG: Unassigned | | |
| WELL: Escrito N19-2408 01H | | | | | | GLE: 6792.4 | | |
| | | | | | | RKBE: 6808.4 | | |
| MWD | OPEN HOLE | FORM | DEPTH | | HOLE | CASING | MW | DEVIATION |
| LWD | LOGGING | | TVD | MD | SIZE | SPECS | MUD TYPE | INFORMATION |
| | | | 60 | 60' | | 16" 42.09# 100sx Type I Neat 16.0ppg cmt | Fresh wtr 8.3-9.2 | |
| Multi-Well pad take survey every stand and run anti-collision report prior to spud | None | San Jose Fn. | 0 | | | | | |
| | | Nacimiento Fn. | surface | | | 9 5/8" 36ppf J55 LTC | Fresh wtr | Vertical |
| | | 9 5/8" Csg | 500 | 500.00 | | TOC Surface with 100% OH Excess: 228 sks Type III Cement + 1% bwoc Calcium Chloride + 0.25 lbs/sack Cello Flake + 0.2% bwoc FL-52A + 58.9% Fresh Water. | 8.3-10 | <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. | 962 | | | 7" 26ppf J55 LTC | Fresh Wtr | Vertical |
| | | Kirtland Shale | 1,189 | | | TOC @ surface (100% OH excess - 70% Lead 30% Tail) Stage 1 Total: 901sks | 8.3-10 | <1° |
| | | Fruitland Coal | 1,444 | | | Stage 1 Lead: 511 sks Premium Lite FM + 3% CaCl2 + 0.25/sk Cello Flake + 5#/sk LCM-1 + 8% Bentonite + 0.4% FL-52A + 0.4% Sodium Metasilicate. Mixed at 12.1 ppg. Yield 2.13 cuft/sk. | | |
| | | Pictured Cliffs Ss. | 1,728 | | | Stage 1 Tail: 390 sks Type III Cement + 1% CaCl2 + 0.25#/sk Cello Flake + 0.2% FL-52A. Mixed at 14.6 ppg. Yield 1.38 cuft/sk. | | |
| | | Lewis Shale | 1,822 | | | | | |
| | | Cliffhouse Ss. | 2,565 | | | | | |
| | | Menefee Fn. | 3,232 | | | | | |
| | | Point Lookout Ss. | 4,129 | | | | | |
| | | Mancos Shale | 4,352 | | | | | |
| | Mud logger onsite | KOP | 600 | 600 | | | | |
| Surveys every 30' through the curve | | Mancos Silt | 4,844 | | | | | |
| | | Gallup Fn. | 5,122 | | | | | |
| | | 7" Csg | 5,246 | 5,488' | | | | |
| Surveys every stand to TD unless directed otherwise by Geologist | No OH Logs | Horizontal Target TD | 5,372 | | | 100' overlap at liner top | | Horz Inc/TVD 90.55deg/5372.4ft |
| | | Base Gallup | 5,320 | 9,780 | | 4292' Drilled Lateral | | TD = 9779.7 MD |
| | | | 5,453 | | | 4 1/2" 11.6ppf SB80 LTC | WBM 8.3-10 | |
| MWD Gamma Directional | | | | | | TOC @ hanger (50% OH excess) Stage 1 Total: 251sks | | |
| | | | | | | Stage 1 Blend: 251 sks Premium Lite High Strength FM + 0.7% bwoc R-3 + 3% bwoc Potassium Chloride + 0.25lbs/sack Cello Flake + 0.5% bwoc CD-32 + 1.15% bwoc FL-52A + 60 lbs/sack Calcium Carbonate + 124.4% Fresh Water. Yield 2.63 cuft/sk. | | |

NOTES:

- 1) Drill with 26" bit to 60', set 16" 42.09ppf 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 600', 8 3/4 inch holesize
- 5) Start curve at 10deg/100' build rate
- 6) Drill to csg point of 5488' MD
- 7) R&C 7" csg, circ cmt to surface
- 8) Land at ~55 deg, drill lateral to 9780' run 4 1/2 inch cemented liner



Database: USA EDM 5000 Multi Users DB
 Company: EnCana Oil & Gas (USA) Inc
 Project: San Juan County, NM
 Site: S19-T24N-R9W
 Well: ESCRITO N19-2408 01H
 Wellbore: HZ
 Design: Plan #1

Local Co-ordinate Reference: Well ESCRITO N19-2408 01H
 TVD Reference: 16' KB @ 6808.0usft
 MD Reference: 16' KB @ 6808.0usft
 North Reference: True
 Survey Calculation Method: Minimum Curvature

Project San Juan County, NM

Map System: US State Plane 1983 System Datum: Mean Sea Level
 Geo Datum: North American Datum 1983
 Map Zone: New Mexico Western Zone

Site S19-T24N-R9W

Site Position: Northing: 1,930,258.01 usft Latitude: 36.304830
 From: Lat/Long Easting: 2,721,681.30 usft Longitude: -107.838120
 Position Uncertainty: 0.0 usft Slot Radius: 13-3/16" Grid Convergence: 0.00 °

Well ESCRITO N19-2408 01H

Well Position +N/-S 0.0 usft Northing: 1,926,901.02 usft Latitude: 36.295559
 +E/-W 0.0 usft Easting: 2,755,068.35 usft Longitude: -107.724820
 Position Uncertainty 0.0 usft Wellhead Elevation: 0.0 usft Ground Level: 6,792.0 usft

Wellbore HZ

| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
|-----------|------------|-------------|--------------------|------------------|------------------------|
| | HDGM | 2/23/2015 | 9.18 | 62.97 | 49,934 |

Design Plan #1

Audit Notes:

Version: Phase: PLAN Tie On Depth: 0.0

| Vertical Section: | Depth From (TVD) (usft) | +N/-S (usft) | +E/-W (usft) | Direction (°) |
|-------------------|----------------------------|-----------------|-----------------|------------------|
| | 0.0 | 0.0 | 0.0 | 134.80 |

Plan Sections

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) | TFO (°) | Target |
|-----------------------------|--------------------|----------------|-----------------------------|-----------------|-----------------|-------------------------------|------------------------------|-----------------------------|------------|--------------------|
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 600.0 | 0.00 | 0.00 | 600.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,529.6 | 18.59 | 201.06 | 1,513.4 | -139.5 | -53.7 | 2.00 | 2.00 | 0.00 | 201.06 | |
| 3,822.5 | 18.59 | 201.06 | 3,686.6 | -821.8 | -316.4 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 4,752.1 | 0.00 | 0.00 | 4,600.0 | -961.3 | -370.1 | 2.00 | -2.00 | 0.00 | 180.00 | |
| 4,876.4 | 0.00 | 0.00 | 4,724.3 | -961.3 | -370.1 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 5,883.1 | 90.60 | 134.80 | 5,360.9 | -1,414.6 | 86.3 | 9.00 | 9.00 | 0.00 | 134.80 | |
| 5,883.1 | 90.60 | 134.80 | 5,360.9 | -1,414.6 | 86.3 | 0.00 | 0.00 | 0.00 | 0.00 | EXCRITO N19-2408 (|
| 9,779.7 | 90.60 | 134.81 | 5,320.1 | -4,160.3 | 2,850.9 | 0.00 | 0.00 | 0.00 | 91.42 | EXCRITO N19-2408 (|

Planning Report

Database: USA EDM 5000 Multi Users DB
 Company: EnCana Oil & Gas (USA) Inc
 Project: San Juan County, NM
 Site: S19-T24N-R9W
 Well: ESCRITO N19-2408 01H
 Wellbore: HZ
 Design: Plan #1

Local Co-ordinate Reference:
 TVD Reference:
 MD Reference:
 North Reference:
 Survey Calculation Method:

Well ESCRITO N19-2408 01H
 16' KB @ 6808.0usft
 16' KB @ 6808.0usft
 True
 Minimum Curvature

Planned Survey

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100u) | Comments / Formations |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|---------------------|-----------------------|
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | |
| 100.0 | 0.00 | 0.00 | 100.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | |
| 200.0 | 0.00 | 0.00 | 200.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | |
| 300.0 | 0.00 | 0.00 | 300.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | |
| 400.0 | 0.00 | 0.00 | 400.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | |
| 500.0 | 0.00 | 0.00 | 500.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 9 5/8" |
| 600.0 | 0.00 | 0.00 | 600.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | KOP @ 600' |
| 700.0 | 2.00 | 201.06 | 700.0 | -1.6 | -0.6 | 0.7 | 2.00 | 2.00 | |
| 800.0 | 4.00 | 201.06 | 799.8 | -6.5 | -2.5 | 2.8 | 2.00 | 2.00 | |
| 900.0 | 6.00 | 201.06 | 899.5 | -14.6 | -5.6 | 6.3 | 2.00 | 2.00 | |
| 962.9 | 7.26 | 201.06 | 961.9 | -21.4 | -8.2 | 9.2 | 2.00 | 2.00 | Ojo Alamo Ss. |
| 1,000.0 | 8.00 | 201.06 | 998.7 | -26.0 | -10.0 | 11.2 | 2.00 | 2.00 | |
| 1,100.0 | 10.00 | 201.06 | 1,097.5 | -40.6 | -15.6 | 17.5 | 2.00 | 2.00 | |
| 1,193.0 | 11.86 | 201.06 | 1,188.7 | -57.1 | -22.0 | 24.6 | 2.00 | 2.00 | Kirtland Shale |
| 1,200.0 | 12.00 | 201.06 | 1,195.6 | -58.4 | -22.5 | 25.2 | 2.00 | 2.00 | |
| 1,300.0 | 14.00 | 201.06 | 1,293.1 | -79.4 | -30.6 | 34.3 | 2.00 | 2.00 | |
| 1,400.0 | 16.00 | 201.06 | 1,389.6 | -103.6 | -39.9 | 44.7 | 2.00 | 2.00 | |
| 1,456.2 | 17.12 | 201.06 | 1,443.5 | -118.5 | -45.6 | 51.1 | 2.00 | 2.00 | Fruitland Coal |
| 1,500.0 | 18.00 | 201.06 | 1,485.3 | -130.8 | -50.4 | 56.5 | 2.00 | 2.00 | |
| 1,529.6 | 18.59 | 201.06 | 1,513.4 | -139.5 | -53.7 | 60.2 | 2.00 | 2.00 | EOB; INC=18.59° |
| 1,600.0 | 18.59 | 201.06 | 1,580.1 | -160.5 | -61.8 | 69.2 | 0.00 | 0.00 | |
| 1,700.0 | 18.59 | 201.06 | 1,674.9 | -190.2 | -73.2 | 82.1 | 0.00 | 0.00 | |
| 1,755.1 | 18.59 | 201.06 | 1,727.1 | -206.6 | -79.5 | 89.1 | 0.00 | 0.00 | Pictured Cliffs Ss. |
| 1,800.0 | 18.59 | 201.06 | 1,769.7 | -220.0 | -84.7 | 94.9 | 0.00 | 0.00 | |
| 1,854.1 | 18.59 | 201.06 | 1,820.9 | -236.1 | -90.9 | 101.9 | 0.00 | 0.00 | Lewis Shale |
| 1,900.0 | 18.59 | 201.06 | 1,864.4 | -249.7 | -96.1 | 107.7 | 0.00 | 0.00 | |
| 2,000.0 | 18.59 | 201.06 | 1,959.2 | -279.5 | -107.6 | 120.6 | 0.00 | 0.00 | |
| 2,100.0 | 18.59 | 201.06 | 2,054.0 | -309.2 | -119.1 | 133.4 | 0.00 | 0.00 | |
| 2,200.0 | 18.59 | 201.06 | 2,148.8 | -339.0 | -130.5 | 146.3 | 0.00 | 0.00 | |
| 2,300.0 | 18.59 | 201.06 | 2,243.6 | -368.8 | -142.0 | 159.1 | 0.00 | 0.00 | |
| 2,400.0 | 18.59 | 201.06 | 2,338.3 | -398.5 | -153.4 | 171.9 | 0.00 | 0.00 | |
| 2,500.0 | 18.59 | 201.06 | 2,433.1 | -428.3 | -164.9 | 184.8 | 0.00 | 0.00 | |
| 2,600.0 | 18.59 | 201.06 | 2,527.9 | -458.0 | -176.3 | 197.6 | 0.00 | 0.00 | |
| 2,636.9 | 18.59 | 201.06 | 2,562.9 | -469.0 | -180.6 | 202.3 | 0.00 | 0.00 | Cliffhouse Ss. |
| 2,700.0 | 18.59 | 201.06 | 2,622.7 | -487.8 | -187.8 | 210.4 | 0.00 | 0.00 | |
| 2,800.0 | 18.59 | 201.06 | 2,717.5 | -517.5 | -199.2 | 223.3 | 0.00 | 0.00 | |
| 2,900.0 | 18.59 | 201.06 | 2,812.2 | -547.3 | -210.7 | 236.1 | 0.00 | 0.00 | |
| 3,000.0 | 18.59 | 201.06 | 2,907.0 | -577.0 | -222.2 | 249.0 | 0.00 | 0.00 | |
| 3,100.0 | 18.59 | 201.06 | 3,001.8 | -606.8 | -233.6 | 261.8 | 0.00 | 0.00 | |
| 3,200.0 | 18.59 | 201.06 | 3,096.6 | -636.5 | -245.1 | 274.6 | 0.00 | 0.00 | |
| 3,300.0 | 18.59 | 201.06 | 3,191.4 | -666.3 | -256.5 | 287.5 | 0.00 | 0.00 | |
| 3,339.6 | 18.59 | 201.06 | 3,228.9 | -678.1 | -261.1 | 292.6 | 0.00 | 0.00 | Menefee Fn. |
| 3,400.0 | 18.59 | 201.06 | 3,286.1 | -696.1 | -268.0 | 300.3 | 0.00 | 0.00 | |
| 3,500.0 | 18.59 | 201.06 | 3,380.9 | -725.8 | -279.4 | 313.2 | 0.00 | 0.00 | |
| 3,600.0 | 18.59 | 201.06 | 3,475.7 | -755.6 | -290.9 | 326.0 | 0.00 | 0.00 | |
| 3,700.0 | 18.59 | 201.06 | 3,570.5 | -785.3 | -302.3 | 338.8 | 0.00 | 0.00 | |
| 3,800.0 | 18.59 | 201.06 | 3,665.3 | -815.1 | -313.8 | 351.7 | 0.00 | 0.00 | |
| 3,822.5 | 18.59 | 201.06 | 3,686.6 | -821.8 | -316.4 | 354.6 | 0.00 | 0.00 | Start Drop -2.00 |
| 3,900.0 | 17.04 | 201.06 | 3,760.4 | -843.9 | -324.9 | 364.1 | 2.00 | -2.00 | |
| 4,000.0 | 15.04 | 201.06 | 3,856.5 | -869.7 | -334.8 | 375.2 | 2.00 | -2.00 | |
| 4,100.0 | 13.04 | 201.06 | 3,953.5 | -892.3 | -343.5 | 385.0 | 2.00 | -2.00 | |
| 4,200.0 | 11.04 | 201.06 | 4,051.3 | -911.8 | -351.0 | 393.4 | 2.00 | -2.00 | |

Planning Report

Database: USA EDM 5000 Multi Users DB
Company: EnCana Oil & Gas (USA) Inc
Project: San Juan County, NM
Site: S19-T24N-R9W
Well: ESCRITO N19-2408 01H
Wellbore: HZ
Design: Plan #1

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

Well ESCRITO N19-2408 01H
16' KB @ 6808.0usft
16' KB @ 6808.0usft
True
Minimum Curvature

Planned Survey

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100u) | Comments / Formations |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|---------------------|--|
| 4,274.7 | 9.55 | 201.06 | 4,124.8 | -924.3 | -355.8 | 398.8 | 2.00 | -2.00 | Point Lookout Ss. |
| 4,300.0 | 9.04 | 201.06 | 4,149.7 | -928.1 | -357.3 | 400.4 | 2.00 | -2.00 | |
| 4,400.0 | 7.04 | 201.06 | 4,248.8 | -941.1 | -362.3 | 406.0 | 2.00 | -2.00 | |
| 4,499.5 | 5.05 | 201.06 | 4,347.7 | -950.9 | -366.1 | 410.3 | 2.00 | -2.00 | Mancos Shale |
| 4,500.0 | 5.04 | 201.06 | 4,348.2 | -951.0 | -366.1 | 410.3 | 2.00 | -2.00 | |
| 4,600.0 | 3.04 | 201.06 | 4,447.9 | -957.5 | -368.6 | 413.1 | 2.00 | -2.00 | |
| 4,700.0 | 1.04 | 201.06 | 4,547.9 | -960.9 | -369.9 | 414.6 | 2.00 | -2.00 | |
| 4,752.1 | 0.00 | 0.00 | 4,600.0 | -961.3 | -370.1 | 414.8 | 2.00 | -2.00 | EOD; INC=0° |
| 4,800.0 | 0.00 | 0.00 | 4,647.9 | -961.3 | -370.1 | 414.8 | 0.00 | 0.00 | |
| 4,876.4 | 0.00 | 0.00 | 4,724.3 | -961.3 | -370.1 | 414.8 | 0.00 | 0.00 | Start Build 9.00 |
| 4,900.0 | 2.12 | 134.80 | 4,747.9 | -961.6 | -369.8 | 415.2 | 9.00 | 9.00 | |
| 4,992.3 | 10.43 | 134.80 | 4,839.5 | -968.7 | -362.6 | 425.3 | 9.00 | 9.00 | Mancos Silt |
| 5,000.0 | 11.12 | 134.80 | 4,847.1 | -969.7 | -361.6 | 426.7 | 9.00 | 9.00 | |
| 5,100.0 | 20.12 | 134.80 | 4,943.3 | -988.7 | -342.5 | 453.6 | 9.00 | 9.00 | |
| 5,200.0 | 29.12 | 134.80 | 5,034.1 | -1,018.0 | -313.0 | 495.2 | 9.00 | 9.00 | |
| 5,298.6 | 38.00 | 134.80 | 5,116.2 | -1,056.4 | -274.4 | 549.7 | 9.00 | 9.00 | Gallup Fn. |
| 5,300.0 | 38.12 | 134.80 | 5,117.3 | -1,057.0 | -273.8 | 550.5 | 9.00 | 9.00 | |
| 5,400.0 | 47.12 | 134.80 | 5,190.8 | -1,104.6 | -225.8 | 618.2 | 9.00 | 9.00 | |
| 5,487.6 | 55.00 | 134.80 | 5,245.8 | -1,152.6 | -177.5 | 686.3 | 9.00 | 9.00 | ICP @ 55° |
| 5,500.0 | 56.12 | 134.80 | 5,252.8 | -1,159.8 | -170.2 | 696.5 | 9.00 | 9.00 | |
| 5,600.0 | 65.12 | 134.80 | 5,301.8 | -1,221.2 | -108.4 | 783.5 | 9.00 | 9.00 | |
| 5,700.0 | 74.12 | 134.80 | 5,336.6 | -1,287.1 | -42.0 | 877.2 | 9.00 | 9.00 | |
| 5,800.0 | 83.12 | 134.80 | 5,356.3 | -1,356.2 | 27.5 | 975.1 | 9.00 | 9.00 | |
| 5,883.1 | 90.60 | 134.80 | 5,360.9 | -1,414.6 | 86.3 | 1,058.0 | 9.00 | 9.00 | LP @ 5360' TVD; 90.6° - ESCRITO N19-2408 C |
| 5,900.0 | 90.60 | 134.80 | 5,360.7 | -1,426.5 | 98.3 | 1,074.9 | 0.00 | 0.00 | |
| 6,000.0 | 90.60 | 134.80 | 5,359.7 | -1,497.0 | 169.3 | 1,174.9 | 0.00 | 0.00 | |
| 6,100.0 | 90.60 | 134.80 | 5,358.6 | -1,567.4 | 240.2 | 1,274.9 | 0.00 | 0.00 | |
| 6,200.0 | 90.60 | 134.80 | 5,357.6 | -1,637.9 | 311.2 | 1,374.9 | 0.00 | 0.00 | |
| 6,300.0 | 90.60 | 134.80 | 5,356.5 | -1,708.3 | 382.1 | 1,474.9 | 0.00 | 0.00 | |
| 6,400.0 | 90.60 | 134.80 | 5,355.5 | -1,778.8 | 453.1 | 1,574.9 | 0.00 | 0.00 | |
| 6,500.0 | 90.60 | 134.80 | 5,354.4 | -1,849.3 | 524.0 | 1,674.9 | 0.00 | 0.00 | |
| 6,600.0 | 90.60 | 134.80 | 5,353.4 | -1,919.7 | 595.0 | 1,774.9 | 0.00 | 0.00 | |
| 6,700.0 | 90.60 | 134.80 | 5,352.3 | -1,990.2 | 665.9 | 1,874.9 | 0.00 | 0.00 | |
| 6,800.0 | 90.60 | 134.80 | 5,351.3 | -2,060.7 | 736.9 | 1,974.9 | 0.00 | 0.00 | |
| 6,900.0 | 90.60 | 134.80 | 5,350.3 | -2,131.1 | 807.8 | 2,074.9 | 0.00 | 0.00 | |
| 7,000.0 | 90.60 | 134.80 | 5,349.2 | -2,201.6 | 878.8 | 2,174.9 | 0.00 | 0.00 | |
| 7,100.0 | 90.60 | 134.80 | 5,348.2 | -2,272.0 | 949.7 | 2,274.9 | 0.00 | 0.00 | |
| 7,200.0 | 90.60 | 134.80 | 5,347.1 | -2,342.5 | 1,020.7 | 2,374.8 | 0.00 | 0.00 | |
| 7,300.0 | 90.60 | 134.80 | 5,346.1 | -2,413.0 | 1,091.6 | 2,474.8 | 0.00 | 0.00 | |
| 7,400.0 | 90.60 | 134.80 | 5,345.0 | -2,483.4 | 1,162.6 | 2,574.8 | 0.00 | 0.00 | |
| 7,500.0 | 90.60 | 134.80 | 5,344.0 | -2,553.9 | 1,233.5 | 2,674.8 | 0.00 | 0.00 | |
| 7,600.0 | 90.60 | 134.80 | 5,342.9 | -2,624.4 | 1,304.5 | 2,774.8 | 0.00 | 0.00 | |
| 7,700.0 | 90.60 | 134.80 | 5,341.9 | -2,694.8 | 1,375.4 | 2,874.8 | 0.00 | 0.00 | |
| 7,800.0 | 90.60 | 134.80 | 5,340.8 | -2,765.3 | 1,446.3 | 2,974.8 | 0.00 | 0.00 | |
| 7,900.0 | 90.60 | 134.80 | 5,339.8 | -2,835.8 | 1,517.3 | 3,074.8 | 0.00 | 0.00 | |
| 8,000.0 | 90.60 | 134.80 | 5,338.7 | -2,906.2 | 1,588.2 | 3,174.8 | 0.00 | 0.00 | |
| 8,100.0 | 90.60 | 134.80 | 5,337.7 | -2,976.7 | 1,659.2 | 3,274.8 | 0.00 | 0.00 | |
| 8,200.0 | 90.60 | 134.80 | 5,336.6 | -3,047.2 | 1,730.1 | 3,374.8 | 0.00 | 0.00 | |
| 8,300.0 | 90.60 | 134.80 | 5,335.6 | -3,117.6 | 1,801.1 | 3,474.8 | 0.00 | 0.00 | |
| 8,400.0 | 90.60 | 134.80 | 5,334.5 | -3,188.1 | 1,872.0 | 3,574.8 | 0.00 | 0.00 | |
| 8,500.0 | 90.60 | 134.81 | 5,333.5 | -3,258.6 | 1,943.0 | 3,674.8 | 0.00 | 0.00 | |
| 8,600.0 | 90.60 | 134.81 | 5,332.5 | -3,329.0 | 2,013.9 | 3,774.8 | 0.00 | 0.00 | |

Planning Report

Database: USA EDM 5000 Multi Users DB
 Company: EnCana Oil & Gas (USA) Inc
 Project: San Juan County, NM
 Site: S19-T24N-R9W
 Well: ESCRITO N19-2408 01H
 Wellbore: HZ
 Design: Plan #1

Local Co-ordinate Reference:
 TVD Reference:
 MD Reference:
 North Reference:
 Survey Calculation Method:

Well ESCRITO N19-2408 01H
 16' KB @ 6808.0usft
 16' KB @ 6808.0usft
 True
 Minimum Curvature

Planned Survey

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100u) | Comments / Formations |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|---------------------|--|
| 8,700.0 | 90.60 | 134.81 | 5,331.4 | -3,399.5 | 2,084.9 | 3,874.8 | 0.00 | 0.00 | |
| 8,800.0 | 90.60 | 134.81 | 5,330.4 | -3,470.0 | 2,155.8 | 3,974.8 | 0.00 | 0.00 | |
| 8,900.0 | 90.60 | 134.81 | 5,329.3 | -3,540.4 | 2,226.8 | 4,074.7 | 0.00 | 0.00 | |
| 9,000.0 | 90.60 | 134.81 | 5,328.3 | -3,610.9 | 2,297.7 | 4,174.7 | 0.00 | 0.00 | |
| 9,100.0 | 90.60 | 134.81 | 5,327.2 | -3,681.4 | 2,368.7 | 4,274.7 | 0.00 | 0.00 | |
| 9,200.0 | 90.60 | 134.81 | 5,326.2 | -3,751.8 | 2,439.6 | 4,374.7 | 0.00 | 0.00 | |
| 9,300.0 | 90.60 | 134.81 | 5,325.1 | -3,822.3 | 2,510.5 | 4,474.7 | 0.00 | 0.00 | |
| 9,400.0 | 90.60 | 134.81 | 5,324.1 | -3,892.8 | 2,581.5 | 4,574.7 | 0.00 | 0.00 | |
| 9,500.0 | 90.60 | 134.81 | 5,323.0 | -3,963.2 | 2,652.4 | 4,674.7 | 0.00 | 0.00 | |
| 9,600.0 | 90.60 | 134.81 | 5,322.0 | -4,033.7 | 2,723.4 | 4,774.7 | 0.00 | 0.00 | |
| 9,700.0 | 90.60 | 134.81 | 5,320.9 | -4,104.2 | 2,794.3 | 4,874.7 | 0.00 | 0.00 | |
| 9,779.7 | 90.60 | 134.81 | 5,320.1 | -4,160.3 | 2,850.9 | 4,954.4 | 0.00 | 0.00 | TD at 9779.7 - EXCRITO N19-2408 01H PBHL |

Targets

| Target Name - hit/miss target - Shape | Dip Angle (°) | Dip Dir. (°) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude | Longitude |
|--|---------------|--------------|------------|--------------|--------------|-----------------|----------------|-----------|-------------|
| EXCRITO N19-2408 01H - plan hits target center - Point | 0.00 | 0.00 | 5,360.9 | -1,414.6 | 86.3 | 1,925,486.51 | 2,755,156.28 | 36.291673 | -107.724527 |
| EXCRITO N19-2408 01H - plan hits target center - Point | 0.00 | 0.00 | 5,320.1 | -4,160.3 | 2,850.9 | 1,922,743.91 | 2,757,923.87 | 36.284130 | -107.715147 |

Casing Points

| Measured Depth (usft) | Vertical Depth (usft) | Name | Casing Diameter (") | Hole Diameter (") |
|-----------------------|-----------------------|-----------|---------------------|-------------------|
| 5,487.6 | 5,245.8 | ICP @ 55° | 0 | 0 |
| 500.0 | 500.0 | 9 5/8" | 0 | 0 |

Planning Report

Database: USA EDM 5000 Multi Users DB
Company: EnCana Oil & Gas (USA) Inc
Project: San Juan County, NM
Site: S19-T24N-R9W
Well: ESCRITO N19-2408 01H
Wellbore: HZ
Design: Plan #1

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

Well ESCRITO N19-2408 01H
 16' KB @ 6808.0usft
 16' KB @ 6808.0usft
 True
 Minimum Curvature

Formations

| Measured Depth (usft) | Vertical Depth (usft) | Name | Lithology | Dip (°) | Dip Direction (°) |
|-----------------------|-----------------------|---------------------|-----------|---------|-------------------|
| 962.9 | 962.0 | Ojo Alamo Ss. | | -0.60 | 134.81 |
| 1,193.0 | 1,189.0 | Kirtland Shale | | -0.60 | 134.81 |
| 1,456.2 | 1,444.0 | Fruitland Coal | | -0.60 | 134.81 |
| 1,755.1 | 1,728.0 | Pictured Cliffs Ss. | | -0.60 | 134.81 |
| 1,854.1 | 1,822.0 | Lewis Shale | | -0.60 | 134.81 |
| 2,636.9 | 2,565.0 | Cliffhouse Ss. | | -0.60 | 134.81 |
| 3,339.6 | 3,232.0 | Menefee Fn. | | -0.60 | 134.81 |
| 4,274.7 | 4,129.0 | Point Lookout Ss. | | -0.60 | 134.81 |
| 4,499.5 | 4,352.0 | Mancos Shale | | -0.60 | 134.81 |
| 4,992.3 | 4,844.0 | Mancos Silt | | -0.60 | 134.81 |
| 5,298.6 | 5,122.0 | Gallup Fn. | | -0.60 | 134.81 |

Plan Annotations

| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates | | Comment |
|-----------------------|-----------------------|-------------------|--------------|-----------------------|
| | | +N/-S (usft) | +E/-W (usft) | |
| 600.0 | 600.0 | 0.0 | 0.0 | KOP @ 600' |
| 1,529.6 | 1,513.4 | -139.5 | -53.7 | EOB; INC=18.59° |
| 3,822.5 | 3,686.6 | -821.8 | -316.4 | Start Drop -2.00 |
| 4,752.1 | 4,600.0 | -961.3 | -370.1 | EOD; INC=0° |
| 4,876.4 | 4,724.3 | -961.3 | -370.1 | Start Build 9.00 |
| 5,883.1 | 5,360.9 | -1,414.6 | 86.3 | LP @ 5360' TVD; 90.6° |
| 9,779.7 | 5,320.1 | -4,160.3 | 2,850.9 | TD at 9779.7 |



EnCana Oil & Gas (USA) Inc

San Juan County, NM

S19-T24N-R9W

ESCRITO N19-2408 01H

HZ

Plan #1

Anticollision Report

23 February, 2015

Anticollision Report

| | | | |
|---------------------------|----------------------------|-------------------------------------|-----------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well ESCRITO N19-2408 01H |
| Project: | San Juan County, NM | TVD Reference: | 16' KB @ 6808.0usft |
| Reference Site: | S19-T24N-R9W | MD Reference: | 16' KB @ 6808.0usft |
| Site Error: | 0.0usft | North Reference: | True |
| Reference Well: | ESCRITO N19-2408 01H | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | HZ | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| | |
|-------------------------------------|---|
| Reference | Plan #1 |
| Filter type: | NO GLOBAL FILTER: Using user defined selection & filtering criteria |
| Interpolation Method: | MD Interval 100.0usft |
| Depth Range: | Unlimited |
| Results Limited by: | Maximum center-center distance of 1,000.0usft |
| Warning Levels Evaluated at: | 2.00 Sigma |
| Error Model: | Systematic Ellipse |
| Scan Method: | Closest Approach 3D |
| Error Surface: | Elliptical Conic |

| | | |
|----------------------------|------------------|--------------------------|
| Survey Tool Program | Date | 2/23/2015 |
| From (usft) | To (usft) | Survey (Wellbore) |
| 0.0 | 9,779.7 | Plan #1 (HZ) |
| | | Tool Name |
| | | Geolink MWD |
| | | Description |
| | | Geolink MWD |

| | | | | | | |
|-------------------------------------|--|-------------------------------------|--|---|--------------------------|----------------|
| Summary | | | | | | |
| Site Name | Reference Measured Depth (usft) | Offset Measured Depth (usft) | Distance Between Centres (usft) | Distance Between Ellipses (usft) | Separation Factor | Warning |
| Offset Well - Wellbore - Design | | | | | | |
| S19-T24N-R9W | | | | | | |
| ESCRITO N19-2408 02H - HZ - Plan #1 | 600.0 | 600.0 | 29.8 | 27.7 | 14.600 | CC, ES |
| ESCRITO N19-2408 02H - HZ - Plan #1 | 9,779.7 | 10,298.7 | 681.9 | 482.8 | 3.425 | SF |

Anticollision Report

| | | | |
|---------------------------|----------------------------|-------------------------------------|-----------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well ESCRITO N19-2408 01H |
| Project: | San Juan County, NM | TVD Reference: | 16' KB @ 6808.0usft |
| Reference Site: | S19-T24N-R9W | MD Reference: | 16' KB @ 6808.0usft |
| Site Error: | 0.0usft | North Reference: | True |
| Reference Well: | ESCRITO N19-2408 01H | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | HZ | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design S19-T24N-R9W - ESCRITO N19-2408 02H - HZ - Plan #1 | | | | | | | | | | | | | Offset Site Error: | 0.0 usft |
|--|-----------------------|-----------------------|-----------------------|------------------|---------------|------------------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|------------------------|--------------------|----------|
| Survey Program: 0-Geolink MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 usft |
| Measured Depth (usft) | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Semi Major Axis (usft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Total Uncertainty Axis | Separation Factor | Warning |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -90.00 | 0.0 | -29.8 | 29.8 | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.1 | 0.1 | 0.1 | -90.00 | 0.0 | -29.8 | 29.8 | 29.5 | 0.29 | 101.504 | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | 0.3 | -90.00 | 0.0 | -29.8 | 29.8 | 29.1 | 0.64 | 46.339 | |
| 300.0 | 300.0 | 300.0 | 300.0 | 0.5 | 0.5 | 0.5 | -90.00 | 0.0 | -29.8 | 29.8 | 28.8 | 0.99 | 30.022 | |
| 400.0 | 400.0 | 400.0 | 400.0 | 0.7 | 0.7 | 0.7 | -90.00 | 0.0 | -29.8 | 29.8 | 28.4 | 1.34 | 22.204 | |
| 500.0 | 500.0 | 500.0 | 500.0 | 0.8 | 0.8 | 0.8 | -90.00 | 0.0 | -29.8 | 29.8 | 28.1 | 1.69 | 17.616 | |
| 600.0 | 600.0 | 600.0 | 600.0 | 1.0 | 1.0 | 1.0 | -90.00 | 0.0 | -29.8 | 29.8 | 27.7 | 2.04 | 14.600 CC, ES | |
| 700.0 | 700.0 | 699.2 | 699.1 | 1.2 | 1.2 | 1.2 | 70.03 | -1.0 | -31.1 | 30.5 | 28.1 | 2.39 | 12.784 | |
| 800.0 | 799.8 | 798.3 | 798.1 | 1.4 | 1.4 | 1.4 | 72.99 | -4.1 | -35.3 | 32.9 | 30.1 | 2.75 | 11.960 | |
| 900.0 | 899.5 | 897.3 | 896.7 | 1.6 | 1.6 | 1.6 | 77.05 | -9.2 | -42.1 | 37.0 | 33.8 | 3.14 | 11.767 | |
| 1,000.0 | 998.7 | 996.1 | 994.9 | 1.8 | 1.8 | 1.8 | 81.38 | -16.4 | -51.7 | 42.9 | 39.3 | 3.59 | 11.961 | |
| 1,100.0 | 1,097.5 | 1,094.7 | 1,092.3 | 2.1 | 2.1 | 2.1 | 85.39 | -25.5 | -63.9 | 50.9 | 46.7 | 4.12 | 12.359 | |
| 1,200.0 | 1,195.6 | 1,193.1 | 1,188.9 | 2.4 | 2.4 | 2.4 | 88.81 | -36.6 | -78.8 | 60.8 | 56.0 | 4.74 | 12.830 | |
| 1,300.0 | 1,293.1 | 1,291.2 | 1,284.5 | 2.8 | 2.8 | 2.8 | 91.60 | -49.6 | -96.3 | 72.6 | 67.2 | 5.46 | 13.297 | |
| 1,400.0 | 1,389.6 | 1,388.9 | 1,378.9 | 3.3 | 3.2 | 3.2 | 93.80 | -64.5 | -116.3 | 86.4 | 80.1 | 6.30 | 13.719 | |
| 1,500.0 | 1,485.3 | 1,486.2 | 1,472.1 | 3.8 | 3.7 | 3.7 | 95.53 | -81.3 | -138.7 | 102.2 | 94.9 | 7.25 | 14.083 | |
| 1,600.0 | 1,580.1 | 1,583.1 | 1,563.9 | 4.3 | 4.3 | 4.3 | 96.71 | -99.9 | -163.6 | 119.6 | 111.3 | 8.29 | 14.430 | |
| 1,700.0 | 1,674.9 | 1,679.6 | 1,654.3 | 4.8 | 4.9 | 4.9 | 96.46 | -120.2 | -190.9 | 138.4 | 129.1 | 9.37 | 14.783 | |
| 1,800.0 | 1,769.7 | 1,777.7 | 1,745.5 | 5.4 | 5.5 | 5.5 | 95.78 | -141.7 | -219.7 | 157.9 | 147.4 | 10.47 | 15.082 | |
| 1,900.0 | 1,864.4 | 1,875.8 | 1,836.8 | 6.0 | 6.1 | 6.1 | 95.24 | -163.2 | -248.4 | 177.4 | 165.8 | 11.58 | 15.309 | |
| 2,000.0 | 1,959.2 | 1,973.9 | 1,928.1 | 6.5 | 6.8 | 6.8 | 94.81 | -184.6 | -277.2 | 196.8 | 184.1 | 12.71 | 15.485 | |
| 2,100.0 | 2,054.0 | 2,071.9 | 2,019.3 | 7.1 | 7.4 | 7.4 | 94.46 | -206.1 | -306.0 | 216.3 | 202.5 | 13.84 | 15.625 | |
| 2,200.0 | 2,148.8 | 2,170.0 | 2,110.6 | 7.7 | 8.1 | 8.1 | 94.17 | -227.6 | -334.8 | 235.8 | 220.8 | 14.98 | 15.738 | |
| 2,300.0 | 2,243.6 | 2,268.1 | 2,201.9 | 8.2 | 8.7 | 8.7 | 93.92 | -249.0 | -363.6 | 255.3 | 239.2 | 16.13 | 15.831 | |
| 2,400.0 | 2,338.3 | 2,366.2 | 2,293.1 | 8.8 | 9.4 | 9.4 | 93.71 | -270.5 | -392.3 | 274.8 | 257.5 | 17.27 | 15.909 | |
| 2,500.0 | 2,433.1 | 2,464.2 | 2,384.4 | 9.4 | 10.1 | 10.1 | 93.52 | -292.0 | -421.1 | 294.3 | 275.9 | 18.42 | 15.974 | |
| 2,600.0 | 2,527.9 | 2,562.3 | 2,475.7 | 10.0 | 10.7 | 10.7 | 93.36 | -313.5 | -449.9 | 313.8 | 294.2 | 19.57 | 16.031 | |
| 2,700.0 | 2,622.7 | 2,660.4 | 2,566.9 | 10.5 | 11.4 | 11.4 | 93.22 | -334.9 | -478.7 | 333.3 | 312.6 | 20.73 | 16.079 | |
| 2,800.0 | 2,717.5 | 2,758.5 | 2,658.2 | 11.1 | 12.1 | 12.1 | 93.09 | -356.4 | -507.4 | 352.8 | 330.9 | 21.88 | 16.121 | |
| 2,900.0 | 2,812.2 | 2,856.5 | 2,749.5 | 11.7 | 12.7 | 12.7 | 92.98 | -377.9 | -536.2 | 372.3 | 349.3 | 23.04 | 16.158 | |
| 3,000.0 | 2,907.0 | 2,954.6 | 2,840.7 | 12.3 | 13.4 | 13.4 | 92.87 | -399.4 | -565.0 | 391.8 | 367.6 | 24.20 | 16.191 | |
| 3,100.0 | 3,001.8 | 3,052.7 | 2,932.0 | 12.9 | 14.1 | 14.1 | 92.78 | -420.8 | -593.8 | 411.3 | 386.0 | 25.36 | 16.220 | |
| 3,200.0 | 3,096.6 | 3,150.8 | 3,023.3 | 13.4 | 14.7 | 14.7 | 92.70 | -442.3 | -622.6 | 430.8 | 404.3 | 26.52 | 16.246 | |
| 3,300.0 | 3,191.4 | 3,248.8 | 3,114.5 | 14.0 | 15.4 | 15.4 | 92.62 | -463.8 | -651.3 | 450.3 | 422.7 | 27.68 | 16.269 | |
| 3,400.0 | 3,286.2 | 3,346.9 | 3,205.8 | 14.6 | 16.1 | 16.1 | 92.55 | -485.2 | -680.1 | 469.8 | 441.0 | 28.84 | 16.291 | |
| 3,500.0 | 3,380.9 | 3,445.0 | 3,297.1 | 15.2 | 16.8 | 16.8 | 92.49 | -506.7 | -708.9 | 489.4 | 459.4 | 30.00 | 16.310 | |
| 3,600.0 | 3,475.7 | 3,543.1 | 3,388.3 | 15.8 | 17.4 | 17.4 | 92.43 | -528.2 | -737.7 | 508.9 | 477.7 | 31.17 | 16.327 | |
| 3,700.0 | 3,570.5 | 3,641.2 | 3,479.6 | 16.4 | 18.1 | 18.1 | 92.37 | -549.7 | -766.5 | 528.4 | 496.1 | 32.33 | 16.343 | |
| 3,800.0 | 3,665.3 | 3,739.2 | 3,570.9 | 16.9 | 18.8 | 18.8 | 92.32 | -571.1 | -795.2 | 547.9 | 514.4 | 33.49 | 16.358 | |
| 3,900.0 | 3,760.4 | 3,837.3 | 3,662.1 | 17.5 | 19.4 | 19.4 | 92.47 | -592.6 | -824.0 | 567.4 | 532.7 | 34.65 | 16.372 | |
| 4,000.0 | 3,856.5 | 3,935.3 | 3,753.3 | 18.0 | 20.1 | 20.1 | 92.38 | -614.1 | -852.8 | 586.7 | 551.0 | 35.72 | 16.425 | |
| 4,100.0 | 3,953.5 | 4,033.1 | 3,844.3 | 18.4 | 20.8 | 20.8 | 91.99 | -635.5 | -881.5 | 606.0 | 569.3 | 36.69 | 16.519 | |
| 4,200.0 | 4,051.3 | 4,130.5 | 3,935.0 | 18.8 | 21.5 | 21.5 | 91.32 | -656.8 | -910.0 | 625.3 | 587.8 | 37.54 | 16.656 | |
| 4,300.0 | 4,149.7 | 4,227.6 | 4,025.3 | 19.1 | 22.1 | 22.1 | 90.42 | -678.0 | -938.5 | 644.8 | 606.5 | 38.29 | 16.840 | |
| 4,400.0 | 4,248.8 | 4,324.0 | 4,115.1 | 19.4 | 22.8 | 22.8 | 89.31 | -699.2 | -966.8 | 664.7 | 625.8 | 38.92 | 17.079 | |
| 4,500.0 | 4,348.2 | 4,419.8 | 4,204.2 | 19.6 | 23.4 | 23.4 | 88.02 | -720.1 | -994.9 | 685.1 | 645.7 | 39.43 | 17.378 | |
| 4,600.0 | 4,447.9 | 4,514.8 | 4,292.6 | 19.7 | 24.1 | 24.1 | 86.58 | -740.9 | -1,022.8 | 706.4 | 666.6 | 39.80 | 17.747 | |
| 4,700.0 | 4,547.9 | 4,608.9 | 4,380.2 | 19.8 | 24.7 | 24.7 | 85.02 | -761.5 | -1,050.4 | 728.6 | 688.6 | 40.05 | 18.192 | |
| 4,800.0 | 4,647.9 | 4,702.1 | 4,466.9 | 19.9 | 25.4 | 25.4 | -75.78 | -781.9 | -1,077.8 | 752.1 | 710.5 | 41.68 | 18.046 | |
| 4,900.0 | 4,747.9 | 5,692.0 | 5,116.0 | 20.0 | 30.8 | 30.8 | 97.64 | -1,356.9 | -861.8 | 730.7 | 703.2 | 27.49 | 26.577 | |
| 5,000.0 | 4,847.1 | 5,775.3 | 5,120.0 | 20.2 | 31.3 | 31.3 | 94.69 | -1,417.0 | -804.3 | 685.9 | 658.4 | 27.50 | 24.939 | |
| 5,100.0 | 4,943.3 | 5,801.4 | 5,119.8 | 20.5 | 31.5 | 31.5 | 95.49 | -1,435.4 | -785.8 | 653.6 | 624.9 | 28.74 | 22.738 | |

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company: EnCana Oil & Gas (USA) Inc
Project: San Juan County, NM
Reference Site: S19-T24N-R9W
Site Error: 0.0usft
Reference Well: ESCRITO N19-2408 01H
Well Error: 0.0usft
Reference Wellbore: HZ
Reference Design: Plan #1

Local Co-ordinate Reference: Well ESCRITO N19-2408 01H
TVD Reference: 16' KB @ 6808.0usft
MD Reference: 16' KB @ 6808.0usft
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: USA EDM 5000 Multi Users DB
Offset TVD Reference: Offset Datum

| Offset Design S19-T24N-R9W - ESCRITO N19-2408 02H - HZ - Plan #1 | | | | | | | | | | | | Offset Site Error: 0.0 usft |
|--|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------|---------|-----------------------------|
| Survey Program: 0-Geolink MWD | | | | | | | | | | | | Offset Well Error: 0.0 usft |
| Reference | | Offset | | Semi Major Axis | | Highside Toolface (°) | Distance | | Total Uncertainty Axis | Separation Factor | Warning | |
| Measured Depth (usft) | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | | | | Between Centres (usft) |
| 5,200.0 | 5,034.1 | 5,842.2 | 5,119.5 | 20.9 | 31.8 | 93.82 | -1,464.2 | -756.9 | 635.2 | 606.0 | 29.16 | 21.781 |
| 5,300.0 | 5,117.3 | 5,896.8 | 5,119.0 | 21.4 | 32.2 | 90.19 | -1,502.7 | -718.3 | 629.5 | 600.3 | 29.22 | 21.540 |
| 5,300.8 | 5,118.0 | 5,897.3 | 5,119.0 | 21.4 | 32.2 | 90.15 | -1,503.1 | -717.9 | 629.5 | 600.3 | 29.23 | 21.539 |
| 5,400.0 | 5,190.8 | 5,963.8 | 5,118.4 | 22.1 | 32.7 | 85.30 | -1,550.0 | -670.8 | 633.8 | 604.2 | 29.62 | 21.395 |
| 5,500.0 | 5,252.8 | 6,041.6 | 5,117.7 | 23.0 | 33.5 | 80.02 | -1,605.0 | -615.8 | 644.1 | 613.4 | 30.76 | 20.942 |
| 5,600.0 | 5,301.9 | 6,128.2 | 5,117.0 | 24.1 | 34.3 | 75.20 | -1,666.1 | -554.4 | 656.6 | 623.6 | 32.95 | 19.928 |
| 5,700.0 | 5,336.6 | 6,221.5 | 5,116.2 | 25.3 | 35.3 | 71.47 | -1,732.0 | -488.3 | 667.6 | 631.3 | 36.35 | 18.367 |
| 5,800.0 | 5,356.4 | 6,319.3 | 5,115.3 | 26.7 | 36.5 | 69.24 | -1,801.0 | -419.1 | 674.9 | 634.0 | 40.95 | 16.480 |
| 5,900.0 | 5,360.7 | 6,419.1 | 5,114.4 | 28.1 | 37.8 | 68.66 | -1,871.5 | -348.5 | 677.0 | 630.9 | 46.13 | 14.674 |
| 6,000.0 | 5,359.7 | 6,519.1 | 5,113.6 | 29.7 | 39.1 | 68.68 | -1,942.1 | -277.7 | 677.1 | 627.3 | 49.82 | 13.591 |
| 6,100.0 | 5,358.6 | 6,619.1 | 5,112.7 | 31.4 | 40.5 | 68.70 | -2,012.7 | -206.9 | 677.2 | 623.6 | 53.64 | 12.627 |
| 6,200.0 | 5,357.6 | 6,719.1 | 5,111.8 | 33.1 | 42.0 | 68.72 | -2,083.3 | -136.1 | 677.4 | 620.2 | 57.22 | 11.837 |
| 6,300.0 | 5,356.5 | 6,819.1 | 5,110.9 | 34.8 | 43.5 | 68.74 | -2,153.9 | -65.3 | 677.5 | 616.5 | 61.04 | 11.099 |
| 6,400.0 | 5,355.5 | 6,919.1 | 5,110.1 | 36.6 | 45.1 | 68.76 | -2,224.5 | 5.5 | 677.6 | 612.8 | 64.87 | 10.447 |
| 6,500.0 | 5,354.4 | 7,019.0 | 5,109.2 | 38.4 | 46.7 | 68.78 | -2,295.2 | 76.4 | 677.8 | 609.1 | 68.71 | 9.864 |
| 6,600.0 | 5,353.4 | 7,119.0 | 5,108.3 | 40.3 | 48.4 | 68.80 | -2,365.8 | 147.2 | 677.9 | 605.3 | 72.58 | 9.340 |
| 6,700.0 | 5,352.3 | 7,219.0 | 5,107.4 | 42.2 | 50.1 | 68.82 | -2,436.4 | 218.0 | 678.0 | 601.6 | 76.46 | 8.868 |
| 6,800.0 | 5,351.3 | 7,319.0 | 5,106.6 | 44.1 | 51.9 | 68.84 | -2,507.0 | 288.8 | 678.1 | 597.8 | 80.35 | 8.440 |
| 6,900.0 | 5,350.3 | 7,419.0 | 5,105.7 | 46.1 | 53.7 | 68.86 | -2,577.6 | 359.6 | 678.3 | 594.0 | 84.26 | 8.050 |
| 7,000.0 | 5,349.2 | 7,519.0 | 5,104.8 | 48.0 | 55.5 | 68.88 | -2,648.2 | 430.4 | 678.4 | 590.2 | 88.18 | 7.694 |
| 7,100.0 | 5,348.2 | 7,619.0 | 5,104.0 | 50.0 | 57.3 | 68.90 | -2,718.8 | 501.2 | 678.5 | 586.4 | 92.10 | 7.367 |
| 7,200.0 | 5,347.1 | 7,719.0 | 5,103.1 | 52.0 | 59.2 | 68.92 | -2,789.4 | 572.0 | 678.7 | 582.6 | 96.04 | 7.067 |
| 7,300.0 | 5,346.1 | 7,819.0 | 5,102.2 | 54.0 | 61.0 | 68.94 | -2,860.0 | 642.8 | 678.8 | 578.8 | 99.98 | 6.789 |
| 7,400.0 | 5,345.0 | 7,919.0 | 5,101.3 | 56.0 | 62.9 | 68.96 | -2,930.6 | 713.6 | 678.9 | 575.0 | 103.93 | 6.532 |
| 7,500.0 | 5,344.0 | 8,019.0 | 5,100.5 | 58.0 | 64.8 | 68.98 | -3,001.3 | 784.4 | 679.0 | 571.2 | 107.89 | 6.294 |
| 7,600.0 | 5,342.9 | 8,119.0 | 5,099.6 | 60.1 | 66.8 | 69.00 | -3,071.9 | 855.2 | 679.2 | 567.3 | 111.85 | 6.072 |
| 7,700.0 | 5,341.9 | 8,219.0 | 5,098.7 | 62.1 | 68.7 | 69.02 | -3,142.5 | 926.0 | 679.3 | 563.5 | 115.82 | 5.865 |
| 7,800.0 | 5,340.8 | 8,319.0 | 5,097.8 | 64.2 | 70.6 | 69.04 | -3,213.1 | 996.8 | 679.4 | 559.6 | 119.79 | 5.672 |
| 7,900.0 | 5,339.8 | 8,419.0 | 5,097.0 | 66.2 | 72.6 | 69.06 | -3,283.7 | 1,067.6 | 679.6 | 555.8 | 123.77 | 5.491 |
| 8,000.0 | 5,338.7 | 8,519.0 | 5,096.1 | 68.3 | 74.6 | 69.08 | -3,354.3 | 1,138.4 | 679.7 | 551.9 | 127.75 | 5.321 |
| 8,100.0 | 5,337.7 | 8,619.0 | 5,095.2 | 70.4 | 76.6 | 69.10 | -3,424.9 | 1,209.2 | 679.8 | 548.1 | 131.73 | 5.161 |
| 8,200.0 | 5,336.6 | 8,719.0 | 5,094.4 | 72.4 | 78.5 | 69.12 | -3,495.5 | 1,280.0 | 679.9 | 544.2 | 135.72 | 5.010 |
| 8,300.0 | 5,335.6 | 8,819.0 | 5,093.5 | 74.5 | 80.5 | 69.14 | -3,566.1 | 1,350.9 | 680.1 | 540.4 | 139.71 | 4.868 |
| 8,400.0 | 5,334.5 | 8,919.0 | 5,092.6 | 76.6 | 82.6 | 69.16 | -3,636.7 | 1,421.7 | 680.2 | 536.5 | 143.71 | 4.733 |
| 8,500.0 | 5,333.5 | 9,019.0 | 5,091.7 | 78.7 | 84.6 | 69.18 | -3,707.4 | 1,492.5 | 680.3 | 532.6 | 147.70 | 4.606 |
| 8,600.0 | 5,332.5 | 9,119.0 | 5,090.9 | 80.8 | 86.6 | 69.20 | -3,778.0 | 1,563.3 | 680.4 | 528.7 | 151.71 | 4.485 |
| 8,700.0 | 5,331.4 | 9,219.0 | 5,090.0 | 82.9 | 88.6 | 69.22 | -3,848.6 | 1,634.1 | 680.6 | 524.9 | 155.71 | 4.371 |
| 8,800.0 | 5,330.4 | 9,319.0 | 5,089.1 | 85.0 | 90.6 | 69.24 | -3,919.2 | 1,704.9 | 680.7 | 521.0 | 159.71 | 4.262 |
| 8,900.0 | 5,329.3 | 9,419.0 | 5,088.2 | 87.1 | 92.7 | 69.26 | -3,989.8 | 1,775.7 | 680.8 | 517.1 | 163.72 | 4.158 |
| 9,000.0 | 5,328.3 | 9,519.0 | 5,087.4 | 89.2 | 94.7 | 69.28 | -4,060.4 | 1,846.5 | 680.9 | 513.2 | 167.73 | 4.060 |
| 9,100.0 | 5,327.2 | 9,619.0 | 5,086.5 | 91.3 | 96.8 | 69.30 | -4,131.0 | 1,917.3 | 681.1 | 509.3 | 171.75 | 3.966 |
| 9,200.0 | 5,326.2 | 9,719.0 | 5,085.6 | 93.4 | 98.8 | 69.32 | -4,201.6 | 1,988.1 | 681.2 | 505.4 | 175.76 | 3.876 |
| 9,300.0 | 5,325.1 | 9,819.0 | 5,084.8 | 95.5 | 100.9 | 69.34 | -4,272.2 | 2,058.9 | 681.3 | 501.5 | 179.78 | 3.790 |
| 9,400.0 | 5,324.1 | 9,919.0 | 5,083.9 | 97.6 | 102.9 | 69.36 | -4,342.8 | 2,129.7 | 681.4 | 497.7 | 183.80 | 3.708 |
| 9,500.0 | 5,323.0 | 10,019.0 | 5,083.0 | 99.7 | 105.0 | 69.38 | -4,413.5 | 2,200.5 | 681.6 | 493.8 | 187.82 | 3.629 |
| 9,600.0 | 5,322.0 | 10,119.0 | 5,082.1 | 101.8 | 107.1 | 69.40 | -4,484.1 | 2,271.3 | 681.7 | 489.9 | 191.84 | 3.553 |
| 9,700.0 | 5,320.9 | 10,219.0 | 5,081.3 | 103.9 | 109.1 | 69.42 | -4,554.7 | 2,342.1 | 681.8 | 486.0 | 195.87 | 3.481 |
| 9,779.7 | 5,320.1 | 10,298.7 | 5,080.6 | 105.6 | 110.8 | 69.43 | -4,610.9 | 2,398.5 | 681.9 | 482.8 | 199.08 | 3.425 SF |

Anticollision Report

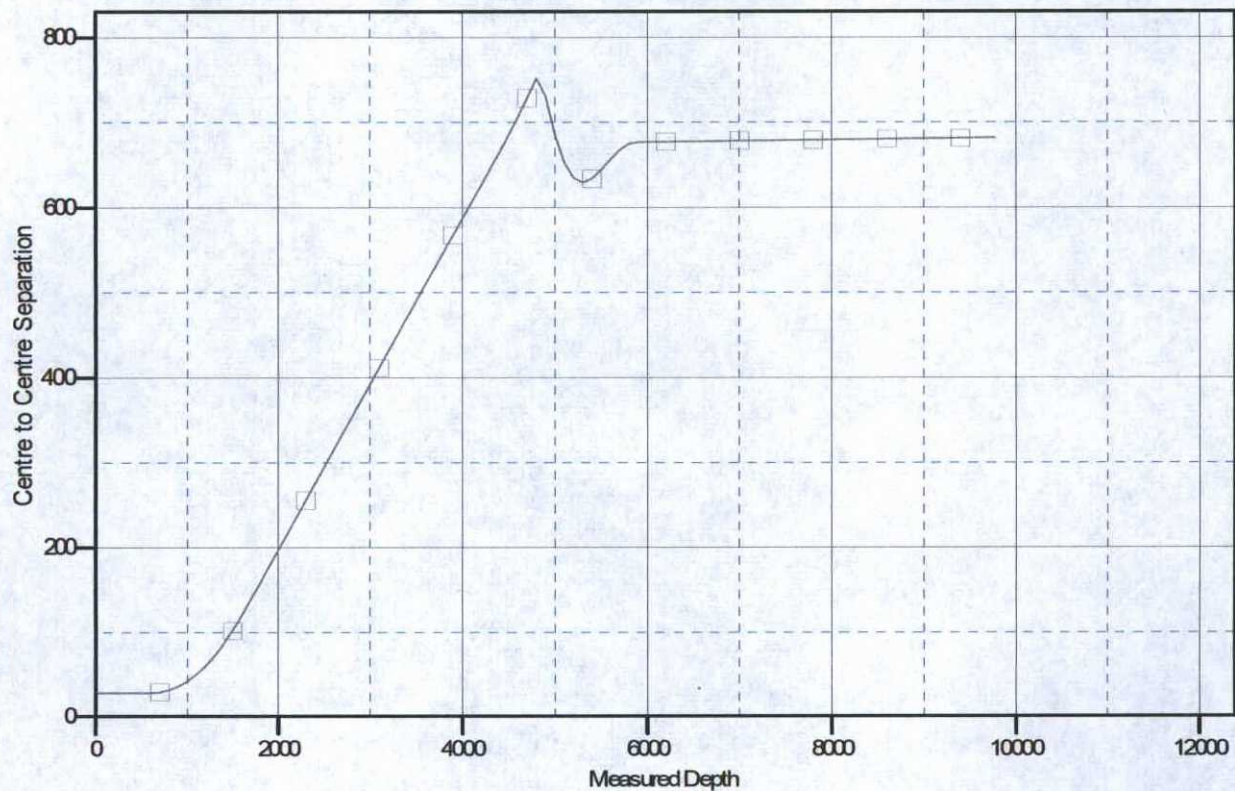
Company: EnCana Oil & Gas (USA) Inc
Project: San Juan County, NM
Reference Site: S19-T24N-R9W
Site Error: 0.0usft
Reference Well: ESCRITO N19-2408 01H
Well Error: 0.0usft
Reference Wellbore: HZ
Reference Design: Plan #1

Local Co-ordinate Reference: Well ESCRITO N19-2408 01H
TVD Reference: 16' KB @ 6808.0usft
MD Reference: 16' KB @ 6808.0usft
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: USA EDM 5000 Multi Users DB
Offset TVD Reference: Offset Datum

Reference Depths are relative to 16' KB @ 6808.0usft
 Offset Depths are relative to Offset Datum
 Central Meridian is -107.833333 °

Coordinates are relative to: ESCRITO N19-2408 01H
 Coordinate System is US State Plane 1983, New Mexico Western Zone
 Grid Convergence at Surface is: 0.06°

Ladder Plot



LEGEND

ESCRITON19-2408 02H, HZ, Plan #1 V0

Escrito N19-2408 01H

**SHL: SESW Section 19, T24N, R8W
1085 FSL and 2095 FWL**

**BHL: NESE Section 30, T24N, R8W
2198 FSL and 330 FEL**

San Juan County, New Mexico

Lease Number: NM 54981 & NM 54980

An existing fence line will be cut and braced for the pipeline installation. H-braces will be installed prior to cutting the fence. The H-braces will be constructed in accordance with the BLM Gold Book standard.

7. METHODS FOR HANDLING WASTE

A. Cuttings

1. A closed-loop system will be used. Cuttings will be moved through a shaker system on the drill rig that separates drilling fluids from the cuttings. Cuttings will be stored onsite in above-ground storage tanks. Cuttings will be pulled from the storage tanks, mixed with saw dust or similar absorbent material, and disposed of at the Envirotech, Inc. and/or Industrial Ecosystem, Inc. waste disposal facilities.
2. The closed-loop system storage tanks will be adequately sized to ensure confinement of all fluids and will provide sufficient freeboard to prevent uncontrolled releases.
3. A 20-mil liner will be installed under tanks, pumps, ancillary facilities, and truck loading/unloading areas associated with the closed-loop system.

B. Drilling Fluids

1. A closed-loop system will be used. Drilling fluids will be stored onsite in above-ground storage tanks. Upon termination of drilling operations, the drilling fluids will be recycled and transferred to other permitted closed-loop systems or returned to the vendor for reuse, as practical. Residual fluids will be vacuumed from the storage tanks and disposed of at Basin Disposal, Inc. and/or Industrial Ecosystem, Inc. waste disposal facilities.
2. The closed-loop system storage tanks will be adequately sized to ensure confinement of all fluids and will provide sufficient freeboard to prevent uncontrolled releases.
3. The closed-loop system storage tanks will be placed in bermed secondary containment sized to accommodate a minimum of 110 percent of the volume of the largest storage tank.
4. A 20-mil liner will be installed under tanks, pumps, ancillary facilities, and truck loading/unloading areas associated with the closed-loop system.

C. Flowback Water

1. The water-based solution that flows back to the surface during and after completion operations will be placed in storage tanks on the location.
2. Flowback water will be confined to a storage tank for a period not to exceed 90 days after initial production and will be disposed of at Basin Disposal, Inc. and/or Industrial Ecosystem, Inc. waste disposal facilities.

D. Spills – any spills of non-freshwater fluids will be immediately cleaned up and removed to an approved disposal site. Encana will also notify the BLM within 24 hours of any spill.

E. Sewage – self-contained, chemical toilets will be provided for human waste disposal. The toilet holding tanks will be pumped, as needed, and the contents thereof disposed of in an approved sewage disposal facility. The toilets will be onsite during all operations.

F. Garbage and other waste material – garbage, trash and other waste materials will be collected in a portable, self-contained and fully-enclosed trash container during drilling and completion

ENCANA OIL & GAS (USA) INC.

ESCRITO N19-2408 #01H

1085' FSL & 2095' FWL

LOCATED IN THE SE/4 SW/4 OF SECTION 19

T24N, R08W, N.M.P.M.

SAN JUAN COUNTY, NEW MEXICO

1,580' +/- RE-ROUTE OF EXISTING ROAD ACROSS BLM LANDS

155' +/- OF NEW ACCESS ACROSS BLM LANDS

DIRECTIONS

1. Beginning in Bloomfield, N.M., follow Hwy 550 south for 35.1 miles to Indian Service Road 459.
2. Turn left (east) and follow Indian Service Road 459 for 0.7 miles to an intersection.
3. Turn left (north) staying on Indian Service Road 459 and follow for 1.4 miles to the proposed reroute of this road (ISR 459) around the proposed pad.
4. Follow the proposed reroute northeast for 0.1 mile to the proposed pad access road.
5. Follow the proposed access road for 155' to the edge of the N19 pad.
6. Well Flag Located at : LATITUDE: 36.295559° N, LONGITUDE: 107.724820° W (NAD 83)

WELLHEAD BLOWOUT CONTROL SYSTEM

encana

Well Name and Number:
Escrito N19-2408 01H

