

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 D302408 #2H

API# 30-045-35657, Section 30, 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.

Charles L...
NMOCD Approved by Signature

10-7-2015
Date KC

OIL CONS. DIV DIST. 3

SEP 23 2015

Form 3160-3
(March 2012)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

MAR 03 2015

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMSF 078860
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 of CA Agreement, Name and No. N/A
3a. Address 370 17th Street, Suite 1700 Denver, CO 80202	3b. Phone No. (include area code) 720-876-3533	8. Lease Name and Well No. Escrito D30-2408 02H
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface ^D 477' FNL, 397' FWL, Section 30, T24N, R8W At proposed prod. zone ^D 730' FNL, 330' FWL, Section 25, T24N, R9W		9. API Well No. 30-045-35657
14. Distance in miles and direction from nearest town or post office* +/- 36.3 miles South from the intersection of HWY 64 & US HWY 550 in Bloomfield, NM		10. Field and Pool, or Exploratory Basin Mancos
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) BHL is 330 FWL Section 25, T24N, R9W	16. No. of acres in lease NMSF 078860 - 2,560 acres	11. Sec., T, R, M. or Blk. and Survey or Area Section 30, T24N, R8W NMPM
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. SHL is +/- 30' South of Escrito D30-2408 01H	19. Proposed Depth 5387' TVD, 10526' MD	12. County or Parish San Juan
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6849' GL, 6865' KB	22. Approximate date work will start* 08/25/2015	13. State NM
17. Spacing Unit dedicated to this well 320 acres- N/2 Section 25, T24N, R9W		
20. BLM/BIA Bond No. on file COB-000235		
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.

BLM'S (Continued on page 2) 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)

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

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

DISTRICT I
1885 N. French Dr., Hobbs, N.M. 88240
Phone: (505) 588-6161 Fax: (505) 588-0720

DISTRICT II
511 S. First St., Artesia, N.M. 88210
Phone: (505) 748-1888 Fax: (505) 748-9780

DISTRICT III
1000 E. Bruce Rd., Aztec, N.M. 87410
Phone: (505) 894-8178 Fax: (505) 894-8170

DISTRICT IV
1880 S. St. Francis Dr., Santa Fe, NM 87506
Phone: (505) 478-9480 Fax: (505) 478-9488

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 1, 2011

Submit one copy to appropriate
District Office

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87605

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-35657		² Pool Code 97232	³ Pool Name BASIN MANCOS GAS
⁴ Property Code 39945	⁵ Property Name ESCRITO D30-2408		⁶ Well Number 02H
⁷ OGRD No. 282327	⁸ Operator Name ENCANA OIL & GAS (USA) INC.		⁹ Elevation 6849.3

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
D	30	24N	8W	1	477'	NORTH	397'	WEST	SAN JUAN

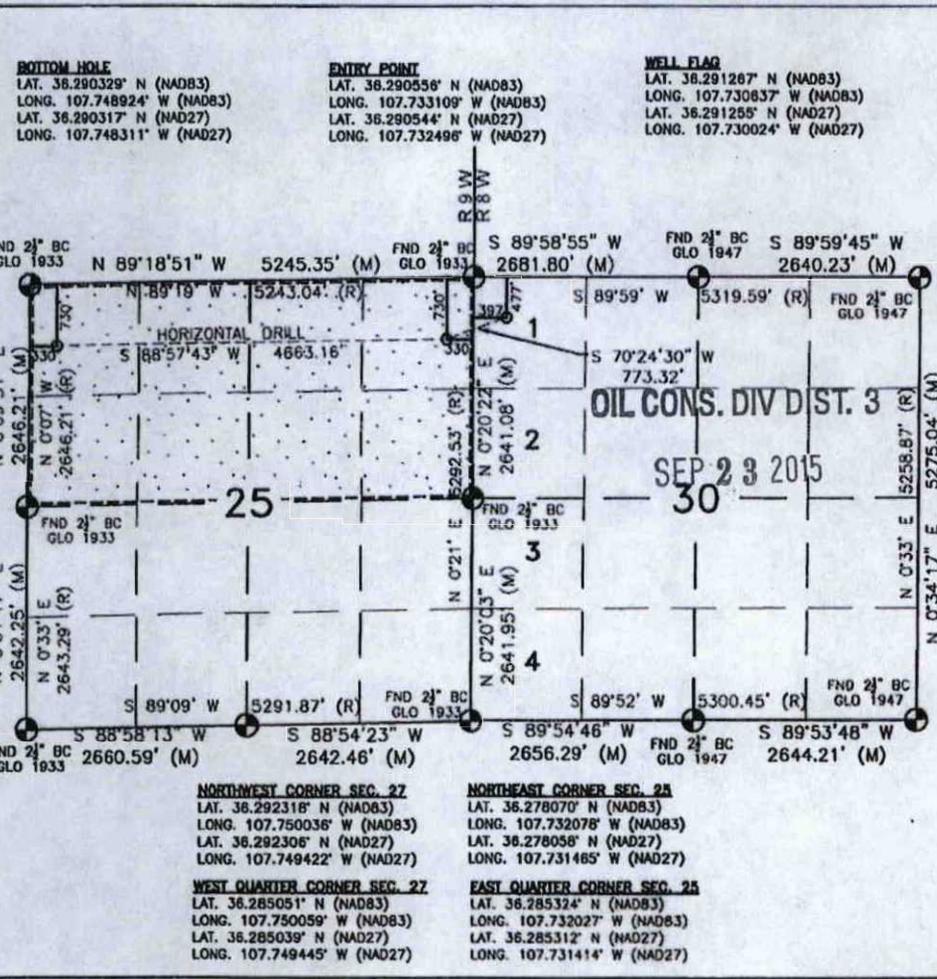
¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	25	24N	9W		730'	NORTH	330'	WEST	SAN JUAN

¹² Dedicated Acres 320.00 Acres - N/2 SEC. 25	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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

16



NORTHWEST CORNER SEC. 27
LAT. 36.292318° N (NAD83)
LONG. 107.750036° W (NAD83)
LAT. 36.292306° N (NAD27)
LONG. 107.749422° W (NAD27)

WEST QUARTER CORNER SEC. 27
LAT. 36.285051° N (NAD83)
LONG. 107.750059° W (NAD83)
LAT. 36.285039° N (NAD27)
LONG. 107.749445° W (NAD27)

NORTHEAST CORNER SEC. 25
LAT. 36.278070° N (NAD83)
LONG. 107.732078° W (NAD83)
LAT. 36.278058° N (NAD27)
LONG. 107.731465° W (NAD27)

EAST QUARTER CORNER SEC. 25
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.

Katie Wegner 3/2/15
Signature Date
Katie Wegner
Printed Name
Kathryn.Wegner@encana.com
E-mail Address

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.

APRIL 8, 2014

Date of Review
Signature and Seal of Professional Surveyor:
David B. Russell
DAVID B. RUSSELL
REGISTERED PROFESSIONAL LAND SURVEYOR
NEW MEXICO
10201
Certificate Number 10201

Escrito D30-2408 02H
 SHL: 477' FNL, 397' FWL, Sec 30, T24N, R8W
 BHL: 730' FNL, 330' FWL, Sec 25, T24N, R9W
 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.	961
Kirtland Shale	1,188
Fruitland Coal	1,443
Pictured Cliffs Ss.	1,727
Lewis Shale	1,821
Cliffhouse Ss.	2,564
Menefee Fn.	3,231
Point Lookout Ss.	4,128
Mancos Shale	4,351
Mancos Silt	4,887
Gallup Fn.	5,165
Base Gallup	5,496

The referenced surface elevation is 6849', KB 6865'

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

Substance	Formation	Depth (TVD) units = feet
Water/Gas	Fruitland Coal	1,443
Oil/Gas	Pictured Cliffs Ss.	1,727
Oil/Gas	Cliffhouse Ss.	2,564
Gas	Menefee Fn.	3,231
Oil/Gas	Point Lookout Ss.	4,128
Oil/Gas	Mancos Shale	4,351
Oil/Gas	Mancos Silt	4,887
Oil/Gas	Gallup Fn.	5,165

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

Escrito D30-2408 02H

SHL: 477' FNL, 397' FWL, Sec 30, T24N, R8W

BHL: 730' FNL, 330' FWL, Sec 25, T24N, R9W

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'-5392'	8 3/4"	7"	26#	J55, LTC New
Production Liner	5292'-10526'	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 D30-2408 02H**SHL: 477' FNL, 397' FWL, Sec 30, T24N, R8W****BHL: 730' FNL, 330' FWL, Sec 25, T24N, R9W****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'-5392'	100% open hole excess Stage 1 Lead: 501 sks Stage 1 Tail: 383 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	5292'- 10526'	50% OH excess Stage 1 Blend Total: 296sks	Blend: 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	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 4584'. Directional plans are attached.

Description	Proposed Depth (TVD/MD)	Formation
Horizontal Lateral TD	5387'/10526'	Gallup

Escrito D30-2408 02H

SHL: 477' FNL, 397' FWL, Sec 30, T24N, R8W

BHL: 730' FNL, 330' FWL, Sec 25, T24N, R9W

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'-5272'/5392'	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"	5272'/5392'- 5387'/10526'	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 +/- 2534 psi based on a 9.0 ppg at 5415' 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: 477' FNL, 397' FWL, Sec 30, T24N, R8W		Encana Natural Gas				ENG: 0	2-27-15	
County: San Juan		WELL SUMMARY				RIG: Unassigned		
WELL: Escrito D30-2408 02H						GLE: 6849.3		
						RKBE: 6865.3		
MWD LWD	OPEN HOLE LOGGING	FORM	DEPTH		HOLE SIZE	CASING SPECS	MW MUD TYPE	DEVIATION INFORMATION
			TVD	MD				
			60	60'				
		San Jose Fn.	0		26	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	Nacimiento Fn. 9 5/8" Csg	surface 500	500.00	12 1/4	9 5/8" 36ppf J55 LTC 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.	Fresh wtr 8.3-10	Vertical <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. Kirtland Shale Fruitland Coal Pictured Cliffs Ss. Lewis Shale Cliffhouse Ss. Menefee Fn. Point Lookout Ss. Mancos Shale	961 1,188 1,443 1,727 1,821 2,564 3,231 4,128 4,351		8 3/4	7" 26ppf J55 LTC TOC @ surface (100% OH excess - 70% Lead 30% Tail) Stage 1 Total: 885sks Stage 1 Lead: 501 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. Stage 1 Tail: 383 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.	Fresh Wtr 8.3-10	Vertical <1°
Surveys every 30' through the curve	Mud logger onsite	KOP Mancos Silt Gallup Fn. 7" Csg	4,584 4,887 5,165 5,272	4,584 5,392'				
Surveys every stand to TD unless directed otherwise by Geologist	No OH Logs	Horizontal Target TD Base Gallup	5,415 5,387 5,496	10,526	6 1/8	100' overlap at liner top 5134' Drilled Lateral		Horz Inc/TVD 90.27deg/5415.3ft TD = 10525.8 MD
MWD Gamma Directional						4 1/2" 11.6ppf SB80 LTC TOC @ hanger (50% OH excess) Stage 1 Total: 296sks Stage 1 Blend: 296 sks 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 + 80 lbs/sack Calcium Carbonate + 124.4% Fresh Water. Yield 2.63 cuft/sk.	WBM 8.3-10	

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 4584', 8 3/4 inch hothesize
- 5) Start curve at 10deg/100' build rate
- 6) Drill to csg point of 5392' MD
- 7) R&C 7" csg, circ cmt to surface
- 8) Land at -55 deg, drill lateral to 10526' run 4 1/2 inch cemented liner



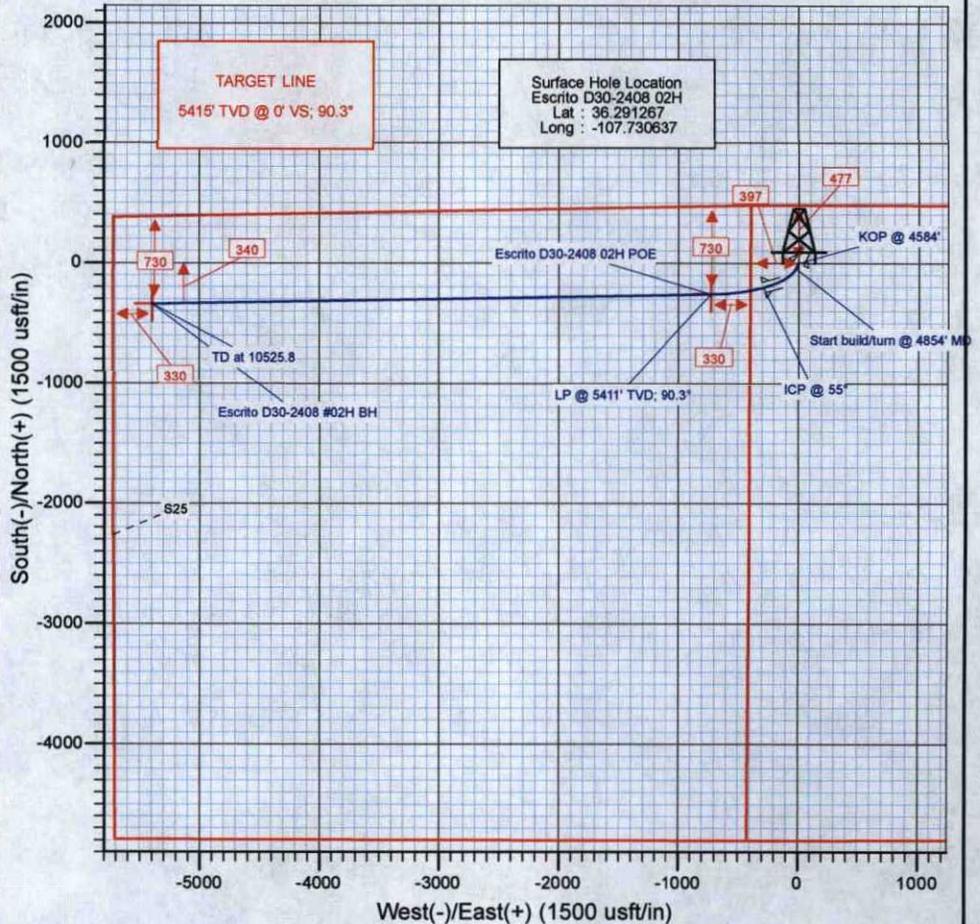
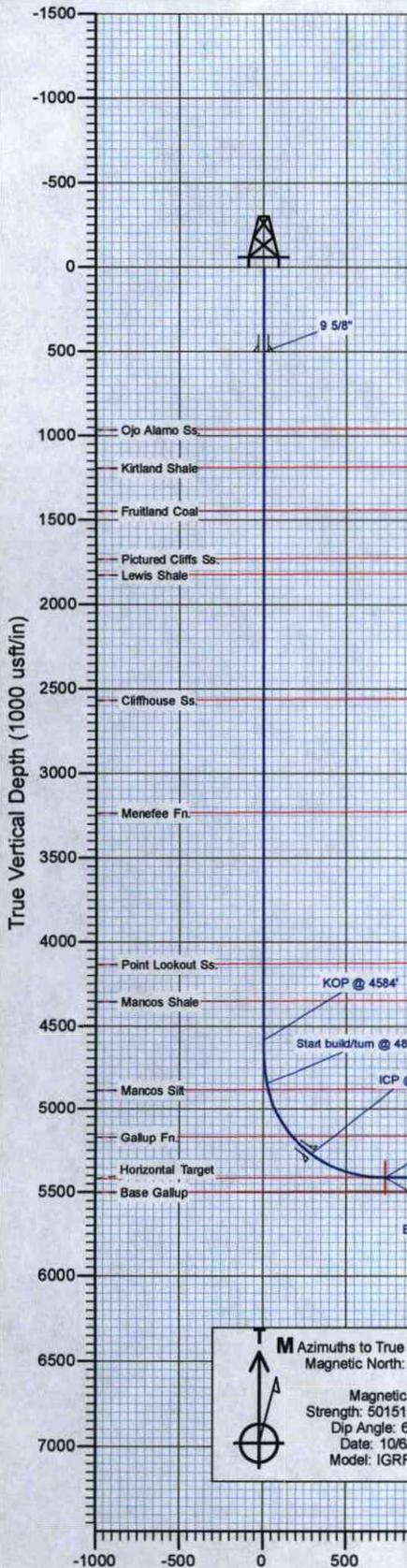
Project: San Juan County, NM
 Site: S30-T24N-R8W
 Well: Escrito D30-2408 02H
 Wellbore: HZ
 Design: Plan #1

CATHEDRAL OIL CONS. DIV DIST. 3

SEP 23 2015

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	4584.0	0.00	0.00	4584.0	0.0	0.0	0.00	0.00	0.0	
3	4854.8	21.66	205.73	4848.4	-45.6	-22.0	8.00	205.73	22.8	
4	5864.4	90.30	268.99	5411.2	-258.8	-728.5	8.00	64.81	732.9	Escrito D30-2408 02H POE
5	10525.8	90.30	268.99	5386.7	-340.9	-5389.2	0.00	0.00	5394.3	Escrito D30-2408 #02H BH



DESIGN TARGET DETAILS

Name	+N-S	+E-W	Northing	Easting	Latitude	Longitude
Escrito D30-2408 #02H BH	-340.9	-5389.2	1924990.09	2747967.05	36.290329	-107.748924
Escrito D30-2408 02H POE	-258.8	-728.5	1925077.16	2752627.64	36.290556	-107.733109

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
961.0	961.0	Ojo Alamo Ss.
1188.0	1188.0	Kirtland Shale
1443.0	1443.0	Fruitland Coal
1727.0	1727.0	Pictured Cliffs Ss.
1821.0	1821.0	Lewis Shale
2564.0	2564.0	Cliffhouse Ss.
3231.0	3231.0	Menefee Fn.
4128.0	4128.0	Point Lookout Ss.
4351.0	4351.0	Mancos Shale
4886.8	4896.4	Mancos Silt
5164.1	5227.0	Gallup Fn.
5411.2	5856.8	Horizontal Target

M Azimuths to True North
 Magnetic North: 9.42°
 Magnetic Field
 Strength: 50151.6snT
 Dip Angle: 63.00°
 Date: 10/6/2014
 Model: IGRF2010

Plan #1
 Escrito D30-2408 02H
 32' KB @ 6865.0usft
 Ground Elevation @ 6849.0
 North American Datum 1983
 Well Escrito D30-2408 02H, True North

Vertical Section at 268.99° (1000 usft/in)

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Escrito D30-2408 02H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	32' KB @ 6865.0usft
Project:	San Juan County, NM	MD Reference:	32' KB @ 6865.0usft
Site:	S30-T24N-R8W	North Reference:	True
Well:	Escrito D30-2408 02H	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #1		

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	S30-T24N-R8W				
Site Position:		Northing:	1,925,369.88 usft	Latitude:	36.291358
From:	Lat/Long	Easting:	2,753,359.06 usft	Longitude:	-107.730626
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16"	Grid Convergence:	0.06 °

Well	Escrito D30-2408 02H					
Well Position	+N/-S	0.0 usft	Northing:	1,925,336.75 usft	Latitude:	36.291267
	+E/-W	0.0 usft	Easting:	2,753,355.86 usft	Longitude:	-107.730637
Position Uncertainty	0.0 usft		Wellhead Elevation:	0.0 usft	Ground Level:	6,849.0 usft

Wellbore	HZ				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF2010	10/6/2014	9.42	63.00	50,152

Design	Plan #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.0	0.0	0.0	268.99

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	
4,584.0	0.00	0.00	4,584.0	0.0	0.0	0.00	0.00	0.00	0.00	
4,854.8	21.66	205.73	4,848.4	-45.6	-22.0	8.00	8.00	0.00	205.73	
5,864.4	90.30	268.99	5,411.2	-258.8	-728.5	8.00	6.80	6.27	64.81	Escrito D30-2408 02H
10,525.8	90.30	268.99	5,386.7	-340.9	-5,389.2	0.00	0.00	0.00	0.00	Escrito D30-2408 #02

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Escrito D30-2408 02H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	32' KB @ 6865.0usft
Project:	San Juan County, NM	MD Reference:	32' KB @ 6865.0usft
Site:	S30-T24N-R8W	North Reference:	True
Well:	Escrito D30-2408 02H	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #1		

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	
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	
961.0	0.00	0.00	961.0	0.0	0.0	0.0	0.00	0.00	Ojo Alamo Ss.
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	
1,188.0	0.00	0.00	1,188.0	0.0	0.0	0.0	0.00	0.00	Kirtland Shale
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	
1,443.0	0.00	0.00	1,443.0	0.0	0.0	0.0	0.00	0.00	Fruitland Coal
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	
1,727.0	0.00	0.00	1,727.0	0.0	0.0	0.0	0.00	0.00	Pictured Cliffs Ss.
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	
1,821.0	0.00	0.00	1,821.0	0.0	0.0	0.0	0.00	0.00	Lewis Shale
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	
2,564.0	0.00	0.00	2,564.0	0.0	0.0	0.0	0.00	0.00	Cliffhouse Ss.
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	
3,231.0	0.00	0.00	3,231.0	0.0	0.0	0.0	0.00	0.00	Menefee Fn.
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	
4,128.0	0.00	0.00	4,128.0	0.0	0.0	0.0	0.00	0.00	Point Lookout Ss.
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Escrito D30-2408 02H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	32' KB @ 6865.0usft
Project:	San Juan County, NM	MD Reference:	32' KB @ 6865.0usft
Site:	S30-T24N-R8W	North Reference:	True
Well:	Escrito D30-2408 02H	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #1		

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
4,351.0	0.00	0.00	4,351.0	0.0	0.0	0.0	0.00	0.00	Mancos Shale
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	
4,584.0	0.00	0.00	4,584.0	0.0	0.0	0.0	0.00	0.00	KOP @ 4584'
4,600.0	1.28	205.73	4,600.0	-0.2	-0.1	0.1	8.00	8.00	
4,700.0	9.28	205.73	4,699.5	-8.4	-4.1	4.2	8.00	8.00	
4,800.0	17.28	205.73	4,796.7	-29.1	-14.0	14.5	8.00	8.00	
4,854.8	21.66	205.73	4,848.4	-45.6	-22.0	22.8	8.00	8.00	Start build/turn @ 4854' MD
4,896.4	23.26	213.37	4,886.8	-59.4	-29.8	30.9	8.00	3.85	Mancos Silt
4,900.0	23.42	213.99	4,890.1	-60.5	-30.6	31.7	8.00	4.30	
5,000.0	28.51	228.16	4,980.1	-93.0	-59.5	61.2	8.00	5.09	
5,100.0	34.64	238.02	5,065.3	-124.0	-101.5	103.7	8.00	6.13	
5,200.0	41.34	245.13	5,144.1	-153.0	-155.7	158.3	8.00	6.70	
5,227.0	43.21	246.72	5,164.1	-160.4	-172.2	175.0	8.00	6.94	Gallup Fn.
5,300.0	48.38	250.53	5,215.0	-179.4	-221.0	224.1	8.00	7.07	
5,391.5	54.99	254.51	5,271.7	-200.8	-289.4	292.9	8.00	7.23	ICP @ 55°
5,400.0	55.61	254.85	5,276.5	-202.7	-296.2	299.7	8.00	7.31	
5,500.0	62.98	258.47	5,327.6	-222.4	-379.8	383.6	8.00	7.37	
5,600.0	70.43	261.65	5,367.1	-238.2	-470.2	474.3	8.00	7.45	
5,700.0	77.92	264.54	5,394.4	-249.7	-565.6	569.9	8.00	7.50	
5,800.0	85.45	267.27	5,408.8	-256.7	-664.2	668.6	8.00	7.53	
5,856.8	89.73	268.79	5,411.2	-258.7	-720.9	725.4	8.00	7.54	Horizontal Target
5,864.4	90.30	268.99	5,411.2	-258.8	-728.5	732.9	8.00	7.54	LP @ 5411' TVD; 90.3°
5,900.0	90.30	268.99	5,411.0	-259.4	-764.1	768.6	0.00	0.00	
6,000.0	90.30	268.99	5,410.5	-261.2	-864.1	868.6	0.00	0.00	
6,100.0	90.30	268.99	5,410.0	-263.0	-964.1	968.6	0.00	0.00	
6,200.0	90.30	268.99	5,409.4	-264.7	-1,064.1	1,068.6	0.00	0.00	
6,300.0	90.30	268.99	5,408.9	-266.5	-1,164.0	1,168.6	0.00	0.00	
6,400.0	90.30	268.99	5,408.4	-268.3	-1,264.0	1,268.6	0.00	0.00	
6,500.0	90.30	268.99	5,407.9	-270.0	-1,364.0	1,368.6	0.00	0.00	
6,600.0	90.30	268.99	5,407.3	-271.8	-1,464.0	1,468.6	0.00	0.00	
6,700.0	90.30	268.99	5,406.8	-273.5	-1,564.0	1,568.6	0.00	0.00	
6,800.0	90.30	268.99	5,406.3	-275.3	-1,664.0	1,668.6	0.00	0.00	
6,900.0	90.30	268.99	5,405.8	-277.1	-1,763.9	1,768.5	0.00	0.00	
7,000.0	90.30	268.99	5,405.2	-278.8	-1,863.9	1,868.5	0.00	0.00	
7,100.0	90.30	268.99	5,404.7	-280.6	-1,963.9	1,968.5	0.00	0.00	
7,200.0	90.30	268.99	5,404.2	-282.3	-2,063.9	2,068.5	0.00	0.00	
7,300.0	90.30	268.99	5,403.7	-284.1	-2,163.9	2,168.5	0.00	0.00	
7,400.0	90.30	268.99	5,403.1	-285.9	-2,263.9	2,268.5	0.00	0.00	
7,500.0	90.30	268.99	5,402.6	-287.6	-2,363.8	2,368.5	0.00	0.00	
7,600.0	90.30	268.99	5,402.1	-289.4	-2,463.8	2,468.5	0.00	0.00	
7,700.0	90.30	268.99	5,401.6	-291.2	-2,563.8	2,568.5	0.00	0.00	
7,800.0	90.30	268.99	5,401.0	-292.9	-2,663.8	2,668.5	0.00	0.00	
7,900.0	90.30	268.99	5,400.5	-294.7	-2,763.8	2,768.5	0.00	0.00	
8,000.0	90.30	268.99	5,400.0	-296.4	-2,863.8	2,868.5	0.00	0.00	
8,100.0	90.30	268.99	5,399.5	-298.2	-2,963.7	2,968.5	0.00	0.00	
8,200.0	90.30	268.99	5,398.9	-300.0	-3,063.7	3,068.5	0.00	0.00	
8,300.0	90.30	268.99	5,398.4	-301.7	-3,163.7	3,168.5	0.00	0.00	
8,400.0	90.30	268.99	5,397.9	-303.5	-3,263.7	3,268.5	0.00	0.00	
8,500.0	90.30	268.99	5,397.4	-305.3	-3,363.7	3,368.5	0.00	0.00	
8,600.0	90.30	268.99	5,396.9	-307.0	-3,463.6	3,468.5	0.00	0.00	
8,700.0	90.30	268.99	5,396.3	-308.8	-3,563.6	3,568.5	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Escrito D30-2408 02H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	32' KB @ 6865.0usft
Project:	San Juan County, NM	MD Reference:	32' KB @ 6865.0usft
Site:	S30-T24N-R8W	North Reference:	True
Well:	Escrito D30-2408 02H	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #1		

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
8,800.0	90.30	268.99	5,395.8	-310.5	-3,663.6	3,668.5	0.00	0.00	
8,900.0	90.30	268.99	5,395.3	-312.3	-3,763.6	3,768.5	0.00	0.00	
9,000.0	90.30	268.99	5,394.8	-314.1	-3,863.6	3,868.5	0.00	0.00	
9,100.0	90.30	268.99	5,394.2	-315.8	-3,963.6	3,968.5	0.00	0.00	
9,200.0	90.30	268.99	5,393.7	-317.6	-4,063.5	4,068.5	0.00	0.00	
9,300.0	90.30	268.99	5,393.2	-319.3	-4,163.5	4,168.5	0.00	0.00	
9,400.0	90.30	268.99	5,392.7	-321.1	-4,263.5	4,268.5	0.00	0.00	
9,500.0	90.30	268.99	5,392.1	-322.9	-4,363.5	4,368.5	0.00	0.00	
9,600.0	90.30	268.99	5,391.6	-324.6	-4,463.5	4,468.5	0.00	0.00	
9,700.0	90.30	268.99	5,391.1	-326.4	-4,563.5	4,568.5	0.00	0.00	
9,800.0	90.30	268.99	5,390.6	-328.2	-4,663.4	4,668.5	0.00	0.00	
9,900.0	90.30	268.99	5,390.0	-329.9	-4,763.4	4,768.5	0.00	0.00	
10,000.0	90.30	268.99	5,389.5	-331.7	-4,863.4	4,868.5	0.00	0.00	
10,100.0	90.30	268.99	5,389.0	-333.4	-4,963.4	4,968.5	0.00	0.00	
10,200.0	90.30	268.99	5,388.5	-335.2	-5,063.4	5,068.5	0.00	0.00	
10,300.0	90.30	268.99	5,387.9	-337.0	-5,163.4	5,168.5	0.00	0.00	
10,400.0	90.30	268.99	5,387.4	-338.7	-5,263.3	5,268.5	0.00	0.00	
10,500.0	90.30	268.99	5,386.9	-340.5	-5,363.3	5,368.5	0.00	0.00	
10,525.8	90.30	268.99	5,386.7	-340.9	-5,389.2	5,394.3	0.00	0.00	TD at 10525.8

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Escrito D30-2408 #02H I - hit/miss target - Shape - plan hits target center - Point	0.00	0.00	5,386.7	-340.9	-5,389.2	1,924,990.09	2,747,967.05	36.290329	-107.748924
Escrito D30-2408 #02H I - plan misses target center by 773.1usft at 0.0usft MD (0.0 TVD, 0.0 N, 0.0 E) - Point	0.00	0.00	0.0	-258.8	-728.5	1,925,077.16	2,752,627.64	36.290556	-107.733109
Escrito D30-2408 02H P - plan hits target center - Point	0.00	0.00	5,411.2	-258.8	-728.5	1,925,077.16	2,752,627.64	36.290556	-107.733109

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
5,391.5	5,271.7	ICP @ 55°	0	0	
500.0	500.0	9 5/8"	0	0	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Escrito D30-2408 02H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	32' KB @ 6865.0usft
Project:	San Juan County, NM	MD Reference:	32' KB @ 6865.0usft
Site:	S30-T24N-R8W	North Reference:	True
Well:	Escrito D30-2408 02H	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #1		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
961.0	961.0	Ojo Alamo Ss.		-0.30	268.99	
1,188.0	1,188.0	Kirtland Shale		-0.30	268.99	
1,443.0	1,443.0	Fruitland Coal		-0.30	268.99	
1,727.0	1,727.0	Pictured Cliffs Ss.		-0.30	268.99	
1,821.0	1,821.0	Lewis Shale		-0.30	268.99	
2,564.0	2,564.0	Cliffhouse Ss.		-0.30	268.99	
3,231.0	3,231.0	Menefee Fn.		-0.30	268.99	
4,128.0	4,128.0	Point Lookout Ss.		-0.30	268.99	
4,351.0	4,351.0	Mancos Shale		-0.30	268.99	
4,896.4	4,887.0	Mancos Silt		-0.30	268.99	
5,227.0	5,165.0	Gallup Fn.		-0.30	268.99	
5,856.8	5,415.0	Horizontal Target		-0.30	268.99	

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
4,584.0	4,584.0	0.0	0.0	KOP @ 4584'	
4,854.8	4,848.4	-45.6	-22.0	Start build/turn @ 4854' MD	
5,864.4	5,411.2	-258.8	-728.5	LP @ 5411' TVD; 90.3°	
10,525.8	5,386.7	-340.9	-5,389.2	TD at 10525.8	

Escrito D30-2408 02H

**SHL: NWNW Section 30, T24N, R8W
477 FNL and 397 FWL**

**BHL: NWNW Section 25, T24N, R9W
730 FNL and 330 FWL**

San Juan County, New Mexico

Lease Number: NMSF-078860

5. Construction equipment may include chain saws, a brush hog, scraper, maintainer, excavator, and dozer. Construction for the access road and well pad will take approximately 2 to 4 weeks.

C. Pipeline

See the Plan of Development submitted with the Final SF-299 Application for authorization to construct, operate, maintain and terminate a 319-foot, up to 6-inch, steel well connect pipeline that was submitted to the BLM on March 28, 2013, and approved on June 3, 2013 (NMNM 130000).

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 OIL & GAS (USA) INC.

ESCRITO D30-2408 #02H

477' FNL & 397' FWL

LOCATED IN THE NW/4 NW/4 OF SECTION 30,

T24N, R8W, N.M.P.M.,

SAN JUAN COUNTY, NEW MEXICO

DIRECTIONS

- 1) FROM THE INTERSECTION OF US HWY 550 AND US HWY 64, TRAVEL SOUTH ON 550 FOR 35.0 MILES TO MP 116.6 INDIAN SERVICE ROUTE 459.
- 2) TURN LEFT ONTO ISR 459 AND GO 0.7 MILES TO "Y" INTERSECTION.
- 3) CONTINUE LEFT ON ISR 459 AND GO 0.6 MILES.
- 4) TURN RIGHT AND GO 300' TO STAKED WELL PAD.

WELL FLAG LOCATED AT LAT. 36.291267° N, LONG. 107.730637° W (NAD 83).

JOB No.: ENC182_REV1
DATE: 06/23/2014
DRAWN BY: TWT



Scorpion Survey & Consulting, L.L.C.
302 S. Ash
Aztec, New Mexico 87410
(505) 334-4007

WELLHEAD BLOWOUT CONTROL SYSTEM

encana

Well Name and Number:
Escrito D30-2408 02H

