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: 7/30/15
Well information;
Operator Encana, Well Name and Number Escrito D20-2409 02H

API# 30-045-35705, Section 20, Township 24 (N)/S, Range 09 E/(W)

Conditions of Approval:
(See the below checked and handwritten conditions)

- X Notify Aztec OCD 24hrs prior to casing & cement.
- X Hold C-104 for directional survey & "As Drilled" Plat
- X Hold C-104 for NSL, NSP, DHC
- o Spacing rule violation. Operator must follow up with change of status notification on other well to be shut in or abandoned
- o 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
- o 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.

NMOCD Approved by Signature

11-30-2015
Date KC

1220 South St. Francis Drive • Santa Fe, New Mexico 87505
Phone (505) 476-3460 • Fax (505) 476-3462 • www.emnrd.state.nm.us/ocd

OIL CONS. DIV DIST. 3

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JUL 31 2015

Farmington Field Office
Bureau of Land Management

Form 3160-3
(March 2012)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
NMNM 4958, BIA NO-G-0103-1462

6. If Indian, Allotee or Tribe Name
Allotee

1a. Type of work: ☑ DRILL ☐ REENTER

7. If Unit or CA Agreement, Name and No.
Pending

1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone

8. Lease Name and Well No.
Escrito D20-2409 02H

2. Name of Operator Encana Oil & Gas (USA) Inc.

9. API Well No.
30-045-35705

3a. Address 370 17th Street, Suite 1700
Denver, CO 80202

3b. Phone No. *(include area code)*
720-876-5919

10. Field and Pool, or Exploratory
Bisti Lower-Gallup

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*

At surface D 1,210' FNL, 264' FWL, Section 20, T24N, R9W NWNW SHL

At proposed prod. zone E 1,980' FNL, 330' FWL, Section 19, T24N, R9W SWSW BHL Sec 19, T24N, R9W

11. Sec., T. R. M. or Blk. and Survey or Area
Section 20, T24N, R9W NMPM

14. Distance in miles and direction from nearest town or post office*
+/- 34.2 miles South from the intersection of US HWY 64 & US HWY 550 in Bloomfield, NM

12. County or Parish
San Juan

13. State
NM

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 19, T24N, R9W

16. No. of acres in lease
NMNM 4958:1,721.01 acres
BIA NO-G-0130-1462:160 acres

17. Spacing Unit dedicated to this well
159.95 acres- S/2 N/2 of Sec. 19, T24N, R9W

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.
SHL is +/- 30' North of Escrito D20-2409 03H

19. Proposed Depth
5,236' TVD; 10,271' MD

20. BLM/BIA Bond No. on file
COB-000235; Allottee Minerals: 105073453

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
6,828' GL; 6,844' KB

22. Approximate date work will start*
03/05/2016

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:

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

25. Signature	Name *(Printed/Typed)*	Date
Jillian McGrath	Jillian McGrath	7/30/15
Title: Regulatory Analyst		
Approved by *(Signature)* /s/ Monica Kuehling	Name *(Printed/Typed)*	Date 11/12/15
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)

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

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)

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

NMOCD

DISTRICT I
1625 N. French Dr., Hobbs, N.M. 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

DISTRICT II
811 S. First St., Artesia, N.M. 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 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

RECEIVED
JUL 31 2015
Farmington Field Office
Bureau of Land Management

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 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-045-35705	5890	BISTI LOWER-GALLUP

[4] Property Code	[5] Property Name	[6] Well Number
315679	ESCRITO D20-2409	02H

[7] OGRID No.	[8] Operator Name	[9] Elevation
282327	ENCANA OIL & GAS (USA) INC.	6827.5'

[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	20	24N	9W		1210'	NORTH	264'	WEST	SAN JUAN

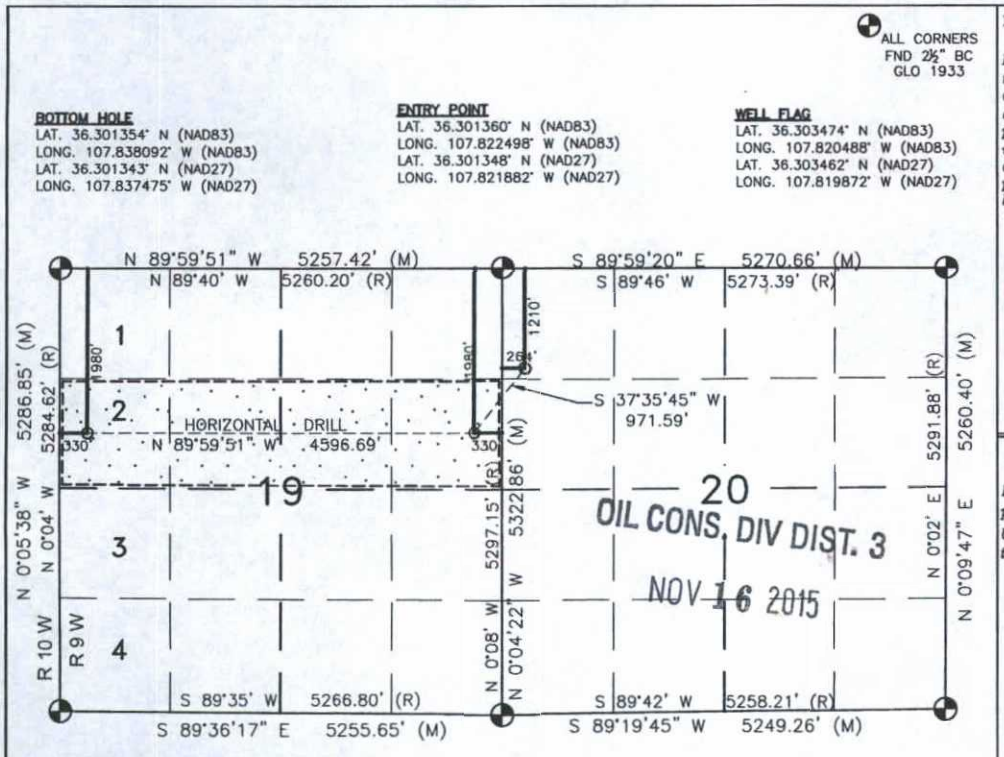
[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	19	24N	9W	2	1980'	NORTH	330'	WEST	SAN JUAN

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
PROJECT AREA 159.95 ACRES S/2 N/2 SEC. 19			

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



NORTHEAST CORNER SEC. 19
LAT. 36.306791' N (NAD83)
LONG. 107.839226' W (NAD83)
LAT. 36.306780' N (NAD27)
LONG. 107.838609' W (NAD27)

NORTHWEST CORNER SEC. 19
LAT. 36.306797' N (NAD83)
LONG. 107.821390' W (NAD83)
LAT. 36.306785' N (NAD27)
LONG. 107.820774' W (NAD27)

SOUTHEAST CORNER SEC. 20
LAT. 36.292273' N (NAD83)
LONG. 107.839186' W (NAD83)
LAT. 36.292261' N (NAD27)
LONG. 107.838569' W (NAD27)

SOUTHWEST CORNER SEC. 19
LAT. 36.292181' N (NAD83)
LONG. 107.821359' W (NAD83)
LAT. 36.292217' N (NAD27)
LONG. 107.820743' 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.

Jillian McGrath 7/30/15
Signature Date

Jillian McGrath
Printed Name

Jillian.McGrath@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.

AUGUST 27, 2014
Date of Survey

Signature and Seal of Professional Surveyor:

HENRY P. BROADHURST
NEW MEXICO
11393
05/31/2015
PROFESSIONAL SURVEYOR

Sheet A

Escrito D20-2409 02H
SHL: 1210' FNL, 264' FWL, Sec 20, T24N, R9W
BHL: 1980' FNL, 330' FWL, Sec 19, T24N, R9W
San Juan, New Mexico
Lease Number: NMNM 4958 & BIA NO-G-0103-1462

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.	838
Kirtland Shale	986
Fruitland Coal	1,286
Pictured Cliffs Ss.	1,601
Lewis Shale	1,736
Cliffhouse Ss.	2,348
Menefee Fn.	3,098
Point Lookout Ss.	4,042
Mancos Shale	4,223
Mancos Silt	4,766
Gallup Fn.	5,034
Base Gallup	5,343

The referenced surface elevation is 6828', KB 6844'

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

Substance	Formation	Depth (TVD) units = feet
Water/Gas	Fruitland Coal	1,286
Oil/Gas	Pictured Cliffs Ss.	1,601
Oil/Gas	Cliffhouse Ss.	2,348
Gas	Menefee Fn.	3,098
Oil/Gas	Point Lookout Ss.	4,042
Oil/Gas	Mancos Shale	4,223
Oil/Gas	Mancos Silt	4,766
Oil/Gas	Gallup Fn.	5,034

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

Escrito D20-2409 02H
SHL: 1210' FNL, 264' FWL, Sec 20, T24N, R9W
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San Juan, New Mexico
Lease Number: NMNM 4958 & BIA NO-G-0103-1462

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'-5676'	8 3/4"	7"	26#	J55, LTC New
Production Liner	5576'-10271'	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.

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San Juan, New Mexico
Lease Number: NMNM 4958 & BIA NO-G-0103-1462

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'-5676'	100% open hole excess Stage 1 Lead: 529 sks Stage 1 Tail: 402 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	5576'-10271'	50% OH excess Stage 1 Blend Total: 267sks	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 800'. Directional plans are attached.

Description	Proposed Depth (TVD/MD)	Formation
Horizontal Lateral TD	5236'/10271'	Gallup

Escrito D20-2409 02H
SHL: 1210' FNL, 264' FWL, Sec 20, T24N, R9W
BHL: 1980' FNL, 330' FWL, Sec 19, T24N, R9W
San Juan, New Mexico
Lease Number: NMNM 4958 & BIA NO-G-0103-1462

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'-5276'/5676	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"	5276'/5676'-5236'/10271'	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 +/- 2469 psi based on a 9.0 ppg at 5277' TVD of the horizontal lateral target. No abnormal pressure or temperatures are anticipated.

No hydrogen sulfide gas is anticipated, however, if H_2S 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 March 5, 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: 1210' FNL, 264' FWL, Sec 20, T24N, R9W County: San Juan WELL: Escrito D20-2409 02H	Encana Oil & Gas (USA) Inc. WELL SUMMARY		ENG: 0 RIG: Unassigned GLE: 6827.5 RKBE: 6843.5	7/30/15

MWD LWD	OPEN HOLE LOGGING	FORM	DEPTH TVD	DEPTH MD	HOLE SIZE	CASING SPECS	MW MUD TYPE	DEVIATION INFORMATION
			60	60'	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	San Jose Fn. Nacimiento Fn. 9 5/8" Csg	0 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	838 986 1,286 1,601 1,736 2,348 3,098 4,042 4,223		8 3/4	7" 26ppf J55 LTC TOC @ surface (100% OH excess - 70% Lead 30% Tail) Stage 1 Total: 932sks Stage 1 Lead: 529 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: 402 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°
	Mud logger onsite	KOP	800	800.00				
Surveys every 30' through the curve		Mancos Silt Gallup Fn. 7" Csg	4,766 5,034 5,276	5,676'				
Surveys every stand to TD unless directed otherwise by Geologist MWD Gamma Directional	No OH Logs	Horizontal Target TD Base Gallup	5,277 5,236 5,343	10,271	6 1/8	100' overlap at liner top 4595' Drilled Lateral 4 1/2" 11.6ppf SB80 LTC TOC @ hanger (50% OH excess) Stage 1 Total: 267sks Stage 1 Blend: 267 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 + 60 lbs/sack Calcium Carbonate + 124.4% Fresh Water. Yield 2.63 cuft/sk.	WBM 8.3-10	Horz Inc/TVD 90.5deg/5276.5ft TD = 10271.1 MD

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 800', 8 3/4 inch holesize
5) Start curve at 10deg/100' build rate
6) Drill to csg point of 5676' MD
7) R&C 7" csg, circ cmt to surface
8) Land at ~55 deg, drill lateral to 10271' run 4 1/2 inch cemented liner

ENCANA

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	800.0	0.00	0.00	800.0	0.0	0.0	0.00	0.00	0.0	
3	1316.5	10.33	181.24	1313.7	-46.4	-1.0	2.00	181.24	1.0	
4	4773.4	10.33	181.24	4714.5	-666.1	-14.4	0.00	0.00	14.7	
5	5676.0	90.50	269.98	5275.8	-769.5	-592.3	10.00	88.67	592.5	ESCRITO D20-2409 02H POE
6	10271.1	90.50	269.98	5235.7	-771.3	-5187.2	0.00	0.00	5187.4	ESCRITO D20-2409 02H PBHL

Project: San Juan County, NM
Site: S20-T24N-R9W
Well: ESCRITO D20-2409 02H
Wellbore: OH
Design: PLAN #1

PLAN #1
ESCRITO D20-2409 02H
1500X; LR
16' KB @ 6844.0usft
GL @ 6828.0
North American Datum 1983
Well ESCRITO D20-2409 02H, True North

Type	Target	Azimuth	Origin Type	N/S	E/W	From TVD
User	No Target (Freehand)	269.98	Slot	0.0	0.0	0.0

	TVD	+N/-S	+E/-W	Latitude	Longitude
ESCRITO D20-2409 02H PBHL	5235.7	-771.3	-5187.2	36.301354	-107.838092
ESCRITO D20-2409 02H POE	5275.8	-769.5	-592.3	36.301366	-107.822498

OIL CONS. DIV DIST. 3
NOV 16 2015

South(-)/North(+) (1200 usft/in)

West(-)/East(+) (1200 usft/in)

ESCRITO D20-2409 02H POE
ESCRITO D20-2409 02H PBHL
1980
330
1210
264

True Vertical Depth (1250 usft/in)

Ojo Alamo Ss.
Kirtland Shale
Fruitland Coal
Pictured Cliffs Ss.
Lewis Shale
Cliffhouse Ss.
Menefee Fn.
Point Lookout Ss.
Mancos Shale
Mancos Silt
Gallup Fn.
Horizontal Target
Base Gallup

9 5/8"
KOP @ 800'
EOB; INC=10.33°
Start DLS 10.00 TFO 88.67
7" ICP
LP @ 5275' TVD; 90.5°
ESCRITO D20-2409 02H POE
7" ICP TO D20-2409 02H POE
ESCRITO D20-2409 02H PBHL
TD at 10271.1

Vertical Section at 269.98° (1250 usft/in)

ESCRITO D20-2409 01H
KOP @ 800'
ESCRITO D20-2409 02H
ESCRITO D20-2409 03H
EOB; INC=10.33°
ESCRITO D20-2409 04H

South(-)/North(+) (50 usft/in)

West(-)/East(+) (50 usft/in)

T M

Azimuths to True North
Magnetic North: 9.22°

Magnetic Field
Strength: 49906.0snT
Dip Angle: 62.95°
Date: 6/30/2015
Model: HDGM

CATHEDRAL

WELL DETAILS: ESCRITO D20-2409 02H

+N/-S	+E/-W	Northing	Ground Level: 6828.0 Easting	Latitude	Longitude	Slot
0.0	0.0	1929764.61	2726876.54	36.303474	-107.820488	

CATHEDRAL

Planning Report

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well ESCRITO D20-2409 02H
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	16' KB @ 6844.0usft
Project:	San Juan County, NM	**MD Reference:**	16' KB @ 6844.0usft
Site:	S20-T24N-R9W	**North Reference:**	True
Well:	ESCRITO D20-2409 02H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
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 S20-T24N-R9W

Site Position:		**Northing:**	1,929,794.46 usft	**Latitude:**	36.303556
From:	Lat/Long	**Easting:**	2,726,876.54 usft	**Longitude:**	-107.820488
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16"	**Grid Convergence:**	0.01 °

Well ESCRITO D20-2409 02H

Well Position	**+N/-S**	0.0 usft	**Northing:**	1,929,764.61 usft	**Latitude:**	36.303474
	+E/-W	0.0 usft	**Easting:**	2,726,876.54 usft	**Longitude:**	-107.820488
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	0.0 usft	**Ground Level:**	6,828.0 usft

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	6/30/2015	9.22	62.95	49,906

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	269.98

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	
800.0	0.00	0.00	800.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,316.5	10.33	181.24	1,313.7	-46.4	-1.0	2.00	2.00	0.00	181.24	
4,773.4	10.33	181.24	4,714.5	-666.1	-14.4	0.00	0.00	0.00	0.00	
5,676.0	90.50	269.98	5,275.8	-769.5	-592.3	10.00	8.88	9.83	88.67	ESCRITO D20-2409 (
10,271.1	90.50	269.98	5,235.7	-771.3	-5,187.2	0.00	0.00	0.00	0.00	ESCRITO D20-2409 (

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well ESCRITO D20-2409 02H
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	16' KB @ 6844.0usft
Project:	San Juan County, NM	**MD Reference:**	16' KB @ 6844.0usft
Site:	S20-T24N-R9W	**North Reference:**	True
Well:	ESCRITO D20-2409 02H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
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	
795.0	0.00	0.00	795.0	0.0	0.0	0.0	0.00	0.00	Ojo Alamo Ss.
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	KOP @ 800'
900.0	2.00	181.24	900.0	-1.7	0.0	0.0	2.00	2.00	
943.1	2.86	181.24	943.0	-3.6	-0.1	0.1	2.00	2.00	Kirtland Shale
1,000.0	4.00	181.24	999.8	-7.0	-0.2	0.2	2.00	2.00	
1,100.0	6.00	181.24	1,099.5	-15.7	-0.3	0.3	2.00	2.00	
1,200.0	8.00	181.24	1,198.7	-27.9	-0.6	0.6	2.00	2.00	
1,244.8	8.90	181.24	1,243.0	-34.5	-0.7	0.8	2.00	2.00	Fruitland Coal
1,300.0	10.00	181.24	1,297.5	-43.5	-0.9	1.0	2.00	2.00	
1,316.5	10.33	181.24	1,313.7	-46.4	-1.0	1.0	2.00	2.00	EOB; INC=10.33°
1,400.0	10.33	181.24	1,395.9	-61.4	-1.3	1.4	0.00	0.00	
1,500.0	10.33	181.24	1,494.2	-79.3	-1.7	1.7	0.00	0.00	
1,564.8	10.33	181.24	1,558.0	-90.9	-2.0	2.0	0.00	0.00	Pictured Cliffs Ss.
1,600.0	10.33	181.24	1,592.6	-97.2	-2.1	2.1	0.00	0.00	
1,700.0	10.33	181.24	1,691.0	-115.2	-2.5	2.5	0.00	0.00	
1,702.0	10.33	181.24	1,693.0	-115.5	-2.5	2.5	0.00	0.00	Lewis Shale
1,800.0	10.33	181.24	1,789.4	-133.1	-2.9	2.9	0.00	0.00	
1,900.0	10.33	181.24	1,887.7	-151.0	-3.3	3.3	0.00	0.00	
2,000.0	10.33	181.24	1,986.1	-169.0	-3.7	3.7	0.00	0.00	
2,100.0	10.33	181.24	2,084.5	-186.9	-4.0	4.1	0.00	0.00	
2,200.0	10.33	181.24	2,182.9	-204.8	-4.4	4.5	0.00	0.00	
2,300.0	10.33	181.24	2,281.3	-222.7	-4.8	4.9	0.00	0.00	
2,324.1	10.33	181.24	2,305.0	-227.1	-4.9	5.0	0.00	0.00	Cliffhouse Ss.
2,400.0	10.33	181.24	2,379.6	-240.7	-5.2	5.3	0.00	0.00	
2,500.0	10.33	181.24	2,478.0	-258.6	-5.6	5.7	0.00	0.00	
2,600.0	10.33	181.24	2,576.4	-276.5	-6.0	6.1	0.00	0.00	
2,700.0	10.33	181.24	2,674.8	-294.4	-6.4	6.5	0.00	0.00	
2,800.0	10.33	181.24	2,773.2	-312.4	-6.8	6.9	0.00	0.00	
2,900.0	10.33	181.24	2,871.5	-330.3	-7.2	7.3	0.00	0.00	
3,000.0	10.33	181.24	2,969.9	-348.2	-7.5	7.7	0.00	0.00	
3,086.4	10.33	181.24	3,054.9	-363.7	-7.9	8.0	0.00	0.00	Menefee Fn.
3,100.0	10.33	181.24	3,068.3	-366.2	-7.9	8.1	0.00	0.00	
3,200.0	10.33	181.24	3,166.7	-384.1	-8.3	8.5	0.00	0.00	
3,300.0	10.33	181.24	3,265.1	-402.0	-8.7	8.8	0.00	0.00	
3,400.0	10.33	181.24	3,363.4	-419.9	-9.1	9.2	0.00	0.00	
3,500.0	10.33	181.24	3,461.8	-437.9	-9.5	9.6	0.00	0.00	
3,600.0	10.33	181.24	3,560.2	-455.8	-9.9	10.0	0.00	0.00	
3,700.0	10.33	181.24	3,658.6	-473.7	-10.3	10.4	0.00	0.00	
3,800.0	10.33	181.24	3,757.0	-491.6	-10.6	10.8	0.00	0.00	
3,900.0	10.33	181.24	3,855.3	-509.6	-11.0	11.2	0.00	0.00	
4,000.0	10.33	181.24	3,953.7	-527.5	-11.4	11.6	0.00	0.00	
4,045.9	10.33	181.24	3,998.9	-535.7	-11.6	11.8	0.00	0.00	Point Lookout Ss.
4,100.0	10.33	181.24	4,052.1	-545.4	-11.8	12.0	0.00	0.00	
4,200.0	10.33	181.24	4,150.5	-563.4	-12.2	12.4	0.00	0.00	

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well ESCRITO D20-2409 02H
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	16' KB @ 6844.0usft
Project:	San Juan County, NM	**MD Reference:**	16' KB @ 6844.0usft
Site:	S20-T24N-R9W	**North Reference:**	True
Well:	ESCRITO D20-2409 02H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
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
4,229.9	10.33	181.24	4,179.9	-568.7	-12.3	12.5	0.00	0.00	Mancos Shale
4,300.0	10.33	181.24	4,248.8	-581.3	-12.6	12.8	0.00	0.00	
4,400.0	10.33	181.24	4,347.2	-599.2	-13.0	13.2	0.00	0.00	
4,500.0	10.33	181.24	4,445.6	-617.1	-13.4	13.6	0.00	0.00	
4,600.0	10.33	181.24	4,544.0	-635.1	-13.8	14.0	0.00	0.00	
4,700.0	10.33	181.24	4,642.4	-653.0	-14.1	14.4	0.00	0.00	
4,773.4	10.33	181.24	4,714.5	-666.1	-14.4	14.7	0.00	0.00	Start DLS 10.00 TFO 88.67
4,800.0	10.72	195.70	4,740.7	-670.9	-15.2	15.4	10.00	1.48	
4,829.7	11.87	209.74	4,769.8	-676.2	-17.4	17.7	10.00	3.85	Mancos Silt
4,900.0	16.48	231.85	4,838.1	-688.7	-28.9	29.1	10.00	6.56	
5,000.0	25.01	246.90	4,931.6	-705.8	-59.5	59.8	10.00	8.54	
5,100.0	34.31	254.40	5,018.4	-721.7	-106.2	106.5	10.00	9.30	
5,122.8	36.48	255.62	5,037.0	-725.1	-119.0	119.3	10.00	9.51	Gallup Fn.
5,200.0	43.90	258.97	5,095.9	-735.9	-167.6	167.8	10.00	9.60	
5,300.0	53.61	262.17	5,161.8	-748.1	-241.7	241.9	10.00	9.71	
5,400.0	63.38	264.65	5,214.0	-757.8	-326.3	326.5	10.00	9.78	
5,500.0	73.19	266.73	5,250.9	-764.7	-418.8	419.1	10.00	9.81	
5,600.0	83.02	268.61	5,271.5	-768.6	-516.4	516.7	10.00	9.83	
5,676.0	90.50	269.98	5,275.8	-769.5	-592.3	592.5	10.00	9.84	LP @ 5275' TVD; 90.5° - 7" ICP - ESCRITO D2
5,700.0	90.50	269.98	5,275.6	-769.6	-616.3	616.5	0.00	0.00	
5,800.0	90.50	269.98	5,274.7	-769.6	-716.2	716.5	0.00	0.00	
5,900.0	90.50	269.98	5,273.8	-769.6	-816.2	816.5	0.00	0.00	
6,000.0	90.50	269.98	5,273.0	-769.7	-916.2	916.5	0.00	0.00	
6,100.0	90.50	269.98	5,272.1	-769.7	-1,016.2	1,016.5	0.00	0.00	
6,200.0	90.50	269.98	5,271.2	-769.7	-1,116.2	1,116.5	0.00	0.00	
6,300.0	90.50	269.98	5,270.4	-769.8	-1,216.2	1,216.5	0.00	0.00	
6,400.0	90.50	269.98	5,269.5	-769.8	-1,316.2	1,316.5	0.00	0.00	
6,500.0	90.50	269.98	5,268.6	-769.9	-1,416.2	1,416.5	0.00	0.00	
6,600.0	90.50	269.98	5,267.7	-769.9	-1,516.2	1,516.5	0.00	0.00	
6,700.0	90.50	269.98	5,266.9	-769.9	-1,616.2	1,616.5	0.00	0.00	
6,800.0	90.50	269.98	5,266.0	-770.0	-1,716.2	1,716.5	0.00	0.00	
6,900.0	90.50	269.98	5,265.1	-770.0	-1,816.2	1,816.5	0.00	0.00	
7,000.0	90.50	269.98	5,264.2	-770.0	-1,916.2	1,916.5	0.00	0.00	
7,100.0	90.50	269.98	5,263.4	-770.1	-2,016.2	2,016.5	0.00	0.00	
7,200.0	90.50	269.98	5,262.5	-770.1	-2,116.2	2,116.5	0.00	0.00	
7,300.0	90.50	269.98	5,261.6	-770.2	-2,216.2	2,216.5	0.00	0.00	
7,400.0	90.50	269.98	5,260.8	-770.2	-2,316.2	2,316.5	0.00	0.00	
7,500.0	90.50	269.98	5,259.9	-770.2	-2,416.2	2,416.5	0.00	0.00	
7,600.0	90.50	269.98	5,259.0	-770.3	-2,516.2	2,516.4	0.00	0.00	
7,700.0	90.50	269.98	5,258.1	-770.3	-2,616.2	2,616.4	0.00	0.00	
7,800.0	90.50	269.98	5,257.3	-770.3	-2,716.2	2,716.4	0.00	0.00	
7,900.0	90.50	269.98	5,256.4	-770.4	-2,816.2	2,816.4	0.00	0.00	
8,000.0	90.50	269.98	5,255.5	-770.4	-2,916.2	2,916.4	0.00	0.00	
8,100.0	90.50	269.98	5,254.6	-770.5	-3,016.2	3,016.4	0.00	0.00	
8,200.0	90.50	269.98	5,253.8	-770.5	-3,116.2	3,116.4	0.00	0.00	
8,300.0	90.50	269.98	5,252.9	-770.5	-3,216.2	3,216.4	0.00	0.00	
8,400.0	90.50	269.98	5,252.0	-770.6	-3,316.1	3,316.4	0.00	0.00	
8,500.0	90.50	269.98	5,251.2	-770.6	-3,416.1	3,416.4	0.00	0.00	
8,600.0	90.50	269.98	5,250.3	-770.6	-3,516.1	3,516.4	0.00	0.00	
8,700.0	90.50	269.98	5,249.4	-770.7	-3,616.1	3,616.4	0.00	0.00	
8,800.0	90.50	269.98	5,248.5	-770.7	-3,716.1	3,716.4	0.00	0.00	
8,900.0	90.50	269.98	5,247.7	-770.8	-3,816.1	3,816.4	0.00	0.00	

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well ESCRITO D20-2409 02H
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	16' KB @ 6844.0usft
Project:	San Juan County, NM	**MD Reference:**	16' KB @ 6844.0usft
Site:	S20-T24N-R9W	**North Reference:**	True
Well:	ESCRITO D20-2409 02H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
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
9,000.0	90.50	269.98	5,246.8	-770.8	-3,916.1	3,916.4	0.00	0.00	
9,100.0	90.50	269.98	5,245.9	-770.8	-4,016.1	4,016.4	0.00	0.00	
9,200.0	90.50	269.98	5,245.0	-770.9	-4,116.1	4,116.4	0.00	0.00	
9,300.0	90.50	269.98	5,244.2	-770.9	-4,216.1	4,216.4	0.00	0.00	
9,400.0	90.50	269.98	5,243.3	-770.9	-4,316.1	4,316.4	0.00	0.00	
9,500.0	90.50	269.98	5,242.4	-771.0	-4,416.1	4,416.4	0.00	0.00	
9,600.0	90.50	269.98	5,241.6	-771.0	-4,516.1	4,516.4	0.00	0.00	
9,700.0	90.50	269.98	5,240.7	-771.0	-4,616.1	4,616.4	0.00	0.00	
9,800.0	90.50	269.98	5,239.8	-771.1	-4,716.1	4,716.4	0.00	0.00	
9,900.0	90.50	269.98	5,238.9	-771.1	-4,816.1	4,816.4	0.00	0.00	
10,000.0	90.50	269.98	5,238.1	-771.2	-4,916.1	4,916.4	0.00	0.00	
10,100.0	90.50	269.98	5,237.2	-771.2	-5,016.1	5,016.4	0.00	0.00	
10,200.0	90.50	269.98	5,236.3	-771.2	-5,116.1	5,116.3	0.00	0.00	
10,271.1	90.50	269.98	5,235.7	-771.3	-5,187.2	5,187.4	0.00	0.00	TD at 10271.1 - ESCRITO D20-2409 02H 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
ESCRITO D20-2409 02I - plan hits target center - Point	0.00	0.00	5,235.7	-771.3	-5,187.2	1,928,992.66	2,721,689.49	36.301354	-107.838092
ESCRITO D20-2409 02I - plan hits target center - Point	0.00	0.00	5,275.8	-769.5	-592.3	1,928,994.99	2,726,284.38	36.301360	-107.822498

Casing Points

	Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
	500.0	500.0	9 5/8"	0	0
	5,676.0	5,275.8	7" ICP	0	0

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well ESCRITO D20-2409 02H
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	16' KB @ 6844.0usft
Project:	San Juan County, NM	**MD Reference:**	16' KB @ 6844.0usft
Site:	S20-T24N-R9W	**North Reference:**	True
Well:	ESCRITO D20-2409 02H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
795.0	795.0	Ojo Alamo Ss.		-0.50	269.98
943.1	943.0	Kirtland Shale		-0.50	269.98
1,244.8	1,243.0	Fruitland Coal		-0.50	269.98
1,564.8	1,558.0	Pictured Cliffs Ss.		-0.50	269.98
1,702.0	1,693.0	Lewis Shale		-0.50	269.98
2,324.1	2,305.0	Cliffhouse Ss.		-0.50	269.98
3,086.4	3,055.0	Menefee Fn.		-0.50	269.98
4,045.9	3,999.0	Point Lookout Ss.		-0.50	269.98
4,229.9	4,180.0	Mancos Shale		-0.50	269.98
4,829.7	4,770.0	Mancos Silt		-0.50	269.98
5,122.8	5,038.0	Gallup Fn.		-0.50	269.98

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
800.0	800.0	0.0	0.0	KOP @ 800'
1,316.5	1,313.7	-46.4	-1.0	EOB; INC=10.33°
4,773.4	4,714.5	-666.1	-14.4	Start DLS 10.00 TFO 88.67
5,676.0	5,275.8	-769.5	-592.3	LP @ 5275' TVD; 90.5°
10,271.1	5,235.7	-771.3	-5,187.2	TD at 10271.1

EnCana Oil & Gas (USA) Inc

San Juan County, NM
S20-T24N-R9W
ESCRITO D20-2409 02H
OH
PLAN #1

Anticollision Report

30 June, 2015

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well ESCRITO D20-2409 02H
Project:	San Juan County, NM	**TVD Reference:**	16' KB @ 6844.0usft
Reference Site:	S20-T24N-R9W	**MD Reference:**	16' KB @ 6844.0usft
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	ESCRITO D20-2409 02H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**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	**Error Model:**	Systematic Ellipse
Depth Range:	Unlimited	**Scan Method:**	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,500.0usft	**Error Surface:**	Elliptical Conic
Warning Levels Evaluated at:	2.00 **Sigma**		

Survey Tool Program **Date** 6/30/2015

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	10,271.1	PLAN #1 (OH)	MWD	MWD - Standard

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
S20-T24N-R9W						
ESCRITO D20-2409 01H - OH - PLAN #1	500.0	500.0	29.9	26.7	9.420	CC, ES
ESCRITO D20-2409 01H - OH - PLAN #1	10,271.1	10,211.9	1,319.6	1,003.9	4.179	SF
ESCRITO D20-2409 03H - OH - PLAN #1	832.9	833.5	24.0	18.4	4.314	CC, ES
ESCRITO D20-2409 03H - OH - PLAN #1	900.0	899.7	25.3	19.2	4.160	SF
ESCRITO D20-2409 04H - OH - PLAN #1	500.0	500.0	60.1	56.9	18.954	CC
ESCRITO D20-2409 04H - OH - PLAN #1	5,381.1	5,350.9	71.7	31.3	1.775	ES, SF

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well ESCRITO D20-2409 02H
Project:	San Juan County, NM	**TVD Reference:**	16' KB @ 6844.0usft
Reference Site:	S20-T24N-R9W	**MD Reference:**	16' KB @ 6844.0usft
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	ESCRITO D20-2409 02H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	PLAN #1	**Offset TVD Reference:**	Offset Datum

Offset Design S20-T24N-R9W - ESCRITO D20-2409 01H - OH - PLAN #1 — Offset Site Error: 0.0 usft

Survey Program: 0-MWD — Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	0.00	29.9	0.0	29.9				
100.0	100.0	100.0	100.0	0.2	0.2	0.00	29.9	0.0	29.9	29.5	0.30	99.132	
200.0	200.0	200.0	200.0	0.5	0.5	0.00	29.9	0.0	29.9	28.8	1.02	29.321	
300.0	300.0	300.0	300.0	0.9	0.9	0.00	29.9	0.0	29.9	28.1	1.74	17.205	
400.0	400.0	400.0	400.0	1.2	1.2	0.00	29.9	0.0	29.9	27.4	2.45	12.174	
500.0	500.0	500.0	500.0	1.6	1.6	0.00	29.9	0.0	29.9	26.7	3.17	9.420	CC, ES
600.0	600.0	598.9	598.9	1.9	1.9	-0.12	31.6	-0.1	31.6	27.7	3.91	8.071	
700.0	700.0	697.6	697.5	2.3	2.3	-0.41	36.7	-0.3	36.7	32.1	4.69	7.833	
800.0	800.0	795.9	795.3	2.7	2.7	-0.75	45.1	-0.6	45.3	39.9	5.48	8.272	
900.0	900.0	894.6	893.4	3.0	3.0	177.78	56.1	-1.0	58.2	52.0	6.18	9.413	
1,000.0	999.8	993.2	991.5	3.3	3.4	177.74	67.1	-1.4	74.6	67.8	6.85	10.896	
1,100.0	1,099.5	1,091.2	1,088.8	3.7	3.8	177.79	78.1	-1.9	94.4	86.9	7.52	12.561	
1,200.0	1,198.7	1,188.5	1,185.5	4.0	4.1	177.88	89.1	-2.3	117.7	109.5	8.19	14.363	
1,300.0	1,297.5	1,284.9	1,281.3	4.4	4.5	177.98	99.9	-2.7	144.3	135.5	8.87	16.268	
1,400.0	1,395.9	1,380.6	1,376.4	4.8	4.9	178.09	110.6	-3.1	173.1	163.6	9.55	18.135	
1,500.0	1,494.2	1,476.4	1,471.5	5.2	5.3	178.17	121.4	-3.5	202.0	191.8	10.22	19.761	
1,600.0	1,592.6	1,572.1	1,566.7	5.6	5.6	178.23	132.1	-4.0	230.9	220.0	10.90	21.174	
1,700.0	1,691.0	1,667.9	1,661.8	6.0	6.0	178.28	142.9	-4.4	259.7	248.1	11.59	22.413	
1,800.0	1,789.4	1,763.6	1,757.0	6.4	6.4	178.32	153.7	-4.8	288.6	276.3	12.28	23.507	
1,900.0	1,887.7	1,859.3	1,852.1	6.9	6.8	178.35	164.4	-5.2	317.4	304.5	12.97	24.478	
2,000.0	1,986.1	1,955.1	1,947.2	7.3	7.1	178.37	175.2	-5.6	346.3	332.6	13.66	25.346	
2,100.0	2,084.5	2,050.8	2,042.4	7.7	7.5	178.39	185.9	-6.0	375.2	360.8	14.36	26.126	
2,200.0	2,182.9	2,146.6	2,137.5	8.2	7.9	178.41	196.7	-6.5	404.0	389.0	15.06	26.831	
2,300.0	2,281.3	2,242.3	2,232.6	8.6	8.3	178.43	207.4	-6.9	432.9	417.1	15.76	27.469	
2,400.0	2,379.6	2,338.1	2,327.8	9.1	8.6	178.44	218.2	-7.3	461.8	445.3	16.46	28.052	
2,500.0	2,478.0	2,433.8	2,422.9	9.5	9.0	178.45	228.9	-7.7	490.6	473.4	17.16	28.584	
2,600.0	2,576.4	2,529.6	2,518.1	10.0	9.4	178.47	239.7	-8.1	519.5	501.6	17.87	29.072	
2,700.0	2,674.8	2,625.3	2,613.2	10.4	9.8	178.48	250.4	-8.5	548.3	529.8	18.57	29.522	
2,800.0	2,773.2	2,721.0	2,708.3	10.9	10.2	178.48	261.2	-9.0	577.2	557.9	19.28	29.938	
2,900.0	2,871.5	2,816.8	2,803.5	11.3	10.5	178.49	271.9	-9.4	606.1	586.1	19.99	30.323	
3,000.0	2,969.9	2,912.5	2,898.6	11.8	10.9	178.50	282.7	-9.8	634.9	614.2	20.69	30.681	
3,100.0	3,068.3	3,008.3	2,993.8	12.2	11.3	178.51	293.4	-10.2	663.8	642.4	21.40	31.014	
3,200.0	3,166.7	3,104.0	3,088.9	12.7	11.7	178.51	304.2	-10.6	692.6	670.5	22.11	31.325	
3,300.0	3,265.1	3,199.8	3,184.0	13.2	12.1	178.52	314.9	-11.0	721.5	698.7	22.82	31.616	
3,400.0	3,363.4	3,295.5	3,279.2	13.6	12.4	178.52	325.7	-11.5	750.4	726.8	23.53	31.889	
3,500.0	3,461.8	3,391.3	3,374.3	14.1	12.8	178.53	336.4	-11.9	779.2	755.0	24.24	32.145	
3,600.0	3,560.2	3,487.0	3,469.4	14.5	13.2	178.53	347.2	-12.3	808.1	783.1	24.95	32.386	
3,700.0	3,658.6	3,582.7	3,564.6	15.0	13.6	178.54	357.9	-12.7	836.9	811.3	25.66	32.613	
3,800.0	3,757.0	3,678.5	3,659.7	15.5	14.0	178.54	368.7	-13.1	865.8	839.4	26.37	32.828	
3,900.0	3,855.3	3,774.2	3,754.9	15.9	14.3	178.54	379.4	-13.5	894.7	867.6	27.09	33.031	
4,000.0	3,953.7	3,870.0	3,850.0	16.4	14.7	178.55	390.2	-14.0	923.5	895.7	27.80	33.223	
4,100.0	4,052.1	3,965.7	3,945.1	16.8	15.1	178.55	400.9	-14.4	952.4	923.9	28.51	33.406	
4,200.0	4,150.5	4,061.5	4,040.3	17.3	15.5	178.55	411.7	-14.8	981.3	952.0	29.22	33.579	
4,300.0	4,248.8	4,157.2	4,135.4	17.8	15.9	178.56	422.4	-15.2	1,010.1	980.2	29.94	33.743	
4,400.0	4,347.2	4,253.0	4,230.5	18.2	16.2	178.56	433.2	-15.6	1,039.0	1,008.3	30.65	33.900	
4,500.0	4,445.6	4,348.7	4,325.7	18.7	16.6	178.56	443.9	-16.0	1,067.8	1,036.5	31.36	34.050	
4,600.0	4,544.0	4,444.4	4,420.8	19.1	17.0	178.56	454.7	-16.5	1,096.7	1,064.6	32.07	34.192	
4,700.0	4,642.4	4,540.2	4,516.0	19.6	17.4	178.57	465.4	-16.9	1,125.6	1,092.8	32.79	34.329	
4,800.0	4,740.7	4,635.9	4,611.1	20.1	17.8	163.58	476.2	-17.3	1,154.4	1,120.9	33.50	34.459	
4,900.0	4,838.1	4,730.9	4,705.5	20.5	18.1	126.01	486.9	-17.9	1,183.0	1,148.8	34.21	34.584	
5,000.0	4,931.6	4,828.4	4,801.6	21.0	18.5	110.00	497.7	-28.8	1,210.9	1,176.0	34.93	34.664	
5,100.0	5,018.4	4,930.1	4,898.4	21.4	18.9	101.78	508.7	-57.6	1,237.2	1,201.4	35.72	34.639	

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	**Local Co-ordinate Reference:**	Well ESCRITO D20-2409 02H
Project:	San Juan County, NM	**TVD Reference:**	16' KB @ 6844.0usft
Reference Site:	S20-T24N-R9W	**MD Reference:**	16' KB @ 6844.0usft
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	ESCRITO D20-2409 02H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	PLAN #1	**Offset TVD Reference:**	Offset Datum

Offset Design S20-T24N-R9W - ESCRITO D20-2409 01H - OH - PLAN #1 — Offset Site Error: 0.0 usft

Survey Program: 0-MWD — Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
5,200.0	5,095.9	5,036.8	4,992.8	21.8	19.3	96.79	519.4	-105.7	1,261.1	1,224.4	36.64	34.418	
5,300.0	5,161.8	5,149.1	5,080.8	22.2	19.8	93.54	529.4	-174.4	1,281.8	1,243.9	37.86	33.856	
5,400.0	5,214.0	5,267.1	5,157.2	22.8	20.5	91.39	538.0	-263.8	1,298.5	1,258.9	39.63	32.769	
5,500.0	5,250.9	5,390.4	5,215.7	23.6	21.6	90.06	544.7	-371.8	1,310.7	1,268.5	42.18	31.076	
5,600.0	5,271.5	5,517.9	5,250.7	24.7	23.4	89.39	548.7	-494.0	1,317.7	1,272.0	45.64	28.872	
5,700.0	5,275.6	5,640.8	5,258.7	26.2	25.5	89.27	549.7	-616.5	1,319.3	1,269.6	49.73	26.528	
5,800.0	5,274.7	5,740.8	5,258.0	28.0	27.5	89.27	549.6	-716.5	1,319.3	1,265.5	53.85	24.500	
5,900.0	5,273.8	5,840.8	5,257.3	30.1	29.7	89.28	549.6	-816.5	1,319.4	1,261.0	58.32	22.623	
6,000.0	5,273.0	5,940.8	5,256.6	32.4	32.1	89.29	549.6	-916.5	1,319.4	1,256.3	63.08	20.917	
6,100.0	5,272.1	6,040.8	5,255.9	34.7	34.5	89.30	549.6	-1,016.5	1,319.4	1,251.3	68.06	19.385	
6,200.0	5,271.2	6,140.8	5,255.2	37.2	37.1	89.30	549.5	-1,116.5	1,319.4	1,246.1	73.23	18.018	
6,300.0	5,270.4	6,240.8	5,254.5	39.8	39.7	89.31	549.5	-1,216.5	1,319.4	1,240.8	78.54	16.799	
6,400.0	5,269.5	6,340.8	5,253.8	42.5	42.4	89.32	549.5	-1,316.5	1,319.4	1,235.4	83.96	15.713	
6,500.0	5,268.6	6,440.8	5,253.1	45.2	45.1	89.33	549.4	-1,416.5	1,319.4	1,229.9	89.49	14.744	
6,600.0	5,267.7	6,540.8	5,252.4	48.0	47.9	89.33	549.4	-1,516.5	1,319.4	1,224.3	95.09	13.875	
6,700.0	5,266.9	6,640.8	5,251.7	50.8	50.8	89.34	549.4	-1,616.5	1,319.4	1,218.6	100.76	13.094	
6,800.0	5,266.0	6,740.8	5,251.0	53.6	53.6	89.35	549.4	-1,716.5	1,319.4	1,212.9	106.49	12.390	
6,900.0	5,265.1	6,840.8	5,250.3	56.5	56.5	89.36	549.3	-1,816.5	1,319.4	1,207.2	112.26	11.753	
7,000.0	5,264.2	6,940.8	5,249.6	59.3	59.4	89.36	549.3	-1,916.5	1,319.4	1,201.3	118.07	11.175	
7,100.0	5,263.4	7,040.8	5,248.9	62.2	62.3	89.37	549.3	-2,016.5	1,319.4	1,195.5	123.92	10.647	
7,200.0	5,262.5	7,140.8	5,248.2	65.2	65.2	89.38	549.2	-2,116.5	1,319.4	1,189.6	129.80	10.165	
7,300.0	5,261.6	7,240.8	5,247.5	68.1	68.2	89.39	549.2	-2,216.5	1,319.4	1,183.7	135.70	9.723	
7,400.0	5,260.8	7,340.8	5,246.8	71.0	71.1	89.40	549.2	-2,316.5	1,319.4	1,177.8	141.63	9.316	
7,500.0	5,259.9	7,440.8	5,246.1	74.0	74.1	89.40	549.1	-2,416.5	1,319.4	1,171.9	147.57	8.941	
7,600.0	5,259.0	7,540.8	5,245.4	77.0	77.1	89.41	549.1	-2,516.5	1,319.5	1,165.9	153.53	8.594	
7,700.0	5,258.1	7,640.8	5,244.7	79.9	80.0	89.42	549.1	-2,616.5	1,319.5	1,159.9	159.51	8.272	
7,800.0	5,257.3	7,740.8	5,244.0	82.9	83.0	89.43	549.1	-2,716.5	1,319.5	1,154.0	165.51	7.972	
7,900.0	5,256.4	7,840.8	5,243.3	85.9	86.0	89.43	549.0	-2,816.5	1,319.5	1,148.0	171.51	7.693	
8,000.0	5,255.5	7,940.8	5,242.6	88.9	89.0	89.44	549.0	-2,916.5	1,319.5	1,142.0	177.53	7.432	
8,100.0	5,254.6	8,040.8	5,241.9	91.9	92.0	89.45	549.0	-3,016.5	1,319.5	1,135.9	183.56	7.188	
8,200.0	5,253.8	8,140.8	5,241.2	94.9	95.1	89.46	548.9	-3,116.5	1,319.5	1,129.9	189.59	6.960	
8,300.0	5,252.9	8,240.8	5,240.5	97.9	98.1	89.46	548.9	-3,216.5	1,319.5	1,123.9	195.64	6.745	
8,400.0	5,252.0	8,340.8	5,239.8	101.0	101.1	89.47	548.9	-3,316.5	1,319.5	1,117.8	201.69	6.542	
8,500.0	5,251.2	8,440.8	5,239.1	104.0	104.1	89.48	548.9	-3,416.4	1,319.5	1,111.8	207.75	6.352	
8,600.0	5,250.3	8,540.8	5,238.4	107.0	107.1	89.49	548.8	-3,516.4	1,319.5	1,105.7	213.81	6.171	
8,700.0	5,249.4	8,640.8	5,237.7	110.0	110.2	89.49	548.8	-3,616.4	1,319.5	1,099.6	219.88	6.001	
8,800.0	5,248.5	8,740.8	5,237.0	113.1	113.2	89.50	548.8	-3,716.4	1,319.5	1,093.6	225.96	5.840	
8,900.0	5,247.7	8,840.8	5,236.4	116.1	116.3	89.51	548.7	-3,816.4	1,319.5	1,087.5	232.04	5.687	
9,000.0	5,246.8	8,940.8	5,235.7	119.1	119.3	89.52	548.7	-3,916.4	1,319.5	1,081.4	238.12	5.541	
9,100.0	5,245.9	9,040.8	5,235.0	122.2	122.3	89.52	548.7	-4,016.4	1,319.5	1,075.3	244.21	5.403	
9,200.0	5,245.0	9,140.8	5,234.3	125.2	125.4	89.53	548.6	-4,116.4	1,319.6	1,069.2	250.31	5.272	
9,300.0	5,244.2	9,240.8	5,233.6	128.3	128.4	89.54	548.6	-4,216.4	1,319.6	1,063.2	256.41	5.146	
9,400.0	5,243.3	9,340.8	5,232.9	131.3	131.5	89.55	548.6	-4,316.4	1,319.6	1,057.1	262.51	5.027	
9,500.0	5,242.4	9,440.8	5,232.2	134.4	134.5	89.55	548.6	-4,416.4	1,319.6	1,051.0	268.61	4.913	
9,600.0	5,241.6	9,540.8	5,231.5	137.4	137.6	89.56	548.5	-4,516.4	1,319.6	1,044.9	274.72	4.803	
9,700.0	5,240.7	9,640.8	5,230.8	140.5	140.6	89.57	548.5	-4,616.4	1,319.6	1,038.8	280.83	4.699	
9,800.0	5,239.8	9,740.8	5,230.1	143.5	143.7	89.58	548.5	-4,716.4	1,319.6	1,032.7	286.94	4.599	
9,900.0	5,238.9	9,840.8	5,229.4	146.6	146.7	89.58	548.4	-4,816.4	1,319.6	1,026.5	293.05	4.503	
10,000.0	5,238.1	9,940.8	5,228.7	149.6	149.8	89.59	548.4	-4,916.4	1,319.6	1,020.4	299.17	4.411	
10,100.0	5,237.2	10,040.8	5,228.0	152.7	152.9	89.60	548.4	-5,016.4	1,319.6	1,014.3	305.29	4.323	
10,200.0	5,236.3	10,140.8	5,227.3	155.7	155.9	89.61	548.4	-5,116.4	1,319.6	1,008.2	311.41	4.238	
10,271.1	5,235.7	10,211.9	5,226.8	157.9	158.1	89.61	548.3	-5,187.5	1,319.6	1,003.9	315.76	4.179 SF	

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

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well ESCRITO D20-2409 02H
Project:	San Juan County, NM	**TVD Reference:**	16' KB @ 6844.0usft
Reference Site:	S20-T24N-R9W	**MD Reference:**	16' KB @ 6844.0usft
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	ESCRITO D20-2409 02H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	PLAN #1	**Offset TVD Reference:**	Offset Datum

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well ESCRITO D20-2409 02H
Project:	San Juan County, NM	**TVD Reference:**	16' KB @ 6844.0usft
Reference Site:	S20-T24N-R9W	**MD Reference:**	16' KB @ 6844.0usft
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	ESCRITO D20-2409 02H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	PLAN #1	**Offset TVD Reference:**	Offset Datum

Offset Design S20-T24N-R9W - ESCRITO D20-2409 03H - OH - PLAN #1 — Offset Site Error: 0.0 usft

Survey Program: 0-MWD — Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-180.00	-29.9	0.0	29.9				
100.0	100.0	100.0	100.0	0.2	0.2	-180.00	-29.9	0.0	29.9	29.5	0.30	99.132	
200.0	200.0	200.0	200.0	0.5	0.5	-180.00	-29.9	0.0	29.9	28.8	1.02	29.321	
300.0	300.0	300.0	300.0	0.9	0.9	-180.00	-29.9	0.0	29.9	28.1	1.74	17.205	
400.0	400.0	400.0	400.0	1.2	1.2	-180.00	-29.9	0.0	29.9	27.4	2.45	12.174	
500.0	500.0	500.0	500.0	1.6	1.6	-180.00	-29.9	0.0	29.9	26.7	3.17	9.420	
600.0	600.0	600.6	600.6	1.9	1.9	-177.17	-28.8	-1.4	28.8	25.0	3.89	7.407	
700.0	700.0	700.9	700.7	2.3	2.3	-167.54	-25.7	-5.7	26.3	21.7	4.62	5.698	
800.0	800.0	800.8	800.2	2.7	2.7	-148.21	-20.5	-12.7	24.1	18.8	5.32	4.533	
832.9	832.9	833.5	832.7	2.8	2.8	39.42	-18.4	-15.6	24.0	18.4	5.56	4.314	CC, ES
900.0	900.0	899.7	898.4	3.0	3.0	61.24	-13.4	-22.4	25.3	19.2	6.08	4.160	SF
1,000.0	999.8	997.8	995.4	3.3	3.4	92.06	-4.7	-34.2	34.4	27.5	6.89	4.997	
1,100.0	1,099.5	1,095.5	1,092.0	3.7	3.8	111.14	4.1	-46.1	50.4	42.8	7.60	6.633	
1,200.0	1,198.7	1,192.6	1,187.9	4.0	4.2	122.77	12.8	-58.0	71.1	62.8	8.28	8.586	
1,300.0	1,297.5	1,288.8	1,283.1	4.4	4.6	130.50	21.4	-69.7	95.7	86.7	8.97	10.667	
1,400.0	1,395.9	1,384.5	1,377.7	4.8	5.0	135.98	30.0	-81.4	122.8	113.2	9.66	12.718	
1,500.0	1,494.2	1,480.2	1,472.3	5.2	5.4	139.53	38.5	-93.1	150.7	140.4	10.35	14.557	
1,600.0	1,592.6	1,575.9	1,566.9	5.6	5.8	141.97	47.1	-104.8	179.0	167.9	11.06	16.186	
1,700.0	1,691.0	1,671.6	1,661.4	6.0	6.2	143.74	55.7	-116.4	207.5	195.7	11.77	17.627	
1,800.0	1,789.4	1,767.3	1,756.0	6.4	6.6	145.09	64.3	-128.1	236.1	223.6	12.49	18.906	
1,900.0	1,887.7	1,863.0	1,850.6	6.9	7.0	146.14	72.9	-139.8	264.8	251.6	13.21	20.046	
2,000.0	1,986.1	1,958.6	1,945.2	7.3	7.4	146.99	81.4	-151.4	293.6	279.7	13.94	21.066	
2,100.0	2,084.5	2,054.3	2,039.8	7.7	7.8	147.69	90.0	-163.1	322.4	307.8	14.67	21.984	
2,200.0	2,182.9	2,150.0	2,134.3	8.2	8.3	148.27	98.6	-174.8	351.3	335.9	15.40	22.813	
2,300.0	2,281.3	2,245.7	2,228.9	8.6	8.7	148.76	107.2	-186.5	380.2	364.1	16.13	23.565	
2,400.0	2,379.6	2,341.4	2,323.5	9.1	9.1	149.19	115.7	-198.1	409.1	392.3	16.87	24.250	
2,500.0	2,478.0	2,437.1	2,418.1	9.5	9.5	149.56	124.3	-209.8	438.1	420.5	17.61	24.876	
2,600.0	2,576.4	2,532.8	2,512.7	10.0	9.9	149.88	132.9	-221.5	467.0	448.7	18.35	25.450	
2,700.0	2,674.8	2,628.4	2,607.3	10.4	10.3	150.17	141.5	-233.2	496.0	476.9	19.09	25.978	
2,800.0	2,773.2	2,724.1	2,701.8	10.9	10.7	150.42	150.0	-244.8	525.0	505.1	19.84	26.466	
2,900.0	2,871.5	2,819.8	2,796.4	11.3	11.1	150.65	158.6	-256.5	554.0	533.4	20.58	26.917	
3,000.0	2,969.9	2,915.5	2,891.0	11.8	11.5	150.85	167.2	-268.2	582.9	561.6	21.32	27.336	
3,100.0	3,068.3	3,011.2	2,985.6	12.2	12.0	151.04	175.8	-279.9	611.9	589.9	22.07	27.726	
3,200.0	3,166.7	3,106.9	3,080.2	12.7	12.4	151.21	184.4	-291.5	640.9	618.1	22.82	28.090	
3,300.0	3,265.1	3,202.6	3,174.8	13.2	12.8	151.36	192.9	-303.2	670.0	646.4	23.56	28.430	
3,400.0	3,363.4	3,298.2	3,269.3	13.6	13.2	151.50	201.5	-314.9	699.0	674.7	24.31	28.749	
3,500.0	3,461.8	3,393.9	3,363.9	14.1	13.6	151.63	210.1	-326.6	728.0	702.9	25.06	29.048	
3,600.0	3,560.2	3,489.6	3,458.5	14.5	14.0	151.75	218.7	-338.2	757.0	731.2	25.81	29.329	
3,700.0	3,658.6	3,585.3	3,553.1	15.0	14.4	151.86	227.2	-349.9	786.0	759.5	26.56	29.594	
3,800.0	3,757.0	3,681.0	3,647.7	15.5	14.9	151.96	235.8	-361.6	815.0	787.7	27.31	29.844	
3,900.0	3,855.3	3,776.7	3,742.3	15.9	15.3	152.06	244.4	-373.2	844.1	816.0	28.06	30.080	
4,000.0	3,953.7	3,872.4	3,836.8	16.4	15.7	152.15	253.0	-384.9	873.1	844.3	28.81	30.304	
4,100.0	4,052.1	3,968.0	3,931.4	16.8	16.1	152.23	261.6	-396.6	902.1	872.6	29.56	30.516	
4,200.0	4,150.5	4,063.7	4,026.0	17.3	16.5	152.31	270.1	-408.3	931.2	900.8	30.31	30.717	
4,300.0	4,248.8	4,159.4	4,120.6	17.8	16.9	152.39	278.7	-419.9	960.2	929.1	31.07	30.908	
4,400.0	4,347.2	4,255.1	4,215.2	18.2	17.4	152.46	287.3	-431.6	989.2	957.4	31.82	31.090	
4,500.0	4,445.6	4,350.8	4,309.7	18.7	17.8	152.52	295.9	-443.3	1,018.3	985.7	32.57	31.263	
4,600.0	4,544.0	4,446.5	4,404.3	19.1	18.2	152.58	304.4	-455.0	1,047.3	1,014.0	33.32	31.429	
4,700.0	4,642.4	4,542.2	4,498.9	19.6	18.6	152.64	313.0	-466.6	1,076.3	1,042.3	34.08	31.587	
4,800.0	4,740.7	4,637.9	4,593.6	20.1	19.0	137.81	321.6	-478.3	1,105.1	1,070.3	34.83	31.729	
4,900.0	4,838.1	4,734.2	4,688.7	20.5	19.4	101.11	330.2	-490.1	1,128.4	1,092.7	35.61	31.682	
5,000.0	4,931.6	4,897.8	4,850.7	21.0	20.0	89.19	348.9	-487.7	1,141.1	1,104.3	36.81	31.001	

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

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well ESCRITO D20-2409 02H
Project:	San Juan County, NM	**TVD Reference:**	16' KB @ 6844.0usft
Reference Site:	S20-T24N-R9W	**MD Reference:**	16' KB @ 6844.0usft
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	ESCRITO D20-2409 02H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	PLAN #1	**Offset TVD Reference:**	Offset Datum

Offset Design S20-T24N-R9W - ESCRITO D20-2409 03H - OH - PLAN #1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
5,100.0	5,018.4	5,006.1	4,954.2	21.4	20.2	86.13	365.3	-461.2	1,145.2	1,107.7	37.56	30.493	
5,200.0	5,095.9	5,063.5	5,006.4	21.8	20.3	84.94	375.0	-439.4	1,147.2	1,109.1	38.13	30.090	
5,300.0	5,161.8	5,087.7	5,027.7	22.2	20.4	83.67	379.3	-428.7	1,150.6	1,112.0	38.64	29.776	
5,400.0	5,214.0	5,091.5	5,030.9	22.8	20.4	81.98	380.0	-426.9	1,156.8	1,117.5	39.22	29.495	
5,500.0	5,250.9	5,082.3	5,023.0	23.6	20.4	79.92	378.3	-431.2	1,165.6	1,125.6	39.96	29.170	
5,600.0	5,271.5	5,064.7	5,007.5	24.7	20.3	77.68	375.2	-438.9	1,176.5	1,135.6	40.92	28.753	
5,700.0	5,275.6	5,050.0	4,994.4	26.2	20.3	76.10	372.7	-445.0	1,188.7	1,146.6	42.16	28.194	
5,800.0	5,274.7	5,020.2	4,967.3	28.0	20.3	74.76	367.6	-456.4	1,206.3	1,163.0	43.36	27.821	
5,900.0	5,273.8	5,000.0	4,948.6	30.1	20.2	73.85	364.3	-463.2	1,231.3	1,186.7	44.65	27.578	
6,000.0	5,273.0	5,000.0	4,948.6	32.4	20.2	73.85	364.3	-463.2	1,263.4	1,217.3	46.10	27.407	
6,100.0	5,272.1	4,973.5	4,923.7	34.7	20.2	72.64	360.0	-471.3	1,301.8	1,254.7	47.15	27.609	
6,200.0	5,271.2	4,950.0	4,901.3	37.2	20.1	71.56	356.4	-477.4	1,346.6	1,298.4	48.11	27.990	
6,300.0	5,270.4	4,950.0	4,901.3	39.8	20.1	71.56	356.4	-477.4	1,396.6	1,347.4	49.22	28.377	
6,400.0	5,269.5	4,950.0	4,901.3	42.5	20.1	71.56	356.4	-477.4	1,451.8	1,401.6	50.19	28.927	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well ESCRITO D20-2409 02H
Project:	San Juan County, NM	**TVD Reference:**	16' KB @ 6844.0usft
Reference Site:	S20-T24N-R9W	**MD Reference:**	16' KB @ 6844.0usft
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	ESCRITO D20-2409 02H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	PLAN #1	**Offset TVD Reference:**	Offset Datum

Offset Design S20-T24N-R9W - ESCRITO D20-2409 04H - OH - PLAN #1 — Offset Site Error: 0.0 usft

Survey Program: 0-MWD — Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-180.00	-60.1	0.0	60.1				
100.0	100.0	100.0	100.0	0.2	0.2	-180.00	-60.1	0.0	60.1	59.8	0.30	199.472	
200.0	200.0	200.0	200.0	0.5	0.5	-180.00	-60.1	0.0	60.1	59.0	1.02	58.999	
300.0	300.0	300.0	300.0	0.9	0.9	-180.00	-60.1	0.0	60.1	58.3	1.74	34.619	
400.0	400.0	400.0	400.0	1.2	1.2	-180.00	-60.1	0.0	60.1	57.6	2.45	24.497	
500.0	500.0	500.0	500.0	1.6	1.6	-180.00	-60.1	0.0	60.1	56.9	3.17	18.954	CC
600.0	600.0	598.4	598.4	1.9	1.9	-178.93	-61.3	-1.1	61.3	57.5	3.88	15.796	
700.0	700.0	696.7	696.5	2.3	2.3	-175.96	-65.0	-4.6	65.3	60.7	4.62	14.142	
800.0	800.0	794.4	793.9	2.7	2.6	-171.78	-71.2	-10.3	72.1	66.8	5.37	13.428	
900.0	900.0	891.6	890.4	3.0	3.0	11.82	-79.7	-18.2	80.6	74.4	6.13	13.144	
1,000.0	999.8	988.4	986.0	3.3	3.3	17.19	-90.5	-28.2	89.2	82.3	6.89	12.954	
1,100.0	1,099.5	1,086.5	1,082.6	3.7	3.7	22.89	-103.4	-40.2	97.8	90.3	7.59	12.894	
1,200.0	1,198.7	1,185.8	1,180.2	4.0	4.1	28.59	-116.7	-52.4	104.5	96.2	8.27	12.635	
1,300.0	1,297.5	1,285.0	1,277.8	4.4	4.6	34.56	-129.9	-64.7	109.1	100.2	8.96	12.185	
1,400.0	1,395.9	1,384.2	1,375.3	4.8	5.0	40.76	-143.1	-76.9	113.2	103.5	9.66	11.712	
1,500.0	1,494.2	1,483.4	1,472.8	5.2	5.5	46.50	-156.3	-89.2	118.4	108.0	10.39	11.395	
1,600.0	1,592.6	1,582.6	1,570.4	5.6	5.9	51.71	-169.5	-101.4	124.8	113.6	11.15	11.191	
1,700.0	1,691.0	1,681.7	1,667.9	6.0	6.3	56.38	-182.7	-113.7	132.1	120.2	11.93	11.068	
1,800.0	1,789.4	1,780.9	1,765.4	6.4	6.8	60.55	-195.9	-125.9	140.2	127.4	12.74	11.002	
1,900.0	1,887.7	1,880.1	1,863.0	6.9	7.2	64.25	-209.1	-138.1	148.9	135.3	13.57	10.976	
2,000.0	1,986.1	1,979.3	1,960.5	7.3	7.7	67.53	-222.3	-150.4	158.2	143.8	14.41	10.978	
2,100.0	2,084.5	2,078.5	2,058.0	7.7	8.2	70.44	-235.5	-162.6	167.9	152.7	15.27	11.000	
2,200.0	2,182.9	2,177.6	2,155.6	8.2	8.6	73.02	-248.7	-174.8	178.1	161.9	16.14	11.036	
2,300.0	2,281.3	2,276.8	2,253.1	8.6	9.1	75.33	-261.9	-187.1	188.5	171.5	17.01	11.082	
2,400.0	2,379.6	2,376.0	2,350.6	9.1	9.5	77.39	-275.1	-199.3	199.3	181.4	17.90	11.135	
2,500.0	2,478.0	2,475.2	2,448.2	9.5	10.0	79.24	-288.3	-211.6	210.2	191.4	18.79	11.191	
2,600.0	2,576.4	2,574.4	2,545.7	10.0	10.4	80.91	-301.5	-223.8	221.4	201.7	19.68	11.250	
2,700.0	2,674.8	2,673.5	2,643.2	10.4	10.9	82.41	-314.7	-236.0	232.7	212.1	20.58	11.310	
2,800.0	2,773.2	2,772.7	2,740.7	10.9	11.4	83.78	-327.9	-248.3	244.2	222.7	21.47	11.370	
2,900.0	2,871.5	2,871.9	2,838.3	11.3	11.8	85.02	-341.2	-260.5	255.8	233.4	22.38	11.430	
3,000.0	2,969.9	2,971.1	2,935.8	11.8	12.3	86.16	-354.4	-272.8	267.5	244.2	23.28	11.490	
3,100.0	3,068.3	3,070.3	3,033.3	12.2	12.7	87.20	-367.6	-285.0	279.3	255.1	24.18	11.548	
3,200.0	3,166.7	3,169.4	3,130.9	12.7	13.2	88.15	-380.8	-297.2	291.1	266.1	25.09	11.604	
3,300.0	3,265.1	3,268.6	3,228.4	13.2	13.7	89.03	-394.0	-309.5	303.1	277.1	26.00	11.660	
3,400.0	3,363.4	3,367.8	3,325.9	13.6	14.1	89.85	-407.2	-321.7	315.1	288.2	26.90	11.713	
3,500.0	3,461.8	3,467.0	3,423.5	14.1	14.6	90.60	-420.4	-334.0	327.2	299.4	27.81	11.765	
3,600.0	3,560.2	3,566.2	3,521.0	14.5	15.1	91.30	-433.6	-346.2	339.3	310.6	28.72	11.815	
3,700.0	3,658.6	3,665.3	3,618.5	15.0	15.5	91.95	-446.8	-358.4	351.5	321.9	29.63	11.864	
3,800.0	3,757.0	3,764.5	3,716.1	15.5	16.0	92.56	-460.0	-370.7	363.7	333.2	30.54	11.911	
3,900.0	3,855.3	3,863.7	3,813.6	15.9	16.5	93.13	-473.2	-382.9	376.0	344.5	31.45	11.956	
4,000.0	3,953.7	3,962.9	3,911.1	16.4	16.9	93.66	-486.4	-395.1	388.3	355.9	32.36	12.000	
4,100.0	4,052.1	4,062.1	4,008.7	16.8	17.4	94.16	-499.6	-407.4	400.6	367.3	33.27	12.042	
4,200.0	4,150.5	4,161.2	4,106.2	17.3	17.8	94.63	-512.8	-419.6	412.9	378.7	34.18	12.083	
4,300.0	4,248.8	4,260.4	4,203.7	17.8	18.3	95.07	-526.0	-431.9	425.3	390.2	35.09	12.122	
4,400.0	4,347.2	4,359.6	4,301.2	18.2	18.8	95.49	-539.2	-444.1	437.7	401.7	36.00	12.160	
4,500.0	4,445.6	4,458.8	4,398.8	18.7	19.2	95.89	-552.4	-456.3	450.1	413.2	36.91	12.196	
4,600.0	4,544.0	4,557.9	4,496.3	19.1	19.7	96.26	-565.6	-468.6	462.6	424.7	37.82	12.232	
4,700.0	4,642.4	4,657.1	4,593.8	19.6	20.2	96.61	-578.9	-480.8	475.0	436.3	38.73	12.266	
4,800.0	4,740.7	4,756.4	4,691.4	20.1	20.6	82.70	-592.1	-493.1	486.9	447.2	39.64	12.283	
4,900.0	4,838.1	5,150.0	5,068.1	20.5	21.8	51.89	-652.7	-432.4	465.9	430.3	35.58	13.094	
5,000.0	4,931.6	5,359.2	5,226.3	21.0	21.9	57.66	-687.5	-301.8	382.0	355.2	26.71	14.298	
5,100.0	5,018.4	5,402.8	5,252.5	21.4	22.0	97.81	-694.4	-267.8	285.8	260.9	24.91	11.474	

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	**Local Co-ordinate Reference:**	Well ESCRITO D20-2409 02H
Project:	San Juan County, NM	**TVD Reference:**	16' KB @ 6844.0usft
Reference Site:	S20-T24N-R9W	**MD Reference:**	16' KB @ 6844.0usft
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	ESCRITO D20-2409 02H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	PLAN #1	**Offset TVD Reference:**	Offset Datum

Offset Design S20-T24N-R9W - ESCRITO D20-2409 04H - OH - PLAN #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

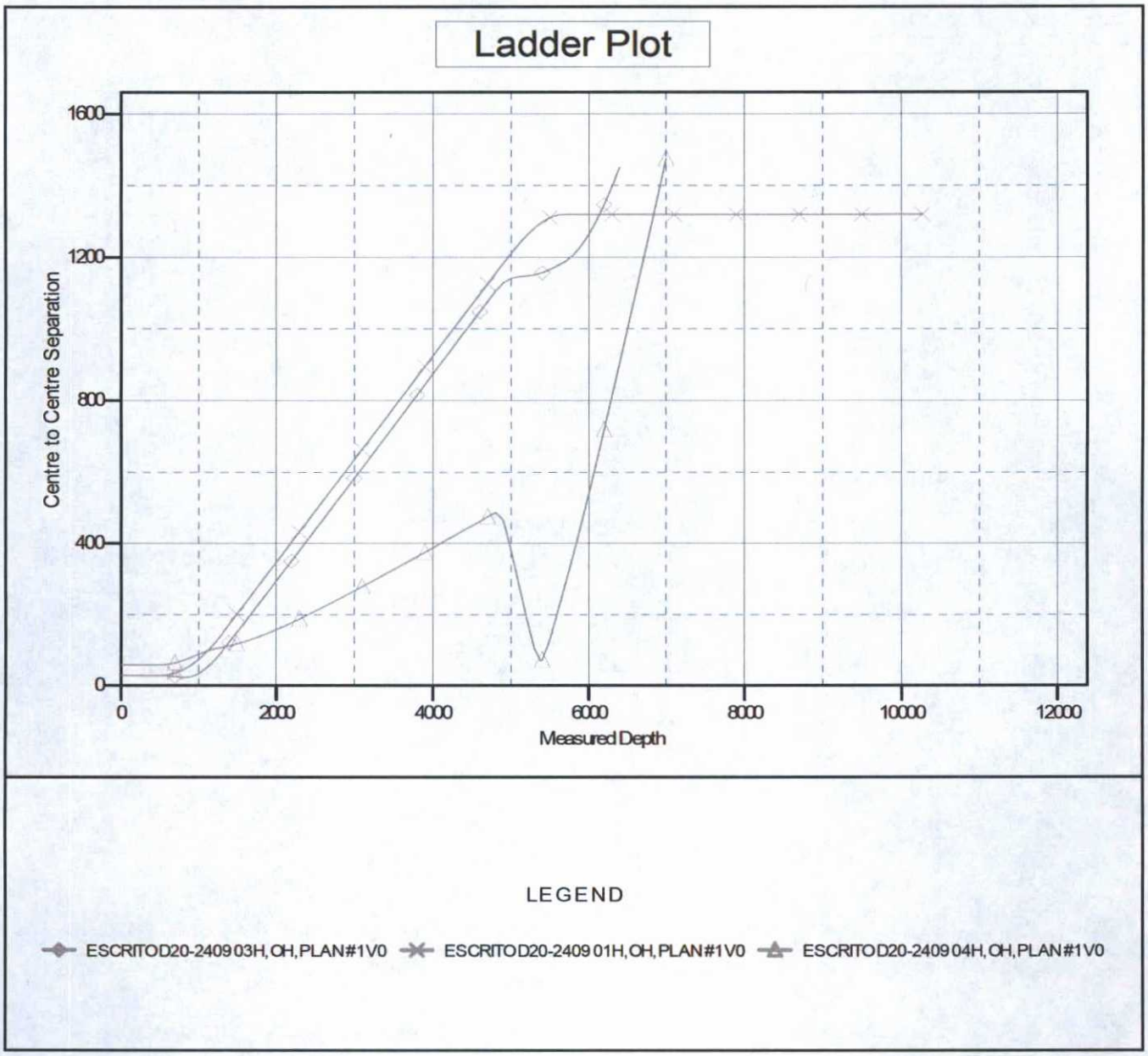
Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
5,200.0	5,095.9	5,398.8	5,250.3	21.8	22.0	123.00	-693.7	-270.9	190.5	163.9	26.57	7.169	
5,300.0	5,161.8	5,376.2	5,236.8	22.2	22.0	120.38	-690.2	-288.8	105.8	73.0	32.80	3.227	
5,381.1	5,205.2	5,350.9	5,221.0	22.7	21.9	104.47	-686.1	-308.1	71.7	31.3	40.41	1.775	ES, SF
5,400.0	5,214.0	5,344.4	5,216.8	22.8	21.9	99.20	-685.1	-312.9	73.9	34.2	39.72	1.861	
5,500.0	5,250.9	5,307.6	5,191.9	23.6	21.9	68.31	-679.1	-339.4	130.8	98.6	32.24	4.058	
5,600.0	5,271.5	5,267.6	5,163.0	24.7	21.9	46.04	-672.5	-366.2	208.8	177.5	31.29	6.673	
5,700.0	5,275.6	5,225.9	5,130.9	26.2	21.9	35.35	-665.5	-391.9	286.5	254.2	32.31	8.868	
5,800.0	5,274.7	5,189.0	5,101.0	28.0	21.8	32.01	-659.3	-412.7	366.8	333.2	33.56	10.930	
5,900.0	5,273.8	5,150.0	5,068.1	30.1	21.8	29.19	-652.7	-432.4	451.0	416.8	34.21	13.183	
6,000.0	5,273.0	5,132.1	5,052.5	32.4	21.8	28.08	-649.7	-440.6	537.8	502.2	35.54	15.130	
6,100.0	5,272.1	5,100.0	5,023.9	34.7	21.7	26.33	-644.3	-454.3	627.0	591.1	35.93	17.452	
6,200.0	5,271.2	5,100.0	5,023.9	37.2	21.7	26.33	-644.3	-454.3	717.7	680.5	37.15	19.319	
6,300.0	5,270.4	5,074.6	5,000.8	39.8	21.7	25.13	-640.0	-463.9	809.6	772.2	37.39	21.653	
6,400.0	5,269.5	5,050.0	4,978.0	42.5	21.6	24.09	-635.9	-472.2	902.9	865.3	37.58	24.025	
6,500.0	5,268.6	5,050.0	4,978.0	45.2	21.6	24.09	-635.9	-472.2	996.8	958.6	38.21	26.087	
6,600.0	5,267.7	5,050.0	4,978.0	48.0	21.6	24.09	-635.9	-472.2	1,091.7	1,053.0	38.70	28.210	
6,700.0	5,266.9	5,026.5	4,955.9	50.8	21.6	23.19	-632.1	-479.2	1,186.8	1,148.1	38.72	30.648	
6,800.0	5,266.0	5,017.6	4,947.5	53.6	21.6	22.87	-630.6	-481.6	1,282.6	1,243.7	38.95	32.932	
6,900.0	5,265.1	5,000.0	4,930.7	56.5	21.5	22.28	-627.8	-486.0	1,379.0	1,340.0	39.02	35.343	
7,000.0	5,264.2	5,000.0	4,930.7	59.3	21.5	22.28	-627.8	-486.0	1,475.5	1,436.2	39.29	37.552	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well ESCRITO D20-2409 02H
Project:	San Juan County, NM	**TVD Reference:**	16' KB @ 6844.0usft
Reference Site:	S20-T24N-R9W	**MD Reference:**	16' KB @ 6844.0usft
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	ESCRITO D20-2409 02H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	PLAN #1	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to 16' KB @ 6844.0usft
Offset Depths are relative to Offset Datum
Central Meridian is -107.833333 °

Coordinates are relative to: ESCRITO D20-2409 02H
Coordinate System is US State Plane 1983, New Mexico Western Zone
Grid Convergence at Surface is: 0.01°



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

If the location becomes prone to wind or water erosion, Encana will take appropriate measures to prevent topsoil loss from wind. Such measures may include using tackifiers or water to wet the topsoil stockpile so that a crust is created across the exposed soil to prevent soil loss.

3. All construction materials for the well pad will consist of native borrow and subsoil accumulated during well pad construction. If additional fill or surfacing material is required, it will be obtained from existing permitted or private sources and will be hauled in by trucks over existing access roads.

   The maximum cut will be approximately 14.4 feet on corner 2 and the maximum fill will be approximately 12.8 feet on corner 6.

4. As determined during the onsite on April 01, 2015, the following best management practices will be implemented:
   a. Water will be diverted around the pad from corner 2 toward corner 6. Water will be diverted around the pad from corner 2 toward corner 3 and around to corner 5. Water will naturally fan out between corner 5 and corner 6.
   b. One silt trap will be installed in EOD at corner 3.

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 modifications to the Standard Form 299 Application for authorization to construct, operate, maintain and terminate a 5,740 foot, up to 6-inch buried, steel well connect pipeline that was submitted to the Bureau of Land Management concurrently with this APD.

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.

ENCANA OIL & GAS (USA) INC.

ESCRITO D20-2409 #02H
1210' FNL & 264' FWL
LOCATED IN THE NW/4 NW/4 OF SECTION 20, T24N, R9W, N.M.P.M.,
SAN JUAN COUNTY, NEW MEXICO

DIRECTIONS

1) FROM THE INTERSECTION OF HWY 64 & HWY 550 IN BLOOMFIELD, TRAVEL SOUTH FOR 28.2 MILES TO HWY 57. (BLANCO TRADING POST, M.P. 123.4).
2) TURN RIGHT ONTO HWY 57 AND GO 2.3 MILES TO DIRT ROAD.
3) TURN LEFT ONTO DIRT ROAD AND GO 1.7 MILES TO PIPELINE CORRIDOR.
4) TURN RIGHT AND GO 1.7 MILES.
5) TURN RIGHT AND GO 0.3 MILES WHERE ACCESS IS STAKED ON RIGHT SIDE OF ROAD.

WELL FLAG LOCATED AT LAT. 36.303474° N, LONG.107.820488° W (NAD 83).

JOB No.: ENC210
DATE: 10/01/2014
DRAWN BY: TWT

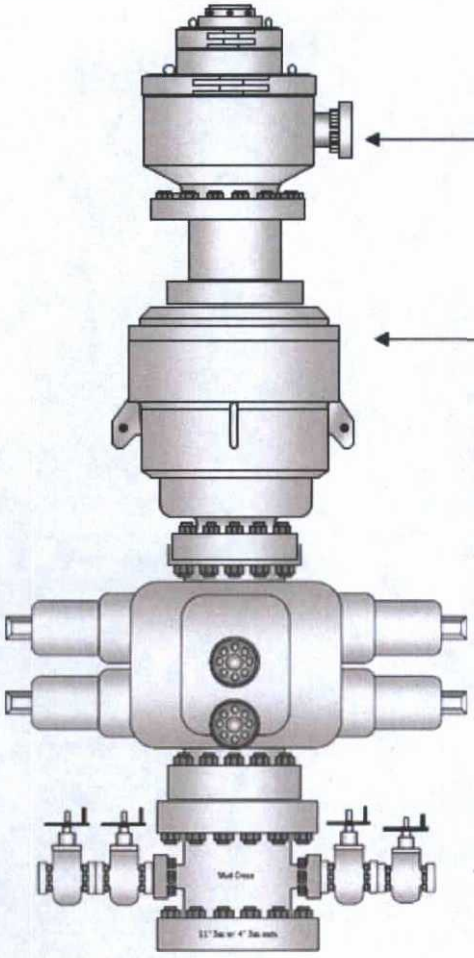
Sheet C

CCI
CHENAULT CONSULTING INC.
4600 COLLEGE BLVD.
SUITE 201
FARMINGTON, NM 87402
(505)-325-7707

WELLHEAD BLOWOUT CONTROL SYSTEM

encana

Well Name and Number:
Escrito D20-2409 02H



11" 3K Rotating Head

11" 3K Annular

3K Double Ram
Top: Pipe Ram
Bottom: Blind Ram
3" Outlets Below Ram

3K Mud Cross 3" gate valves