Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

CONFIDENTIAL

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

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE – Other instructions on page 2.

APR 05 2013

Farmington Field Office
Bureau of Land Management

1. Type of Well ☑ Oil Well ☐ Gas Well ☐ Other	5. Lease Serial No. NMNM 112955
	6. If Indian, Allottee or Tribe Name N/A
	7. If Unit of CA/Agreement, Name and/or No. N/A
	8. Well Name and No. Escrito E07-2409 01H
2. Name of Operator Encana Oil & Gas (USA) Inc.	9. API Well No. 30-045 35432
3a. Address 370 17th Street, Suite 1700 Denver, CO 80202	3b. Phone No. *(include area code)* 720-876-5353
	10. Field and Pool or Exploratory Area Bisti Lower - Gallup
4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)* SHL: 1640' FNL and 262' FWL Sec 7, T24N, R9W BHL: 890' FNL and 330' FWL Sec 12, T24N, R10W	11. Country or Parish, State San Juan, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☑ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other _____
	☑ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	_____
☐ Final Abandonment Notice	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	_____

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Encana Oil & Gas (USA) Inc. (Encana) would like to remove the pilot hole, shorten the lateral, change the BHL, reduce the PA, change the intermediate hole size and intermediate cementing plans Escrito E07-2409 01H well. Encana would like to shorten the lateral from 7135' to 4539', change the BHL from 890 FNL and 2265 FEL to 890' FNL and 330' FWL, reduce the PA from 240 acres to 160 acres, change the intermediate hole size from 8 1/2" to 8 3/4", and increase the intermediate cementing plans to accomidate the larger hole size. Please see attached 10 point drilling plan, wellbore diagram, directional plan, and C-102.

RCVD APR 12 '13
OIL CONS. DIV.
DIST. 3

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

CONDITIONS OF APPROVAL
Adhere to previously issued stipulations.
Hold C104
for Directional Survey
and "As Drilled" plat

14. I hereby certify that the foregoing is true and correct. Name *(Printed/Typed)* Amie Weis	Title Drilling Engineer
Signature Amie Weis	Date 4/3/2013

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by William Tambekou	Title Petroleum Engineer	Date 04/08/2013
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office FFO	

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

NMOCD

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

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
1220 South St. Francis Drive
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011

Submit one copy to
Appropriate District Office

AMENDED REPORT

RECEIVED

APR 05 2013

Farmington Field Office
Bureau of Land Management

WELL LOCATION AND ACREAGE DEDICATION PLAT

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

[4] Property Code	[5] Property Name	[6] Well Number
	ESCRITO E07-2409	01H

[7] OGRID No.	[8] Operator Name	[9] Elevation
282327	ENCANA OIL & GAS (USA) INC.	6876'

[10] Surface Location

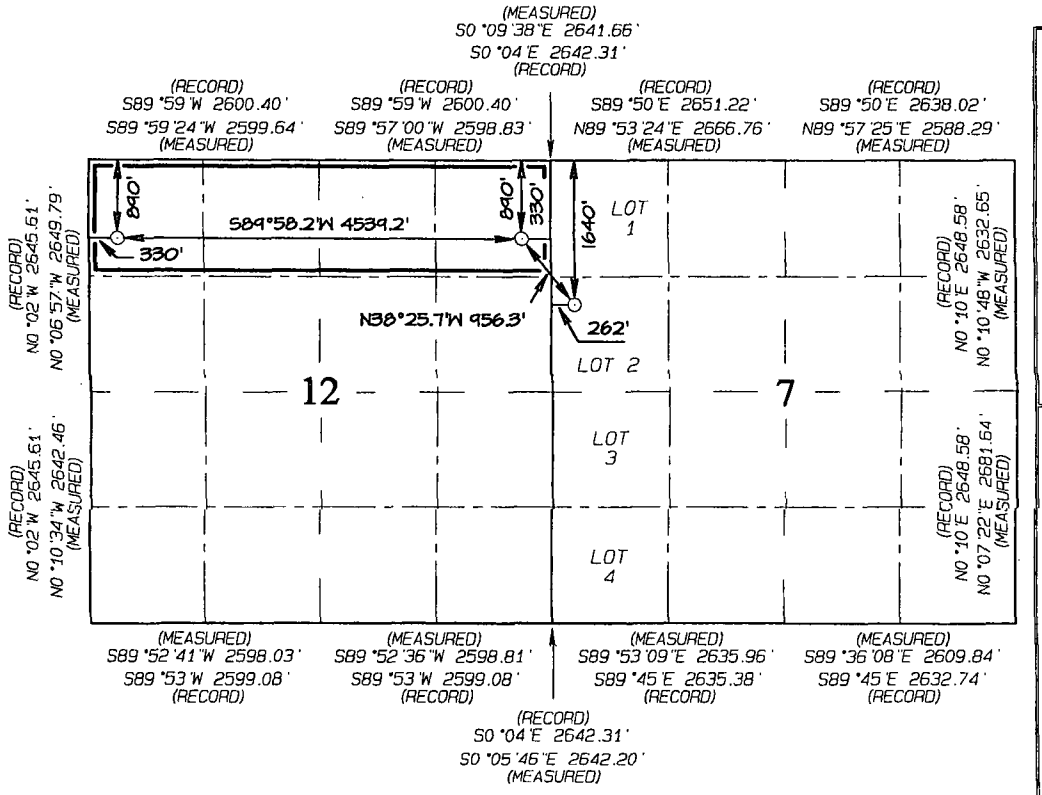
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	7	24N	9W	2	1640	NORTH	262	WEST	SAN JUAN

[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	12	24N	10W		890	NORTH	330	WEST	SAN JUAN

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
160.0 Acres N/2 N/2 - Section 12			

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



END-OF-LATERAL
890' FNL 330' FWL
SECTION 12, T24N, R10W
LAT: 36.33336 °N
LONG: 107.85520 °W
DATUM: NAD1927

LAT: 36.33337 °N
LONG: 107.85582 °W
DATUM: NAD1983

POINT-OF-ENTRY
890' FNL 330' FEL
SECTION 12, T24N, R10W
LAT: 36.33336 °N
LONG: 107.83979 °W
DATUM: NAD1927

LAT: 36.33337 °N
LONG: 107.84041 °W
DATUM: NAD1983

SURFACE LOCATION
1640' FNL 262' FWL
SECTION 7, T24N, R9W
LAT: 36.33131 °N
LONG: 107.83777 °W
DATUM: NAD1927

LAT: 36.33132 °N
LONG: 107.83839 °W
DATUM: NAD1983

[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.

Amie Weis 4-3-13
Signature Date

Amie Weis
Printed Name

amie.weis@encana.com
E-mail Address

[18] SURVEYOR CERTIFICATION

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

Date of Survey: JULY 9, 2012

Signature and Seal of Professional Surveyor

JASON C. EDWARDS
NEW MEXICO
15269
REGISTERED PROFESSIONAL SURVEYOR

JASON C. EDWARDS
Certificate Number 15269

LOC: **Sec 7-T24N-R9W**
County: **San Juan**
WELL: **Escrito E07-2409 01H**

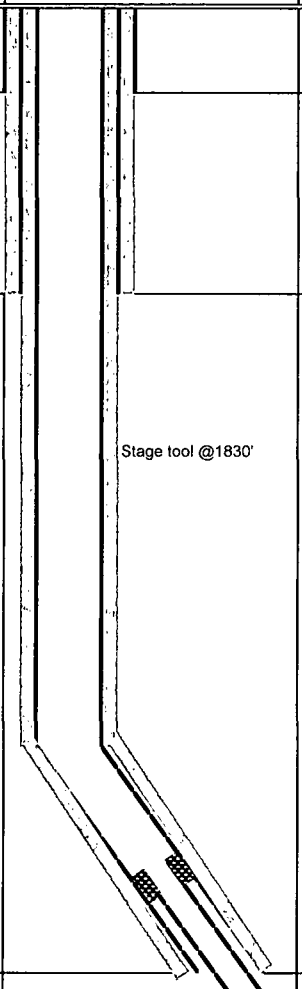
Encana Natural Gas

WELL SUMMARY

encana natural gas

ENG: J. Fox/ A. **4/3/13**
RIG:
GLE: 6876
RKBE: 6889

MWD LWD	OPEN HOLE LOGGING	FORM	DEPTH TVD	DEPTH MD	HOLE SIZE	CASING SPECS	MW MUD TYPE	DEVIATION INFORMATION
			60	60'	**30**	**20" 94#** 100sx Type I Neat 48.8ppg cmt	**Fresh wtr** 8.3-9.2	
Surveys After csg is run	None		**500**	**500**	**12 1/4**	**9 5/8" 36ppf J55 STC** TOC @ surface 178 sks Type III Cmt	**Fresh wtr** 8.4-8.6	Vertical <1°
Surveys every 500'	No OH logs	Ojo Alamo Kirtland Fruitland Coal Pictured Cliffs Ss Lewis Shale Cliffhouse Ss Menefee Fn Point Lookout Ss Mancos Sh	942 1120 1530 1778 1922 2606 3315 4242 4452		**8 3/4**	**7" 26ppf J55 LTC** Stage tool @1830' TOC @ surface 30% OH excess: 621 sks Total Stage 1 Lead: 273 sks Stage 1 Tail: 187 sks Stage 2 Lead: 161 sks	**Fresh Wtr** 8.5-8.8	Vertical <1°
	Mud logger onsite	**KICK OFF PT** Mancos Silt Gallup Top	4714 5045 5247					KOP 4714 10 deg/100'
		horz target Base Gallup	5474 5477 5553	6080 6176	**6 1/8**	200' overlap at liner top 4539' Lateral	8.6-9.0 OBM	.25deg updip 5437'TVD TD = 10715' MD
Surveys every 500' Gyro at CP MWD Gamma Directional	No OH Logs					**4 1/2" 11.6ppf SB80 LTC** Running external swellable csg packers for isolation of prod string Plan on setting top packer within 100' of intermediate casing shoe	Switch to OBM 8.6-9.0	



NOTES:

1) Drill with 30" bit to 60', set 20" 94# conductor pipe
2) Drill surface to 500', R&C 9 5/8" casing
3) N/U BOP and surface equipment
4) Drill to KOP of 4714' , 8 3/4" hole size,
5) PU directional tools and start curve at 10deg/100' build rate
6) Drill to casing point of 6080' MD
7) R&C 7" casing, circ cmt to surface, switch to OBM
8) Land at 90deg, drill 4539' lateral to 10715', run 4 1/2" liner with external swellable csg packers

Escrito E07-2409 01H
SHL: SWNW Section 7, T24N, R9W
1640 FNL and 262 FWL
BHL: NWNW Section 12, T24N, R10W
890 FNL and 330 FWL
San Juan County, New Mexico
Lease Number: NMNM 112955

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)
Ojo Alamo	942'
Kirtland	1120'
Fruitland Coal	1530'
Pictured Cliffs	1778'
Lewis	1922'
Cliffhouse	2606'
Menefee	3315'
Point Lookout	4242'
Mancos	4452'
Gallup	5247'

The referenced surface elevation is 6876', KB 6889'

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

Substance	Formation	Depth (TVD)
Water	Ojo Alamo	942'
Gas	Fruitland Coal	1530'
Gas	Pictured Cliffs	1778'
Gas	Cliffhouse	2606'
Gas	Point Lookout	4242'
Oil/Gas	Mancos	4452'

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

3. PRESSURE CONTROL

a) Pressure control equipment and configuration will be designed to meet 2M standards.
b) Working pressure on rams and BOPE will be 3,000 psi
c) Function test and visual inspection of the BOP will be conducted daily and noted in the IADC Daily Drilling Report.
d) The Annular BOP will be pressure tested to a minimum of 50 percent of its rated working pressure.
e) Blind and Pipe Rams/BOP will be tested against a test plug to 100 percent of rated working pressure.
f) Pressure tests are required before drilling out from under all casing strings set and cemented in place.
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	Hole Size	Csg Size	Weight	Grade
Conductor	0-60'	30"	20"	94#	H40, STC New
Surface	0'-500'	12 1/4"	9 5/8"	36#	J55, STC New
Intermediate	0'-6080'MD	8 3/4"	7"	26#	J55, LTC New
Production Liner	5880'-10715'MD	6 1/8"	4 1/2"	11.6#	B80*, LTC New

Casing String				Casing Strength Properties			Minimum Design Factors		
Size	Weight (lb/ft)	Grade	Connection	Collapse (psi)	Burst (psi)	Tensile (1000lb)	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 1/2"	11.6	B80	LTC	6350	7780	201	1.125	1.1	1.5

*B80 pipe specifications are attached

Casing design is subject to revision based on geologic conditions encountered.

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

b) The proposed cementing program is as follows:

Top plugs shall be used to reduce contamination of cement by displacement fluid. A bottom plug or other acceptable technique, such as a pre-flush fluid, inner string cement method, etc. shall be utilized to help isolate the cement from contamination by the mud fluid being displaced ahead of the cement slurry.

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BHL: NWNW Section 12, T24N, R10W
890 FNL and 330 FWL
San Juan County, New Mexico
Lease Number: NMNM 112955

Casing	Depth	Cement Volume (sacks)	Cement Type&Yield	Designed TOC	Centralizers
Conductor	60'	100sk	Type I Neat 14.8ppg	Surface	None
Surface	500'	178sk	Type III Cement + 1% CaCl + 0.25lb/sk Cello Flake + 0.2% FL, 14.6ppg, 1.38cuf/sk	Surface	1 turbolizer per joint on bottom 3 joints
Intermediate	5474'TVD/ 6080'MD	30% open hole excess Stg 1 Lead: 273sk Stg 1 Tail: 187sk Stg 2 Lead: 161sk	**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 per joint for bottom 3 joints, 1 every 3 joints for remaining joints
Production Liner*	5880'MD-10715'MD	None – External casing packers	N/A	N/A	N/A

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

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

All waiting on cement times shall be adequate to achieve a 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 4714'. Directional plans are attached.

Description	Proposed Depth (TVD/MD)	Formation
Horizontal Lateral TD	5437'/10715'	Gallup

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San Juan County, New Mexico
Lease Number: NMNM 112955

6. DRILLING FLUIDS PROGRAM

a) Vertical Pilot Hole:

Hole Size (in)	TVD (ft)	Mud Type	Density (lb/gal)	Viscosity (sec/qt)	Fluid Loss (cc)
30"	0-60'	Fresh Water	8.3-9.2	38-100	4-28
12 1/4"	0-500'	Fresh Water	8.4-8.6	60-70	NC
8 3/4"	500'TVD-5474'TVD/6080'MD	Fresh Water LSND	8.5-8.8	40-50	8-10

b) Intermediate Casing Point to TD:

Hole Size (in)	MD (ft)	Mud Type	Density (lb/gal)	Viscosity (sec/qt)	Fluid Loss (cc)
6 1/8"	6080'-10715'	Synthetic Oil Based Mud	8.6-9.0	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, including fresh water and oil-based operations. 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 wit the Surface Use Plan of Operations.

7. TESTING, CORING and LOGGING

a) Drill Stem Testing – None anticipated.
b) Coring – None anticipated.
c) Mud 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 +/- 2,563 psi based on a 9.0 ppg at 5477' TVD of the vertical pilot hole. 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.

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San Juan County, New Mexico
Lease Number: NMNM 112955

9. ANTICIPATED START DATE AND DURATION OF OPERATIONS

Drilling is estimated to commence on June 11, 2014. 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 25 days.

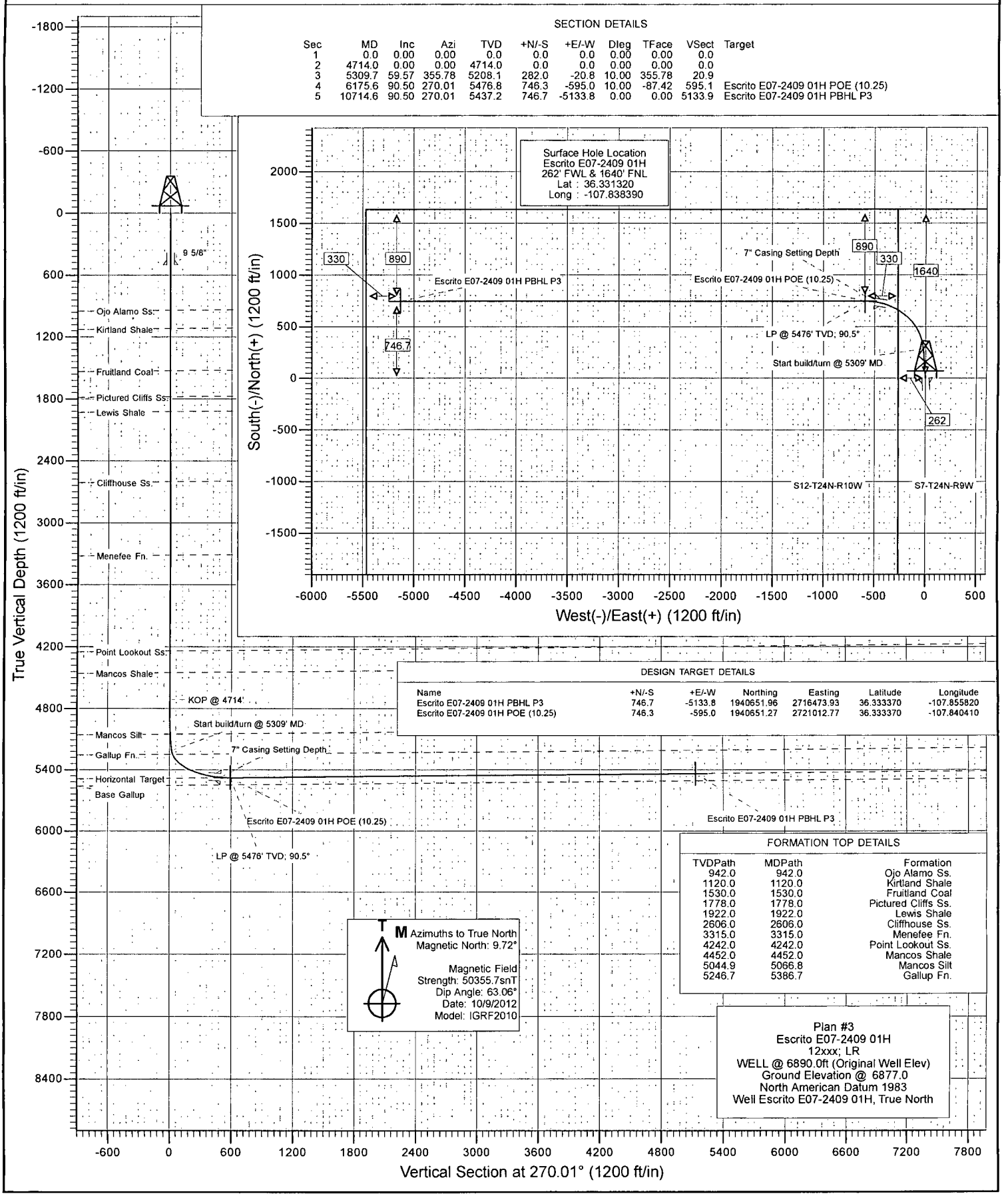
encana natural gas

Project: San Juan County, NM
Site: S7- T24N-R9W
Well: Escrito E07-2409 01H
Wellbore: Hz
Design: Plan #3

CATHEDRAL

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	4714.0	0.00	0.00	4714.0	0.0	0.0	0.00	0.00	0.0	
3	5309.7	59.57	355.78	5208.1	282.0	-20.8	10.00	355.78	20.9	
4	6175.6	90.50	270.01	5476.8	746.3	-595.0	10.00	-87.42	595.1	Escrito E07-2409 01H POE (10.25)
5	10714.6	90.50	270.01	5437.2	746.7	-5133.8	0.00	0.00	5133.9	Escrito E07-2409 01H PBHL P3



DESIGN TARGET DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Escrito E07-2409 01H PBHL P3	746.7	-5133.8	1940651.96	2716473.93	36.333370	-107.855820
Escrito E07-2409 01H POE (10.25)	746.3	-595.0	1940651.27	2721012.77	36.333370	-107.840410

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
942.0	942.0	Ojo Alamo Ss.
1120.0	1120.0	Kirtland Shale
1530.0	1530.0	Fruitland Coal
1778.0	1778.0	Pictured Cliffs Ss.
1922.0	1922.0	Lewis Shale
2606.0	2606.0	Cliffhouse Ss.
3315.0	3315.0	Menefee Fn.
4242.0	4242.0	Point Lookout Ss.
4452.0	4452.0	Mancos Shale
5044.9	5066.8	Mancos Silt
5246.7	5386.7	Gallup Fn.

T M Azimuths to True North
Magnetic North: 9.72°

Magnetic Field
Strength: 50355.7snT
Dip Angle: 63.06°
Date: 10/9/2012
Model: IGRF2010

Plan #3
Escrito E07-2409 01H
12xxx; LR
WELL @ 6890.0ft (Original Well Elev)
Ground Elevation @ 6877.0
North American Datum 1983
Well Escrito E07-2409 01H, True North

Planning Report

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Escrito E07-2409 01H
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	WELL @ 6890.0ft (Original Well Elev)
Project:	San Juan County, NM	**MD Reference:**	WELL @ 6890.0ft (Original Well Elev)
Site:	S7- T24N-R9W	**North Reference:**	True
Well:	Escrito E07-2409 01H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #3		

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	S7- T24N-R9W				
Site Position:		**Northing:**	1,939,904.96 ft	**Latitude:**	36.331320
From:	Lat/Long	**Easting:**	2,721,607.69 ft	**Longitude:**	-107.838390
Position Uncertainty:	0.0 ft	**Slot Radius:**	13.200 in	**Grid Convergence:**	0.00 °

Well	Escrito E07-2409 01H					
Well Position	**+N/-S**	0.0 ft	**Northing:**	1,939,904.96 ft	**Latitude:**	36.331320
	+E/-W	0.0 ft	**Easting:**	2,721,607.69 ft	**Longitude:**	-107.838390
Position Uncertainty		0.0 ft	**Wellhead Elevation:**	ft	**Ground Level:**	6,877.0 ft

Wellbore	Hz				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2010	10/9/2012	9.72	63.06	50,356

Design	Plan #3				
Audit Notes:					
Version:		**Phase:**	PLAN	**Tie On Depth:**	0.0
Vertical Section:	**Depth From (TVD) (ft)**	**+N/-S (ft)**	**+E/-W (ft)**	**Direction (°)**	
	0.0	0.0	0.0	270.01	

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
4,714.0	0.00	0.00	4,714.0	0.0	0.0	0.00	0.00	0.00	0.00	
5,309.7	59.57	355.78	5,208.1	282.0	-20.8	10.00	10.00	0.00	355.78	
6,175.6	90.50	270.01	5,476.8	746.3	-595.0	10.00	3.57	-9.91	-87.42	Escrito E07-2409 01H
10,714.6	90.50	270.01	5,437.2	746.7	-5,133.8	0.00	0.00	0.00	0.00	Escrito E07-2409 01H

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Escrito E07-2409 01H
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	WELL @ 6890.0ft (Original Well Elev)
Project:	San Juan County, NM	**MD Reference:**	WELL @ 6890.0ft (Original Well Elev)
Site:	S7- T24N-R9W	**North Reference:**	True
Well:	Escrito E07-2409 01H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #3		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	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	
942.0	0.00	0.00	942.0	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	
1,120.0	0.00	0.00	1,120.0	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	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	
1,530.0	0.00	0.00	1,530.0	0.0	0.0	0.0	0.00	0.00	Fruitland Coal
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	
1,778.0	0.00	0.00	1,778.0	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	
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	
1,922.0	0.00	0.00	1,922.0	0.0	0.0	0.0	0.00	0.00	Lewis Shale
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	
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	
2,606.0	0.00	0.00	2,606.0	0.0	0.0	0.0	0.00	0.00	Cliffhouse Ss.
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	
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	
3,315.0	0.00	0.00	3,315.0	0.0	0.0	0.0	0.00	0.00	Menefee Fn.
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	
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	
4,242.0	0.00	0.00	4,242.0	0.0	0.0	0.0	0.00	0.00	Point Lookout Ss.
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Escrito E07-2409 01H
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	WELL @ 6890.0ft (Original Well Elev)
Project:	San Juan County, NM	**MD Reference:**	WELL @ 6890.0ft (Original Well Elev)
Site:	S7- T24N-R9W	**North Reference:**	True
Well:	Escrito E07-2409 01H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #3		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	
4,452.0	0.00	0.00	4,452.0	0.0	0.0	0.0	0.00	0.00	Mancos Shale
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	
4,714.0	0.00	0.00	4,714.0	0.0	0.0	0.0	0.00	0.00	KOP @ 4714'
4,800.0	8.60	355.78	4,799.7	6.4	-0.5	0.5	10.00	10.00	
4,900.0	18.60	355.78	4,896.8	29.8	-2.2	2.2	10.00	10.00	
5,000.0	28.60	355.78	4,988.3	69.7	-5.1	5.2	10.00	10.00	
5,066.8	35.28	355.78	5,044.9	104.9	-7.8	7.8	10.00	10.00	Mancos Silt
5,100.0	38.60	355.78	5,071.5	124.8	-9.2	9.2	10.00	10.00	
5,200.0	48.60	355.78	5,143.8	193.5	-14.3	14.3	10.00	10.00	
5,300.0	58.60	355.78	5,203.1	273.7	-20.2	20.3	10.00	10.00	
5,309.7	59.57	355.78	5,208.1	282.0	-20.8	20.9	10.00	10.00	Start build/turn @ 5309' MD
5,386.7	60.21	346.90	5,246.7	347.7	-30.9	30.9	10.00	0.84	Gallup Fn.
5,400.0	60.39	345.38	5,253.3	358.9	-33.6	33.7	10.00	1.29	
5,500.0	62.21	334.17	5,301.5	441.0	-63.9	64.0	10.00	1.83	
5,600.0	64.91	323.41	5,346.1	517.4	-110.3	110.4	10.00	2.70	
5,700.0	68.35	313.17	5,385.8	585.7	-171.4	171.5	10.00	3.44	
5,800.0	72.38	303.44	5,419.5	643.9	-245.2	245.3	10.00	4.03	
5,900.0	76.86	294.17	5,446.1	690.2	-329.6	329.7	10.00	4.48	
6,000.0	81.67	285.24	5,464.7	723.3	-422.0	422.1	10.00	4.80	
6,080.0	85.66	278.26	5,473.6	739.4	-499.8	499.9	10.00	4.99	7" Casing Setting Depth
6,100.0	86.66	276.52	5,474.9	742.0	-519.6	519.7	10.00	5.05	
6,175.6	90.50	270.01	5,476.8	746.3	-595.0	595.1	10.00	5.07	LP @ 5476' TVD; 90.5° - Escrito E07-2409 01H
6,200.0	90.50	270.01	5,476.6	746.3	-619.4	619.5	0.00	0.00	
6,300.0	90.50	270.01	5,475.7	746.3	-719.4	719.5	0.00	0.00	
6,400.0	90.50	270.01	5,474.8	746.3	-819.4	819.5	0.00	0.00	
6,500.0	90.50	270.01	5,474.0	746.3	-919.4	919.5	0.00	0.00	
6,600.0	90.50	270.01	5,473.1	746.3	-1,019.4	1,019.5	0.00	0.00	
6,700.0	90.50	270.01	5,472.2	746.3	-1,119.4	1,119.5	0.00	0.00	
6,800.0	90.50	270.01	5,471.4	746.3	-1,219.4	1,219.5	0.00	0.00	
6,900.0	90.50	270.01	5,470.5	746.3	-1,319.4	1,319.5	0.00	0.00	
7,000.0	90.50	270.01	5,469.6	746.4	-1,419.3	1,419.5	0.00	0.00	
7,100.0	90.50	270.01	5,468.7	746.4	-1,519.3	1,519.5	0.00	0.00	
7,200.0	90.50	270.01	5,467.9	746.4	-1,619.3	1,619.5	0.00	0.00	
7,300.0	90.50	270.01	5,467.0	746.4	-1,719.3	1,719.5	0.00	0.00	
7,400.0	90.50	270.01	5,466.1	746.4	-1,819.3	1,819.5	0.00	0.00	
7,500.0	90.50	270.01	5,465.2	746.4	-1,919.3	1,919.5	0.00	0.00	
7,600.0	90.50	270.01	5,464.4	746.4	-2,019.3	2,019.5	0.00	0.00	
7,700.0	90.50	270.01	5,463.5	746.4	-2,119.3	2,119.5	0.00	0.00	
7,800.0	90.50	270.01	5,462.6	746.4	-2,219.3	2,219.4	0.00	0.00	
7,900.0	90.50	270.01	5,461.8	746.4	-2,319.3	2,319.4	0.00	0.00	
8,000.0	90.50	270.01	5,460.9	746.5	-2,419.3	2,419.4	0.00	0.00	
8,100.0	90.50	270.01	5,460.0	746.5	-2,519.3	2,519.4	0.00	0.00	
8,200.0	90.50	270.01	5,459.1	746.5	-2,619.3	2,619.4	0.00	0.00	
8,300.0	90.50	270.01	5,458.3	746.5	-2,719.3	2,719.4	0.00	0.00	
8,400.0	90.50	270.01	5,457.4	746.5	-2,819.3	2,819.4	0.00	0.00	
8,500.0	90.50	270.01	5,456.5	746.5	-2,919.3	2,919.4	0.00	0.00	
8,600.0	90.50	270.01	5,455.6	746.5	-3,019.3	3,019.4	0.00	0.00	
8,700.0	90.50	270.01	5,454.8	746.5	-3,119.3	3,119.4	0.00	0.00	
8,800.0	90.50	270.01	5,453.9	746.5	-3,219.3	3,219.4	0.00	0.00	

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Escrito E07-2409 01H
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	WELL @ 6890.0ft (Original Well Elev)
Project:	San Juan County, NM	**MD Reference:**	WELL @ 6890.0ft (Original Well Elev)
Site:	S7- T24N-R9W	**North Reference:**	True
Well:	Escrito E07-2409 01H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #3		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
8,900.0	90.50	270.01	5,453.0	746.5	-3,319.3	3,319.4	0.00	0.00	
9,000.0	90.50	270.01	5,452.2	746.6	-3,419.3	3,419.4	0.00	0.00	
9,100.0	90.50	270.01	5,451.3	746.6	-3,519.3	3,519.4	0.00	0.00	
9,200.0	90.50	270.01	5,450.4	746.6	-3,619.3	3,619.4	0.00	0.00	
9,300.0	90.50	270.01	5,449.5	746.6	-3,719.3	3,719.4	0.00	0.00	
9,400.0	90.50	270.01	5,448.7	746.6	-3,819.3	3,819.4	0.00	0.00	
9,500.0	90.50	270.01	5,447.8	746.6	-3,919.3	3,919.4	0.00	0.00	
9,600.0	90.50	270.01	5,446.9	746.6	-4,019.2	4,019.4	0.00	0.00	
9,700.0	90.50	270.01	5,446.0	746.6	-4,119.2	4,119.4	0.00	0.00	
9,800.0	90.50	270.01	5,445.2	746.6	-4,219.2	4,219.4	0.00	0.00	
9,900.0	90.50	270.01	5,444.3	746.7	-4,319.2	4,319.4	0.00	0.00	
10,000.0	90.50	270.01	5,443.4	746.7	-4,419.2	4,419.4	0.00	0.00	
10,100.0	90.50	270.01	5,442.6	746.7	-4,519.2	4,519.4	0.00	0.00	
10,200.0	90.50	270.01	5,441.7	746.7	-4,619.2	4,619.4	0.00	0.00	
10,300.0	90.50	270.01	5,440.8	746.7	-4,719.2	4,719.4	0.00	0.00	
10,400.0	90.50	270.01	5,439.9	746.7	-4,819.2	4,819.3	0.00	0.00	
10,500.0	90.50	270.01	5,439.1	746.7	-4,919.2	4,919.3	0.00	0.00	
10,600.0	90.50	270.01	5,438.2	746.7	-5,019.2	5,019.3	0.00	0.00	
10,700.0	90.50	270.01	5,437.3	746.7	-5,119.2	5,119.3	0.00	0.00	
10,714.6	90.50	270.01	5,437.2	746.7	-5,133.8	5,133.9	0.00	0.00	TD at 10714.6 - Escrito E07-2409 01H PBHL (1

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
Escrito E07-2409 01H P - plan misses target center by 2595.0ft at 10714.6ft MD (5437.2 TVD, 746.7 N, -5133.8 E) - Point	0.00	0.00	5,414.5	740.0	-7,728.7	1,940,645.40	2,713,879.05	36.333350	-107.864630
Escrito E07-2409 01H P - plan hits target center - Point	0.00	0.00	5,437.2	746.7	-5,133.8	1,940,651.96	2,716,473.93	36.333370	-107.855820
Escrito E07-2409 01H P - plan hits target center - Point	0.00	0.00	5,476.8	746.3	-595.0	1,940,651.27	2,721,012.77	36.333370	-107.840410

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)
6,080.0	5,473.6	7" Casing Setting Depth	0.000	0.000
500.0	500.0	9 5/8"	0.000	0.000

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Escrito E07-2409 01H
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	WELL @ 6890.0ft (Original Well Elev)
Project:	San Juan County, NM	**MD Reference:**	WELL @ 6890.0ft (Original Well Elev)
Site:	S7- T24N-R9W	**North Reference:**	True
Well:	Escrito E07-2409 01H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #3		

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
942.0	942.0	Ojo Alamo Ss.		-0.50	269.95
1,120.0	1,120.0	Kirtland Shale		-0.50	269.95
1,530.0	1,530.0	Fruitland Coal		-0.50	269.95
1,778.0	1,778.0	Pictured Cliffs Ss.		-0.50	269.95
1,922.0	1,922.0	Lewis Shale		-0.50	269.95
2,606.0	2,606.0	Cliffhouse Ss.		-0.50	269.95
3,315.0	3,315.0	Menefee Fn.		-0.50	269.95
4,242.0	4,242.0	Point Lookout Ss.		-0.50	269.95
4,452.0	4,452.0	Mancos Shale		-0.50	269.95
5,066.8	5,045.0	Mancos Silt		-0.50	269.95
5,386.7	5,247.0	Gallup Fn.		-0.50	269.95

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
4,714.0	4,714.0	0.0	0.0	KOP @ 4714'
5,309.7	5,208.1	282.0	-20.8	Start build/turn @ 5309' MD
6,175.6	5,476.8	746.3	-595.0	LP @ 5476' TVD; 90.5°
10,714.6	5,437.2	746.7	-5,133.8	TD at 10714.6