

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

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

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

15 2013

SUBMIT IN TRIPLICATE - Other instructions on page 2.

1. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other		5. Lease Serial No. NM 51000 and NM 4958
2. Name of Operator Encana Oil & Gas (USA) Inc.		6. If Indian, Allottee or Tribe Name N/A
3a. Address 370 17th Street, Suite 1700 Denver, CO 80202 ATTN: ROBYNN HADEN	3b. Phone No. (include area code) 720-876-3941	7. If Unit of CA/Agreement, Name and/or No. N/A
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) SHL: 1985' FNL and 341' FEL Section 31, T24N, R9W BHL: 1725' FNL and 330' FWL Section 31, T24N, R9W		8. Well Name and No. Escrito H31-2409 01H
		9. API Well No. PENDING 30-048-38391
		10. Field and Pool or Exploratory Area Bisti - Lower Gallup
		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
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other _____
	☒ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ 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 recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Encana Oil & Gas (USA) Inc. (Encana) would like to change the bottom hole location, horizontal target and casing and cementing program for the Escrito H31-2409 01H well. The BHL will change from 1985' FNL and 330' FWL to 1725' FNL and 330' FWL Sec 31, T24N, R9W. The horizontal target will change from 4633' TVD to 5015' TVD. Please see attached 10 point drilling plan, wellbore diagram and C-102 and directional plan for casing and cementing program changes.

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.

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed) Amanda Cavoto	Title Engineering Technologist
Signature <i>Amanda Cavoto</i>	Date 1/14/13

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by <i>[Signature]</i>	Title <i>AFM</i>	Date <i>4/8/13</i>
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 <i>FFO</i>	

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.

NWCCD

District I
1625 N. French Drive, Hobbs, NM 88240
Phone: (575) 393-6151 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) 476-3450 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 1, 2011

Submit one copy to
Appropriate District Office

OIL CONSERVATION DIVISION

1220 South St. Francis Drive
Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-35391	² Pool Code 5890	³ Pool Name BISTI LOWER - GALLUP
⁴ Property Code 39824	⁵ Property Name ESCRITO H31-2409	⁶ Well Number 01H
⁷ GRID No. 282327	⁸ Operator Name ENCANA OIL & GAS (USA) INC.	⁹ Elevation 6831'

¹⁰ Surface Location

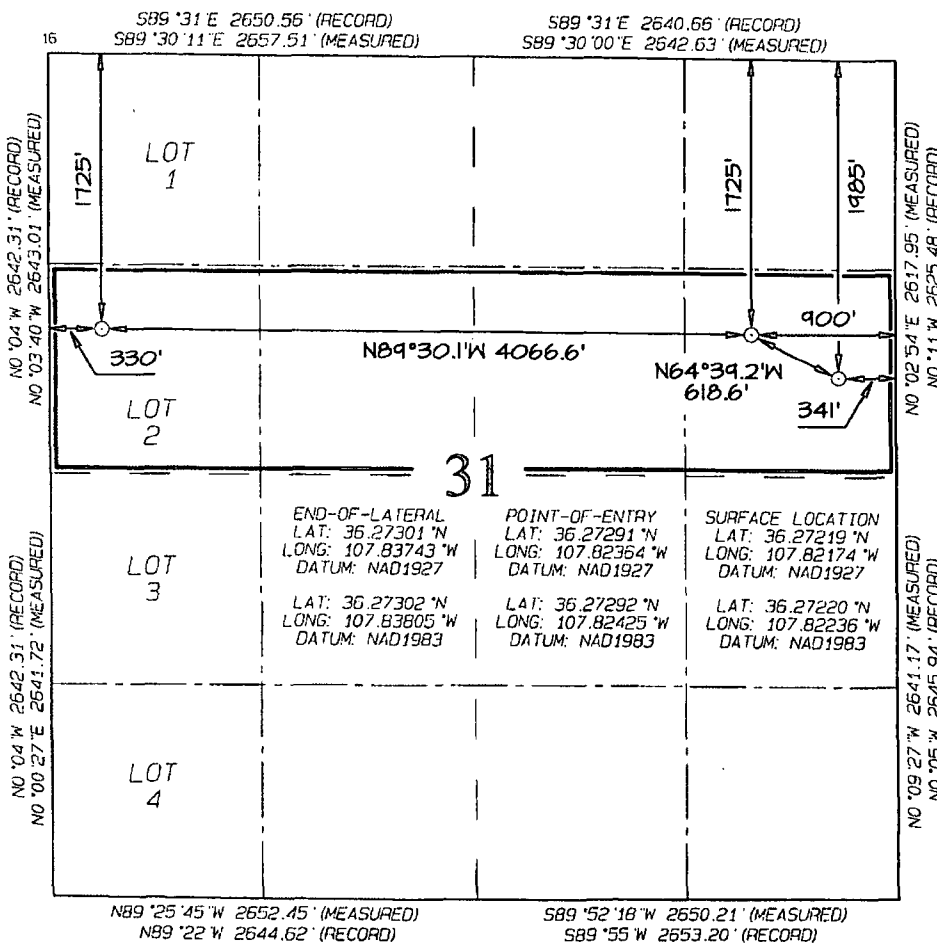
U. or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	31	24N	9W		1985	NORTH	341	EAST	SAN JUAN

¹¹ Bottom Hole Location If Different From Surface

U. or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	31	24N	9W	2	1725	NORTH	330	WEST	SAN JUAN

¹² Dedicated Acres 160.48 Acres - (S/2 N/2)	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
--	-------------------------------	----------------------------------	-------------------------

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



¹⁷ OPERATOR CERTIFICATION

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

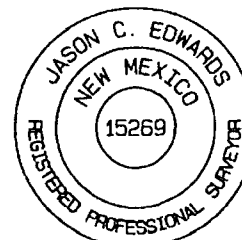
Signature: *Brenda R. Linster* Date: *Nov 01 2013*
Printed Name: **Brenda R. Linster, Regulatory Lead**
E-mail Address: **brenda.linster@encana.com**

¹⁸ SURVEYOR CERTIFICATION

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

Survey Date: **FEBRUARY 9, 2012**

Signature and Seal of Professional Surveyor:



JASON C. EDWARDS
Certificate Number: **15269**

Escrito H31-2409 01H

SHL: SENE Section 31, T24N, R9W
1985 FNL and 341 FEL

BHL: SWNW Section 31, T24N, R9W
1725 FNL and 330 FWL

San Juan County, New Mexico

Lease Number: NM 51000 and NM 4958

Encana Oil & Gas (USA) Inc. Drilling Plan

1. ESTIMATED TOPS OF GEOLOGICAL MARKERS (TVD)

The estimated tops of important geologic markers are as follows:

<u>Formation</u>	<u>Depth (TVD)</u>
Ojo Alamo Ss.	630'
Kirtland	756'
Fruitland Coal	1117'
Pictured Cliffs	1359'
Lewis	1533'
Cliffhouse	2108'
Menefee	2804'
Point Lookout	3756'
Mancos Shale	3928'
Mancos Silt	4474'
Gallup	4733'

The referenced surface elevation is 6831', KB 6844'

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

<u>Substance</u>	<u>Formation</u>	<u>Depth (TVD)</u>
Gas	Fruitland Coal	1117'
Gas	Pictured Cliffs	1359'
Gas	Cliffhouse	2108'
Gas	Point Lookout	3756'
Oil/Gas	Mancos	3928'

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

3. PRESSURE CONTROL

- Pressure control equipment and configuration will be designed to meet 2M standards.
- Working pressure on rams and BOPE will be 3,000 psi
- Function test and visual inspection of the BOP will be conducted daily and noted in the IADC Daily Drilling Report.
- The Annular BOP will be pressure tested to a minimum of 50 percent of its rated working pressure.
- Blind and Pipe Rams/BOP will be tested against a test plug to 100 percent of rated working pressure.
- Pressure tests are required before drilling out from under all casing strings set and cemented in place.
- BOP controls must be installed prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned.
- BOP testing procedures and testing frequency will conform to Onshore Order No. 2.

Escrito H31-2409 01H

**SHL: SENE Section 31, T24N, R9W
1985 FNL and 341 FEL**

**BHL: SWNW Section 31, T24N, R9W
1725 FNL and 330 FWL**

San Juan County, New Mexico

Lease Number: NM 51000 and NM 4958

- 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'-5195'MD	8 1/2"	7"	26#	J55, LTC New
Production Liner	4995'-9440'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.

Escrito H31-2409 01H

SHL: SENE Section 31, T24N, R9W
1985 FNL and 341 FEL

BHL: SWNW Section 31, T24N, R9W
1725 FNL and 330 FWL

San Juan County, New Mexico

Lease Number: NM 51000 and NM 4958

Casing	Depth	Cement Volume (sacks)	Cement Type&Yield	Designed TOC	Centralizers
Conductor	60'	100sk	Type I Neat 14.8 ppg	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 per joint on bottom 3 joints
Intermediate	5195'MD	30% open hole excess Stage 1 Lead: 206sks Stage 1 Tail: 142sks Stage 2 Lead: 109sks	Lead (Stages 1 and 2): PremLite + 3% CaCl + 0.25lb/sk CelloFlake + 5lb/sk LCM, 12.1ppg 2.13cuf/sk Tail (Stage 1): Type III Cmt + 1% CaCl + 0.25lb/sk Cello Flake 14.5ppg 1.38cuf/sk	Surface	1 per joint for bottom 3 joints, 1 every 3 joints for remaining joints
Production Liner*	4995'-9440'	None – External casing packers	N/A	N/A	N/A

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

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

All waiting on cement times shall be a minimum of 8 hours or adequate to achieve 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 4292'. Directional plans are attached.

Description	Proposed Depth (TVD/MD)	Formation
Horizontal Lateral TD	4987'/9440'	Gallup

Escrito H31-2409 01H

**SHL: SENE Section 31, T24N, R9W
1985 FNL and 341 FEL**

**BHL: SWNW Section 31, T24N, R9W
1725 FNL and 330 FWL**

San Juan County, New Mexico

Lease Number: NM 51000 and NM 4958

6. DRILLING FLUIDS PROGRAM

a) Surface through Intermediate Casing Point:

Hole Size (in)	Depth (ft)	Mud Type	Density (lb/gal)	Viscosity (sec/qt)	Fluid Loss (cc)
30"	0-60' TVD	Fresh Water	8.3-9.2	38-100	4-28
12 1/4"	0-500' TVD	Fresh Water	8.4-8.6	60-70	NC
8 1/2"	500'TVD- 4984'TVD/5195'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"	5195'-9440'	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 with 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 +/- 2347 psi based on a 9.0 ppg at 5015' TVD of the landing point of the horizontal lateral. No abnormal pressure or temperatures are anticipated.

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

Escrito H31-2409 01H

**SHL: SENE Section 31, T24N, R9W
1985 FNL and 341 FEL**

**BHL: SWNW Section 31, T24N, R9W
1725 FNL and 330 FWL**

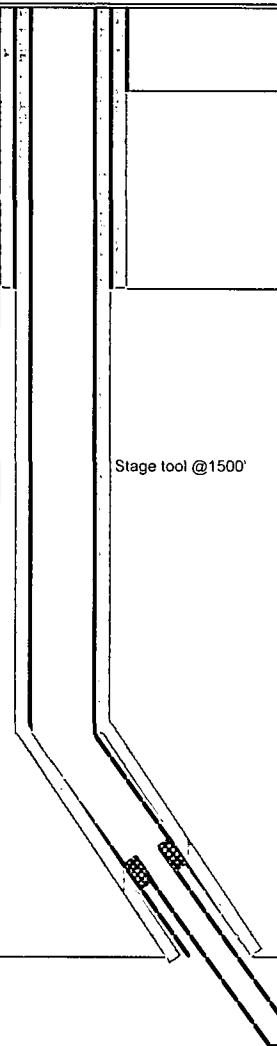
San Juan County, New Mexico

Lease Number: NM 51000 and NM 4958

9. ANTICIPATED START DATE AND DURATION OF OPERATIONS

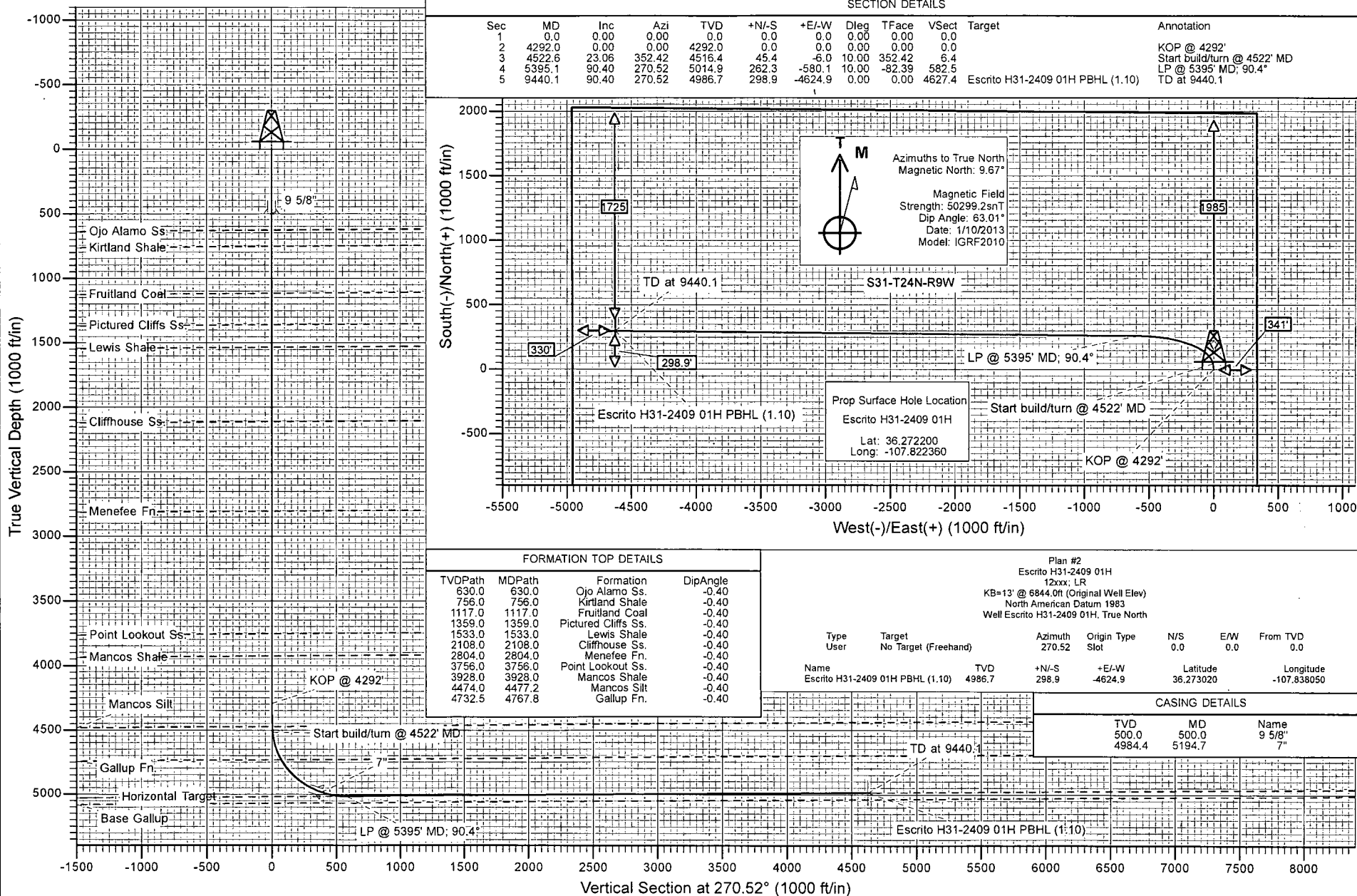
Drilling is estimated to commence on May 27, 2013. It is anticipated that completion operations will begin within 30 days after the well has been drilled depending on fracture treatment schedules with various pumping service companies.

It is anticipated that the drilling of this well will take approximately 25 days.

LOC: Sec 31-T24N-R9W County: San Juan WELL: Escrito H31-2409 01H			Encana Natural Gas WELL SUMMARY				encana [™] natural gas		ENG: J. Fox/ A. RIG: GLE: 6831 RKBE: 6844		1/14/13
MWD LWD	OPEN HOLE LOGGING	FORM	DEPTH TVDMD			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					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	630 756 1117 1359 1533 2108 2804			8 1/2	7" 26ppf J55 LTC TOC @ surface 30% OH excess: 457 sksTotal. Stage 1 Lead: 206sks Stage 1 Tail: 142sks. Stage 2 Lead: 109sks	Fresh Wtr 8.5-8.8	Vertical <1°		
	Mud logger onsite	Point Lookout Ss Mancos Sh KICK OFF PT Mancos Silt Gallup Top	3756 3928 4292 4474 4733 4984	5195						KOP 4292 10 deg/100'	
Surveys every 500' Gyro at CP MWD Gamma Directional	No OH Logs	horz target Base Gallup	5015 5072	5395		6 1/8	200' overlap at liner top 4045' Lateral	8.6-9.0 OBM	.25deg updip 4987'TVD TD = 9440' MD		
							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			



Project: San Juan County, NM
 Site: S31-T24N-R9W
 Well: Escrito H31-2409 01H
 Wellbore: Hz
 Design: Plan #2



Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Escrito H31-2409 01H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KB=13' @ 6844.0ft (Original Well Elev)
Project:	San Juan County, NM	MD Reference:	KB=13' @ 6844.0ft (Original Well Elev)
Site:	S31-T24N-R9W	North Reference:	True
Well:	Escrito H31-2409 01H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #2		

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	S31-T24N-R9W				
Site Position:		Northing:	1,919,406.77 ft	Latitude:	36.275010
From:	Lat/Long	Easting:	2,726,375.80 ft	Longitude:	-107.822210
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	0.01 °

Well	Escrito H31-2409 01H				
Well Position	+N/-S	0.0 ft	Northing:	1,918,383.86 ft	Latitude: 36.272200
	+E/-W	0.0 ft	Easting:	2,726,331.70 ft	Longitude: -107.822360
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level: 6,831.0 ft

Wellbore	Hz				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	1/10/2013	9.67	63.01	50,299

Design	Plan #2				
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	270.52	

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	
4,292.0	0.00	0.00	4,292.0	0.0	0.0	0.00	0.00	0.00	0.00	
4,522.6	23.06	352.42	4,516.4	45.4	-6.0	10.00	10.00	0.00	352.42	
5,395.1	90.40	270.52	5,014.9	262.3	-580.1	10.00	7.72	-9.39	-82.39	
9,440.1	90.40	270.52	4,986.7	298.9	-4,624.9	0.00	0.00	0.00	0.00	Escrito H31-2409 01H

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Escrito H31-2409 01H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KB=13' @ 6844.0ft (Original Well Elev)
Project:	San Juan County, NM	MD Reference:	KB=13' @ 6844.0ft (Original Well Elev)
Site:	S31-T24N-R9W	North Reference:	True
Well:	Escrito H31-2409 01H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #2		

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	
630.0	0.00	0.00	630.0	0.0	0.0	0.0	0.00	0.00	Ojo Alamo Ss.
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	
756.0	0.00	0.00	756.0	0.0	0.0	0.0	0.00	0.00	Kirtland Shale
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	
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	
1,117.0	0.00	0.00	1,117.0	0.0	0.0	0.0	0.00	0.00	Fruitland Coal
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	
1,359.0	0.00	0.00	1,359.0	0.0	0.0	0.0	0.00	0.00	Pictured Cliffs Ss.
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	
1,533.0	0.00	0.00	1,533.0	0.0	0.0	0.0	0.00	0.00	Lewis Shale
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	
1,800.0	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	
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	
2,108.0	0.00	0.00	2,108.0	0.0	0.0	0.0	0.00	0.00	Cliffhouse Ss.
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	
2,700.0	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	
2,804.0	0.00	0.00	2,804.0	0.0	0.0	0.0	0.00	0.00	Menefee Fn.
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	
3,400.0	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	
3,756.0	0.00	0.00	3,756.0	0.0	0.0	0.0	0.00	0.00	Point Lookout Ss.
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	
3,928.0	0.00	0.00	3,928.0	0.0	0.0	0.0	0.00	0.00	Mancos Shale
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	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Escrito H31-2409 01H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KB=13' @ 6844.0ft (Original Well Elev)
Project:	San Juan County, NM	MD Reference:	KB=13' @ 6844.0ft (Original Well Elev)
Site:	S31-T24N-R9W	North Reference:	True
Well:	Escrito H31-2409 01H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #2		

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
4,292.0	0.00	0.00	4,292.0	0.0	0.0	0.0	0.00	0.00	KOP @ 4292'
4,300.0	0.80	352.42	4,300.0	0.1	0.0	0.0	10.00	10.00	
4,400.0	10.80	352.42	4,399.4	10.1	-1.3	1.4	10.00	10.00	
4,477.2	18.52	352.42	4,474.0	29.4	-3.9	4.2	10.00	10.00	Mancos Silt
4,500.0	20.80	352.42	4,495.5	37.0	-4.9	5.3	10.00	10.00	
4,522.6	23.06	352.42	4,516.4	45.4	-6.0	6.4	10.00	10.00	Start build/turn @ 4522' MD
4,600.0	25.21	334.17	4,587.2	75.3	-15.2	15.9	10.00	2.78	
4,700.0	30.62	316.08	4,675.6	112.9	-42.2	43.3	10.00	5.41	
4,767.8	35.34	307.14	4,732.5	137.2	-69.9	71.1	10.00	6.97	Gallup Fn.
4,800.0	37.79	303.61	4,758.4	148.3	-85.5	86.9	10.00	7.58	
4,900.0	45.89	294.79	4,832.9	180.4	-143.8	145.4	10.00	8.10	
5,000.0	54.50	288.17	4,896.9	208.2	-215.2	217.1	10.00	8.61	
5,100.0	63.41	282.86	4,948.4	230.9	-297.7	299.8	10.00	8.90	
5,194.7	72.00	278.56	4,984.4	247.1	-383.7	385.9	10.00	9.07	7"
5,200.0	72.48	278.33	4,986.0	247.8	-388.7	390.9	10.00	9.13	
5,300.0	81.65	274.23	5,008.3	258.4	-485.5	487.8	10.00	9.17	
5,395.1	90.40	270.52	5,014.9	262.3	-580.1	582.5	10.00	9.21	LP @ 5395' MD; 90.4°
5,400.0	90.40	270.52	5,014.9	262.4	-585.1	587.4	0.00	0.00	
5,500.0	90.40	270.52	5,014.2	263.3	-685.0	687.4	0.00	0.00	
5,600.0	90.40	270.52	5,013.5	264.2	-785.0	787.4	0.00	0.00	
5,700.0	90.40	270.52	5,012.8	265.1	-885.0	887.4	0.00	0.00	
5,800.0	90.40	270.52	5,012.1	266.0	-985.0	987.4	0.00	0.00	
5,900.0	90.40	270.52	5,011.4	266.9	-1,085.0	1,087.4	0.00	0.00	
6,000.0	90.40	270.52	5,010.7	267.8	-1,185.0	1,187.4	0.00	0.00	
6,100.0	90.40	270.52	5,010.0	268.7	-1,285.0	1,287.4	0.00	0.00	
6,200.0	90.40	270.52	5,009.3	269.6	-1,385.0	1,387.4	0.00	0.00	
6,300.0	90.40	270.52	5,008.6	270.5	-1,485.0	1,487.4	0.00	0.00	
6,400.0	90.40	270.52	5,007.9	271.4	-1,585.0	1,587.4	0.00	0.00	
6,500.0	90.40	270.52	5,007.2	272.3	-1,685.0	1,687.4	0.00	0.00	
6,600.0	90.40	270.52	5,006.5	273.2	-1,785.0	1,787.4	0.00	0.00	
6,700.0	90.40	270.52	5,005.8	274.1	-1,885.0	1,887.4	0.00	0.00	
6,800.0	90.40	270.52	5,005.1	275.0	-1,985.0	1,987.4	0.00	0.00	
6,900.0	90.40	270.52	5,004.4	275.9	-2,085.0	2,087.4	0.00	0.00	
7,000.0	90.40	270.52	5,003.7	276.8	-2,184.9	2,187.4	0.00	0.00	
7,100.0	90.40	270.52	5,003.0	277.7	-2,284.9	2,287.4	0.00	0.00	
7,200.0	90.40	270.52	5,002.3	278.6	-2,384.9	2,387.4	0.00	0.00	
7,300.0	90.40	270.52	5,001.6	279.5	-2,484.9	2,487.4	0.00	0.00	
7,400.0	90.40	270.52	5,000.9	280.4	-2,584.9	2,587.4	0.00	0.00	
7,500.0	90.40	270.52	5,000.2	281.3	-2,684.9	2,687.4	0.00	0.00	
7,600.0	90.40	270.52	4,999.5	282.2	-2,784.9	2,787.4	0.00	0.00	
7,700.0	90.40	270.52	4,998.8	283.1	-2,884.9	2,887.4	0.00	0.00	
7,800.0	90.40	270.52	4,998.1	284.1	-2,984.9	2,987.4	0.00	0.00	
7,900.0	90.40	270.52	4,997.4	285.0	-3,084.9	3,087.3	0.00	0.00	
8,000.0	90.40	270.52	4,996.7	285.9	-3,184.9	3,187.3	0.00	0.00	
8,100.0	90.40	270.52	4,996.0	286.8	-3,284.9	3,287.3	0.00	0.00	
8,200.0	90.40	270.52	4,995.3	287.7	-3,384.9	3,387.3	0.00	0.00	
8,300.0	90.40	270.52	4,994.6	288.6	-3,484.9	3,487.3	0.00	0.00	
8,400.0	90.40	270.52	4,994.0	289.5	-3,584.9	3,587.3	0.00	0.00	
8,500.0	90.40	270.52	4,993.3	290.4	-3,684.8	3,687.3	0.00	0.00	
8,600.0	90.40	270.52	4,992.6	291.3	-3,784.8	3,787.3	0.00	0.00	
8,700.0	90.40	270.52	4,991.9	292.2	-3,884.8	3,887.3	0.00	0.00	
8,800.0	90.40	270.52	4,991.2	293.1	-3,984.8	3,987.3	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Escrito H31-2409 01H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KB=13' @ 6844.0ft (Original Well Elev)
Project:	San Juan County, NM	MD Reference:	KB=13' @ 6844.0ft (Original Well Elev)
Site:	S31-T24N-R9W	North Reference:	True
Well:	Escrito H31-2409 01H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #2		

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	90.40	270.52	4,990.5	294.0	-4,084.8	4,087.3	0.00	0.00	
9,000.0	90.40	270.52	4,989.8	294.9	-4,184.8	4,187.3	0.00	0.00	
9,100.0	90.40	270.52	4,989.1	295.8	-4,284.8	4,287.3	0.00	0.00	
9,200.0	90.40	270.52	4,988.4	296.7	-4,384.8	4,387.3	0.00	0.00	
9,300.0	90.40	270.52	4,987.7	297.6	-4,484.8	4,487.3	0.00	0.00	
9,400.0	90.40	270.52	4,987.0	298.5	-4,584.8	4,587.3	0.00	0.00	
9,440.1	90.40	270.52	4,986.7	298.9	-4,624.9	4,627.4	0.00	0.00	TD at 9440.1 - Escrito H31-2409 01H PBHL (1.

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
Escrito H31-2409 01H P	0.00	0.00	4,986.7	298.9	-4,624.9	1,918,682.21	2,721,706.80	36.273020	-107.838050
- plan hits target center									
- Point									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
500.0	500.0	9 5/8"	0.000	0.000	
5,194.7	4,984.4	7"	0.000	0.000	

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
630.0	630.0	Ojo Alamo Ss.		-0.40	270.52
756.0	756.0	Kirtland Shale		-0.40	270.52
1,117.0	1,117.0	Fruitland Coal		-0.40	270.52
1,359.0	1,359.0	Pictured Cliffs Ss.		-0.40	270.52
1,533.0	1,533.0	Lewis Shale		-0.40	270.52
2,108.0	2,108.0	Cliffhouse Ss.		-0.40	270.52
2,804.0	2,804.0	Menefee Fn.		-0.40	270.52
3,756.0	3,756.0	Point Lookout Ss.		-0.40	270.52
3,928.0	3,928.0	Mancos Shale		-0.40	270.52
4,477.2	4,474.0	Mancos Silt		-0.40	270.52
4,767.8	4,733.0	Gallup Fn.		-0.40	270.52

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Escrito H31-2409 01H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KB=13' @ 6844.0ft (Original Well Elev)
Project:	San Juan County, NM	MD Reference:	KB=13' @ 6844.0ft (Original Well Elev)
Site:	S31-T24N-R9W	North Reference:	True
Well:	Escrito H31-2409 01H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #2		

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
4,292.0	4,292.0	0.0	0.0	KOP @ 4292'
4,522.6	4,516.4	45.4	-6.0	Start build/turn @ 4522' MD
5,395.1	5,014.9	262.3	-580.1	LP @ 5395' MD; 90.4°
9,440.1	4,986.7	298.9	-4,624.9	TD at 9440.1