

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

1a. Type of work: ☒ DRILL ☐ REENTER		5. Lease Serial No. NMNM 112955
1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone		6. If Indian, Allottee or Tribe Name N/A
2. Name of Operator Encana Oil & Gas (USA) Inc.		7. If Unit or CA Agreement, Name and No. N/A
3a. Address 370 17th Street, Suite 1700 Denver, CO 80202	3b. Phone No. (include area code) 720-876-5331	8. Lease Name and Well No. Escrito M07-2409 01H
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 1026' FSL and 503' FWL Section 7, T24N, R9W At proposed prod. zone 1980' FSL and 330' FWL Section 12, T24N, R10W		9. API Well No. 3004835435
10. Field and Pool, or Exploratory Bisti Lower - Gallup		11. Sec., T. R. M. or Blk. and Survey or Area Section 7, T24N, R9W NMPM
12. Distance in miles and direction from nearest town or post office* +/- 31 miles southwest from intersection of US HWY 64 & US HWY 550, in Bloomfield, NM		12. County or Parish San Juan
13. State NM		
14. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) Point of entry is 330' from east lease line	15. No. of acres in lease NMNM 112955 - 1,761.69	16. Spacing Unit dedicated to this well 160 acres - N2S2 of Sec 12, T24N R10W
17. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. SIXTEEN GS 91 is +/- 273' east of SHL	18. Proposed Depth 5449' TVD/10963' MVD	19. BLM/BIA Bond No. on file COB-000235
20. Elevations (Show whether DF, KDB, RT, GL, etc.) 6910' GL, 6923' KB	21. Approximate date work will start* 01/20/2014	22. Estimated duration 25 days

24. Attachments

RCVD APR 8 '13
OIL CONS. DIV.
DIST 3

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

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

25. Signature <i>Holly Hill</i>	Name (Printed/Typed) Holly Hill	Date 10/31/12
Title Regulatory Analyst		
Approved by (Signature) <i>[Signature]</i>	Name (Printed/Typed) AFM	Date 4/1/13
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)

**NOTIFY AZTEC OCD 24 HRS.
PRIOR TO CASING & CEMENT**

*(Instructions on page 2)

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

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

NMOCD

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS".
Hold C104

for Directional Survey
and "As Drilled" plat

CONFIDENTIAL

APR 10 2013 ca

Hold C104
for Directional Survey
and "As Drilled" plat

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) 476-3452

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

*API Number 30-045-35435	*Pool Code 5890	*Pool Name BISTI LOWER - GALLUP
*Property Code 39811	*Property Name ESCRITO M07-2409	*Well Number 01H
*GRID No. 282327	*Operator Name ENCANA OIL & GAS (USA) INC.	*Elevation 6910'

10 Surface Location

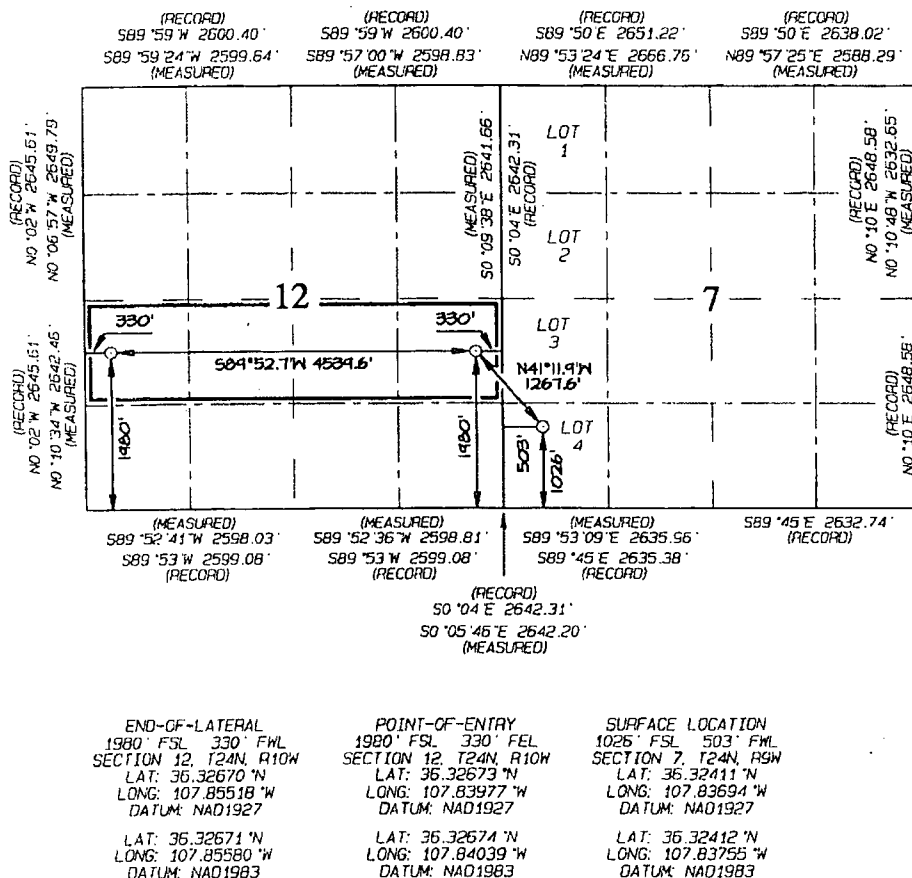
UL or lot no.	Section	Township	Range	Lot 10	Feet from the	North/South line	Feet from the	East/West line	County
M	7	24N	9W	Lot 4	1026	SOUTH	503	WEST	SAN JUAN

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot 10	Feet from the	North/South line	Feet from the	East/West line	County
L	12	24N	10W		1980	SOUTH	330	WEST	SAN JUAN

*Dedicated Acres 160.0 Acres N/2 S/2 - Section 12	*Joint or Infill	*Consolidation Code	*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.

Holly Hill 10/31/12
Signature Date
Holly Hill
Printed Name
holly.hill@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.

Survey Date: OCTOBER 10, 2012

Signature and Seal of Professional Surveyor



Jason C. Edwards
Certificate Number 15269

Directions from the Intersection of US Hwy 550 & US Hwy 64

in Bloomfield, NM to Encana Oil & Gas (USA) Inc. Escrito M07-2409 01H

1026' FSL & 503' FWL, Section 7, T24N, R9W, N.M.P.M., San Juan County, NM

Latitude: 36.32412°N Longitude: 107.83755°W Datum: NAD1983

From the intersection of US Hwy 550 & US Hwy 64 in Bloomfield, NM, travel Southerly on US Hwy 550 for 27.9 miles to State Hwy #57 @ Mile Marker 123.4;

Go right (South-westerly) on State Hwy #57 for 2.3 miles to fork in road;

Go left (Southerly) exiting State Hwy #57 for 0.4 miles to fork in road;

Go right which is straight (Southerly) for 0.1 miles to fork in road;

Go left which is straight (Southerly) for 0.3 miles to existing wellpad from which new access continues for 67' to Encana Escrito M07-2409 01H.

Escrito M07-2409 01H

SHL: SWSW Section 7, T24N, R9W
1026 FSL and 503 FWL

BHL: NWSW Section 12, T24N, R10W
1980 FSL 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:

<u>Formation</u>	<u>Depth (TVD)</u>
Ojo Alamo Ss.	945'
Kirtland	1128'
Fruitland Coal	1508'
Pictured Cliffs	1775'
Lewis	1929'
Cliffhouse	2583'
Menefee	3303'
Point Lookout	4230'
Mancos Shale	4442'
Mancos Silt	5043'
Gallup	5253'

The referenced surface elevation is 6910', KB 6923'

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	1508'
Gas	Pictured Cliffs	1775'
Gas	Cliffhouse	2583'
Gas	Point Lookout	4230'
Oil/Gas	Mancos	4442'

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.

Escrito M07-2409 01H

SHL: SWSW Section 7, T24N, R9W
1026 FSL and 503 FWL

BHL: NWSW Section 12, T24N, R10W
1980 FSL and 330 FWL

San Juan County, New Mexico

Lease Number: NMNM 112955

- 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'-6320'MD	8 1/2"	7"	26#	J55, LTC New
Production Liner	6120'-10963'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 M07-2409 01H

SHL: SWSW Section 7, T24N, R9W
1026 FSL and 503 FWL

BHL: NWSW Section 12, T24N, R10W
1980 FSL 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 14.8 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	6320'MD	30% open hole excess Lead:155sk Tail: 522sk	Lead: PremLite + 3% CaCl + 0.25lb/sk CelloFlake + 5lb/sk LCM, 12.1ppg 2.13cuf/sk Tail: 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*	6120'-10963'	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 4600'. Directional plans are attached.

Description	Proposed Depth (TVD/MD)	Formation
Horizontal Lateral TD	5449'/10963'	Gallup

Escrito M07-2409 01H

SHL: SWSW Section 7, T24N, R9W
1026 FSL and 503 FWL

BHL: NWSW Section 12, T24N, R10W
1980 FSL and 330 FWL

San Juan County, New Mexico

Lease Number: NMNM 112955

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- 5479'TVD/6320'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"	6320'-10963'	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 +/- 2565 psi based on a 9.0 ppg at 5480' 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 M07-2409 01H

SHL: SWSW Section 7, T24N, R9W
1026 FSL and 503 FWL

BHL: NWSW Section 12, T24N, R10W
1980 FSL and 330 FWL

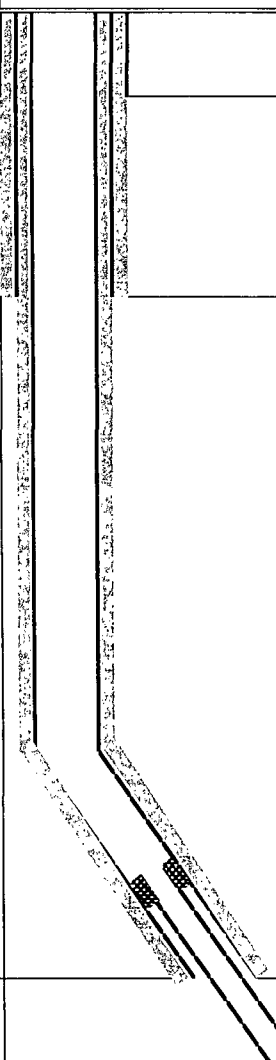
San Juan County, New Mexico

Lease Number: NMNM 112955

9. ANTICIPATED START DATE AND DURATION OF OPERATIONS

Drilling is estimated to commence on January 20, 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.

LOC: Sec 7-T24N-R9W County: San Juan WELL: Escrito M07-2409 01H			Encana Natural Gas WELL SUMMARY			encana™ natural gas		ENG: J. Fox/ A. RIG: GLE: 6910 RKBE: 6923		10/30/12
MWD LWD	OPEN HOLE LOGGING	FORM	DEPTH			HOLE SIZE	CASING SPECS	MW MUD TYPE	DEVIATION INFORMATION	
			TVD	MD						
			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	945 1,128			8 1/2	7" 26ppf J55 LTC TOC @ surface 30% OH excess: 677 sks Lead 155 sks Tail 522 sks	Fresh Wtr 8.5-8.8	Vertical <1°	
		Fruitland Coal	1508							
		Pictured Cliffs Ss Lewis Shale	1775 1929							
		Cliffhouse Ss Menefee Fn	2583 3303							
		Point Lookout Ss Mancos Sh	4230 4442							
	KICK OFF PT	4600								
	Mancos Silt	5043								
	Gallup Top	5253							KOP 4600 10 deg/100'	
			5479	6320						
Surveys every 500' Gyro at CP MWD Gamma Directional	No OH Logs	horz target	5480	6423		6 1/8	200' overlap at liner top		.25deg updip 5449'TVD	
		Base Gallup	5563				4510' Lateral	8.6-9.0 OBM	TD = 10963' 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		

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 4600' , 8 1/2" hole size,
- 5) PU directional tools and start curve at 10deg/100' build rate
- 6) Drill to casing point of 6320' MD
- 7) R&C 7" casing, circ cmt to surface, switch to OBM
- 8) Land at 90deg, drill 4510' lateral to 10963', run 4 1/2" liner with external swellable csg packers



Boomerang Tube LLC

CASING (OR) TUBING DESCRIPTION AND PERFORMANCE PROPERTIES

Pipe Outside Diameter (ins)	_____	4.500
Pipe Wall Thickness (ins)	_____	0.250
Nominal Weight Per Foot (lbs)	_____	11.60
Thread Name	_____	Long Thread CSG
Grade Name	_____	SB-80
Pipe Minimum Yield (psi)	_____	80,000
Pipe Minimum Ultimate (psi)	_____	90,000
Coupling Minimum Yield (psi)	_____	80,000
Coupling Minimum Ultimate (psi)	_____	100,000
Coupling or Joint Outside Diameter (ins)	_____	5.000
Drift Diameter (ins)	_____	3.875
Plain End Weight per Foot (lbs)	_____	11.36
Joint Strength (lbs)	_____	201,000
Internal Yield (psi)	_____	7,780
Collapse Rating (psi)	_____	6,350

MAXIMUM DEPTH/LENGTH BASED ON MUD WTS & SAFETY FACTORS

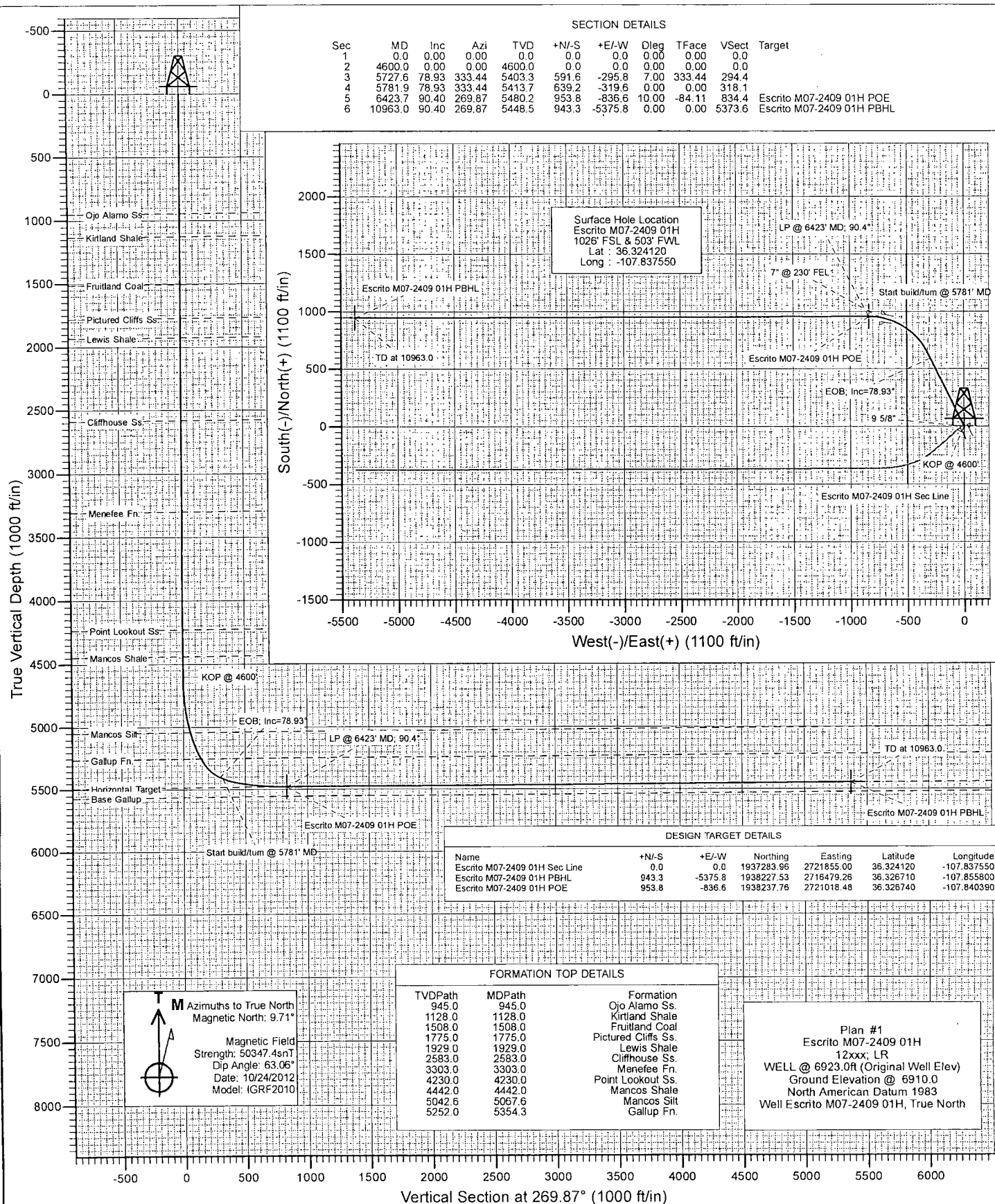
Drilling Mud Weight (ppg)	_____	9.625
Tension Safety Factor	_____	1.80
Maximum Tension Length (ft)	_____	9,630
Internal Yield Safety Factor	_____	1.10
Maximum Depth for Internal Yield (ft)	_____	14,150
Collapse Safety Factor	_____	1.125
Maximum Collapse Depth (ft)	_____	11,290

API RELATED VALUES and INTERMEDIATE CALCULATION RESULTS

Coupling Thread Fracture Strength	_____	464,000
Pipe Thread Fracture Strength (lbs)	_____	201,000
Pipe Body Plain End Yield (lbs)	_____	267,000
Round Thread Pull-Out (lbs)	_____	219,000
Minimum Make-up Torque (ft-lbs)	_____	1,640
Nominal Make-up Torque (ft-lbs)	_____	2,190
Maximum Make-up Torque (ft-lbs)	_____	2,740
Coupling Internal Yield (psi)	_____	10,660
Pipe Body Internal Yield (psi)	_____	7,780
Leak @ E1 or E7 plane (psi)	_____	17,920
Pipe Hydrostatic Test Pressure @ 80 % SMYS	_____	7,100



Project: San Juan Co, NM
 Site: S7- T24N-R9W
 Well: Escrito M07-2409 01H
 Wellbore: Hz
 Design: Plan #1



Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Escrito M07-2409 01H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 6923.0ft (Original Well Elev)
Project:	San Juan Co, NM	MD Reference:	WELL @ 6923.0ft (Original Well Elev)
Site:	S7- T24N-R9W	North Reference:	True
Well:	Escrito M07-2409 01H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Project:	San Juan Co, 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 M07-2409 01H					
Well Position	+N/-S	0.0 ft	Northing:	1,937,283.96 ft	Latitude:	36.324120
	+E/-W	0.0 ft	Easting:	2,721,855.00 ft	Longitude:	-107.837550
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	6,910.0 ft

Wellbore		Hz			
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	10/24/2012	9.71	63.06	50,347

Design:	Plan #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.0	0.0	0.0	269.87

Plan Sections										
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Dogleg Rate	Build Rate	Turn Rate	TFO	Target
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)	(°)	
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.00	0.00	0.00	0.00	
5,727.6	78.93	333.44	5,403.3	591.6	-295.8	7.00	7.00	0.00	333.44	
5,781.9	78.93	333.44	5,413.7	639.2	-319.6	0.00	0.00	0.00	0.00	
6,423.7	90.40	269.87	5,480.2	953.8	-836.6	10.00	1.79	-9.90	-84.11	Escrito M07-2409 01H
10,963.0	90.40	269.87	5,448.5	943.3	-5,375.8	0.00	0.00	0.00	0.00	Escrito M07-2409 01H

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Escrito M07-2409 01H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 6923.0ft (Original Well Elev)
Project:	San Juan Co, NM	MD Reference:	WELL @ 6923.0ft (Original Well Elev)
Site:	S7- T24N-R9W	North Reference:	True
Well:	Escrito M07-2409 01H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

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	Escrito M07-2409 01H Sec Line
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	
945.0	0.00	0.00	945.0	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	
1,128.0	0.00	0.00	1,128.0	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	
1,508.0	0.00	0.00	1,508.0	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	
1,775.0	0.00	0.00	1,775.0	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	
1,929.0	0.00	0.00	1,929.0	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	
2,583.0	0.00	0.00	2,583.0	0.0	0.0	0.0	0.00	0.00	Cliffhouse Ss.
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	
3,303.0	0.00	0.00	3,303.0	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	
4,230.0	0.00	0.00	4,230.0	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	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Escrito M07-2409 01H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 6923.0ft (Original Well Elev)
Project:	San Juan Co, NM	MD Reference:	WELL @ 6923.0ft (Original Well Elev)
Site:	S7- T24N-R9W	North Reference:	True
Well:	Escrito M07-2409 01H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

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	
4,442.0	0.00	0.00	4,442.0	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	KOP @ 4600'
4,700.0	7.00	333.44	4,699.8	5.5	-2.7	2.7	7.00	7.00	
4,800.0	14.00	333.44	4,798.0	21.7	-10.9	10.8	7.00	7.00	
4,900.0	21.00	333.44	4,893.3	48.6	-24.3	24.2	7.00	7.00	
5,000.0	28.00	333.44	4,984.3	85.7	-42.8	42.7	7.00	7.00	
5,067.6	32.73	333.44	5,042.6	116.3	-58.1	57.9	7.00	7.00	Mancos Silt
5,100.0	35.00	333.44	5,069.5	132.4	-66.2	65.9	7.00	7.00	
5,200.0	42.00	333.44	5,147.7	188.0	-94.0	93.6	7.00	7.00	
5,300.0	49.00	333.44	5,217.7	251.8	-125.9	125.3	7.00	7.00	
5,354.3	52.80	333.44	5,252.0	289.5	-144.7	144.1	7.00	7.00	Gallup Fn.
5,400.0	56.00	333.44	5,278.6	322.7	-161.4	160.6	7.00	7.00	
5,500.0	63.00	333.44	5,329.3	399.7	-199.9	199.0	7.00	7.00	
5,600.0	70.00	333.44	5,369.1	481.7	-240.8	239.8	7.00	7.00	
5,700.0	77.00	333.44	5,397.5	567.4	-283.7	282.4	7.00	7.00	
5,727.6	78.93	333.44	5,403.3	591.6	-295.8	294.4	7.00	7.00	EOB; Inc=78.93°
5,781.9	78.93	333.44	5,413.7	639.2	-319.6	318.1	0.00	0.00	Start build/turn @ 5781' MD
5,800.0	79.12	331.60	5,417.2	655.0	-327.8	326.3	10.00	1.06	
5,900.0	80.37	321.52	5,435.0	737.0	-382.0	380.3	10.00	1.25	
6,000.0	81.90	311.52	5,450.4	808.6	-449.9	448.0	10.00	1.53	
6,100.0	83.68	301.60	5,463.0	867.6	-529.5	527.5	10.00	1.78	
6,200.0	85.64	291.75	5,472.4	912.2	-618.3	616.3	10.00	1.96	
6,300.0	87.73	281.95	5,478.1	941.1	-713.8	711.6	10.00	2.09	
6,319.6	88.15	280.03	5,478.8	944.8	-733.0	730.9	10.00	2.14	7" @ 230' FEL
6,400.0	89.89	272.18	5,480.2	953.3	-812.9	810.7	10.00	2.16	
6,423.7	90.40	269.87	5,480.2	953.8	-836.6	834.4	10.00	2.17	LP @ 6423' MD; 90.4° - Escrito M07-2409 01H
6,500.0	90.40	269.87	5,479.6	953.6	-912.9	910.7	0.00	0.00	
6,600.0	90.40	269.87	5,478.9	953.4	-1,012.9	1,010.7	0.00	0.00	
6,700.0	90.40	269.87	5,478.2	953.1	-1,112.9	1,110.7	0.00	0.00	
6,800.0	90.40	269.87	5,477.5	952.9	-1,212.8	1,210.7	0.00	0.00	
6,900.0	90.40	269.87	5,476.8	952.7	-1,312.8	1,310.7	0.00	0.00	
7,000.0	90.40	269.87	5,476.1	952.4	-1,412.8	1,410.7	0.00	0.00	
7,100.0	90.40	269.87	5,475.4	952.2	-1,512.8	1,510.7	0.00	0.00	
7,200.0	90.40	269.87	5,474.8	952.0	-1,612.8	1,610.7	0.00	0.00	
7,300.0	90.40	269.87	5,474.1	951.8	-1,712.8	1,710.7	0.00	0.00	
7,400.0	90.40	269.87	5,473.4	951.5	-1,812.8	1,810.7	0.00	0.00	
7,500.0	90.40	269.87	5,472.7	951.3	-1,912.8	1,910.7	0.00	0.00	
7,600.0	90.40	269.87	5,472.0	951.1	-2,012.8	2,010.7	0.00	0.00	
7,700.0	90.40	269.87	5,471.3	950.8	-2,112.8	2,110.7	0.00	0.00	
7,800.0	90.40	269.87	5,470.6	950.6	-2,212.8	2,210.7	0.00	0.00	
7,900.0	90.40	269.87	5,469.9	950.4	-2,312.8	2,310.7	0.00	0.00	
8,000.0	90.40	269.87	5,469.2	950.1	-2,412.8	2,410.7	0.00	0.00	
8,100.0	90.40	269.87	5,468.5	949.9	-2,512.8	2,510.7	0.00	0.00	
8,200.0	90.40	269.87	5,467.8	949.7	-2,612.8	2,610.6	0.00	0.00	
8,300.0	90.40	269.87	5,467.1	949.5	-2,712.8	2,710.6	0.00	0.00	
8,400.0	90.40	269.87	5,466.4	949.2	-2,812.8	2,810.6	0.00	0.00	
8,500.0	90.40	269.87	5,465.7	949.0	-2,912.8	2,910.6	0.00	0.00	
8,600.0	90.40	269.87	5,465.0	948.8	-3,012.8	3,010.6	0.00	0.00	
8,700.0	90.40	269.87	5,464.3	948.5	-3,112.8	3,110.6	0.00	0.00	
8,800.0	90.40	269.87	5,463.6	948.3	-3,212.8	3,210.6	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Escrito M07-2409 01H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 6923.0ft (Original Well Elev)
Project:	San Juan Co, NM	MD Reference:	WELL @ 6923.0ft (Original Well Elev)
Site:	S7- T24N-R9W	North Reference:	True
Well:	Escrito M07-2409 01H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

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	269.87	5,462.9	948.1	-3,312.8	3,310.6	0.00	0.00	
9,000.0	90.40	269.87	5,462.2	947.8	-3,412.8	3,410.6	0.00	0.00	
9,100.0	90.40	269.87	5,461.5	947.6	-3,512.8	3,510.6	0.00	0.00	
9,200.0	90.40	269.87	5,460.8	947.4	-3,612.8	3,610.6	0.00	0.00	
9,300.0	90.40	269.87	5,460.1	947.2	-3,712.8	3,710.6	0.00	0.00	
9,400.0	90.40	269.87	5,459.4	946.9	-3,812.8	3,810.6	0.00	0.00	
9,500.0	90.40	269.87	5,458.7	946.7	-3,912.8	3,910.6	0.00	0.00	
9,600.0	90.40	269.87	5,458.0	946.5	-4,012.8	4,010.6	0.00	0.00	
9,700.0	90.40	269.87	5,457.3	946.2	-4,112.8	4,110.6	0.00	0.00	
9,800.0	90.40	269.87	5,456.6	946.0	-4,212.8	4,210.6	0.00	0.00	
9,900.0	90.40	269.87	5,455.9	945.8	-4,312.8	4,310.6	0.00	0.00	
10,000.0	90.40	269.87	5,455.2	945.6	-4,412.8	4,410.6	0.00	0.00	
10,100.0	90.40	269.87	5,454.5	945.3	-4,512.8	4,510.6	0.00	0.00	
10,200.0	90.40	269.87	5,453.8	945.1	-4,612.8	4,610.6	0.00	0.00	
10,300.0	90.40	269.87	5,453.1	944.9	-4,712.8	4,710.6	0.00	0.00	
10,400.0	90.40	269.87	5,452.4	944.6	-4,812.8	4,810.6	0.00	0.00	
10,500.0	90.40	269.87	5,451.7	944.4	-4,912.7	4,910.6	0.00	0.00	
10,600.0	90.40	269.87	5,451.0	944.2	-5,012.7	5,010.6	0.00	0.00	
10,700.0	90.40	269.87	5,450.3	943.9	-5,112.7	5,110.6	0.00	0.00	
10,800.0	90.40	269.87	5,449.6	943.7	-5,212.7	5,210.6	0.00	0.00	
10,900.0	90.40	269.87	5,448.9	943.5	-5,312.7	5,310.6	0.00	0.00	
10,963.0	90.40	269.87	5,448.5	943.3	-5,375.8	5,373.6	0.00	0.00	TD at 10963.0 - Escrito M07-2409 01H PBHL

Targets									
Target Name	- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N-S (ft)	+E-W (ft)	Northing (ft)	Easting (ft)	Latitude Longitude
Escrito M07-2409 01H S	- plan misses target center by 5448.5ft at 0.0ft MD (0.0 TVD, 0.0 N, 0.0 E)	0.00	0.00	-5,448.5	0.0	0.0	1,937,283.96	2,721,855.00	36.324120 -107.837550
- Polygon									
Point 1				-5,448.5	1,500.0	-503.0	1,938,783.98	2,721,352.06	
Point 2				-5,448.5	-500.0	-503.0	1,936,783.98	2,721,351.98	
Escrito M07-2409 01H P	- plan hits target center	0.00	0.00	5,448.5	943.3	-5,375.8	1,938,227.53	2,716,479.26	36.326710 -107.855800
- Point									
Escrito M07-2409 01H P	- plan hits target center	0.00	0.00	5,480.2	953.8	-836.6	1,938,237.76	2,721,018.48	36.326740 -107.840390
- 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
6,319.6	5,478.8	7" @ 230' FEL	0.000	0.000

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Escrito M07-2409 01H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 6923.0ft (Original Well Elev)
Project:	San Juan Co, NM	MD Reference:	WELL @ 6923.0ft (Original Well Elev)
Site:	S7- T24N-R9W	North Reference:	True
Well:	Escrito M07-2409 01H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Formations				
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip Direction (°)
945.0	945.0	Ojo Alamo Ss.		-0.40 269.87
1,128.0	1,128.0	Kirtland Shale		-0.40 269.87
1,508.0	1,508.0	Fruitland Coal		-0.40 269.87
1,775.0	1,775.0	Pictured Cliffs Ss.		-0.40 269.87
1,929.0	1,929.0	Lewis Shale		-0.40 269.87
2,583.0	2,583.0	Cliffhouse Ss.		-0.40 269.87
3,303.0	3,303.0	Menefee Fn.		-0.40 269.87
4,230.0	4,230.0	Point Lookout Ss.		-0.40 269.87
4,442.0	4,442.0	Mancos Shale		-0.40 269.87
5,067.6	5,043.0	Mancos Silt		-0.40 269.87
5,354.3	5,253.0	Gallup Fn.		-0.40 269.87

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
4,600.0	4,600.0	0.0	0.0	KOP @ 4600'
5,727.6	5,403.3	591.6	-295.8	EOB; Inc=78.93°
5,781.9	5,413.7	639.2	-319.6	Start build/turn @ 5781' MD
6,423.7	5,480.2	953.8	-836.6	LP @ 6423' MD; 90.4°
10,963.0	5,448.5	943.3	-5,375.8	TD at 10963.0

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Escrito M07-2409 01H
Project:	San Juan Co, NM	TVD Reference:	WELL @ 6923.0ft (Original Well Elev)
Reference Site:	S7- T24N-R9W	MD Reference:	WELL @ 6923.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Escrito M07-2409 01H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore:	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference	Plan #1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0ft	Error Model:	Systematic Ellipse
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,251.5ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program		Date 10/24/2012		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	10,963.0	Plan #1 (Hz)	MWD	Geolink MWD

Summary		Reference	Offset	Distance		Separation	Warning
Site Name	Offset Well - Wellbore - Design	Measured Depth (ft)	Measured Depth (ft)	Between Centres (ft)	Between Ellipses (ft)	Factor	
S7- T24N-R9W	Escrito M07-2409 02H - Hz - Plan #1	4,656.2	4,655.9	30.0	13.8	1.852	CC, ES, SF

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

Anticollision Report

Company: EnCana Oil & Gas (USA) Inc
 Project: San Juan Co, NM
 Reference Site: S7- T24N-R9W
 Site Error: 0.0ft
 Reference Well: Escrito M07-2409 01H
 Well Error: 0.0ft
 Reference Wellbore: Hz
 Reference Design: Plan #1

Local Co-ordinate Reference: Well Escrito M07-2409 01H
 TVD Reference: WELL @ 6923.0ft (Original Well Elev)
 MD Reference: WELL @ 6923.0ft (Original Well Elev)
 North Reference: True
 Survey Calculation Method: Minimum Curvature
 Output errors are at: 2.00 sigma
 Database: USA EDM 5000 Multi Users DB
 Offset TVD Reference: Offset Datum

Offset Design S7- T24N-R9W - Escrito M07-2409 02H - Hz - Plan #1														Offset Site Error: 0.0 ft	
Survey Program: 0-MWD														Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Distance		Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N-S (ft)	+E-W (ft)	Between Centres (ft)	Between Ellipses (ft)					
0.0	0.0	0.0	0.0	0.0	0.0	-103.88	-7.3	-29.5	30.3						
100.0	100.0	100.0	100.0	0.2	0.2	-103.88	-7.3	-29.5	30.3	30.0	0.30	99.917			
200.0	200.0	200.0	200.0	0.3	0.3	-103.88	-7.3	-29.5	30.3	29.7	0.65	46.486			
300.0	300.0	300.0	300.0	0.5	0.5	-103.88	-7.3	-29.5	30.3	29.3	1.00	30.289			
400.0	400.0	400.0	400.0	0.7	0.7	-103.88	-7.3	-29.5	30.3	29.0	1.35	22.462			
500.0	500.0	500.0	500.0	0.8	0.8	-103.88	-7.3	-29.5	30.3	28.6	1.70	17.850			
600.0	600.0	600.0	600.0	1.0	1.0	-103.88	-7.3	-29.5	30.3	28.3	2.05	14.809			
700.0	700.0	700.0	700.0	1.2	1.2	-103.88	-7.3	-29.5	30.3	27.9	2.40	12.653			
800.0	800.0	800.0	800.0	1.4	1.4	-103.88	-7.3	-29.5	30.3	27.6	2.75	11.046			
900.0	900.0	900.0	900.0	1.5	1.5	-103.88	-7.3	-29.5	30.3	27.2	3.10	9.800			
1,000.0	1,000.0	1,000.0	1,000.0	1.7	1.7	-103.88	-7.3	-29.5	30.3	26.9	3.45	8.807			
1,100.0	1,100.0	1,100.0	1,100.0	1.9	1.9	-103.88	-7.3	-29.5	30.3	26.5	3.79	7.997			
1,200.0	1,200.0	1,200.0	1,200.0	2.1	2.1	-103.88	-7.3	-29.5	30.3	26.2	4.14	7.323			
1,300.0	1,300.0	1,300.0	1,300.0	2.2	2.2	-103.88	-7.3	-29.5	30.3	25.9	4.49	6.754			
1,400.0	1,400.0	1,400.0	1,400.0	2.4	2.4	-103.88	-7.3	-29.5	30.3	25.5	4.84	6.267			
1,500.0	1,500.0	1,500.0	1,500.0	2.6	2.6	-103.88	-7.3	-29.5	30.3	25.2	5.19	5.846			
1,600.0	1,600.0	1,600.0	1,600.0	2.8	2.8	-103.88	-7.3	-29.5	30.3	24.8	5.54	5.478			
1,700.0	1,700.0	1,700.0	1,700.0	2.9	2.9	-103.88	-7.3	-29.5	30.3	24.5	5.89	5.153			
1,800.0	1,800.0	1,800.0	1,800.0	3.1	3.1	-103.88	-7.3	-29.5	30.3	24.1	6.24	4.864			
1,900.0	1,900.0	1,900.0	1,900.0	3.3	3.3	-103.88	-7.3	-29.5	30.3	23.8	6.59	4.607			
2,000.0	2,000.0	2,000.0	2,000.0	3.5	3.5	-103.88	-7.3	-29.5	30.3	23.4	6.94	4.375			
2,100.0	2,100.0	2,100.0	2,100.0	3.6	3.6	-103.88	-7.3	-29.5	30.3	23.1	7.29	4.165			
2,200.0	2,200.0	2,200.0	2,200.0	3.8	3.8	-103.88	-7.3	-29.5	30.3	22.7	7.63	3.975			
2,300.0	2,300.0	2,300.0	2,300.0	4.0	4.0	-103.88	-7.3	-29.5	30.3	22.4	7.98	3.801			
2,400.0	2,400.0	2,400.0	2,400.0	4.2	4.2	-103.88	-7.3	-29.5	30.3	22.0	8.33	3.642			
2,500.0	2,500.0	2,500.0	2,500.0	4.3	4.3	-103.88	-7.3	-29.5	30.3	21.7	8.68	3.495			
2,600.0	2,600.0	2,600.0	2,600.0	4.5	4.5	-103.88	-7.3	-29.5	30.3	21.3	9.03	3.360			
2,700.0	2,700.0	2,700.0	2,700.0	4.7	4.7	-103.88	-7.3	-29.5	30.3	21.0	9.38	3.235			
2,800.0	2,800.0	2,800.0	2,800.0	4.9	4.9	-103.88	-7.3	-29.5	30.3	20.6	9.73	3.119			
2,900.0	2,900.0	2,900.0	2,900.0	5.0	5.0	-103.88	-7.3	-29.5	30.3	20.3	10.08	3.011			
3,000.0	3,000.0	3,000.0	3,000.0	5.2	5.2	-103.88	-7.3	-29.5	30.3	19.9	10.43	2.910			
3,100.0	3,100.0	3,100.0	3,100.0	5.4	5.4	-103.88	-7.3	-29.5	30.3	19.6	10.78	2.816			
3,200.0	3,200.0	3,200.0	3,200.0	5.6	5.6	-103.88	-7.3	-29.5	30.3	19.2	11.12	2.728			
3,300.0	3,300.0	3,300.0	3,300.0	5.7	5.7	-103.88	-7.3	-29.5	30.3	18.9	11.47	2.645			
3,400.0	3,400.0	3,400.0	3,400.0	5.9	5.9	-103.88	-7.3	-29.5	30.3	18.5	11.82	2.567			
3,500.0	3,500.0	3,500.0	3,500.0	6.1	6.1	-103.88	-7.3	-29.5	30.3	18.2	12.17	2.493			
3,600.0	3,600.0	3,600.0	3,600.0	6.3	6.3	-103.88	-7.3	-29.5	30.3	17.8	12.52	2.423			
3,700.0	3,700.0	3,700.0	3,700.0	6.4	6.4	-103.88	-7.3	-29.5	30.3	17.5	12.87	2.358			
3,800.0	3,800.0	3,800.0	3,800.0	6.6	6.6	-103.88	-7.3	-29.5	30.3	17.1	13.22	2.295			
3,900.0	3,900.0	3,900.0	3,900.0	6.8	6.8	-103.88	-7.3	-29.5	30.3	16.8	13.57	2.236			
4,000.0	4,000.0	4,000.0	4,000.0	7.0	7.0	-103.88	-7.3	-29.5	30.3	16.4	13.92	2.180			
4,100.0	4,100.0	4,100.0	4,100.0	7.1	7.1	-103.88	-7.3	-29.5	30.3	16.1	14.27	2.127			
4,200.0	4,200.0	4,200.0	4,200.0	7.3	7.3	-103.88	-7.3	-29.5	30.3	15.7	14.62	2.076			
4,300.0	4,300.0	4,300.0	4,300.0	7.5	7.5	-103.88	-7.3	-29.5	30.3	15.4	14.96	2.028			
4,400.0	4,400.0	4,400.0	4,400.0	7.7	7.7	-103.88	-7.3	-29.5	30.3	15.0	15.31	1.981			
4,500.0	4,500.0	4,500.0	4,500.0	7.8	7.8	-103.88	-7.3	-29.5	30.3	14.7	15.66	1.937			
4,600.0	4,600.0	4,600.0	4,600.0	8.0	8.0	-103.88	-7.3	-29.5	30.3	14.3	16.01	1.895			
4,656.2	4,656.2	4,655.9	4,655.9	8.1	8.1	-80.93	-7.3	-29.5	30.0	13.8	16.21	1.852 CC, ES, SF			
4,700.0	4,699.8	4,697.3	4,697.2	8.2	8.2	-89.28	-8.6	-30.9	31.6	15.2	16.36	1.932			
4,800.0	4,798.0	4,787.3	4,786.0	8.4	8.3	-111.67	-17.9	-41.9	51.8	35.1	16.66	3.109			
4,900.0	4,893.3	4,866.4	4,861.3	8.6	8.5	-121.55	-33.6	-60.1	95.2	78.4	16.85	5.649			
5,000.0	4,984.3	4,932.0	4,920.8	8.9	8.7	-123.60	-51.6	-81.1	156.0	139.0	17.05	9.152			

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

Anticollision Report

Company: EnCana Oil & Gas (USA) Inc
Project: San Juan Co. NM
Reference Site: S7- T24N-R9W
Site Error: 0.0ft
Reference Well: Escrito M07-2409 01H
Well Error: 0.0ft
Reference Wellbore: Hz
Reference Design: Plan #1

Local Co-ordinate Reference: Well Escrito M07-2409 01H
TVD Reference: WELL @ 6923.0ft (Original Well Elev)
MD Reference: WELL @ 6923.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: USA EDM 5000 Multi Users DB
Offset TVD Reference: Offset Datum

Offset Design S7- T24N-R9W - Escrito M07-2409 02H - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference	Offset	Semi Major Axis		Distance		Total		Separation		Warning				
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N-S (ft)	+E-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Factor		
5,100.0	5,069.5	4,984.0	4,965.4	9.3	8.9	-121.70	-68.9	-101.3	229.3	212.0	17.36	13.210		
5,200.0	5,147.7	5,023.9	4,997.9	9.9	9.1	-116.71	-84.0	-118.8	311.5	293.5	17.96	17.341		
5,300.0	5,217.7	5,050.0	5,018.3	10.7	9.2	-107.78	-94.6	-131.2	399.7	380.7	19.03	21.003		
5,400.0	5,278.6	5,074.2	5,036.5	11.7	9.4	-95.79	-105.0	-143.3	491.8	471.3	20.44	24.062		
5,500.0	5,329.3	5,091.2	5,048.9	12.8	9.5	-80.22	-112.5	-152.1	585.9	564.4	21.57	27.161		
5,600.0	5,369.1	5,104.9	5,058.9	14.2	9.6	-63.98	-118.7	-159.2	680.7	659.1	21.62	31.493		
5,700.0	5,397.5	5,109.5	5,062.3	15.6	9.6	-48.46	-120.7	-161.6	775.2	754.9	20.29	38.197		
5,800.0	5,417.2	5,107.6	5,060.9	17.2	9.6	-47.04	-119.9	-160.6	869.1	848.0	21.12	41.150		
5,900.0	5,435.0	5,112.2	5,064.2	18.9	9.6	-57.61	-121.9	-163.0	960.8	936.3	24.55	39.137		
6,000.0	5,450.4	5,126.8	5,074.8	20.7	9.7	-63.73	-128.4	-170.6	1,047.4	1,020.6	26.77	39.121		
6,100.0	5,463.0	5,151.0	5,092.4	22.5	9.9	-67.66	-139.3	-183.2	1,127.4	1,099.1	28.29	39.844		
6,200.0	5,472.4	5,184.1	5,116.5	24.2	10.1	-70.54	-154.1	-200.4	1,199.2	1,169.9	29.33	40.885		

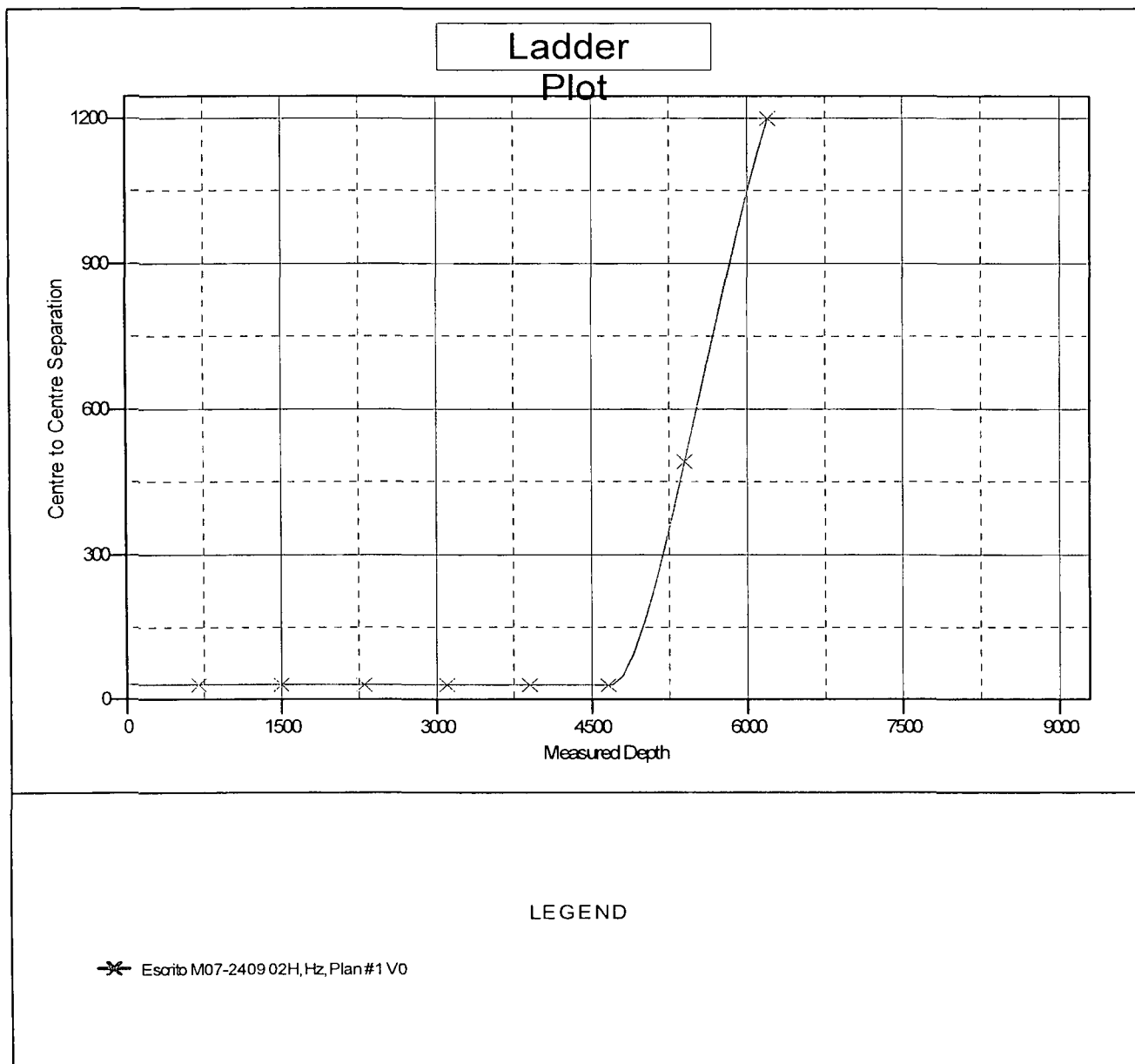
Anticollision Report

Company: EnCana Oil & Gas (USA) Inc
Project: San Juan Co, NM
Reference Site: S7- T24N-R9W
Site Error: 0.0ft
Reference Well: Escrito M07-2409 01H
Well Error: 0.0ft
Reference Wellbore: Hz
Reference Design: Plan #1

Local Co-ordinate Reference: Well Escrito M07-2409 01H
TVD Reference: WELL @ 6923.0ft (Original Well Elev)
MD Reference: WELL @ 6923.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: USA EDM 5000 Multi Users DB
Offset TVD Reference: Offset Datum

Reference Depths are relative to WELL @ 6923.0ft (Original Well Elev)
 Offset Depths are relative to Offset Datum
 Central Meridian is -107.833333 °

Coordinates are relative to: Escrito M07-2409 01H
 Coordinate System is US State Plane 1983, New Mexico Western Zone
 Grid Convergence at Surface is: 0.00°



WELLHEAD BLOWOUT CONTROL SYSTEM



Well name and number:

Escrito M07-2409 01H

