

CONFIDENTIAL

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

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

☒ As-Drilled

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-35362		*Pool Code 5890		*Pool Name BISTI LOWER - GALLUP	
*Property Code 39128		*Property Name ESCRITO I16-2409			*Well Number 01H
*GRID No. 282327		*Operator Name ENCANA OIL & GAS (USA) INC.			*Elevation 6821'

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
I	16	24N	9W		2230	SOUTH	300	EAST	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
L	16	24N	9W		2250	SOUTH	336	WEST	SAN JUAN

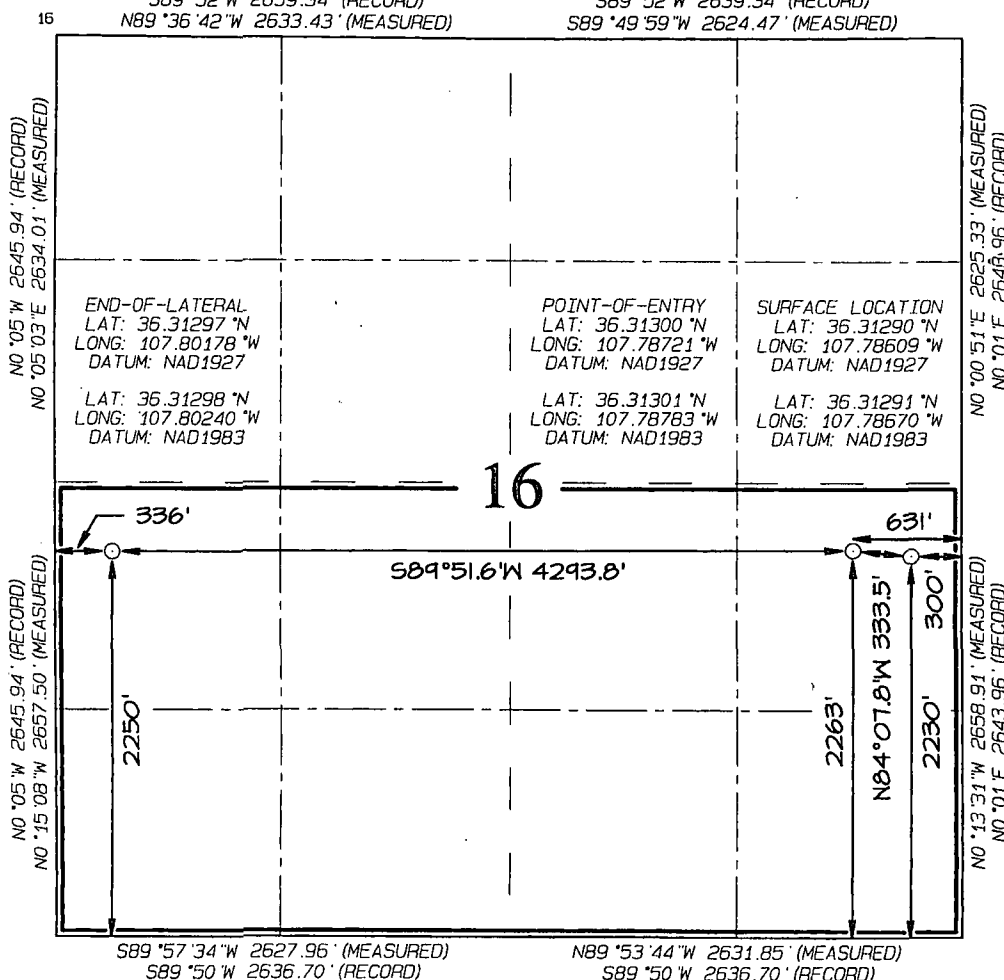
¹² Dedicated Acres 320.0 Acres - S/2					¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No. RCVD MAR 4'13	
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION OIL CONS. DIV.

DIST. 3

S89°52'W 2639.34' (RECORD)
N89°36'42"W 2633.43' (MEASURED)

S89°52'W 2639.34' (RECORD)
S89°49'59"W 2624.47' (MEASURED)



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: Robynn Haden Date: 2/28/13

Printed Name: ROBYNN HADEN

E-mail Address: robynn.haden@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.

Date Revised: FEBRUARY 28, 2013
Survey Date: JANUARY 16, 2012

Signature and Seal of Professional Surveyor

JASON C. EDWARDS
Certificate Number 15269

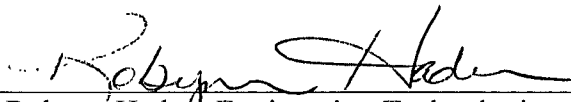
DEVIATION SURVEYS

MD (Feet)	Inclination (Degree)
800	.50
1300	.50
1800	.50
2300	1
2600	1.3
2900	1.3
3200	1.2
3520	1.5
3800	1.2
4100	1.1
4400	.8
4750	.9
5000	1.2
5300	1.5

RCVD MAR 4 '13
OIL CONS. DIV.
DIST. 3

OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.


Robynn Haden, Engineering Technologist

2/28/13
2/28/13

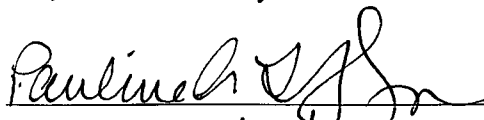
ACKNOWLEDGMENT

State of Colorado
City and County of Denver

This instrument was acknowledged before me on this 28th day of February, 2013 by Robynn Haden as Attorney in Fact of Encana Oil & Gas (USA) Inc., on behalf of said corporation.

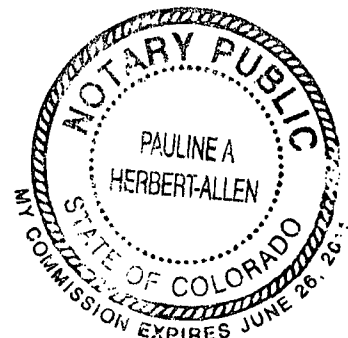
In witness whereof, I hereunto set my hand and official seal.

Notary Public:



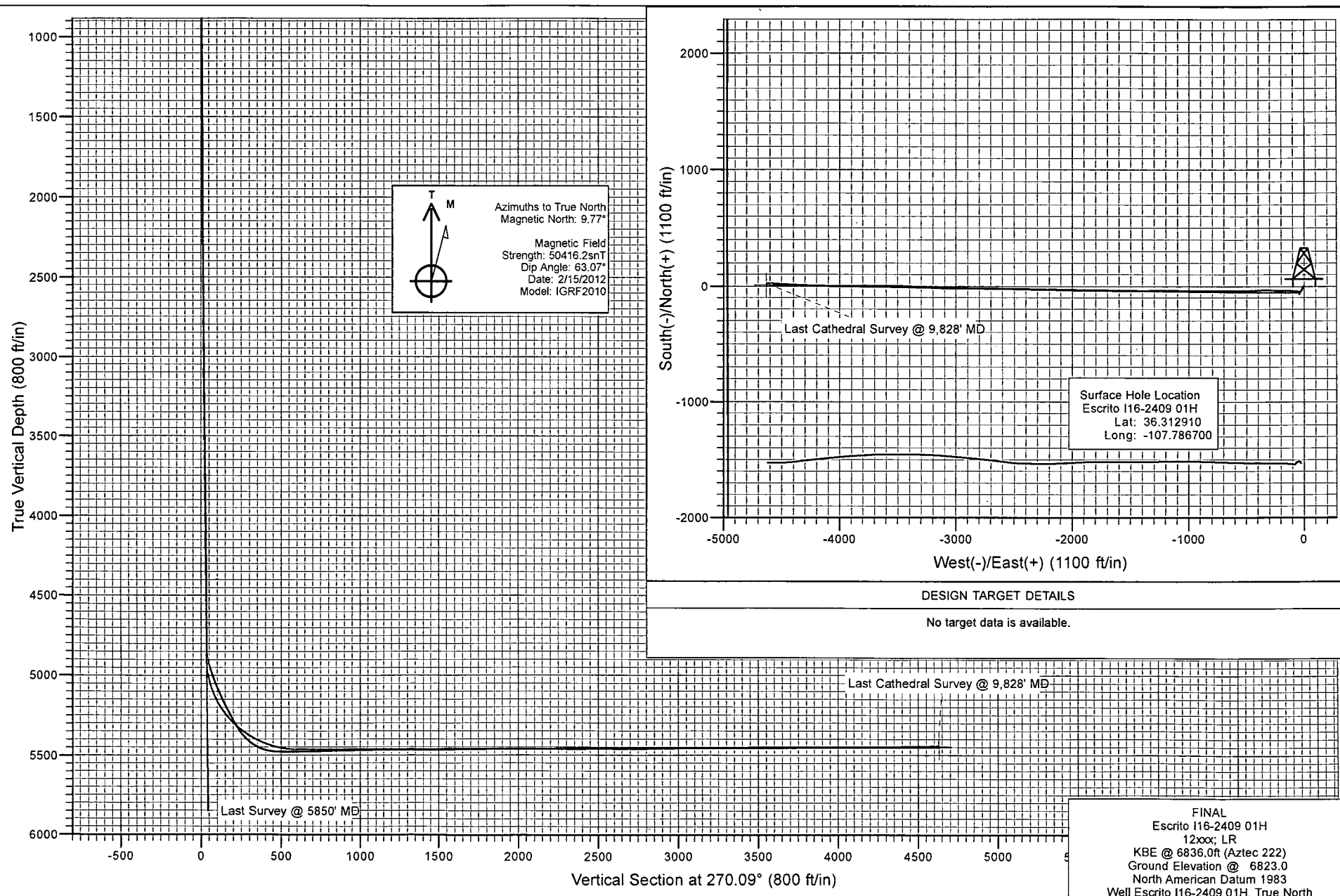
My Commission Expires:

06/26/2016





Project: San Juan County, NM
Site: S16-T24N-R9W (Escrito)
Well: Escrito I16-2409 01H
Wellbore: Hz
Design: FINAL



Cathedral Energy Services

Survey Report

Company: EnCana Oil & Gas (USA) Inc
Project: San Juan County, NM
Site: S16-T24N-R9W (Escrito)
Well: Escrito I16-2409 01H
Wellbore: Hz
Design: FINAL

Local Co-ordinate Reference: Well Escrito I16-2409 01H
TVD Reference: KBE @ 6836.0ft (Aztec 222)
MD Reference: KBE @ 6836.0ft (Aztec 222)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: USA EDM 5000 Multi Users DB

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	S16-T24N-R9W (Escrito)				
Site Position:		Northing:	1,933,206.49 ft	Latitude:	36.312910
From:	Lat/Long	Easting:	2,736,836.00 ft	Longitude:	-107.786700
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	0.03 °

Well	Escrito I16-2409 01H					
Well Position	+N/-S	0.0 ft	Northing:	1,933,206.49 ft	Latitude:	36.312910
	+E/-W	0.0 ft	Easting:	2,736,836.00 ft	Longitude:	-107.786700
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	6,823.0 ft

Wellbore	Hz				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF2010	2/15/2012	9.77	63.07	50,416

Design	FINAL				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	4,850.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(ft)	(ft)	(ft)	(°)	
	0.0	0.0	0.0	270.09	

Survey Program	Date 2/21/2013				
From	To	Survey (Wellbore)	Tool Name	Description	
(ft)	(ft)				
550.0	4,850.0	Survey #1 (Pilot)	MWD	Geolink MWD	
4,892.0	9,828.0	Survey #1 (Hz)	MWD	Geolink MWD	

Survey									
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Vertical	Dogleg	Build	Formations /
Depth	(°)	(°)	Depth	(ft)	(ft)	Section	Rate	Rate	Comments
(ft)			(ft)			(ft)	(°/100ft)	(°/100ft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
550.0	0.50	273.70	550.0	0.2	-2.4	2.4	0.09	0.09	
600.0	0.60	260.30	600.0	0.1	-2.9	2.9	0.32	0.20	
650.0	0.40	268.00	650.0	0.1	-3.3	3.3	0.42	-0.40	
700.0	0.40	269.90	700.0	0.1	-3.7	3.7	0.03	0.00	
750.0	0.30	254.50	750.0	0.0	-4.0	4.0	0.27	-0.20	
800.0	0.30	256.20	800.0	0.0	-4.2	4.2	0.02	0.00	
850.0	0.50	266.40	850.0	-0.1	-4.6	4.6	0.42	0.40	
900.0	0.70	267.90	900.0	-0.1	-5.1	5.1	0.40	0.40	
950.0	0.60	283.70	950.0	-0.1	-5.6	5.6	0.41	-0.20	
1,000.0	0.50	285.10	1,000.0	0.1	-6.1	6.1	0.20	-0.20	
1,050.0	0.30	265.50	1,050.0	0.1	-6.4	6.4	0.48	-0.40	

Cathedral Energy Services

Survey Report

Company: EnCana Oil & Gas (USA) Inc
Project: San Juan County, NM
Site: S16-T24N-R9W (Escrito)
Well: Escrito I16-2409 01H
Wellbore: Hz
Design: FINAL

Local Co-ordinate Reference: Well Escrito I16-2409 01H
TVD Reference: KBE @ 6836.0ft (Aztec 222)
MD Reference: KBE @ 6836.0ft (Aztec 222)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: USA EDM 5000 Multi Users DB

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Formations / Comments
1,100.0	0.30	245.70	1,100.0	0.0	-6.7	6.7	0.21	0.00	
1,150.0	0.20	240.40	1,150.0	0.0	-6.9	6.9	0.21	-0.20	
1,200.0	0.30	224.50	1,200.0	-0.2	-7.1	7.1	0.24	0.20	
1,250.0	0.40	228.90	1,250.0	-0.4	-7.3	7.3	0.21	0.20	
1,300.0	0.40	237.70	1,300.0	-0.6	-7.6	7.6	0.12	0.00	
1,350.0	0.40	226.20	1,350.0	-0.8	-7.8	7.8	0.16	0.00	
1,400.0	0.50	220.20	1,400.0	-1.1	-8.1	8.1	0.22	0.20	
1,450.0	0.50	212.90	1,450.0	-1.5	-8.4	8.4	0.13	0.00	
1,500.0	0.60	206.30	1,500.0	-1.9	-8.6	8.6	0.24	0.20	
1,550.0	0.80	194.30	1,550.0	-2.4	-8.8	8.8	0.49	0.40	
1,600.0	0.70	195.80	1,600.0	-3.1	-9.0	9.0	0.20	-0.20	
1,650.0	0.50	201.70	1,650.0	-3.6	-9.1	9.1	0.42	-0.40	
1,700.0	0.70	195.30	1,700.0	-4.1	-9.3	9.3	0.42	0.40	
1,750.0	0.70	196.40	1,749.9	-4.7	-9.5	9.4	0.03	0.00	
1,800.0	0.60	206.20	1,799.9	-5.2	-9.7	9.6	0.30	-0.20	
1,850.0	0.50	206.00	1,849.9	-5.6	-9.9	9.9	0.20	-0.20	
1,900.0	0.50	196.90	1,899.9	-6.0	-10.0	10.0	0.16	0.00	
1,950.0	0.50	191.70	1,949.9	-6.4	-10.1	10.1	0.09	0.00	
2,000.0	0.60	189.70	1,999.9	-6.9	-10.2	10.2	0.20	0.20	
2,050.0	0.60	190.90	2,049.9	-7.4	-10.3	10.3	0.03	0.00	
2,100.0	0.60	188.10	2,099.9	-7.9	-10.4	10.4	0.06	0.00	
2,150.0	0.70	187.60	2,149.9	-8.5	-10.5	10.5	0.20	0.20	
2,200.0	0.80	190.60	2,199.9	-9.2	-10.6	10.6	0.21	0.20	
2,250.0	0.80	191.60	2,249.9	-9.8	-10.7	10.7	0.03	0.00	
2,300.0	0.90	189.40	2,299.9	-10.6	-10.9	10.8	0.21	0.20	
2,350.0	0.90	187.00	2,349.9	-11.3	-11.0	10.9	0.08	0.00	
2,400.0	1.00	187.70	2,399.9	-12.2	-11.1	11.0	0.20	0.20	
2,450.0	1.00	196.60	2,449.9	-13.0	-11.3	11.2	0.31	0.00	
2,500.0	1.20	206.00	2,499.9	-13.9	-11.6	11.6	0.54	0.40	
2,550.0	1.10	208.70	2,549.9	-14.8	-12.1	12.0	0.23	-0.20	
2,600.0	1.10	205.00	2,599.9	-15.7	-12.5	12.5	0.14	0.00	
2,650.0	1.10	208.50	2,649.9	-16.5	-12.9	12.9	0.13	0.00	
2,700.0	1.30	208.90	2,699.8	-17.4	-13.4	13.4	0.40	0.40	
2,750.0	1.30	203.50	2,749.8	-18.4	-13.9	13.9	0.24	0.00	
2,800.0	1.40	205.80	2,799.8	-19.5	-14.4	14.4	0.23	0.20	
2,850.0	1.30	202.40	2,849.8	-20.6	-14.9	14.9	0.26	-0.20	
2,900.0	1.30	202.20	2,899.8	-21.6	-15.3	15.3	0.01	0.00	
2,950.0	1.30	202.80	2,949.8	-22.7	-15.8	15.7	0.03	0.00	
3,000.0	1.20	200.90	2,999.8	-23.7	-16.2	16.1	0.22	-0.20	
3,050.0	1.20	202.70	3,049.8	-24.7	-16.6	16.5	0.08	0.00	
3,100.0	1.10	199.80	3,099.7	-25.6	-16.9	16.9	0.23	-0.20	
3,150.0	1.10	200.30	3,149.7	-26.5	-17.3	17.2	0.02	0.00	
3,200.0	1.10	205.00	3,199.7	-27.4	-17.6	17.6	0.18	0.00	
3,250.0	1.10	206.30	3,249.7	-28.3	-18.0	18.0	0.05	0.00	
3,300.0	1.20	206.00	3,299.7	-29.2	-18.5	18.4	0.20	0.20	
3,350.0	1.20	206.30	3,349.7	-30.1	-19.0	18.9	0.01	0.00	
3,400.0	1.40	212.50	3,399.7	-31.1	-19.5	19.5	0.49	0.40	
3,450.0	1.40	214.40	3,449.7	-32.1	-20.2	20.1	0.09	0.00	
3,500.0	1.30	213.80	3,499.7	-33.1	-20.8	20.8	0.20	-0.20	
3,550.0	1.30	212.40	3,549.6	-34.0	-21.5	21.4	0.06	0.00	
3,600.0	1.30	212.10	3,599.6	-35.0	-22.1	22.0	0.01	0.00	
3,650.0	1.20	212.20	3,649.6	-35.9	-22.6	22.6	0.20	-0.20	
3,700.0	1.20	213.30	3,699.6	-36.8	-23.2	23.2	0.05	0.00	

Cathedral Energy Services

Survey Report

Company: EnCana Oil & Gas (USA) Inc
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Site: S16-T24N-R9W (Escrito)
Well: Escrito I16-2409 01H
Wellbore: Hz
Design: FINAL

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MD Reference: KBE @ 6836.0ft (Aztec 222)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: USA EDM 5000 Multi Users DB

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Formations / Comments
3,750.0	1.10	217.10	3,749.6	-37.6	-23.8	23.7	0.25	-0.20	
3,800.0	1.10	219.20	3,799.6	-38.4	-24.4	24.3	0.08	0.00	
3,850.0	1.10	221.30	3,849.6	-39.1	-25.0	24.9	0.08	0.00	
3,900.0	1.00	223.00	3,899.6	-39.8	-25.6	25.6	0.21	-0.20	
3,950.0	0.90	224.10	3,949.6	-40.4	-26.2	26.1	0.20	-0.20	
4,000.0	0.90	225.30	3,999.6	-40.9	-26.7	26.7	0.04	0.00	
4,050.0	0.90	224.50	4,049.5	-41.5	-27.3	27.2	0.03	0.00	
4,100.0	0.90	224.40	4,099.5	-42.1	-27.8	27.8	0.00	0.00	
4,150.0	0.90	221.90	4,149.5	-42.6	-28.4	28.3	0.08	0.00	
4,200.0	0.80	217.70	4,199.5	-43.2	-28.9	28.8	0.24	-0.20	
4,250.0	0.70	218.20	4,249.5	-43.7	-29.3	29.2	0.20	-0.20	
4,300.0	0.60	220.30	4,299.5	-44.2	-29.6	29.6	0.21	-0.20	
4,350.0	0.70	221.80	4,349.5	-44.6	-30.0	29.9	0.20	0.20	
4,400.0	0.70	222.50	4,399.5	-45.0	-30.4	30.3	0.02	0.00	
4,450.0	0.70	218.50	4,449.5	-45.5	-30.8	30.7	0.10	0.00	
4,500.0	0.60	216.60	4,499.5	-45.9	-31.1	31.1	0.20	-0.20	
4,550.0	0.60	213.60	4,549.5	-46.4	-31.4	31.4	0.06	0.00	
4,600.0	0.70	212.90	4,599.5	-46.8	-31.8	31.7	0.20	0.20	
4,650.0	0.70	211.30	4,649.5	-47.4	-32.1	32.0	0.04	0.00	
4,700.0	0.80	208.30	4,699.5	-47.9	-32.4	32.3	0.21	0.20	
4,750.0	0.80	206.90	4,749.5	-48.6	-32.7	32.7	0.04	0.00	
4,800.0	0.90	206.90	4,799.5	-49.2	-33.1	33.0	0.20	0.20	
4,850.0	1.00	204.90	4,849.5	-50.0	-33.4	33.3	0.21	0.20	
4,892.0	9.80	276.80	4,891.3	-49.9	-37.1	37.1	22.71	20.95	
4,923.0	16.40	291.00	4,921.4	-48.0	-43.9	43.8	23.53	21.29	
4,955.0	18.40	279.10	4,952.0	-45.6	-53.1	53.0	12.73	6.25	
4,987.0	20.60	279.30	4,982.2	-43.9	-63.6	63.5	6.88	6.87	
5,018.0	19.00	275.20	5,011.3	-42.5	-74.0	73.9	6.83	-5.16	
5,050.0	21.20	272.30	5,041.4	-41.8	-85.0	84.9	7.55	6.87	
5,073.0	22.20	272.10	5,062.7	-41.5	-93.5	93.4	4.36	4.35	
5,104.0	22.90	271.70	5,091.4	-41.1	-105.4	105.3	2.31	2.26	
5,122.0	23.00	273.80	5,107.9	-40.8	-112.4	112.3	4.58	0.56	
5,133.0	23.90	275.70	5,118.0	-40.4	-116.7	116.7	10.68	8.18	
5,165.0	27.00	277.50	5,146.9	-38.8	-130.4	130.3	9.98	9.69	
5,197.0	27.00	273.20	5,175.4	-37.4	-144.8	144.8	6.10	0.00	
5,222.0	25.80	270.30	5,197.8	-37.1	-156.0	155.9	7.04	-4.80	
5,260.0	25.80	269.10	5,232.1	-37.2	-172.5	172.4	1.37	0.00	
5,292.0	27.30	268.80	5,260.7	-37.5	-186.8	186.7	4.71	4.69	
5,324.0	28.70	269.10	5,288.9	-37.7	-201.8	201.8	4.40	4.37	
5,355.0	30.80	269.30	5,315.8	-37.9	-217.2	217.1	6.78	6.77	
5,387.0	34.30	271.50	5,342.8	-37.8	-234.4	234.3	11.54	10.94	
5,419.0	38.70	272.90	5,368.5	-37.1	-253.4	253.4	13.99	13.75	
5,451.0	43.70	273.20	5,392.6	-35.9	-274.5	274.4	15.64	15.62	
5,482.0	50.00	272.50	5,413.8	-34.8	-297.0	297.0	20.39	20.32	
5,514.0	55.90	271.00	5,433.1	-34.1	-322.6	322.5	18.81	18.44	
5,546.0	62.80	268.90	5,449.4	-34.1	-350.1	350.0	22.29	21.56	
5,577.0	69.70	268.10	5,461.8	-34.8	-378.4	378.4	22.38	22.26	
5,609.0	76.90	267.40	5,471.0	-36.1	-409.0	409.0	22.60	22.50	
5,625.0	80.70	266.10	5,474.1	-36.9	-424.7	424.6	25.05	23.75	
5,656.0	86.80	266.30	5,477.5	-39.0	-455.4	455.4	19.69	19.68	
5,688.0	87.80	268.10	5,479.0	-40.5	-487.3	487.3	6.43	3.12	
5,720.0	89.00	269.90	5,479.9	-41.1	-519.3	519.3	6.76	3.75	
5,751.0	90.30	270.70	5,480.1	-40.9	-550.3	550.3	4.92	4.19	

Cathedral Energy Services

Survey Report

Company: EnCana Oil & Gas (USA) Inc
Project: San Juan County, NM
Site: S16-T24N-R9W (Escrito)
Well: Escrito 116-2409 01H
Wellbore: .Hz
Design: FINAL

Local Co-ordinate Reference: Well Escrito 116-2409 01H
TVD Reference: KBE @ 6836.0ft (Aztec 222)
MD Reference: KBE @ 6836.0ft (Aztec 222)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: USA EDM 5000 Multi Users DB

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Formations / Comments
5,783.0	91.40	270.60	5,479.6	-40.6	-582.3	582.2	3.45	3.44	
5,846.0	91.30	270.10	5,478.1	-40.2	-645.3	645.2	0.81	-0.16	
5,910.0	91.10	270.10	5,476.8	-40.1	-709.3	709.2	0.31	-0.31	
5,973.0	91.00	269.50	5,475.7	-40.3	-772.3	772.2	0.97	-0.16	
6,036.0	91.40	269.40	5,474.3	-40.9	-835.3	835.2	0.65	0.63	
6,100.0	91.50	269.70	5,472.7	-41.4	-899.2	899.2	0.49	0.16	
6,163.0	91.40	270.60	5,471.1	-41.2	-962.2	962.1	1.44	-0.16	
6,227.0	90.50	270.50	5,470.1	-40.6	-1,026.2	1,026.1	1.41	-1.41	
6,290.0	91.40	270.50	5,469.0	-40.1	-1,089.2	1,089.1	1.43	1.43	
6,353.0	91.80	271.30	5,467.3	-39.1	-1,152.2	1,152.1	1.42	0.63	
6,417.0	89.70	270.20	5,466.4	-38.3	-1,216.1	1,216.1	3.70	-3.28	
6,480.0	89.00	269.70	5,467.1	-38.3	-1,279.1	1,279.1	1.37	-1.11	
6,544.0	89.50	269.30	5,468.0	-38.9	-1,343.1	1,343.1	1.00	0.78	
6,607.0	90.50	269.50	5,468.0	-39.5	-1,406.1	1,406.1	1.62	1.59	
6,671.0	91.10	269.20	5,467.1	-40.3	-1,470.1	1,470.0	1.05	0.94	
6,735.0	91.50	270.00	5,465.6	-40.7	-1,534.1	1,534.0	1.40	0.62	
6,798.0	91.40	271.00	5,464.0	-40.1	-1,597.1	1,597.0	1.59	-0.16	
6,861.0	89.90	270.90	5,463.3	-39.1	-1,660.1	1,660.0	2.39	-2.38	
6,925.0	89.70	270.30	5,463.5	-38.4	-1,724.1	1,724.0	0.99	-0.31	
6,988.0	90.00	270.30	5,463.7	-38.1	-1,787.1	1,787.0	0.48	0.48	
7,052.0	89.90	270.30	5,463.8	-37.8	-1,851.1	1,851.0	0.16	-0.16	
7,115.0	91.00	271.10	5,463.3	-37.0	-1,914.1	1,914.0	2.16	1.75	
7,179.0	90.00	270.90	5,462.7	-35.9	-1,978.0	1,978.0	1.59	-1.56	
7,242.0	90.70	272.00	5,462.3	-34.3	-2,041.0	2,041.0	2.07	1.11	
7,306.0	90.70	272.00	5,461.5	-32.1	-2,105.0	2,104.9	0.00	0.00	
7,370.0	90.20	271.60	5,461.0	-30.0	-2,168.9	2,168.9	1.00	-0.78	
7,433.0	89.50	270.30	5,461.2	-29.0	-2,231.9	2,231.9	2.34	-1.11	
7,497.0	89.30	270.30	5,461.9	-28.7	-2,295.9	2,295.9	0.31	-0.31	
7,560.0	90.60	271.50	5,461.9	-27.7	-2,358.9	2,358.9	2.81	2.06	
7,624.0	91.20	272.00	5,460.9	-25.7	-2,422.9	2,422.8	1.22	0.94	
7,687.0	89.90	271.00	5,460.3	-24.1	-2,485.8	2,485.8	2.60	-2.06	
7,751.0	89.50	270.10	5,460.7	-23.5	-2,549.8	2,549.8	1.54	-0.62	
7,814.0	90.10	270.90	5,460.9	-22.9	-2,612.8	2,612.8	1.59	0.95	
7,877.0	90.40	270.50	5,460.6	-22.1	-2,675.8	2,675.8	0.79	0.48	
7,941.0	90.70	269.80	5,460.0	-22.0	-2,739.8	2,739.8	1.19	0.47	
8,004.0	90.50	270.70	5,459.3	-21.7	-2,802.8	2,802.8	1.46	-0.32	
8,068.0	91.30	269.60	5,458.3	-21.5	-2,866.8	2,866.8	2.13	1.25	
8,131.0	91.60	271.70	5,456.7	-20.8	-2,929.8	2,929.7	3.37	0.48	
8,194.0	90.30	271.40	5,455.7	-19.1	-2,992.7	2,992.7	2.12	-2.06	
8,258.0	89.40	270.70	5,455.8	-17.9	-3,056.7	3,056.7	1.78	-1.41	
8,322.0	89.90	270.60	5,456.2	-17.2	-3,120.7	3,120.7	0.80	0.78	
8,385.0	90.60	272.70	5,456.0	-15.4	-3,183.7	3,183.7	3.51	1.11	
8,449.0	91.00	271.80	5,455.1	-12.9	-3,247.6	3,247.6	1.54	0.62	
8,512.0	91.50	273.20	5,453.7	-10.1	-3,310.6	3,310.5	2.36	0.79	
8,576.0	90.80	273.90	5,452.4	-6.2	-3,374.4	3,374.4	1.55	-1.09	
8,639.0	90.80	273.80	5,451.5	-1.9	-3,437.3	3,437.3	0.16	0.00	
8,703.0	90.50	272.40	5,450.8	1.5	-3,501.2	3,501.2	2.24	-0.47	
8,766.0	90.70	270.80	5,450.1	3.3	-3,564.1	3,564.1	2.56	0.32	
8,830.0	90.00	269.40	5,449.8	3.4	-3,628.1	3,628.1	2.45	-1.09	
8,893.0	89.90	268.80	5,449.8	2.4	-3,691.2	3,691.2	0.97	-0.16	
8,956.0	89.60	269.70	5,450.1	1.6	-3,754.1	3,754.1	1.51	-0.48	
9,020.0	90.00	269.50	5,450.3	1.1	-3,818.1	3,818.1	0.70	0.62	
9,084.0	89.50	270.10	5,450.6	0.9	-3,882.1	3,882.1	1.22	-0.78	

Cathedral Energy Services

Survey Report

Company: EnCana Oil & Gas (USA) Inc
Project: San Juan County, NM
Site: S16-T24N-R9W (Escrito)
Well: Escrito I16-2409 01H
Wellbore: Hz
Design: FINAL

Local Co-ordinate Reference: Well Escrito I16-2409 01H
TVD Reference: KBE @ 6836.0ft (Aztec 222)
MD Reference: KBE @ 6836.0ft (Aztec 222)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: USA EDM 5000 Multi Users DB

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Formations / Comments
9,147.0	90.40	270.30	5,450.6	1.1	-3,945.1	3,945.1	1.46	1.43	
9,210.0	90.10	269.30	5,450.4	0.9	-4,008.1	4,008.1	1.66	-0.48	
9,274.0	90.30	270.80	5,450.1	1.0	-4,072.1	4,072.1	2.36	0.31	
9,337.0	90.90	270.80	5,449.5	1.8	-4,135.1	4,135.1	0.95	0.95	
9,401.0	90.10	271.30	5,448.9	3.0	-4,199.1	4,199.1	1.47	-1.25	
9,464.0	91.20	271.70	5,448.2	4.7	-4,262.1	4,262.1	1.86	1.75	
9,528.0	90.00	272.20	5,447.5	6.8	-4,326.0	4,326.1	2.03	-1.87	
9,591.0	91.80	273.70	5,446.6	10.1	-4,389.0	4,389.0	3.72	2.86	
9,655.0	91.30	273.90	5,444.8	14.3	-4,452.8	4,452.8	0.84	-0.78	
9,718.0	89.10	272.80	5,444.6	18.0	-4,515.7	4,515.7	3.90	-3.49	
9,778.0	91.00	273.00	5,444.5	21.0	-4,575.6	4,575.6	3.18	3.17	
9,828.0	91.00	273.00	5,443.7	23.6	-4,625.5	4,625.5	0.00	0.00	Last Cathedral Survey @ 9,828' MD - Escrito I16

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 I16-2409 01H PE - actual wellpath misses target center by 17.1ft at 9828.0ft MD (5443.7 TVD, 23.6 N, -4625.5 E) - Point	0.00	0.00	5,445.7	7.7	-4,631.3	1,933,211.91	2,732,204.64	36.312930	-107.802420
Escrito I16-2409 01H PE - actual wellpath misses target center by 18.9ft at 9828.0ft MD (5443.7 TVD, 23.6 N, -4625.5 E) - Point	0.00	0.00	5,451.8	7.7	-4,631.3	1,933,211.91	2,732,204.64	36.312930	-107.802420

Design Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates	Comment
9,828.0	5,443.7	+N/-S (ft) 23.6 +E/-W (ft) -4,625.5	Last Cathedral Survey @ 9,828' MD

Checked By: _____ Approved By: _____ Date: _____