

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

OIL CONSERVATION DIVISION

1220 South St. Francis Drive
Santa Fe, NM 87505

Submit one copy to
Appropriate District Office

☐ AMENDED REPORT

☒ As-Drilled

CONFIDENTIAL

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-35478	*Pool Code 98080	*Pool Name NAGEEZI UNIT HZ (OIL)
*Property Code 313752	*Property Name NAGEEZI UNIT L27-2409	*Well Number 01H
*OGRID No. 282327	*Operator Name ENCANA OIL & GAS (USA) INC.	*Elevation 6924

¹⁰ Surface Location

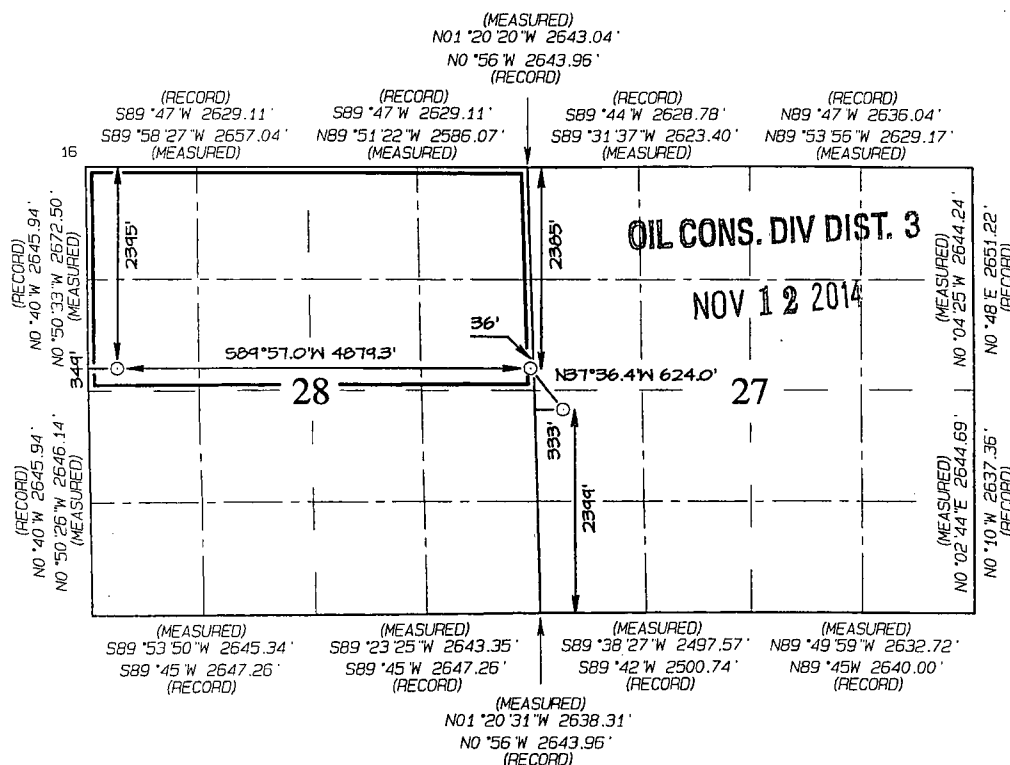
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	27	24N	9W		2399	SOUTH	333	WEST	SAN JUAN

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	28	24N	9W		2395	NORTH	349	WEST	SAN JUAN

12 Dedicated Acres	320.0 Acres N/2 Section 28	13 Joint or Infill	14 Consolidation Code	15 Order No.	R-13856	9,135.51 Acres
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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



END-OF-LATERAL
2395' FNL 349' FWL
SECTION 28, T24N, R9W
LAT: 36.28577°N
LONG: 107.80164°W
DATUM: NAD1927

LAT: 36.28578 'N
LONG: 107.80226 'W
DATUM: NAD1983

POINT-OF-ENTRY
2385' FNL 36' FEL
SECTION 28, T24N, R9W
LAT: 36.28577°N
LONG: 107.78509°W
DATUM: NAD1927

LAT: 36.28579 °N
LONG: 107.78570 °W
DATUM: NAD1983

SURFACE LOCATION
2399' FSL 333' FWL
SECTION 27, T24N, R9W
LAT: 36.28441°N
LONG: 107.78380°W
DATUM: NAD1927

LAT: 36.28443°N
LONG: 107.78441°W
DATUM: NAD1983

17 OPERATOR CERTIFICATION

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

Jessica Gregg 11/10/14

Signature _____ Date _____

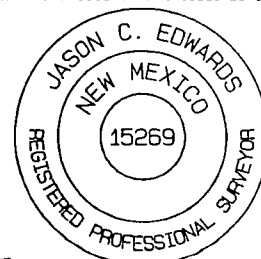
Jessica Gregg

Printed Name _____

Jessica.Gregg@encana.com

E-mail Address _____

18 SURVEYOR CERTIFICATION
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my belief.
Date Revised: SEPTEMBER 19, 2014
Date of Survey: JULY 30, 2012
Signature and Seal of Professional Surveyor



JASON C. EDWARDS
Certificate Number 15269

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District I
1525 N. French Drive, Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

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811 S. First Street, Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

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Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 1, 2011

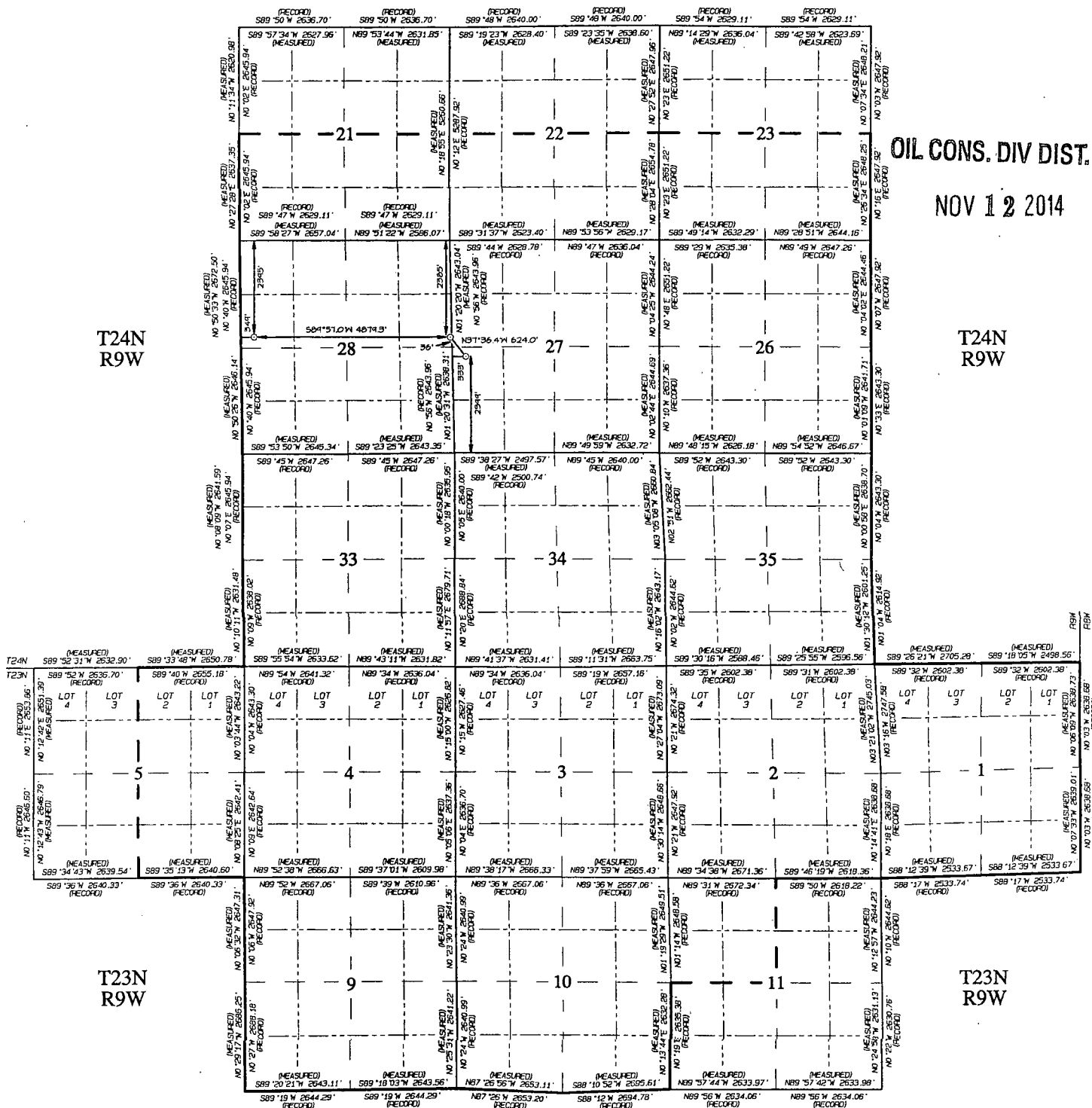
Submit one copy to
Appropriate District Office

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

☐ AMENDED REPORT

OIL CONS. DIV DIST. 3

NOV 12 2014



DEVIATION SURVEYS
Nageezi Unit L27-2409 01H
30-045-35478

CONFIDENTIAL

MD (Feet)	Inclination (Degree)
322'	0.10
689'	0.10
997'	0.10
1305'	0.04
1617'	0.60
1934'	0.40
2250'	0.60
2566'	0.40
2882'	0.40
3198'	0.10
3514'	0.60
3830'	0.50
4146'	0.40
4406'	0.70
4564'	8.10

OIL CONS. DIV DIST. 3

NOV 12 2014

OPERATOR CERTIFICATION

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

Cristi BAUER

Cristi Bauer, Operations Technician

11/10/14

Date

ACKNOWLEDGMENT

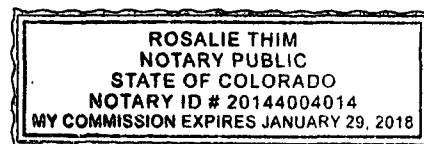
State of Colorado
City and County of Denver

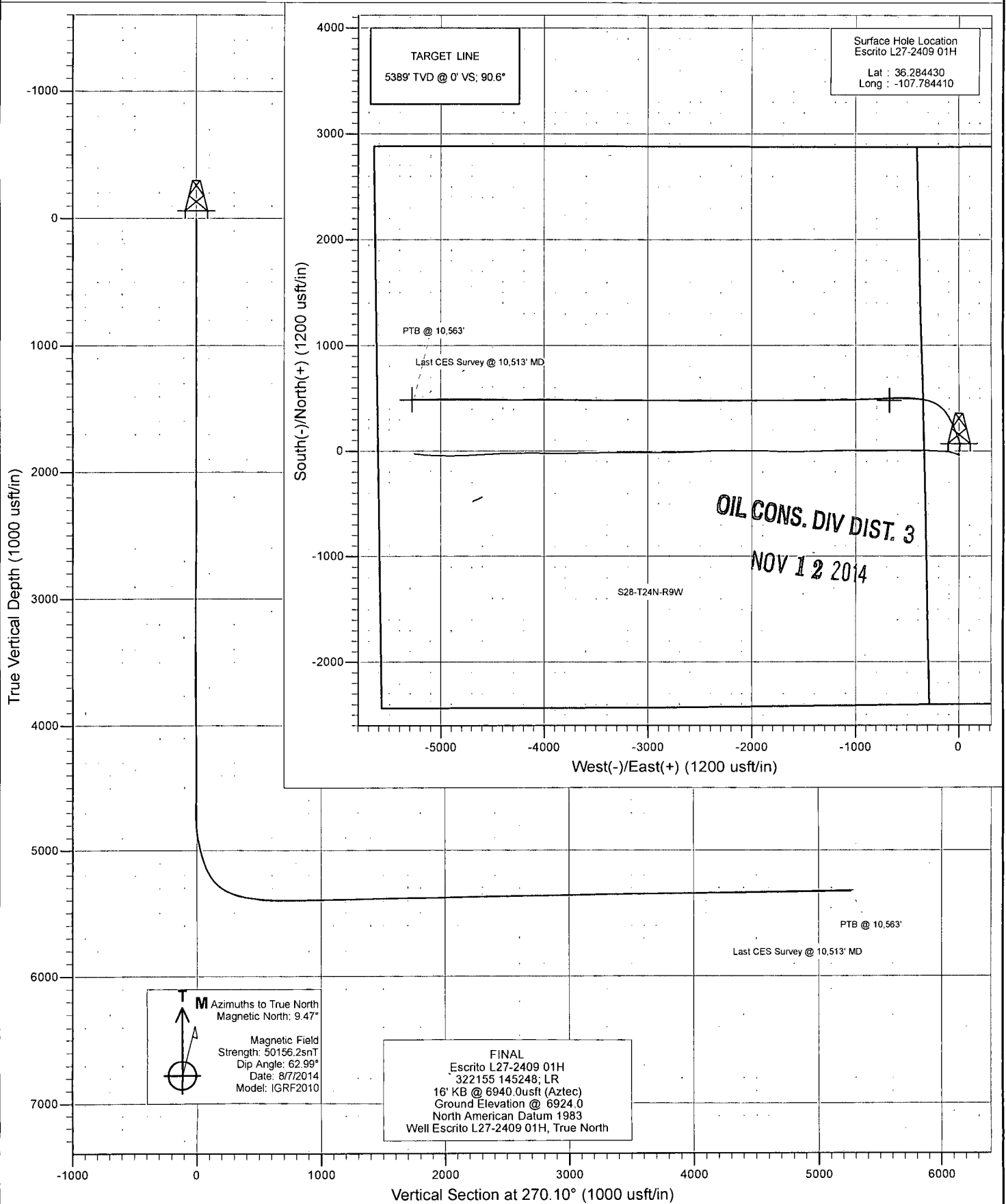
This instrument was acknowledged before me on this 10th day of November, 2014 by Cristi Bauer as Operations Technician of Encana Oil & Gas (USA) Inc., authorized agent for Encana Oil & Gas (USA) Inc., on behalf of said corporation.

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

Notary Public: Rosalie Thim

My Commission Expires: 1/29/18

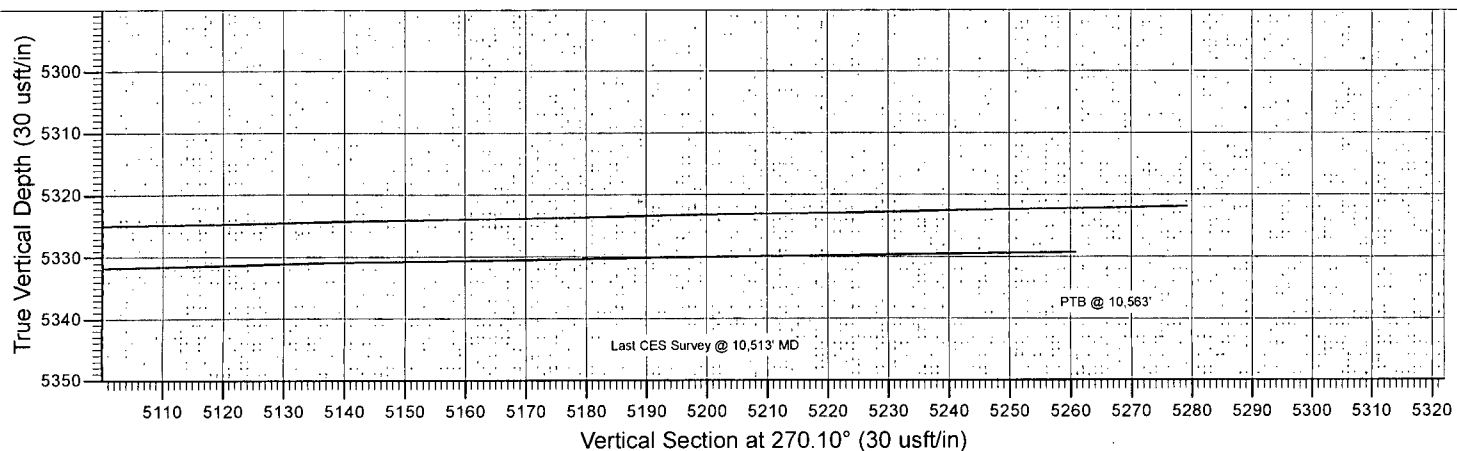
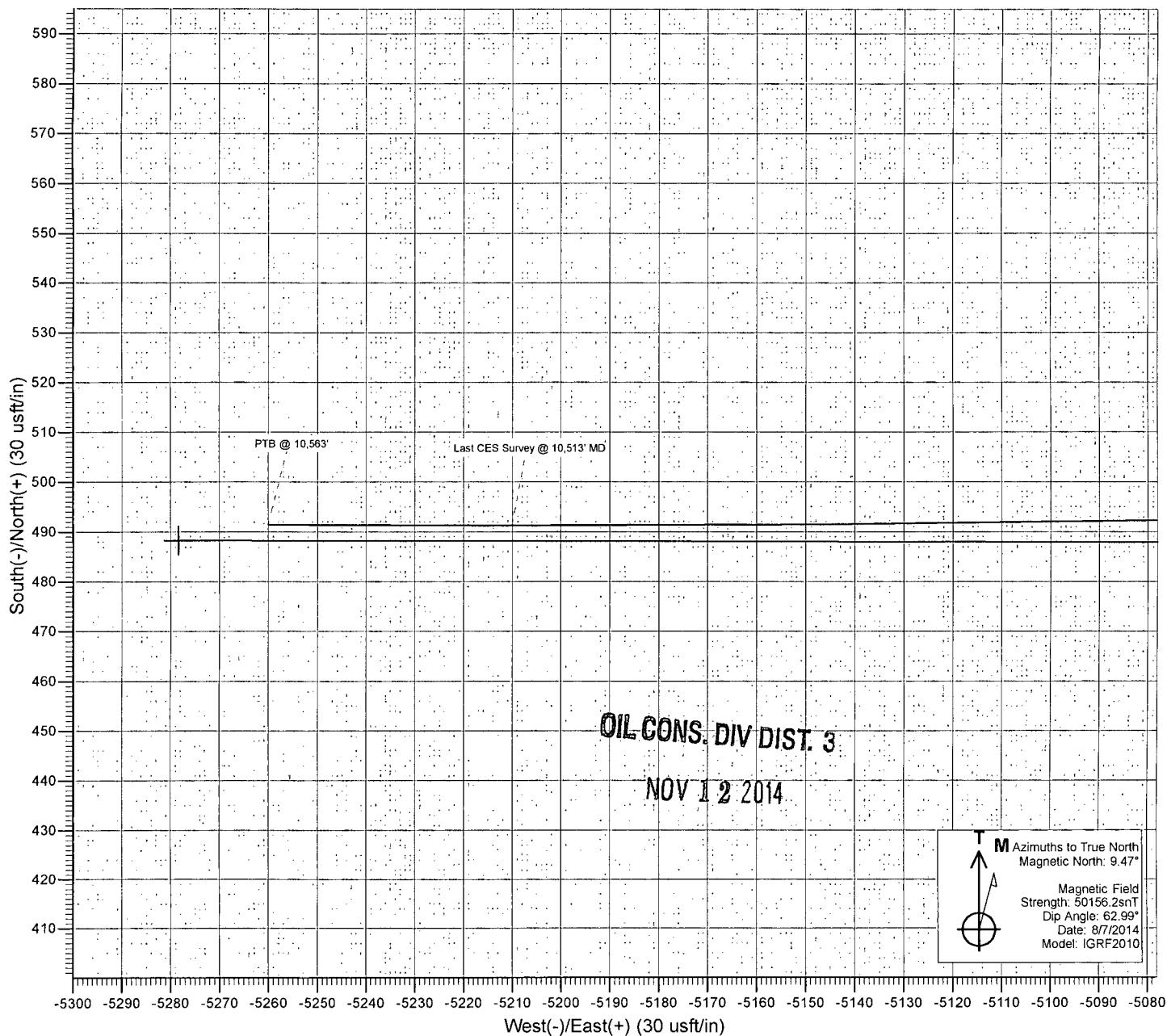




encana.

natural gas

Project: San Juan County, NM
Site: S27-T24N-R9W
Well: Escrito L27-2409 01H
Wellbore: Hz
Design: FINAL



Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Escrito L27-2409 01H
Project:	San Juan County, NM	TVD Reference:	16' KB @ 6940.0usft (Aztec)
Site:	S27-T24N-R9W	MD Reference:	16' KB @ 6940.0usft (Aztec)
Well:	Escrito L27-2409 01H	North Reference:	True
Wellbore:	Hz	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	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	S27-T24N-R9W				
Site Position:		Northing:	1,922,835.50 usft	Latitude:	36.284430
From:	Lat/Long	Easting:	2,737,510.43 usft	Longitude:	-107.784410
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16"	Grid Convergence:	0.03 °

Well	Escrito L27-2409 01H					
Well Position	+N/-S	0.0 usft	Northing:	1,922,835.50 usft	Latitude:	36.284430
	+E/-W	0.0 usft	Easting:	2,737,510.43 usft	Longitude:	-107.784410
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft	Ground Level:	6,924.0 usft	

Wellbore	Hz				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	8/7/2014	9.47	62.99	50,156

Design	FINAL			
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth: 0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	270.10

Survey Program		Date	8/18/2014		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
110.0	10,563.0	Survey #1 (Hz)	Geolink MWD	Geolink MWD	

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usf)	Build Rate (°/100u)	Formations / Comments
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
110.0	0.80	233.00	110.0	-0.5	-0.6	0.6	0.73	0.73	
201.0	0.30	245.40	201.0	-0.9	-1.3	1.3	0.56	-0.55	
260.0	0.30	227.00	260.0	-1.1	-1.6	1.6	0.16	0.00	
322.0	0.10	251.90	322.0	-1.2	-1.8	1.8	0.34	-0.32	
384.0	0.20	325.10	384.0	-1.2	-1.9	1.9	0.32	0.16	
450.0	0.20	43.30	450.0	-1.0	-1.9	1.9	0.38	0.00	
566.0	0.20	358.20	566.0	-0.6	-1.7	1.7	0.13	0.00	
628.0	0.10	99.50	628.0	-0.5	-1.7	1.7	0.39	-0.16	
689.0	0.10	58.50	689.0	-0.5	-1.6	1.6	0.11	0.00	
751.0	0.40	50.00	751.0	-0.4	-1.4	1.4	0.49	0.48	
812.0	0.30	18.20	812.0	-0.1	-1.2	1.2	0.35	-0.16	
874.0	0.20	35.60	874.0	0.2	-1.0	1.0	0.20	-0.16	

Cathedral Energy Services

Survey Report

Company: EnCana Oil & Gas (USA) Inc
Project: San Juan County, NM
Site: S27-T24N-R9W
Well: Escrito L27-2409 01H
Wellbore: Hz
Design: FINAL

Local Co-ordinate Reference: Well Escrito L27-2409 01H
TVD Reference: 16' KB @ 6940.0usft (Aztec)
MD Reference: 16' KB @ 6940.0usft (Aztec)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: USA EDM 5000 Multi Users DB

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usf)	Build Rate (°/100u)	Formations / Comments
935.0	0.10	279.50	935.0	0.3	-1.0	1.0	0.43	-0.16	
997.0	0.10	29.30	997.0	0.3	-1.1	1.1	0.26	0.00	
1,059.0	0.20	333.40	1,059.0	0.5	-1.1	1.1	0.27	0.16	
1,120.0	0.10	4.60	1,120.0	0.6	-1.1	1.1	0.21	-0.16	
1,182.0	0.04	131.30	1,182.0	0.7	-1.1	1.1	0.21	-0.10	
1,243.0	0.01	279.50	1,243.0	0.6	-1.1	1.1	0.08	-0.05	
1,305.0	0.04	98.10	1,305.0	0.6	-1.1	1.1	0.08	0.05	
1,366.0	0.10	182.70	1,366.0	0.6	-1.1	1.1	0.17	0.10	
1,428.0	0.50	181.80	1,428.0	0.3	-1.1	1.1	0.65	0.65	
1,491.0	0.60	171.70	1,491.0	-0.3	-1.0	1.0	0.22	0.16	
1,554.0	0.60	177.30	1,554.0	-1.0	-1.0	1.0	0.09	0.00	
1,617.0	0.60	139.20	1,617.0	-1.6	-0.7	0.7	0.62	0.00	
1,681.0	0.90	143.40	1,681.0	-2.2	-0.2	0.2	0.48	0.47	
1,744.0	1.00	145.60	1,744.0	-3.1	0.4	-0.4	0.17	0.16	
1,807.0	0.40	173.00	1,807.0	-3.8	0.7	-0.7	1.06	-0.95	
1,871.0	0.30	195.40	1,871.0	-4.1	0.7	-0.7	0.26	-0.16	
1,934.0	0.40	205.20	1,934.0	-4.5	0.6	-0.6	0.18	0.16	
1,997.0	0.20	47.30	1,997.0	-4.6	0.6	-0.6	0.94	-0.32	
2,060.0	0.70	29.40	2,060.0	-4.2	0.8	-0.8	0.81	0.79	
2,123.0	0.60	23.00	2,122.9	-3.6	1.1	-1.2	0.20	-0.16	
2,187.0	0.50	16.50	2,186.9	-3.0	1.4	-1.4	0.18	-0.16	
2,250.0	0.60	17.40	2,249.9	-2.4	1.5	-1.5	0.16	0.16	
2,313.0	0.50	17.60	2,312.9	-1.8	1.7	-1.7	0.16	-0.16	
2,376.0	0.40	4.90	2,375.9	-1.4	1.8	-1.8	0.22	-0.16	
2,440.0	0.40	0.50	2,439.9	-0.9	1.8	-1.8	0.05	0.00	
2,503.0	0.50	349.20	2,502.9	-0.4	1.8	-1.8	0.21	0.16	
2,566.0	0.40	19.90	2,565.9	0.1	1.8	-1.8	0.41	-0.16	
2,629.0	0.40	33.90	2,628.9	0.4	2.0	-2.0	0.15	0.00	
2,692.0	0.40	32.90	2,691.9	0.8	2.2	-2.2	0.01	0.00	
2,756.0	0.40	12.60	2,755.9	1.2	2.4	-2.4	0.22	0.00	
2,819.0	0.40	39.20	2,818.9	1.6	2.6	-2.6	0.29	0.00	
2,882.0	0.40	28.40	2,881.9	2.0	2.9	-2.8	0.12	0.00	
2,945.0	0.20	53.40	2,944.9	2.2	3.0	-3.0	0.37	-0.32	
3,009.0	0.10	38.50	3,008.9	2.3	3.2	-3.2	0.17	-0.16	
3,072.0	0.10	40.50	3,071.9	2.4	3.2	-3.2	0.01	0.00	
3,135.0	0.20	148.80	3,134.9	2.4	3.3	-3.3	0.40	0.16	
3,198.0	0.10	99.50	3,197.9	2.3	3.4	-3.4	0.25	-0.16	
3,261.0	0.30	99.50	3,260.9	2.2	3.7	-3.7	0.32	0.32	
3,324.0	0.40	107.60	3,323.9	2.1	4.0	-4.0	0.18	0.16	
3,387.0	0.70	65.10	3,386.9	2.2	4.6	-4.6	0.77	0.48	
3,451.0	0.90	50.00	3,450.9	2.7	5.3	-5.3	0.45	0.31	
3,514.0	0.60	33.20	3,513.9	3.3	5.9	-5.9	0.59	-0.48	
3,577.0	0.60	339.70	3,576.9	3.9	6.0	-5.9	0.86	0.00	
3,640.0	0.50	346.50	3,639.9	4.5	5.8	-5.8	0.19	-0.16	
3,704.0	0.50	342.40	3,703.9	5.0	5.6	-5.6	0.06	0.00	
3,767.0	0.40	340.10	3,766.9	5.5	5.5	-5.5	0.16	-0.16	
3,830.0	0.50	340.20	3,829.9	5.9	5.3	-5.3	0.16	0.16	
3,893.0	0.50	298.20	3,892.9	6.3	5.0	-5.0	0.57	0.00	
3,956.0	0.70	296.50	3,955.9	6.6	4.4	-4.4	0.32	0.32	
4,020.0	0.90	284.90	4,019.9	6.9	3.5	-3.5	0.40	0.31	
4,083.0	1.00	284.60	4,082.9	7.2	2.5	-2.5	0.16	0.16	
4,146.0	0.40	264.40	4,145.9	7.3	1.8	-1.8	1.02	-0.95	
4,209.0	0.20	212.40	4,208.9	7.2	1.5	-1.5	0.51	-0.32	

Cathedral Energy Services

Survey Report

Company: EnCana Oil & Gas (USA) Inc
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Site: S27-T24N-R9W
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Wellbore: Hz
Design: FINAL

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North Reference: True
Survey Calculation Method: Minimum Curvature
Database: USA EDM 5000 Multi Users DB

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usf)	Build Rate (°/100u)	Formations / Comments
4,272.0	0.10	193.80	4,271.9	7.1	1.4	-1.4	0.17	-0.16	
4,335.0	0.20	194.00	4,334.9	6.9	1.4	-1.4	0.16	0.16	
4,374.0	0.50	166.10	4,373.9	6.7	1.4	-1.4	0.86	0.77	
4,406.0	0.70	192.00	4,405.9	6.3	1.4	-1.4	1.04	0.62	
4,437.0	1.10	19.10	4,436.9	6.4	1.5	-1.5	5.80	1.29	
4,469.0	2.80	17.50	4,468.8	7.5	1.8	-1.8	5.31	5.31	
4,501.0	4.30	8.30	4,500.8	9.4	2.2	-2.2	5.00	4.69	
4,532.0	6.20	4.30	4,531.7	12.2	2.5	-2.5	6.24	6.13	
4,564.0	8.10	5.70	4,563.4	16.2	2.9	-2.8	5.96	5.94	
4,596.0	10.10	6.80	4,595.0	21.2	3.4	-3.4	6.27	6.25	
4,627.0	11.90	8.00	4,625.4	27.1	4.2	-4.1	5.85	5.81	
4,659.0	13.70	8.00	4,656.6	34.1	5.2	-5.1	5.62	5.62	
4,690.0	15.70	6.50	4,686.6	41.9	6.2	-6.1	6.57	6.45	
4,722.0	17.20	1.10	4,717.3	50.9	6.7	-6.6	6.69	4.69	
4,754.0	18.70	355.90	4,747.7	60.8	6.5	-6.4	6.86	4.69	
4,785.0	20.70	351.50	4,776.9	71.2	5.3	-5.2	8.03	6.45	
4,817.0	22.60	348.00	4,806.7	82.8	3.2	-3.0	7.18	5.94	
4,848.0	24.50	345.80	4,835.1	94.8	0.4	-0.2	6.75	6.13	
4,880.0	26.10	343.50	4,864.0	108.0	-3.3	3.5	5.87	5.00	
4,912.0	27.30	340.60	4,892.6	121.7	-7.7	7.9	5.53	3.75	
4,943.0	28.70	338.10	4,920.0	135.3	-12.8	13.1	5.89	4.52	
4,975.0	30.10	338.00	4,947.9	149.9	-18.7	19.0	4.38	4.37	
5,006.0	32.00	338.70	4,974.4	164.7	-24.6	24.9	6.24	6.13	
5,038.0	33.80	338.70	5,001.3	180.9	-30.9	31.2	5.62	5.62	
5,070.0	35.20	337.20	5,027.7	197.7	-37.7	38.1	5.12	4.37	
5,101.0	36.30	336.40	5,052.8	214.4	-44.9	45.2	3.86	3.55	
5,133.0	37.90	336.20	5,078.3	232.0	-52.6	53.0	5.01	5.00	
5,164.0	39.80	335.20	5,102.5	249.8	-60.6	61.1	6.45	6.13	
5,196.0	41.70	333.60	5,126.7	268.6	-69.7	70.1	6.78	5.94	
5,227.0	43.40	331.80	5,149.6	287.2	-79.3	79.8	6.74	5.48	
5,259.0	45.00	329.70	5,172.5	306.7	-90.2	90.7	6.78	5.00	
5,291.0	47.00	327.80	5,194.7	326.4	-102.1	102.7	7.57	6.25	
5,322.0	48.90	326.80	5,215.5	345.7	-114.6	115.2	6.58	6.13	
5,354.0	51.40	323.20	5,236.0	365.8	-128.7	129.3	11.64	7.81	
5,386.0	54.20	318.90	5,255.3	385.6	-144.7	145.4	13.82	8.75	
5,417.0	55.80	313.50	5,273.1	403.9	-162.3	163.0	15.17	5.16	
5,449.0	57.00	307.60	5,290.9	421.3	-182.5	183.2	15.81	3.75	
5,480.0	59.90	302.30	5,307.1	436.4	-204.2	204.9	17.31	9.35	
5,512.0	63.40	298.00	5,322.3	450.5	-228.5	229.3	16.11	10.94	
5,544.0	66.80	293.10	5,335.8	463.0	-254.7	255.5	17.48	10.62	
5,575.0	69.90	287.70	5,347.2	473.0	-281.7	282.5	19.03	10.00	
5,606.0	73.20	283.00	5,357.0	480.8	-310.0	310.9	17.89	10.65	
5,645.0	77.00	279.90	5,367.0	488.2	-347.0	347.8	12.41	9.74	
5,677.0	77.50	277.50	5,374.1	493.0	-377.8	378.7	7.48	1.56	
5,708.0	79.00	276.10	5,380.4	496.6	-407.9	408.8	6.55	4.84	
5,740.0	81.70	275.30	5,385.8	499.7	-439.3	440.2	8.79	8.44	
5,771.0	83.50	274.50	5,389.8	502.3	-470.0	470.8	6.35	5.81	
5,803.0	84.60	272.90	5,393.1	504.4	-501.7	502.6	6.05	3.44	
5,835.0	86.00	270.90	5,395.7	505.4	-533.6	534.5	7.61	4.37	
5,866.0	87.20	270.10	5,397.6	505.7	-564.5	565.4	4.65	3.87	
5,898.0	88.10	269.50	5,398.9	505.6	-596.5	597.4	3.38	2.81	
5,930.0	88.70	268.00	5,399.8	504.9	-628.5	629.4	5.05	1.87	
5,961.0	89.90	267.70	5,400.1	503.7	-659.5	660.3	3.99	3.87	

Cathedral Energy Services

Survey Report

Company: EnCana Oil & Gas (USA) Inc
Project: San Juan County, NM
Site: S27-T24N-R9W
Well: Escrito L27-2409 01H
Wellbore: Hz
Design: FINAL

Local Co-ordinate Reference: Well Escrito L27-2409 01H
TVD Reference: 16' KB @ 6940.0usft (Aztec)
MD Reference: 16' KB @ 6940.0usft (Aztec)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: USA EDM 5000 Multi Users DB

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usf)	Build Rate (°/100u)	Formations / Comments
6,024.0	89.60	266.20	5,400.4	500.4	-722.4	723.2	2.43	-0.48	
6,088.0	90.00	266.50	5,400.6	496.3	-786.2	787.1	0.78	0.62	
6,151.0	91.10	268.30	5,400.0	493.4	-849.2	850.0	3.35	1.75	
6,214.0	91.10	268.20	5,398.8	491.5	-912.1	913.0	0.16	0.00	
6,277.0	90.40	267.80	5,398.0	489.3	-975.1	975.9	1.28	-1.11	
6,340.0	90.50	268.70	5,397.5	487.4	-1,038.0	1,038.9	1.44	0.16	
6,404.0	90.60	268.50	5,396.9	485.8	-1,102.0	1,102.9	0.35	0.16	
6,467.0	91.10	268.80	5,396.0	484.3	-1,165.0	1,165.8	0.93	0.79	
6,530.0	90.80	269.00	5,394.9	483.1	-1,228.0	1,228.8	0.57	-0.48	
6,593.0	90.70	268.50	5,394.1	481.8	-1,291.0	1,291.8	0.81	-0.16	
6,656.0	92.00	270.30	5,392.6	481.1	-1,353.9	1,354.8	3.52	2.06	
6,720.0	92.60	270.90	5,390.0	481.8	-1,417.9	1,418.7	1.33	0.94	
6,783.0	92.50	270.10	5,387.2	482.3	-1,480.8	1,481.7	1.28	-0.16	
6,846.0	91.50	269.80	5,385.0	482.3	-1,543.8	1,544.6	1.66	-1.59	
6,910.0	89.20	268.70	5,384.6	481.4	-1,607.8	1,608.6	3.98	-3.59	
6,973.0	89.70	270.00	5,385.2	480.7	-1,670.8	1,671.6	2.21	0.79	
7,036.0	91.10	270.70	5,384.8	481.1	-1,733.8	1,734.6	2.48	2.22	
7,099.0	91.60	271.10	5,383.3	482.1	-1,796.7	1,797.6	1.02	0.79	
7,163.0	90.80	269.60	5,382.0	482.5	-1,860.7	1,861.5	2.66	-1.25	
7,226.0	90.80	270.30	5,381.1	482.4	-1,923.7	1,924.5	1.11	0.00	
7,289.0	91.10	270.10	5,380.1	482.6	-1,986.7	1,987.5	0.57	0.48	
7,353.0	91.20	269.80	5,378.8	482.6	-2,050.7	2,051.5	0.49	0.16	
7,416.0	91.20	269.60	5,377.5	482.3	-2,113.7	2,114.5	0.32	0.00	
7,479.0	91.00	269.60	5,376.2	481.8	-2,176.7	2,177.5	0.32	-0.32	
7,542.0	91.40	270.50	5,374.9	481.9	-2,239.6	2,240.5	1.56	0.63	
7,606.0	91.30	269.60	5,373.4	481.9	-2,303.6	2,304.5	1.41	-0.16	
7,669.0	91.30	270.20	5,372.0	481.8	-2,366.6	2,367.4	0.95	0.00	
7,732.0	90.60	268.90	5,370.9	481.3	-2,429.6	2,430.4	2.34	-1.11	
7,795.0	91.50	269.20	5,369.8	480.3	-2,492.6	2,493.4	1.51	1.43	
7,859.0	90.90	269.70	5,368.5	479.7	-2,556.6	2,557.4	1.22	-0.94	
7,922.0	90.90	270.60	5,367.5	479.8	-2,619.5	2,620.4	1.43	0.00	
7,985.0	91.00	271.60	5,366.4	481.0	-2,682.5	2,683.4	1.60	0.16	
8,048.0	91.00	271.50	5,365.3	482.7	-2,745.5	2,746.3	0.16	0.00	
8,112.0	90.70	270.30	5,364.4	483.7	-2,809.5	2,810.3	1.93	-0.47	
8,175.0	91.10	270.40	5,363.4	484.1	-2,872.5	2,873.3	0.65	0.63	
8,238.0	91.10	269.40	5,362.2	484.0	-2,935.5	2,936.3	1.59	0.00	
8,301.0	91.00	270.30	5,361.0	483.9	-2,998.4	2,999.3	1.44	-0.16	
8,364.0	90.90	270.30	5,360.0	484.2	-3,061.4	3,062.3	0.16	-0.16	
8,428.0	90.70	269.50	5,359.1	484.1	-3,125.4	3,126.3	1.29	-0.31	
8,491.0	91.50	270.60	5,357.9	484.1	-3,188.4	3,189.3	2.16	1.27	
8,554.0	91.20	269.70	5,356.4	484.3	-3,251.4	3,252.2	1.51	-0.48	
8,617.0	90.90	269.20	5,355.2	483.7	-3,314.4	3,315.2	0.93	-0.48	
8,680.0	91.20	269.90	5,354.1	483.2	-3,377.4	3,378.2	1.21	0.48	
8,744.0	90.60	270.90	5,353.1	483.6	-3,441.4	3,442.2	1.82	-0.94	
8,807.0	90.60	271.00	5,352.4	484.7	-3,504.3	3,505.2	0.16	0.00	
8,870.0	91.10	270.90	5,351.5	485.7	-3,567.3	3,568.2	0.81	0.79	
8,933.0	90.40	270.30	5,350.6	486.4	-3,630.3	3,631.2	1.46	-1.11	
8,996.0	91.10	270.50	5,349.8	486.8	-3,693.3	3,694.2	1.16	1.11	
9,060.0	91.00	270.50	5,348.7	487.4	-3,757.3	3,758.1	0.16	-0.16	
9,123.0	90.90	270.60	5,347.6	488.0	-3,820.3	3,821.1	0.22	-0.16	
9,186.0	90.80	271.20	5,346.7	489.0	-3,883.3	3,884.1	0.97	-0.16	
9,249.0	90.40	270.40	5,346.0	489.9	-3,946.3	3,947.1	1.42	-0.63	
9,313.0	90.00	269.50	5,345.8	489.8	-4,010.3	4,011.1	1.54	-0.62	

Cathedral Energy Services

Survey Report

Company: EnCana Oil & Gas (USA) Inc
Project: San Juan County, NM
Site: S27-T24N-R9W
Well: Escrito L27-2409 01H
Wellbore: Hz
Design: FINAL

Local Co-ordinate Reference: Well Escrito L27-2409 01H
TVD Reference: 16' KB @ 6940.0usft (Aztec)
MD Reference: 16' KB @ 6940.0usft (Aztec)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: USA EDM 5000 Multi Users DB

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usf)	Build Rate (°/100u)	Formations / Comments
9,376.0	90.70	269.60	5,345.4	489.3	-4,073.3	4,074.1	1.12	1.11	
9,439.0	89.70	269.60	5,345.2	488.9	-4,136.3	4,137.1	1.59	-1.59	
9,502.0	89.70	268.90	5,345.5	488.0	-4,199.2	4,200.1	1.11	0.00	
9,566.0	90.40	270.80	5,345.5	487.9	-4,263.2	4,264.1	3.16	1.09	
9,629.0	91.10	270.40	5,344.6	488.5	-4,326.2	4,327.1	1.28	1.11	
9,692.0	90.70	270.10	5,343.6	488.8	-4,389.2	4,390.1	0.79	-0.63	
9,755.0	90.70	270.90	5,342.9	489.4	-4,452.2	4,453.1	1.27	0.00	
9,819.0	91.40	271.20	5,341.7	490.5	-4,516.2	4,517.0	1.19	1.09	
9,882.0	91.20	270.50	5,340.3	491.5	-4,579.2	4,580.0	1.16	-0.32	
9,945.0	90.70	270.90	5,339.2	492.2	-4,642.2	4,643.0	1.02	-0.79	
10,008.0	90.40	270.90	5,338.6	493.2	-4,705.1	4,706.0	0.48	-0.48	
10,071.0	90.50	270.20	5,338.1	493.8	-4,768.1	4,769.0	1.12	0.16	
10,135.0	91.80	269.90	5,336.8	493.9	-4,832.1	4,833.0	2.08	2.03	
10,198.0	91.40	270.20	5,335.1	493.9	-4,895.1	4,896.0	0.79	-0.63	
10,261.0	90.80	269.30	5,333.9	493.7	-4,958.1	4,958.9	1.72	-0.95	
10,324.0	90.70	269.50	5,333.1	493.0	-5,021.1	5,021.9	0.35	-0.16	
10,387.0	91.20	269.20	5,332.0	492.3	-5,084.1	5,084.9	0.93	0.79	
10,450.0	91.00	269.40	5,330.8	491.5	-5,147.1	5,147.9	0.45	-0.32	
10,513.0	90.70	270.20	5,329.9	491.3	-5,210.0	5,210.9	1.36	-0.48	Last CES Survey @ 10,513' MD
10,563.0	90.70	270.20	5,329.3	491.5	-5,260.0	5,260.9	0.00	0.00	PTB @ 10,563'

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Escrito L27-2409 01H
Project:	San Juan County, NM	TVD Reference:	16' KB @ 6940.0usft (Aztec)
Site:	S27-T24N-R9W	MD Reference:	16' KB @ 6940.0usft (Aztec)
Well:	Escrito L27-2409 01H	North Reference:	True
Wellbore:	Hz	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
Escrito L27-2409 01H PI	0.00	0.00	5,278.7	488.3	-5,278.4	1,923,321.11	2,732,231.81	36.285770	-107.802320
- actual wellpath misses target center by 53.9usft at 10563.0usft MD (5329.3 TVD, 491.5 N, -5260.0 E)									
- Point									
Escrito L27-2409 01H PI	0.00	0.00	5,402.2	480.5	-674.9	1,923,315.68	2,736,835.29	36.285750	-107.786700
- actual wellpath misses target center by 22.6usft at 5977.7usft MD (5400.2 TVD, 503.0 N, -676.1 E)									
- Point									
Escrito L27-2409 01H PI	0.00	0.00	5,303.9	488.3	-5,278.4	1,923,321.11	2,732,231.81	36.285770	-107.802320
- actual wellpath misses target center by 31.5usft at 10563.0usft MD (5329.3 TVD, 491.5 N, -5260.0 E)									
- Point									
Escrito L27-2409 PBHL	0.00	0.00	5,333.7	488.3	-5,278.4	1,923,321.11	2,732,231.81	36.285770	-107.802320
- actual wellpath misses target center by 19.1usft at 10563.0usft MD (5329.3 TVD, 491.5 N, -5260.0 E)									
- Point									
Escrito L27-2409 01H PI	0.00	0.00	5,326.9	480.5	-674.9	1,923,315.68	2,736,835.29	36.285750	-107.786700
- actual wellpath misses target center by 76.7usft at 5977.3usft MD (5400.2 TVD, 503.0 N, -675.8 E)									
- Point									
Escrito L27-2409 01H PI	0.00	0.00	5,384.2	480.5	-674.9	1,923,315.68	2,736,835.29	36.285750	-107.786700
- actual wellpath misses target center by 27.6usft at 5977.6usft MD (5400.2 TVD, 503.0 N, -676.0 E)									
- Point									

Design Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(usft)	(usft)	+N/-S (usft)	+E/-W (usft)	
10,513.0	5,329.9	491.3	-5,210.0	Last CES Survey @ 10,513' MD
10,563.0	5,329.3	491.5	-5,260.0	PTB @ 10,563'

Checked By: _____ Approved By: _____ Date: _____

EnCana Oil & Gas (USA) Inc

San Juan County, NM

S27-T24N-R9W

Escrito L27-2409 01H

Hz

Design: FINAL

Survey Report - Geographic

18 August, 2014

Cathedral Energy Services

Survey Report - Geographic

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Escrito L27-2409 01H
Project:	San Juan County, NM	TVD Reference:	16' KB @ 6940.0usft (Aztec)
Site:	S27-T24N-R9W	MD Reference:	16' KB @ 6940.0usft (Aztec)
Well:	Escrito L27-2409 01H	North Reference:	True
Wellbore:	Hz	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	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	S27-T24N-R9W				
Site Position:		Northing:	1,922,835.50 usft	Latitude:	36.284430
From:	Lat/Long	Easting:	2,737,510.43 usft	Longitude:	-107.784410
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.03 °

Well	Escrito L27-2409 01H					1
Well Position	+N/-S	0.0 usft	Northing:	1,922,835.50 usft	Latitude:	36.284430
	+E/-W	0.0 usft	Easting:	2,737,510.43 usft	Longitude:	-107.784410
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	6,924.0 usft

Wellbore	Hz				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	8/7/2014	9.47	62.99	50,156

Design	FINAL				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	270.10	

Survey Program		Date	8/18/2014		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
110.0	10,563.0	Survey #1 (Hz)	Geolink MWD	Geolink MWD	

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.0	0.00	0.00	0.0	0.0	0.0	1,922,835.50	2,737,510.43	36.284430	-107.784410
110.0	0.80	233.00	110.0	-0.5	-0.6	1,922,835.04	2,737,509.82	36.284429	-107.784412
201.0	0.30	245.40	201.0	-0.9	-1.3	1,922,834.56	2,737,509.09	36.284427	-107.784415
260.0	0.30	227.00	260.0	-1.1	-1.6	1,922,834.39	2,737,508.84	36.284427	-107.784416
322.0	0.10	251.90	322.0	-1.2	-1.8	1,922,834.26	2,737,508.67	36.284427	-107.784416
384.0	0.20	325.10	384.0	-1.2	-1.9	1,922,834.33	2,737,508.56	36.284427	-107.784417
450.0	0.20	43.30	450.0	-1.0	-1.9	1,922,834.51	2,737,508.57	36.284427	-107.784417
566.0	0.20	358.20	566.0	-0.6	-1.7	1,922,834.86	2,737,508.70	36.284428	-107.784416
628.0	0.10	99.50	628.0	-0.5	-1.7	1,922,834.96	2,737,508.75	36.284429	-107.784416
689.0	0.10	58.50	689.0	-0.5	-1.6	1,922,834.98	2,737,508.85	36.284429	-107.784416
751.0	0.40	50.00	751.0	-0.4	-1.4	1,922,835.15	2,737,509.06	36.284429	-107.784415
812.0	0.30	18.20	812.0	-0.1	-1.2	1,922,835.44	2,737,509.28	36.284430	-107.784414

Cathedral Energy Services

Survey Report - Geographic

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Escrito L27-2409 01H
Project:	San Juan County, NM	TVD Reference:	16' KB @ 6940.0usft (Aztec)
Site:	S27-T24N-R9W	MD Reference:	16' KB @ 6940.0usft (Aztec)
Well:	Escrito L27-2409 01H	North Reference:	True
Wellbore:	Hz	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
874.0	0.20	35.60	874.0	0.2	-1.0	1,922,835.68	2,737,509.39	36.284431	-107.784414
935.0	0.10	279.50	935.0	0.3	-1.0	1,922,835.77	2,737,509.40	36.284431	-107.784414
997.0	0.10	29.30	997.0	0.3	-1.1	1,922,835.83	2,737,509.37	36.284431	-107.784414
1,059.0	0.20	333.40	1,059.0	0.5	-1.1	1,922,835.97	2,737,509.35	36.284431	-107.784414
1,120.0	0.10	4.60	1,120.0	0.6	-1.1	1,922,836.12	2,737,509.31	36.284432	-107.784414
1,182.0	0.04	131.30	1,182.0	0.7	-1.1	1,922,836.16	2,737,509.33	36.284432	-107.784414
1,243.0	0.01	279.50	1,243.0	0.6	-1.1	1,922,836.15	2,737,509.34	36.284432	-107.784414
1,305.0	0.04	98.10	1,305.0	0.6	-1.1	1,922,836.15	2,737,509.35	36.284432	-107.784414
1,366.0	0.10	182.70	1,366.0	0.6	-1.1	1,922,836.09	2,737,509.37	36.284432	-107.784414
1,428.0	0.50	181.80	1,428.0	0.3	-1.1	1,922,835.76	2,737,509.36	36.284431	-107.784414
1,491.0	0.60	171.70	1,491.0	-0.3	-1.0	1,922,835.16	2,737,509.40	36.284429	-107.784414
1,554.0	0.60	177.30	1,554.0	-1.0	-1.0	1,922,834.51	2,737,509.46	36.284427	-107.784414
1,617.0	0.60	139.20	1,617.0	-1.6	-0.7	1,922,833.93	2,737,509.70	36.284426	-107.784413
1,681.0	0.90	143.40	1,681.0	-2.2	-0.2	1,922,833.27	2,737,510.21	36.284424	-107.784411
1,744.0	1.00	145.60	1,744.0	-3.1	0.4	1,922,832.42	2,737,510.82	36.284422	-107.784409
1,807.0	0.40	173.00	1,807.0	-3.8	0.7	1,922,831.75	2,737,511.16	36.284420	-107.784408
1,871.0	0.30	195.40	1,871.0	-4.1	0.7	1,922,831.37	2,737,511.14	36.284419	-107.784408
1,934.0	0.40	205.20	1,934.0	-4.5	0.6	1,922,831.01	2,737,511.00	36.284418	-107.784408
1,997.0	0.20	47.30	1,997.0	-4.6	0.6	1,922,830.88	2,737,510.99	36.284417	-107.784408
2,060.0	0.70	29.40	2,060.0	-4.2	0.8	1,922,831.29	2,737,511.26	36.284419	-107.784407
2,123.0	0.60	23.00	2,122.9	-3.6	1.1	1,922,831.93	2,737,511.58	36.284420	-107.784406
2,187.0	0.50	16.50	2,186.9	-3.0	1.4	1,922,832.51	2,737,511.79	36.284422	-107.784406
2,250.0	0.60	17.40	2,249.9	-2.4	1.5	1,922,833.09	2,737,511.96	36.284423	-107.784405
2,313.0	0.50	17.60	2,312.9	-1.8	1.7	1,922,833.66	2,737,512.15	36.284425	-107.784404
2,376.0	0.40	4.90	2,375.9	-1.4	1.8	1,922,834.15	2,737,512.25	36.284426	-107.784404
2,440.0	0.40	0.50	2,439.9	-0.9	1.8	1,922,834.59	2,737,512.27	36.284428	-107.784404
2,503.0	0.50	349.20	2,502.9	-0.4	1.8	1,922,835.08	2,737,512.22	36.284429	-107.784404
2,566.0	0.40	19.90	2,565.9	0.1	1.8	1,922,835.56	2,737,512.24	36.284430	-107.784404
2,629.0	0.40	33.90	2,628.9	0.4	2.0	1,922,835.95	2,737,512.44	36.284431	-107.784403
2,692.0	0.40	32.90	2,691.9	0.8	2.2	1,922,836.32	2,737,512.68	36.284432	-107.784403
2,756.0	0.40	12.60	2,755.9	1.2	2.4	1,922,836.72	2,737,512.85	36.284433	-107.784402
2,819.0	0.40	39.20	2,818.9	1.6	2.6	1,922,837.11	2,737,513.04	36.284434	-107.784401
2,882.0	0.40	28.40	2,881.9	2.0	2.9	1,922,837.47	2,737,513.28	36.284435	-107.784401
2,945.0	0.20	53.40	2,944.9	2.2	3.0	1,922,837.73	2,737,513.47	36.284436	-107.784400
3,009.0	0.10	38.50	3,008.9	2.3	3.2	1,922,837.84	2,737,513.60	36.284437	-107.784400
3,072.0	0.10	40.50	3,071.9	2.4	3.2	1,922,837.92	2,737,513.67	36.284437	-107.784399
3,135.0	0.20	148.80	3,134.9	2.4	3.3	1,922,837.87	2,737,513.76	36.284437	-107.784399
3,198.0	0.10	99.50	3,197.9	2.3	3.4	1,922,837.77	2,737,513.87	36.284436	-107.784399
3,261.0	0.30	99.50	3,260.9	2.2	3.7	1,922,837.73	2,737,514.09	36.284436	-107.784398
3,324.0	0.40	107.60	3,323.9	2.1	4.0	1,922,837.64	2,737,514.46	36.284436	-107.784397
3,387.0	0.70	65.10	3,386.9	2.2	4.6	1,922,837.74	2,737,515.02	36.284436	-107.784395
3,451.0	0.90	50.00	3,450.9	2.7	5.3	1,922,838.22	2,737,515.76	36.284438	-107.784392
3,514.0	0.60	33.20	3,513.9	3.3	5.9	1,922,838.82	2,737,516.32	36.284439	-107.784390
3,577.0	0.60	339.70	3,576.9	3.9	6.0	1,922,839.40	2,737,516.38	36.284441	-107.784390
3,640.0	0.50	346.50	3,639.9	4.5	5.8	1,922,839.98	2,737,516.21	36.284442	-107.784391
3,704.0	0.50	342.40	3,703.9	5.0	5.6	1,922,840.52	2,737,516.06	36.284444	-107.784391
3,767.0	0.40	340.10	3,766.9	5.5	5.5	1,922,840.99	2,737,515.90	36.284445	-107.784392
3,830.0	0.50	340.20	3,829.9	5.9	5.3	1,922,841.45	2,737,515.73	36.284446	-107.784392
3,893.0	0.50	298.20	3,892.9	6.3	5.0	1,922,841.84	2,737,515.39	36.284447	-107.784393
3,956.0	0.70	296.50	3,955.9	6.6	4.4	1,922,842.14	2,737,514.81	36.284448	-107.784395
4,020.0	0.90	284.90	4,019.9	6.9	3.5	1,922,842.44	2,737,513.97	36.284449	-107.784398
4,083.0	1.00	284.60	4,082.9	7.2	2.5	1,922,842.71	2,737,512.96	36.284450	-107.784402
4,146.0	0.40	264.40	4,145.9	7.3	1.8	1,922,842.83	2,737,512.21	36.284450	-107.784404
4,209.0	0.20	212.40	4,208.9	7.2	1.5	1,922,842.71	2,737,511.93	36.284450	-107.784405
4,272.0	0.10	193.80	4,271.9	7.1	1.4	1,922,842.57	2,737,511.86	36.284449	-107.784405

Cathedral Energy Services

Survey Report - Geographic

Company: EnCana Oil & Gas (USA) Inc
Project: San Juan County, NM
Site: S27-T24N-R9W
Well: Escrito L27-2409 01H
Wellbore: Hz
Design: FINAL

Local Co-ordinate Reference: Well Escrito L27-2409 01H
TVD Reference: 16' KB @ 6940.0usft (Aztec)
MD Reference: 16' KB @ 6940.0usft (Aztec)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: USA EDM 5000 Multi Users DB

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
4,335.0	0.20	194.00	4,334.9	6.9	1.4	1,922,842.41	2,737,511.82	36.284449	-107.784406
4,374.0	0.50	166.10	4,373.9	6.7	1.4	1,922,842.17	2,737,511.84	36.284448	-107.784405
4,406.0	0.70	192.00	4,405.9	6.3	1.4	1,922,841.85	2,737,511.84	36.284448	-107.784405
4,437.0	1.10	19.10	4,436.9	6.4	1.5	1,922,841.94	2,737,511.90	36.284448	-107.784405
4,469.0	2.80	17.50	4,468.8	7.5	1.8	1,922,842.98	2,737,512.23	36.284451	-107.784404
4,501.0	4.30	8.30	4,500.8	9.4	2.2	1,922,844.91	2,737,512.64	36.284456	-107.784403
4,532.0	6.20	4.30	4,531.7	12.2	2.5	1,922,847.73	2,737,512.93	36.284464	-107.784402
4,564.0	8.10	5.70	4,563.4	16.2	2.9	1,922,851.70	2,737,513.28	36.284475	-107.784401
4,596.0	10.10	6.80	4,595.0	21.2	3.4	1,922,856.73	2,737,513.84	36.284488	-107.784399
4,627.0	11.90	8.00	4,625.4	27.1	4.2	1,922,862.59	2,737,514.60	36.284505	-107.784396
4,659.0	13.70	8.00	4,656.6	34.1	5.2	1,922,869.61	2,737,515.58	36.284524	-107.784393
4,690.0	15.70	6.50	4,686.6	41.9	6.2	1,922,877.42	2,737,516.56	36.284545	-107.784389
4,722.0	17.20	1.10	4,717.3	50.9	6.7	1,922,886.45	2,737,517.14	36.284570	-107.784387
4,754.0	18.70	355.90	4,747.7	60.8	6.5	1,922,896.30	2,737,516.86	36.284597	-107.784388
4,785.0	20.70	351.50	4,776.9	71.2	5.3	1,922,906.68	2,737,515.69	36.284626	-107.784392
4,817.0	22.60	348.00	4,806.7	82.8	3.2	1,922,918.29	2,737,513.57	36.284657	-107.784399
4,848.0	24.50	345.80	4,835.1	94.8	0.4	1,922,930.34	2,737,510.75	36.284691	-107.784409
4,880.0	26.10	343.50	4,864.0	108.0	-3.3	1,922,943.52	2,737,507.11	36.284727	-107.784421
4,912.0	27.30	340.60	4,892.6	121.7	-7.7	1,922,957.19	2,737,502.67	36.284764	-107.784436
4,943.0	28.70	338.10	4,920.0	135.3	-12.8	1,922,970.80	2,737,497.52	36.284802	-107.784454
4,975.0	30.10	338.00	4,947.9	149.9	-18.7	1,922,985.37	2,737,491.64	36.284842	-107.784474
5,006.0	32.00	338.70	4,974.4	164.7	-24.6	1,923,000.23	2,737,485.74	36.284883	-107.784494
5,038.0	33.80	338.70	5,001.3	180.9	-30.9	1,923,016.42	2,737,479.42	36.284927	-107.784515
5,070.0	35.20	337.20	5,027.7	197.7	-37.7	1,923,033.21	2,737,472.60	36.284973	-107.784538
5,101.0	36.30	336.40	5,052.8	214.4	-44.9	1,923,049.85	2,737,465.46	36.285019	-107.784563
5,133.0	37.90	336.20	5,078.3	232.0	-52.6	1,923,067.52	2,737,457.69	36.285068	-107.784589
5,164.0	39.80	335.20	5,102.5	249.8	-60.6	1,923,085.24	2,737,449.68	36.285116	-107.784616
5,196.0	41.70	333.60	5,126.7	268.6	-69.7	1,923,104.07	2,737,440.64	36.285168	-107.784647
5,227.0	43.40	331.80	5,149.6	287.2	-79.3	1,923,122.69	2,737,431.01	36.285219	-107.784679
5,259.0	45.00	329.70	5,172.5	306.7	-90.2	1,923,142.14	2,737,420.10	36.285273	-107.784716
5,291.0	47.00	327.80	5,194.7	326.4	-102.1	1,923,161.81	2,737,408.14	36.285327	-107.784757
5,322.0	48.90	326.80	5,215.5	345.7	-114.6	1,923,181.17	2,737,395.69	36.285380	-107.784799
5,354.0	51.40	323.20	5,236.0	365.8	-128.7	1,923,201.27	2,737,381.59	36.285435	-107.784847
5,386.0	54.20	318.90	5,255.3	385.6	-144.7	1,923,221.07	2,737,365.55	36.285489	-107.784901
5,417.0	55.80	313.50	5,273.1	403.9	-162.3	1,923,239.36	2,737,347.96	36.285540	-107.784961
5,449.0	57.00	307.60	5,290.9	421.3	-182.5	1,923,256.66	2,737,327.71	36.285587	-107.785030
5,480.0	59.90	302.30	5,307.1	436.4	-204.2	1,923,271.76	2,737,306.05	36.285629	-107.785103
5,512.0	63.40	298.00	5,322.3	450.5	-228.5	1,923,285.87	2,737,281.70	36.285668	-107.785186
5,544.0	66.80	293.10	5,335.8	463.0	-254.7	1,923,298.35	2,737,255.51	36.285702	-107.785274
5,575.0	69.90	287.70	5,347.2	473.0	-281.7	1,923,308.36	2,737,228.51	36.285729	-107.785366
5,606.0	73.20	283.00	5,357.0	480.8	-310.0	1,923,316.12	2,737,200.16	36.285751	-107.785462
5,645.0	77.00	279.90	5,367.0	488.2	-347.0	1,923,323.57	2,737,163.23	36.285771	-107.785588
5,677.0	77.50	277.50	5,374.1	493.0	-377.8	1,923,328.27	2,737,132.38	36.285784	-107.785692
5,708.0	79.00	276.10	5,380.4	496.6	-407.9	1,923,331.85	2,737,102.24	36.285794	-107.785794
5,740.0	81.70	275.30	5,385.8	499.7	-439.3	1,923,334.97	2,737,070.85	36.285803	-107.785901
5,771.0	83.50	274.50	5,389.8	502.3	-470.0	1,923,337.58	2,737,040.22	36.285810	-107.786005
5,803.0	84.60	272.90	5,393.1	504.4	-501.7	1,923,339.61	2,737,008.46	36.285816	-107.786113
5,835.0	86.00	270.90	5,395.7	505.4	-533.6	1,923,340.66	2,736,976.59	36.285819	-107.786221
5,866.0	87.20	270.10	5,397.6	505.7	-564.5	1,923,340.91	2,736,945.64	36.285819	-107.786326
5,898.0	88.10	269.50	5,398.9	505.6	-596.5	1,923,340.78	2,736,913.67	36.285819	-107.786434
5,930.0	88.70	268.00	5,399.8	504.9	-628.5	1,923,340.07	2,736,881.69	36.285817	-107.786543
5,961.0	89.90	267.70	5,400.1	503.7	-659.5	1,923,338.89	2,736,850.72	36.285814	-107.786648
6,024.0	89.60	266.20	5,400.4	500.4	-722.4	1,923,335.51	2,736,787.81	36.285805	-107.786861
6,088.0	90.00	266.50	5,400.6	496.3	-786.2	1,923,331.40	2,736,723.94	36.285793	-107.787078
6,151.0	91.10	268.30	5,400.0	493.4	-849.2	1,923,328.51	2,736,661.02	36.285786	-107.787292

Cathedral Energy Services

Survey Report - Geographic

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Escrito L27-2409 01H
Project:	San Juan County, NM	TVD Reference:	16' KB @ 6940.0usft (Aztec)
Site:	S27-T24N-R9W	MD Reference:	16' KB @ 6940.0usft (Aztec)
Well:	Escrito L27-2409 01H	North Reference:	True
Wellbore:	Hz	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
6,214.0	91.10	268.20	5,398.8	491.5	-912.1	1,923,326.55	2,736,598.06	36.285780	-107.787505	
6,277.0	90.40	267.80	5,398.0	489.3	-975.1	1,923,324.32	2,736,535.10	36.285774	-107.787719	
6,340.0	90.50	268.70	5,397.5	487.4	-1,038.0	1,923,322.37	2,736,472.14	36.285769	-107.787932	
6,404.0	90.60	268.50	5,396.9	485.8	-1,102.0	1,923,320.77	2,736,408.16	36.285765	-107.788150	
6,467.0	91.10	268.80	5,396.0	484.3	-1,165.0	1,923,319.26	2,736,345.18	36.285761	-107.788363	
6,530.0	90.80	269.00	5,394.9	483.1	-1,228.0	1,923,318.02	2,736,282.21	36.285757	-107.788577	
6,593.0	90.70	268.50	5,394.1	481.8	-1,291.0	1,923,316.61	2,736,219.23	36.285753	-107.788791	
6,656.0	92.00	270.30	5,392.6	481.1	-1,353.9	1,923,315.92	2,736,156.25	36.285752	-107.789004	
6,720.0	92.60	270.90	5,390.0	481.8	-1,417.9	1,923,316.55	2,736,092.31	36.285753	-107.789221	
6,783.0	92.50	270.10	5,387.2	482.3	-1,480.8	1,923,317.07	2,736,029.37	36.285755	-107.789435	
6,846.0	91.50	269.80	5,385.0	482.3	-1,543.8	1,923,316.99	2,735,966.41	36.285755	-107.789648	
6,910.0	89.20	268.70	5,384.6	481.4	-1,607.8	1,923,316.12	2,735,902.42	36.285752	-107.789866	
6,973.0	89.70	270.00	5,385.2	480.7	-1,670.8	1,923,315.37	2,735,839.43	36.285750	-107.790079	
7,036.0	91.10	270.70	5,384.8	481.1	-1,733.8	1,923,315.72	2,735,776.44	36.285752	-107.790293	
7,099.0	91.60	271.10	5,383.3	482.1	-1,796.7	1,923,316.68	2,735,713.46	36.285754	-107.790507	
7,163.0	90.80	269.60	5,382.0	482.5	-1,860.7	1,923,317.04	2,735,649.48	36.285755	-107.790724	
7,226.0	90.80	270.30	5,381.1	482.4	-1,923.7	1,923,316.95	2,735,586.49	36.285755	-107.790938	
7,289.0	91.10	270.10	5,380.1	482.6	-1,986.7	1,923,317.14	2,735,523.50	36.285756	-107.791151	
7,353.0	91.20	269.80	5,378.8	482.6	-2,050.7	1,923,317.05	2,735,459.51	36.285756	-107.791368	
7,416.0	91.20	269.60	5,377.5	482.3	-2,113.7	1,923,316.69	2,735,396.52	36.285755	-107.791582	
7,479.0	91.00	269.60	5,376.2	481.8	-2,176.7	1,923,316.22	2,735,333.54	36.285753	-107.791796	
7,542.0	91.40	270.50	5,374.9	481.9	-2,239.6	1,923,316.24	2,735,270.55	36.285754	-107.792010	
7,606.0	91.30	269.60	5,373.4	481.9	-2,303.6	1,923,316.26	2,735,206.57	36.285754	-107.792227	
7,669.0	91.30	270.20	5,372.0	481.8	-2,366.6	1,923,316.12	2,735,143.59	36.285753	-107.792440	
7,732.0	90.60	268.90	5,370.9	481.3	-2,429.6	1,923,315.60	2,735,080.60	36.285752	-107.792654	
7,795.0	91.50	269.20	5,369.8	480.3	-2,492.6	1,923,314.52	2,735,017.62	36.285749	-107.792868	
7,859.0	90.90	269.70	5,368.5	479.7	-2,556.6	1,923,313.87	2,734,953.64	36.285747	-107.793085	
7,922.0	90.90	270.60	5,367.5	479.8	-2,619.5	1,923,314.01	2,734,890.65	36.285748	-107.793299	
7,985.0	91.00	271.60	5,366.4	481.0	-2,682.5	1,923,315.18	2,734,827.67	36.285751	-107.793512	
8,048.0	91.00	271.50	5,365.3	482.7	-2,745.5	1,923,316.86	2,734,764.70	36.285756	-107.793726	
8,112.0	90.70	270.30	5,364.4	483.7	-2,809.5	1,923,317.83	2,734,700.71	36.285759	-107.793943	
8,175.0	91.10	270.40	5,363.4	484.1	-2,872.5	1,923,318.18	2,734,637.72	36.285760	-107.794157	
8,238.0	91.10	269.40	5,362.2	484.0	-2,935.5	1,923,318.04	2,734,574.74	36.285759	-107.794371	
8,301.0	91.00	270.30	5,361.0	483.9	-2,998.4	1,923,317.84	2,734,511.75	36.285759	-107.794584	
8,364.0	90.90	270.30	5,360.0	484.2	-3,061.4	1,923,318.14	2,734,448.76	36.285760	-107.794798	
8,428.0	90.70	269.50	5,359.1	484.1	-3,125.4	1,923,318.00	2,734,384.76	36.285759	-107.795015	
8,491.0	91.50	270.60	5,357.9	484.1	-3,188.4	1,923,318.02	2,734,321.78	36.285760	-107.795229	
8,554.0	91.20	269.70	5,356.4	484.3	-3,251.4	1,923,318.15	2,734,258.79	36.285760	-107.795443	
8,617.0	90.90	269.20	5,355.2	483.7	-3,314.4	1,923,317.52	2,734,195.81	36.285758	-107.795656	
8,680.0	91.20	269.90	5,354.1	483.2	-3,377.4	1,923,316.99	2,734,132.82	36.285757	-107.795870	
8,744.0	90.60	270.90	5,353.1	483.6	-3,441.4	1,923,317.40	2,734,068.83	36.285758	-107.796087	
8,807.0	90.60	271.00	5,352.4	484.7	-3,504.3	1,923,318.42	2,734,005.84	36.285761	-107.796301	
8,870.0	91.10	270.90	5,351.5	485.7	-3,567.3	1,923,319.43	2,733,942.86	36.285764	-107.796515	
8,933.0	90.40	270.30	5,350.6	486.4	-3,630.3	1,923,320.06	2,733,879.87	36.285766	-107.796728	
8,996.0	91.10	270.50	5,349.8	486.8	-3,693.3	1,923,320.47	2,733,816.88	36.285767	-107.796942	
9,060.0	91.00	270.50	5,348.7	487.4	-3,757.3	1,923,320.99	2,733,752.89	36.285768	-107.797159	
9,123.0	90.90	270.60	5,347.6	488.0	-3,820.3	1,923,321.56	2,733,689.90	36.285770	-107.797373	
9,186.0	90.80	271.20	5,346.7	489.0	-3,883.3	1,923,322.52	2,733,626.91	36.285773	-107.797587	
9,249.0	90.40	270.40	5,346.0	489.9	-3,946.3	1,923,323.37	2,733,563.92	36.285775	-107.797800	
9,313.0	90.00	269.50	5,345.8	489.8	-4,010.3	1,923,323.28	2,733,499.93	36.285775	-107.798017	
9,376.0	90.70	269.60	5,345.4	489.3	-4,073.3	1,923,322.75	2,733,436.93	36.285773	-107.798231	
9,439.0	89.70	269.60	5,345.2	488.9	-4,136.3	1,923,322.28	2,733,373.93	36.285772	-107.798445	
9,502.0	89.70	268.90	5,345.5	488.0	-4,199.2	1,923,321.43	2,733,310.94	36.285770	-107.798659	
9,566.0	90.40	270.80	5,345.5	487.9	-4,263.2	1,923,321.23	2,733,246.94	36.285769	-107.798876	
9,629.0	91.10	270.40	5,344.6	488.5	-4,326.2	1,923,321.85	2,733,183.95	36.285771	-107.799090	

Cathedral Energy Services

Survey Report - Geographic

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Escrito L27-2409 01H
Project:	San Juan County, NM	TVD Reference:	16' KB @ 6940.0usft (Aztec)
Site:	S27-T24N-R9W	MD Reference:	16' KB @ 6940.0usft (Aztec)
Well:	Escrito L27-2409 01H	North Reference:	True
Wellbore:	Hz	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
9,692.0	90.70	270.10	5,343.6	488.8	-4,389.2	1,923,322.10	2,733,120.96	36.285772	-107.799303
9,755.0	90.70	270.90	5,342.9	489.4	-4,452.2	1,923,322.62	2,733,057.97	36.285773	-107.799517
9,819.0	91.40	271.20	5,341.7	490.5	-4,516.2	1,923,323.76	2,732,993.99	36.285777	-107.799734
9,882.0	91.20	270.50	5,340.3	491.5	-4,579.2	1,923,324.66	2,732,931.01	36.285779	-107.799948
9,945.0	90.70	270.90	5,339.2	492.2	-4,642.2	1,923,325.40	2,732,868.03	36.285781	-107.800162
10,008.0	90.40	270.90	5,338.6	493.2	-4,705.1	1,923,326.35	2,732,805.04	36.285784	-107.800375
10,071.0	90.50	270.20	5,338.1	493.8	-4,768.1	1,923,326.93	2,732,742.04	36.285786	-107.800589
10,135.0	91.80	269.90	5,336.8	493.9	-4,832.1	1,923,326.95	2,732,678.05	36.285786	-107.800806
10,198.0	91.40	270.20	5,335.1	493.9	-4,895.1	1,923,326.97	2,732,615.08	36.285786	-107.801020
10,261.0	90.80	269.30	5,333.9	493.7	-4,958.1	1,923,326.67	2,732,552.09	36.285785	-107.801234
10,324.0	90.70	269.50	5,333.1	493.0	-5,021.1	1,923,325.97	2,732,489.10	36.285783	-107.801447
10,387.0	91.20	269.20	5,332.0	492.3	-5,084.1	1,923,325.23	2,732,426.12	36.285781	-107.801661
10,450.0	91.00	269.40	5,330.8	491.5	-5,147.1	1,923,324.43	2,732,363.13	36.285779	-107.801875
10,513.0	90.70	270.20	5,329.9	491.3	-5,210.0	1,923,324.18	2,732,300.14	36.285778	-107.802088
Last CES Survey @ 10,513' MD									
10,563.0	90.70	270.20	5,329.3	491.5	-5,260.0	1,923,324.32	2,732,250.14	36.285779	-107.802258
PTB @ 10,563'									

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
10,513.0	5,329.9	491.3	-5,210.0	Last CES Survey @ 10,513' MD
10,563.0	5,329.3	491.5	-5,260.0	PTB @ 10,563'

Checked By: _____ Approved By: _____ Date: _____