

District I
1525 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) 334-5178 Fax: (505) 334-5170

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 30-045-35480		*Pool Code 98080	*Pool Name NAGEEZI UNIT HZ (OIL)
*Property Code 313757	*Property Name NAGEEZI UNIT M27-2409		*Well Number 01H
*OGRID No. 282327	*Operator Name ENCANA OIL & GAS (USA) INC.		*Elevation 6978'

10 Surface Location

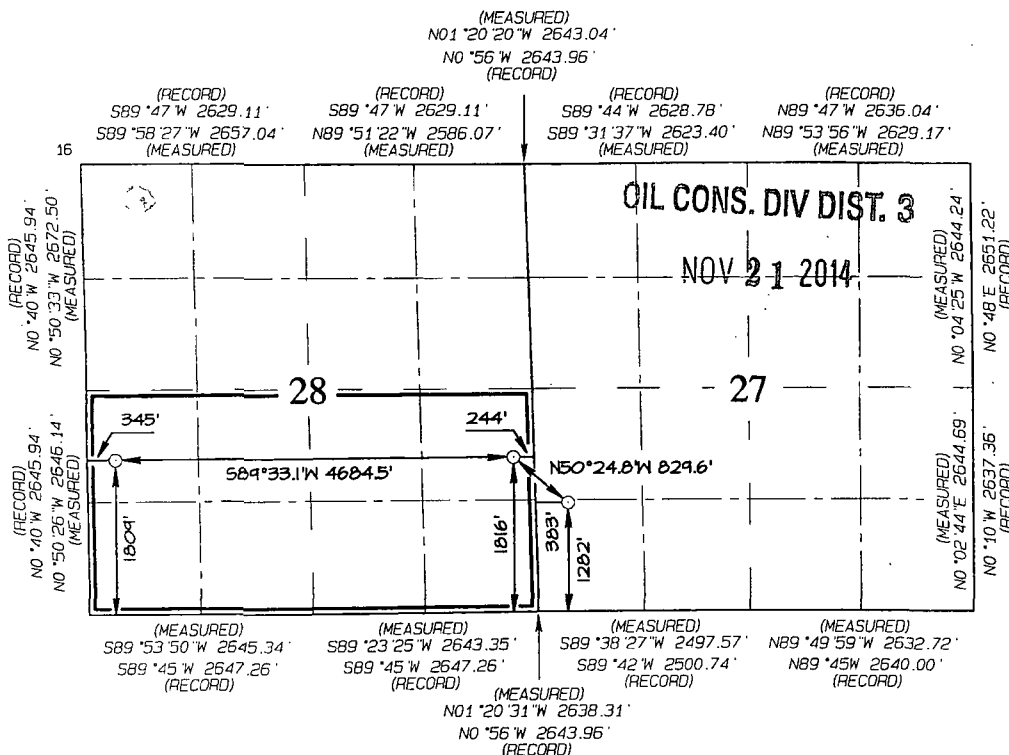
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	27	24N	9W		1282	SOUTH	383	WEST	SAN JUAN

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
L	28	24N	9W		1809	SOUTH	345	WEST	SAN JUAN

12 Dedicated Acres 320.0 Acres S/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



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: *Jessica Gregg* Date: 11/19/14
Printed Name: Jessica Gregg

Printed Name: Jessica.Gregg@encana.com

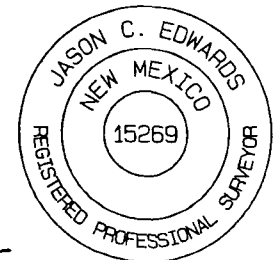
E-mail Address

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: OCTOBER 20, 2014
Date of Survey: JULY 30, 2012

Signature and Seal of Professional Surveyor



JASON C. EDWARDS
Certificate Number 15269

END-OF-LATERAL
1809' FSL 345' FWL
SECTION 28, T24N, R9W
LAT: 36.28271°N
LONG: 107.80160°W
DATUM: NAD1927

LAT: 36.28272°N
LONG: 107.80222°W
DATUM: NAD1983

POINT-OF-ENTRY
1816' FSL 244' FEL
SECTION 27, T24N, R9W
LAT: 36.28280°N
LONG: 107.78571°W
DATUM: NAD1927

LAT: 36.28281°N
LONG: 107.78632°W
DATUM: NAD1983

SURFACE LOCATION
1282' FSL 383' FWL
SECTION 27, T24N, R9W
LAT: 36.28135°N
LONG: 107.78354°W
DATUM: NAD1927

LAT: 36.28136°N
LONG: 107.78415°W
DATUM: NAD1983

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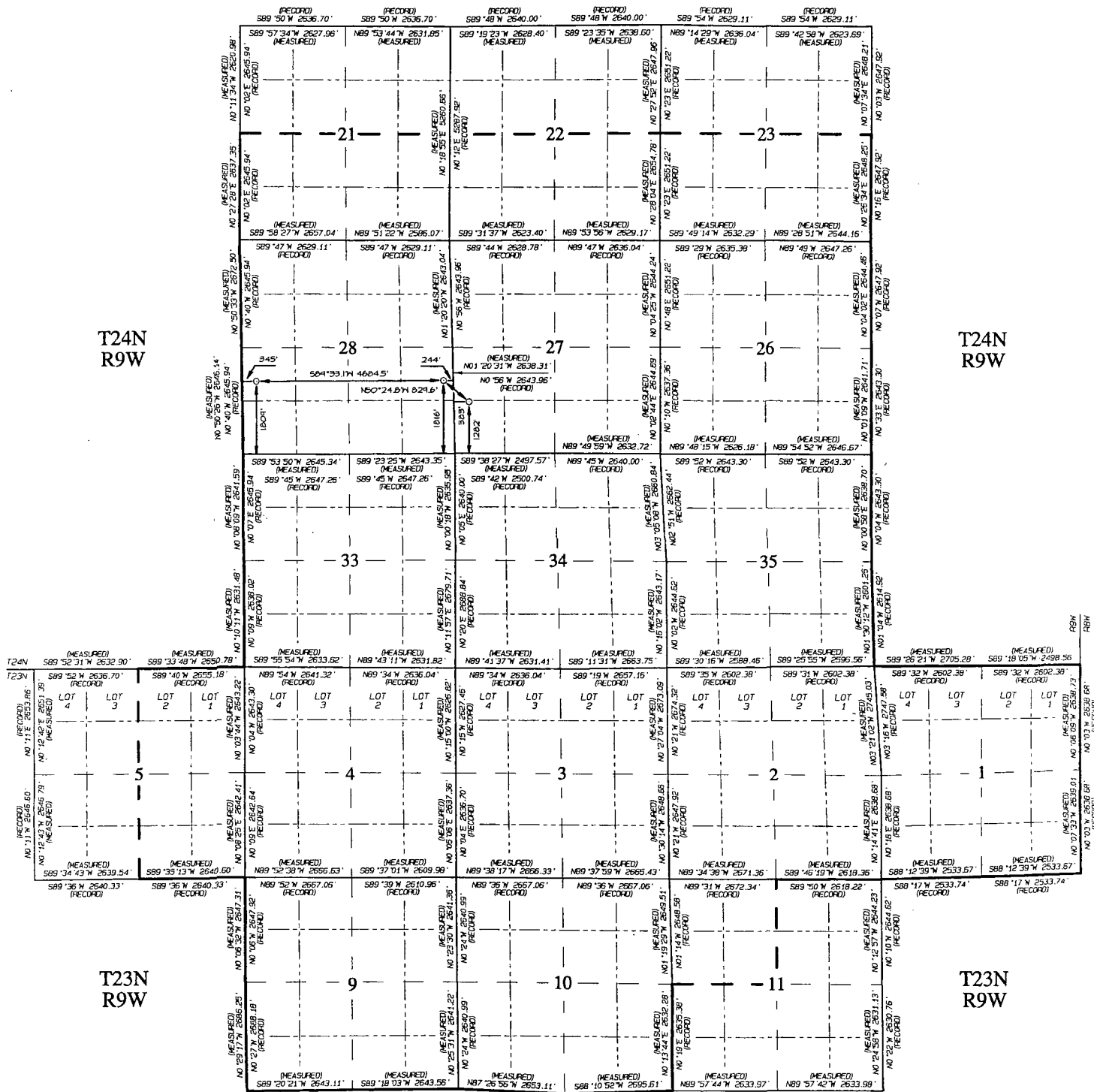
State of New Mexico
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Form C-102
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OIL CONSERVATION DIVISION
1220 South St. Francis Drive
Santa Fe, NM 87505

Submit one copy to
Appropriate District Office

☐ AMENDED REPORT



CONFIDENTIAL

DEVIATION SURVEYS
Nageezi Unit M27-2409 01H
30-045-35480

MD (Feet)	Inclination (Degree)
299'	0.30
616'	0.80
932'	0.70
1248'	1.40
1564'	1.00
1880'	0.80
2196'	0.70
2512'	0.80
2828'	0.90
3144'	1.00
3460'	1.20
3776'	2.00
4060'	10.7

OIL CONS. DIV DIST. 3

NOV 21 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

11/19/14
Date

ACKNOWLEDGMENT

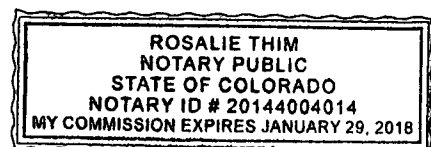
State of Colorado
City and County of Denver

This instrument was acknowledged before me on this 19th 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.

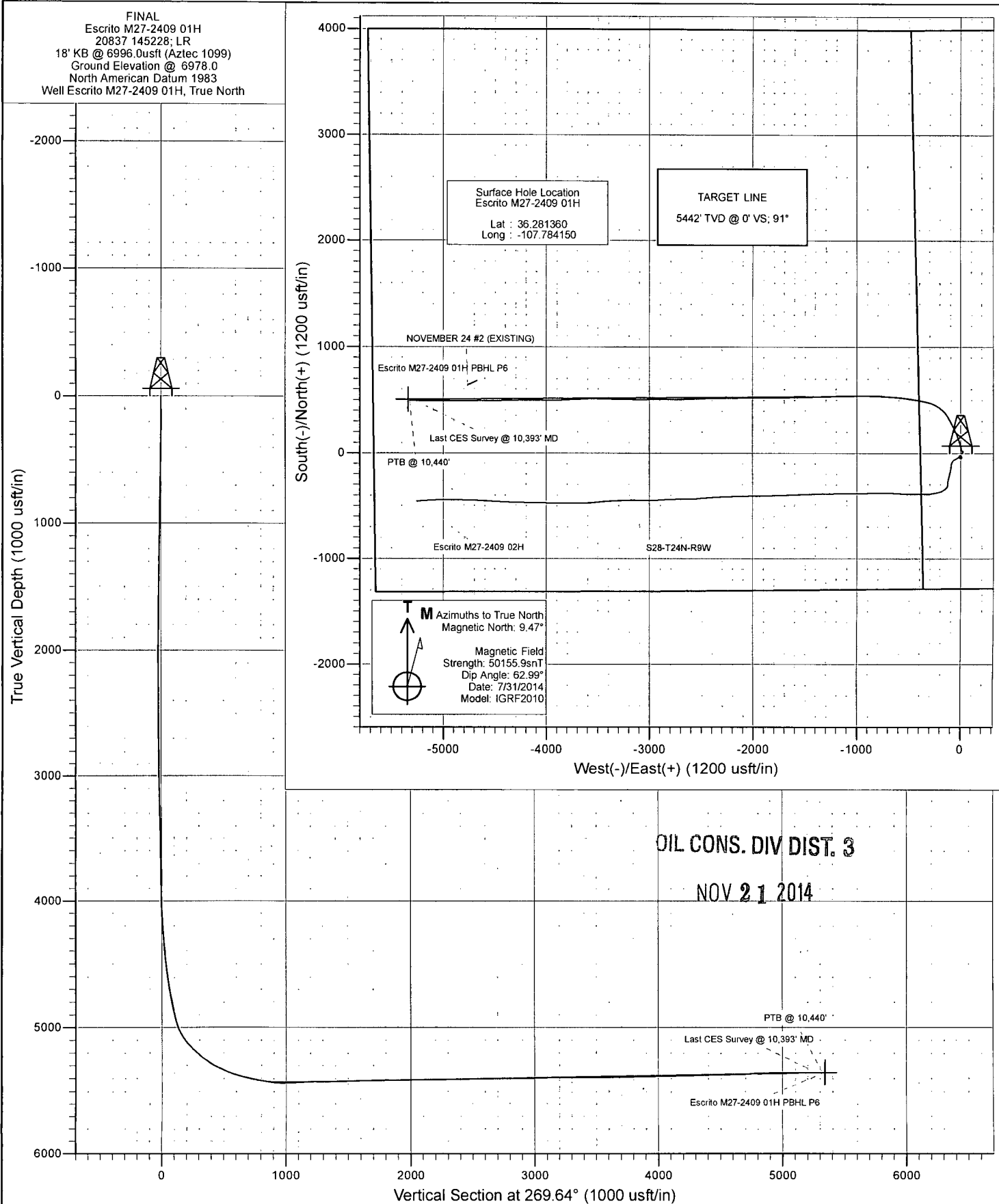
Notary Public: Rosalie Thim

My Commission Expires: 1/29/18



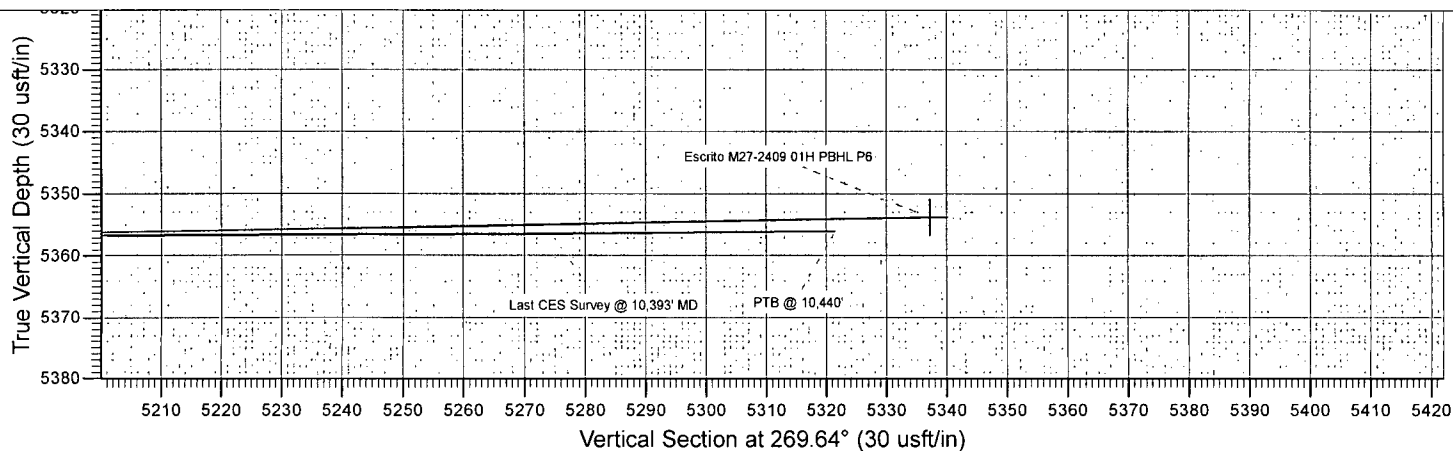
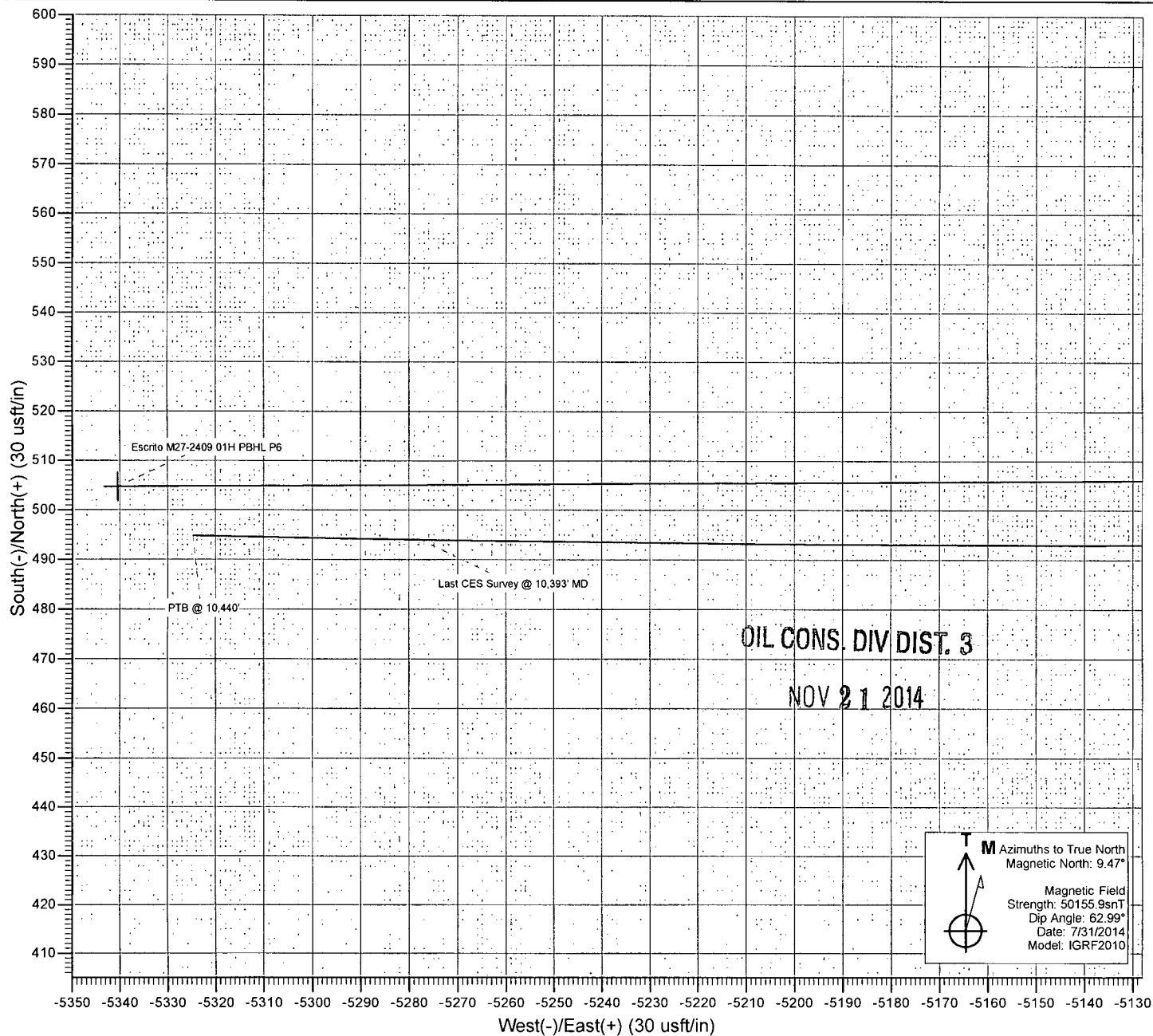


Project: San Juan County, NM
Site: S27-T24N-R9W
Well: Escrito M27-2409 01H
Wellbore: Hz
Design: FINAL





Project: San Juan County, NM
Site: S27-T24N-R9W
Well: Escrito M27-2409 01H
Wellbore: Hz
Design: FINAL



Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Escrito M27-2409 01H
Project:	San Juan County, NM	TVD Reference:	18' KB @ 6996.0usft (Aztec 1099)
Site:	S27-T24N-R9W	MD Reference:	18' KB @ 6996.0usft (Aztec 1099)
Well:	Escrito M27-2409 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 M27-2409 01H					
Well Position	+N/-S	0.0 usft	Northing:	1,921,717.98 usft	Latitude:	36.281360
	+E/-W	0.0 usft	Easting:	2,737,587.63 usft	Longitude:	-107.784150
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft	Ground Level:	6,978.0 usft	

Wellbore	Hz				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/31/2014	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)	+N/-S	+E/-W	Direction	
	(usft)	(usft)	(usft)	(°)	
	0.0	0.0	0.0	269.64	

Survey Program	Date	8/18/2014
From	To	
(usft)	(usft)	
144.0	10,440.0	Survey #1 (Hz)
Tool Name	Description	
Geolink MWD	Geolink MWD	

Survey									
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Vertical	Dogleg	Build	Formations /
Depth	(°)	(°)	Depth	(usft)	(usft)	Section	Rate	Rate	Comments
(usft)			(usft)			(usft)	(°/100usf)	(°/100u)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
144.0	0.40	95.20	144.0	0.0	0.5	-0.5	0.28	0.28	
173.0	0.20	99.50	173.0	-0.1	0.7	-0.7	0.69	-0.69	
236.0	0.20	76.50	236.0	-0.1	0.9	-0.9	0.13	0.00	
299.0	0.30	84.90	299.0	0.0	1.1	-1.1	0.17	0.16	
358.0	0.50	83.00	358.0	0.0	1.5	-1.5	0.34	0.34	
384.0	0.60	83.60	384.0	0.1	1.8	-1.8	0.39	0.38	
521.0	1.00	90.20	521.0	0.1	3.7	-3.7	0.30	0.29	
553.0	0.80	74.20	553.0	0.2	4.2	-4.2	1.00	-0.62	
616.0	0.80	63.00	616.0	0.5	5.0	-5.0	0.25	0.00	
679.0	0.80	72.20	679.0	0.8	5.8	-5.8	0.20	0.00	
743.0	0.80	67.30	743.0	1.2	6.7	-6.7	0.11	0.00	
806.0	0.70	66.20	806.0	1.5	7.4	-7.4	0.16	-0.16	

Cathedral Energy Services

Survey Report

Company: EnCana Oil & Gas (USA) Inc
Project: San Juan County, NM
Site: S27-T24N-R9W
Well: Escrito M27-2409 01H
Wellbore: Hz
Design: FINAL

Local Co-ordinate Reference: Well Escrito M27-2409 01H
TVD Reference: 18' KB @ 6996.0usft (Aztec 1099)
MD Reference: 18' KB @ 6996.0usft (Aztec 1099)
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
869.0	0.80	65.30	868.9	1.8	8.2	-8.2	0.16	0.16	
932.0	0.70	64.10	931.9	2.2	8.9	-8.9	0.16	-0.16	
996.0	0.60	64.30	995.9	2.5	9.6	-9.6	0.16	-0.16	
1,059.0	0.40	54.30	1,058.9	2.8	10.0	-10.1	0.35	-0.32	
1,122.0	1.10	55.70	1,121.9	3.2	10.7	-10.7	1.11	1.11	
1,185.0	1.50	56.70	1,184.9	4.0	11.9	-11.9	0.64	0.63	
1,248.0	1.40	54.20	1,247.9	4.9	13.2	-13.3	0.19	-0.16	
1,312.0	1.30	59.10	1,311.9	5.8	14.5	-14.5	0.24	-0.16	
1,375.0	1.20	58.70	1,374.9	6.5	15.7	-15.7	0.16	-0.16	
1,438.0	1.20	53.00	1,437.8	7.2	16.8	-16.8	0.19	0.00	
1,501.0	1.10	47.40	1,500.8	8.0	17.7	-17.8	0.24	-0.16	
1,564.0	1.00	36.00	1,563.8	8.9	18.5	-18.5	0.37	-0.16	
1,627.0	1.10	33.10	1,626.8	9.8	19.1	-19.2	0.18	0.16	
1,690.0	1.10	45.50	1,689.8	10.7	19.9	-20.0	0.38	0.00	
1,754.0	1.10	54.40	1,753.8	11.5	20.8	-20.9	0.27	0.00	
1,817.0	1.00	51.10	1,816.8	12.2	21.8	-21.8	0.19	-0.16	
1,880.0	0.80	42.80	1,879.8	12.9	22.5	-22.6	0.38	-0.32	
1,943.0	0.70	17.50	1,942.8	13.6	22.9	-23.0	0.54	-0.16	
2,007.0	0.70	355.40	2,006.8	14.4	23.0	-23.1	0.42	0.00	
2,070.0	0.70	355.70	2,069.8	15.1	22.9	-23.0	0.01	0.00	
2,133.0	0.70	350.70	2,132.8	15.9	22.8	-22.9	0.10	0.00	
2,196.0	0.70	349.20	2,195.7	16.6	22.7	-22.8	0.03	0.00	
2,259.0	0.50	330.00	2,258.7	17.3	22.5	-22.6	0.45	-0.32	
2,323.0	0.50	325.80	2,322.7	17.7	22.2	-22.3	0.06	0.00	
2,386.0	0.50	337.00	2,385.7	18.2	21.9	-22.1	0.15	0.00	
2,449.0	0.70	328.30	2,448.7	18.8	21.6	-21.7	0.35	0.32	
2,512.0	0.80	331.10	2,511.7	19.5	21.2	-21.3	0.17	0.16	
2,575.0	0.90	322.40	2,574.7	20.3	20.7	-20.8	0.26	0.16	
2,639.0	0.90	326.60	2,638.7	21.1	20.1	-20.2	0.10	0.00	
2,702.0	0.90	329.90	2,701.7	21.9	19.6	-19.7	0.08	0.00	
2,765.0	0.90	332.00	2,764.7	22.8	19.1	-19.3	0.05	0.00	
2,828.0	0.90	319.20	2,827.7	23.6	18.6	-18.7	0.32	0.00	
2,892.0	0.80	288.80	2,891.7	24.1	17.8	-18.0	0.71	-0.16	
2,955.0	0.80	279.10	2,954.7	24.4	17.0	-17.1	0.21	0.00	
3,018.0	0.70	259.60	3,017.7	24.4	16.1	-16.3	0.43	-0.16	
3,081.0	0.90	281.00	3,080.7	24.4	15.3	-15.4	0.57	0.32	
3,144.0	1.00	266.50	3,143.7	24.4	14.2	-14.4	0.41	0.16	
3,208.0	1.00	268.00	3,207.7	24.4	13.1	-13.3	0.04	0.00	
3,267.0	1.10	283.20	3,266.6	24.5	12.1	-12.2	0.50	0.17	
3,334.0	1.00	291.40	3,333.6	24.9	10.9	-11.0	0.27	-0.15	
3,397.0	1.40	295.40	3,396.6	25.4	9.7	-9.8	0.65	0.63	
3,460.0	1.20	300.70	3,459.6	26.1	8.4	-8.6	0.37	-0.32	
3,523.0	1.10	297.00	3,522.6	26.7	7.3	-7.5	0.20	-0.16	
3,587.0	1.20	292.20	3,586.6	27.2	6.1	-6.3	0.22	0.16	
3,650.0	1.20	296.20	3,649.6	27.7	4.9	-5.1	0.13	0.00	
3,713.0	1.50	303.90	3,712.5	28.5	3.7	-3.8	0.56	0.48	
3,776.0	2.00	335.40	3,775.5	29.9	2.5	-2.7	1.69	0.79	
3,840.0	4.50	354.60	3,839.4	33.5	1.8	-2.0	4.21	3.91	
3,903.0	8.20	358.70	3,902.0	40.4	1.5	-1.7	5.91	5.87	
3,934.0	9.80	2.10	3,932.6	45.3	1.5	-1.8	5.44	5.16	
3,997.0	10.20	356.60	3,994.7	56.2	1.4	-1.8	1.64	0.63	
4,060.0	10.70	350.70	4,056.6	67.5	0.1	-0.6	1.87	0.79	
4,123.0	10.50	340.60	4,118.6	78.7	-2.7	2.2	2.96	-0.32	

Cathedral Energy Services

Survey Report

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Wellbore: Hz
Design: FINAL

Local Co-ordinate Reference: Well Escrito M27-2409 01H
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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 (°/100usft)	Build Rate (°/100u)	Formations / Comments
4,187.0	10.30	339.00	4,181.5	89.6	-6.7	6.1	0.55	-0.31	
4,250.0	12.50	338.70	4,243.3	101.2	-11.2	10.6	3.49	3.49	
4,313.0	13.10	339.80	4,304.7	114.2	-16.1	15.4	1.03	0.95	
4,376.0	15.40	340.50	4,365.8	128.8	-21.4	20.6	3.66	3.65	
4,439.0	16.70	339.60	4,426.3	145.2	-27.4	26.4	2.10	2.06	
4,503.0	16.40	338.90	4,487.6	162.2	-33.8	32.8	0.56	-0.47	
4,566.0	18.20	337.90	4,547.8	179.6	-40.7	39.6	2.90	2.86	
4,629.0	19.40	335.40	4,607.4	198.3	-48.8	47.5	2.29	1.90	
4,692.0	21.00	334.10	4,666.6	217.9	-58.1	56.7	2.64	2.54	
4,755.0	22.30	333.50	4,725.1	238.8	-68.3	66.8	2.09	2.06	
4,819.0	23.90	332.70	4,784.0	261.2	-79.7	78.0	2.55	2.50	
4,882.0	24.80	332.80	4,841.4	284.3	-91.6	89.8	1.43	1.43	
4,913.0	24.80	332.60	4,869.5	295.8	-97.5	95.7	0.27	0.00	
4,946.0	26.20	330.90	4,899.3	308.3	-104.3	102.3	4.79	4.24	
5,009.0	30.00	331.50	4,954.9	334.3	-118.6	116.5	6.05	6.03	
5,072.0	34.90	323.80	5,008.0	362.8	-136.7	134.5	10.16	7.78	
5,136.0	39.60	315.30	5,059.0	392.1	-161.9	159.5	10.87	7.34	
5,199.0	45.10	308.30	5,105.6	420.2	-193.6	191.0	11.49	8.73	
5,262.0	49.00	301.20	5,148.5	446.4	-231.5	228.7	10.31	6.19	
5,325.0	50.50	290.50	5,189.3	467.2	-274.7	271.7	13.17	2.38	
5,357.0	52.00	285.00	5,209.3	474.8	-298.4	295.4	14.20	4.69	
5,388.0	52.60	283.00	5,228.3	480.8	-322.2	319.2	5.46	1.94	
5,420.0	53.10	282.40	5,247.6	486.4	-347.1	344.0	2.16	1.56	
5,452.0	55.20	281.70	5,266.3	491.8	-372.5	369.4	6.80	6.56	
5,483.0	58.50	280.30	5,283.3	496.7	-397.9	394.8	11.30	10.65	
5,515.0	62.20	278.70	5,299.1	501.3	-425.4	422.2	12.35	11.56	
5,547.0	65.40	278.80	5,313.3	505.7	-453.7	450.6	10.00	10.00	
5,578.0	65.80	278.90	5,326.1	510.0	-481.6	478.4	1.32	1.29	
5,610.0	67.40	278.80	5,338.8	514.5	-510.7	507.4	5.01	5.00	
5,641.0	69.00	277.90	5,350.3	518.7	-539.1	535.9	5.82	5.16	
5,673.0	71.30	276.00	5,361.1	522.4	-569.0	565.7	9.10	7.19	
5,705.0	72.00	275.60	5,371.2	525.4	-599.2	595.9	2.49	2.19	
5,736.0	73.70	274.70	5,380.4	528.1	-628.7	625.4	6.15	5.48	
5,768.0	76.00	274.50	5,388.7	530.6	-659.5	656.2	7.21	7.19	
5,818.0	77.90	271.60	5,400.0	533.2	-708.1	704.8	6.81	3.80	
5,881.0	79.60	271.90	5,412.3	535.0	-769.9	766.5	2.74	2.70	
5,944.0	80.00	272.20	5,423.5	537.3	-831.9	828.5	0.79	0.63	
6,007.0	82.80	272.20	5,432.9	539.6	-894.1	890.7	4.44	4.44	
6,070.0	88.70	270.30	5,437.5	541.0	-956.9	953.5	9.84	9.37	
6,134.0	92.90	270.20	5,436.7	541.3	-1,020.9	1,017.4	6.56	6.56	
6,197.0	93.40	269.90	5,433.2	541.3	-1,083.8	1,080.3	0.93	0.79	
6,260.0	92.40	268.80	5,430.0	540.6	-1,146.7	1,143.3	2.36	-1.59	
6,323.0	91.90	268.10	5,427.6	538.9	-1,209.6	1,206.2	1.36	-0.79	
6,386.0	90.10	268.00	5,426.5	536.8	-1,272.6	1,269.2	2.86	-2.86	
6,450.0	90.30	267.80	5,426.3	534.4	-1,336.5	1,333.1	0.44	0.31	
6,513.0	91.10	267.30	5,425.5	531.7	-1,399.5	1,396.1	1.50	1.27	
6,576.0	92.00	268.70	5,423.8	529.6	-1,462.4	1,459.0	2.64	1.43	
6,639.0	92.10	268.90	5,421.6	528.2	-1,525.3	1,522.0	0.35	0.16	
6,703.0	92.70	268.40	5,418.9	526.7	-1,589.3	1,585.9	1.22	0.94	
6,764.0	92.40	268.70	5,416.2	525.2	-1,650.2	1,646.9	0.70	-0.49	
6,826.0	90.30	269.20	5,414.7	524.0	-1,712.2	1,708.8	3.48	-3.39	
6,887.0	90.30	269.40	5,414.4	523.3	-1,773.1	1,769.8	0.33	0.00	
6,948.0	91.50	268.90	5,413.5	522.4	-1,834.1	1,830.8	2.13	1.97	

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Escrito M27-2409 01H
Project:	San Juan County, NM	TVD Reference:	18' KB @ 6996.0usft (Aztec 1099)
Site:	S27-T24N-R9W	MD Reference:	18' KB @ 6996.0usft (Aztec 1099)
Well:	Escrito M27-2409 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)	Vertical Section (usft)	Dogleg Rate (°/100usf)	Build Rate (°/100u)	Formations / Comments
7,009.0	90.40	270.20	5,412.4	521.9	-1,895.1	1,891.8	2.79	-1.80	
7,071.0	89.80	269.90	5,412.3	522.0	-1,957.1	1,953.8	1.08	-0.97	
7,133.0	90.90	270.00	5,412.0	521.9	-2,019.1	2,015.8	1.78	1.77	
7,194.0	90.50	269.60	5,411.2	521.7	-2,080.1	2,076.8	0.93	-0.66	
7,255.0	91.10	269.50	5,410.4	521.2	-2,141.1	2,137.8	1.00	0.98	
7,315.0	90.30	269.50	5,409.6	520.7	-2,201.1	2,197.8	1.33	-1.33	
7,377.0	90.80	269.10	5,409.0	519.9	-2,263.1	2,259.8	1.03	0.81	
7,438.0	91.90	269.10	5,407.6	519.0	-2,324.1	2,320.8	1.80	1.80	
7,500.0	90.90	268.40	5,406.1	517.6	-2,386.0	2,382.7	1.97	-1.61	
7,562.0	91.10	267.40	5,405.0	515.4	-2,448.0	2,444.7	1.64	0.32	
7,623.0	92.20	267.60	5,403.2	512.7	-2,508.9	2,505.6	1.83	1.80	
7,684.0	91.00	268.50	5,401.5	510.6	-2,569.8	2,566.6	2.46	-1.97	
7,745.0	88.50	269.60	5,401.8	509.6	-2,630.8	2,627.6	4.48	-4.10	
7,807.0	88.90	269.50	5,403.2	509.1	-2,692.8	2,689.5	0.67	0.65	
7,868.0	89.90	269.40	5,403.9	508.5	-2,753.8	2,750.5	1.65	1.64	
7,930.0	90.90	269.40	5,403.4	507.9	-2,815.8	2,812.5	1.61	1.61	
7,991.0	90.80	269.80	5,402.5	507.5	-2,876.8	2,873.5	0.68	-0.16	
8,052.0	91.30	269.60	5,401.4	507.2	-2,937.8	2,934.5	0.88	0.82	
8,113.0	92.20	269.50	5,399.5	506.7	-2,998.7	2,995.5	1.48	1.48	
8,174.0	91.70	270.10	5,397.5	506.5	-3,059.7	3,056.5	1.28	-0.82	
8,235.0	91.30	269.90	5,395.9	506.5	-3,120.7	3,117.4	0.73	-0.66	
8,298.0	90.60	270.90	5,394.8	506.9	-3,183.7	3,180.4	1.94	-1.11	
8,362.0	90.00	270.50	5,394.5	507.7	-3,247.7	3,244.4	1.13	-0.94	
8,425.0	91.90	270.90	5,393.4	508.5	-3,310.6	3,307.4	3.08	3.02	
8,488.0	90.60	271.40	5,392.1	509.7	-3,373.6	3,370.3	2.21	-2.06	
8,551.0	90.50	270.90	5,391.5	511.0	-3,436.6	3,433.3	0.81	-0.16	
8,614.0	89.30	270.90	5,391.6	512.0	-3,499.6	3,496.3	1.90	-1.90	
8,678.0	89.80	270.20	5,392.1	512.6	-3,563.6	3,560.3	1.34	0.78	
8,741.0	89.50	267.10	5,392.5	511.1	-3,626.6	3,623.3	4.94	-0.48	
8,804.0	90.20	267.00	5,392.6	507.9	-3,689.5	3,686.2	1.12	1.11	
8,867.0	91.60	267.30	5,391.6	504.7	-3,752.4	3,749.1	2.27	2.22	
8,930.0	91.90	268.10	5,389.7	502.2	-3,815.3	3,812.1	1.36	0.48	
8,994.0	90.50	268.90	5,388.4	500.5	-3,879.3	3,876.0	2.52	-2.19	
9,057.0	92.00	269.60	5,387.0	499.7	-3,942.2	3,939.0	2.63	2.38	
9,120.0	91.60	269.90	5,385.0	499.4	-4,005.2	4,002.0	0.79	-0.63	
9,183.0	91.90	269.90	5,383.1	499.3	-4,068.2	4,065.0	0.48	0.48	
9,246.0	91.60	269.90	5,381.2	499.2	-4,131.2	4,127.9	0.48	-0.48	
9,310.0	90.50	268.70	5,380.0	498.4	-4,195.1	4,191.9	2.54	-1.72	
9,373.0	92.00	269.40	5,378.6	497.4	-4,258.1	4,254.9	2.63	2.38	
9,436.0	91.50	269.40	5,376.7	496.7	-4,321.1	4,317.9	0.79	-0.79	
9,499.0	90.90	268.70	5,375.4	495.7	-4,384.1	4,380.9	1.46	-0.95	
9,562.0	91.80	269.00	5,373.9	494.4	-4,447.0	4,443.8	1.51	1.43	
9,625.0	91.00	269.20	5,372.4	493.4	-4,510.0	4,506.8	1.31	-1.27	
9,689.0	91.10	269.20	5,371.2	492.5	-4,574.0	4,570.8	0.16	0.16	
9,752.0	92.10	269.40	5,369.4	491.8	-4,637.0	4,633.8	1.62	1.59	
9,815.0	92.20	270.20	5,367.1	491.5	-4,699.9	4,696.7	1.28	0.16	
9,878.0	93.30	270.50	5,364.0	491.9	-4,762.8	4,759.6	1.81	1.75	
9,942.0	92.40	270.20	5,360.9	492.3	-4,826.8	4,823.6	1.48	-1.41	
10,005.0	91.30	269.70	5,358.8	492.3	-4,889.7	4,886.5	1.92	-1.75	
10,068.0	90.90	270.40	5,357.6	492.3	-4,952.7	4,949.5	1.28	-0.63	
10,132.0	91.30	270.50	5,356.4	492.8	-5,016.7	5,013.5	0.64	0.62	
10,195.0	89.40	270.00	5,356.0	493.1	-5,079.7	5,076.5	3.12	-3.02	
10,258.0	89.60	269.90	5,356.5	493.0	-5,142.7	5,139.5	0.35	0.32	

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Escrito M27-2409 01H
Project:	San Juan County, NM	TVD Reference:	18' KB @ 6996.0usft (Aztec 1099)
Site:	S27-T24N-R9W	MD Reference:	18' KB @ 6996.0usft (Aztec 1099)
Well:	Escrito M27-2409 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)	Vertical Section (usft)	Dogleg Rate (°/100usf)	Build Rate (°/100u)	Formations / Comments
10,321.0	90.00	270.40	5,356.8	493.2	-5,205.7	5,202.5	1.02	0.63	
10,385.0	90.40	270.90	5,356.5	493.9	-5,269.7	5,266.5	1.00	0.62	
10,393.0	90.40	270.90	5,356.5	494.1	-5,277.7	5,274.5	0.00	0.00	Last CES Survey @ 10,393' MD
10,440.0	90.40	270.90	5,356.2	494.8	-5,324.7	5,321.5	0.00	0.00	PTB @ 10,440'

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Escrito M27-2409 01H
Project:	San Juan County, NM	TVD Reference:	18' KB @ 6996.0usft (Aztec 1099)
Site:	S27-T24N-R9W	MD Reference:	18' KB @ 6996.0usft (Aztec 1099)
Well:	Escrito M27-2409 01H	North Reference:	True
Wellbore:	HZ	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
Escrito M27-2409 01H P	0.00	0.00	5,353.8	504.7	-5,340.5	1,922,219.97	2,732,246.91	36.282745	-107.802270
- actual wellpath misses target center by 18.8usft at 10440.0usft MD (5356.2 TVD, 494.8 N, -5324.7 E)									
- Point									
Escrito M27-2409 01H P	0.00	0.00	5,349.4	504.7	-5,340.5	1,922,219.97	2,732,246.91	36.282745	-107.802270
- actual wellpath misses target center by 19.8usft at 10440.0usft MD (5356.2 TVD, 494.8 N, -5324.7 E)									
- Point									
Escrito M27-2409 01H P	0.00	0.00	5,333.1	504.7	-5,340.5	1,922,219.97	2,732,246.91	36.282745	-107.802270
- actual wellpath misses target center by 29.6usft at 10440.0usft MD (5356.2 TVD, 494.8 N, -5324.7 E)									
- Point									
Escrito M27-2409 01H P	0.00	0.00	5,348.8	504.7	-5,340.5	1,922,219.97	2,732,246.91	36.282745	-107.802270
- actual wellpath misses target center by 20.0usft at 10440.0usft MD (5356.2 TVD, 494.8 N, -5324.7 E)									
- Point									
Escrito M27-2409 01H P	0.00	0.00	5,349.4	564.7	-5,340.5	1,922,280.01	2,732,246.88	36.282910	-107.802270
- actual wellpath misses target center by 72.0usft at 10440.0usft MD (5356.2 TVD, 494.8 N, -5324.7 E)									
- Point									
Escrito M27-2409 01H P	0.00	0.00	5,389.6	533.4	-728.0	1,922,251.01	2,736,859.38	36.282825	-107.786620
- actual wellpath misses target center by 14.3usft at 5835.4usft MD (5403.6 TVD, 533.6 N, -725.2 E)									
- Point									
Escrito M27-2409 01H P	0.00	0.00	5,372.4	593.4	-728.0	1,922,310.98	2,736,859.35	36.282990	-107.786620
- actual wellpath misses target center by 67.4usft at 5833.9usft MD (5403.3 TVD, 533.6 N, -723.7 E)									
- Point									
Escrito M27-2409 01H P	0.00	0.00	5,324.1	564.7	-5,340.5	1,922,280.01	2,732,246.88	36.282910	-107.802270
- actual wellpath misses target center by 78.5usft at 10440.0usft MD (5356.2 TVD, 494.8 N, -5324.7 E)									
- Point									
Escrito M27-2409 01H P	0.00	0.00	5,389.6	593.4	-728.0	1,922,310.98	2,736,859.35	36.282990	-107.786620
- actual wellpath misses target center by 61.4usft at 5837.2usft MD (5404.0 TVD, 533.7 N, -726.9 E)									
- Point									
NOVEMBER 24 2 TD @	0.00	0.00	5,340.8	634.7	-4,763.4	1,922,350.24	2,732,823.91	36.283102	-107.800312
- actual wellpath misses target center by 144.6usft at 9880.6usft MD (5363.9 TVD, 491.9 N, -4765.4 E)									
- Circle (radius 50.0)									
Escrito M27-2409 01H P	0.00	0.00	5,434.3	533.4	-728.0	1,922,251.01	2,736,859.38	36.282825	-107.786620
- actual wellpath misses target center by 29.5usft at 5844.1usft MD (5405.3 TVD, 533.9 N, -733.7 E)									
- Point									
Escrito M27-2409 01H P	0.00	0.00	5,429.3	533.4	-728.0	1,922,251.01	2,736,859.38	36.282825	-107.786620
- actual wellpath misses target center by 24.6usft at 5843.2usft MD (5405.1 TVD, 533.9 N, -732.8 E)									
- Point									

Design Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(usft)	(usft)	+N/-S (usft)	+E/-W (usft)	
10,393.0	5,356.5	494.1	-5,277.7	Last CES Survey @ 10,393' MD
10,440.0	5,356.2	494.8	-5,324.7	PTB @ 10,440'

Checked By: _____	Approved By: _____	Date: _____
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EnCana Oil & Gas (USA) Inc

San Juan County, NM

S27-T24N-R9W

Escrito M27-2409 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 M27-2409 01H
Project:	San Juan County, NM	TVD Reference:	18' KB @ 6996.0usft (Aztec 1099)
Site:	S27-T24N-R9W	MD Reference:	18' KB @ 6996.0usft (Aztec 1099)
Well:	Escrito M27-2409 01H	North Reference:	True
Wellbore:	H2	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 M27-2409 01H					
Well Position	+N-S	0.0 usft	Northing:	1,921,717.98 usft	Latitude:	36.281360
	+E-W	0.0 usft	Easting:	2,737,587.63 usft	Longitude:	-107.784150
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft	Ground Level:	6,978.0 usft	

Wellbore	H2				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/31/2014	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	269.64	

Survey Program		Date	8/18/2014		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
144.0	10,440.0	Survey #1 (Hz)	Geolink MWD	Geolink MWD	

Survey									
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	1,921,717.98	2,737,587.63	36.281360	-107.784150
144.0	0.40	95.20	144.0	0.0	0.5	1,921,717.94	2,737,588.13	36.281360	-107.784149
173.0	0.20	99.50	173.0	-0.1	0.7	1,921,717.92	2,737,588.28	36.281360	-107.784148
236.0	0.20	76.50	236.0	-0.1	0.9	1,921,717.93	2,737,588.49	36.281360	-107.784147
299.0	0.30	84.90	299.0	0.0	1.1	1,921,717.97	2,737,588.76	36.281360	-107.784146
358.0	0.50	83.00	358.0	0.0	1.5	1,921,718.02	2,737,589.17	36.281360	-107.784145
384.0	0.60	83.60	384.0	0.1	1.8	1,921,718.04	2,737,589.42	36.281360	-107.784144
521.0	1.00	90.20	521.0	0.1	3.7	1,921,718.12	2,737,591.33	36.281360	-107.784138
553.0	0.80	74.20	553.0	0.2	4.2	1,921,718.18	2,737,591.82	36.281361	-107.784136
616.0	0.80	63.00	616.0	0.5	5.0	1,921,718.50	2,737,592.64	36.281362	-107.784133
679.0	0.80	72.20	679.0	0.8	5.8	1,921,718.84	2,737,593.45	36.281362	-107.784131
743.0	0.80	67.30	743.0	1.2	6.7	1,921,719.15	2,737,594.29	36.281363	-107.784128

Cathedral Energy Services

Survey Report - Geographic

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Escrito M27-2409 01H
Project:	San Juan County, NM	TVD Reference:	18' KB @ 6996.0usft (Aztec 1099)
Site:	S27-T24N-R9W	MD Reference:	18' KB @ 6996.0usft (Aztec 1099)
Well:	Escrito M27-2409 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
806.0	0.70	66.20	806.0	1.5	7.4	1,921,719.47	2,737,595.04	36.281364	-107.784125
869.0	0.80	65.30	868.9	1.8	8.2	1,921,719.81	2,737,595.80	36.281365	-107.784123
932.0	0.70	64.10	931.9	2.2	8.9	1,921,720.16	2,737,596.54	36.281366	-107.784120
996.0	0.60	64.30	995.9	2.5	9.6	1,921,720.48	2,737,597.19	36.281367	-107.784118
1,059.0	0.40	54.30	1,058.9	2.8	10.0	1,921,720.75	2,737,597.67	36.281368	-107.784116
1,122.0	1.10	55.70	1,121.9	3.2	10.7	1,921,721.22	2,737,598.35	36.281369	-107.784114
1,185.0	1.50	56.70	1,184.9	4.0	11.9	1,921,722.01	2,737,599.54	36.281371	-107.784110
1,248.0	1.40	54.20	1,247.9	4.9	13.2	1,921,722.92	2,737,600.85	36.281374	-107.784105
1,312.0	1.30	59.10	1,311.9	5.8	14.5	1,921,723.75	2,737,602.11	36.281376	-107.784101
1,375.0	1.20	58.70	1,374.9	6.5	15.7	1,921,724.46	2,737,603.28	36.281378	-107.784097
1,438.0	1.20	53.00	1,437.8	7.2	16.8	1,921,725.20	2,737,604.37	36.281380	-107.784093
1,501.0	1.10	47.40	1,500.8	8.0	17.7	1,921,726.01	2,737,605.34	36.281382	-107.784090
1,564.0	1.00	36.00	1,563.8	8.9	18.5	1,921,726.86	2,737,606.11	36.281384	-107.784088
1,627.0	1.10	33.10	1,626.8	9.8	19.1	1,921,727.81	2,737,606.77	36.281387	-107.784085
1,690.0	1.10	45.50	1,689.8	10.7	19.9	1,921,728.74	2,737,607.53	36.281390	-107.784083
1,754.0	1.10	54.40	1,753.8	11.5	20.8	1,921,729.53	2,737,608.46	36.281392	-107.784080
1,817.0	1.00	51.10	1,816.8	12.2	21.8	1,921,730.23	2,737,609.38	36.281394	-107.784076
1,880.0	0.80	42.80	1,879.8	12.9	22.5	1,921,730.90	2,737,610.11	36.281396	-107.784074
1,943.0	0.70	17.50	1,942.8	13.6	22.9	1,921,731.59	2,737,610.52	36.281397	-107.784073
2,007.0	0.70	355.40	2,006.8	14.4	23.0	1,921,732.35	2,737,610.61	36.281400	-107.784072
2,070.0	0.70	355.70	2,069.8	15.1	22.9	1,921,733.12	2,737,610.55	36.281402	-107.784072
2,133.0	0.70	350.70	2,132.8	15.9	22.8	1,921,733.88	2,737,610.46	36.281404	-107.784073
2,196.0	0.70	349.20	2,195.7	16.6	22.7	1,921,734.64	2,737,610.32	36.281406	-107.784073
2,259.0	0.50	330.00	2,258.7	17.3	22.5	1,921,735.25	2,737,610.11	36.281408	-107.784074
2,323.0	0.50	325.80	2,322.7	17.7	22.2	1,921,735.73	2,737,609.82	36.281409	-107.784075
2,386.0	0.50	337.00	2,385.7	18.2	21.9	1,921,736.21	2,737,609.55	36.281410	-107.784076
2,449.0	0.70	328.30	2,448.7	18.8	21.6	1,921,736.79	2,737,609.24	36.281412	-107.784077
2,512.0	0.80	331.10	2,511.7	19.5	21.2	1,921,737.50	2,737,608.83	36.281414	-107.784078
2,575.0	0.90	322.40	2,574.7	20.3	20.7	1,921,738.28	2,737,608.31	36.281416	-107.784080
2,639.0	0.90	326.60	2,638.7	21.1	20.1	1,921,739.09	2,737,607.73	36.281418	-107.784082
2,702.0	0.90	329.90	2,701.7	21.9	19.6	1,921,739.94	2,737,607.21	36.281420	-107.784084
2,765.0	0.90	332.00	2,764.7	22.8	19.1	1,921,740.80	2,737,606.73	36.281423	-107.784085
2,828.0	0.90	319.20	2,827.7	23.6	18.6	1,921,741.61	2,737,606.17	36.281425	-107.784087
2,892.0	0.80	288.80	2,891.7	24.1	17.8	1,921,742.14	2,737,605.42	36.281426	-107.784090
2,955.0	0.80	279.10	2,954.7	24.4	17.0	1,921,742.35	2,737,604.57	36.281427	-107.784093
3,018.0	0.70	259.60	3,017.7	24.4	16.1	1,921,742.35	2,737,603.76	36.281427	-107.784095
3,081.0	0.90	281.00	3,080.7	24.4	15.3	1,921,742.37	2,737,602.89	36.281427	-107.784098
3,144.0	1.00	266.50	3,143.7	24.4	14.2	1,921,742.43	2,737,601.86	36.281427	-107.784102
3,208.0	1.00	268.00	3,207.7	24.4	13.1	1,921,742.38	2,737,600.74	36.281427	-107.784106
3,267.0	1.10	283.20	3,266.6	24.5	12.1	1,921,742.49	2,737,599.68	36.281427	-107.784109
3,334.0	1.00	291.40	3,333.6	24.9	10.9	1,921,742.85	2,737,598.51	36.281428	-107.784113
3,397.0	1.40	295.40	3,396.6	25.4	9.7	1,921,743.38	2,737,597.30	36.281430	-107.784117
3,460.0	1.20	300.70	3,459.6	26.1	8.4	1,921,744.04	2,737,596.04	36.281432	-107.784122
3,523.0	1.10	297.00	3,522.6	26.7	7.3	1,921,744.65	2,737,594.93	36.281433	-107.784125
3,587.0	1.20	292.20	3,586.6	27.2	6.1	1,921,745.19	2,737,593.76	36.281435	-107.784129
3,650.0	1.20	296.20	3,649.6	27.7	4.9	1,921,745.73	2,737,592.56	36.281436	-107.784133
3,713.0	1.50	303.90	3,712.5	28.5	3.7	1,921,746.48	2,737,591.28	36.281438	-107.784138
3,776.0	2.00	335.40	3,775.5	29.9	2.5	1,921,747.93	2,737,590.14	36.281442	-107.784142
3,840.0	4.50	354.60	3,839.4	33.5	1.8	1,921,751.45	2,737,589.44	36.281452	-107.784144
3,903.0	8.20	358.70	3,902.0	40.4	1.5	1,921,758.40	2,737,589.10	36.281471	-107.784145
3,934.0	9.80	2.10	3,932.6	45.3	1.5	1,921,763.25	2,737,589.14	36.281484	-107.784145
3,997.0	10.20	356.60	3,994.7	56.2	1.4	1,921,774.18	2,737,589.00	36.281514	-107.784146
4,060.0	10.70	350.70	4,056.6	67.5	0.1	1,921,785.52	2,737,587.72	36.281546	-107.784150
4,123.0	10.50	340.60	4,118.6	78.7	-2.7	1,921,796.70	2,737,584.86	36.281576	-107.784160
4,187.0	10.30	339.00	4,181.5	89.6	-6.7	1,921,807.54	2,737,580.87	36.281606	-107.784173

Cathedral Energy Services

Survey Report - Geographic

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Escrito M27-2409 01H
Project:	San Juan County, NM	TVD Reference:	18' KB @ 6996.0usft (Aztec 1099)
Site:	S27-T24N-R9W	MD Reference:	18' KB @ 6996.0usft (Aztec 1099)
Well:	Escrito M27-2409 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
4,250.0	12.50	338.70	4,243.3	101.2	-11.2	1,921,819.15	2,737,576.37	36.281638	-107.784188
4,313.0	13.10	339.80	4,304.7	114.2	-16.1	1,921,832.20	2,737,571.42	36.281674	-107.784205
4,376.0	15.40	340.50	4,365.8	128.8	-21.4	1,921,846.79	2,737,566.15	36.281714	-107.784223
4,439.0	16.70	339.60	4,426.3	145.2	-27.4	1,921,863.15	2,737,560.20	36.281759	-107.784243
4,503.0	16.40	338.90	4,487.6	162.2	-33.8	1,921,880.20	2,737,553.73	36.281806	-107.784265
4,566.0	18.20	337.90	4,547.8	179.6	-40.7	1,921,897.61	2,737,546.82	36.281854	-107.784288
4,629.0	19.40	335.40	4,607.4	198.3	-48.8	1,921,916.24	2,737,538.75	36.281905	-107.784316
4,692.0	21.00	334.10	4,666.6	217.9	-58.1	1,921,935.90	2,737,529.45	36.281959	-107.784347
4,755.0	22.30	333.50	4,725.1	238.8	-68.3	1,921,956.75	2,737,519.18	36.282016	-107.784382
4,819.0	23.90	332.70	4,784.0	261.2	-79.7	1,921,979.13	2,737,507.80	36.282078	-107.784421
4,882.0	24.80	332.80	4,841.4	284.3	-91.6	1,922,002.22	2,737,495.90	36.282141	-107.784461
4,913.0	24.80	332.60	4,869.5	295.8	-97.5	1,922,013.77	2,737,489.93	36.282173	-107.784481
4,946.0	26.20	330.90	4,899.3	308.3	-104.3	1,922,026.28	2,737,483.19	36.282207	-107.784504
5,009.0	30.00	331.50	4,954.9	334.3	-118.6	1,922,052.27	2,737,468.90	36.282279	-107.784553
5,072.0	34.90	323.80	5,008.0	362.8	-136.7	1,922,080.68	2,737,450.70	36.282357	-107.784614
5,136.0	39.60	315.30	5,059.0	392.1	-161.9	1,922,109.97	2,737,425.50	36.282437	-107.784700
5,199.0	45.10	308.30	5,105.6	420.2	-193.6	1,922,138.10	2,737,393.81	36.282514	-107.784807
5,262.0	49.00	301.20	5,148.5	446.4	-231.5	1,922,164.25	2,737,355.91	36.282586	-107.784936
5,325.0	50.50	290.50	5,189.3	467.2	-274.7	1,922,185.09	2,737,312.72	36.282644	-107.785082
5,357.0	52.00	285.00	5,209.3	474.8	-298.4	1,922,192.67	2,737,288.96	36.282664	-107.785163
5,388.0	52.60	283.00	5,228.3	480.8	-322.2	1,922,198.59	2,737,265.16	36.282681	-107.785244
5,420.0	53.10	282.40	5,247.6	486.4	-347.1	1,922,204.18	2,737,240.28	36.282696	-107.785328
5,452.0	55.20	281.70	5,266.3	491.8	-372.5	1,922,209.58	2,737,214.91	36.282711	-107.785414
5,483.0	58.50	280.30	5,283.3	496.7	-397.9	1,922,214.52	2,737,189.43	36.282725	-107.785500
5,515.0	62.20	278.70	5,299.1	501.3	-425.4	1,922,219.08	2,737,162.01	36.282737	-107.785594
5,547.0	65.40	278.80	5,313.3	505.7	-453.7	1,922,223.44	2,737,133.63	36.282749	-107.785690
5,578.0	65.80	278.90	5,326.1	510.0	-481.6	1,922,227.77	2,737,105.73	36.282761	-107.785784
5,610.0	67.40	278.80	5,338.8	514.5	-510.7	1,922,232.27	2,737,076.71	36.282774	-107.785883
5,641.0	69.00	277.90	5,350.3	518.7	-539.1	1,922,236.43	2,737,048.23	36.282785	-107.785980
5,673.0	71.30	276.00	5,361.1	522.4	-569.0	1,922,240.06	2,737,018.36	36.282795	-107.786081
5,705.0	72.00	275.60	5,371.2	525.4	-599.2	1,922,243.11	2,736,988.14	36.282803	-107.786183
5,736.0	73.70	274.70	5,380.4	528.1	-628.7	1,922,245.75	2,736,958.64	36.282811	-107.786284
5,768.0	76.00	274.50	5,388.7	530.6	-659.5	1,922,248.21	2,736,927.85	36.282818	-107.786388
5,818.0	77.90	271.60	5,400.0	533.2	-708.1	1,922,250.78	2,736,879.22	36.282825	-107.786553
5,881.0	79.60	271.90	5,412.3	535.0	-769.9	1,922,252.63	2,736,817.46	36.282830	-107.786763
5,944.0	80.00	272.20	5,423.5	537.3	-831.9	1,922,254.82	2,736,755.49	36.282836	-107.786973
6,007.0	82.80	272.20	5,432.9	539.6	-894.1	1,922,257.18	2,736,693.25	36.282843	-107.787184
6,070.0	88.70	270.30	5,437.5	541.0	-956.9	1,922,258.51	2,736,630.47	36.282846	-107.787397
6,134.0	92.90	270.20	5,436.7	541.3	-1,020.9	1,922,258.76	2,736,566.49	36.282847	-107.787614
6,197.0	93.40	269.90	5,433.2	541.3	-1,083.8	1,922,258.78	2,736,503.58	36.282847	-107.787827
6,260.0	92.40	268.80	5,430.0	540.6	-1,146.7	1,922,258.04	2,736,440.67	36.282845	-107.788041
6,323.0	91.90	268.10	5,427.6	538.9	-1,209.6	1,922,256.30	2,736,377.74	36.282840	-107.788254
6,386.0	90.10	268.00	5,426.5	536.8	-1,272.6	1,922,254.13	2,736,314.79	36.282835	-107.788468
6,450.0	90.30	267.80	5,426.3	534.4	-1,336.5	1,922,251.75	2,736,250.83	36.282828	-107.788685
6,513.0	91.10	267.30	5,425.5	531.7	-1,399.5	1,922,249.02	2,736,187.90	36.282821	-107.788899
6,576.0	92.00	268.70	5,423.8	529.6	-1,462.4	1,922,246.79	2,736,124.96	36.282815	-107.789112
6,639.0	92.10	268.90	5,421.6	528.2	-1,525.3	1,922,245.44	2,736,062.02	36.282811	-107.789326
6,703.0	92.70	268.40	5,418.9	526.7	-1,589.3	1,922,243.90	2,735,998.09	36.282807	-107.789543
6,764.0	92.40	268.70	5,416.2	525.2	-1,650.2	1,922,242.33	2,735,937.17	36.282803	-107.789749
6,826.0	90.30	269.20	5,414.7	524.0	-1,712.2	1,922,241.16	2,735,875.21	36.282800	-107.789960
6,887.0	90.30	269.40	5,414.4	523.3	-1,773.1	1,922,240.39	2,735,814.21	36.282797	-107.790166
6,948.0	91.50	268.90	5,413.5	522.4	-1,834.1	1,922,239.45	2,735,753.23	36.282795	-107.790373
7,009.0	90.40	270.20	5,412.4	521.9	-1,895.1	1,922,238.94	2,735,692.24	36.282794	-107.790580
7,071.0	89.80	269.90	5,412.3	522.0	-1,957.1	1,922,238.96	2,735,630.24	36.282794	-107.790791
7,133.0	90.90	270.00	5,412.0	521.9	-2,019.1	1,922,238.88	2,735,568.24	36.282794	-107.791001

Cathedral Energy Services

Survey Report - Geographic

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Escrito M27-2409 01H
Project:	San Juan County, NM	TVD Reference:	18' KB @ 6996.0usft (Aztec 1099)
Site:	S27-T24N-R9W	MD Reference:	18' KB @ 6996.0usft (Aztec 1099)
Well:	Escrito M27-2409 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
7,194.0	90.50	269.60	5,411.2	521.7	-2,080.1	1,922,238.64	2,735,507.25	36.282793	-107.791208
7,255.0	91.10	269.50	5,410.4	521.2	-2,141.1	1,922,238.13	2,735,446.26	36.282792	-107.791415
7,315.0	90.30	269.50	5,409.6	520.7	-2,201.1	1,922,237.57	2,735,386.26	36.282790	-107.791619
7,377.0	90.80	269.10	5,409.0	519.9	-2,263.1	1,922,236.78	2,735,324.27	36.282788	-107.791829
7,438.0	91.90	269.10	5,407.6	519.0	-2,324.1	1,922,235.79	2,735,263.30	36.282786	-107.792036
7,500.0	90.90	268.40	5,406.1	517.6	-2,386.0	1,922,234.41	2,735,201.33	36.282782	-107.792246
7,562.0	91.10	267.40	5,405.0	515.4	-2,448.0	1,922,232.11	2,735,139.39	36.282776	-107.792456
7,623.0	92.20	267.60	5,403.2	512.7	-2,508.9	1,922,229.42	2,735,078.47	36.282768	-107.792663
7,684.0	91.00	268.50	5,401.5	510.6	-2,569.8	1,922,227.31	2,735,017.53	36.282763	-107.792870
7,745.0	88.50	269.60	5,401.8	509.6	-2,630.8	1,922,226.27	2,734,956.55	36.282760	-107.793077
7,807.0	88.90	269.50	5,403.2	509.1	-2,692.8	1,922,225.75	2,734,894.57	36.282758	-107.793287
7,868.0	89.90	269.40	5,403.9	508.5	-2,753.8	1,922,225.13	2,734,833.58	36.282757	-107.793494
7,930.0	90.90	269.40	5,403.4	507.9	-2,815.8	1,922,224.45	2,734,771.58	36.282755	-107.793704
7,991.0	90.80	269.80	5,402.5	507.5	-2,876.8	1,922,224.00	2,734,710.59	36.282754	-107.793911
8,052.0	91.30	269.60	5,401.4	507.2	-2,937.8	1,922,223.65	2,734,649.60	36.282753	-107.794118
8,113.0	92.20	269.50	5,399.5	506.7	-2,998.7	1,922,223.14	2,734,588.63	36.282752	-107.794325
8,174.0	91.70	270.10	5,397.5	506.5	-3,059.7	1,922,222.89	2,734,527.67	36.282751	-107.794532
8,235.0	91.30	269.90	5,395.9	506.5	-3,120.7	1,922,222.86	2,734,466.69	36.282751	-107.794739
8,298.0	90.60	270.90	5,394.8	506.9	-3,183.7	1,922,223.27	2,734,403.70	36.282752	-107.794952
8,362.0	90.00	270.50	5,394.5	507.7	-3,247.7	1,922,224.02	2,734,339.71	36.282754	-107.795169
8,425.0	91.90	270.90	5,393.4	508.5	-3,310.6	1,922,224.76	2,734,276.72	36.282756	-107.795383
8,488.0	90.60	271.40	5,392.1	509.7	-3,373.6	1,922,225.99	2,734,213.75	36.282760	-107.795597
8,551.0	90.50	270.90	5,391.5	511.0	-3,436.6	1,922,227.22	2,734,150.77	36.282763	-107.795811
8,614.0	89.30	270.90	5,391.6	512.0	-3,499.6	1,922,228.18	2,734,087.77	36.282766	-107.796024
8,678.0	89.80	270.20	5,392.1	512.6	-3,563.6	1,922,228.76	2,734,023.78	36.282768	-107.796241
8,741.0	89.50	267.10	5,392.5	511.1	-3,626.6	1,922,227.24	2,733,960.81	36.282763	-107.796455
8,804.0	90.20	267.00	5,392.6	507.9	-3,689.5	1,922,223.97	2,733,897.89	36.282755	-107.796669
8,867.0	91.60	267.30	5,391.6	504.7	-3,752.4	1,922,220.81	2,733,834.98	36.282746	-107.796882
8,930.0	91.90	268.10	5,389.7	502.2	-3,815.3	1,922,218.25	2,733,772.06	36.282739	-107.797095
8,994.0	90.50	268.90	5,388.4	500.5	-3,879.3	1,922,216.54	2,733,708.10	36.282734	-107.797312
9,057.0	92.00	269.60	5,387.0	499.7	-3,942.2	1,922,215.68	2,733,645.13	36.282732	-107.797526
9,120.0	91.60	269.90	5,385.0	499.4	-4,005.2	1,922,215.38	2,733,582.16	36.282731	-107.797740
9,183.0	91.90	269.90	5,383.1	499.3	-4,068.2	1,922,215.23	2,733,519.19	36.282731	-107.797953
9,246.0	91.60	269.90	5,381.2	499.2	-4,131.2	1,922,215.09	2,733,456.22	36.282731	-107.798167
9,310.0	90.50	268.70	5,380.0	498.4	-4,195.1	1,922,214.28	2,733,392.24	36.282728	-107.798384
9,373.0	92.00	269.40	5,378.6	497.4	-4,258.1	1,922,213.20	2,733,329.26	36.282726	-107.798598
9,436.0	91.50	269.40	5,376.7	496.7	-4,321.1	1,922,212.51	2,733,266.29	36.282724	-107.798812
9,499.0	90.90	268.70	5,375.4	495.7	-4,384.1	1,922,211.43	2,733,203.32	36.282721	-107.799025
9,562.0	91.80	269.00	5,373.9	494.4	-4,447.0	1,922,210.14	2,733,140.35	36.282717	-107.799239
9,625.0	91.00	269.20	5,372.4	493.4	-4,510.0	1,922,209.12	2,733,077.38	36.282715	-107.799453
9,689.0	91.10	269.20	5,371.2	492.5	-4,574.0	1,922,208.19	2,733,013.40	36.282712	-107.799670
9,752.0	92.10	269.40	5,369.4	491.8	-4,637.0	1,922,207.39	2,732,950.43	36.282710	-107.799883
9,815.0	92.20	270.20	5,367.1	491.5	-4,699.9	1,922,207.14	2,732,887.47	36.282709	-107.800097
9,878.0	93.30	270.50	5,364.0	491.9	-4,762.8	1,922,207.49	2,732,824.55	36.282710	-107.800310
9,942.0	92.40	270.20	5,360.9	492.3	-4,826.8	1,922,207.85	2,732,760.63	36.282711	-107.800527
10,005.0	91.30	269.70	5,358.8	492.3	-4,889.7	1,922,207.76	2,732,697.66	36.282711	-107.800741
10,068.0	90.90	270.40	5,357.6	492.3	-4,952.7	1,922,207.78	2,732,634.67	36.282711	-107.800955
10,132.0	91.30	270.50	5,356.4	492.8	-5,016.7	1,922,208.25	2,732,570.69	36.282713	-107.801172
10,195.0	90.40	270.00	5,356.0	493.1	-5,079.7	1,922,208.50	2,732,507.69	36.282713	-107.801385
10,258.0	89.60	269.90	5,356.5	493.0	-5,142.7	1,922,208.41	2,732,444.69	36.282713	-107.801599
10,321.0	90.00	270.40	5,356.8	493.2	-5,205.7	1,922,208.54	2,732,381.69	36.282714	-107.801813
10,385.0	90.40	270.90	5,356.5	493.9	-5,269.7	1,922,209.24	2,732,317.70	36.282716	-107.802030
10,393.0	90.40	270.90	5,356.5	494.1	-5,277.7	1,922,209.36	2,732,309.70	36.282716	-107.802057

Last CES Survey @ 10,393' MD

Cathedral Energy Services

Survey Report - Geographic

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Escrito M27-2409 01H
Project:	San Juan County, NM	TVD Reference:	18' KB @ 6996.0usft (Aztec 1099)
Site:	S27-T24N-R9W	MD Reference:	18' KB @ 6996.0usft (Aztec 1099)
Well:	Escrito M27-2409 01H	North Reference:	True
Wellbore:	H2	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
10,440.0	90.40	270.90	5,356.2	494.8	-5,324.7	1,922,210.07	2,732,262.71	36.282718	-107.802217
PTB @ 10,440'									

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
Escrito M27-2409 01H P	0.00	0.00	5,353.8	504.7	-5,340.5	1,922,219.97	2,732,246.91	36.282745	-107.802270
- actual wellpath misses target center by 18.8usft at 10440.0usft MD (5356.2 TVD, 494.8 N, -5324.7 E)									
- Point									

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
10,393.0	5,356.5	494.1	-5,277.7	Last CES Survey @ 10,393' MD
10,440.0	5,356.2	494.8	-5,324.7	PTB @ 10,440'

Checked By: _____ Approved By: _____ Date: _____