

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) 476-3450 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 1, 2011

Submit one copy to
Appropriate District Office

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

☐ AMENDED REPORT

☐ As-Drilled

RCVD FEB 14 '13
OIL CONS. DIV.

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-043-21118		Pool Code 97232	Pool Name BASIN MANCOS DIST. 3
Property Code 39120	Property Name LYBROOK H26-2307		Well Number 01H
GRID No. 282327	Operator Name ENCANA OIL & GAS (USA) INC.		Elevation 7233'

¹⁰ Surface Location

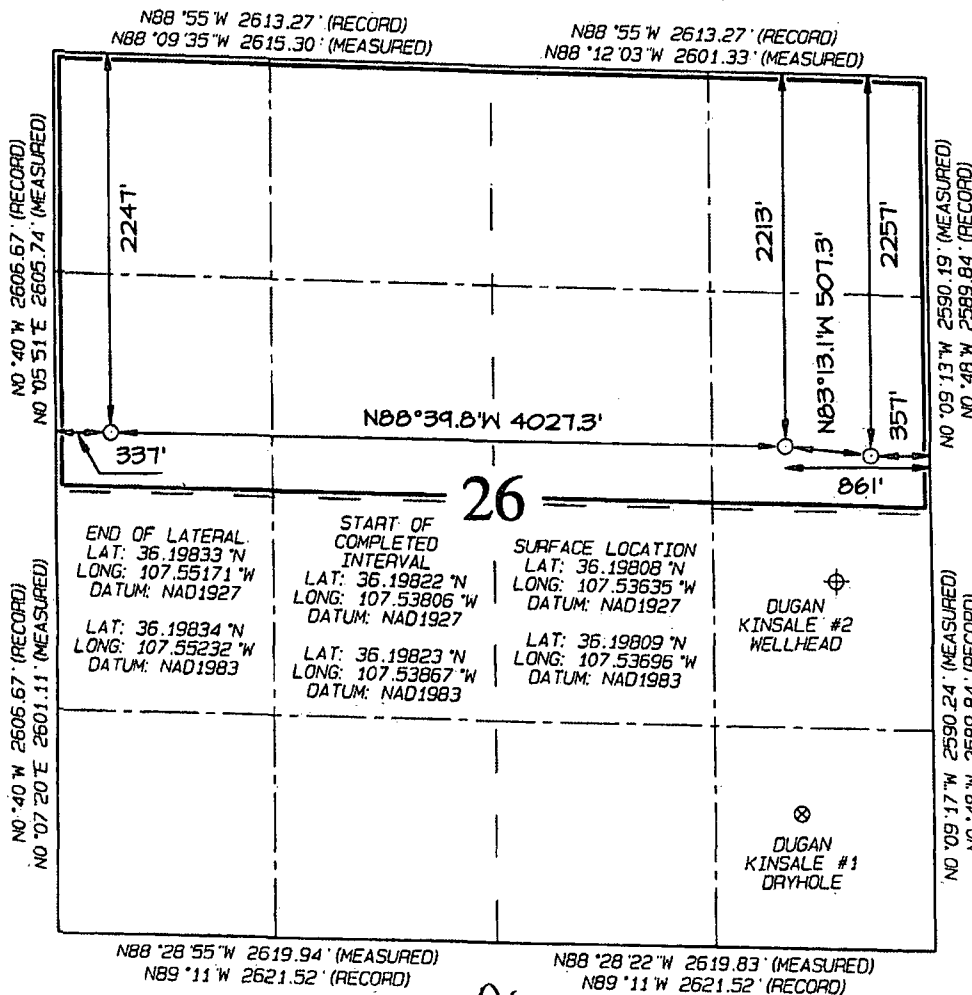
UL or lot no.	Section	Township	Range	Lot Idn.	Feet from the	North/South line	Feet from the	East/West line	County
H	26	23N	7W		2257	NORTH	357	EAST	SANDOVAL

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	26	23N	7W		2247	NORTH	337	WEST	SANDOVAL

¹² Dedicated Acres 320.0 Acres - (N/2)					¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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.

Holly Hill 2/12/13
Signature Date
Holly Hill
Printed Name
holly.hill@encana.com
E-mail Address

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

Survey Date: OCTOBER 3, 2012
Signature and Seal of Professional Surveyor



JASON C. EDWARDS
Certificate Number 15269

DEVIATION SURVEYS

MD (Feet)	Inclination (Degree)
175	1
350	.75
500	.50
945	.30
1390	.50
1707	.40
2025	.50
2407	.90
3042	.10
3613	1.00
4059	.80
4630	.20
4953	.80

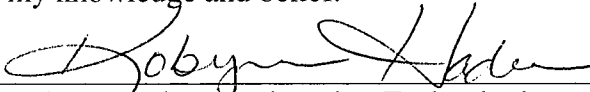
RCVD FEB 7 '13

OIL CONS. DIV.
DIST. 3

CONFIDENTIAL

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

2/4/13
2/4/13

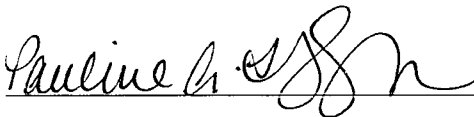
ACKNOWLEDGMENT

State of Colorado
City and County of Denver

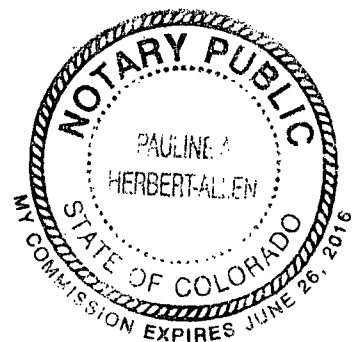
This instrument was acknowledged before me on this 4th day of February, 2013 by Robynn Haden as Attorney in Fact of Encana Oil & Gas (USA) Inc., on behalf of said corporation.

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

Notary Public:

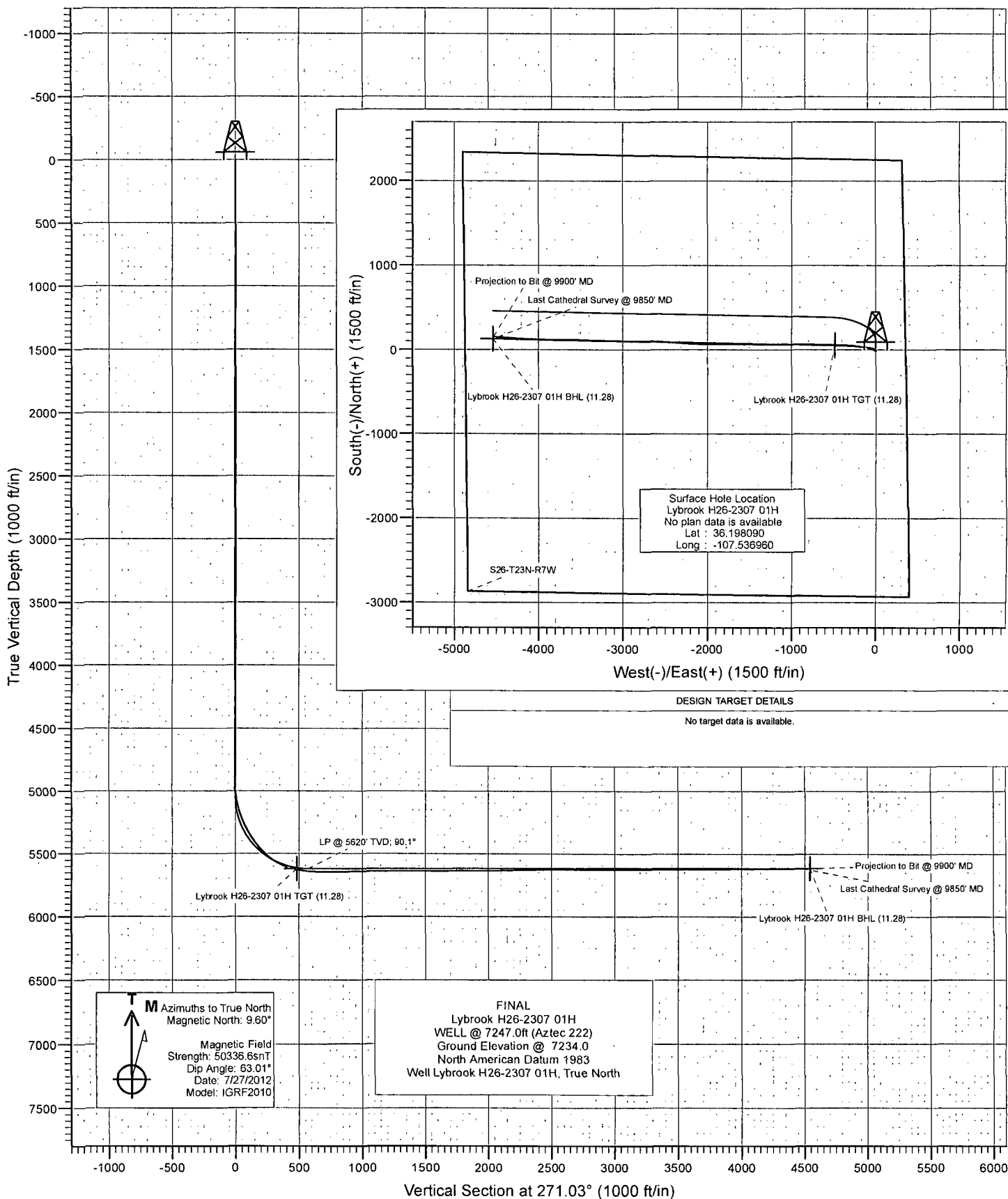


My Commission Expires: June 26, 2016





Project: Sandoval County, NM
Site: Lybrook
Well: Lybrook H26-2307 01H
Wellbore: HZ
Design: FINAL



Cathedral Energy Services

Survey Report

Company: EnCana Oil & Gas (USA) Inc
Project: Sandoval County, NM
Site: Lybrook
Well: Lybrook H26-2307 01H
Wellbore: HZ
Design: FINAL

Local Co-ordinate Reference: Well Lybrook H26-2307 01H
TVD Reference: WELL @ 7247.0ft (Aztec 222)
MD Reference: WELL @ 7247.0ft (Aztec 222)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: USA EDM 5000 Multi Users DB

Project	Sandoval County, NM
Map System:	US State Plane 1983
Geo Datum:	North American Datum 1983
Map Zone:	New Mexico Central Zone
System Datum:	Mean Sea Level

Site	Lybrook				
Site Position:		Northing:	1,882,676.45 ft	Latitude:	36.168210
From:	Lat/Long	Easting:	1,287,068.90 ft	Longitude:	-107.447150
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	-0.71 °

Well	Lybrook H26-2307 01H					
Well Position	+N-S	0.0 ft	Northing:	1,893,893.21 ft	Latitude:	36.198090
	+E-W	0.0 ft	Easting:	1,260,703.52 ft	Longitude:	-107.536960
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	7,234.0 ft

Wellbore	HZ				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/27/2012	9.60	63.01	50,337

Design	FINAL			
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth: 0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.0	0.0	0.0	271.03

Survey Program		Date	1/21/2013		
From	To	Survey (Wellbore)	Tool Name	Description	
(ft)	(ft)				
566.0	9,900.0	Survey #1 (H2)	MWD	Geolink MWD	

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
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
566.0	0.00	359.00	566.0	0.0	0.0	0.0	0.00	0.00	
629.0	0.30	175.80	629.0	-0.2	0.0	0.0	0.48	0.48	
693.0	0.10	250.00	693.0	-0.4	0.0	0.0	0.45	-0.31	
756.0	0.20	191.40	756.0	-0.5	-0.1	0.1	0.27	0.16	
820.0	0.40	179.40	820.0	-0.8	-0.1	0.1	0.33	0.31	
883.0	0.50	184.70	883.0	-1.3	-0.1	0.1	0.17	0.16	
945.0	0.30	156.30	945.0	-1.7	-0.1	0.1	0.44	-0.32	
1,009.0	0.40	120.90	1,009.0	-2.0	0.2	-0.2	0.36	0.16	
1,073.0	0.20	185.60	1,073.0	-2.2	0.3	-0.4	0.57	-0.31	
1,136.0	0.20	68.80	1,136.0	-2.3	0.4	-0.5	0.54	0.00	
1,200.0	0.40	79.00	1,200.0	-2.2	0.8	-0.8	0.32	0.31	
1,263.0	0.40	65.40	1,263.0	-2.1	1.2	-1.2	0.15	0.00	

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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
1,327.0	0.30	87.70	1,327.0	-2.0	1.5	-1.6	0.26	-0.16	
1,390.0	0.50	123.80	1,390.0	-2.1	1.9	-2.0	0.50	0.32	
1,454.0	0.50	128.60	1,454.0	-2.4	2.4	-2.4	0.07	0.00	
1,517.0	0.60	99.60	1,517.0	-2.7	2.9	-3.0	0.46	0.16	
1,580.0	0.40	93.80	1,580.0	-2.7	3.5	-3.5	0.33	-0.32	
1,644.0	0.40	135.00	1,644.0	-2.9	3.9	-3.9	0.44	0.00	
1,707.0	0.40	106.60	1,707.0	-3.1	4.2	-4.3	0.31	0.00	
1,771.0	0.50	128.70	1,771.0	-3.4	4.7	-4.7	0.31	0.16	
1,834.0	0.60	106.20	1,834.0	-3.6	5.2	-5.2	0.37	0.16	
1,898.0	0.20	182.40	1,898.0	-3.8	5.5	-5.6	0.91	-0.62	
1,962.0	0.40	187.80	1,962.0	-4.2	5.5	-5.5	0.32	0.31	
2,025.0	0.50	184.00	2,025.0	-4.7	5.4	-5.5	0.17	0.16	
2,089.0	0.50	148.60	2,089.0	-5.2	5.5	-5.6	0.48	0.00	
2,152.0	0.40	175.20	2,152.0	-5.6	5.7	-5.8	0.36	-0.16	
2,216.0	0.40	174.00	2,216.0	-6.1	5.7	-5.9	0.01	0.00	
2,279.0	0.40	305.20	2,279.0	-6.2	5.6	-5.7	1.16	0.00	
2,343.0	0.70	292.10	2,343.0	-5.9	5.0	-5.1	0.51	0.47	
2,407.0	0.90	277.40	2,407.0	-5.7	4.2	-4.3	0.45	0.31	
2,470.0	0.70	345.30	2,469.9	-5.2	3.6	-3.7	1.44	-0.32	
2,534.0	0.80	340.60	2,533.9	-4.4	3.3	-3.4	0.18	0.16	
2,597.0	0.80	338.10	2,596.9	-3.6	3.0	-3.1	0.06	0.00	
2,661.0	0.30	43.50	2,660.9	-3.1	3.0	-3.0	1.14	-0.78	
2,724.0	0.50	38.50	2,723.9	-2.8	3.3	-3.3	0.32	0.32	
2,788.0	0.20	39.80	2,787.9	-2.5	3.5	-3.6	0.47	-0.47	
2,851.0	0.40	44.90	2,850.9	-2.2	3.7	-3.8	0.32	0.32	
2,915.0	0.30	337.10	2,914.9	-1.9	3.8	-3.9	0.62	-0.16	
2,978.0	0.00	248.10	2,977.9	-1.7	3.8	-3.8	0.48	-0.48	
3,042.0	0.10	76.50	3,041.9	-1.7	3.8	-3.9	0.16	0.16	
3,106.0	0.20	77.90	3,105.9	-1.7	4.0	-4.0	0.16	0.16	
3,169.0	0.40	49.30	3,168.9	-1.5	4.3	-4.3	0.39	0.32	
3,233.0	0.50	116.60	3,232.9	-1.5	4.7	-4.7	0.79	0.16	
3,296.0	0.40	89.60	3,295.9	-1.6	5.1	-5.2	0.37	-0.16	
3,360.0	0.40	93.70	3,359.9	-1.6	5.6	-5.6	0.04	0.00	
3,423.0	0.50	168.80	3,422.9	-1.9	5.9	-5.9	0.88	0.16	
3,486.0	0.80	216.10	3,485.9	-2.6	5.7	-5.7	0.94	0.48	
3,550.0	0.70	207.70	3,549.9	-3.3	5.2	-5.3	0.23	-0.16	
3,613.0	1.00	185.30	3,612.9	-4.1	5.0	-5.1	0.70	0.48	
3,677.0	0.70	184.00	3,676.9	-5.1	4.9	-5.0	0.47	-0.47	
3,740.0	0.10	279.60	3,739.9	-5.5	4.8	-4.9	1.14	-0.95	
3,804.0	0.50	269.60	3,803.9	-5.5	4.5	-4.6	0.63	0.62	
3,867.0	0.70	272.50	3,866.9	-5.4	3.8	-3.9	0.32	0.32	
3,932.0	1.00	279.60	3,931.9	-5.3	2.9	-3.0	0.49	0.46	
3,995.0	1.10	272.70	3,994.9	-5.2	1.7	-1.8	0.26	0.16	
4,059.0	0.80	230.00	4,058.9	-5.5	0.8	-0.9	1.17	-0.47	
4,122.0	0.40	216.00	4,121.9	-5.9	0.3	-0.4	0.67	-0.63	
4,186.0	0.30	145.70	4,185.9	-6.3	0.3	-0.4	0.64	-0.16	
4,249.0	0.40	127.20	4,248.9	-6.5	0.5	-0.7	0.24	0.16	
4,313.0	0.40	128.40	4,312.9	-6.8	0.9	-1.0	0.01	0.00	
4,376.0	0.40	99.60	4,375.9	-7.0	1.3	-1.4	0.32	0.00	
4,439.0	0.50	151.20	4,438.9	-7.2	1.6	-1.8	0.64	0.16	
4,503.0	0.40	114.10	4,502.9	-7.6	2.0	-2.1	0.47	-0.16	
4,566.0	0.20	170.40	4,565.9	-7.8	2.2	-2.3	0.53	-0.32	
4,630.0	0.20	113.30	4,629.9	-7.9	2.3	-2.5	0.30	0.00	

Cathedral Energy Services

Survey Report

Company: EnCana Oil & Gas (USA) Inc
Project: Sandoval County, NM
Site: Lybrook
Well: Lybrook H26-2307 01H
Wellbore: HZ
Design: FINAL

Local Co-ordinate Reference: Well Lybrook H26-2307 01H
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MD Reference: WELL @ 7247.0ft (Aztec 222)
North Reference: True
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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
4,693.0	0.60	135.70	4,692.9	-8.2	2.6	-2.8	0.67	0.63	
4,757.0	0.40	240.80	4,756.8	-8.6	2.7	-2.8	1.25	-0.31	
4,820.0	0.20	172.60	4,819.8	-8.8	2.5	-2.7	0.60	-0.32	
4,884.0	0.30	169.30	4,883.8	-9.1	2.5	-2.7	0.16	0.16	
4,910.0	0.60	215.60	4,909.8	-9.2	2.5	-2.6	1.73	1.15	
4,953.0	0.80	252.40	4,952.8	-9.5	2.1	-2.2	1.12	0.47	
4,986.0	3.30	289.30	4,985.8	-9.3	0.9	-1.1	8.19	7.58	
5,017.0	6.60	296.10	5,016.7	-8.2	-1.5	1.3	10.79	10.65	
5,049.0	10.00	300.40	5,048.4	-6.0	-5.5	5.4	10.79	10.62	
5,081.0	12.90	303.10	5,079.7	-2.6	-10.9	10.9	9.21	9.06	
5,113.0	15.30	299.80	5,110.8	1.4	-17.6	17.6	7.91	7.50	
5,144.0	17.50	294.30	5,140.5	5.4	-25.4	25.5	8.68	7.10	
5,176.0	19.20	289.00	5,170.9	9.1	-34.8	34.9	7.44	5.31	
5,208.0	19.90	285.40	5,201.0	12.2	-45.0	45.2	4.35	2.19	
5,240.0	22.20	281.70	5,230.9	14.9	-56.2	56.4	8.30	7.19	
5,271.0	24.70	281.50	5,259.3	17.4	-68.2	68.5	8.07	8.06	
5,303.0	27.20	281.20	5,288.1	20.1	-82.0	82.3	7.82	7.81	
5,335.0	29.50	280.00	5,316.3	22.9	-96.9	97.3	7.40	7.19	
5,366.0	31.40	280.60	5,343.0	25.7	-112.4	112.8	6.21	6.13	
5,398.0	33.80	279.80	5,369.9	28.8	-129.3	129.8	7.62	7.50	
5,430.0	35.60	279.90	5,396.2	31.9	-147.3	147.8	5.63	5.62	
5,461.0	37.30	278.50	5,421.2	34.9	-165.4	166.0	6.10	5.48	
5,493.0	39.70	278.30	5,446.2	37.8	-185.2	185.8	7.51	7.50	
5,525.0	42.50	277.40	5,470.3	40.6	-206.0	206.7	8.94	8.75	
5,557.0	45.90	276.80	5,493.3	43.4	-228.1	228.9	10.71	10.62	
5,589.0	49.00	276.70	5,514.9	46.2	-251.5	252.3	9.69	9.69	
5,620.0	52.40	275.50	5,534.5	48.7	-275.4	276.2	11.37	10.97	
5,652.0	56.40	274.60	5,553.2	51.0	-301.3	302.2	12.71	12.50	
5,684.0	60.70	274.40	5,569.9	53.1	-328.5	329.4	13.45	13.44	
5,716.0	65.00	273.10	5,584.5	55.0	-356.9	357.8	13.91	13.44	
5,747.0	68.50	272.00	5,596.7	56.2	-385.4	386.3	11.75	11.29	
5,779.0	71.20	272.00	5,607.7	57.3	-415.4	416.3	8.44	8.44	
5,811.0	74.00	272.00	5,617.3	58.4	-445.9	446.9	8.75	8.75	
5,828.0	75.60	272.20	5,621.7	59.0	-462.3	463.3	9.48	9.41	
5,848.8	78.82	271.06	5,626.4	59.5	-482.6	483.6	16.34	15.45	Lybrook H26-2307 01H TGT (11.28)
5,850.0	79.00	271.00	5,626.6	59.6	-483.7	484.7	16.34	15.47	
5,881.0	81.30	271.10	5,631.9	60.1	-514.3	515.3	7.43	7.42	
5,912.0	83.00	271.80	5,636.1	60.9	-545.0	546.0	5.92	5.48	
5,942.0	83.70	271.70	5,639.6	61.8	-574.8	575.8	2.36	2.33	
5,973.0	85.30	271.50	5,642.6	62.7	-605.6	606.6	5.20	5.16	
6,005.0	88.20	271.00	5,644.4	63.4	-637.5	638.6	9.20	9.06	
6,036.0	88.90	270.10	5,645.2	63.7	-668.5	669.6	3.68	2.26	
6,068.0	89.10	270.30	5,645.7	63.8	-700.5	701.6	0.88	0.62	
6,100.0	89.50	270.70	5,646.1	64.0	-732.5	733.6	1.77	1.25	
6,131.0	89.90	271.50	5,646.3	64.6	-763.5	764.6	2.89	1.29	
6,163.0	91.20	271.20	5,646.0	65.4	-795.5	796.5	4.17	4.06	
6,226.0	91.80	271.20	5,644.3	66.7	-858.5	859.5	0.95	0.95	
6,289.0	91.50	270.80	5,642.5	67.8	-921.4	922.5	0.79	-0.48	
6,353.0	90.70	271.00	5,641.3	68.8	-985.4	986.5	1.29	-1.25	
6,417.0	90.30	270.10	5,640.7	69.4	-1,049.4	1,050.5	1.54	-0.62	
6,481.0	90.90	270.00	5,640.0	69.5	-1,113.4	1,114.5	0.95	0.94	
6,544.0	91.20	269.00	5,638.9	68.9	-1,176.4	1,177.4	1.66	0.48	
6,607.0	90.90	269.40	5,637.7	68.1	-1,239.4	1,240.4	0.79	-0.48	

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Local Co-ordinate Reference: Well Lybrook H26-2307 01H
TVD Reference: WELL @ 7247.0ft (Aztec 222)
MD Reference: WELL @ 7247.0ft (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
6,670.0	90.60	269.30	5,636.9	67.3	-1,302.4	1,303.4	0.50	-0.48	
6,734.0	89.50	269.60	5,636.9	66.7	-1,366.4	1,367.3	1.78	-1.72	
6,797.0	89.10	270.40	5,637.6	66.7	-1,429.3	1,430.3	1.42	-0.63	
6,861.0	89.30	270.60	5,638.5	67.3	-1,493.3	1,494.3	0.44	0.31	
6,924.0	90.30	271.10	5,638.7	68.2	-1,556.3	1,557.3	1.77	1.59	
6,988.0	91.00	271.30	5,638.0	69.6	-1,620.3	1,621.3	1.14	1.09	
7,051.0	91.60	271.10	5,636.6	70.9	-1,683.3	1,684.3	1.00	0.95	
7,115.0	91.50	271.50	5,634.8	72.3	-1,747.2	1,748.3	0.64	-0.16	
7,178.0	90.20	270.10	5,633.9	73.2	-1,810.2	1,811.3	3.03	-2.06	
7,242.0	89.90	268.60	5,633.9	72.5	-1,874.2	1,875.2	2.39	-0.47	
7,305.0	89.70	268.60	5,634.1	71.0	-1,937.2	1,938.2	0.32	-0.32	
7,369.0	90.20	269.80	5,634.1	70.1	-2,001.2	2,002.1	2.03	0.78	
7,432.0	90.90	271.00	5,633.5	70.5	-2,064.2	2,065.1	2.21	1.11	
7,496.0	90.70	272.80	5,632.6	72.6	-2,128.1	2,129.1	2.83	-0.31	
7,559.0	90.70	273.30	5,631.9	76.0	-2,191.1	2,192.1	0.79	0.00	
7,622.0	91.00	272.50	5,630.9	79.2	-2,254.0	2,255.0	1.36	0.48	
7,686.0	91.60	273.70	5,629.5	82.6	-2,317.9	2,319.0	2.10	0.94	
7,749.0	91.50	274.90	5,627.8	87.3	-2,380.6	2,381.8	1.91	-0.16	
7,813.0	90.50	274.20	5,626.7	92.4	-2,444.4	2,445.7	1.91	-1.56	
7,876.0	90.40	273.80	5,626.2	96.8	-2,507.3	2,508.6	0.65	-0.16	
7,940.0	90.50	272.80	5,625.7	100.5	-2,571.2	2,572.6	1.57	0.16	
8,003.0	89.90	271.50	5,625.4	102.9	-2,634.1	2,635.5	2.27	-0.95	
8,067.0	90.40	270.50	5,625.3	104.0	-2,698.1	2,699.5	1.75	0.78	
8,130.0	89.90	269.70	5,625.1	104.1	-2,761.1	2,762.5	1.50	-0.79	
8,194.0	90.50	270.70	5,624.9	104.3	-2,825.1	2,826.5	1.82	0.94	
8,257.0	90.70	270.70	5,624.2	105.1	-2,888.1	2,889.5	0.32	0.32	
8,321.0	90.00	270.40	5,623.8	105.7	-2,952.1	2,953.5	1.19	-1.09	
8,384.0	89.90	270.10	5,623.9	106.0	-3,015.1	3,016.5	0.50	-0.16	
8,448.0	89.90	271.60	5,624.0	106.9	-3,079.1	3,080.5	2.34	0.00	
8,512.0	90.10	271.80	5,624.0	108.8	-3,143.1	3,144.5	0.44	0.31	
8,575.0	89.70	270.90	5,624.1	110.3	-3,206.0	3,207.5	1.56	-0.63	
8,638.0	90.70	271.10	5,623.9	111.4	-3,269.0	3,270.5	1.62	1.59	
8,702.0	90.50	272.00	5,623.2	113.1	-3,333.0	3,334.5	1.44	-0.31	
8,765.0	90.00	271.50	5,622.9	115.1	-3,396.0	3,397.5	1.12	-0.79	
8,829.0	89.80	271.60	5,623.1	116.8	-3,460.0	3,461.5	0.35	-0.31	
8,892.0	90.30	271.80	5,623.0	118.7	-3,522.9	3,524.5	0.85	0.79	
8,956.0	90.60	270.90	5,622.5	120.2	-3,586.9	3,588.5	1.48	0.47	
9,020.0	90.10	270.70	5,622.1	121.1	-3,650.9	3,652.5	0.84	-0.78	
9,084.0	90.10	269.60	5,622.0	121.2	-3,714.9	3,716.5	1.72	0.00	
9,147.0	90.40	270.30	5,621.7	121.2	-3,777.9	3,779.5	1.21	0.48	
9,210.0	90.40	270.90	5,621.3	121.8	-3,840.9	3,842.5	0.95	0.00	
9,274.0	90.80	270.70	5,620.6	122.7	-3,904.9	3,906.5	0.70	0.62	
9,337.0	90.30	271.30	5,620.0	123.8	-3,967.9	3,969.4	1.24	-0.79	
9,400.0	89.80	270.80	5,620.0	125.0	-4,030.9	4,032.4	1.12	-0.79	
9,463.0	90.20	272.30	5,620.0	126.7	-4,093.8	4,095.4	2.46	0.63	
9,527.0	90.80	273.00	5,619.4	129.6	-4,157.8	4,159.4	1.44	0.94	
9,590.0	90.60	273.40	5,618.6	133.2	-4,220.7	4,222.4	0.71	-0.32	
9,653.0	90.70	274.00	5,617.9	137.2	-4,283.5	4,285.3	0.97	0.16	
9,717.0	90.30	273.80	5,617.4	141.6	-4,347.4	4,349.2	0.70	-0.62	
9,781.0	89.90	273.50	5,617.2	145.6	-4,411.2	4,413.1	0.78	-0.62	
9,850.0	91.40	274.10	5,616.5	150.2	-4,480.1	4,482.1	2.34	2.17	Last Cathedral Survey @ 9850' MD
9,900.0	91.40	274.10	5,615.2	153.8	-4,529.9	4,532.0	0.00	0.00	Projection to Bit @ 9900' MD - Lybrook H26-230

Cathedral Energy Services

Survey Report

Company: EnCana Oil & Gas (USA) Inc
Project: Sandoval County, NM
Site: Lybrook
Well: Lybrook H26-2307 01H
Wellbore: HZ
Design: FINAL

Local Co-ordinate Reference: Well Lybrook H26-2307 01H
TVD Reference: WELL @ 7247.0ft (Aztec 222)
MD Reference: WELL @ 7247.0ft (Aztec 222)
North Reference: True
Survey Calculation Method: Minimum Curvature
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	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
Lybrook H26-2307 01H I	0.00	0.00	5,614.1	127.8	-4,538.5	1,894,081.20	1,256,167.13	36.198440	-107.552340
- actual wellpath misses target center by 27.4ft at 9900.0ft MD (5615.2 TVD, 153.8 N, -4529.9 E)									
- Point									
Lybrook H26-2307 01H	0.00	0.00	5,620.9	54.6	-483.9	1,893,954.25	1,260,220.34	36.198240	-107.538600
- actual wellpath misses target center by 7.4ft at 5849.0ft MD (5626.4 TVD, 59.5 N, -482.8 E)									
- Point									

Design Annotations

Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	
9,850.0	5,616.5	150.2	-4,480.1	Last Cathedral Survey @ 9850' MD
9,900.0	5,615.2	153.8	-4,529.9	Projection to Bit @ 9900' MD

Checked By: _____ Approved By: _____ Date: _____