

District I
1625 N. French Drive, Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

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

District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

District IV
1220 S. St. Francis Drive, Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department

CONFIDENTIAL

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 30-043-21134		*Pool Code 42289		*Pool Name LYBROOK GALLUP	
*Property Code 42289		*Property Name LYBROOK P01-2207			*Well Number 01H
*OGRID No. 282327		*Operator Name ENCANA OIL & GAS (USA) INC.			*Elevation 7153'

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
P	1	22N	7W		816	SOUTH	412	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
M	1	22N	7W		753	SOUTH	344	WEST	SANDOVAL

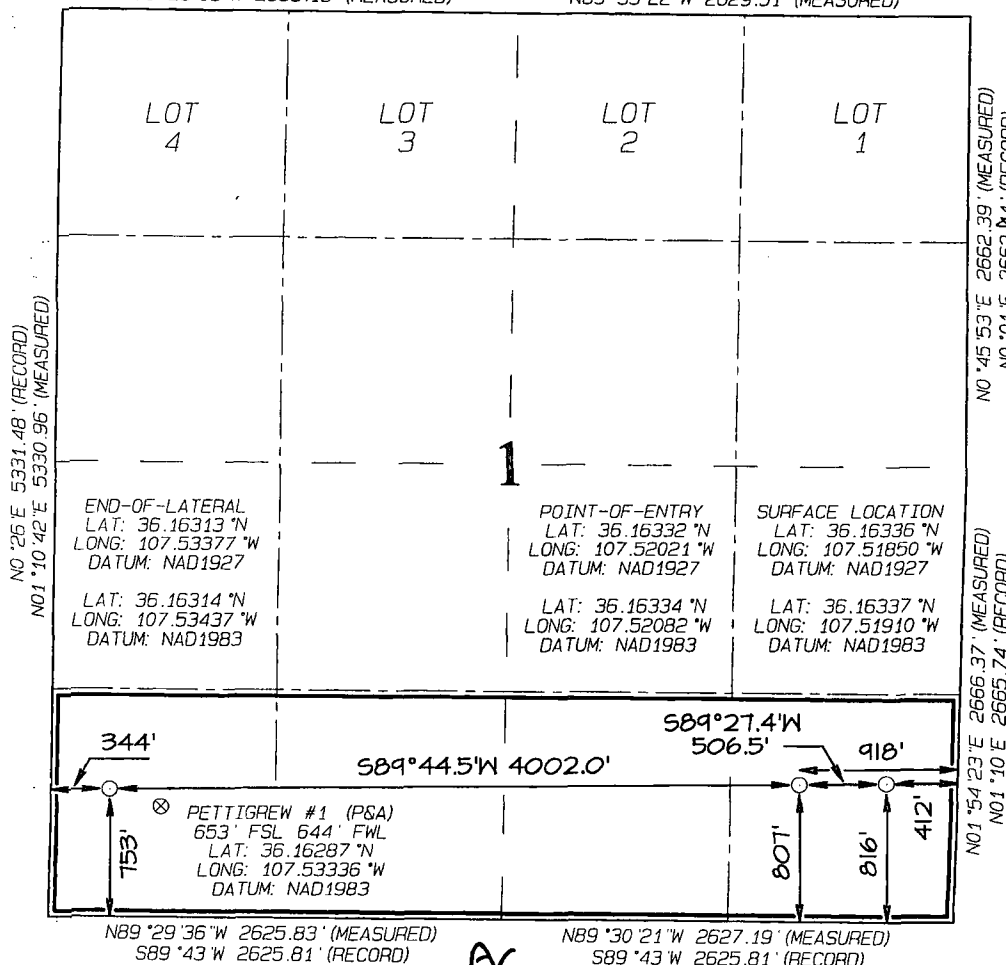
¹² Dedicated Acres 160.0 Acres - (S/2 S/2)					¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No. RCVD APR 19'13	
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

OIL CONS. DIV.
DIST. 3

S89°46'W 2634.72' (RECORD)
N89°23'08"W 2638.15' (MEASURED)

S89°46'W 2634.72' (RECORD)
N89°33'22"W 2629.51' (MEASURED)



OPERATOR CERTIFICATION

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

Signature: *Robynn Haden* Date: 4/17/13

Printed Name: Robynn Haden
robynn.haden@encana.com

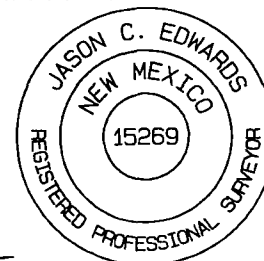
E-mail Address

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: APRIL 16, 2013
Date of Survey: JULY 26, 2012

Signature and Seal of Professional Surveyor



JASON C. EDWARDS
Certificate Number 15269

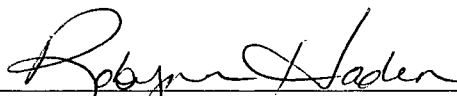
DEVIATION SURVEYS

MD (Feet)	Inclination (Degree)
559	.80
803	.40
1109	.90
1413	.70
1729	.50
2043	.60
2358	.50
2674	.40
2988	.20
3303	.40
3618	.70
3933	.40
4248	.20
4501	.40
4688	.60

RCVD APR 19 '13
OIL CONS. DIV.
DIST. 3

OPERATOR CERTIFICATION

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


Robynn Haden, Engineering Technologist

4/17/13
4/17/13

ACKNOWLEDGMENT

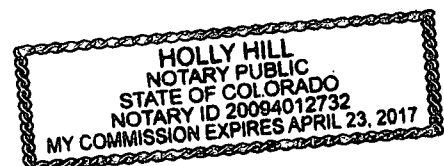
State of Colorado
City and County of Denver

This instrument was acknowledged before me on this 17th day of April, 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: Holly Hill

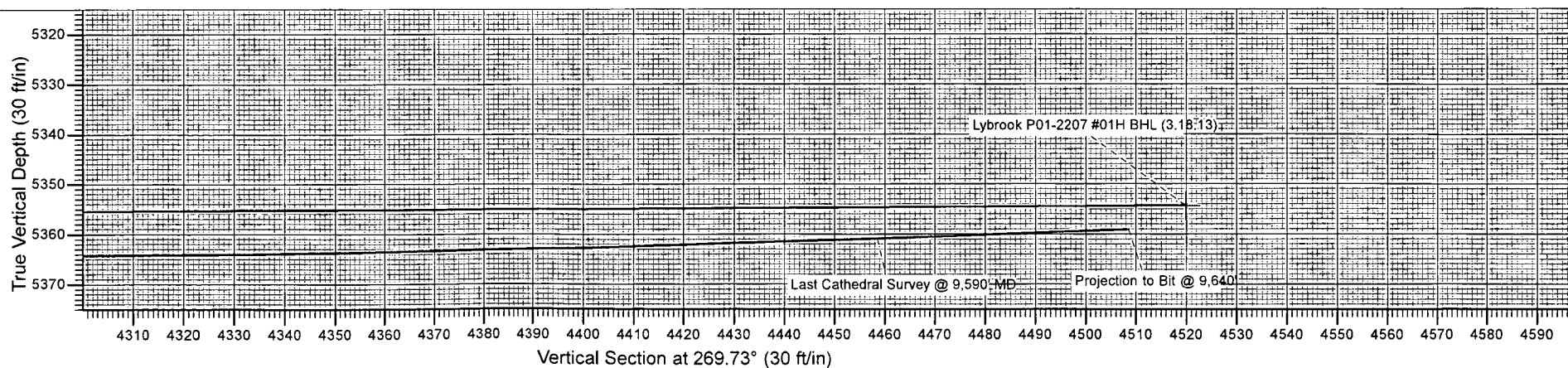
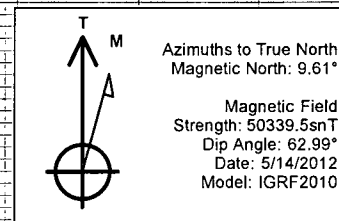
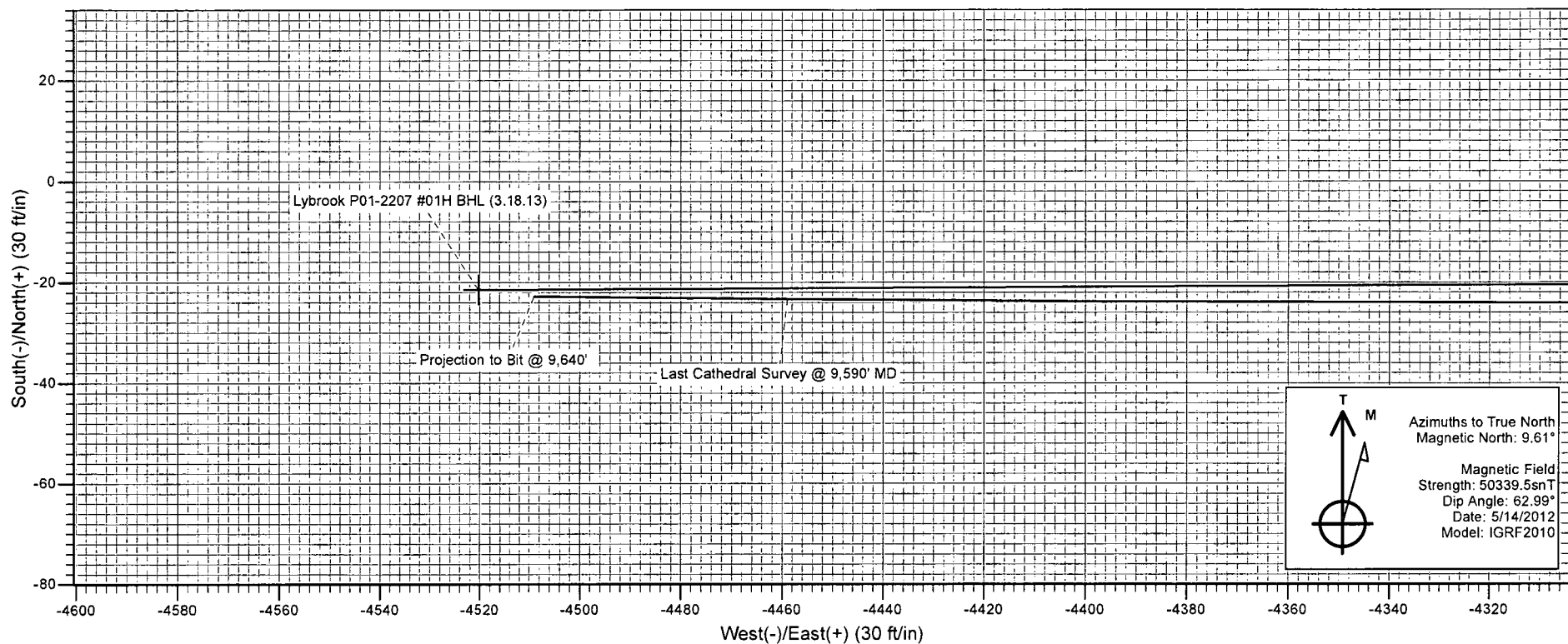
My Commission Expires: April 23, 2017







Project: Sandoval County, NM
Site: Lybrook
Well: Lybrook P01-2207 01H
Wellbore: HZ
Design: FINAL



Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Lybrook P01-2207 01H
Project:	Sandoval County, NM	TVD Reference:	KBE @ 7166.0ft
Site:	Lybrook	MD Reference:	KBE @ 7166.0ft
Well:	Lybrook P01-2207 01H	North Reference:	True
Wellbore:	HZ	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

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

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

Well							Lybrook P01-2207 01H						
Well Position		+N/-S	0.0 ft	Northing:		1,881,184.27 ft	Latitude:		36.163370				
		+E/-W	0.0 ft	Easting:		1,265,808.06 ft	Longitude:		-107.519100				
Position Uncertainty		0.0 ft	Wellhead Elevation:		ft		Ground Level:		7,153.0 ft				

Wellbore	HZ				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF2010	5/14/2012	9.61	62.99	50,340

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	269.73	

Survey Program	Date	4/11/2013			
From	To	Survey (Wellbore)	Tool Name	Description	
(ft)	(ft)				
559.0	9,640.0	Survey #1 (HZ)	MWD	Geolink MWD	

Survey									
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Vertical	Dogleg	Build	Formations /
Depth	(°)	(°)	Depth	(ft)	(ft)	Section	Rate	Rate	Comments
(ft)			(ft)			(ft)	(°/100ft)	(°/100ft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
559.0	0.80	268.70	559.0	-0.1	-3.9	3.9	0.14	0.14	
621.0	0.70	266.50	621.0	-0.1	-4.7	4.7	0.17	-0.16	
681.0	0.70	246.50	681.0	-0.3	-5.4	5.4	0.41	0.00	
742.0	0.80	252.70	742.0	-0.6	-6.2	6.2	0.21	0.16	
803.0	0.40	176.40	803.0	-0.9	-6.6	6.6	1.32	-0.66	
865.0	0.40	169.80	865.0	-1.3	-6.5	6.5	0.07	0.00	
925.0	0.50	171.50	925.0	-1.8	-6.4	6.4	0.17	0.17	
986.0	0.60	148.30	986.0	-2.3	-6.2	6.2	0.40	0.16	
1,047.0	0.60	152.30	1,047.0	-2.9	-5.9	5.9	0.07	0.00	
1,109.0	0.90	127.90	1,108.9	-3.5	-5.4	5.4	0.70	0.48	
1,169.0	0.20	183.10	1,168.9	-3.9	-5.0	5.0	1.34	-1.17	
1,230.0	0.60	14.40	1,229.9	-3.7	-4.9	4.9	1.31	0.66	

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Lybrook P01-2207 01H
Project:	Sandoval County, NM	TVD Reference:	KBE @ 7166.0ft
Site:	Lybrook	MD Reference:	KBE @ 7166.0ft
Well:	Lybrook P01-2207 01H	North Reference:	True
Wellbore:	HZ	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	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
1,291.0	1.00	9.60	1,290.9	-2.8	-4.8	4.8	0.66	0.66	
1,352.0	0.80	10.60	1,351.9	-1.9	-4.6	4.6	0.33	-0.33	
1,413.0	0.70	334.70	1,412.9	-1.1	-4.7	4.7	0.77	-0.16	
1,476.0	0.40	358.50	1,475.9	-0.6	-4.8	4.8	0.59	-0.48	
1,539.0	0.30	338.50	1,538.9	-0.2	-4.9	4.9	0.25	-0.16	
1,603.0	0.30	4.90	1,602.9	0.1	-5.0	5.0	0.21	0.00	
1,666.0	0.30	6.70	1,665.9	0.5	-4.9	4.9	0.01	0.00	
1,729.0	0.50	140.50	1,728.9	0.4	-4.7	4.7	1.17	0.32	
1,792.0	0.60	131.10	1,791.9	0.0	-4.3	4.3	0.21	0.16	
1,855.0	0.60	145.30	1,854.9	-0.5	-3.9	3.9	0.24	0.00	
1,917.0	0.60	135.60	1,916.9	-1.0	-3.5	3.5	0.16	0.00	
1,981.0	0.70	131.20	1,980.9	-1.5	-2.9	2.9	0.17	0.16	
2,043.0	0.60	108.60	2,042.9	-1.9	-2.3	2.3	0.44	-0.16	
2,106.0	0.70	48.30	2,105.9	-1.7	-1.7	1.7	1.05	0.16	
2,169.0	0.70	15.70	2,168.9	-1.1	-1.3	1.4	0.62	0.00	
2,232.0	0.70	16.00	2,231.9	-0.3	-1.1	1.1	0.01	0.00	
2,295.0	0.60	24.50	2,294.9	0.3	-0.9	0.9	0.22	-0.16	
2,358.0	0.50	42.80	2,357.9	0.8	-0.6	0.6	0.32	-0.16	
2,422.0	0.50	2.10	2,421.9	1.3	-0.4	0.4	0.54	0.00	
2,485.0	0.60	13.40	2,484.9	1.9	-0.3	0.3	0.23	0.16	
2,548.0	0.50	22.80	2,547.9	2.5	-0.1	0.1	0.21	-0.16	
2,611.0	0.40	18.10	2,610.9	3.0	0.1	-0.1	0.17	-0.16	
2,674.0	0.40	359.10	2,673.9	3.4	0.1	-0.2	0.21	0.00	
2,737.0	0.50	9.80	2,736.9	3.9	0.2	-0.2	0.21	0.16	
2,799.0	0.40	359.00	2,798.9	4.4	0.2	-0.2	0.21	-0.16	
2,862.0	0.60	348.10	2,861.9	4.9	0.2	-0.2	0.35	0.32	
2,925.0	0.40	7.40	2,924.9	5.4	0.1	-0.1	0.41	-0.32	
2,988.0	0.20	27.30	2,987.9	5.8	0.2	-0.2	0.35	-0.32	
3,051.0	0.10	76.00	3,050.9	5.9	0.3	-0.3	0.24	-0.16	
3,114.0	0.30	3.00	3,113.9	6.0	0.4	-0.4	0.46	0.32	
3,177.0	0.20	46.90	3,176.9	6.3	0.4	-0.5	0.33	-0.16	
3,240.0	0.20	73.40	3,239.9	6.4	0.6	-0.7	0.15	0.00	
3,303.0	0.40	99.50	3,302.9	6.4	1.0	-1.0	0.38	0.32	
3,366.0	0.30	110.80	3,365.9	6.3	1.3	-1.4	0.19	-0.16	
3,429.0	0.10	127.10	3,428.9	6.2	1.5	-1.6	0.33	-0.32	
3,492.0	0.00	0.00	3,491.9	6.2	1.6	-1.6	0.16	-0.16	
3,555.0	0.20	268.40	3,554.9	6.2	1.5	-1.5	0.32	0.32	
3,618.0	0.70	243.70	3,617.9	6.0	1.0	-1.0	0.83	0.79	
3,681.0	0.90	259.60	3,680.9	5.7	0.2	-0.2	0.47	0.32	
3,744.0	0.90	249.10	3,743.8	5.5	-0.8	0.8	0.26	0.00	
3,807.0	0.60	243.00	3,806.8	5.1	-1.5	1.5	0.49	-0.48	
3,870.0	0.70	229.90	3,869.8	4.7	-2.1	2.1	0.28	0.16	
3,933.0	0.40	242.20	3,932.8	4.4	-2.6	2.6	0.51	-0.48	
3,996.0	0.50	242.60	3,995.8	4.2	-3.0	3.0	0.16	0.16	
4,059.0	0.80	262.60	4,058.8	4.0	-3.7	3.7	0.59	0.48	
4,122.0	0.80	271.00	4,121.8	3.9	-4.6	4.6	0.19	0.00	
4,185.0	0.70	272.00	4,184.8	3.9	-5.4	5.4	0.16	-0.16	
4,248.0	0.20	199.50	4,247.8	3.9	-5.9	5.8	1.06	-0.79	
4,311.0	0.40	203.30	4,310.8	3.6	-6.0	6.0	0.32	0.32	
4,374.0	0.30	172.60	4,373.8	3.2	-6.0	6.0	0.33	-0.16	
4,438.0	0.50	174.70	4,437.8	2.7	-6.0	6.0	0.31	0.31	
4,501.0	0.40	156.00	4,500.8	2.3	-5.9	5.9	0.28	-0.16	
4,564.0	0.80	154.20	4,563.8	1.7	-5.6	5.6	0.64	0.63	

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Lybrook P01-2207 01H
Project:	Sandoval County, NM	TVD Reference:	KBE @ 7166.0ft
Site:	Lybrook	MD Reference:	KBE @ 7166.0ft
Well:	Lybrook P01-2207 01H	North Reference:	True
Wellbore:	HZ	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	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
4,627.0	0.70	163.60	4,626.8	0.9	-5.3	5.3	0.25	-0.16	
4,688.0	0.60	173.50	4,687.8	0.2	-5.2	5.2	0.25	-0.16	
4,733.0	0.60	183.30	4,732.8	-0.2	-5.1	5.1	0.23	0.00	
4,764.0	1.50	252.50	4,763.8	-0.5	-5.5	5.5	4.53	2.90	
4,796.0	3.80	268.00	4,795.7	-0.7	-7.0	7.0	7.46	7.19	
4,827.0	6.40	273.60	4,826.6	-0.6	-9.8	9.8	8.53	8.39	
4,859.0	9.10	273.60	4,858.3	-0.3	-14.1	14.1	8.44	8.44	
4,890.0	11.20	274.40	4,888.8	0.0	-19.5	19.5	6.79	6.77	
4,922.0	13.50	273.90	4,920.1	0.5	-26.3	26.3	7.20	7.19	
4,953.0	15.80	273.50	4,950.1	1.0	-34.2	34.2	7.43	7.42	
4,985.0	17.90	273.10	4,980.7	1.6	-43.4	43.4	6.57	6.56	
5,016.0	19.80	270.80	5,010.1	1.9	-53.4	53.4	6.58	6.13	
5,048.0	21.40	269.20	5,040.0	1.9	-64.7	64.7	5.30	5.00	
5,079.0	24.10	268.00	5,068.6	1.6	-76.7	76.7	8.84	8.71	
5,111.0	27.30	268.70	5,097.4	1.2	-90.5	90.5	10.04	10.00	
5,143.0	30.40	269.20	5,125.4	0.9	-106.0	106.0	9.72	9.69	
5,174.0	33.30	267.80	5,151.8	0.5	-122.3	122.3	9.65	9.35	
5,206.0	36.10	266.70	5,178.1	-0.4	-140.5	140.5	8.97	8.75	
5,237.0	39.50	267.30	5,202.6	-1.4	-159.5	159.5	11.03	10.97	
5,269.0	43.60	268.40	5,226.5	-2.2	-180.7	180.7	13.01	12.81	
5,300.0	47.00	269.80	5,248.3	-2.5	-202.7	202.7	11.43	10.97	
5,332.0	50.20	271.10	5,269.5	-2.3	-226.7	226.7	10.45	10.00	
5,363.0	54.00	270.20	5,288.5	-2.0	-251.2	251.2	12.47	12.26	
5,395.0	58.90	269.20	5,306.2	-2.2	-277.8	277.8	15.53	15.31	
5,426.0	64.20	268.60	5,321.0	-2.7	-305.1	305.1	17.18	17.10	
5,458.0	68.00	269.20	5,333.9	-3.3	-334.3	334.3	12.00	11.87	
5,489.0	70.10	269.60	5,345.0	-3.6	-363.3	363.3	6.88	6.77	
5,520.0	72.10	269.20	5,355.0	-3.9	-392.6	392.6	6.57	6.45	
5,552.0	74.40	269.30	5,364.3	-4.3	-423.2	423.2	7.19	7.19	
5,582.0	77.40	269.60	5,371.6	-4.6	-452.3	452.3	10.05	10.00	
5,613.0	80.60	269.80	5,377.5	-4.7	-482.7	482.8	10.34	10.32	
5,630.0	82.30	269.80	5,380.0	-4.8	-499.6	499.6	10.00	10.00	
5,657.0	84.70	269.60	5,383.1	-4.9	-526.4	526.4	8.92	8.89	
5,688.0	86.70	270.00	5,385.4	-5.0	-557.3	557.3	6.58	6.45	
5,718.0	88.50	270.30	5,386.7	-5.0	-587.3	587.3	6.08	6.00	
5,749.0	89.70	270.70	5,387.1	-4.7	-618.3	618.3	4.08	3.87	
5,779.0	90.40	271.20	5,387.1	-4.2	-648.3	648.3	2.87	2.33	
5,810.0	91.00	271.20	5,386.7	-3.5	-679.2	679.3	1.94	1.94	
5,873.0	91.70	270.10	5,385.3	-2.8	-742.2	742.2	2.07	1.11	
5,936.0	90.20	270.20	5,384.2	-2.7	-805.2	805.2	2.39	-2.38	
5,999.0	89.90	270.00	5,384.2	-2.5	-868.2	868.2	0.57	-0.48	
6,062.0	89.90	270.10	5,384.3	-2.5	-931.2	931.2	0.16	0.00	
6,125.0	89.90	270.20	5,384.4	-2.3	-994.2	994.2	0.16	0.00	
6,188.0	90.70	269.90	5,384.0	-2.3	-1,057.2	1,057.2	1.36	1.27	
6,251.0	89.90	269.30	5,383.7	-2.7	-1,120.2	1,120.2	1.59	-1.27	
6,314.0	90.80	269.20	5,383.3	-3.5	-1,183.2	1,183.2	1.44	1.43	
6,377.0	91.40	269.80	5,382.1	-4.1	-1,246.2	1,246.2	1.35	0.95	
6,440.0	90.40	269.90	5,381.1	-4.3	-1,309.2	1,309.2	1.60	-1.59	
6,503.0	90.30	270.00	5,380.7	-4.3	-1,372.2	1,372.2	0.22	-0.16	
6,566.0	91.20	270.20	5,379.9	-4.2	-1,435.2	1,435.2	1.46	1.43	
6,629.0	90.30	270.10	5,379.1	-4.0	-1,498.2	1,498.2	1.44	-1.43	
6,692.0	91.00	270.20	5,378.4	-3.9	-1,561.2	1,561.2	1.12	1.11	
6,755.0	90.20	269.90	5,377.7	-3.8	-1,624.2	1,624.2	1.36	-1.27	

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Lybrook P01-2207 01H
Project:	Sandoval County, NM	TVD Reference:	KBE @ 7166.0ft
Site:	Lybrook	MD Reference:	KBE @ 7166.0ft
Well:	Lybrook P01-2207 01H	North Reference:	True
Wellbore:	HZ	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	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
6,818.0	91.00	270.20	5,377.1	-3.8	-1,687.1	1,687.1	1.36	1.27	
6,880.0	90.60	270.10	5,376.2	-3.6	-1,749.1	1,749.1	0.67	-0.65	
6,943.0	89.70	269.70	5,376.0	-3.7	-1,812.1	1,812.1	1.56	-1.43	
7,006.0	90.70	269.50	5,375.8	-4.1	-1,875.1	1,875.1	1.62	1.59	
7,069.0	90.60	268.40	5,375.1	-5.3	-1,938.1	1,938.1	1.75	-0.16	
7,132.0	91.00	267.00	5,374.2	-7.8	-2,001.1	2,001.1	2.31	0.63	
7,195.0	91.00	267.50	5,373.1	-10.8	-2,064.0	2,064.0	0.79	0.00	
7,258.0	90.40	268.50	5,372.3	-13.0	-2,126.9	2,127.0	1.85	-0.95	
7,321.0	89.60	269.80	5,372.3	-14.0	-2,189.9	2,190.0	2.42	-1.27	
7,384.0	90.40	270.10	5,372.3	-14.0	-2,252.9	2,253.0	1.36	1.27	
7,447.0	90.20	269.80	5,372.0	-14.1	-2,315.9	2,316.0	0.57	-0.32	
7,511.0	91.60	270.10	5,371.0	-14.1	-2,379.9	2,380.0	2.24	2.19	
7,574.0	91.40	269.00	5,369.4	-14.6	-2,442.9	2,442.9	1.77	-0.32	
7,637.0	90.00	269.10	5,368.6	-15.7	-2,505.9	2,505.9	2.23	-2.22	
7,700.0	91.00	269.90	5,368.0	-16.2	-2,568.9	2,568.9	2.03	1.59	
7,763.0	90.50	269.80	5,367.2	-16.4	-2,631.9	2,631.9	0.81	-0.79	
7,826.0	90.00	269.70	5,366.9	-16.7	-2,694.9	2,694.9	0.81	-0.79	
7,889.0	91.20	269.60	5,366.3	-17.1	-2,757.9	2,757.9	1.91	1.90	
7,952.0	90.30	270.30	5,365.5	-17.1	-2,820.9	2,820.9	1.81	-1.43	
8,015.0	91.10	269.80	5,364.7	-17.1	-2,883.8	2,883.9	1.50	1.27	
8,078.0	90.40	270.70	5,363.9	-16.8	-2,946.8	2,946.9	1.81	-1.11	
8,141.0	89.70	272.00	5,363.8	-15.3	-3,009.8	3,009.9	2.34	-1.11	
8,204.0	90.90	271.60	5,363.5	-13.3	-3,072.8	3,072.8	2.01	1.90	
8,267.0	90.50	270.90	5,362.7	-11.9	-3,135.8	3,135.8	1.28	-0.63	
8,331.0	89.10	270.80	5,362.9	-11.0	-3,199.8	3,199.8	2.19	-2.19	
8,394.0	88.50	269.70	5,364.3	-10.7	-3,262.7	3,262.8	1.99	-0.95	
8,457.0	89.00	269.00	5,365.6	-11.4	-3,325.7	3,325.7	1.37	0.79	
8,520.0	90.10	269.40	5,366.1	-12.3	-3,388.7	3,388.7	1.86	1.75	
8,583.0	89.50	269.10	5,366.3	-13.1	-3,451.7	3,451.7	1.06	-0.95	
8,646.0	90.30	269.20	5,366.5	-14.1	-3,514.7	3,514.7	1.28	1.27	
8,709.0	91.30	269.60	5,365.6	-14.7	-3,577.7	3,577.7	1.71	1.59	
8,772.0	90.90	269.60	5,364.4	-15.2	-3,640.7	3,640.7	0.63	-0.63	
8,835.0	89.40	270.10	5,364.2	-15.3	-3,703.7	3,703.7	2.51	-2.38	
8,898.0	90.00	270.00	5,364.5	-15.3	-3,766.7	3,766.7	0.97	0.95	
8,961.0	90.60	269.00	5,364.2	-15.8	-3,829.7	3,829.7	1.85	0.95	
9,024.0	89.50	268.60	5,364.1	-17.2	-3,892.7	3,892.7	1.86	-1.75	
9,087.0	90.20	268.60	5,364.3	-18.7	-3,955.6	3,955.7	1.11	1.11	
9,150.0	90.50	267.90	5,363.9	-20.6	-4,018.6	4,018.7	1.21	0.48	
9,213.0	89.70	268.40	5,363.8	-22.7	-4,081.6	4,081.6	1.50	-1.27	
9,276.0	89.40	269.70	5,364.3	-23.7	-4,144.6	4,144.6	2.12	-0.48	
9,339.0	90.10	269.50	5,364.6	-24.1	-4,207.6	4,207.6	1.16	1.11	
9,402.0	90.00	270.40	5,364.5	-24.2	-4,270.6	4,270.6	1.44	-0.16	
9,465.0	90.90	270.00	5,364.0	-24.0	-4,333.6	4,333.6	1.56	1.43	
9,528.0	91.30	270.30	5,362.8	-23.8	-4,396.6	4,396.6	0.79	0.63	
9,590.0	92.20	270.60	5,360.9	-23.3	-4,458.5	4,458.6	1.53	1.45	Last Cathedral Survey @ 9,590' MD
9,640.0	92.20	270.60	5,359.0	-22.8	-4,508.5	4,508.5	0.00	0.00	Projection to Bit @ 9,640'

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Lybrook P01-2207 01H
Project:	Sandoval County, NM	TVD Reference:	KBE @ 7166.0ft
Site:	Lybrook	MD Reference:	KBE @ 7166.0ft
Well:	Lybrook P01-2207 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	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
Lybrook P01-2207 #01H	0.00	0.00	-5,366.1	0.0	0.0	1,881,184.29	1,265,808.06	36.163370	-107.519100
- actual wellpath misses target center by 5366.1ft at 0.0ft MD (0.0 TVD, 0.0 N, 0.0 E)									
- Point									
Lybrook P01-2207 #01H	0.00	0.00	5,372.3	-21.5	-4,519.8	1,881,221.89	1,261,288.35	36.163310	-107.534410
- actual wellpath misses target center by 17.5ft at 9640.0ft MD (5359.0 TVD, -22.8 N, -4508.5 E)									
- Polygon									
Point 1			5,372.3	300.0	-330.0	1,881,526.17	1,260,962.30		
Point 2			5,372.3	-816.0	-330.0	1,880,410.27	1,260,947.71		
Lybrook P01-2207 #01H	0.00	0.00	5,354.3	-21.5	-4,519.8	1,881,221.89	1,261,288.35	36.163310	-107.534410
- actual wellpath misses target center by 12.4ft at 9640.0ft MD (5359.0 TVD, -22.8 N, -4508.5 E)									
- Point									

Design Annotations				
Measured Depth	Vertical Depth	Local Coordinates		
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	Comment
9,590.0	5,360.9	-23.3	-4,458.5	Last Cathedral Survey @ 9,590' MD
9,640.0	5,359.0	-22.8	-4,508.5	Projection to Bit @ 9,640'

Checked By: _____	Approved By: _____	Date: _____
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