

CONFIDENTIAL

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

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

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

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

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 1, 2011

Submit one copy to
Appropriate District Office

OIL CONSERVATION DIVISION

1220 South St. Francis Drive
Santa Fe, NM 87505

☐ AMENDED REPORT
☒ As-Drilled

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-35524		*Pool Code 1039	*Pool Name ALAMITO - GALLUP
*Property Code 313255	*Property Name LYBROOK 035-2308		*Well Number 02H
*GRID No. 282327	*Operator Name ENCANA OIL & GAS (USA) INC.		*Elevation 6860'

¹⁰ Surface Location

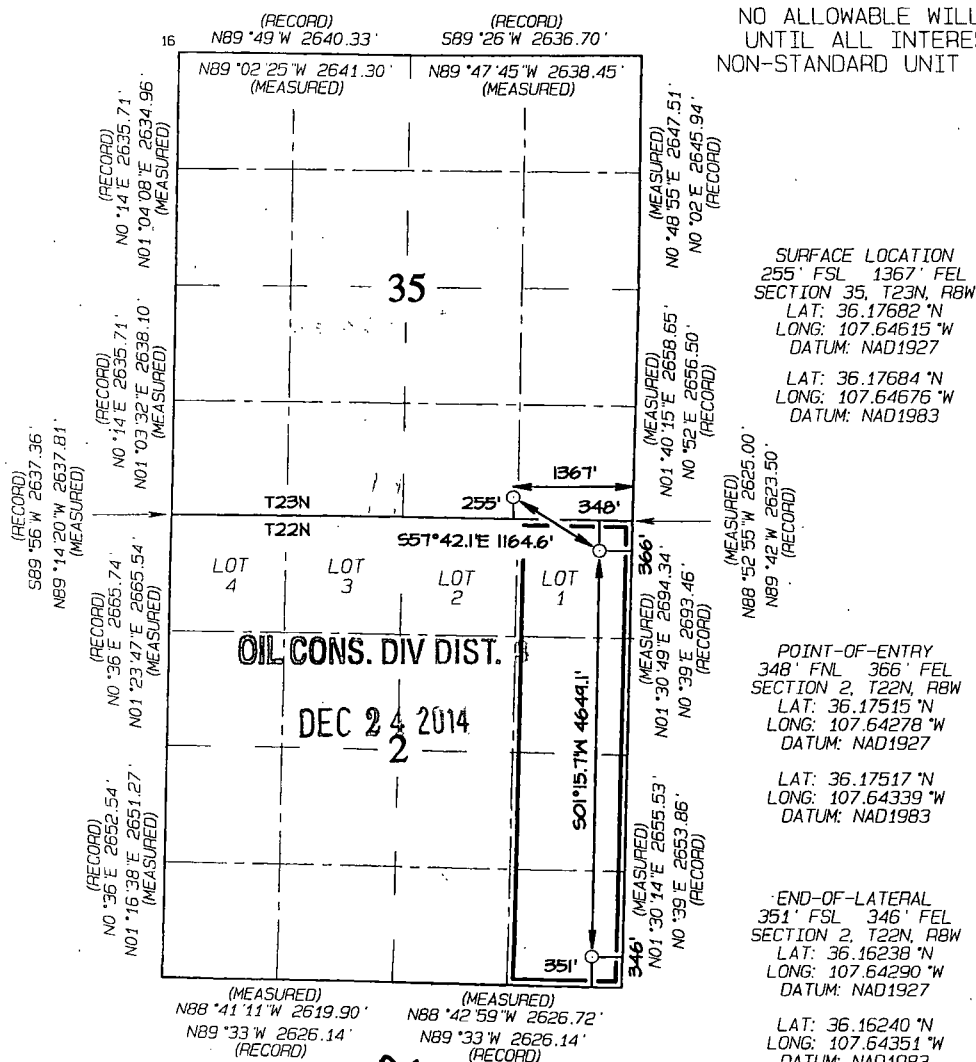
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	35	23N	8W		255	SOUTH	1367	EAST	SAN JUAN

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	2	22N	8W		351	SOUTH	346	EAST	SAN JUAN

¹² Dedicated Acres 161.10 Acres E/2 E/2 - Section 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.

Jessica Gregg 12/22/14
Signature Date

Printed Name
Jessica.Gregg@encana.com

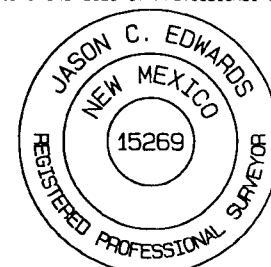
E-mail Address

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: NOVEMBER 4, 2014
Date of Survey: JUNE 4, 2013

Signature and Seal of Professional Surveyor



Jason C. Edwards
Certificate Number 15269

DEVIATION SURVEYS
Lybrook 035-2308 02H
30-045-35524

CONFIDENTIAL

MD (Feet)	Inclination (Degree)
745'	0.70
1124'	1.50
1440'	0.40
1748'	0.40
2054'	0.50
2362'	0.50
2669'	1.00
2980'	0.90
3296'	0.50
3612'	0.40
3865'	0.50
4023'	13.80

OIL CONS. DIV DIST. 3

DEC 24 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

12/22/14

Date

ACKNOWLEDGMENT

State of Colorado
City and County of Denver

This instrument was acknowledged before me on this *22nd* day of *December*, 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.

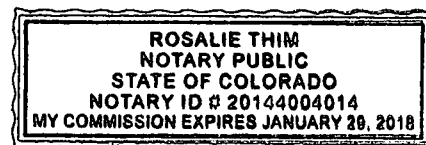
In witness whereof, I hereunto set my hand and official seal.

Notary Public

Rosalie Thim

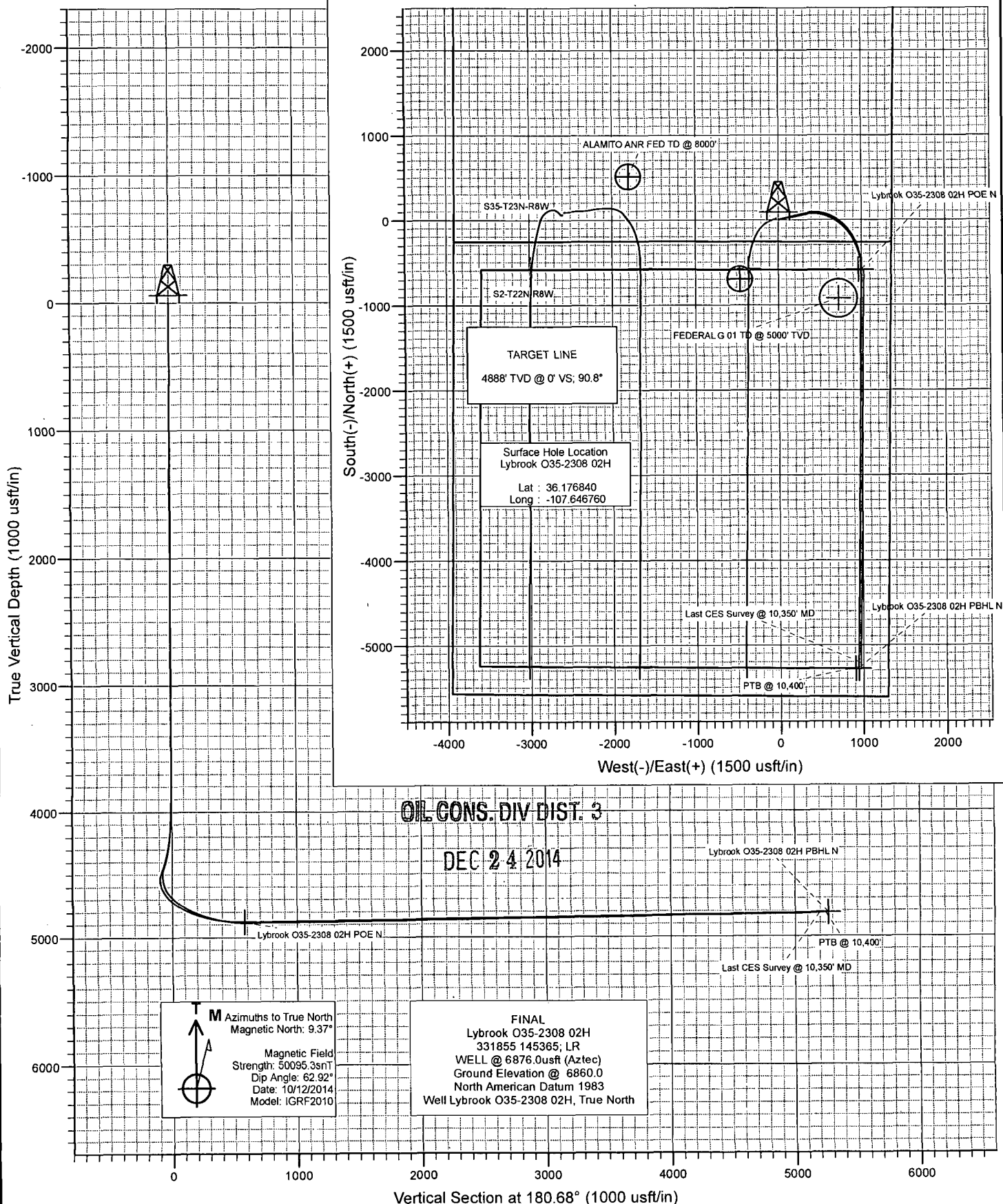
My Commission Expires:

1/29/18





Project: San Juan County, NM
 Site: S35-T23N-R8W
 Well: Lybrook O35-2308 02H
 Wellbore: Hz
 Design: FINAL



Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Lybrook O35-2308 02H
Project:	San Juan County, NM	TVD Reference:	WELL @ 6876.0usft (Aztec)
Site:	S35-T23N-R8W	MD Reference:	WELL @ 6876.0usft (Aztec)
Well:	Lybrook O35-2308 02H	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	S35-T23N-R8W		
Site Position:		Northing:	1,883,780.33 usft
From:	Lat/Long	Easting:	2,775,554.08 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16"
		Latitude:	36.177020
		Longitude:	-107.655570
		Grid Convergence:	0.10 °

Well	Lybrook O35-2308 02H		
Well Position	+N/-S	0.0 usft	Northing: 1,883,719.68 usft
	+E/-W	0.0 usft	Easting: 2,778,154.26 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	36.176840
		Longitude:	-107.646760
		Ground Level:	6,860.0 usft

Wellbore	Hz		
Magnetics	Model Name	Sample Date	Declination
			(°)
	IGRF2010	10/12/2014	9.37
			(°)
			62.92
			50,095

Design	FINAL		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			180.68

Survey Program	Date 10/24/2014		
From	To	Survey (Wellbore)	Tool Name
(usft)	(usft)		
556.0	10,400.0	Survey #1 (Hz)	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	
556.0	0.60	96.50	556.0	-0.3	2.9	0.3	0.11	0.11	
619.0	0.50	120.20	619.0	-0.5	3.5	0.5	0.39	-0.16	
682.0	0.70	121.20	682.0	-0.8	4.0	0.8	0.32	0.32	
745.0	0.70	123.70	745.0	-1.3	4.7	1.2	0.05	0.00	
808.0	0.70	111.50	808.0	-1.6	5.4	1.5	0.24	0.00	
935.0	0.80	105.90	935.0	-2.1	6.9	2.1	0.10	0.08	
998.0	0.80	101.90	998.0	-2.3	7.8	2.3	0.09	0.00	
1,061.0	0.60	59.20	1,061.0	-2.3	8.5	2.2	0.86	-0.32	
1,124.0	1.50	342.80	1,123.9	-1.3	8.5	1.2	2.35	1.43	
1,187.0	1.80	337.50	1,186.9	0.4	7.9	-0.5	0.53	0.48	
1,251.0	1.80	321.70	1,250.9	2.1	6.9	-2.2	0.77	0.00	
1,314.0	1.00	305.60	1,313.9	3.2	5.8	-3.3	1.40	-1.27	

Survey Report

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Site:	S35-T23N-R8W	MD Reference:	WELL @ 6876.0usft (Aztec)
Well:	Lybrook O35-2308 02H	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 (°/100usft)	Build Rate (°/100u)	Formations / Comments
1,377.0	0.90	292.30	1,376.9	3.7	4.9	-3.8	0.38	-0.16	
1,440.0	0.40	255.70	1,439.9	3.8	4.3	-3.9	0.99	-0.79	
1,502.0	0.40	222.60	1,501.9	3.6	3.9	-3.7	0.37	0.00	
1,563.0	0.40	203.30	1,562.9	3.3	3.7	-3.3	0.22	0.00	
1,625.0	0.30	191.30	1,624.9	2.9	3.6	-3.0	0.20	-0.16	
1,686.0	0.40	186.50	1,685.8	2.6	3.5	-2.6	0.17	0.16	
1,748.0	0.40	184.10	1,747.8	2.1	3.5	-2.2	0.03	0.00	
1,809.0	0.40	185.00	1,808.8	1.7	3.4	-1.7	0.01	0.00	
1,870.0	0.40	182.40	1,869.8	1.3	3.4	-1.3	0.03	0.00	
1,931.0	0.40	189.10	1,930.8	0.8	3.4	-0.9	0.08	0.00	
1,993.0	0.40	165.70	1,992.8	0.4	3.4	-0.5	0.26	0.00	
2,054.0	0.50	173.40	2,053.8	0.0	3.5	0.0	0.19	0.16	
2,116.0	0.60	168.70	2,115.8	-0.6	3.6	0.6	0.18	0.16	
2,177.0	0.60	180.10	2,176.8	-1.3	3.6	1.2	0.20	0.00	
2,239.0	0.50	179.70	2,238.8	-1.9	3.6	1.8	0.16	-0.16	
2,300.0	0.50	177.90	2,299.8	-2.4	3.6	2.3	0.03	0.00	
2,362.0	0.50	181.50	2,361.8	-2.9	3.6	2.9	0.05	0.00	
2,423.0	0.50	177.10	2,422.8	-3.5	3.6	3.4	0.06	0.00	
2,485.0	0.40	137.90	2,484.8	-3.9	3.8	3.9	0.51	-0.16	
2,546.0	0.90	67.90	2,545.8	-3.9	4.4	3.8	1.39	0.82	
2,608.0	1.10	36.20	2,607.8	-3.2	5.2	3.1	0.93	0.32	
2,669.0	1.00	5.50	2,668.8	-2.2	5.6	2.1	0.92	-0.16	
2,731.0	0.30	304.40	2,730.8	-1.6	5.5	1.5	1.44	-1.13	
2,792.0	0.70	291.10	2,791.8	-1.4	5.0	1.3	0.68	0.66	
2,853.0	0.90	282.30	2,852.8	-1.1	4.2	1.1	0.38	0.33	
2,917.0	0.90	288.80	2,916.8	-0.8	3.2	0.8	0.16	0.00	
2,980.0	0.90	284.20	2,979.8	-0.6	2.3	0.5	0.11	0.00	
3,043.0	0.90	279.50	3,042.8	-0.4	1.3	0.3	0.12	0.00	
3,106.0	1.10	286.10	3,105.8	-0.1	0.3	0.1	0.37	0.32	
3,170.0	0.40	207.30	3,169.8	-0.1	-0.4	0.1	1.71	-1.09	
3,233.0	0.60	161.80	3,232.7	-0.7	-0.4	0.7	0.68	0.32	
3,296.0	0.50	158.70	3,295.7	-1.2	-0.2	1.2	0.17	-0.16	
3,359.0	0.50	150.00	3,358.7	-1.7	0.0	1.7	0.12	0.00	
3,422.0	0.50	156.00	3,421.7	-2.2	0.3	2.2	0.08	0.00	
3,485.0	0.50	141.30	3,484.7	-2.7	0.5	2.7	0.20	0.00	
3,549.0	0.70	144.20	3,548.7	-3.2	0.9	3.2	0.32	0.31	
3,612.0	0.40	43.20	3,611.7	-3.4	1.3	3.3	1.38	-0.48	
3,675.0	0.60	17.50	3,674.7	-2.9	1.6	2.9	0.47	0.32	
3,739.0	0.50	11.60	3,738.7	-2.3	1.7	2.3	0.18	-0.16	
3,802.0	0.40	7.10	3,801.7	-1.8	1.8	1.8	0.17	-0.16	
3,833.0	0.50	2.30	3,832.7	-1.6	1.8	1.5	0.34	0.32	
3,865.0	0.50	342.10	3,864.7	-1.3	1.8	1.3	0.55	0.00	
3,897.0	2.30	77.70	3,896.7	-1.0	2.4	1.0	7.50	5.62	
3,928.0	5.70	86.20	3,927.6	-0.8	4.5	0.7	11.10	10.97	
3,960.0	8.40	85.70	3,959.4	-0.5	8.4	0.4	8.44	8.44	
3,991.0	11.30	83.00	3,989.9	0.0	13.7	-0.2	9.47	9.35	
4,023.0	13.80	81.30	4,021.2	1.0	20.6	-1.2	7.90	7.81	
4,055.0	16.40	79.30	4,052.1	2.4	28.8	-2.8	8.29	8.12	
4,086.0	18.70	77.40	4,081.6	4.3	38.0	-4.8	7.65	7.42	
4,118.0	20.90	76.10	4,111.7	6.8	48.5	-7.4	7.01	6.87	
4,149.0	23.30	76.10	4,140.4	9.6	59.8	-10.3	7.74	7.74	
4,181.0	26.20	77.10	4,169.5	12.7	72.9	-13.6	9.16	9.06	
4,212.0	28.60	79.60	4,197.0	15.6	86.8	-16.6	8.58	7.74	

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Lybrook O35-2308 02H
Project:	San Juan County, NM	TVD Reference:	WELL @ 6876.0usft (Aztec)
Site:	S35-T23N-R8W	MD Reference:	WELL @ 6876.0usft (Aztec)
Well:	Lybrook O35-2308 02H	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
4,244.0	30.80	82.00	4,224.8	18.1	102.5	-19.3	7.81	6.87	
4,276.0	33.50	82.10	4,251.9	20.4	119.3	-21.9	8.44	8.44	
4,307.0	36.70	80.70	4,277.3	23.1	137.0	-24.7	10.64	10.32	
4,339.0	39.80	79.60	4,302.4	26.5	156.5	-28.4	9.92	9.69	
4,370.0	42.60	79.70	4,325.7	30.2	176.6	-32.3	9.03	9.03	
4,402.0	45.10	79.90	4,348.8	34.1	198.4	-36.5	7.82	7.81	
4,434.0	47.30	79.20	4,370.9	38.3	221.1	-40.9	7.05	6.87	
4,465.0	50.10	78.50	4,391.4	42.8	243.9	-45.7	9.19	9.03	
4,497.0	53.40	78.50	4,411.2	47.8	268.6	-51.0	10.31	10.31	
4,528.0	55.60	78.40	4,429.2	52.9	293.3	-56.3	7.10	7.10	
4,560.0	57.80	78.20	4,446.8	58.3	319.5	-62.1	6.89	6.87	
4,592.0	57.70	80.70	4,463.8	63.2	346.1	-67.3	6.61	-0.31	
4,610.0	57.00	83.00	4,473.6	65.4	361.1	-69.7	11.44	-3.89	
4,624.0	56.40	86.30	4,481.2	66.5	372.7	-70.9	20.16	-4.29	
4,654.0	55.80	89.00	4,498.0	67.5	397.6	-72.2	7.74	-2.00	
4,686.0	55.10	91.20	4,516.1	67.5	423.9	-72.5	6.07	-2.19	
4,718.0	54.50	95.30	4,534.6	66.0	450.0	-71.3	10.64	-1.88	
4,749.0	54.50	98.20	4,552.6	63.0	475.1	-68.7	7.62	0.00	
4,781.0	55.70	100.70	4,570.9	58.7	501.0	-64.7	7.42	3.75	
4,812.0	57.40	101.70	4,588.0	53.7	526.4	-59.9	6.11	5.48	
4,844.0	58.50	103.90	4,605.0	47.7	552.8	-54.2	6.77	3.44	
4,876.0	59.70	106.80	4,621.4	40.4	579.3	-47.3	8.63	3.75	
4,907.0	60.70	110.70	4,636.8	31.8	604.7	-38.9	11.38	3.23	
4,939.0	61.40	114.80	4,652.3	20.9	630.6	-28.4	11.42	2.19	
4,970.0	61.70	119.00	4,667.1	8.6	654.9	-16.4	11.95	0.97	
5,002.0	61.50	122.00	4,682.3	-5.7	679.1	-2.4	8.27	-0.63	
5,034.0	61.70	124.60	4,697.5	-21.1	702.6	12.8	7.17	0.63	
5,065.0	62.30	127.00	4,712.1	-37.2	724.8	28.5	7.10	1.94	
5,097.0	62.90	128.90	4,726.8	-54.6	747.2	45.8	5.59	1.88	
5,128.0	63.80	131.90	4,740.7	-72.6	768.3	63.5	9.12	2.90	
5,160.0	65.70	134.50	4,754.4	-92.4	789.4	83.0	9.45	5.94	
5,192.0	67.80	137.60	4,767.0	-113.6	809.8	103.9	11.06	6.56	
5,223.0	69.40	139.90	4,778.3	-135.3	828.8	125.4	8.62	5.16	
5,255.0	70.50	141.80	4,789.3	-158.6	847.8	148.5	6.55	3.44	
5,286.0	70.50	145.30	4,799.6	-182.1	865.2	171.8	10.64	0.00	
5,318.0	71.20	148.20	4,810.1	-207.3	881.7	196.9	8.84	2.19	
5,349.0	71.30	151.40	4,820.1	-232.7	896.5	222.1	9.78	0.32	
5,381.0	72.90	153.50	4,829.9	-259.7	910.6	248.9	8.00	5.00	
5,413.0	74.30	154.40	4,839.0	-287.3	924.1	276.3	5.14	4.38	
5,444.0	75.70	156.10	4,847.0	-314.5	936.6	303.3	6.96	4.52	
5,476.0	76.80	158.90	4,854.6	-343.2	948.5	331.9	9.17	3.44	
5,508.0	78.00	160.80	4,861.6	-372.5	959.2	361.1	6.90	3.75	
5,539.0	78.80	163.70	4,867.8	-401.4	968.5	389.9	9.52	2.58	
5,571.0	79.90	166.50	4,873.7	-431.8	976.6	420.2	9.26	3.44	
5,603.0	81.70	169.80	4,878.8	-462.7	983.1	451.0	11.63	5.63	
5,634.0	83.00	172.60	4,883.0	-493.1	987.8	481.3	9.88	4.19	
5,666.0	85.60	175.60	4,886.2	-524.8	991.0	513.0	12.37	8.12	
5,697.0	88.40	177.90	4,887.8	-555.7	992.8	543.8	11.68	9.03	
5,729.0	90.10	179.10	4,888.2	-587.7	993.6	575.8	6.50	5.31	
5,792.0	91.70	181.50	4,887.2	-650.6	993.3	638.8	4.58	2.54	
5,855.0	90.50	180.80	4,886.0	-713.6	992.0	701.8	2.21	-1.90	
5,919.0	90.80	180.90	4,885.3	-777.6	991.1	765.8	0.49	0.47	
5,982.0	90.70	180.90	4,884.4	-840.6	990.1	828.8	0.16	-0.16	

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Lybrook O35-2308 02H
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Site:	S35-T23N-R8W	MD Reference:	WELL @ 6876.0usft (Aztec)
Well:	Lybrook O35-2308 02H	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)	Vertical Section (usft)	Dogleg Rate (°/100usf)	Build Rate (°/100u)	Formations / Comments
6,045.0	91.00	181.60	4,883.5	-903.6	988.7	891.8	1.21	0.48	
6,108.0	91.10	181.50	4,882.4	-966.5	987.0	954.7	0.22	0.16	
6,172.0	90.30	179.50	4,881.6	-1,030.5	986.5	1,018.7	3.37	-1.25	
6,235.0	90.60	180.20	4,881.1	-1,093.5	986.6	1,081.7	1.21	0.48	
6,298.0	90.50	180.00	4,880.5	-1,156.5	986.5	1,144.7	0.35	-0.16	
6,361.0	91.30	180.50	4,879.5	-1,219.5	986.2	1,207.7	1.50	1.27	
6,424.0	91.20	181.00	4,878.1	-1,282.5	985.4	1,270.7	0.81	-0.16	
6,487.0	91.20	181.30	4,876.8	-1,345.5	984.2	1,333.7	0.48	0.00	
6,550.0	90.80	181.60	4,875.7	-1,408.4	982.6	1,396.7	0.79	-0.63	
6,614.0	90.30	181.20	4,875.1	-1,472.4	981.0	1,460.7	1.00	-0.78	
6,677.0	90.40	181.00	4,874.7	-1,535.4	979.8	1,523.7	0.35	0.16	
6,740.0	90.90	180.60	4,874.0	-1,598.4	978.9	1,586.7	1.02	0.79	
6,803.0	90.90	180.10	4,873.0	-1,661.4	978.5	1,649.6	0.79	0.00	
6,867.0	91.20	180.80	4,871.8	-1,725.4	978.0	1,713.6	1.19	0.47	
6,930.0	90.60	180.80	4,870.8	-1,788.3	977.1	1,776.6	0.95	-0.95	
6,993.0	90.90	179.50	4,870.0	-1,851.3	977.0	1,839.6	2.12	0.48	
7,056.0	90.80	179.40	4,869.1	-1,914.3	977.6	1,902.6	0.22	-0.16	
7,120.0	90.70	179.10	4,868.2	-1,978.3	978.4	1,966.6	0.49	-0.16	
7,183.0	90.80	178.70	4,867.4	-2,041.3	979.6	2,029.5	0.65	0.16	
7,246.0	90.20	180.60	4,866.9	-2,104.3	980.0	2,092.5	3.16	-0.95	
7,309.0	90.10	180.50	4,866.7	-2,167.3	979.4	2,155.5	0.22	-0.16	
7,372.0	91.40	181.20	4,865.9	-2,230.3	978.5	2,218.5	2.34	2.06	
7,435.0	91.20	180.10	4,864.4	-2,293.3	977.8	2,281.5	1.77	-0.32	
7,498.0	91.10	180.30	4,863.2	-2,356.2	977.5	2,344.5	0.35	-0.16	
7,561.0	90.70	179.60	4,862.2	-2,419.2	977.6	2,407.5	1.28	-0.63	
7,625.0	90.60	179.30	4,861.5	-2,483.2	978.2	2,471.4	0.49	-0.16	
7,688.0	91.60	180.30	4,860.2	-2,546.2	978.4	2,534.4	2.24	1.59	
7,751.0	91.90	180.30	4,858.3	-2,609.2	978.1	2,597.4	0.48	0.48	
7,814.0	91.90	179.70	4,856.2	-2,672.1	978.1	2,660.4	0.95	0.00	
7,877.0	91.00	180.80	4,854.6	-2,735.1	977.8	2,723.3	2.26	-1.43	
7,939.0	91.10	180.20	4,853.5	-2,797.1	977.3	2,785.3	0.98	0.16	
8,003.0	90.20	180.80	4,852.8	-2,861.1	976.7	2,849.3	1.69	-1.41	
8,066.0	90.30	182.30	4,852.5	-2,924.1	975.0	2,912.3	2.39	0.16	
8,129.0	90.60	182.10	4,852.0	-2,987.0	972.6	2,975.3	0.57	0.48	
8,192.0	90.20	182.30	4,851.6	-3,050.0	970.2	3,038.2	0.71	-0.63	
8,255.0	91.80	183.60	4,850.5	-3,112.9	966.9	3,101.2	3.27	2.54	
8,319.0	91.90	183.00	4,848.4	-3,176.7	963.3	3,165.1	0.95	0.16	
8,382.0	90.60	181.60	4,847.0	-3,239.7	960.7	3,228.0	3.03	-2.06	
8,445.0	89.90	181.10	4,846.8	-3,302.6	959.2	3,291.0	1.37	-1.11	
8,508.0	89.60	180.00	4,847.0	-3,365.6	958.6	3,354.0	1.81	-0.48	
8,571.0	89.50	180.00	4,847.5	-3,428.6	958.6	3,417.0	0.16	-0.16	
8,634.0	90.70	179.80	4,847.4	-3,491.6	958.7	3,480.0	1.93	1.90	
8,698.0	90.80	179.90	4,846.6	-3,555.6	958.9	3,544.0	0.22	0.16	
8,761.0	91.10	180.90	4,845.5	-3,618.6	958.5	3,607.0	1.66	0.48	
8,824.0	91.60	181.00	4,844.0	-3,681.6	957.4	3,670.0	0.81	0.79	
8,887.0	91.70	180.50	4,842.2	-3,744.6	956.6	3,732.9	0.81	0.16	
8,950.0	90.00	180.30	4,841.3	-3,807.5	956.2	3,795.9	2.72	-2.70	
9,013.0	90.70	180.80	4,840.9	-3,870.5	955.6	3,858.9	1.37	1.11	
9,077.0	91.20	180.50	4,839.8	-3,934.5	954.8	3,922.9	0.91	0.78	
9,140.0	91.50	180.10	4,838.4	-3,997.5	954.5	3,985.9	0.79	0.48	
9,203.0	92.10	180.30	4,836.4	-4,060.5	954.3	4,048.9	1.00	0.95	
9,266.0	91.10	180.10	4,834.6	-4,123.5	954.1	4,111.8	1.62	-1.59	
9,330.0	89.80	180.60	4,834.1	-4,187.4	953.7	4,175.8	2.18	-2.03	

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Lybrook O35-2308 02H
Project:	San Juan County, NM	TVD Reference:	WELL @ 6876.0usft (Aztec)
Site:	S35-T23N-R8W	MD Reference:	WELL @ 6876.0usft (Aztec)
Well:	Lybrook O35-2308 02H	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
9,393.0	90.40	180.70	4,834.0	-4,250.4	953.0	4,238.8	0.97	0.95	
9,456.0	90.20	181.80	4,833.7	-4,313.4	951.6	4,301.8	1.77	-0.32	
9,519.0	89.90	180.60	4,833.6	-4,376.4	950.3	4,364.8	1.96	-0.48	
9,582.0	90.80	181.30	4,833.2	-4,439.4	949.2	4,427.8	1.81	1.43	
9,645.0	91.40	181.70	4,832.0	-4,502.4	947.6	4,490.8	1.14	0.95	
9,708.0	91.20	180.90	4,830.6	-4,565.3	946.1	4,553.8	1.31	-0.32	
9,772.0	91.40	181.00	4,829.2	-4,629.3	945.1	4,617.8	0.35	0.31	
9,835.0	91.90	180.90	4,827.3	-4,692.3	944.0	4,680.7	0.81	0.79	
9,898.0	89.90	178.30	4,826.4	-4,755.3	944.5	4,743.7	5.21	-3.17	
9,961.0	90.40	177.90	4,826.2	-4,818.2	946.6	4,806.6	1.02	0.79	
10,024.0	91.20	177.20	4,825.3	-4,881.2	949.3	4,869.5	1.69	1.27	
10,088.0	91.70	177.80	4,823.7	-4,945.1	952.1	4,933.4	1.22	0.78	
10,151.0	91.30	177.60	4,822.0	-5,008.0	954.6	4,996.3	0.71	-0.63	
10,214.0	90.50	178.30	4,821.0	-5,071.0	956.8	5,059.2	1.69	-1.27	
10,277.0	91.10	179.30	4,820.2	-5,133.9	958.2	5,122.2	1.85	0.95	
10,350.0	92.60	180.40	4,817.8	-5,206.9	958.3	5,195.2	2.55	2.05	Last CES Survey @ 10,350' MD
10,400.0	92.60	180.40	4,815.5	-5,256.8	958.0	5,245.1	0.00	0.00	PTB @ 10,400'

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									
Lybrook O35-2308 02H I	0.00	0.00	4,814.4	-5,278.3	943.3	1,878,443.24	2,779,107.71	36.162340	-107.643564
- actual wellpath misses target center by 26.0usft at 10400.0usft MD (4815.5 TVD, -5256.8 N, 958.0 E)									
- Point									
Lybrook O35-2308 02H I	0.00	0.00	4,814.4	-5,278.3	903.3	1,878,443.16	2,779,067.66	36.162340	-107.643700
- actual wellpath misses target center by 58.8usft at 10400.0usft MD (4815.5 TVD, -5256.8 N, 958.0 E)									
- Point									
Lybrook O35-2308 02H I	0.00	0.00	4,879.9	-589.7	959.2	1,883,131.83	2,779,114.58	36.175220	-107.643510
- actual wellpath misses target center by 35.5usft at 5731.4usft MD (4888.2 TVD, -590.0 N, 993.7 E)									
- Point									
Lybrook O35-2308 02H I	0.00	0.00	4,879.9	-589.7	999.2	1,883,131.91	2,779,154.60	36.175220	-107.643374
- actual wellpath misses target center by 10.0usft at 5731.1usft MD (4888.2 TVD, -589.8 N, 993.7 E)									
- Point									

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
10,350.0	4,817.8	-5,206.9	958.3	Last CES Survey @ 10,350' MD PTB @ 10,400'
10,400.0	4,815.5	-5,256.8	958.0	

Checked By: _____ Approved By: _____ Date: _____

EnCana Oil & Gas (USA) Inc

San Juan County, NM

S35-T23N-R8W

Lybrook O35-2308 02H

Hz

Design: FINAL

Survey Report - Geographic

24 October, 2014

Survey Report - Geographic

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Lybrook O35-2308 02H
Project:	San Juan County, NM	TVD Reference:	WELL @ 6876.0usft (Aztec)
Site:	S35-T23N-R8W	MD Reference:	WELL @ 6876.0usft (Aztec)
Well:	Lybrook O35-2308 02H	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	S35-T23N-R8W				
Site Position:		Northing:	1,883,780.33 usft	Latitude:	36.177020
From:	Lat/Long	Easting:	2,775,554.08 usft	Longitude:	-107.655570
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.10 °

Well	Lybrook O35-2308 02H				
Well Position	+N/-S	0.0 usft	Northing:	1,883,719.68 usft	Latitude: 36.176840
	+E/-W	0.0 usft	Easting:	2,778,154.27 usft	Longitude: -107.646760
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level: 6,860.0 usft

Wellbore	Hz				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	10/12/2014	9.37	62.92	50,095

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	180.68	

Survey Program	Date	10/24/2014			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
556.0	10,400.0	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	1,883,719.68	2,778,154.27	36.176840	-107.646760
556.0	0.60	96.50	556.0	-0.3	2.9	1,883,719.36	2,778,157.16	36.176839	-107.646750
619.0	0.50	120.20	619.0	-0.5	3.5	1,883,719.18	2,778,157.72	36.176839	-107.646749
682.0	0.70	121.20	682.0	-0.8	4.0	1,883,718.85	2,778,158.29	36.176838	-107.646747
745.0	0.70	123.70	745.0	-1.3	4.7	1,883,718.44	2,778,158.94	36.176837	-107.646744
808.0	0.70	111.50	808.0	-1.6	5.4	1,883,718.08	2,778,159.62	36.176836	-107.646742
935.0	0.80	105.90	935.0	-2.1	6.9	1,883,717.56	2,778,161.20	36.176834	-107.646737
998.0	0.80	101.90	998.0	-2.3	7.8	1,883,717.35	2,778,162.05	36.176834	-107.646734
1,061.0	0.60	59.20	1,061.0	-2.3	8.5	1,883,717.43	2,778,162.76	36.176834	-107.646731
1,124.0	1.50	342.80	1,123.9	-1.3	8.5	1,883,718.39	2,778,162.80	36.176836	-107.646731
1,187.0	1.80	337.50	1,186.9	0.4	7.9	1,883,720.09	2,778,162.18	36.176841	-107.646733
1,251.0	1.80	321.70	1,250.9	2.1	6.9	1,883,721.80	2,778,161.16	36.176846	-107.646737

Survey Report - Geographic

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Lybrook O35-2308 02H
Project:	San Juan County, NM	TVD Reference:	WELL @ 6876.0usft (Aztec)
Site:	S35-T23N-R8W	MD Reference:	WELL @ 6876.0usft (Aztec)
Well:	Lybrook O35-2308 02H	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
1,314.0	1.00	305.60	1,313.9	3.2	5.8	1,883,722.90	2,778,160.10	36.176849	-107.646740
1,377.0	0.90	292.30	1,376.9	3.7	4.9	1,883,723.40	2,778,159.20	36.176850	-107.646744
1,440.0	0.40	255.70	1,439.9	3.8	4.3	1,883,723.53	2,778,158.53	36.176851	-107.646746
1,502.0	0.40	222.60	1,501.9	3.6	3.9	1,883,723.32	2,778,158.17	36.176850	-107.646747
1,563.0	0.40	203.30	1,562.9	3.3	3.7	1,883,722.97	2,778,157.94	36.176849	-107.646748
1,625.0	0.30	191.30	1,624.9	2.9	3.6	1,883,722.61	2,778,157.83	36.176848	-107.646748
1,686.0	0.40	186.50	1,685.8	2.6	3.5	1,883,722.24	2,778,157.77	36.176847	-107.646748
1,748.0	0.40	184.10	1,747.8	2.1	3.5	1,883,721.81	2,778,157.73	36.176846	-107.646749
1,809.0	0.40	185.00	1,808.8	1.7	3.4	1,883,721.39	2,778,157.70	36.176845	-107.646749
1,870.0	0.40	182.40	1,869.8	1.3	3.4	1,883,720.96	2,778,157.67	36.176844	-107.646749
1,931.0	0.40	189.10	1,930.8	0.8	3.4	1,883,720.54	2,778,157.63	36.176842	-107.646749
1,993.0	0.40	165.70	1,992.8	0.4	3.4	1,883,720.12	2,778,157.65	36.176841	-107.646749
2,054.0	0.50	173.40	2,053.8	0.0	3.5	1,883,719.64	2,778,157.73	36.176840	-107.646749
2,116.0	0.60	168.70	2,115.8	-0.6	3.6	1,883,719.06	2,778,157.83	36.176838	-107.646748
2,177.0	0.60	180.10	2,176.8	-1.3	3.6	1,883,718.43	2,778,157.89	36.176837	-107.646748
2,239.0	0.50	179.70	2,238.8	-1.9	3.6	1,883,717.83	2,778,157.90	36.176835	-107.646748
2,300.0	0.50	177.90	2,299.8	-2.4	3.6	1,883,717.30	2,778,157.91	36.176834	-107.646748
2,362.0	0.50	181.50	2,361.8	-2.9	3.6	1,883,716.76	2,778,157.91	36.176832	-107.646748
2,423.0	0.50	177.10	2,422.8	-3.5	3.6	1,883,716.23	2,778,157.92	36.176831	-107.646748
2,485.0	0.40	137.90	2,484.8	-3.9	3.8	1,883,715.80	2,778,158.08	36.176829	-107.646747
2,546.0	0.90	67.90	2,545.8	-3.9	4.4	1,883,715.82	2,778,158.66	36.176829	-107.646745
2,608.0	1.10	36.20	2,607.8	-3.2	5.2	1,883,716.48	2,778,159.47	36.176831	-107.646743
2,669.0	1.00	5.50	2,668.8	-2.2	5.6	1,883,717.49	2,778,159.86	36.176834	-107.646741
2,731.0	0.30	304.40	2,730.8	-1.6	5.5	1,883,718.12	2,778,159.78	36.176836	-107.646742
2,792.0	0.70	291.10	2,791.8	-1.4	5.0	1,883,718.34	2,778,159.30	36.176836	-107.646743
2,853.0	0.90	282.30	2,852.8	-1.1	4.2	1,883,718.57	2,778,158.48	36.176837	-107.646746
2,917.0	0.90	288.80	2,916.8	-0.8	3.2	1,883,718.84	2,778,157.51	36.176838	-107.646749
2,980.0	0.90	284.20	2,979.8	-0.6	2.3	1,883,719.12	2,778,156.57	36.176839	-107.646752
3,043.0	0.90	279.50	3,042.8	-0.4	1.3	1,883,719.32	2,778,155.60	36.176839	-107.646756
3,106.0	1.10	286.10	3,105.8	-0.1	0.3	1,883,719.57	2,778,154.53	36.176840	-107.646759
3,170.0	0.40	207.30	3,169.8	-0.1	-0.4	1,883,719.54	2,778,153.84	36.176840	-107.646762
3,233.0	0.60	161.80	3,232.7	-0.7	-0.4	1,883,719.03	2,778,153.84	36.176838	-107.646762
3,296.0	0.50	158.70	3,295.7	-1.2	-0.2	1,883,718.46	2,778,154.04	36.176837	-107.646761
3,359.0	0.50	150.00	3,358.7	-1.7	0.0	1,883,717.97	2,778,154.28	36.176835	-107.646760
3,422.0	0.50	156.00	3,421.7	-2.2	0.3	1,883,717.48	2,778,154.53	36.176834	-107.646759
3,485.0	0.50	141.30	3,484.7	-2.7	0.5	1,883,717.01	2,778,154.82	36.176833	-107.646758
3,549.0	0.70	144.20	3,548.7	-3.2	0.9	1,883,716.48	2,778,155.22	36.176831	-107.646757
3,612.0	0.40	43.20	3,611.7	-3.4	1.3	1,883,716.33	2,778,155.60	36.176831	-107.646756
3,675.0	0.60	17.50	3,674.7	-2.9	1.6	1,883,716.80	2,778,155.84	36.176832	-107.646755
3,739.0	0.50	11.60	3,738.7	-2.3	1.7	1,883,717.40	2,778,156.00	36.176834	-107.646754
3,802.0	0.40	7.10	3,801.7	-1.8	1.8	1,883,717.89	2,778,156.08	36.176835	-107.646754
3,833.0	0.50	2.30	3,832.7	-1.6	1.8	1,883,718.13	2,778,156.10	36.176836	-107.646754
3,865.0	0.50	342.10	3,864.7	-1.3	1.8	1,883,718.40	2,778,156.06	36.176837	-107.646754
3,897.0	2.30	77.70	3,896.7	-1.0	2.4	1,883,718.67	2,778,156.65	36.176837	-107.646752
3,928.0	5.70	86.20	3,927.6	-0.8	4.5	1,883,718.91	2,778,158.79	36.176838	-107.646745
3,960.0	8.40	85.70	3,959.4	-0.5	8.4	1,883,719.20	2,778,162.71	36.176839	-107.646732
3,991.0	11.30	83.00	3,989.9	0.0	13.7	1,883,719.75	2,778,167.98	36.176840	-107.646714
4,023.0	13.80	81.30	4,021.2	1.0	20.6	1,883,720.72	2,778,174.86	36.176843	-107.646690
4,055.0	16.40	79.30	4,052.1	2.4	28.8	1,883,722.15	2,778,183.07	36.176847	-107.646663
4,086.0	18.70	77.40	4,081.6	4.3	38.0	1,883,724.07	2,778,192.22	36.176852	-107.646632
4,118.0	20.90	76.10	4,111.7	6.8	48.5	1,883,726.58	2,778,202.76	36.176859	-107.646596
4,149.0	23.30	76.10	4,140.4	9.6	59.8	1,883,729.40	2,778,214.08	36.176866	-107.646558
4,181.0	26.20	77.10	4,169.5	12.7	72.9	1,883,732.52	2,778,227.11	36.176875	-107.646513
4,212.0	28.60	79.60	4,197.0	15.6	86.8	1,883,735.42	2,778,241.07	36.176883	-107.646466
4,244.0	30.80	82.00	4,224.8	18.1	102.5	1,883,737.97	2,778,256.72	36.176890	-107.646413

Survey Report - Geographic

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Lybrook O35-2308 02H
Project:	San Juan County, NM	TVD Reference:	WELL @ 6876.0usft (Aztec)
Site:	S35-T23N-R8W	MD Reference:	WELL @ 6876.0usft (Aztec)
Well:	Lybrook O35-2308 02H	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
4,276.0	33.50	82.10	4,251.9	20.4	119.3	1,883,740.36	2,778,273.57	36.176896	-107.646356
4,307.0	36.70	80.70	4,277.3	23.1	137.0	1,883,743.07	2,778,291.19	36.176904	-107.646296
4,339.0	39.80	79.60	4,302.4	26.5	156.5	1,883,746.50	2,778,310.70	36.176913	-107.646230
4,370.0	42.60	79.70	4,325.7	30.2	176.6	1,883,750.21	2,778,330.78	36.176923	-107.646162
4,402.0	45.10	79.90	4,348.8	34.1	198.4	1,883,754.17	2,778,352.58	36.176934	-107.646088
4,434.0	47.30	79.20	4,370.9	38.3	221.1	1,883,758.41	2,778,375.29	36.176945	-107.646011
4,465.0	50.10	78.50	4,391.4	42.8	243.9	1,883,762.96	2,778,398.13	36.176958	-107.645934
4,497.0	53.40	78.50	4,411.2	47.8	268.6	1,883,768.01	2,778,422.74	36.176971	-107.645850
4,528.0	55.60	78.40	4,429.2	52.9	293.3	1,883,773.11	2,778,447.45	36.176985	-107.645766
4,560.0	57.80	78.20	4,446.8	58.3	319.5	1,883,778.59	2,778,473.63	36.177000	-107.645678
4,592.0	57.70	80.70	4,463.8	63.2	346.1	1,883,783.60	2,778,500.22	36.177014	-107.645588
4,610.0	57.00	83.00	4,473.6	65.4	361.1	1,883,785.77	2,778,515.22	36.177020	-107.645537
4,624.0	56.40	86.30	4,481.2	66.5	372.7	1,883,786.89	2,778,526.87	36.177023	-107.645497
4,654.0	55.80	89.00	4,498.0	67.5	397.6	1,883,787.96	2,778,551.73	36.177026	-107.645413
4,686.0	55.10	91.20	4,516.1	67.5	423.9	1,883,787.96	2,778,578.08	36.177025	-107.645324
4,718.0	54.50	95.30	4,534.6	66.0	450.0	1,883,786.54	2,778,604.19	36.177021	-107.645235
4,749.0	54.50	98.20	4,552.6	63.0	475.1	1,883,783.62	2,778,629.25	36.177013	-107.645150
4,781.0	55.70	100.70	4,570.9	58.7	501.0	1,883,779.36	2,778,655.14	36.177001	-107.645063
4,812.0	57.40	101.70	4,588.0	53.7	526.4	1,883,774.38	2,778,680.52	36.176988	-107.644977
4,844.0	58.50	103.90	4,605.0	47.7	552.8	1,883,768.42	2,778,706.98	36.176971	-107.644887
4,876.0	59.70	106.80	4,621.4	40.4	579.3	1,883,761.20	2,778,733.46	36.176951	-107.644797
4,907.0	60.70	110.70	4,636.8	31.8	604.7	1,883,752.60	2,778,758.95	36.176927	-107.644711
4,939.0	61.40	114.80	4,652.3	20.9	630.6	1,883,741.82	2,778,784.78	36.176898	-107.644624
4,970.0	61.70	119.00	4,667.1	8.6	654.9	1,883,729.54	2,778,809.10	36.176864	-107.644541
5,002.0	61.50	122.00	4,682.3	-5.7	679.1	1,883,715.30	2,778,833.38	36.176824	-107.644459
5,034.0	61.70	124.60	4,697.5	-21.1	702.6	1,883,699.89	2,778,856.93	36.176782	-107.644380
5,065.0	62.30	127.00	4,712.1	-37.2	724.8	1,883,683.93	2,778,879.16	36.176738	-107.644304
5,097.0	62.90	128.90	4,726.8	-54.6	747.2	1,883,666.50	2,778,901.59	36.176690	-107.644228
5,128.0	63.80	131.90	4,740.7	-72.6	768.3	1,883,648.58	2,778,922.72	36.176641	-107.644157
5,160.0	65.70	134.50	4,754.4	-92.4	789.4	1,883,628.81	2,778,943.85	36.176586	-107.644085
5,192.0	67.80	137.60	4,767.0	-113.6	809.8	1,883,607.68	2,778,964.29	36.176528	-107.644016
5,223.0	69.40	139.90	4,778.3	-135.3	828.8	1,883,586.02	2,778,983.36	36.176468	-107.643952
5,255.0	70.50	141.80	4,789.3	-158.6	847.8	1,883,562.74	2,779,002.38	36.176404	-107.643888
5,286.0	70.50	145.30	4,799.6	-182.1	865.2	1,883,539.28	2,779,019.78	36.176340	-107.643829
5,318.0	71.20	148.20	4,810.1	-207.3	881.7	1,883,514.03	2,779,036.40	36.176270	-107.643773
5,349.0	71.30	151.40	4,820.1	-232.7	896.5	1,883,488.69	2,779,051.21	36.176201	-107.643723
5,381.0	72.90	153.50	4,829.9	-259.7	910.6	1,883,461.72	2,779,065.34	36.176127	-107.643675
5,413.0	74.30	154.40	4,839.0	-287.3	924.1	1,883,434.17	2,779,078.88	36.176051	-107.643629
5,444.0	75.70	156.10	4,847.0	-314.5	936.6	1,883,407.00	2,779,091.46	36.175976	-107.643587
5,476.0	76.80	158.90	4,854.6	-343.2	948.5	1,883,378.31	2,779,103.41	36.175897	-107.643546
5,508.0	78.00	160.80	4,861.6	-372.5	959.2	1,883,349.02	2,779,114.22	36.175817	-107.643510
5,539.0	78.80	163.70	4,867.8	-401.4	968.5	1,883,320.12	2,779,123.53	36.175737	-107.643479
5,571.0	79.90	166.50	4,873.7	-431.8	976.6	1,883,289.74	2,779,131.68	36.175654	-107.643451
5,603.0	81.70	169.80	4,878.8	-462.7	983.1	1,883,258.85	2,779,138.22	36.175569	-107.643429
5,634.0	83.00	172.60	4,883.0	-493.1	987.8	1,883,228.48	2,779,142.98	36.175485	-107.643413
5,666.0	85.60	175.60	4,886.2	-524.8	991.0	1,883,196.82	2,779,146.31	36.175398	-107.643402
5,697.0	88.40	177.90	4,887.8	-555.7	992.8	1,883,165.93	2,779,148.12	36.175314	-107.643396
5,729.0	90.10	179.10	4,888.2	-587.7	993.6	1,883,133.94	2,779,149.02	36.175226	-107.643394
5,792.0	91.70	181.50	4,887.2	-650.6	993.3	1,883,070.96	2,779,148.81	36.175053	-107.643395
5,855.0	90.50	180.80	4,886.0	-713.6	992.0	1,883,007.98	2,779,147.67	36.174880	-107.643399
5,919.0	90.80	180.90	4,885.3	-777.6	991.1	1,882,943.99	2,779,146.84	36.174704	-107.643402
5,982.0	90.70	180.90	4,884.4	-840.6	990.1	1,882,881.00	2,779,145.97	36.174531	-107.643406
6,045.0	91.00	181.60	4,883.5	-903.6	988.7	1,882,818.02	2,779,144.72	36.174358	-107.643410
6,108.0	91.10	181.50	4,882.4	-966.5	987.0	1,882,755.05	2,779,143.14	36.174185	-107.643416
6,172.0	90.30	179.50	4,881.6	-1,030.5	986.5	1,882,691.06	2,779,142.70	36.174009	-107.643418

Survey Report - Geographic

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Lybrook O35-2308 02H
Project:	San Juan County, NM	TVD Reference:	WELL @ 6876.0usft (Aztec)
Site:	S35-T23N-R8W	MD Reference:	WELL @ 6876.0usft (Aztec)
Well:	Lybrook O35-2308 02H	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
6,235.0	90.60	180.20	4,881.1	-1,093.5	986.6	1,882,628.06	2,779,142.99	36.173836	-107.643417
6,298.0	90.50	180.00	4,880.5	-1,156.5	986.5	1,882,565.07	2,779,143.00	36.173663	-107.643418
6,361.0	91.30	180.50	4,879.5	-1,219.5	986.2	1,882,502.08	2,779,142.85	36.173490	-107.643419
6,424.0	91.20	181.00	4,878.1	-1,282.5	985.4	1,882,439.10	2,779,142.14	36.173317	-107.643421
6,487.0	91.20	181.30	4,876.8	-1,345.5	984.2	1,882,376.12	2,779,141.00	36.173144	-107.643426
6,550.0	90.80	181.60	4,875.7	-1,408.4	982.6	1,882,313.15	2,779,139.53	36.172971	-107.643431
6,614.0	90.30	181.20	4,875.1	-1,472.4	981.0	1,882,249.17	2,779,138.09	36.172795	-107.643436
6,677.0	90.40	181.00	4,874.7	-1,535.4	979.8	1,882,186.18	2,779,137.00	36.172622	-107.643441
6,740.0	90.90	180.60	4,874.0	-1,598.4	978.9	1,882,123.19	2,779,136.24	36.172449	-107.643444
6,803.0	90.90	180.10	4,873.0	-1,661.4	978.5	1,882,060.19	2,779,135.98	36.172276	-107.643445
6,867.0	91.20	180.80	4,871.8	-1,725.4	978.0	1,881,996.21	2,779,135.60	36.172100	-107.643447
6,930.0	90.60	180.80	4,870.8	-1,788.3	977.1	1,881,933.22	2,779,134.84	36.171927	-107.643450
6,993.0	90.90	179.50	4,870.0	-1,851.3	977.0	1,881,870.23	2,779,134.79	36.171754	-107.643450
7,056.0	90.80	179.40	4,869.1	-1,914.3	977.6	1,881,807.24	2,779,135.52	36.171581	-107.643448
7,120.0	90.70	179.10	4,868.2	-1,978.3	978.4	1,881,743.25	2,779,136.48	36.171405	-107.643445
7,183.0	90.80	178.70	4,867.4	-2,041.3	979.6	1,881,680.27	2,779,137.81	36.171232	-107.643441
7,246.0	90.20	180.60	4,866.9	-2,104.3	980.0	1,881,617.28	2,779,138.32	36.171059	-107.643440
7,309.0	90.10	180.50	4,866.7	-2,167.3	979.4	1,881,554.28	2,779,137.83	36.170886	-107.643442
7,372.0	91.40	181.20	4,865.9	-2,230.3	978.5	1,881,491.29	2,779,137.02	36.170713	-107.643445
7,435.0	91.20	180.10	4,864.4	-2,293.3	977.8	1,881,428.31	2,779,136.43	36.170540	-107.643448
7,498.0	91.10	180.30	4,863.2	-2,356.2	977.5	1,881,365.32	2,779,136.33	36.170367	-107.643448
7,561.0	90.70	179.60	4,862.2	-2,419.2	977.6	1,881,302.33	2,779,136.50	36.170194	-107.643448
7,625.0	90.60	179.30	4,861.5	-2,483.2	978.2	1,881,238.34	2,779,137.24	36.170018	-107.643446
7,688.0	91.60	180.30	4,860.2	-2,546.2	978.4	1,881,175.36	2,779,137.58	36.169845	-107.643445
7,751.0	91.90	180.30	4,858.3	-2,609.2	978.1	1,881,112.39	2,779,137.37	36.169672	-107.643446
7,814.0	91.90	179.70	4,856.2	-2,672.1	978.1	1,881,049.42	2,779,137.50	36.169499	-107.643446
7,877.0	91.00	180.80	4,854.6	-2,735.1	977.8	1,880,986.44	2,779,137.34	36.169326	-107.643447
7,939.0	91.10	180.20	4,853.5	-2,797.1	977.3	1,880,924.47	2,779,136.92	36.169156	-107.643449
8,003.0	90.20	180.80	4,852.8	-2,861.1	976.7	1,880,860.48	2,779,136.48	36.168980	-107.643451
8,066.0	90.30	182.30	4,852.5	-2,924.1	975.0	1,880,797.50	2,779,134.90	36.168807	-107.643457
8,129.0	90.60	182.10	4,852.0	-2,987.0	972.6	1,880,734.54	2,779,132.60	36.168634	-107.643465
8,192.0	90.20	182.30	4,851.6	-3,050.0	970.2	1,880,671.59	2,779,130.31	36.168461	-107.643473
8,255.0	91.80	183.60	4,850.5	-3,112.9	966.9	1,880,608.68	2,779,127.19	36.168289	-107.643484
8,319.0	91.90	183.00	4,848.4	-3,176.7	963.3	1,880,544.81	2,779,123.63	36.168113	-107.643497
8,382.0	90.60	181.60	4,847.0	-3,239.7	960.7	1,880,481.87	2,779,121.22	36.167940	-107.643505
8,445.0	89.90	181.10	4,846.8	-3,302.6	959.2	1,880,418.89	2,779,119.86	36.167767	-107.643510
8,508.0	89.60	180.00	4,847.0	-3,365.6	958.6	1,880,355.89	2,779,119.37	36.167594	-107.643512
8,571.0	89.50	180.00	4,847.5	-3,428.6	958.6	1,880,292.90	2,779,119.49	36.167421	-107.643512
8,634.0	90.70	179.80	4,847.4	-3,491.6	958.7	1,880,229.90	2,779,119.73	36.167248	-107.643512
8,698.0	90.80	179.90	4,846.6	-3,555.6	958.9	1,880,165.90	2,779,120.02	36.167072	-107.643511
8,761.0	91.10	180.90	4,845.5	-3,618.6	958.5	1,880,102.92	2,779,119.70	36.166899	-107.643513
8,824.0	91.60	181.00	4,844.0	-3,681.6	957.4	1,880,039.94	2,779,118.77	36.166726	-107.643517
8,887.0	91.70	180.50	4,842.2	-3,744.6	956.6	1,879,976.97	2,779,118.07	36.166553	-107.643519
8,950.0	90.00	180.30	4,841.3	-3,807.5	956.2	1,879,913.98	2,779,117.75	36.166380	-107.643521
9,013.0	90.70	180.80	4,840.9	-3,870.5	955.6	1,879,850.98	2,779,117.27	36.166207	-107.643523
9,077.0	91.20	180.50	4,839.8	-3,934.5	954.8	1,879,787.00	2,779,116.67	36.166031	-107.643525
9,140.0	91.50	180.10	4,838.4	-3,997.5	954.5	1,879,724.01	2,779,116.46	36.165858	-107.643526
9,203.0	92.10	180.30	4,836.4	-4,060.5	954.3	1,879,661.05	2,779,116.36	36.165685	-107.643527
9,266.0	91.10	180.10	4,834.6	-4,123.5	954.1	1,879,598.07	2,779,116.26	36.165512	-107.643528
9,330.0	89.80	180.60	4,834.1	-4,187.4	953.7	1,879,534.08	2,779,115.99	36.165337	-107.643529
9,393.0	90.40	180.70	4,834.0	-4,250.4	953.0	1,879,471.08	2,779,115.40	36.165164	-107.643532
9,456.0	90.20	181.80	4,833.7	-4,313.4	951.6	1,879,408.09	2,779,114.14	36.164991	-107.643536
9,519.0	89.90	180.60	4,833.6	-4,376.4	950.3	1,879,345.11	2,779,112.95	36.164818	-107.643541
9,582.0	90.80	181.30	4,833.2	-4,439.4	949.2	1,879,282.12	2,779,112.02	36.164645	-107.643544
9,645.0	91.40	181.70	4,832.0	-4,502.4	947.6	1,879,219.15	2,779,110.50	36.164472	-107.643550

Survey Report - Geographic

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Lybrook O35-2308 02H
Project:	San Juan County, NM	TVD Reference:	WELL @ 6876.0usft (Aztec)
Site:	S35-T23N-R8W	MD Reference:	WELL @ 6876.0usft (Aztec)
Well:	Lybrook O35-2308 02H	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
9,708.0	91.20	180.90	4,830.6	-4,565.3	946.1	1,879,156.18	2,779,109.19	36.164299	-107.643555
9,772.0	91.40	181.00	4,829.2	-4,629.3	945.1	1,879,092.20	2,779,108.25	36.164123	-107.643558
9,835.0	91.90	180.90	4,827.3	-4,692.3	944.0	1,879,029.23	2,779,107.33	36.163950	-107.643562
9,898.0	89.90	178.30	4,826.4	-4,755.3	944.5	1,878,966.25	2,779,107.89	36.163777	-107.643561
9,961.0	90.40	177.90	4,826.2	-4,818.2	946.6	1,878,903.29	2,779,110.10	36.163604	-107.643553
10,024.0	91.20	177.20	4,825.3	-4,881.2	949.3	1,878,840.36	2,779,112.91	36.163431	-107.643544
10,088.0	91.70	177.80	4,823.7	-4,945.1	952.1	1,878,776.45	2,779,115.82	36.163255	-107.643535
10,151.0	91.30	177.60	4,822.0	-5,008.0	954.6	1,878,713.53	2,779,118.47	36.163083	-107.643526
10,214.0	90.50	178.30	4,821.0	-5,071.0	956.8	1,878,650.58	2,779,120.85	36.162910	-107.643519
10,277.0	91.10	179.30	4,820.2	-5,133.9	958.2	1,878,587.60	2,779,122.29	36.162737	-107.643514
10,350.0	92.60	180.40	4,817.8	-5,206.9	958.3	1,878,514.63	2,779,122.62	36.162536	-107.643514
Last CES Survey @ 10,350' MD									
10,400.0	92.60	180.40	4,815.5	-5,256.8	958.0	1,878,464.70	2,779,122.37	36.162399	-107.643515
PTB @ 10,400'									

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									
Lybrook O35-2308 02H I	0.00	0.00	4,814.4	-5,278.3	943.3	1,878,443.24	2,779,107.71	36.162340	-107.643565
- actual wellpath misses target center by 26.0usft at 10400.0usft MD (4815.5 TVD, -5256.8 N, 958.0 E)									
- Point									
Lybrook O35-2308 02H I	0.00	0.00	4,879.9	-589.7	999.2	1,883,131.91	2,779,154.60	36.175220	-107.643375
- actual wellpath misses target center by 10.0usft at 5731.1usft MD (4888.2 TVD, -589.8 N, 993.7 E)									
- Point									

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
10,350.0	4,817.8	-5,206.9	958.3	Last CES Survey @ 10,350' MD
10,400.0	4,815.5	-5,256.8	958.0	PTB @ 10,400'

Checked By: _____ Approved By: _____ Date: _____