

DISTRICT I
1625 N. French Dr., Hobbs, N.M. 88240
Phone: (575) 393-8161 Fax: (575) 393-0720

DISTRICT II
811 S. First St., Artesia, N.M. 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410
Phone: (505) 334-8178 Fax: (505) 334-6170

DISTRICT IV
1220 S. St. Francis Dr., 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

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit one copy to appropriate
District Office

☐ AMENDED REPORT
☒ AS-DRILLED

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-043-21220	² Pool Code 42289	³ Pool Name Lybrook Gallup
⁴ Property Code 313351	⁵ Property Name LYBROOK P03-2206	⁶ Well Number 02H
⁷ GRID No. 282327	⁸ Operator Name ENCANA OIL & GAS (USA) INC.	⁹ Elevation 7124.1'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	WEST/West line	County
P	3	22N	6W		439'	SOUTH	1192'	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	WEST/West line	County
H	15	22N	6W		2344'	NORTH	753'	EAST	SANDOVAL

¹² Dedicated Acres 160.00 ACRES E/2 E/2 SEC. 10 80.00 ACRES E/2 NE/4 SEC. 15	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
---	-------------------------------	----------------------------------	-------------------------

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

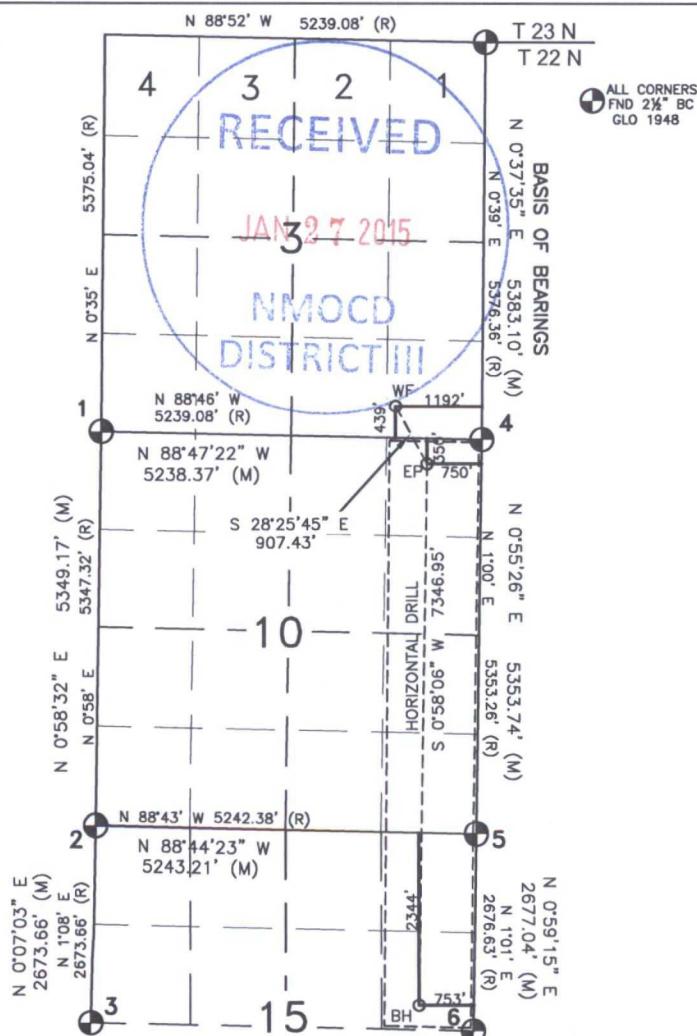
16

- LAT. 36.160110° N (NAD83)
LONG. 107.464533° W (NAD83)
LAT. 36.160095° N (NAD27)
LONG. 107.464533° W (NAD27)
- LAT. 36.145423° N (NAD83)
LONG. 107.464846° W (NAD83)
LAT. 36.145408° N (NAD27)
LONG. 107.464242° W (NAD27)
- LAT. 36.138078° N (NAD83)
LONG. 107.465026° W (NAD83)
LAT. 36.138063° N (NAD27)
LONG. 107.464422° W (NAD27)
- LAT. 36.159800° N (NAD83)
LONG. 107.446799° W (NAD83)
LAT. 36.159785° N (NAD27)
LONG. 107.446195° W (NAD27)
- LAT. 36.145101° N (NAD83)
LONG. 107.447099° W (NAD83)
LAT. 36.145086° N (NAD27)
LONG. 107.446495° W (NAD27)
- LAT. 36.137751° N (NAD83)
LONG. 107.447260° W (NAD83)
LAT. 36.137736° N (NAD27)
LONG. 107.446656° W (NAD27)

AB - WELL HEAD
LAT. 36.161076° N (NAD83)
LONG. 107.450817° W (NAD83)
LAT. 36.161061° N (NAD27)
LONG. 107.450213° W (NAD27)

AB - ENTRY POINT
LAT. 36.158884° N (NAD83)
LONG. 107.449356° W (NAD83)
LAT. 36.158869° N (NAD27)
LONG. 107.448752° W (NAD27)

AB - BOTTOM HOLE
LAT. 36.138713° N (NAD83)
LONG. 107.449787° W (NAD83)
LAT. 36.138698° N (NAD27)
LONG. 107.449183° W (NAD27)



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: *Katie Wegner* Date: 1/20/15

Printed Name: Katie Wegner

E-mail Address: Katie.wegner@encana.com

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 OF ASBUILT SURVEY - DECEMBER 30, 2014
DATE OF SURVEY - SEPTEMBER 9, 2013

Date of Survey

Signature and Seal of Professional Surveyor:

Signature: *David Russell*
Seal: DAVID R. RUSSELL, NEW MEXICO, 10201, REGISTERED PROFESSIONAL LAND SURVEYOR
Certificate Number: 10201

DEVIATION SURVEYS
Lybrook P03-2206 02H
30-043-21220

CONFIDENTIAL

MD (Feet)	Inclination (Degree)
309'	0.67
633'	0.44
942'	1.29
1246'	0.19
1548'	0.46
1852'	0.17
2160'	0.35
2476'	0.89
2792'	0.36
3108'	0.34
3360'	0.74
3676'	0.29
3992'	1.07
4308'	0.43
4624'	0.61
4813'	10.01



OPERATOR CERTIFICATION

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

Cristi Bauer, Operations Technician

Date

ACKNOWLEDGMENT

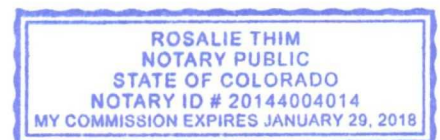
State of Colorado
City and County of Denver

This instrument was acknowledged before me on this 23rd day of January, 2014 by Cristi Bauer as Operations Technician of Encana Oil & Gas (USA) Inc., authorized agent for Encana Oil & Gas (USA) Inc., on behalf of said corporation.

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

Notary Public: Rosalie Thim

My Commission Expires: 1/29/18





EnCana Oil & Gas (USA) Inc

Sandoval County, NM
S3-T22N-R6W
Lybrook P03-2206 02H

HZ

Design: HZ



Survey Report - Geographic

11 December, 2014



www.scientificdrilling.com





SDI
Survey Report - Geographic



Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Lybrook P03-2206 02H
Project:	Sandoval County, NM	TVD Reference:	GL 7124' & RKB 15' @ 7139.00ft (Aztec 920)
Site:	S3-T22N-R6W	MD Reference:	GL 7124' & RKB 15' @ 7139.00ft (Aztec 920)
Well:	Lybrook P03-2206 02H	North Reference:	True
Wellbore:	HZ	Survey Calculation Method:	Minimum Curvature
Design:	HZ	Database:	Grand Junction District

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	S3-T22N-R6W				
Site Position:		Northing:	1,880,089.04 usft	Latitude:	36.1610750
From:	Lat/Long	Easting:	1,285,921.40 usft	Longitude:	-107.4509200
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	-0.71 °

Well	Lybrook P03-2206 02H					
Well Position	+N/-S	0.00 ft	Northing:	1,880,088.66 usft	Latitude:	36.1610750
	+E/-W	0.00 ft	Easting:	1,285,951.51 usft	Longitude:	-107.4508180
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	7,124.00 ft

Wellbore	HZ				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2/6/2014	9.37	62.96	50,177

Design	HZ				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.00	0.00	0.00	180.97	

Survey Program	Date 12/11/2014				
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
153.00	4,971.00	Survey #1 - Surface MWD Survey (HZ)	SDI MWD	SDI MWD - Standard ver 1.0.1	
5,003.00	6,077.00	Survey #2 - Curve MWD Survey (HZ)	SDI MWD	SDI MWD - Standard ver 1.0.1	
6,109.00	13,367.00	Survey #3 - Lateral MWD Survey (HZ)	SDI MWD	SDI MWD - Standard ver 1.0.1	

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
0.00	0.00	0.00	0.00	0.00	0.00	1,880,088.66	1,285,951.51	36.1610750	-107.4508180	
153.00	0.36	299.71	153.00	0.24	-0.42	1,880,088.91	1,285,951.09	36.1610756	-107.4508195	
183.00	0.69	320.10	183.00	0.42	-0.62	1,880,089.09	1,285,950.90	36.1610761	-107.4508201	
246.00	0.39	299.18	245.99	0.82	-1.05	1,880,089.49	1,285,950.47	36.1610772	-107.4508216	
309.00	0.67	296.82	308.99	1.09	-1.56	1,880,089.77	1,285,949.96	36.1610780	-107.4508233	
373.00	0.68	316.15	372.99	1.53	-2.16	1,880,090.22	1,285,949.37	36.1610792	-107.4508254	
436.00	0.46	294.20	435.98	1.91	-2.65	1,880,090.60	1,285,948.88	36.1610802	-107.4508270	
483.00	0.66	294.74	482.98	2.10	-3.07	1,880,090.80	1,285,948.47	36.1610807	-107.4508284	
569.00	0.24	289.03	568.98	2.36	-3.69	1,880,091.07	1,285,947.85	36.1610815	-107.4508305	
633.00	0.44	302.28	632.98	2.54	-4.02	1,880,091.25	1,285,947.52	36.1610819	-107.4508317	



Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Lybrook P03-2206 02H
Project:	Sandoval County, NM	TVD Reference:	GL 7124' & RKB 15' @ 7139.00ft (Aztec 920)
Site:	S3-T22N-R6W	MD Reference:	GL 7124' & RKB 15' @ 7139.00ft (Aztec 920)
Well:	Lybrook P03-2206 02H	North Reference:	True
Wellbore:	HZ	Survey Calculation Method:	Minimum Curvature
Design:	HZ	Database:	Grand Junction District

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
696.00	0.93	125.75	695.98	2.37	-3.81	1,880,091.08	1,285,947.72	36.1610815	-107.4508310
759.00	1.53	140.12	758.96	1.42	-2.86	1,880,090.12	1,285,948.67	36.1610789	-107.4508277
822.00	1.62	150.48	821.94	0.00	-1.88	1,880,088.69	1,285,949.63	36.1610750	-107.4508244
882.00	0.94	98.33	881.92	-0.81	-0.97	1,880,087.87	1,285,950.52	36.1610728	-107.4508213
942.00	1.29	103.00	941.91	-1.03	0.17	1,880,087.63	1,285,951.66	36.1610722	-107.4508175
1,004.00	0.97	102.53	1,003.90	-1.30	1.36	1,880,087.35	1,285,952.85	36.1610714	-107.4508134
1,064.00	0.85	68.89	1,063.89	-1.25	2.28	1,880,087.38	1,285,953.76	36.1610715	-107.4508103
1,125.00	0.46	331.39	1,124.89	-0.87	2.58	1,880,087.76	1,285,954.07	36.1610726	-107.4508093
1,186.00	1.20	324.05	1,185.88	-0.14	2.09	1,880,088.50	1,285,953.59	36.1610746	-107.4508110
1,246.00	0.19	58.91	1,245.88	0.42	1.80	1,880,089.06	1,285,953.31	36.1610761	-107.4508119
1,306.00	0.11	135.52	1,305.88	0.43	1.93	1,880,089.07	1,285,953.44	36.1610762	-107.4508115
1,366.00	0.07	294.96	1,365.88	0.40	1.94	1,880,089.04	1,285,953.45	36.1610761	-107.4508115
1,427.00	0.13	53.95	1,426.88	0.46	1.96	1,880,089.10	1,285,953.47	36.1610762	-107.4508114
1,487.00	0.38	20.33	1,486.88	0.69	2.08	1,880,089.32	1,285,953.60	36.1610769	-107.4508110
1,548.00	0.46	359.91	1,547.88	1.12	2.15	1,880,089.76	1,285,953.67	36.1610781	-107.4508108
1,608.00	0.12	57.81	1,607.88	1.40	2.21	1,880,090.03	1,285,953.73	36.1610788	-107.4508106
1,669.00	0.35	4.78	1,668.88	1.62	2.28	1,880,090.25	1,285,953.80	36.1610794	-107.4508103
1,730.00	0.20	358.18	1,729.88	1.91	2.29	1,880,090.54	1,285,953.82	36.1610802	-107.4508103
1,791.00	0.52	315.03	1,790.87	2.21	2.09	1,880,090.85	1,285,953.62	36.1610810	-107.4508110
1,852.00	0.17	340.07	1,851.87	2.49	1.86	1,880,091.13	1,285,953.40	36.1610818	-107.4508117
1,913.00	0.62	5.80	1,912.87	2.90	1.86	1,880,091.54	1,285,953.41	36.1610830	-107.4508117
1,973.00	0.38	26.17	1,972.87	3.41	1.98	1,880,092.04	1,285,953.53	36.1610843	-107.4508113
2,034.00	0.39	27.05	2,033.87	3.77	2.17	1,880,092.41	1,285,953.72	36.1610853	-107.4508107
2,097.00	0.28	331.37	2,096.87	4.10	2.19	1,880,092.73	1,285,953.75	36.1610862	-107.4508106
2,160.00	0.35	333.64	2,159.87	4.41	2.03	1,880,093.04	1,285,953.59	36.1610871	-107.4508112
2,223.00	0.53	333.15	2,222.86	4.84	1.82	1,880,093.48	1,285,953.38	36.1610883	-107.4508119
2,287.00	0.69	180.14	2,286.86	4.72	1.68	1,880,093.36	1,285,953.25	36.1610879	-107.4508123
2,350.00	0.96	189.81	2,349.86	3.82	1.59	1,880,092.46	1,285,953.14	36.1610855	-107.4508127
2,413.00	0.71	162.96	2,412.85	2.93	1.62	1,880,091.57	1,285,953.16	36.1610830	-107.4508126
2,476.00	0.89	159.53	2,475.84	2.09	1.90	1,880,090.73	1,285,953.43	36.1610807	-107.4508116
2,539.00	0.84	197.66	2,538.84	1.20	1.93	1,880,089.83	1,285,953.45	36.1610783	-107.4508115
2,602.00	0.78	174.02	2,601.83	0.33	1.84	1,880,088.97	1,285,953.35	36.1610759	-107.4508118
2,666.00	0.78	188.26	2,665.82	-0.54	1.82	1,880,088.10	1,285,953.32	36.1610735	-107.4508119
2,729.00	0.26	209.14	2,728.82	-1.09	1.69	1,880,087.56	1,285,953.18	36.1610720	-107.4508123
2,792.00	0.36	254.02	2,791.82	-1.26	1.43	1,880,087.38	1,285,952.92	36.1610715	-107.4508132
2,855.00	0.44	293.25	2,854.82	-1.22	1.02	1,880,087.43	1,285,952.51	36.1610716	-107.4508146
2,918.00	0.44	297.82	2,917.82	-1.02	0.58	1,880,087.64	1,285,952.07	36.1610722	-107.4508161
2,981.00	0.35	291.14	2,980.82	-0.83	0.19	1,880,087.83	1,285,951.68	36.1610727	-107.4508174
3,045.00	0.44	260.03	3,044.81	-0.80	-0.24	1,880,087.86	1,285,951.26	36.1610728	-107.4508189
3,108.00	0.34	225.72	3,107.81	-0.98	-0.61	1,880,087.69	1,285,950.88	36.1610723	-107.4508201
3,171.00	0.44	245.17	3,170.81	-1.21	-0.96	1,880,087.47	1,285,950.53	36.1610717	-107.4508213
3,234.00	0.26	208.08	3,233.81	-1.44	-1.25	1,880,087.24	1,285,950.24	36.1610710	-107.4508223
3,297.00	0.50	236.10	3,296.81	-1.72	-1.55	1,880,086.97	1,285,949.94	36.1610703	-107.4508233
3,360.00	0.74	221.23	3,359.81	-2.18	-2.04	1,880,086.51	1,285,949.44	36.1610690	-107.4508250
3,423.00	0.42	200.69	3,422.80	-2.70	-2.39	1,880,086.00	1,285,949.08	36.1610676	-107.4508261
3,486.00	0.35	223.90	3,485.80	-3.05	-2.61	1,880,085.64	1,285,948.86	36.1610666	-107.4508269
3,550.00	0.17	194.07	3,549.80	-3.29	-2.77	1,880,085.41	1,285,948.70	36.1610660	-107.4508274
3,613.00	0.40	273.50	3,612.80	-3.36	-3.01	1,880,085.34	1,285,948.46	36.1610657	-107.4508282
3,676.00	0.29	250.53	3,675.80	-3.40	-3.38	1,880,085.30	1,285,948.09	36.1610656	-107.4508295
3,739.00	0.95	28.23	3,738.80	-3.00	-3.28	1,880,085.71	1,285,948.19	36.1610668	-107.4508292
3,802.00	0.71	52.58	3,801.79	-2.30	-2.72	1,880,086.40	1,285,948.75	36.1610687	-107.4508273
3,866.00	0.78	23.62	3,865.78	-1.66	-2.23	1,880,087.03	1,285,949.25	36.1610704	-107.4508256
3,929.00	0.90	17.52	3,928.78	-0.79	-1.91	1,880,087.89	1,285,949.58	36.1610728	-107.4508245
3,992.00	1.07	22.31	3,991.77	0.22	-1.54	1,880,088.91	1,285,949.97	36.1610756	-107.4508233
4,055.00	0.67	35.38	4,054.76	1.07	-1.11	1,880,089.74	1,285,950.41	36.1610779	-107.4508218



SDI
Survey Report - Geographic



Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Lybrook P03-2206 02H
Project:	Sandoval County, NM	TVD Reference:	GL 7124' & RKB 15' @ 7139.00ft (Aztec 920)
Site:	S3-T22N-R6W	MD Reference:	GL 7124' & RKB 15' @ 7139.00ft (Aztec 920)
Well:	Lybrook P03-2206 02H	North Reference:	True
Wellbore:	HZ	Survey Calculation Method:	Minimum Curvature
Design:	HZ	Database:	Grand Junction District

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
4,118.00	0.60	54.86	4,117.76	1.56	-0.62	1,880,090.23	1,285,950.90	36.1610793	-107.4508202
4,181.00	0.56	62.29	4,180.75	1.89	-0.08	1,880,090.55	1,285,951.45	36.1610802	-107.4508183
4,245.00	0.41	31.37	4,244.75	2.23	0.32	1,880,090.89	1,285,951.85	36.1610811	-107.4508170
4,308.00	0.43	71.14	4,307.75	2.50	0.66	1,880,091.16	1,285,952.19	36.1610818	-107.4508158
4,371.00	0.45	56.89	4,370.75	2.71	1.09	1,880,091.36	1,285,952.63	36.1610824	-107.4508144
4,434.00	0.18	81.69	4,433.75	2.86	1.39	1,880,091.51	1,285,952.93	36.1610828	-107.4508133
4,498.00	0.05	1.27	4,497.75	2.90	1.49	1,880,091.55	1,285,953.03	36.1610830	-107.4508130
4,561.00	0.36	110.89	4,560.75	2.86	1.68	1,880,091.50	1,285,953.22	36.1610828	-107.4508124
4,624.00	0.61	158.02	4,623.74	2.48	1.99	1,880,091.12	1,285,953.53	36.1610818	-107.4508113
4,687.00	0.59	204.43	4,686.74	1.87	1.98	1,880,090.51	1,285,953.51	36.1610801	-107.4508113
4,721.00	1.57	162.40	4,720.74	1.27	2.05	1,880,089.91	1,285,953.57	36.1610785	-107.4508111
4,750.00	4.11	151.03	4,749.70	-0.02	2.67	1,880,088.61	1,285,954.18	36.1610749	-107.4508090
4,784.00	7.29	147.62	4,783.53	-2.91	4.42	1,880,085.70	1,285,955.89	36.1610670	-107.4508031
4,813.00	10.01	143.10	4,812.19	-6.48	6.92	1,880,082.10	1,285,958.34	36.1610572	-107.4507946
4,847.00	13.13	142.30	4,845.50	-11.90	11.05	1,880,076.63	1,285,962.41	36.1610423	-107.4507806
4,877.00	15.68	142.24	4,874.55	-17.80	15.62	1,880,070.67	1,285,966.91	36.1610261	-107.4507651
4,910.00	18.37	145.33	4,906.10	-25.60	21.31	1,880,062.80	1,285,972.50	36.1610047	-107.4507459
4,940.00	20.86	145.00	4,934.36	-33.87	27.07	1,880,054.46	1,285,978.15	36.1609820	-107.4507264
4,971.00	22.86	143.22	4,963.13	-43.21	33.84	1,880,045.04	1,285,984.81	36.1609563	-107.4507034
5,003.00	24.84	142.22	4,992.40	-53.50	41.68	1,880,034.65	1,285,992.52	36.1609280	-107.4506769
First SDI Curve MWD Survey									
5,035.00	28.33	140.90	5,021.01	-64.71	50.59	1,880,023.33	1,286,001.29	36.1608972	-107.4506467
5,066.00	32.17	139.90	5,047.78	-76.74	60.54	1,880,011.18	1,286,011.10	36.1608642	-107.4506130
5,098.00	36.17	138.36	5,074.26	-90.32	72.31	1,879,997.46	1,286,022.69	36.1608269	-107.4505731
5,129.00	39.78	137.91	5,098.69	-104.52	85.04	1,879,983.10	1,286,035.25	36.1607879	-107.4505300
5,161.00	43.65	138.75	5,122.57	-120.42	99.19	1,879,967.02	1,286,049.20	36.1607442	-107.4504821
5,193.00	45.75	139.35	5,145.31	-137.43	113.94	1,879,949.84	1,286,063.74	36.1606975	-107.4504321
5,224.00	47.62	138.71	5,166.58	-154.45	128.73	1,879,932.63	1,286,078.31	36.1606507	-107.4503820
5,256.00	49.55	137.48	5,187.75	-172.31	144.76	1,879,914.58	1,286,094.12	36.1606017	-107.4503277
5,287.00	51.37	137.18	5,207.48	-189.89	160.96	1,879,896.80	1,286,110.11	36.1605534	-107.4502728
5,319.00	52.67	138.30	5,227.17	-208.55	177.92	1,879,877.92	1,286,126.83	36.1605021	-107.4502154
5,350.00	54.64	141.00	5,245.55	-227.58	194.08	1,879,858.70	1,286,142.76	36.1604499	-107.4501606
5,382.00	56.47	144.27	5,263.65	-248.56	210.09	1,879,837.53	1,286,158.50	36.1603922	-107.4501064
5,415.00	58.92	147.61	5,281.29	-271.66	225.69	1,879,814.23	1,286,173.82	36.1603288	-107.4500536
5,446.00	59.62	148.93	5,297.13	-294.33	239.71	1,879,791.39	1,286,187.55	36.1602665	-107.4500061
5,478.00	59.97	148.58	5,313.23	-317.97	254.05	1,879,767.57	1,286,201.60	36.1602016	-107.4499575
5,510.00	61.03	149.02	5,328.99	-341.80	268.48	1,879,743.57	1,286,215.73	36.1601361	-107.4499087
5,541.00	62.61	150.25	5,343.63	-365.37	282.29	1,879,719.83	1,286,229.25	36.1600714	-107.4498619
5,573.00	64.63	151.57	5,357.84	-390.42	296.22	1,879,694.61	1,286,242.88	36.1600026	-107.4498147
5,604.00	67.18	151.92	5,370.50	-415.35	309.62	1,879,669.52	1,286,255.96	36.1599341	-107.4497693
5,636.00	70.00	152.80	5,382.18	-441.74	323.43	1,879,642.96	1,286,269.45	36.1598616	-107.4497225
5,667.00	72.46	153.15	5,392.15	-467.88	336.77	1,879,616.65	1,286,282.46	36.1597898	-107.4496773
5,699.00	74.66	155.00	5,401.21	-495.48	350.18	1,879,588.89	1,286,295.53	36.1597140	-107.4496319
5,731.00	75.80	156.93	5,409.37	-523.74	362.78	1,879,560.47	1,286,307.78	36.1596364	-107.4495892
5,762.00	77.91	158.07	5,416.42	-551.63	374.33	1,879,532.45	1,286,318.99	36.1595598	-107.4495501
5,793.00	79.76	159.66	5,422.42	-580.00	385.30	1,879,503.95	1,286,329.60	36.1594819	-107.4495130
5,825.00	80.99	161.94	5,427.77	-609.79	395.67	1,879,474.03	1,286,339.60	36.1594000	-107.4494778
5,856.00	82.31	163.87	5,432.27	-639.10	404.69	1,879,444.60	1,286,348.26	36.1593195	-107.4494473
5,887.00	83.27	167.13	5,436.17	-668.87	412.38	1,879,414.74	1,286,355.58	36.1592377	-107.4494212
5,919.00	84.94	168.80	5,439.45	-700.00	419.02	1,879,383.53	1,286,361.83	36.1591522	-107.4493987
5,951.00	86.79	170.99	5,441.76	-731.42	424.62	1,879,352.05	1,286,367.04	36.1590659	-107.4493798
5,982.00	87.14	173.28	5,443.40	-762.09	428.85	1,879,321.33	1,286,370.90	36.1589817	-107.4493654
5,997.68	87.06	174.70	5,444.19	-777.66	430.49	1,879,305.74	1,286,372.35	36.1589389	-107.4493599
6,014.00	86.97	176.18	5,445.04	-793.90	431.79	1,879,289.48	1,286,373.44	36.1588943	-107.4493555
6,045.00	87.23	178.46	5,446.61	-824.83	433.24	1,879,258.54	1,286,374.51	36.1588094	-107.4493506



SDI
Survey Report - Geographic



Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Lybrook P03-2206 02H
Project:	Sandoval County, NM	TVD Reference:	GL 7124' & RKB 15' @ 7139.00ft (Aztec 920)
Site:	S3-T22N-R6W	MD Reference:	GL 7124' & RKB 15' @ 7139.00ft (Aztec 920)
Well:	Lybrook P03-2206 02H	North Reference:	True
Wellbore:	HZ	Survey Calculation Method:	Minimum Curvature
Design:	HZ	Database:	Grand Junction District

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
6,077.00	88.81	180.31	5,447.72	-856.81	433.58	1,879,226.56	1,286,374.45	36.1587215	-107.4493494
Last SDI Curve MWD Survey									
6,109.00	90.66	181.01	5,447.87	-888.80	433.21	1,879,194.57	1,286,373.69	36.1586336	-107.4493507
First SDI Lateral MWD Survey									
6,172.00	91.71	181.19	5,446.56	-951.78	432.00	1,879,131.62	1,286,371.70	36.1584607	-107.4493548
6,235.00	92.42	181.36	5,444.29	-1,014.72	430.60	1,879,068.70	1,286,369.52	36.1582878	-107.4493595
6,298.00	92.07	181.45	5,441.83	-1,077.65	429.06	1,879,005.79	1,286,367.20	36.1581149	-107.4493648
6,361.00	91.10	181.80	5,440.08	-1,140.60	427.27	1,878,942.87	1,286,364.64	36.1579420	-107.4493708
6,425.00	90.31	181.80	5,439.30	-1,204.56	425.26	1,878,878.93	1,286,361.84	36.1577663	-107.4493776
6,488.00	90.13	181.72	5,439.05	-1,267.53	423.33	1,878,815.99	1,286,359.12	36.1575933	-107.4493842
6,551.00	90.22	181.28	5,438.86	-1,330.51	421.68	1,878,753.04	1,286,356.69	36.1574204	-107.4493898
6,615.00	90.66	181.63	5,438.37	-1,394.49	420.05	1,878,689.09	1,286,354.28	36.1572446	-107.4493953
6,678.00	90.75	182.42	5,437.59	-1,457.44	417.83	1,878,626.16	1,286,351.27	36.1570717	-107.4494028
6,741.00	90.92	182.33	5,436.68	-1,520.38	415.22	1,878,563.26	1,286,347.89	36.1568988	-107.4494117
6,804.00	90.31	182.16	5,436.00	-1,583.33	412.75	1,878,500.35	1,286,344.64	36.1567259	-107.4494200
6,867.00	90.40	180.93	5,435.61	-1,646.31	411.05	1,878,437.40	1,286,342.16	36.1565529	-107.4494258
6,931.00	90.75	180.49	5,434.97	-1,710.30	410.26	1,878,373.43	1,286,340.58	36.1563772	-107.4494285
6,994.00	90.66	181.28	5,434.19	-1,773.29	409.28	1,878,310.45	1,286,338.83	36.1562042	-107.4494318
7,057.00	91.10	181.36	5,433.23	-1,836.26	407.83	1,878,247.50	1,286,336.60	36.1560312	-107.4494367
7,120.00	91.71	181.19	5,431.68	-1,899.23	406.43	1,878,184.56	1,286,334.42	36.1558582	-107.4494415
7,183.00	91.10	181.54	5,430.14	-1,962.19	404.93	1,878,121.62	1,286,332.14	36.1556853	-107.4494465
7,247.00	89.52	179.96	5,429.79	-2,026.18	404.09	1,878,057.65	1,286,330.51	36.1555095	-107.4494494
7,310.00	89.52	179.08	5,430.32	-2,089.17	404.62	1,877,994.65	1,286,330.26	36.1553365	-107.4494476
7,373.00	90.22	178.99	5,430.46	-2,152.16	405.68	1,877,931.65	1,286,330.54	36.1551635	-107.4494440
7,436.00	90.75	179.08	5,429.93	-2,215.15	406.74	1,877,868.65	1,286,330.82	36.1549905	-107.4494404
7,499.00	90.66	179.43	5,429.15	-2,278.14	407.56	1,877,805.66	1,286,330.86	36.1548174	-107.4494376
7,562.00	89.60	180.49	5,429.01	-2,341.14	407.61	1,877,742.67	1,286,330.12	36.1546444	-107.4494375
7,626.00	89.60	180.75	5,429.46	-2,405.13	406.91	1,877,678.68	1,286,328.64	36.1544686	-107.4494398
7,689.00	90.04	181.01	5,429.65	-2,468.13	405.95	1,877,615.71	1,286,326.89	36.1542956	-107.4494431
7,752.00	90.04	182.07	5,429.61	-2,531.10	404.25	1,877,552.76	1,286,324.42	36.1541226	-107.4494489
7,815.00	90.48	182.16	5,429.32	-2,594.06	401.93	1,877,489.84	1,286,321.32	36.1539497	-107.4494567
7,878.00	91.01	181.45	5,428.50	-2,657.02	399.94	1,877,426.90	1,286,318.56	36.1537767	-107.4494635
7,941.00	90.57	181.89	5,427.64	-2,719.99	398.11	1,877,363.96	1,286,315.94	36.1536038	-107.4494697
8,005.00	89.96	181.80	5,427.34	-2,783.96	396.05	1,877,300.03	1,286,313.09	36.1534281	-107.4494767
8,068.00	90.40	181.63	5,427.14	-2,846.93	394.16	1,877,237.09	1,286,310.43	36.1532551	-107.4494831
8,131.00	90.74	181.33	5,426.52	-2,909.90	392.54	1,877,174.13	1,286,308.02	36.1530821	-107.4494886
8,194.00	89.96	181.28	5,426.13	-2,972.88	391.10	1,877,111.18	1,286,305.81	36.1529091	-107.4494934
8,257.00	89.60	180.31	5,426.37	-3,035.88	390.23	1,877,048.20	1,286,304.15	36.1527361	-107.4494964
8,321.00	90.22	179.96	5,426.47	-3,099.88	390.08	1,876,984.21	1,286,303.21	36.1525603	-107.4494969
8,384.00	89.43	179.96	5,426.67	-3,162.88	390.12	1,876,921.21	1,286,302.48	36.1523873	-107.4494968
8,447.00	89.96	179.78	5,427.00	-3,225.87	390.26	1,876,858.22	1,286,301.84	36.1522142	-107.4494963
8,511.00	90.57	180.49	5,426.70	-3,289.87	390.11	1,876,794.22	1,286,300.90	36.1520384	-107.4494968
8,574.00	90.13	180.75	5,426.32	-3,352.87	389.43	1,876,731.24	1,286,299.44	36.1518654	-107.4494991
8,633.00	90.40	180.49	5,426.05	-3,415.86	388.79	1,876,672.26	1,286,298.07	36.1517034	-107.4495013
8,694.00	90.31	181.19	5,425.67	-3,478.85	387.90	1,876,611.28	1,286,296.42	36.1515358	-107.4495043
8,755.00	90.13	181.80	5,425.43	-3,541.83	386.31	1,876,550.33	1,286,294.07	36.1513683	-107.4495097
8,816.00	90.57	181.72	5,425.06	-3,604.80	384.43	1,876,489.39	1,286,291.45	36.1512009	-107.4495161
8,876.00	90.31	181.98	5,424.60	-3,667.77	382.50	1,876,429.45	1,286,288.77	36.1510362	-107.4495226
8,937.00	89.60	182.16	5,424.65	-3,730.73	380.29	1,876,368.52	1,286,285.81	36.1508687	-107.4495301
8,997.00	89.96	182.07	5,424.88	-3,793.69	378.08	1,876,308.59	1,286,282.86	36.1507040	-107.4495376
9,057.00	90.57	181.98	5,424.60	-3,856.65	375.96	1,876,248.66	1,286,279.99	36.1505393	-107.4495448
9,118.00	90.04	182.33	5,424.28	-3,919.61	373.66	1,876,187.74	1,286,276.95	36.1503719	-107.4495525
9,178.00	89.69	182.42	5,424.42	-3,982.57	371.18	1,876,127.83	1,286,273.72	36.1502072	-107.4495610
9,239.00	90.04	182.60	5,424.56	-4,045.53	368.51	1,876,066.93	1,286,270.29	36.1500398	-107.4495700
9,299.00	90.04	182.16	5,424.52	-4,108.49	366.01	1,876,007.01	1,286,267.06	36.1498752	-107.4495785



SDI
Survey Report - Geographic



Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Lybrook P03-2206 02H
Project:	Sandoval County, NM	TVD Reference:	GL 7124' & RKB 15' @ 7139.00ft (Aztec 920)
Site:	S3-T22N-R6W	MD Reference:	GL 7124' & RKB 15' @ 7139.00ft (Aztec 920)
Well:	Lybrook P03-2206 02H	North Reference:	True
Wellbore:	HZ	Survey Calculation Method:	Minimum Curvature
Design:	HZ	Database:	Grand Junction District

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
9,360.00	90.48	182.33	5,424.24	-4,138.40	363.63	1,875,946.09	1,286,263.92	36.1497078	-107.4495866
9,420.00	90.31	182.07	5,423.83	-4,198.35	361.32	1,875,886.17	1,286,260.87	36.1495431	-107.4495944
9,481.00	90.31	180.84	5,423.50	-4,259.33	359.77	1,875,825.22	1,286,258.57	36.1493756	-107.4495996
9,542.00	89.60	180.66	5,423.55	-4,320.32	358.97	1,875,764.24	1,286,257.02	36.1492080	-107.4496023
9,603.00	90.13	180.75	5,423.69	-4,381.32	358.22	1,875,703.26	1,286,255.51	36.1490405	-107.4496049
9,664.00	89.78	180.31	5,423.74	-4,442.31	357.66	1,875,642.27	1,286,254.19	36.1488730	-107.4496068
9,725.00	90.40	180.66	5,423.64	-4,503.31	357.14	1,875,581.29	1,286,252.92	36.1487054	-107.4496085
9,785.00	90.22	181.45	5,423.32	-4,563.30	356.04	1,875,521.32	1,286,251.08	36.1485406	-107.4496123
9,847.00	89.87	181.36	5,423.27	-4,625.28	354.52	1,875,459.36	1,286,248.79	36.1483704	-107.4496174
9,907.00	90.22	181.63	5,423.22	-4,685.26	352.95	1,875,399.40	1,286,246.48	36.1482056	-107.4496227
9,968.00	91.01	181.36	5,422.57	-4,746.24	351.36	1,875,338.45	1,286,244.14	36.1480382	-107.4496281
10,029.00	90.84	180.66	5,421.58	-4,807.22	350.29	1,875,277.49	1,286,242.31	36.1478706	-107.4496318
10,090.00	90.13	180.05	5,421.07	-4,868.21	349.91	1,875,216.50	1,286,241.18	36.1477031	-107.4496331
10,152.00	89.69	180.57	5,421.16	-4,930.21	349.57	1,875,154.51	1,286,240.07	36.1475328	-107.4496342
10,213.00	90.40	180.31	5,421.12	-4,991.21	349.11	1,875,093.53	1,286,238.85	36.1473653	-107.4496358
10,273.00	90.04	181.19	5,420.89	-5,051.20	348.32	1,875,033.55	1,286,237.32	36.1472005	-107.4496384
10,334.00	90.75	180.93	5,420.47	-5,112.19	347.19	1,874,972.58	1,286,235.44	36.1470330	-107.4496423
10,394.00	90.31	181.01	5,419.91	-5,172.18	346.18	1,874,912.61	1,286,233.68	36.1468682	-107.4496457
10,454.00	89.43	181.01	5,420.05	-5,232.17	345.12	1,874,852.63	1,286,231.88	36.1467034	-107.4496493
10,515.00	90.13	180.75	5,420.28	-5,293.16	344.18	1,874,791.66	1,286,230.19	36.1465359	-107.4496525
10,575.00	89.78	180.93	5,420.33	-5,353.16	343.30	1,874,731.68	1,286,228.57	36.1463711	-107.4496555
10,637.00	90.40	180.93	5,420.23	-5,415.15	342.30	1,874,669.71	1,286,226.80	36.1462008	-107.4496589
10,698.00	89.96	181.80	5,420.04	-5,476.13	340.84	1,874,608.75	1,286,224.59	36.1460333	-107.4496638
10,758.00	90.75	181.98	5,419.67	-5,536.09	338.86	1,874,548.81	1,286,221.87	36.1458686	-107.4496705
10,820.00	91.10	181.28	5,418.67	-5,598.06	337.10	1,874,486.87	1,286,219.34	36.1456984	-107.4496765
10,880.00	91.10	181.63	5,417.51	-5,658.03	335.58	1,874,426.93	1,286,217.08	36.1455337	-107.4496816
10,941.00	90.66	179.61	5,416.58	-5,719.02	334.92	1,874,365.95	1,286,215.66	36.1453661	-107.4496839
11,004.00	89.43	178.73	5,416.53	-5,782.01	335.83	1,874,302.95	1,286,215.80	36.1451931	-107.4496808
11,067.00	89.96	179.34	5,416.86	-5,845.00	336.89	1,874,239.96	1,286,216.08	36.1450201	-107.4496772
11,130.00	89.69	179.70	5,417.06	-5,908.00	337.42	1,874,176.96	1,286,215.83	36.1448471	-107.4496754
11,194.00	90.48	179.78	5,416.96	-5,971.99	337.71	1,874,112.96	1,286,215.32	36.1446713	-107.4496744
11,257.00	89.96	181.28	5,416.72	-6,034.99	337.13	1,874,049.98	1,286,213.96	36.1444982	-107.4496764
11,320.00	90.31	181.01	5,416.57	-6,097.98	335.87	1,873,987.01	1,286,211.92	36.1443252	-107.4496807
11,383.00	89.43	180.93	5,416.71	-6,160.97	334.80	1,873,924.04	1,286,210.08	36.1441522	-107.4496843
11,447.00	90.48	180.93	5,416.76	-6,224.96	333.76	1,873,861.07	1,286,208.25	36.1439764	-107.4496878
11,510.00	90.48	181.54	5,416.24	-6,287.94	332.40	1,873,797.11	1,286,206.11	36.1438034	-107.4496924
11,573.00	90.84	181.89	5,415.51	-6,350.91	330.52	1,873,734.17	1,286,203.45	36.1436305	-107.4496988
11,637.00	89.69	181.72	5,415.21	-6,414.87	328.50	1,873,670.23	1,286,200.64	36.1434548	-107.4497056
11,700.00	90.22	181.36	5,415.26	-6,477.85	326.81	1,873,607.28	1,286,198.17	36.1432818	-107.4497114
11,763.00	91.10	180.93	5,414.54	-6,540.83	325.55	1,873,544.32	1,286,196.13	36.1431088	-107.4497156
11,826.00	90.75	182.42	5,413.52	-6,603.80	323.71	1,873,481.38	1,286,193.51	36.1429359	-107.4497219
11,890.00	90.75	181.72	5,412.68	-6,667.75	321.40	1,873,417.46	1,286,190.41	36.1427602	-107.4497297
11,953.00	90.31	179.96	5,412.10	-6,730.74	320.47	1,873,354.49	1,286,188.71	36.1425872	-107.4497328
12,016.00	90.84	180.66	5,411.47	-6,793.73	320.13	1,873,291.51	1,286,187.59	36.1424141	-107.4497340
12,080.00	90.48	178.99	5,410.73	-6,857.72	320.33	1,873,227.51	1,286,186.99	36.1422384	-107.4497333
12,143.00	91.45	179.61	5,409.67	-6,920.71	321.10	1,873,164.52	1,286,186.98	36.1420654	-107.4497307
12,206.00	91.71	179.34	5,407.93	-6,983.68	321.68	1,873,101.55	1,286,186.78	36.1418924	-107.4497288
12,269.00	92.15	179.17	5,405.81	-7,046.64	322.49	1,873,038.59	1,286,186.82	36.1417195	-107.4497260
12,333.00	91.28	180.13	5,403.90	-7,110.61	322.89	1,872,974.62	1,286,186.42	36.1415437	-107.4497247
12,396.00	90.13	180.05	5,403.12	-7,173.60	322.79	1,872,911.63	1,286,185.54	36.1413707	-107.4497250
12,459.00	91.19	180.31	5,402.40	-7,236.60	322.59	1,872,848.64	1,286,184.56	36.1411977	-107.4497257
12,522.00	90.48	180.49	5,401.48	-7,299.59	322.15	1,872,785.66	1,286,183.35	36.1410247	-107.4497272
12,586.00	90.31	181.19	5,401.04	-7,363.58	321.21	1,872,721.69	1,286,181.62	36.1408489	-107.4497304
12,649.00	89.43	182.24	5,401.18	-7,426.55	319.33	1,872,658.74	1,286,178.95	36.1406759	-107.4497368
12,712.00	89.43	182.60	5,401.81	-7,489.49	316.67	1,872,595.84	1,286,175.51	36.1405030	-107.4497458



SDI
Survey Report - Geographic



Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Lybrook P03-2206 02H
Project:	Sandoval County, NM	TVD Reference:	GL 7124' & RKB 15' @ 7139.00ft (Aztec 920)
Site:	S3-T22N-R6W	MD Reference:	GL 7124' & RKB 15' @ 7139.00ft (Aztec 920)
Well:	Lybrook P03-2206 02H	North Reference:	True
Wellbore:	HZ	Survey Calculation Method:	Minimum Curvature
Design:	HZ	Database:	Grand Junction District

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
12,775.00	90.92	183.47	5,401.61	-7,552.40	313.33	1,872,532.98	1,286,171.40	36.1403302	-107.4497571
12,839.00	90.84	183.39	5,400.63	-7,616.28	309.50	1,872,469.15	1,286,166.78	36.1401548	-107.4497701
12,902.00	91.98	183.56	5,399.08	-7,679.14	305.68	1,872,406.34	1,286,162.19	36.1399821	-107.4497830
12,965.00	91.10	181.45	5,397.39	-7,742.06	302.93	1,872,343.47	1,286,158.66	36.1398093	-107.4497923
13,028.00	90.22	180.13	5,396.66	-7,805.04	302.06	1,872,280.50	1,286,157.01	36.1396363	-107.4497953
13,092.00	91.45	180.66	5,395.73	-7,869.03	301.62	1,872,216.52	1,286,155.78	36.1394605	-107.4497968
13,155.00	90.75	179.17	5,394.52	-7,932.02	301.72	1,872,153.53	1,286,155.09	36.1392875	-107.4497964
13,218.00	91.10	179.34	5,393.50	-7,995.01	302.53	1,872,090.54	1,286,155.13	36.1391145	-107.4497937
13,281.00	90.13	178.03	5,392.83	-8,057.98	303.98	1,872,027.55	1,286,155.80	36.1389415	-107.4497888
13,309.00	89.96	177.32	5,392.80	-8,085.96	305.12	1,871,999.56	1,286,156.59	36.1388647	-107.4497849
Last SDI Lateral MWD Survey									
13,367.00	89.96	177.32	5,392.84	-8,143.90	307.83	1,871,941.60	1,286,158.58	36.1387055	-107.4497758
Projection to TD									

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
5,003.00	4,992.40	-53.50	41.68	First SDI Curve MWD Survey	
6,077.00	5,447.72	-856.81	433.58	Last SDI Curve MWD Survey	
6,109.00	5,447.87	-888.80	433.21	First SDI Lateral MWD Survey	
13,309.00	5,392.80	-8,085.96	305.12	Last SDI Lateral MWD Survey	
13,367.00	5,392.84	-8,143.90	307.83	Projection to TD	

Checked By: _____ Approved By: _____ Date: _____