



**Scientific
Drilling**

Survey Certification

7327 West Barton Road
Casper, WY 82604
(307)-472-6621 Fax (307) 472-5439

Operator	EnCana Oil & Gas (USA) Inc
Well Name & No.	Maier 4B-28H
County & State	Weld County, CO
SDI Job No.	410813HMP40691
Rig	Ensign 124
Survey Date	9-Sep-2013

I, Seth M. Burstad, having personal knowledge of all the facts, hereby
certify that the attached directional survey run from a measured depth of 150 feet to a
measured depth of 12007 feet is true and correct as determined from all available records.

Seth Burstad
Signature

11-Sep-2013
Date

Seth M. Burstad

Rockies Region Well Planner
Scientific Drilling - Rocky Mountain District



EnCana Oil & Gas (USA) Inc

**DJ Wattenberg
S28-T2N-R66W (Maier)
Maier 4B-28H**

Hz

Design: Hz

Standard Survey Report

11 September, 2013



www.scientificdrilling.com





Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Maier 4B-28H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4987.00ft (Ensign 124)
Site:	S28-T2N-R66W (Maier)	MD Reference:	WELL @ 4987.00ft (Ensign 124)
Well:	Maier 4B-28H	North Reference:	True
Wellbore:	Hz	Survey Calculation Method:	Minimum Curvature
Design:	Hz	Database:	Casper District

Project	DJ Wattenberg		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site	S28-T2N-R66W (Maier)		
Site Position:		Northing:	1,281,419.45 usft
From:	Lat/Long	Easting:	3,201,127.68 usft
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in
		Latitude:	40° 6' 13.140 N
		Longitude:	104° 46' 51.528 W
		Grid Convergence:	0.46 °

Well	Maier 4B-28H		
Well Position	+N/-S	0.00 ft	Northing:
	+E/-W	0.00 ft	Easting:
Position Uncertainty	0.00 ft	Wellhead Elevation:	
			Latitude:
			Longitude:
			Ground Level:

Wellbore	Hz				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	8/6/2013	8.56	66.73	52,747

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	0.00	

Survey Program	Date	9/11/2013			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
150.00	1,093.00	Survey #1 - Surface MWD (Hz)	SDI MWD	SDI MWD - Standard ver 1.0.1	
1,184.00	7,840.00	Survey #2 - Vert/Curve MWD (Hz)	SDI MWD	SDI MWD - Standard ver 1.0.1	
7,907.00	12,007.00	Survey #3 - Lateral MWD (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)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
150.00	0.37	191.04	150.00	-0.48	-0.09	-0.48	0.25	0.25	0.00	
First SDI MWD Survey										
243.00	0.62	223.42	243.00	-1.14	-0.50	-1.14	0.39	0.27	34.82	
337.00	1.77	129.35	336.98	-2.43	0.28	-2.43	2.04	1.22	-100.07	
430.00	3.06	139.62	429.90	-5.23	3.00	-5.23	1.46	1.39	11.04	
523.00	4.40	136.41	522.70	-9.70	7.06	-9.70	1.46	1.44	-3.45	
616.00	5.32	131.21	615.36	-15.13	12.77	-15.13	1.10	0.99	-5.59	
709.00	7.48	135.37	707.78	-22.28	20.26	-22.28	2.37	2.32	4.47	

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Well:	Maier 4B-28H	North Reference:	True
Wellbore:	Hz	Survey Calculation Method:	Minimum Curvature
Design:	Hz	Database:	Casper District

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
802.00	8.59	134.49	799.86	-31.45	29.47	-31.45	1.20	1.19	-0.95
895.00	8.94	135.87	891.78	-41.51	39.46	-41.51	0.44	0.38	1.48
988.00	8.29	133.10	983.73	-51.27	49.39	-51.27	0.83	-0.70	-2.98
1,093.00	6.95	124.33	1,087.80	-60.03	60.16	-60.03	1.69	-1.28	-8.35
1,184.00	5.97	118.89	1,178.22	-65.42	68.85	-65.42	1.27	-1.08	-5.98
1,277.00	7.61	115.76	1,270.57	-70.43	78.63	-70.43	1.81	1.76	-3.37
1,370.00	8.65	121.46	1,362.63	-76.76	90.14	-76.76	1.41	1.12	6.13
1,463.00	9.54	122.35	1,454.46	-84.53	102.62	-84.53	0.97	0.96	0.96
1,556.00	11.09	134.21	1,545.97	-94.90	115.54	-94.90	2.82	1.67	12.75
1,649.00	11.75	138.61	1,637.13	-108.24	128.22	-108.24	1.17	0.71	4.73
1,742.00	12.21	142.35	1,728.10	-123.13	140.48	-123.13	0.97	0.49	4.02
1,835.00	11.23	140.57	1,819.16	-137.91	152.24	-137.91	1.12	-1.05	-1.91
1,928.00	11.52	141.43	1,910.34	-152.17	163.78	-152.17	0.36	0.31	0.92
2,023.00	11.28	138.26	2,003.46	-166.52	175.88	-166.52	0.71	-0.25	-3.34
2,118.00	11.99	140.98	2,096.51	-181.11	188.28	-181.11	0.94	0.75	2.86
2,213.00	12.17	142.89	2,189.41	-196.77	200.54	-196.77	0.46	0.19	2.01
2,308.00	11.66	142.21	2,282.36	-212.34	212.46	-212.34	0.56	-0.54	-0.72
2,403.00	11.85	142.53	2,375.37	-227.67	224.28	-227.67	0.21	0.20	0.34
2,498.00	11.50	144.42	2,468.40	-243.11	235.72	-243.11	0.55	-0.37	1.99
2,592.00	12.40	145.86	2,560.37	-259.09	246.84	-259.09	1.01	0.96	1.53
2,687.00	11.99	143.52	2,653.22	-275.46	258.43	-275.46	0.68	-0.43	-2.46
2,782.00	11.37	140.30	2,746.26	-290.60	270.28	-290.60	0.95	-0.65	-3.39
2,877.00	11.76	144.43	2,839.33	-305.68	281.89	-305.68	0.96	0.41	4.35
2,972.00	12.53	143.22	2,932.20	-321.81	293.69	-321.81	0.85	0.81	-1.27
3,067.00	12.23	141.69	3,024.99	-337.96	306.10	-337.96	0.47	-0.32	-1.61
3,162.00	12.76	141.09	3,117.74	-354.02	318.93	-354.02	0.57	0.56	-0.63
3,257.00	12.14	142.07	3,210.51	-370.06	331.66	-370.06	0.69	-0.65	1.03
3,352.00	12.33	135.65	3,303.35	-385.19	344.89	-385.19	1.45	0.20	-6.76
3,447.00	12.23	139.56	3,396.18	-400.11	358.51	-400.11	0.88	-0.11	4.12
3,542.00	11.06	142.34	3,489.23	-414.98	370.60	-414.98	1.37	-1.23	2.93
3,637.00	10.65	144.28	3,582.53	-429.32	381.30	-429.32	0.58	-0.43	2.04
3,732.00	9.97	139.48	3,675.99	-442.70	391.76	-442.70	1.15	-0.72	-5.05
3,826.00	10.81	137.93	3,768.45	-455.43	402.96	-455.43	0.94	0.89	-1.65
3,921.00	10.83	140.92	3,861.76	-468.97	414.55	-468.97	0.59	0.02	3.15
4,016.00	10.71	140.36	3,955.09	-482.70	425.81	-482.70	0.17	-0.13	-0.59
4,111.00	10.10	143.85	4,048.53	-496.22	436.36	-496.22	0.92	-0.64	3.67
4,206.00	10.05	143.23	4,142.06	-509.59	446.23	-509.59	0.13	-0.05	-0.65
4,301.00	9.26	144.86	4,235.72	-522.48	455.59	-522.48	0.88	-0.83	1.72
4,396.00	7.86	144.63	4,329.66	-534.02	463.75	-534.02	1.47	-1.47	-0.24
4,491.00	5.32	144.48	4,424.02	-542.91	470.07	-542.91	2.67	-2.67	-0.16
4,586.00	4.47	136.41	4,518.68	-549.17	475.19	-549.17	1.15	-0.89	-8.49
4,681.00	3.25	135.72	4,613.46	-553.78	479.62	-553.78	1.29	-1.28	-0.73
4,776.00	1.89	120.12	4,708.36	-556.50	482.85	-556.50	1.60	-1.43	-16.42



Scientific Drilling International
Survey Report



Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Maier 4B-28H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4987.00ft (Ensign 124)
Site:	S28-T2N-R66W (Maier)	MD Reference:	WELL @ 4987.00ft (Ensign 124)
Well:	Maier 4B-28H	North Reference:	True
Wellbore:	Hz	Survey Calculation Method:	Minimum Curvature
Design:	Hz	Database:	Casper District

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
4,871.00	2.65	109.91	4,803.29	-558.03	486.27	-558.03	0.90	0.80	-10.75	
4,966.00	4.03	124.53	4,898.12	-560.67	491.09	-560.67	1.70	1.45	15.39	
5,061.00	3.29	130.65	4,992.93	-564.34	495.91	-564.34	0.88	-0.78	6.44	
5,156.00	3.87	141.05	5,087.75	-568.61	499.99	-568.61	0.91	0.61	10.95	
5,251.00	3.07	148.15	5,182.57	-573.26	503.35	-573.26	0.95	-0.84	7.47	
5,346.00	3.26	146.00	5,277.43	-577.66	506.20	-577.66	0.24	0.20	-2.26	
5,441.00	2.98	149.32	5,372.29	-582.03	508.97	-582.03	0.35	-0.29	3.49	
5,536.00	2.21	151.19	5,467.19	-585.76	511.11	-585.76	0.82	-0.81	1.97	
5,630.00	2.62	149.50	5,561.10	-589.19	513.08	-589.19	0.44	0.44	-1.80	
5,725.00	2.34	150.00	5,656.01	-592.75	515.15	-592.75	0.30	-0.29	0.53	
5,820.00	1.65	140.56	5,750.96	-595.48	516.99	-595.48	0.80	-0.73	-9.94	
5,915.00	2.01	142.32	5,845.91	-597.86	518.88	-597.86	0.38	0.38	1.85	
6,010.00	2.40	159.84	5,940.84	-601.04	520.58	-601.04	0.81	0.41	18.44	
6,105.00	0.98	184.51	6,035.80	-603.72	521.20	-603.72	1.65	-1.49	25.97	
6,199.00	1.95	162.26	6,129.76	-606.04	521.63	-606.04	1.18	1.03	-23.67	
6,294.00	0.72	206.80	6,224.74	-608.12	521.85	-608.12	1.60	-1.29	46.88	
6,389.00	1.39	149.14	6,319.72	-609.64	522.17	-609.64	1.24	0.71	-60.69	
6,484.00	1.62	253.34	6,414.71	-611.01	521.48	-611.01	2.50	0.24	109.68	
6,579.00	1.66	261.81	6,509.67	-611.59	518.83	-611.59	0.26	0.04	8.92	
6,673.00	0.77	296.50	6,603.65	-611.51	516.91	-611.51	1.19	-0.95	36.90	
6,768.00	0.58	291.72	6,698.64	-611.04	515.90	-611.04	0.21	-0.20	-5.03	
6,863.00	1.21	242.32	6,793.63	-611.33	514.56	-611.33	0.99	0.66	-52.00	
6,894.00	1.39	235.52	6,824.62	-611.70	513.96	-611.70	0.76	0.58	-21.94	
6,926.00	1.88	287.04	6,856.61	-611.76	513.14	-611.76	4.65	1.53	161.00	
6,958.00	3.64	328.97	6,888.57	-610.74	512.11	-610.74	8.03	5.50	131.03	
6,989.00	6.77	341.17	6,919.44	-608.16	511.02	-608.16	10.65	10.10	39.35	
7,021.00	10.90	350.83	6,951.06	-603.39	509.93	-603.39	13.67	12.91	30.19	
7,053.00	15.09	355.58	6,982.23	-596.25	509.12	-596.25	13.50	13.09	14.84	
7,084.00	19.28	355.16	7,011.84	-587.12	508.38	-587.12	13.52	13.52	-1.35	
7,116.00	22.31	354.22	7,041.75	-575.81	507.32	-575.81	9.53	9.47	-2.94	
7,147.00	24.32	354.95	7,070.22	-563.60	506.17	-563.60	6.55	6.48	2.35	
7,179.00	25.15	358.08	7,099.29	-550.23	505.36	-550.23	4.84	2.59	9.78	
7,211.00	26.61	359.53	7,128.08	-536.27	505.07	-536.27	4.97	4.56	4.53	
7,243.00	28.88	358.32	7,156.40	-521.38	504.79	-521.38	7.31	7.09	-3.78	
7,274.00	32.37	357.56	7,183.07	-505.60	504.21	-505.60	11.33	11.26	-2.45	
7,306.00	36.14	357.82	7,209.51	-487.61	503.49	-487.61	11.79	11.78	0.81	
7,337.00	39.75	358.27	7,233.95	-468.56	502.84	-468.56	11.68	11.65	1.45	
7,369.00	42.57	359.69	7,258.04	-447.50	502.47	-447.50	9.28	8.81	4.44	
7,401.00	45.49	0.74	7,281.05	-425.27	502.56	-425.27	9.41	9.13	3.28	
7,432.00	48.52	1.66	7,302.19	-402.60	503.04	-402.60	10.01	9.77	2.97	
7,464.00	51.07	1.59	7,322.84	-378.17	503.74	-378.17	7.97	7.97	-0.22	
7,495.00	52.95	2.01	7,341.92	-353.75	504.50	-353.75	6.16	6.06	1.35	
7,527.00	55.90	2.67	7,360.54	-327.75	505.57	-327.75	9.37	9.22	2.06	
7,559.00	58.96	3.52	7,377.76	-300.83	507.03	-300.83	9.82	9.56	2.66	

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Well:	Maier 4B-28H	North Reference:	True
Wellbore:	Hz	Survey Calculation Method:	Minimum Curvature
Design:	Hz	Database:	Casper District

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
7,590.00	61.62	3.38	7,393.12	-273.95	508.65	-273.95	8.59	8.58	-0.45
7,622.00	63.41	2.70	7,407.89	-245.61	510.15	-245.61	5.90	5.59	-2.13
7,653.00	65.38	2.15	7,421.29	-217.68	511.33	-217.68	6.55	6.35	-1.77
7,685.00	68.80	0.94	7,433.74	-188.22	512.12	-188.22	11.24	10.69	-3.78
7,717.00	72.71	0.11	7,444.29	-158.01	512.40	-158.01	12.46	12.22	-2.59
7,748.00	76.30	0.38	7,452.57	-128.14	512.53	-128.14	11.61	11.58	0.87
7,780.00	78.70	0.52	7,459.50	-96.91	512.77	-96.91	7.51	7.50	0.44
7,812.00	80.93	1.12	7,465.15	-65.42	513.22	-65.42	7.21	6.97	1.88
7,840.00	83.57	0.96	7,468.93	-37.68	513.73	-37.68	9.45	9.43	-0.57
Last Survey in 8 3/4" Hole									
7,907.00	87.49	1.18	7,474.15	29.09	514.97	29.09	5.86	5.85	0.33
First Survey in 6" Hole									
7,970.00	87.49	1.00	7,476.91	92.02	516.17	92.02	0.29	0.00	-0.29
8,065.00	88.99	1.53	7,479.83	186.95	518.27	186.95	1.67	1.58	0.56
8,160.00	90.40	1.53	7,480.33	281.91	520.80	281.91	1.48	1.48	0.00
8,255.00	90.92	1.44	7,479.24	376.87	523.27	376.87	0.56	0.55	-0.09
8,350.00	90.66	0.91	7,477.93	471.84	525.21	471.84	0.62	-0.27	-0.56
8,445.00	90.22	1.09	7,477.20	566.83	526.87	566.83	0.50	-0.46	0.19
8,540.00	89.34	359.42	7,477.56	661.82	527.30	661.82	1.99	-0.93	-1.76
8,634.00	89.60	359.24	7,478.43	755.81	526.20	755.81	0.34	0.28	-0.19
8,730.00	89.34	358.89	7,479.32	851.79	524.63	851.79	0.45	-0.27	-0.36
8,824.00	89.08	356.78	7,480.62	945.71	521.08	945.71	2.26	-0.28	-2.24
8,920.00	89.60	356.87	7,481.72	1,041.56	515.76	1,041.56	0.55	0.54	0.09
9,015.00	90.57	357.84	7,481.58	1,136.45	511.38	1,136.45	1.44	1.02	1.02
9,110.00	91.89	357.75	7,479.54	1,231.36	507.72	1,231.36	1.39	1.39	-0.09
9,205.00	91.45	359.33	7,476.78	1,326.29	505.31	1,326.29	1.73	-0.46	1.66
9,300.00	91.80	1.09	7,474.08	1,421.24	505.65	1,421.24	1.89	0.37	1.85
9,395.00	89.16	1.44	7,473.29	1,516.21	507.75	1,516.21	2.80	-2.78	0.37
9,489.00	88.72	0.47	7,475.02	1,610.18	509.32	1,610.18	1.13	-0.47	-1.03
9,585.00	88.90	0.65	7,477.02	1,706.15	510.25	1,706.15	0.27	0.19	0.19
9,679.00	90.04	1.62	7,477.89	1,800.13	512.12	1,800.13	1.59	1.21	1.03
9,774.00	91.10	0.91	7,476.94	1,895.10	514.21	1,895.10	1.34	1.12	-0.75
9,869.00	89.87	359.24	7,476.14	1,990.09	514.34	1,990.09	2.18	-1.29	-1.76
9,964.00	90.75	0.21	7,475.62	2,085.08	513.88	2,085.08	1.38	0.93	1.02
10,059.00	90.31	0.21	7,474.75	2,180.08	514.23	2,180.08	0.46	-0.46	0.00
10,153.00	89.87	359.42	7,474.60	2,274.08	513.93	2,274.08	0.96	-0.47	-0.84
10,248.00	90.40	359.86	7,474.37	2,369.07	513.33	2,369.07	0.73	0.56	0.46
10,343.00	89.52	0.30	7,474.44	2,464.07	513.46	2,464.07	1.04	-0.93	0.46
10,438.00	90.57	1.53	7,474.37	2,559.06	514.98	2,559.06	1.70	1.11	1.29
10,533.00	89.78	1.79	7,474.08	2,654.02	517.73	2,654.02	0.88	-0.83	0.27
10,628.00	91.45	2.50	7,473.06	2,748.94	521.29	2,748.94	1.91	1.76	0.75
10,722.00	90.48	2.76	7,471.47	2,842.83	525.60	2,842.83	1.07	-1.03	0.28
10,817.00	88.20	1.53	7,472.57	2,937.75	529.15	2,937.75	2.73	-2.40	-1.29

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Maier 4B-28H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4987.00ft (Ensign 124)
Site:	S28-T2N-R66W (Maier)	MD Reference:	WELL @ 4987.00ft (Ensign 124)
Well:	Maier 4B-28H	North Reference:	True
Wellbore:	Hz	Survey Calculation Method:	Minimum Curvature
Design:	Hz	Database:	Casper District

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
10,912.00	87.14	359.07	7,476.43	3,032.66	529.65	3,032.66	2.82	-1.12	-2.59
11,006.00	88.81	359.42	7,479.75	3,126.59	528.41	3,126.59	1.82	1.78	0.37
11,101.00	89.34	359.07	7,481.28	3,221.57	527.16	3,221.57	0.67	0.56	-0.37
11,196.00	90.13	359.24	7,481.72	3,316.55	525.76	3,316.55	0.85	0.83	0.18
11,291.00	89.25	359.33	7,482.24	3,411.54	524.58	3,411.54	0.93	-0.93	0.09
11,386.00	90.04	359.86	7,482.83	3,506.54	523.91	3,506.54	1.00	0.83	0.56
11,481.00	90.04	359.42	7,482.76	3,601.54	523.31	3,601.54	0.46	0.00	-0.46
11,576.00	89.69	358.80	7,482.98	3,696.53	521.83	3,696.53	0.75	-0.37	-0.65
11,671.00	89.60	358.19	7,483.57	3,791.49	519.34	3,791.49	0.65	-0.09	-0.64
11,766.00	90.84	358.54	7,483.21	3,886.45	516.63	3,886.45	1.36	1.31	0.37
11,860.00	91.28	358.98	7,481.47	3,980.41	514.59	3,980.41	0.66	0.47	0.47
11,942.00	91.54	358.72	7,479.45	4,062.37	512.95	4,062.37	0.45	0.32	-0.32
Last SDI MWD Survey									
12,007.00	91.54	358.72	7,477.70	4,127.33	511.50	4,127.33	0.00	0.00	0.00
Projection to TD									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
Maier 4B-28H PBHL	0.00	0.00	7,471.00	4,181.95	520.21	1,285,605.52	3,201,622.35	40° 6' 54.468 N	104° 46' 44.724 W
- actual wellpath misses target center by 55.71ft at 12007.00ft MD (7477.70 TVD, 4127.33 N, 511.50 E)									
- Point									
Maier 4B-28H PBHL P2	0.00	0.00	7,478.00	4,181.95	520.21	1,285,605.52	3,201,622.35	40° 6' 54.468 N	104° 46' 44.724 W
- actual wellpath misses target center by 55.31ft at 12007.00ft MD (7477.70 TVD, 4127.33 N, 511.50 E)									
- Point									
Maier 4B-28H 11000' TC	0.00	0.00	7,489.00	3,163.33	520.23	1,284,586.94	3,201,630.63	40° 6' 44.401 N	104° 46' 44.724 W
- actual wellpath misses target center by 11.55ft at 11042.99ft MD (7480.45 TVD, 3163.57 N, 528.00 E)									
- Point									
Maier 4B-28H 9000' TG	0.00	0.00	7,489.00	1,163.33	520.26	1,282,587.01	3,201,646.88	40° 6' 24.636 N	104° 46' 44.724 W
- actual wellpath misses target center by 12.58ft at 9041.35ft MD (7481.24 TVD, 1162.78 N, 510.38 E)									
- Point									

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
150.00	150.00	-0.48	-0.09	First SDI MWD Survey	
7,840.00	7,468.93	-37.68	513.73	Last Survey in 8 3/4" Hole	
7,907.00	7,474.15	29.09	514.97	First Survey in 6" Hole	
11,942.00	7,479.45	4,062.37	512.95	Last SDI MWD Survey	
12,007.00	7,477.70	4,127.33	511.50	Projection to TD	

Checked By: _____	Approved By: _____	Date: _____
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