



Bill Barrett Corporation

Bill Barrett Corp.

Garfield County, Colorado

Miller 10 Pad

Miller Federal 24B-31-691

Wellbore #1

Survey: Surveys from Surface

Standard Survey Report

20 December, 2010



Company:	Bill Barrett Corp.	Local Co-ordinate Reference:	Well Miller Federal 24B-31-691
Project:	Garfield County, Colorado	TVD Reference:	KB @ 6284.00ft
Site:	Miller 10 Pad	MD Reference:	KB @ 6284.00ft
Well:	Miller Federal 24B-31-691	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Compass VM

Project	Garfield County, Colorado		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		

Site	Miller 10 Pad				
Site Position:		Northing:	1,605,362.13 usft	Latitude:	39° 28' 36.39 N
From:	Lat/Long	Easting:	2,408,695.61 usft	Longitude:	107° 35' 41.81 W
Position Uncertainty:	0.00 ft	Slot Radius:	1.10 ft	Grid Convergence:	-1.32 °

Well	Miller Federal 24B-31-691					
Well Position	+N/-S	0.00 ft	Northing:	1,605,398.18 usft	Latitude:	39° 28' 36.74 N
	+E/-W	0.00 ft	Easting:	2,408,664.26 usft	Longitude:	107° 35' 42.22 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	6,262.00 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	07/28/10	10.26	65.83	52,408

Design	Wellbore #1				
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	295.17	

Survey Program	Date	12/20/10			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
50.00	700.00	Gyro Surveys (Wellbore #1)	MWD	MWD - Standard	
876.00	7,340.00	Surveys (Wellbore #1)	MWD	MWD - Standard	

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	0.00
50.00	0.62	55.46	50.00	0.15	0.22	-0.14	1.24	1.24	0.00	
100.00	0.58	48.87	100.00	0.47	0.64	-0.37	0.16	-0.08	-13.18	
150.00	0.58	57.42	149.99	0.78	1.04	-0.61	0.17	0.00	17.10	
200.00	0.54	81.15	199.99	0.95	1.49	-0.94	0.47	-0.08	47.46	
250.00	0.52	94.41	249.99	0.97	1.95	-1.35	0.25	-0.04	26.52	
300.00	0.49	69.37	299.99	1.03	2.37	-1.71	0.44	-0.06	-50.08	
350.00	0.58	59.91	349.99	1.23	2.79	-2.00	0.25	0.18	-18.92	
400.00	0.43	90.55	399.98	1.35	3.20	-2.32	0.61	-0.30	61.28	
450.00	0.58	99.24	449.98	1.31	3.63	-2.73	0.34	0.30	17.38	

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Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
500.00	0.61	132.95	499.98	1.09	4.08	-3.23	0.69	0.06	67.42
550.00	0.71	112.89	549.98	0.79	4.56	-3.79	0.50	0.20	-40.12
600.00	0.52	132.72	599.97	0.51	5.01	-4.32	0.57	-0.38	39.66
650.00	0.68	123.67	649.97	0.19	5.43	-4.83	0.37	0.32	-18.10
700.00	0.60	150.02	699.97	-0.20	5.80	-5.34	0.60	-0.16	52.70
709.00	0.58	150.35	708.97	-0.28	5.85	-5.41	0.24	-0.23	3.68
9 5/8"									
876.00	0.20	169.10	875.96	-1.30	6.32	-6.27	0.24	-0.23	11.23
968.00	2.50	308.70	967.93	-0.20	4.79	-4.42	2.89	2.50	151.74
1,063.00	4.70	310.00	1,062.74	3.60	0.19	1.36	2.32	2.32	1.37
1,157.00	8.20	305.70	1,156.13	9.99	-8.21	11.68	3.76	3.72	-4.57
1,252.00	10.90	299.30	1,249.81	18.34	-21.55	27.30	3.05	2.84	-6.74
1,348.00	13.70	293.30	1,343.60	27.28	-39.91	47.72	3.20	2.92	-6.25
1,443.00	17.20	292.50	1,435.15	37.11	-63.23	73.00	3.69	3.68	-0.84
1,538.00	19.20	293.30	1,525.40	48.66	-90.55	102.65	2.12	2.11	0.84
1,633.00	22.10	294.30	1,614.28	62.20	-121.19	136.14	3.08	3.05	1.05
1,728.00	24.30	295.30	1,701.60	77.91	-155.16	173.56	2.35	2.32	1.05
1,823.00	23.40	293.40	1,788.48	93.75	-190.14	211.96	1.25	-0.95	-2.00
1,918.00	26.50	294.70	1,874.61	110.11	-226.72	252.02	3.31	3.26	1.37
2,013.00	26.40	293.30	1,959.67	127.32	-265.37	294.33	0.66	-0.11	-1.47
2,108.00	26.30	291.80	2,044.80	143.49	-304.31	336.44	0.71	-0.11	-1.58
2,203.00	26.30	295.30	2,129.97	160.30	-342.88	378.50	1.63	0.00	3.68
2,295.00	26.00	294.30	2,212.55	177.31	-379.69	419.05	0.58	-0.33	-1.09
2,394.00	26.00	292.50	2,301.53	194.54	-419.51	462.42	0.80	0.00	-1.82
2,489.00	25.10	297.60	2,387.25	211.85	-456.61	503.36	2.50	-0.95	5.37
2,584.00	25.00	296.10	2,473.32	230.01	-492.50	543.56	0.68	-0.11	-1.58
2,679.00	25.00	296.50	2,559.42	247.80	-528.49	583.70	0.18	0.00	0.42
2,774.00	25.00	295.70	2,645.52	265.46	-564.54	623.84	0.36	0.00	-0.84
2,869.00	25.00	295.80	2,731.62	282.91	-600.71	663.99	0.04	0.00	0.11
2,965.00	24.40	295.40	2,818.83	300.24	-636.88	704.10	0.65	-0.63	-0.42
3,060.00	24.10	294.50	2,905.45	316.70	-672.26	743.12	0.50	-0.32	-0.95
3,155.00	23.20	295.20	2,992.47	332.71	-706.84	781.23	0.99	-0.95	0.74
3,250.00	22.10	293.00	3,080.14	347.66	-740.22	817.80	1.46	-1.16	-2.32
3,345.00	22.70	291.90	3,167.98	361.48	-773.68	853.96	0.77	0.63	-1.16
3,440.00	22.20	293.10	3,255.78	375.36	-807.20	890.20	0.71	-0.53	1.26
3,535.00	21.60	298.80	3,343.93	390.83	-839.03	925.59	2.32	-0.63	6.00
3,630.00	20.70	297.40	3,432.53	406.98	-869.26	959.82	1.09	-0.95	-1.47
3,725.00	20.00	295.60	3,521.60	421.73	-898.82	992.84	0.99	-0.74	-1.89
3,821.00	19.80	294.70	3,611.87	435.61	-928.40	1,025.52	0.38	-0.21	-0.94
3,916.00	18.00	294.70	3,701.74	448.47	-956.35	1,056.28	1.89	-1.89	0.00
4,011.00	15.20	296.90	3,792.78	460.24	-980.80	1,083.42	3.02	-2.95	2.32
4,106.00	13.10	297.70	3,884.89	470.88	-1,001.44	1,106.62	2.22	-2.21	0.84
4,201.00	10.10	298.30	3,977.94	479.84	-1,018.31	1,125.70	3.16	-3.16	0.63

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4,296.00	7.70	297.80	4,071.79	486.76	-1,031.28	1,140.38	2.53	-2.53	-0.53	
4,387.00	6.20	298.60	4,162.12	491.95	-1,040.99	1,151.37	1.65	-1.65	0.88	
4,482.00	4.00	289.40	4,256.74	495.51	-1,048.62	1,159.79	2.46	-2.32	-9.68	
4,577.00	3.40	310.40	4,351.54	498.44	-1,053.89	1,165.81	1.55	-0.63	22.11	
4,673.00	1.10	289.60	4,447.46	500.59	-1,056.92	1,169.47	2.50	-2.40	-21.67	
4,768.00	0.80	221.50	4,542.45	500.40	-1,058.22	1,170.57	1.15	-0.32	-71.68	
4,863.00	2.50	188.60	4,637.41	497.85	-1,058.97	1,170.16	1.98	1.79	-34.63	
4,958.00	1.10	185.40	4,732.36	494.90	-1,059.37	1,169.26	1.48	-1.47	-3.37	
5,053.00	0.60	286.40	4,827.35	494.13	-1,059.93	1,169.44	1.42	-0.53	106.32	
5,148.00	1.80	359.60	4,922.34	495.76	-1,060.42	1,170.58	1.82	1.26	77.05	
5,244.00	1.00	353.60	5,018.31	498.10	-1,060.52	1,171.67	0.85	-0.83	-6.25	
5,339.00	1.90	358.90	5,113.27	500.50	-1,060.64	1,172.80	0.96	0.95	5.58	
5,434.00	1.70	335.80	5,208.23	503.36	-1,061.25	1,174.57	0.79	-0.21	-24.32	
5,529.00	2.10	25.20	5,303.18	506.22	-1,061.09	1,175.64	1.71	0.42	52.00	
5,624.00	1.20	23.00	5,398.14	508.71	-1,059.96	1,175.67	0.95	-0.95	-2.32	
5,719.00	0.40	356.00	5,493.13	509.96	-1,059.59	1,175.87	0.91	-0.84	-28.42	
5,814.00	0.60	234.60	5,588.13	510.00	-1,060.02	1,176.28	0.92	0.21	-127.79	
5,909.00	0.60	356.40	5,683.13	510.21	-1,060.46	1,176.76	1.10	0.00	128.21	
6,004.00	0.30	270.70	5,778.13	510.71	-1,060.74	1,177.23	0.68	-0.32	-90.21	
6,099.00	0.90	214.10	5,873.12	510.09	-1,061.40	1,177.57	0.82	0.63	-59.58	
6,195.00	1.10	207.30	5,969.11	508.65	-1,062.25	1,177.72	0.24	0.21	-7.08	
6,290.00	2.10	201.10	6,064.07	506.22	-1,063.29	1,177.63	1.07	1.05	-6.53	
6,385.00	0.70	209.60	6,159.04	504.09	-1,064.21	1,177.55	1.49	-1.47	8.95	
6,480.00	1.10	196.00	6,254.03	502.71	-1,064.75	1,177.45	0.47	0.42	-14.32	
6,575.00	1.80	217.80	6,348.99	500.65	-1,065.91	1,177.63	0.93	0.74	22.95	
6,670.00	2.00	210.40	6,443.94	498.04	-1,067.67	1,178.11	0.33	0.21	-7.79	
6,765.00	2.70	210.40	6,538.86	494.68	-1,069.64	1,178.47	0.74	0.74	0.00	
6,861.00	1.30	201.30	6,634.80	491.72	-1,071.18	1,178.60	1.49	-1.46	-9.48	
6,956.00	0.80	134.40	6,729.79	490.25	-1,071.09	1,177.90	1.30	-0.53	-70.42	
7,051.00	1.60	153.60	6,824.77	488.60	-1,070.03	1,176.23	0.93	0.84	20.21	
7,146.00	2.00	158.40	6,919.72	485.87	-1,068.83	1,173.99	0.45	0.42	5.05	
7,241.00	2.50	170.60	7,014.65	482.28	-1,067.88	1,171.60	0.73	0.53	12.84	
7,295.00	2.90	174.20	7,068.59	479.76	-1,067.55	1,170.23	0.80	0.74	6.67	
7,340.00	2.90	174.20	7,113.53	477.50	-1,067.32	1,169.06	0.00	0.00	0.00	

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (ft)	Hole Diameter (ft)	
709.00	708.97	9 5/8"	0.80	1.02	

Checked By: _____ Approved By: _____ Date: _____