

Bill Barrett Corp.

Garfield County, Colorado [NAD83]

CB-TG Land Pad

CB-TG Land 11C-20-692

Wellbore #1

Design: Wellbore #1

Standard Survey Report

20 June, 2011

Survey Report

Company:	Bill Barrett Corp.	Local Co-ordinate Reference:	Well CB-TG Land 11C-20-692
Project:	Garfield County, Colorado [NAD83]	TVD Reference:	KB @ 5546.00ft
Site:	CB-TG Land Pad	MD Reference:	KB @ 5546.00ft
Well:	CB-TG Land 11C-20-692	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	CompassVM

Project	Garfield County, Colorado [NAD83]		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		

Site		CB-TG Land Pad			
Site Position:		Northing:	1,620,905.31 usft	Latitude:	39.517717
From:	Lat/Long	Easting:	2,382,159.86 usft	Longitude:	-107.690254
Position Uncertainty:	0.00 ft	Slot Radius:	1.10 ft	Grid Convergence:	-1.38 °

Well	CB-TG Land 11C-20-692					
Well Position	+N/-S	0.00 ft	Northing:	1,620,889.50 usft	Latitude:	39.517674
	+E/-W	0.00 ft	Easting:	2,382,164.00 usft	Longitude:	-107.690238
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	5,529.00 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	4/14/2011	10.24	65.82	52,323

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	276.73	

Survey Program	Date	6/20/2011			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
50.00	768.00	Gyro Surveys (Wellbore #1)	MWD	MWD - Standard	
800.00	8,110.00	MWD 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	
50.00	0.22	188.49	50.00	-0.09	-0.01	0.00	0.44	0.44	0.00	
100.00	0.28	165.92	100.00	-0.31	0.00	-0.04	0.23	0.12	-45.14	
150.00	0.09	192.67	150.00	-0.47	0.02	-0.08	0.41	-0.38	53.50	
200.00	0.24	160.18	200.00	-0.60	0.05	-0.12	0.34	0.30	-64.98	
250.00	0.15	154.72	250.00	-0.76	0.11	-0.20	0.18	-0.18	-10.92	
300.00	0.12	143.56	300.00	-0.86	0.17	-0.27	0.08	-0.06	-22.32	
350.00	0.25	144.47	350.00	-0.99	0.27	-0.38	0.26	0.26	1.82	
400.00	0.28	132.05	400.00	-1.16	0.42	-0.55	0.13	0.06	-24.84	
450.00	0.26	135.34	450.00	-1.33	0.59	-0.74	0.05	-0.04	6.58	

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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	0.26	151.95	500.00	-1.51	0.72	-0.90	0.15	0.00	33.22
550.00	0.21	169.82	550.00	-1.70	0.79	-0.99	0.18	-0.10	35.74
600.00	0.25	165.16	600.00	-1.89	0.84	-1.05	0.09	0.08	-9.32
650.00	0.16	173.87	650.00	-2.07	0.87	-1.11	0.19	-0.18	17.42
700.00	0.20	180.10	700.00	-2.22	0.88	-1.13	0.09	0.08	12.46
750.00	0.17	180.20	749.99	-2.38	0.88	-1.15	0.06	-0.06	0.20
768.00	0.25	206.30	767.99	-2.45	0.86	-1.14	0.68	0.44	145.00
End of Gyros									
800.00	0.25	206.30	799.99	-2.57	0.80	-1.10	0.00	0.00	0.00
900.00	0.25	206.30	899.99	-2.96	0.61	-0.95	0.00	0.00	0.00
960.00	2.10	239.30	959.98	-3.64	-0.40	-0.03	3.16	3.08	55.00
1,054.00	5.80	273.80	1,053.75	-4.21	-6.62	6.08	4.51	3.94	36.70
1,148.00	11.50	283.10	1,146.65	-1.77	-20.50	20.15	6.22	6.06	9.89
1,243.00	16.00	283.10	1,238.90	3.35	-42.48	42.58	4.74	4.74	0.00
1,338.00	20.70	279.50	1,329.05	9.09	-71.81	72.38	5.09	4.95	-3.79
1,433.00	25.00	276.40	1,416.57	14.10	-108.34	109.25	4.70	4.53	-3.26
1,528.00	28.30	274.70	1,501.47	18.19	-150.75	151.84	3.56	3.47	-1.79
1,622.00	30.10	272.30	1,583.53	20.96	-196.51	197.61	2.28	1.91	-2.55
1,717.00	30.30	272.70	1,665.63	23.05	-244.25	245.27	0.30	0.21	0.42
1,812.00	31.30	275.40	1,747.24	26.50	-292.76	293.85	1.80	1.05	2.84
1,907.00	31.00	276.40	1,828.54	31.55	-341.64	342.98	0.63	-0.32	1.05
2,002.00	31.70	274.80	1,909.67	36.36	-390.83	392.39	1.14	0.74	-1.68
2,097.00	32.20	275.70	1,990.28	40.96	-440.89	442.65	0.73	0.53	0.95
2,191.00	31.70	276.10	2,070.04	46.08	-490.36	492.39	0.58	-0.53	0.43
2,286.00	30.90	278.40	2,151.21	52.29	-539.32	541.73	1.51	-0.84	2.42
2,381.00	29.30	277.40	2,233.40	58.85	-586.50	589.36	1.76	-1.68	-1.05
2,476.00	28.90	277.70	2,316.41	64.92	-632.31	635.56	0.45	-0.42	0.32
2,571.00	29.40	277.70	2,399.38	71.12	-678.16	681.82	0.53	0.53	0.00
2,666.00	29.00	277.30	2,482.31	77.17	-724.11	728.17	0.47	-0.42	-0.42
2,760.00	28.50	275.60	2,564.72	82.25	-769.03	773.37	1.02	-0.53	-1.81
2,856.00	28.80	277.30	2,648.97	87.43	-814.77	819.40	0.90	0.31	1.77
2,950.00	28.90	274.50	2,731.30	92.09	-859.87	864.74	1.44	0.11	-2.98
3,045.00	29.80	275.40	2,814.11	96.11	-906.26	911.28	1.06	0.95	0.95
3,140.00	30.90	276.90	2,896.09	101.26	-953.98	959.27	1.41	1.16	1.58
3,235.00	31.20	280.80	2,977.49	108.80	-1,002.37	1,008.21	2.14	0.32	4.11
3,329.00	30.00	279.80	3,058.39	117.37	-1,049.45	1,055.97	1.39	-1.28	-1.06
3,424.00	29.30	271.70	3,140.99	122.10	-1,096.10	1,102.86	4.28	-0.74	-8.53
3,519.00	28.90	279.10	3,224.02	126.42	-1,142.02	1,148.97	3.81	-0.42	7.79
3,614.00	29.00	279.80	3,307.15	133.97	-1,187.38	1,194.90	0.37	0.11	0.74
3,709.00	27.90	279.60	3,390.68	141.60	-1,231.99	1,240.10	1.16	-1.16	-0.21
3,803.00	27.40	279.20	3,473.94	148.73	-1,275.03	1,283.67	0.57	-0.53	-0.43
3,898.00	27.20	277.70	3,558.36	155.13	-1,318.12	1,327.22	0.75	-0.21	-1.58
3,993.00	27.90	274.00	3,642.60	159.59	-1,361.82	1,371.13	1.95	0.74	-3.89

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Design:	Wellbore #1	Database:	CompassVM

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)	
4,087.00	29.90	277.20	3,724.89	164.06	-1,407.01	1,416.54	2.69	2.13	3.40	
4,182.00	30.10	277.60	3,807.16	170.18	-1,454.11	1,464.03	0.30	0.21	0.42	
As of June 13										
4,277.00	30.10	276.00	3,889.35	175.82	-1,501.41	1,511.67	0.84	0.00	-1.68	
4,372.00	29.40	276.60	3,971.83	180.99	-1,548.27	1,558.81	0.80	-0.74	0.63	
4,466.00	29.40	277.40	4,053.73	186.61	-1,594.07	1,604.96	0.42	0.00	0.85	
4,561.00	28.80	275.90	4,136.74	191.97	-1,639.96	1,651.15	0.99	-0.63	-1.58	
4,656.00	28.50	277.50	4,220.11	197.28	-1,685.19	1,696.70	0.87	-0.32	1.68	
4,751.00	27.80	274.80	4,303.87	202.09	-1,729.74	1,741.50	1.53	-0.74	-2.84	
4,846.00	26.90	276.50	4,388.25	206.38	-1,773.17	1,785.14	1.25	-0.95	1.79	
4,941.00	24.60	280.10	4,473.82	212.28	-1,814.00	1,826.38	2.93	-2.42	3.79	
5,036.00	22.30	279.10	4,560.97	218.60	-1,851.27	1,864.13	2.46	-2.42	-1.05	
5,130.00	20.30	277.30	4,648.54	223.49	-1,885.05	1,898.26	2.24	-2.13	-1.91	
5,225.00	17.80	279.60	4,738.33	228.01	-1,915.72	1,929.24	2.75	-2.63	2.42	
5,320.00	16.20	278.50	4,829.18	232.39	-1,943.15	1,956.99	1.72	-1.68	-1.16	
5,415.00	14.60	274.80	4,920.77	235.35	-1,968.19	1,982.21	1.98	-1.68	-3.89	
5,510.00	13.80	276.40	5,012.87	237.62	-1,991.38	2,005.50	0.94	-0.84	1.68	
5,604.00	11.40	279.80	5,104.60	240.45	-2,011.68	2,026.00	2.67	-2.55	3.62	
5,699.00	9.20	281.60	5,198.06	243.57	-2,028.37	2,042.94	2.34	-2.32	1.89	
As of June 14										
5,795.00	7.60	274.40	5,293.03	245.60	-2,042.22	2,056.93	1.99	-1.67	-7.50	
5,889.00	4.70	274.70	5,386.48	246.40	-2,052.26	2,066.99	3.09	-3.09	0.32	
5,984.00	3.30	265.10	5,481.25	246.48	-2,058.86	2,073.56	1.63	-1.47	-10.11	
6,079.00	1.60	261.00	5,576.16	246.04	-2,062.90	2,077.52	1.80	-1.79	-4.32	
6,174.00	0.60	277.50	5,671.14	245.90	-2,064.70	2,079.29	1.09	-1.05	17.37	
6,269.00	1.60	28.30	5,766.13	247.13	-2,064.56	2,079.30	2.00	1.05	116.63	
6,364.00	1.30	49.00	5,861.10	249.00	-2,063.12	2,078.09	0.63	-0.32	21.79	
6,459.00	1.00	78.10	5,956.08	249.88	-2,061.50	2,076.58	0.68	-0.32	30.63	
6,554.00	1.10	120.00	6,051.06	249.60	-2,059.90	2,074.95	0.80	0.11	44.11	
6,649.00	1.30	140.90	6,146.04	248.31	-2,058.43	2,073.34	0.50	0.21	22.00	
6,743.00	1.80	175.80	6,240.01	246.01	-2,057.65	2,072.30	1.11	0.53	37.13	
6,838.00	1.60	205.10	6,334.97	243.32	-2,058.10	2,072.43	0.93	-0.21	30.84	
6,933.00	0.40	172.40	6,429.95	241.79	-2,058.62	2,072.77	1.35	-1.26	-34.42	
7,028.00	1.40	149.80	6,524.94	240.45	-2,057.99	2,071.99	1.10	1.05	-23.79	
7,123.00	0.40	145.50	6,619.93	239.18	-2,057.22	2,071.07	1.05	-1.05	-4.53	
7,217.00	0.90	135.10	6,713.92	238.39	-2,056.51	2,070.28	0.54	0.53	-11.06	
7,312.00	1.60	119.10	6,808.90	237.21	-2,054.83	2,068.47	0.82	0.74	-16.84	
7,406.00	1.80	67.40	6,902.86	237.14	-2,052.32	2,065.97	1.59	0.21	-55.00	
7,501.00	1.30	112.90	6,997.83	237.29	-2,049.95	2,063.63	1.35	-0.53	47.89	
7,596.00	1.10	154.70	7,092.81	236.05	-2,048.56	2,062.11	0.92	-0.21	44.00	
7,690.00	1.80	181.50	7,186.78	233.76	-2,048.22	2,061.50	1.02	0.74	28.51	
7,784.00	0.80	145.90	7,280.76	231.74	-2,047.89	2,060.93	1.32	-1.06	-37.87	
7,878.00	0.50	145.80	7,374.75	230.86	-2,047.29	2,060.24	0.32	-0.32	-0.11	
7,973.00	0.70	135.50	7,469.75	230.10	-2,046.65	2,059.51	0.24	0.21	-10.84	

Survey Report

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Project:	Garfield County, Colorado [NAD83]	TVD Reference:	KB @ 5546.00ft
Site:	CB-TG Land Pad	MD Reference:	KB @ 5546.00ft
Well:	CB-TG Land 11C-20-692	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	CompassVM

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8,057.00	1.00	159.20	7,553.74	229.05	-2,046.03	2,058.77	0.54	0.36	28.21	
8,110.00	1.00	159.20	7,606.73	228.18	-2,045.70	2,058.35	0.00	0.00	0.00	
Projected TD										

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
768.00	767.99	-2.45	0.86	End of Gyros	
4,182.00	3,807.16	170.18	-1,454.11	As of June 13	
5,699.00	5,198.06	243.57	-2,028.37	As of June 14	
8,110.00	7,606.73	228.18	-2,045.70	Projected TD	

Checked By: _____	Approved By: _____	Date: _____
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