



Bill Barrett Corporation

Bill Barrett Corp.

Garfield County, Colorado [NAD83]

GGU 14-19 Pad

GGU Daley 21D-30-691

Wellbore #1

Survey: Surveys from Surface

Standard Survey Report

11 April, 2011



Company:	Bill Barrett Corp.	Local Co-ordinate Reference:	Well GGU Daley 21D-30-691
Project:	Garfield County, Colorado [NAD83]	TVD Reference:	KB @ 5846.00ft
Site:	GGU 14-19 Pad	MD Reference:	KB @ 5846.00ft
Well:	GGU Daley 21D-30-691	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Compass VM

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		GGU 14-19 Pad			
Site Position:		Northing:	1,616,207.75 usft	Latitude:	39° 30' 23.35 N
From:	Lat/Long	Easting:	2,407,793.69 usft	Longitude:	107° 35' 56.51 W
Position Uncertainty:	0.00 ft	Slot Radius:	1.10 ft	Grid Convergence:	-1.32 °

Well	GGU Daley 21D-30-691					
Well Position	+N/-S	0.00 ft	Northing:	1,616,175.67 usft	Latitude:	39° 30' 23.03 N
	+E/-W	0.00 ft	Easting:	2,407,793.79 usft	Longitude:	107° 35' 56.50 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	5,823.00 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	03/23/11	10.20	65.83	52,332

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	186.07	

Survey Program	Date	04/11/11			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
50.00	740.00	Gyro Surveys (Wellbore #1)	MWD	MWD - Standard	
879.00	7,310.00	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	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
50.00	0.050	319.54	50.00	0.02	-0.01	-0.02	0.10	0.10	0.00	
100.00	0.100	20.70	100.00	0.07	-0.01	-0.07	0.18	0.10	122.32	
150.00	0.100	45.06	150.00	0.15	0.03	-0.15	0.08	0.00	48.72	
200.00	0.130	83.73	200.00	0.18	0.12	-0.19	0.16	0.06	77.34	
250.00	0.140	58.85	250.00	0.22	0.23	-0.24	0.12	0.02	-49.76	
300.00	0.200	35.92	300.00	0.32	0.33	-0.36	0.18	0.12	-45.86	
350.00	0.460	83.74	350.00	0.42	0.58	-0.47	0.72	0.52	95.64	
400.00	0.270	181.39	400.00	0.32	0.78	-0.40	1.13	-0.38	195.30	
450.00	0.210	114.39	450.00	0.16	0.86	-0.25	0.54	-0.12	-134.00	

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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	0.300	62.74	500.00	0.19	1.06	-0.30	0.47	0.18	-103.30
550.00	0.040	69.61	550.00	0.25	1.19	-0.38	0.52	-0.52	13.74
600.00	0.310	83.96	600.00	0.27	1.34	-0.41	0.54	0.54	28.70
650.00	0.190	244.25	650.00	0.25	1.40	-0.40	0.99	-0.24	320.58
700.00	0.220	161.39	700.00	0.12	1.36	-0.27	0.54	0.06	-165.72
740.00	0.170	158.03	740.00	0.00	1.41	-0.14	0.13	-0.13	-8.40
791.00	0.087	226.10	791.00	-0.10	1.41	-0.05	0.31	-0.16	133.47
9 5/8"									
879.00	0.300	291.20	879.00	-0.06	1.14	-0.06	0.31	0.24	73.98
971.00	0.100	232.80	970.99	-0.03	0.86	-0.07	0.28	-0.22	-63.48
1,063.00	1.100	203.20	1,062.99	-0.89	0.44	0.83	1.10	1.09	-32.17
1,156.00	2.900	167.50	1,155.93	-4.00	0.60	3.92	2.27	1.94	-38.39
1,248.00	3.100	169.80	1,247.80	-8.72	1.55	8.51	0.25	0.22	2.50
1,343.00	4.800	174.70	1,342.58	-15.21	2.37	14.87	1.82	1.79	5.16
1,439.00	6.900	178.20	1,438.07	-24.97	2.92	24.53	2.22	2.19	3.65
1,534.00	8.100	185.30	1,532.26	-37.34	2.48	36.87	1.59	1.26	7.47
1,629.00	8.700	190.30	1,626.24	-51.08	0.58	50.73	0.99	0.63	5.26
1,725.00	9.000	188.60	1,721.10	-65.64	-1.84	65.47	0.41	0.31	-1.77
1,820.00	10.100	194.10	1,814.78	-81.07	-4.98	81.14	1.50	1.16	5.79
1,916.00	9.100	185.00	1,909.44	-96.80	-7.70	97.07	1.89	-1.04	-9.48
2,011.00	8.400	186.10	2,003.34	-111.18	-9.09	111.52	0.76	-0.74	1.16
2,106.00	7.900	182.00	2,097.38	-124.61	-10.05	124.97	0.81	-0.53	-4.32
2,201.00	8.300	180.90	2,191.43	-137.99	-10.39	138.31	0.45	0.42	-1.16
2,297.00	8.300	179.60	2,286.42	-151.85	-10.45	152.10	0.20	0.00	-1.35
2,392.00	8.300	187.00	2,380.43	-165.51	-11.24	165.77	1.12	0.00	7.79
2,487.00	8.000	184.40	2,474.47	-178.91	-12.58	179.23	0.50	-0.32	-2.74
2,583.00	8.300	185.50	2,569.50	-192.46	-13.76	192.84	0.35	0.31	1.15
2,678.00	8.300	182.40	2,663.51	-206.14	-14.70	206.54	0.47	0.00	-3.26
2,774.00	8.300	189.90	2,758.50	-219.89	-16.18	220.37	1.13	0.00	7.81
2,869.00	8.600	187.50	2,852.47	-233.69	-18.29	234.31	0.49	0.32	-2.53
2,965.00	8.900	185.30	2,947.36	-248.20	-19.91	248.91	0.47	0.31	-2.29
3,060.00	7.600	188.10	3,041.37	-261.73	-21.48	262.54	1.43	-1.37	2.95
3,156.00	7.400	183.10	3,136.55	-274.19	-22.70	275.06	0.71	-0.21	-5.21
3,251.00	7.700	190.00	3,230.73	-286.57	-24.14	287.52	1.00	0.32	7.26
3,346.00	7.800	189.50	3,324.86	-299.20	-26.31	300.30	0.13	0.11	-0.53
3,442.00	8.100	188.30	3,419.94	-312.31	-28.36	313.56	0.36	0.31	-1.25
3,537.00	8.100	187.80	3,513.99	-325.57	-30.24	326.94	0.07	0.00	-0.53
3,633.00	8.000	186.10	3,609.05	-338.91	-31.86	340.38	0.27	-0.10	-1.77
3,728.00	7.900	182.00	3,703.13	-352.01	-32.79	353.50	0.61	-0.11	-4.32
3,824.00	7.100	188.20	3,798.31	-364.47	-33.87	366.01	1.18	-0.83	6.46
3,919.00	7.000	191.40	3,892.59	-375.96	-35.85	377.64	0.43	-0.11	3.37
4,014.00	5.900	194.40	3,986.99	-386.36	-38.21	388.24	1.21	-1.16	3.16
4,110.00	4.100	190.60	4,082.62	-394.52	-40.07	396.54	1.91	-1.88	-3.96

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Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Compass VM

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)
4,204.00	2.700	181.00	4,176.46	-400.03	-40.73	402.10	1.60	-1.49	-10.21
4,300.00	2.900	181.50	4,272.34	-404.72	-40.83	406.77	0.21	0.21	0.52
4,395.00	1.600	189.40	4,367.27	-408.43	-41.11	410.49	1.40	-1.37	8.32
4,490.00	0.500	312.60	4,462.26	-409.46	-41.63	411.57	2.02	-1.16	129.68
4,586.00	0.300	155.60	4,558.25	-409.41	-41.83	411.53	0.82	-0.21	-163.54
4,681.00	0.600	129.60	4,653.25	-409.95	-41.35	412.02	0.37	0.32	-27.37
4,777.00	1.000	138.30	4,749.24	-410.90	-40.40	412.86	0.43	0.42	9.06
4,872.00	0.400	65.00	4,844.24	-411.37	-39.55	413.25	1.02	-0.63	-77.16
4,967.00	1.100	92.90	4,939.23	-411.28	-38.34	413.03	0.81	0.74	29.37
5,063.00	1.100	139.60	5,035.21	-412.03	-36.82	413.61	0.91	0.00	48.65
5,158.00	1.300	190.90	5,130.19	-413.78	-36.44	415.31	1.11	0.21	54.00
5,254.00	1.900	196.90	5,226.16	-416.37	-37.10	417.96	0.65	0.63	6.25
5,349.00	1.000	225.40	5,321.12	-418.46	-38.15	420.15	1.19	-0.95	30.00
5,445.00	1.100	232.40	5,417.11	-419.61	-39.48	421.43	0.17	0.10	7.29
5,539.00	1.100	204.80	5,511.09	-420.98	-40.57	422.91	0.56	0.00	-29.36
5,634.00	1.600	283.50	5,606.07	-421.50	-42.24	423.60	1.85	0.53	82.84
5,730.00	1.400	296.80	5,702.04	-420.66	-44.59	423.02	0.42	-0.21	13.85
5,825.00	1.400	300.90	5,797.01	-419.54	-46.63	422.12	0.11	0.00	4.32
5,920.00	1.200	290.80	5,891.99	-418.59	-48.55	421.38	0.32	-0.21	-10.63
6,016.00	0.800	265.80	5,987.97	-418.28	-50.16	421.24	0.61	-0.42	-26.04
6,111.00	1.200	228.50	6,082.96	-418.99	-51.57	422.09	0.78	0.42	-39.26
6,207.00	0.800	199.30	6,178.94	-420.29	-52.54	423.49	0.66	-0.42	-30.42
6,302.00	0.600	175.20	6,273.94	-421.41	-52.72	424.62	0.37	-0.21	-25.37
6,397.00	1.100	154.90	6,368.93	-422.73	-52.29	425.89	0.61	0.53	-21.37
6,492.00	1.100	151.10	6,463.91	-424.36	-51.46	427.42	0.08	0.00	-4.00
6,588.00	0.900	130.20	6,559.90	-425.65	-50.44	428.60	0.43	-0.21	-21.77
6,683.00	1.400	153.00	6,654.88	-427.17	-49.34	429.99	0.70	0.53	24.00
6,778.00	2.400	33.90	6,749.85	-426.55	-47.71	429.20	3.49	1.05	-125.37
6,874.00	3.200	24.20	6,845.73	-422.44	-45.49	424.88	0.97	0.83	-10.10
6,969.00	3.300	18.60	6,940.58	-417.43	-43.53	419.69	0.35	0.11	-5.89
7,063.00	1.800	48.40	7,034.49	-413.88	-41.56	415.96	2.08	-1.60	31.70
7,161.00	1.600	71.20	7,132.45	-412.42	-39.12	414.24	0.71	-0.20	23.27
7,263.00	1.500	86.30	7,234.41	-411.87	-36.44	413.42	0.41	-0.10	14.80
7,310.00	1.500	86.30	7,281.39	-411.79	-35.21	413.21	0.00	0.00	0.00

Casing Points				
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (ft)	Hole Diameter (ft)
791.00	791.00	9 5/8"	0.80	1.02

Company:	Bill Barrett Corp.	Local Co-ordinate Reference:	Well GGU Daley 21D-30-691
Project:	Garfield County, Colorado [NAD83]	TVD Reference:	KB @ 5846.00ft
Site:	GGU 14-19 Pad	MD Reference:	KB @ 5846.00ft
Well:	GGU Daley 21D-30-691	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Compass VM

Survey Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
740.00	740.00	0.00	1.41	End of Gyros

Checked By: _____ Approved By: _____ Date: _____