



Bill Barrett Corp.

Garfield County, Colorado [NAD83]

GGU 14-19 Pad

GGU Daley 24A-19-691

Wellbore #1

Survey: Surveys from Surface

Standard Survey Report

25 April, 2011



Company:	Bill Barrett Corp.	Local Co-ordinate Reference:	Well GGU Daley 24A-19-691
Project:	Garfield County, Colorado [NAD83]	TVD Reference:	KB @ 5846.00ft
Site:	GGU 14-19 Pad	MD Reference:	KB @ 5846.00ft
Well:	GGU Daley 24A-19-691	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 24A-19-691					
Well Position	+N/-S	0.00 ft	Northing:	1,616,191.71 usft	Latitude:	39° 30' 23.19 N
	+E/-W	0.00 ft	Easting:	2,407,793.88 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	196.57	

Survey Program	Date	04/25/11			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
50.00	725.00	Gyro Surveys (Wellbore #1)	MWD	MWD - Standard	
882.00	7,272.00	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	0.160	349.95	50.00	0.07	-0.01	-0.06	0.32	0.32	0.00	
100.00	0.120	40.70	100.00	0.18	0.01	-0.17	0.25	-0.08	101.50	
150.00	0.300	39.90	150.00	0.32	0.13	-0.34	0.36	0.36	-1.60	
200.00	0.210	46.93	200.00	0.48	0.28	-0.54	0.19	-0.18	14.06	
250.00	0.090	66.57	250.00	0.56	0.38	-0.64	0.26	-0.24	39.28	
300.00	0.130	26.00	300.00	0.63	0.44	-0.73	0.17	0.08	-81.14	
350.00	0.080	1.06	350.00	0.71	0.47	-0.81	0.13	-0.10	-49.88	
400.00	0.100	283.04	400.00	0.76	0.43	-0.85	0.23	0.04	-156.04	
450.00	0.190	267.74	450.00	0.76	0.30	-0.82	0.19	0.18	-30.60	

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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)
500.00	0.220	144.93	500.00	0.68	0.27	-0.73	0.72	0.06	-245.62
550.00	0.170	102.05	550.00	0.59	0.40	-0.68	0.30	-0.10	-85.76
600.00	0.220	51.08	600.00	0.63	0.55	-0.76	0.35	0.10	-101.94
650.00	0.240	11.14	650.00	0.79	0.64	-0.94	0.32	0.04	-79.88
700.00	0.170	304.46	700.00	0.94	0.60	-1.07	0.47	-0.14	-133.36
725.00	0.150	257.34	725.00	0.95	0.54	-1.07	0.52	-0.08	-188.48
788.00	0.166	186.92	788.00	0.84	0.45	-0.94	0.29	0.03	-111.78
9 5/8"									
882.00	0.400	155.10	882.00	0.41	0.57	-0.56	0.29	0.25	-33.85
974.00	0.200	31.30	973.99	0.26	0.79	-0.47	0.58	-0.22	-134.57
1,066.00	0.200	312.50	1,065.99	0.50	0.75	-0.70	0.28	0.00	-85.65
1,158.00	0.100	38.00	1,157.99	0.67	0.68	-0.84	0.24	-0.11	92.93
1,251.00	0.200	351.30	1,250.99	0.90	0.71	-1.06	0.16	0.11	-50.22
1,340.00	0.200	283.20	1,339.99	1.09	0.54	-1.19	0.25	0.00	-76.52
1,429.00	0.400	312.50	1,428.99	1.33	0.16	-1.32	0.28	0.22	32.92
1,524.00	0.400	282.30	1,523.99	1.63	-0.41	-1.44	0.22	0.00	-31.79
1,620.00	2.000	223.60	1,619.97	0.49	-1.90	0.08	1.90	1.67	-61.15
1,715.00	3.200	218.30	1,714.87	-2.80	-4.68	4.02	1.29	1.26	-5.58
1,810.00	3.500	219.80	1,809.71	-7.10	-8.18	9.14	0.33	0.32	1.58
1,906.00	3.600	216.30	1,905.52	-11.78	-11.84	14.67	0.25	0.10	-3.65
2,001.00	3.800	214.80	2,000.32	-16.77	-15.40	20.47	0.23	0.21	-1.58
2,096.00	4.700	200.90	2,095.06	-22.99	-18.59	27.34	1.43	0.95	-14.63
2,191.00	5.300	195.90	2,189.70	-30.85	-21.18	35.61	0.78	0.63	-5.26
2,286.00	5.400	190.40	2,284.29	-39.47	-23.19	44.44	0.55	0.11	-5.79
2,382.00	5.400	174.50	2,379.87	-48.41	-23.57	53.12	1.55	0.00	-16.56
2,477.00	5.100	180.70	2,474.47	-57.08	-23.20	61.32	0.68	-0.32	6.53
2,573.00	4.000	185.90	2,570.17	-64.68	-23.59	68.72	1.22	-1.15	5.42
2,668.00	3.600	174.60	2,664.96	-70.94	-23.65	74.74	0.89	-0.42	-11.89
2,764.00	2.500	189.70	2,760.82	-76.01	-23.72	79.61	1.41	-1.15	15.73
2,859.00	1.400	199.30	2,855.77	-79.14	-24.45	82.83	1.20	-1.16	10.11
2,954.00	1.600	198.00	2,950.73	-81.50	-25.25	85.32	0.21	0.21	-1.37
3,050.00	1.500	195.50	3,046.70	-83.99	-26.00	87.91	0.13	-0.10	-2.60
3,145.00	0.800	219.70	3,141.68	-85.69	-26.75	89.77	0.88	-0.74	25.47
3,241.00	0.800	194.80	3,237.67	-86.86	-27.35	91.05	0.36	0.00	-25.94
3,336.00	0.400	62.70	3,332.67	-87.35	-27.23	91.48	1.17	-0.42	-139.05
3,432.00	0.400	211.90	3,428.67	-87.48	-27.11	91.58	0.80	0.00	155.42
3,527.00	0.700	136.20	3,523.66	-88.18	-26.88	92.18	0.75	0.32	-79.68
3,622.00	1.400	118.20	3,618.65	-89.15	-25.45	92.70	0.81	0.74	-18.95
3,718.00	1.700	139.80	3,714.61	-90.79	-23.50	93.72	0.68	0.31	22.50
3,813.00	1.100	109.50	3,809.59	-92.17	-21.73	94.54	0.98	-0.63	-31.89
3,909.00	0.600	35.60	3,905.58	-92.07	-20.57	94.11	1.14	-0.52	-76.98
4,004.00	0.300	63.90	4,000.57	-91.55	-20.06	93.47	0.38	-0.32	29.79
4,100.00	1.500	351.40	4,096.56	-90.20	-20.02	92.16	1.50	1.25	-75.52

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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)	
4,195.00	1.300	0.70	4,191.53	-87.89	-20.19	90.00	0.32	-0.21	9.79	
4,290.00	0.400	356.00	4,286.52	-86.48	-20.20	88.66	0.95	-0.95	-4.95	
4,385.00	0.900	355.20	4,381.52	-85.41	-20.29	87.65	0.53	0.53	-0.84	
4,480.00	0.600	17.50	4,476.51	-84.19	-20.20	86.46	0.43	-0.32	23.47	
4,576.00	0.900	65.70	4,572.50	-83.40	-19.36	85.46	0.70	0.31	50.21	
4,671.00	2.400	342.40	4,667.47	-81.20	-19.29	83.33	2.59	1.58	-87.68	
4,766.00	1.800	304.80	4,762.41	-78.45	-21.11	81.22	1.54	-0.63	-39.58	
4,862.00	1.100	283.60	4,858.38	-77.37	-23.25	80.79	0.91	-0.73	-22.08	
4,957.00	0.800	256.50	4,953.36	-77.32	-24.78	81.17	0.56	-0.32	-28.53	
5,053.00	0.800	225.60	5,049.36	-77.94	-25.91	82.09	0.44	0.00	-32.19	
5,148.00	1.100	334.30	5,144.35	-77.58	-26.78	82.00	1.64	0.32	114.42	
5,244.00	0.800	316.60	5,240.34	-76.27	-27.64	80.98	0.43	-0.31	-18.44	
5,339.00	0.600	316.00	5,335.33	-75.43	-28.44	80.40	0.21	-0.21	-0.63	
5,434.00	0.800	316.80	5,430.32	-74.58	-29.24	79.83	0.21	0.21	0.84	
5,530.00	0.400	340.50	5,526.32	-73.78	-29.81	79.22	0.48	-0.42	24.69	
5,625.00	0.600	202.10	5,621.31	-73.93	-30.11	79.44	0.99	0.21	-145.68	
5,720.00	0.800	145.80	5,716.31	-74.94	-29.92	80.36	0.72	0.21	-59.26	
5,815.00	0.500	46.10	5,811.30	-75.20	-29.25	80.42	1.07	-0.32	-104.95	
5,910.00	0.200	50.00	5,906.30	-74.81	-28.82	79.92	0.32	-0.32	4.11	
6,006.00	0.800	101.80	6,002.30	-74.83	-28.04	79.72	0.72	0.63	53.96	
6,101.00	0.500	156.30	6,097.29	-75.35	-27.22	79.98	0.69	-0.32	57.37	
6,197.00	0.700	147.60	6,193.29	-76.23	-26.74	80.69	0.23	0.21	-9.06	
6,292.00	1.000	133.70	6,288.28	-77.29	-25.83	81.45	0.38	0.32	-14.63	
6,387.00	0.900	151.50	6,383.26	-78.52	-24.88	82.35	0.33	-0.11	18.74	
6,483.00	0.900	150.60	6,479.25	-79.84	-24.15	83.41	0.01	0.00	-0.94	
6,577.00	0.700	140.60	6,573.24	-80.93	-23.42	84.24	0.26	-0.21	-10.64	
6,673.00	0.400	114.70	6,669.24	-81.52	-22.74	84.62	0.40	-0.31	-26.98	
6,768.00	0.700	129.40	6,764.23	-82.03	-21.99	84.89	0.35	0.32	15.47	
6,864.00	1.400	124.50	6,860.22	-83.06	-20.57	85.48	0.73	0.73	-5.10	
6,959.00	1.100	181.90	6,955.20	-84.63	-19.65	86.72	1.29	-0.32	60.42	
7,054.00	1.100	170.90	7,050.18	-86.44	-19.53	88.42	0.22	0.00	-11.58	
7,150.00	1.300	151.70	7,146.16	-88.31	-18.87	90.03	0.46	0.21	-20.00	
7,225.00	1.800	148.50	7,221.13	-90.07	-17.85	91.42	0.68	0.67	-4.27	
7,272.00	1.800	148.50	7,268.11	-91.32	-17.08	92.40	0.00	0.00	0.00	

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (ft)	Hole Diameter (ft)	
788.00	788.00	9 5/8"	0.80	1.02	

Company:	Bill Barrett Corp.	Local Co-ordinate Reference:	Well GGU Daley 24A-19-691
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Site:	GGU 14-19 Pad	MD Reference:	KB @ 5846.00ft
Well:	GGU Daley 24A-19-691	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)	
725.00	725.00	0.95	0.54	End of Gyros

Checked By: _____ Approved By: _____ Date: _____