

Bill Barrett Corp.

Garfield County, Colorado [NAD83]

MDP Pad #10

GGU Federal 23C-20-691

Wellbore #1

Design: Wellbore #1

Standard Survey Report

05 October, 2011

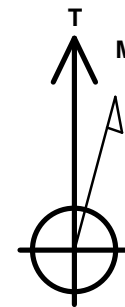
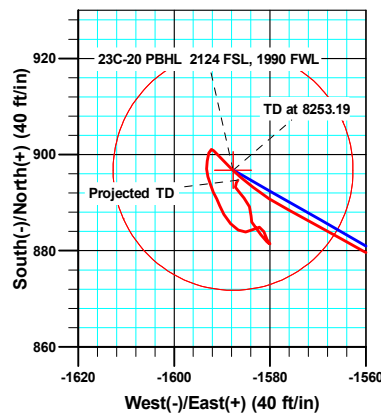
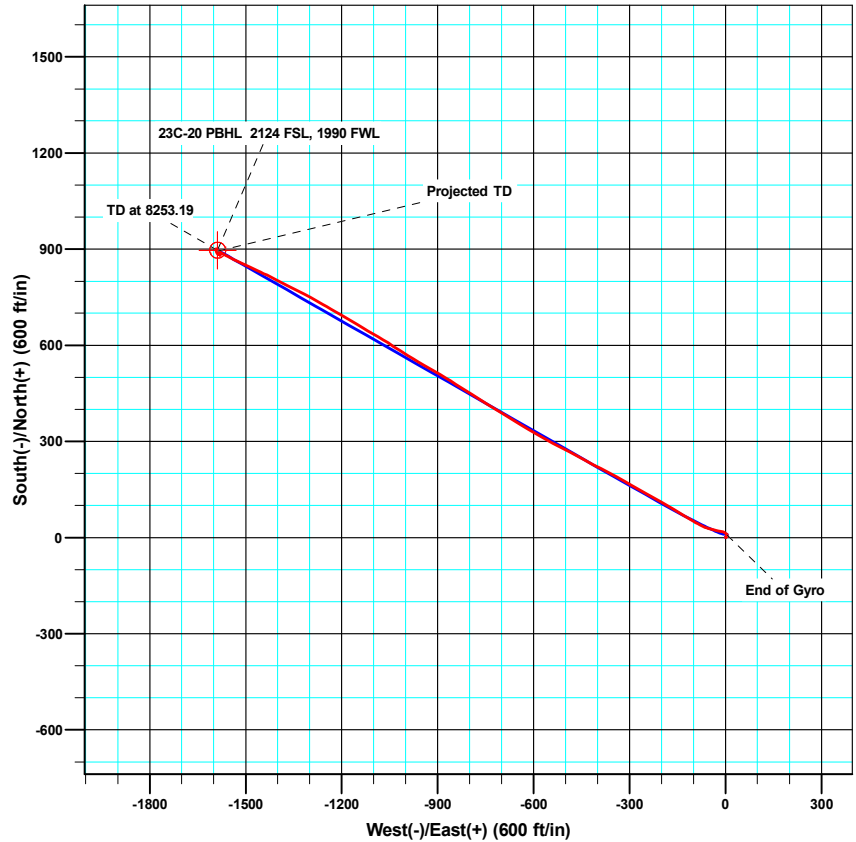
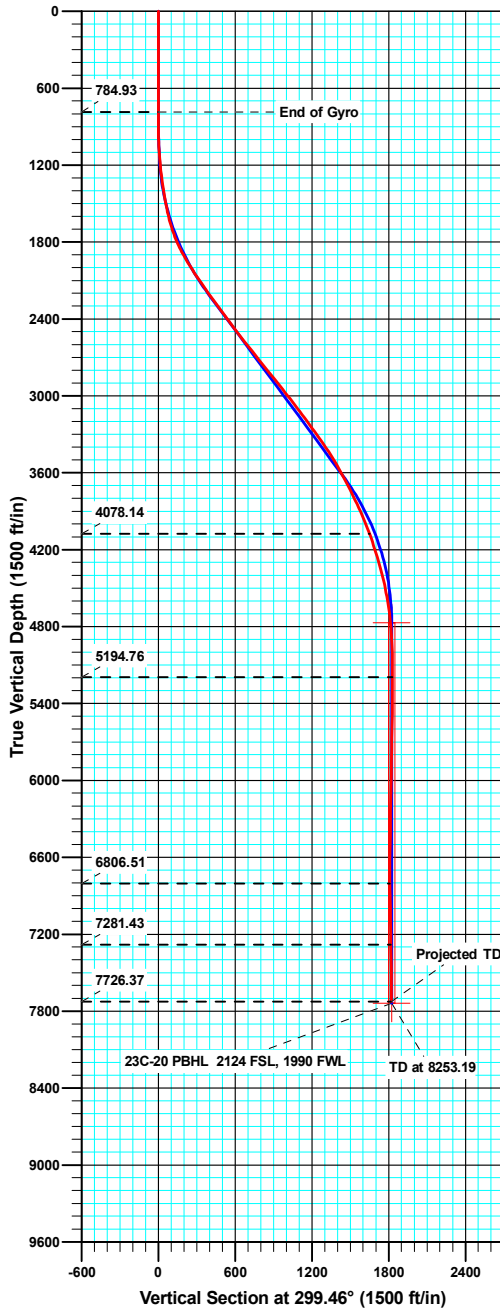


Well Details: GGU Federal 23C-20-691



North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
 +N/-S +E/-W Northing Easting Latitude Longitude
 0.00 0.00 1617113.60 2414622.94 39° 30' 33.85 N 107° 34' 29.66 W

Ground Level: 6452.00 MDP Pad #10



Azimuths to True North
 Magnetic North: 10.14°

Magnetic Field
 Strength: 52287.1snT
 Dip Angle: 65.82°
 Date: 08/30/2011
 Model: IGRF2010

ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	Vsect	Departure	Annotation
784.93	785.00	0.800	356.41	7.78	4.96	-0.49	9.48	End of Gyro
4078.14	4560.00	20.700	296.40	819.02	-1433.94	1651.34	1666.25	As of Sept 29
5194.76	5698.00	1.000	194.70	900.32	-1592.73	1829.58	1846.32	As of Sept 30
6806.51	7310.00	1.000	314.60	881.88	-1580.69	1810.03	1874.95	As of Oct 3
7281.43	7785.00	1.300	333.90	889.18	-1584.31	1816.77	1883.48	As of Oct 4
7726.37	8230.00	0.700	32.00	894.70	-1586.68	1821.54	1890.20	Projected TD



Company:	Bill Barrett Corp.	Local Co-ordinate Reference:	Well GGU Federal 23C-20-691
Project:	Garfield County, Colorado [NAD83]	TVD Reference:	KB @ 6494.21ft (KB=22')
Site:	MDP Pad #10	MD Reference:	KB @ 6494.21ft (KB=22')
Well:	GGU Federal 23C-20-691	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	MDP Pad #10				
Site Position:		Northing:	1,617,054.04 usft	Latitude:	39° 30' 33.26 N
From:	Lat/Long	Easting:	2,414,646.98 usft	Longitude:	107° 34' 29.34 W
Position Uncertainty:	0.00 ft	Slot Radius:	1.10 ft	Grid Convergence:	-1.31 °

Well	GGU Federal 23C-20-691					
Well Position	+N/-S	0.00 ft	Northing:	1,617,113.59 usft	Latitude:	39° 30' 33.85 N
	+E/-W	0.00 ft	Easting:	2,414,622.94 usft	Longitude:	107° 34' 29.66 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	6,472.21 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	08/30/11	10.14	65.82	52,287

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		299.46

Survey Program	Date	10/05/11			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
22.00	785.00	Survey #1 Gyro (Wellbore #1)	NS-GYRO-MS	North sensing gyrocompassing m/s	
800.00	8,230.00	MWD (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	
22.00	0.000	0.00	22.00	0.00	0.00	0.00	0.00	0.00	0.00	
72.00	0.360	50.34	72.00	0.10	0.12	-0.06	0.72	0.72	0.00	
122.00	0.710	47.95	122.00	0.41	0.47	-0.21	0.70	0.70	-4.78	
172.00	0.760	57.26	171.99	0.79	0.98	-0.46	0.26	0.10	18.62	
222.00	0.500	55.12	221.99	1.10	1.44	-0.71	0.52	-0.52	-4.28	
272.00	0.890	32.90	271.99	1.55	1.83	-0.83	0.93	0.78	-44.44	
322.00	1.090	34.56	321.98	2.27	2.31	-0.90	0.40	0.40	3.32	
372.00	0.950	22.03	371.97	3.04	2.73	-0.88	0.53	-0.28	-25.06	
422.00	0.890	26.67	421.97	3.77	3.06	-0.81	0.19	-0.12	9.28	

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Well:	GGU Federal 23C-20-691	North Reference:	True
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)
472.00	0.990	14.98	471.96	4.54	3.35	-0.68	0.43	0.20	-23.38
522.00	0.550	24.99	521.95	5.17	3.56	-0.56	0.92	-0.88	20.02
572.00	0.520	23.90	571.95	5.60	3.76	-0.52	0.06	-0.06	-2.18
622.00	0.940	41.26	621.95	6.11	4.12	-0.58	0.94	0.84	34.72
672.00	0.920	19.28	671.94	6.80	4.52	-0.59	0.71	-0.04	-43.96
722.00	0.240	33.79	721.94	7.27	4.71	-0.53	1.38	-1.36	29.02
772.00	0.710	29.52	771.94	7.62	4.92	-0.54	0.94	0.94	-8.54
785.00	0.800	356.41	784.94	7.78	4.96	-0.49	3.38	0.69	-254.69
800.00	0.800	356.41	799.93	7.99	4.94	-0.37	0.00	0.00	0.00
896.00	0.500	42.80	895.93	8.97	5.19	-0.11	0.61	-0.31	48.32
958.00	1.200	340.10	957.92	9.78	5.15	0.33	1.72	1.13	-101.13
1,053.00	3.000	310.20	1,052.86	12.32	2.91	3.52	2.16	1.89	-31.47
1,148.00	4.900	296.40	1,147.63	15.73	-2.62	10.02	2.22	2.00	-14.53
1,242.00	6.500	284.60	1,241.16	18.85	-11.37	19.17	2.10	1.70	-12.55
1,336.00	8.300	278.60	1,334.38	21.21	-23.22	30.65	2.08	1.91	-6.38
1,431.00	9.700	285.80	1,428.21	24.42	-37.71	44.84	1.89	1.47	7.58
1,526.00	11.600	284.80	1,521.57	29.03	-54.64	61.86	2.01	2.00	-1.05
1,621.00	13.900	296.30	1,614.24	36.53	-74.11	82.50	3.59	2.42	12.11
1,716.00	18.800	300.30	1,705.37	49.32	-97.57	109.21	5.29	5.16	4.21
1,811.00	23.100	301.10	1,794.07	66.68	-126.76	143.16	4.54	4.53	0.84
1,905.00	27.600	300.50	1,878.99	87.26	-161.33	183.39	4.79	4.79	-0.64
2,000.00	31.700	300.20	1,961.54	111.00	-201.88	230.37	4.32	4.32	-0.32
2,095.00	33.800	299.40	2,041.43	136.53	-246.48	281.76	2.26	2.21	-0.84
2,190.00	34.600	299.70	2,120.00	162.86	-292.93	335.15	0.86	0.84	0.32
2,284.00	35.500	298.00	2,196.96	188.90	-340.21	389.13	1.41	0.96	-1.81
2,379.00	35.900	297.40	2,274.11	214.67	-389.30	444.54	0.56	0.42	-0.63
2,474.00	37.200	298.60	2,350.42	241.24	-439.24	501.09	1.56	1.37	1.26
2,569.00	36.500	297.60	2,426.44	268.07	-489.50	558.05	0.97	-0.74	-1.05
2,664.00	37.700	298.10	2,502.21	294.85	-540.16	615.33	1.30	1.26	0.53
2,759.00	38.100	299.50	2,577.18	322.96	-591.30	673.68	1.00	0.42	1.47
2,854.00	38.900	301.70	2,651.53	353.07	-642.19	732.80	1.67	0.84	2.32
2,948.00	38.500	301.50	2,724.89	383.87	-692.24	791.53	0.45	-0.43	-0.21
3,044.00	38.700	302.30	2,799.91	415.52	-743.09	851.37	0.56	0.21	0.83
3,138.00	38.500	301.90	2,873.38	446.68	-792.77	909.95	0.34	-0.21	-0.43
3,233.00	38.700	303.00	2,947.62	478.48	-842.78	969.13	0.75	0.21	1.16
3,328.00	37.600	300.00	3,022.34	509.15	-892.79	1,027.76	2.27	-1.16	-3.16
3,423.00	38.100	299.60	3,097.35	538.12	-943.38	1,086.05	0.59	0.53	-0.42
3,518.00	36.300	302.30	3,173.02	567.63	-992.64	1,143.46	2.56	-1.89	2.84
3,612.00	35.100	303.40	3,249.36	597.37	-1,038.72	1,198.21	1.45	-1.28	1.17
3,707.00	36.700	299.80	3,326.32	626.52	-1,086.17	1,253.86	2.79	1.68	-3.79
3,802.00	34.100	301.20	3,403.75	654.43	-1,133.59	1,308.87	2.87	-2.74	1.47
3,991.00	29.700	299.20	3,564.17	704.74	-1,219.82	1,408.70	2.39	-2.33	-1.06
4,086.00	27.700	301.10	3,647.50	727.63	-1,259.27	1,454.31	2.31	-2.11	2.00

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Design:	Wellbore #1	Database:	Compass VM

Survey									
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4,181.00	26.900	298.50	3,731.92	749.29	-1,297.07	1,497.87	1.51	-0.84	-2.74
4,276.00	26.000	296.00	3,816.97	768.68	-1,334.67	1,540.15	1.51	-0.95	-2.63
4,371.00	23.800	297.50	3,903.14	786.66	-1,370.40	1,580.09	2.41	-2.32	1.58
4,465.00	22.100	297.00	3,989.70	803.45	-1,402.98	1,616.72	1.82	-1.81	-0.53
4,560.00	20.700	296.40	4,078.14	819.02	-1,433.94	1,651.34	1.49	-1.47	-0.63
4,655.00	17.800	295.00	4,167.82	832.63	-1,462.15	1,682.59	3.09	-3.05	-1.47
4,750.00	16.500	295.00	4,258.60	844.47	-1,487.53	1,710.52	1.37	-1.37	0.00
4,845.00	15.300	294.00	4,349.96	855.27	-1,511.21	1,736.44	1.30	-1.26	-1.05
4,940.00	13.400	295.00	4,441.99	865.02	-1,532.64	1,759.90	2.02	-2.00	1.05
5,035.00	11.100	300.10	4,534.83	874.26	-1,550.53	1,780.02	2.67	-2.42	5.37
5,130.00	9.100	298.60	4,628.35	882.44	-1,565.04	1,796.68	2.12	-2.11	-1.58
5,224.00	6.200	298.30	4,721.50	888.41	-1,576.04	1,809.19	3.09	-3.09	-0.32
5,319.00	4.600	308.40	4,816.08	893.21	-1,583.54	1,818.08	1.95	-1.68	10.63
5,414.00	3.200	315.50	4,910.86	897.46	-1,588.39	1,824.39	1.56	-1.47	7.47
5,509.00	1.400	315.00	5,005.78	900.18	-1,591.07	1,828.06	1.89	-1.89	-0.53
5,603.00	0.400	281.70	5,099.77	901.06	-1,592.20	1,829.48	1.16	-1.06	-35.43
5,698.00	1.000	194.70	5,194.76	900.32	-1,592.73	1,829.58	1.11	0.63	-91.58
5,793.00	1.000	191.70	5,289.75	898.71	-1,593.11	1,829.12	0.06	0.00	-3.16
5,888.00	1.000	176.20	5,384.73	897.07	-1,593.23	1,828.41	0.28	0.00	-16.32
5,983.00	1.000	164.00	5,479.72	895.44	-1,592.94	1,827.37	0.22	0.00	-12.84
6,077.00	1.100	161.00	5,573.70	893.80	-1,592.42	1,826.11	0.12	0.11	-3.19
6,172.00	1.000	153.90	5,668.69	892.20	-1,591.76	1,824.74	0.17	-0.11	-7.47
6,267.00	0.900	152.40	5,763.67	890.79	-1,591.05	1,823.43	0.11	-0.11	-1.58
6,361.00	1.000	161.60	5,857.66	889.36	-1,590.45	1,822.20	0.19	0.11	9.79
6,456.00	1.400	149.70	5,952.64	887.57	-1,589.60	1,820.59	0.49	0.42	-12.53
6,551.00	1.500	141.00	6,047.61	885.60	-1,588.23	1,818.43	0.25	0.11	-9.16
6,646.00	1.100	112.80	6,142.58	884.28	-1,586.61	1,816.36	0.78	-0.42	-29.68
6,741.00	0.800	92.00	6,237.57	883.90	-1,585.11	1,814.87	0.48	-0.32	-21.89
6,836.00	1.100	55.70	6,332.56	884.40	-1,583.69	1,813.88	0.69	0.32	-38.21
6,930.00	0.900	88.50	6,426.55	884.92	-1,582.21	1,812.85	0.63	-0.21	34.89
7,025.00	1.200	170.90	6,521.53	883.96	-1,581.30	1,811.59	1.48	0.32	86.74
7,119.00	1.100	139.70	6,615.52	882.30	-1,580.57	1,810.13	0.67	-0.11	-33.19
7,214.00	0.200	201.60	6,710.51	881.45	-1,580.04	1,809.25	1.07	-0.95	65.16
7,310.00	1.000	314.60	6,806.51	881.88	-1,580.69	1,810.03	1.14	0.83	117.71
7,405.00	1.300	325.30	6,901.49	883.35	-1,581.90	1,811.80	0.39	0.32	11.26
7,500.00	1.100	324.10	6,996.47	884.98	-1,583.05	1,813.60	0.21	-0.21	-1.26
7,595.00	0.400	320.60	7,091.46	885.97	-1,583.79	1,814.74	0.74	-0.74	-3.68
7,690.00	1.200	4.70	7,186.45	887.22	-1,583.92	1,815.47	1.00	0.84	46.42
7,785.00	1.300	333.90	7,281.43	889.18	-1,584.31	1,816.77	0.71	0.11	-32.42
7,879.00	1.200	323.50	7,375.40	890.93	-1,585.37	1,818.55	0.26	-0.11	-11.06
7,974.00	1.000	316.80	7,470.39	892.33	-1,586.53	1,820.25	0.25	-0.21	-7.05
8,069.00	0.400	338.50	7,565.38	893.24	-1,587.22	1,821.30	0.68	-0.63	22.84
8,180.00	0.700	32.00	7,676.37	894.18	-1,587.00	1,821.57	0.51	0.27	48.20

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

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8,230.00	0.700	32.00	7,726.37	894.70	-1,586.68	1,821.54	0.00	0.00	0.00	

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
785.00	784.93	7.78	4.96	End of Gyro	
4,560.00	4,078.14	819.02	-1,433.94	As of Sept 29	
5,698.00	5,194.76	900.32	-1,592.73	As of Sept 30	
7,310.00	6,806.51	881.88	-1,580.69	As of Oct 3	
7,785.00	7,281.43	889.18	-1,584.31	As of Oct 4	
8,230.00	7,726.37	894.70	-1,586.68	Projected TD	

Checked By: _____ Approved By: _____ Date: _____