



## **Bill Barrett Corp.**

Garfield County, Colorado

MDP 11 Pad

GGU Federal 42C-29-691

Wellbore #1

Survey: Surveys

## **Standard Survey Report**

01 February, 2011



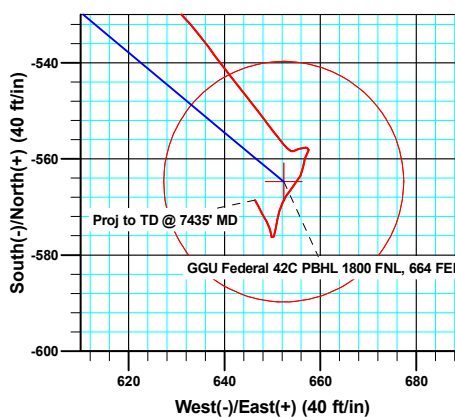
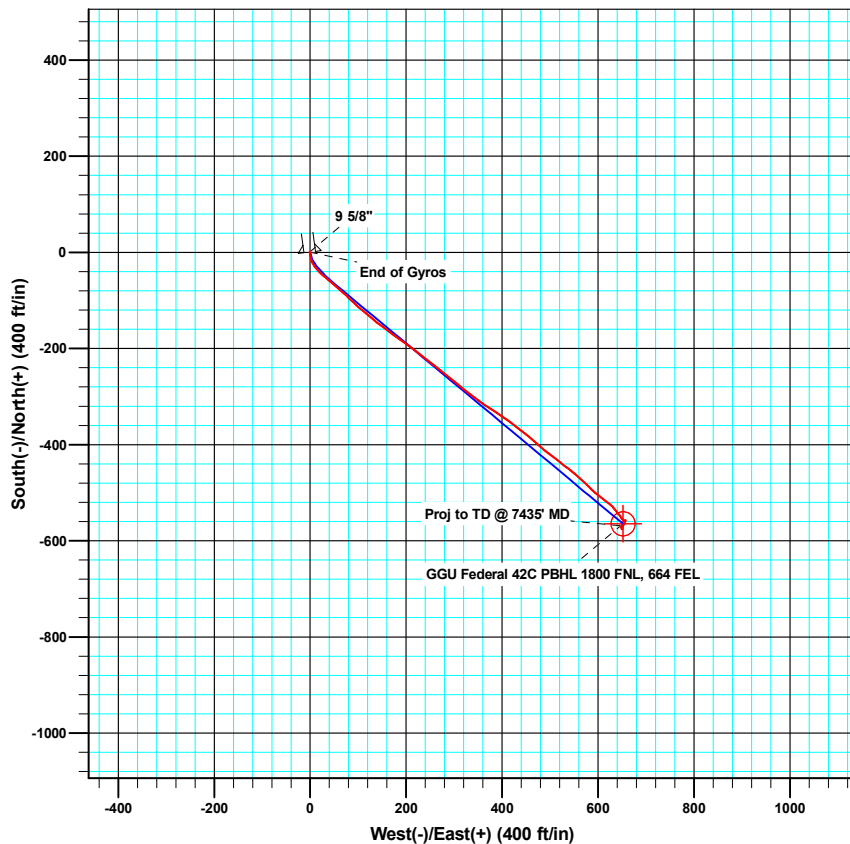
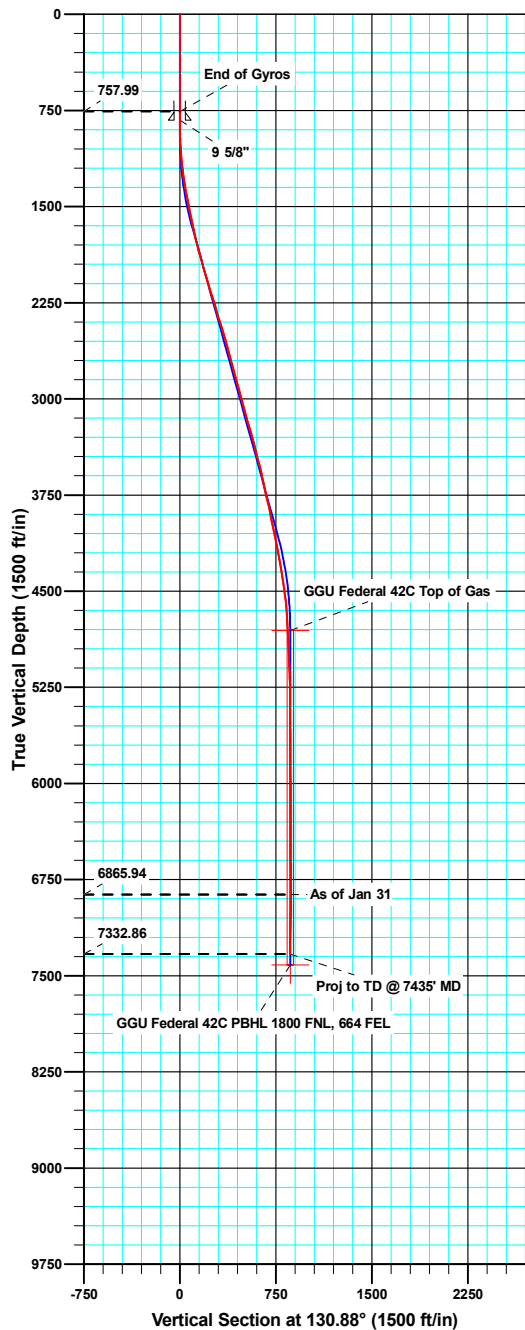


WELL DETAILS: GGU Federal 42C-29-691

Ground Level: 6103.90

North American Datum 1983 , US State Plane 1983 , Colorado Central Zone  
 +N/-S +E/-W Northing Easting Latitude Longitude  
 0.00 0.00 1614691.43 2415056.74 39° 30' 10.01 N 107° 34' 23.42 W

MDP 11 Pad



Azimuths to True North  
 Magnetic North: 10.20°

Magnetic Field  
 Strength: 52387.1nT  
 Dip Angle: 65.85°  
 Date: 12/21/2010  
 Model: IGRF200510

#### ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	Vsect	Departure	Annotation
6865.94	6968.00	0.900	351.00	-576.25	649.85	868.48	894.12	As of Jan 31
7332.86	7435.00	1.000	329.30	-568.56	646.37	860.82	902.64	Proj to TD @ 7435' MD

<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well GGU Federal 42C-29-691
<b>Project:</b>	Garfield County, Colorado	<b>TVD Reference:</b>	KB @ 6126.90ft
<b>Site:</b>	MDP 11 Pad	<b>MD Reference:</b>	KB @ 6126.90ft
<b>Well:</b>	GGU Federal 42C-29-691	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	Compass VM

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

Site		MDP 11 Pad			
Site Position:		Northing:	1,614,688.12 usft	Latitude:	39° 30' 9.99 N
From:	Lat/Long	Easting:	2,415,090.26 usft	Longitude:	107° 34' 22.99 W
Position Uncertainty:	0.00 ft	Slot Radius:	1.10 ft	Grid Convergence:	-1.31 °

Well		GGU Federal 42C-29-691				
Well Position	+N/-S	0.00 ft	Northing:	1,614,691.43 usft	Latitude:	39° 30' 10.01 N
	+E/-W	0.00 ft	Easting:	2,415,056.75 usft	Longitude:	107° 34' 23.42 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	6,103.90 ft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF200510	12/21/10	10.20	65.85	52,387

<b>Design</b>	Wellbore #1				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>	
	0.00	0.00	0.00	130.88	

<b>Survey Program</b>	<b>Date</b>	02/01/11			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
50.00	758.00	Gyro Surveys (Wellbore #1)	MWD	MWD - Standard	
880.00	7,435.00	Surveys (Wellbore #1)	MWD	MWD - Standard	

<b>Survey</b>										
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Vertical Section (ft)</b>	<b>Dogleg Rate (°/100ft)</b>	<b>Build Rate (°/100ft)</b>	<b>Turn Rate (°/100ft)</b>	
758.00	0.290	125.13	757.99	0.47	-0.58	-0.74	0.00	0.00	0.00	
827.10	0.228	172.51	827.09	0.23	-0.42	-0.47	0.31	-0.09	68.56	
<b>9 5/8"</b>										
880.00	0.300	205.50	879.99	0.00	-0.46	-0.35	0.31	0.14	62.37	
972.00	3.200	168.70	971.94	-2.73	-0.06	1.74	3.22	3.15	-40.00	
1,064.00	5.200	171.10	1,063.68	-9.37	1.09	6.95	2.18	2.17	2.61	
1,156.00	6.900	161.30	1,155.17	-18.72	3.50	14.90	2.16	1.85	-10.65	
1,248.00	8.400	143.30	1,246.36	-29.35	9.29	26.23	3.05	1.63	-19.57	
1,344.00	9.200	135.60	1,341.23	-40.45	18.85	40.73	1.48	0.83	-8.02	
1,439.00	10.800	130.80	1,434.79	-51.70	30.90	57.20	1.90	1.68	-5.05	

<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well GGU Federal 42C-29-691
<b>Project:</b>	Garfield County, Colorado	<b>TVD Reference:</b>	KB @ 6126.90ft
<b>Site:</b>	MDP 11 Pad	<b>MD Reference:</b>	KB @ 6126.90ft
<b>Well:</b>	GGU Federal 42C-29-691	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	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)
1,534.00	11.700	128.30	1,527.96	-63.48	45.20	75.72	1.08	0.95	-2.63
1,630.00	11.700	132.20	1,621.97	-76.05	60.05	95.18	0.82	0.00	4.06
1,725.00	12.900	133.60	1,714.79	-89.84	74.87	115.40	1.30	1.26	1.47
1,820.00	14.300	132.50	1,807.12	-105.08	91.20	137.72	1.50	1.47	-1.16
1,916.00	15.500	130.80	1,899.89	-121.47	109.65	162.40	1.33	1.25	-1.77
2,011.00	16.300	128.90	1,991.26	-138.14	129.63	188.42	1.00	0.84	-2.00
2,106.00	17.100	126.30	2,082.25	-154.78	151.27	215.67	1.15	0.84	-2.74
2,202.00	17.100	126.50	2,174.01	-171.53	173.99	243.81	0.06	0.00	0.21
2,297.00	17.300	126.00	2,264.76	-188.14	196.64	271.81	0.26	0.21	-0.53
2,392.00	17.300	127.00	2,355.46	-204.94	219.35	299.98	0.31	0.00	1.05
2,488.00	16.400	127.90	2,447.34	-221.86	241.45	327.75	0.98	-0.94	0.94
2,583.00	16.000	128.30	2,538.57	-238.21	262.30	354.23	0.44	-0.42	0.42
2,678.00	15.500	129.30	2,630.00	-254.37	282.40	380.00	0.60	-0.53	1.05
2,774.00	15.000	128.40	2,722.62	-270.21	302.06	405.23	0.58	-0.52	-0.94
2,869.00	15.100	129.50	2,814.36	-285.72	321.25	429.88	0.32	0.11	1.16
2,965.00	15.600	126.60	2,906.94	-301.37	341.26	455.26	0.95	0.52	-3.02
3,060.00	15.800	123.30	2,998.40	-316.08	362.32	480.82	0.96	0.21	-3.47
3,155.00	15.800	124.80	3,089.81	-330.56	383.75	506.50	0.43	0.00	1.58
3,251.00	15.600	123.10	3,182.23	-345.07	405.30	532.28	0.52	-0.21	-1.77
3,346.00	15.500	129.60	3,273.76	-360.14	425.78	557.63	1.84	-0.11	6.84
3,441.00	15.300	126.60	3,365.35	-375.71	445.63	582.82	0.86	-0.21	-3.16
3,537.00	14.400	131.80	3,458.14	-391.22	464.69	607.39	1.67	-0.94	5.42
3,632.00	13.800	130.30	3,550.28	-406.42	482.14	630.53	0.74	-0.63	-1.58
3,727.00	12.000	126.10	3,642.88	-419.57	498.76	651.70	2.14	-1.89	-4.42
3,823.00	11.700	128.00	3,736.84	-431.44	514.50	671.37	0.51	-0.31	1.98
3,917.00	13.100	129.20	3,828.64	-444.04	530.26	691.54	1.51	1.49	1.28
4,012.00	11.900	126.90	3,921.39	-456.73	546.44	712.07	1.37	-1.26	-2.42
4,108.00	11.900	133.90	4,015.33	-469.53	561.49	731.83	1.50	0.00	7.29
4,203.00	11.200	133.10	4,108.41	-482.63	575.28	750.83	0.76	-0.74	-0.84
4,298.00	10.500	133.00	4,201.71	-494.84	588.35	768.70	0.74	-0.74	-0.11
4,394.00	9.800	128.70	4,296.21	-505.91	601.12	785.61	1.07	-0.73	-4.48
4,489.00	9.500	125.60	4,389.86	-515.53	613.81	801.49	0.63	-0.32	-3.26
4,584.00	7.500	130.00	4,483.81	-524.08	624.93	815.50	2.21	-2.11	4.63
4,680.00	6.300	140.50	4,579.12	-532.17	633.08	826.96	1.81	-1.25	10.94
4,775.00	3.500	144.80	4,673.77	-538.56	638.07	834.91	2.97	-2.95	4.53
4,870.00	3.200	141.10	4,768.60	-543.00	641.41	840.34	0.39	-0.32	-3.89
4,966.00	3.000	141.50	4,864.46	-547.05	644.66	845.44	0.21	-0.21	0.42
5,061.00	2.600	142.70	4,959.35	-550.71	647.51	850.00	0.43	-0.42	1.26
5,156.00	2.300	143.10	5,054.26	-553.95	649.96	853.97	0.32	-0.32	0.42
5,252.00	2.500	139.80	5,150.18	-557.09	652.47	857.92	0.25	0.21	-3.44
5,347.00	0.800	63.50	5,245.14	-558.37	654.40	860.22	2.57	-1.79	-80.32
5,442.00	0.700	76.90	5,340.13	-557.95	655.56	860.82	0.21	-0.11	14.11
5,585.00	0.400	80.30	5,483.13	-557.66	656.90	861.65	0.21	-0.21	2.38

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<b>Site:</b>	MDP 11 Pad	<b>MD Reference:</b>	KB @ 6126.90ft
<b>Well:</b>	GGU Federal 42C-29-691	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	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)	
5,633.00	0.500	113.90	5,531.13	-557.72	657.26	861.95	0.58	0.21	70.00	
5,728.00	0.300	181.90	5,626.12	-558.14	657.63	862.51	0.50	-0.21	71.58	
5,824.00	0.500	220.10	5,722.12	-558.71	657.35	862.67	0.34	0.21	39.79	
5,919.00	1.100	197.10	5,817.11	-559.90	656.81	863.04	0.70	0.63	-24.21	
6,015.00	1.200	188.60	5,913.09	-561.77	656.39	863.95	0.21	0.10	-8.85	
6,110.00	1.000	208.80	6,008.08	-563.48	655.84	864.66	0.46	-0.21	21.26	
6,205.00	1.300	216.40	6,103.06	-565.08	654.81	864.92	0.35	0.32	8.00	
6,301.00	0.900	218.10	6,199.04	-566.54	653.69	865.04	0.42	-0.42	1.77	
6,396.00	1.000	212.00	6,294.03	-567.84	652.79	865.20	0.15	0.11	-6.42	
6,491.00	1.000	203.30	6,389.01	-569.30	652.03	865.58	0.16	0.00	-9.16	
6,587.00	1.000	195.00	6,485.00	-570.88	651.48	866.20	0.15	0.00	-8.65	
6,682.00	1.100	194.60	6,579.98	-572.56	651.04	866.96	0.11	0.11	-0.42	
6,778.00	1.100	186.10	6,675.96	-574.37	650.70	867.90	0.17	0.00	-8.85	
6,873.00	1.100	200.70	6,770.95	-576.13	650.29	868.73	0.29	0.00	15.37	
6,968.00	0.900	351.00	6,865.94	-576.25	649.85	868.48	2.04	-0.21	158.21	
7,063.00	1.000	344.20	6,960.93	-574.71	649.50	867.21	0.16	0.11	-7.16	
7,158.00	1.100	334.00	7,055.91	-573.09	648.88	865.68	0.22	0.11	-10.74	
7,254.00	1.100	326.00	7,151.89	-571.50	647.96	863.94	0.16	0.00	-8.33	
7,349.00	1.100	337.80	7,246.88	-569.90	647.10	862.25	0.24	0.00	12.42	
7,388.00	1.000	329.30	7,285.87	-569.26	646.79	861.59	0.47	-0.26	-21.79	
7,435.00	1.000	329.30	7,332.86	-568.56	646.37	860.82	0.00	0.00	0.00	

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name		Casing Diameter (ft)	Hole Diameter (ft)
827.10	827.09	9 5/8"		0.80	1.02

Survey Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
6,968.00	6,865.94	-576.25	649.85	As of Jan 31	
7,435.00	7,332.86	-568.56	646.37	Proj to TD @ 7435' MD	

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_