



**Bill Barrett Corporation**

## **Bill Barrett Corp.**

Garfield County, Colorado

MDP 6 Pad

GGU Miller Fed 33C-32-691

Wellbore #1

Survey: Surveys

## **Standard Survey Report**

28 December, 2010



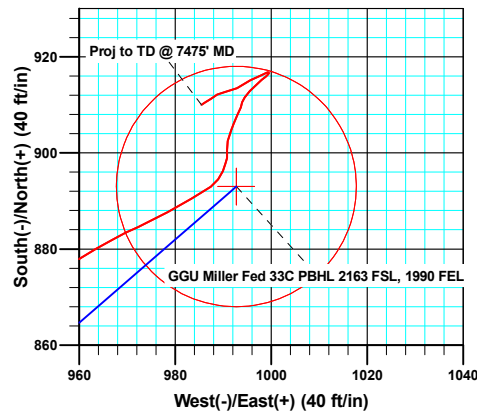
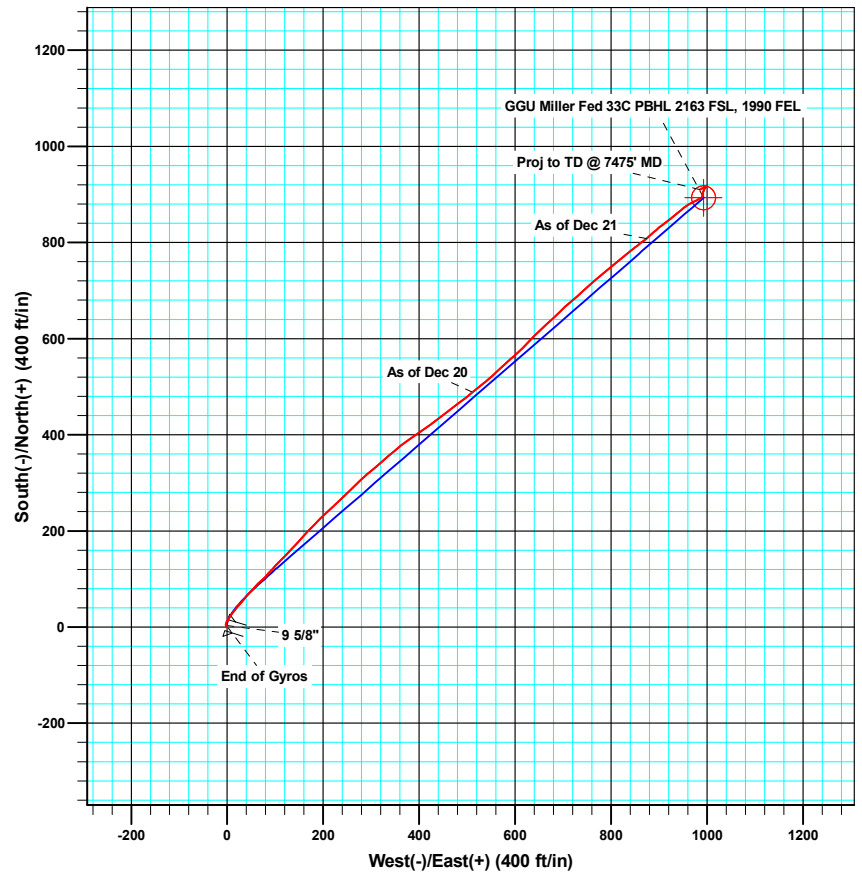
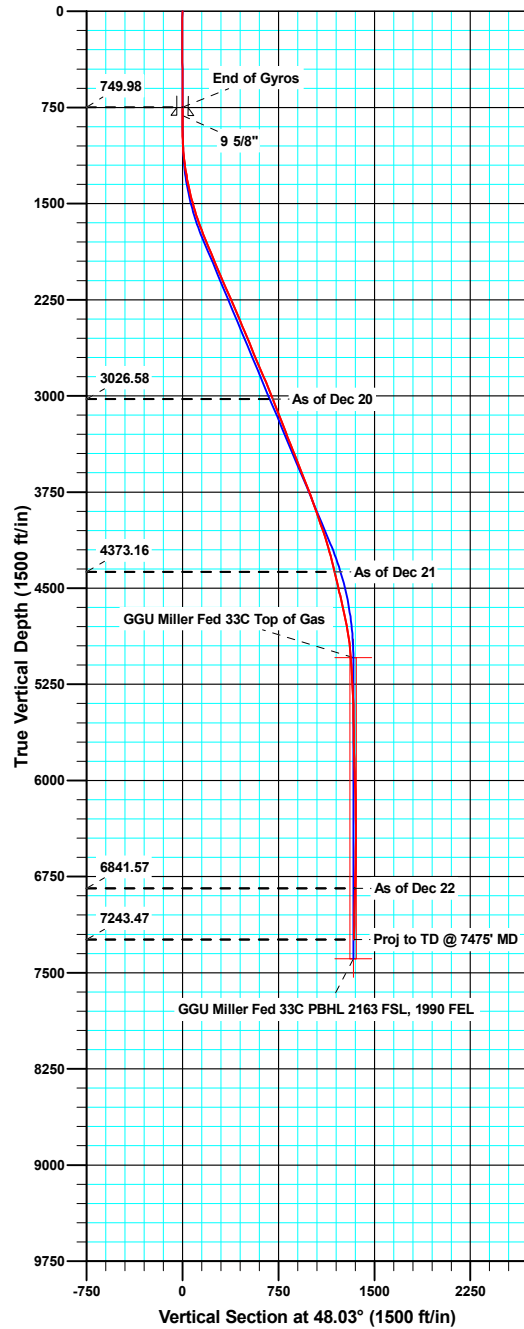


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WELL DETAILS: GGU Miller Fed 33C-32-691

Ground Level: 6120.00

North American Datum 1983		US State Plane 1983		Colorado Central Zone	
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	1606646.80	2413292.89	39° 28' 50.12 N	107° 34' 43.57 W



Azimuths to True North  
Magnetic North: 10.22°

Magnetic Field  
Strength: 52392.5nT  
Dip Angle: 65.83°  
Date: 10/14/2010  
Model: IGRF200510

#### ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	Vsect	Departure	Annotation
3026.58	3159.00	21.800	50.80	488.54	511.70	707.15	713.14	As of Dec 20
4373.16	4591.00	12.700	49.70	808.40	873.88	1190.33	1196.76	As of Dec 21
6841.57	7073.00	2.500	240.90	913.52	992.87	1349.10	1374.92	As of Dec 22
7243.47	7475.00	1.200	236.60	910.00	985.46	1341.24	1383.44	Proj to TD @ 7475' MD

<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well GGU Miller Fed 33C-32-691
<b>Project:</b>	Garfield County, Colorado	<b>TVD Reference:</b>	KB @ 6142.00ft
<b>Site:</b>	MDP 6 Pad	<b>MD Reference:</b>	KB @ 6142.00ft
<b>Well:</b>	GGU Miller Fed 33C-32-691	<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		

<b>Site</b>	MDP 6 Pad		
<b>Site Position:</b>		<b>Northing:</b>	1,606,603.61 usft
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,413,270.17 usft
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	1.10 ft
		<b>Latitude:</b>	39° 28' 49.69 N
		<b>Longitude:</b>	107° 34' 43.85 W
		<b>Grid Convergence:</b>	-1.31 °

<b>Well</b>	GGU Miller Fed 33C-32-691		
<b>Well Position</b>	<b>+N/-S</b>	0.00 ft	<b>Northing:</b> 1,606,646.80 usft
	<b>+E/-W</b>	0.00 ft	<b>Easting:</b> 2,413,292.90 usft
<b>Position Uncertainty</b>	0.00 ft	<b>Wellhead Elevation:</b>	ft
		<b>Latitude:</b>	39° 28' 50.12 N
		<b>Longitude:</b>	107° 34' 43.57 W
		<b>Ground Level:</b>	6,120.00 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	10/14/10	10.22	65.83	52,393

<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	48.03	

<b>Survey Program</b>	<b>Date</b>	12/28/10			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
50.00	750.00	Gyro Surveys (Wellbore #1)	MWD	MWD - Standard	
881.00	7,475.00	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>	
750.00	0.080	73.87	749.98	3.46	-1.61	1.12	0.00	0.00	0.00	
813.70	0.451	286.51	813.68	3.54	-1.80	1.03	0.82	0.58	-231.33	
<b>9 5/8"</b>										
881.00	1.000	283.90	880.98	3.76	-2.63	0.56	0.82	0.82	-3.88	
973.00	1.800	11.10	972.96	5.37	-3.13	1.27	2.19	0.87	94.78	
1,065.00	4.100	20.70	1,064.83	9.87	-1.69	5.34	2.55	2.50	10.43	
1,157.00	7.100	34.50	1,156.38	17.63	2.70	13.79	3.55	3.26	15.00	
1,250.00	9.100	36.40	1,248.45	28.29	10.32	26.59	2.17	2.15	2.04	
1,345.00	11.700	41.30	1,341.88	41.57	21.13	43.51	2.89	2.74	5.16	
1,441.00	13.600	39.10	1,435.55	57.65	34.68	64.33	2.04	1.98	-2.29	

<b>Company:</b>	Bill Barrett Corp.	<b>Local Co-ordinate Reference:</b>	Well GGU Miller Fed 33C-32-691
<b>Project:</b>	Garfield County, Colorado	<b>TVD Reference:</b>	KB @ 6142.00ft
<b>Site:</b>	MDP 6 Pad	<b>MD Reference:</b>	KB @ 6142.00ft
<b>Well:</b>	GGU Miller Fed 33C-32-691	<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)	
1,536.00	16.300	43.40	1,527.33	76.01	50.89	88.66	3.07	2.84	4.53	
1,632.00	18.800	45.50	1,618.85	96.64	71.18	117.55	2.69	2.60	2.19	
1,727.00	21.400	42.60	1,708.06	120.13	93.83	150.10	2.93	2.74	-3.05	
1,822.00	23.500	44.80	1,795.86	146.33	118.91	186.27	2.38	2.21	2.32	
1,918.00	22.100	42.00	1,884.36	173.34	144.49	223.34	1.84	-1.46	-2.92	
2,013.00	22.500	42.80	1,972.25	199.95	168.79	259.21	0.53	0.42	0.84	
2,108.00	23.100	47.00	2,059.84	226.00	194.78	295.95	1.83	0.63	4.42	
2,204.00	23.700	45.80	2,147.94	252.30	222.38	334.06	0.80	0.63	-1.25	
2,299.00	24.000	46.90	2,234.83	278.81	250.18	372.46	0.56	0.32	1.16	
2,395.00	23.200	46.10	2,322.80	305.26	278.06	410.87	0.90	-0.83	-0.83	
2,490.00	23.600	50.50	2,409.99	330.33	306.22	448.58	1.89	0.42	4.63	
2,586.00	22.400	48.20	2,498.36	354.75	334.68	486.07	1.56	-1.25	-2.40	
2,681.00	22.300	52.10	2,586.23	377.89	362.40	522.15	1.56	-0.11	4.11	
2,777.00	23.000	56.20	2,674.83	399.51	392.36	558.89	1.80	0.73	4.27	
2,872.00	23.500	54.00	2,762.12	420.97	423.11	596.10	1.05	0.53	-2.32	
2,968.00	23.800	52.10	2,850.06	444.12	453.88	634.46	0.85	0.31	-1.98	
3,063.00	22.100	53.50	2,937.53	466.53	483.37	671.37	1.88	-1.79	1.47	
3,159.00	21.800	50.80	3,026.58	488.54	511.70	707.15	1.10	-0.31	-2.81	
3,254.00	21.400	50.20	3,114.91	510.78	538.69	742.09	0.48	-0.42	-0.63	
3,349.00	21.000	47.00	3,203.48	533.48	564.45	776.43	1.29	-0.42	-3.37	
3,445.00	20.400	48.70	3,293.28	556.26	589.60	810.36	0.88	-0.63	1.77	
3,540.00	22.700	45.10	3,381.64	580.13	615.03	845.23	2.79	2.42	-3.79	
3,636.00	20.800	44.10	3,470.80	605.45	640.02	880.74	2.02	-1.98	-1.04	
3,732.00	21.900	48.30	3,560.22	629.60	665.25	915.65	1.96	1.15	4.38	
3,827.00	21.800	45.40	3,648.39	653.77	691.04	950.99	1.14	-0.11	-3.05	
3,922.00	21.400	49.80	3,736.73	677.35	716.84	985.93	1.76	-0.42	4.63	
4,018.00	19.800	48.20	3,826.59	699.49	742.34	1,019.70	1.77	-1.67	-1.67	
4,114.00	19.200	48.50	3,917.08	720.79	766.28	1,051.75	0.63	-0.63	0.31	
4,209.00	19.200	51.20	4,006.80	740.93	790.15	1,082.96	0.93	0.00	2.84	
4,305.00	17.500	50.40	4,097.91	760.02	813.58	1,113.15	1.79	-1.77	-0.83	
4,400.00	17.100	50.40	4,188.62	778.03	835.35	1,141.38	0.42	-0.42	0.00	
4,495.00	14.900	53.40	4,279.93	794.21	855.92	1,167.49	2.47	-2.32	3.16	
4,591.00	12.700	49.70	4,373.16	808.40	873.88	1,190.33	2.47	-2.29	-3.85	
4,686.00	12.400	48.10	4,465.89	821.97	889.43	1,210.97	0.48	-0.32	-1.68	
4,782.00	14.400	52.10	4,559.27	836.19	906.53	1,233.19	2.30	2.08	4.17	
4,877.00	12.600	52.30	4,651.64	849.78	924.05	1,255.31	1.90	-1.89	0.21	
4,973.00	11.100	49.70	4,745.60	862.16	939.38	1,274.99	1.66	-1.56	-2.71	
5,068.00	9.200	53.10	4,839.11	872.64	952.43	1,291.69	2.10	-2.00	3.58	
5,163.00	7.100	60.10	4,933.14	880.12	963.59	1,305.00	2.44	-2.21	7.37	
5,259.00	4.600	66.80	5,028.64	884.60	972.28	1,314.45	2.70	-2.60	6.98	
5,354.00	3.800	58.90	5,123.38	887.73	978.47	1,321.15	1.04	-0.84	-8.32	
5,450.00	3.000	62.90	5,219.21	890.51	983.43	1,326.70	0.87	-0.83	4.17	
5,545.00	2.700	53.00	5,314.09	892.99	987.43	1,331.33	0.61	-0.32	-10.42	

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<b>Site:</b>	MDP 6 Pad	<b>MD Reference:</b>	KB @ 6142.00ft
<b>Well:</b>	GGU Miller Fed 33C-32-691	<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)	
5,641.00	2.400	20.60	5,410.00	896.23	989.95	1,335.37	1.51	-0.31	-33.75	
5,736.00	1.100	10.90	5,504.96	898.99	990.82	1,337.86	1.40	-1.37	-10.21	
5,831.00	0.900	346.60	5,599.94	900.61	990.82	1,338.95	0.49	-0.21	-25.58	
5,927.00	1.400	15.60	5,695.93	902.48	990.96	1,340.30	0.78	0.52	30.21	
6,022.00	1.500	18.90	5,790.89	904.77	991.67	1,342.36	0.14	0.11	3.47	
6,118.00	2.500	25.40	5,886.84	907.85	992.98	1,345.39	1.07	1.04	6.77	
6,213.00	1.000	8.90	5,981.79	910.54	994.00	1,347.95	1.65	-1.58	-17.37	
6,309.00	2.500	42.50	6,077.74	912.91	995.54	1,350.68	1.83	1.56	35.00	
6,404.00	1.600	53.90	6,172.68	915.22	998.01	1,354.06	1.04	-0.95	12.00	
6,500.00	0.500	37.00	6,268.66	916.35	999.35	1,355.81	1.18	-1.15	-17.60	
6,595.00	0.100	227.90	6,363.66	916.62	999.54	1,356.13	0.63	-0.42	-178.00	
6,691.00	0.300	339.20	6,459.66	916.80	999.38	1,356.14	0.36	0.21	115.94	
6,786.00	0.500	218.30	6,554.66	916.71	999.04	1,355.82	0.74	0.21	-127.26	
6,882.00	1.300	252.10	6,650.65	916.04	997.74	1,354.41	0.97	0.83	35.21	
6,977.00	1.400	239.70	6,745.62	915.13	995.72	1,352.29	0.32	0.11	-13.05	
7,073.00	2.500	240.90	6,841.57	913.52	992.87	1,349.10	1.15	1.15	1.25	
7,168.00	1.100	273.20	6,936.52	912.56	990.15	1,346.44	1.76	-1.47	34.00	
7,264.00	0.800	225.90	7,032.51	912.15	988.75	1,345.12	0.84	-0.31	-49.27	
7,359.00	1.100	241.80	7,127.49	911.25	987.47	1,343.57	0.42	0.32	16.74	
7,428.00	1.200	236.60	7,196.48	910.54	986.28	1,342.21	0.21	0.14	-7.54	
7,475.00	1.200	236.60	7,243.47	910.00	985.46	1,341.24	0.00	0.00	0.00	

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name		Casing Diameter (ft)	Hole Diameter (ft)
813.70	813.68	9 5/8"		0.80	1.02

Survey Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
3,159.00	3,026.58	488.54	511.70	As of Dec 20	
4,591.00	4,373.16	808.40	873.88	As of Dec 21	
7,073.00	6,841.57	913.52	992.87	As of Dec 22	
7,475.00	7,243.47	910.00	985.46	Proj to TD @ 7475' MD	

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