

Bill Barrett Corp.

Garfield County, Colorado [NAD83]

GGU 14-19 Pad

GGU Daley 24C-19-691

Wellbore #1

Design: Wellbore #1

Standard Survey Report

07 July, 2011

Wells Details: GGU Daley 24C-19-691

Ground Level: 5823.00



Bill Barrett Corporation

North American Datum 1983

+N/-S

0.00

+E/-W

0.00

US State Plane 1983

Northing

1616271.51

Easting

2407793.46

Colorado Central Zone

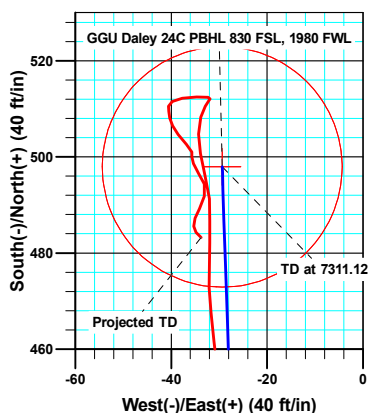
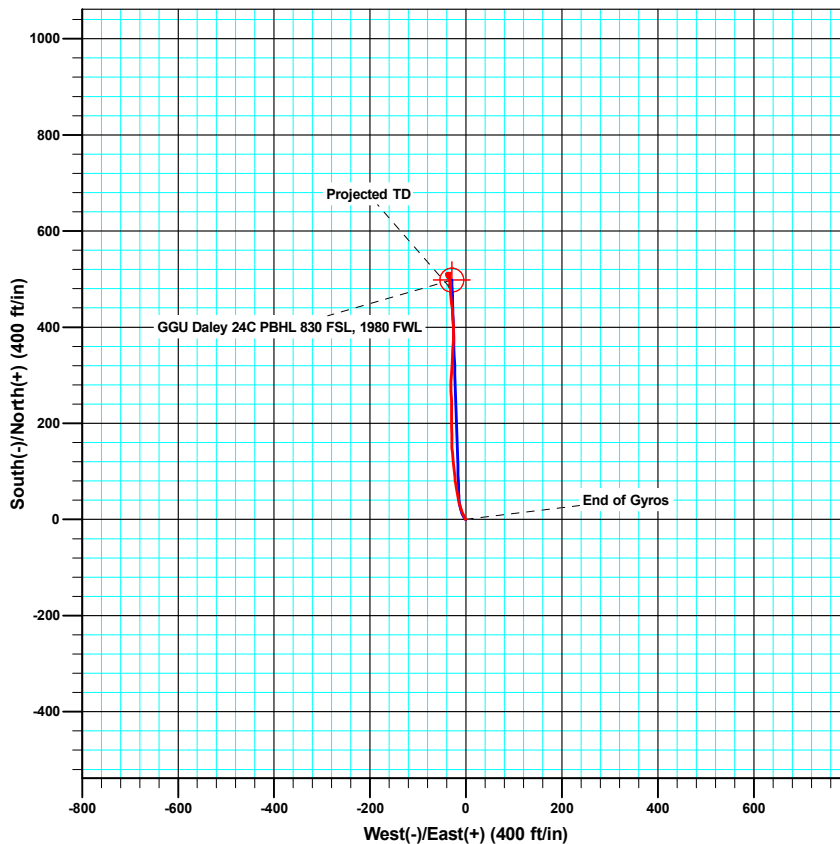
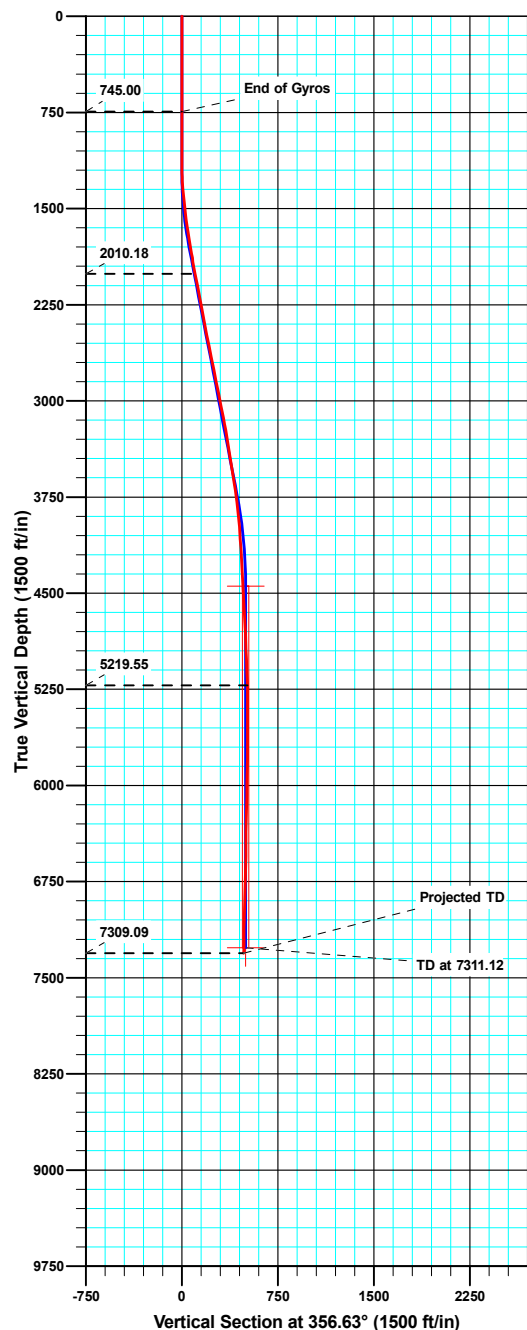
Latitude

39.506660

Longitude

-107.599036

GGU 14-19 Pad



Azimuths to True North
Magnetic North: 10.20°

Magnetic Field
Strength: 52332.2snT
Dip Angle: 65.83°
Date: 03/23/2011
Model: IGRF2010

ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	VSect	Departure	Annotation
745.00	745.00	0.09	171.45	0.10	-0.73	0.14	1.86	End of Gyros
2010.18	2018.00	10.90	352.10	103.72	-24.72	104.99	109.75	As of June 8
5219.55	5260.00	1.10	24.50	510.55	-32.86	511.60	518.00	As of June 9
7309.09	7350.00	1.00	134.20	483.26	-33.76	484.41	560.76	Projected TD

Sharewell

Survey Report

Company:	Bill Barrett Corp.	Local Co-ordinate Reference:	Well GGU Daley 24C-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 24C-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:	39.506485
From:	Lat/Long	Easting:	2,407,793.69 usft	Longitude:	-107.599030
Position Uncertainty:	0.00 ft	Slot Radius:	1.10 ft	Grid Convergence:	-1.32 °

Well	GGU Daley 24C-19-691					
Well Position	+N/-S	0.00 ft	Northing:	1,616,271.50 usft	Latitude:	39.506660
	+E/-W	0.00 ft	Easting:	2,407,793.47 usft	Longitude:	-107.599036
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	356.63	

Survey Program	Date	07/07/11			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
50.00	745.00	Gyro Surveys (Wellbore #1)	MWD	MWD - Standard	
882.00	7,350.00	MWD 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
50.00	0.22	99.91	50.00	-0.02	0.09	-0.02	0.44	0.44	0.00	
100.00	0.09	158.40	100.00	-0.07	0.20	-0.08	0.38	-0.26	116.98	
150.00	0.15	263.76	150.00	-0.11	0.15	-0.12	0.39	0.12	210.72	
200.00	0.10	287.77	200.00	-0.11	0.05	-0.11	0.14	-0.10	48.02	
250.00	0.12	308.19	250.00	-0.06	-0.04	-0.06	0.09	0.04	40.84	
300.00	0.11	306.70	300.00	0.00	-0.12	0.01	0.02	-0.02	-2.98	
350.00	0.16	277.41	350.00	0.04	-0.22	0.05	0.17	0.10	-58.58	
400.00	0.21	333.37	400.00	0.13	-0.33	0.15	0.36	0.10	111.92	
450.00	0.23	294.36	450.00	0.25	-0.47	0.28	0.30	0.04	-78.02	

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Site:	GGU 14-19 Pad	MD Reference:	KB @ 5846.00ft
Well:	GGU Daley 24C-19-691	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)
500.00	0.27	320.82	500.00	0.38	-0.63	0.42	0.24	0.08	52.92
550.00	0.19	162.16	550.00	0.40	-0.68	0.44	0.90	-0.16	-317.32
600.00	0.07	210.77	600.00	0.29	-0.67	0.33	0.31	-0.24	97.22
650.00	0.13	208.42	650.00	0.22	-0.71	0.26	0.12	0.12	-4.70
700.00	0.04	173.59	700.00	0.15	-0.74	0.19	0.20	-0.18	-69.66
745.00	0.09	171.45	745.00	0.10	-0.73	0.14	0.11	0.11	-4.76
882.00	0.10	187.80	882.00	-0.13	-0.73	-0.08	0.02	0.01	11.93
975.00	0.10	265.50	975.00	-0.21	-0.82	-0.17	0.13	0.00	83.55
1,067.00	0.10	325.40	1,067.00	-0.15	-0.95	-0.10	0.11	0.00	65.11
1,159.00	0.40	2.90	1,159.00	0.23	-0.98	0.29	0.35	0.33	40.76
1,255.00	2.50	330.40	1,254.96	2.39	-2.00	2.50	2.26	2.19	-33.85
1,350.00	4.90	334.80	1,349.76	7.86	-4.75	8.13	2.54	2.53	4.63
1,445.00	6.50	341.80	1,444.28	16.64	-8.16	17.09	1.83	1.68	7.37
1,541.00	7.10	340.50	1,539.61	27.40	-11.83	28.04	0.65	0.63	-1.35
1,636.00	8.40	348.30	1,633.74	39.73	-15.20	40.55	1.76	1.37	8.21
1,732.00	9.50	352.80	1,728.57	54.45	-17.62	55.39	1.36	1.15	4.69
1,827.00	9.10	347.60	1,822.33	69.57	-20.21	70.64	0.98	-0.42	-5.47
1,922.00	10.80	354.70	1,915.90	85.77	-22.65	86.95	2.20	1.79	7.47
2,018.00	10.90	352.10	2,010.18	103.72	-24.72	104.99	0.52	0.10	-2.71
2,113.00	10.80	356.10	2,103.48	121.49	-26.56	122.85	0.80	-0.11	4.21
2,209.00	10.80	353.70	2,197.78	139.41	-28.16	140.82	0.47	0.00	-2.50
2,304.00	10.90	359.40	2,291.09	157.24	-29.23	158.68	1.13	0.11	6.00
2,400.00	10.80	359.50	2,385.37	175.31	-29.41	176.73	0.11	-0.10	0.10
2,496.00	11.00	358.70	2,479.64	193.46	-29.69	194.87	0.26	0.21	-0.83
2,591.00	11.00	0.20	2,572.90	211.58	-29.87	212.97	0.30	0.00	1.58
2,686.00	11.30	0.00	2,666.10	229.95	-29.84	231.31	0.32	0.32	-0.21
2,781.00	11.10	358.60	2,759.29	248.40	-30.06	249.74	0.36	-0.21	-1.47
2,876.00	11.70	356.50	2,852.42	267.16	-30.87	268.51	0.77	0.63	-2.21
2,972.00	11.30	3.40	2,946.50	286.26	-30.91	287.59	1.49	-0.42	7.19
3,067.00	11.30	3.50	3,039.65	304.84	-29.79	306.07	0.02	0.00	0.11
3,163.00	11.30	3.90	3,133.79	323.62	-28.57	324.74	0.08	0.00	0.42
3,258.00	9.90	0.20	3,227.17	341.07	-27.91	342.12	1.64	-1.47	-3.89
3,354.00	9.00	4.90	3,321.87	356.80	-27.24	357.79	1.23	-0.94	4.90
3,449.00	8.90	3.70	3,415.71	371.54	-26.13	372.44	0.22	-0.11	-1.26
3,544.00	9.60	357.60	3,509.48	386.79	-25.99	387.65	1.27	0.74	-6.42
3,640.00	9.60	359.70	3,604.13	402.79	-26.37	403.65	0.36	0.00	2.19
3,735.00	7.80	355.90	3,698.04	417.15	-26.87	418.00	1.99	-1.89	-4.00
3,830.00	7.20	357.30	3,792.22	429.52	-27.61	430.40	0.66	-0.63	1.47
3,926.00	6.10	351.60	3,887.58	440.58	-28.64	441.50	1.33	-1.15	-5.94
4,021.00	4.30	353.20	3,982.18	449.11	-29.80	450.08	1.90	-1.89	1.68
4,116.00	3.50	355.30	4,076.96	455.53	-30.46	456.54	0.86	-0.84	2.21
4,212.00	4.00	353.70	4,172.76	461.78	-31.07	462.81	0.53	0.52	-1.67
4,307.00	3.10	354.60	4,267.57	467.63	-31.67	468.69	0.95	-0.95	0.95

Sharewell

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Site:	GGU 14-19 Pad	MD Reference:	KB @ 5846.00ft
Well:	GGU Daley 24C-19-691	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)
4,402.00	3.20	356.10	4,362.43	472.84	-32.09	473.91	0.14	0.11	1.58
4,498.00	2.60	7.50	4,458.31	477.67	-31.99	478.72	0.86	-0.63	11.88
4,593.00	2.80	354.70	4,553.20	482.12	-31.92	483.16	0.67	0.21	-13.47
4,689.00	2.70	5.60	4,649.09	486.70	-31.92	487.74	0.55	-0.10	11.35
4,784.00	2.90	352.80	4,743.98	491.31	-32.00	492.34	0.69	0.21	-13.47
4,879.00	3.10	345.70	4,838.85	496.19	-32.94	497.26	0.44	0.21	-7.47
4,974.00	2.50	350.60	4,933.74	500.72	-33.91	501.85	0.68	-0.63	5.16
5,069.00	2.40	358.50	5,028.65	504.75	-34.30	505.90	0.37	-0.11	8.32
5,165.00	1.90	20.70	5,124.58	508.25	-33.79	509.36	1.00	-0.52	23.13
5,260.00	1.10	24.50	5,219.55	510.55	-32.86	511.60	0.85	-0.84	4.00
5,355.00	0.70	49.00	5,314.54	511.76	-32.04	512.76	0.58	-0.42	25.79
5,451.00	0.90	287.70	5,410.53	512.38	-32.32	513.39	1.46	0.21	-126.35
5,546.00	2.00	265.20	5,505.50	512.47	-34.68	513.62	1.28	1.16	-23.68
5,641.00	1.60	263.70	5,600.46	512.18	-37.65	513.51	0.42	-0.42	-1.58
5,737.00	1.10	238.90	5,696.43	511.56	-39.77	513.01	0.79	-0.52	-25.83
5,832.00	0.60	183.90	5,791.42	510.59	-40.59	512.09	0.95	-0.53	-57.89
5,927.00	0.80	167.30	5,886.41	509.45	-40.47	510.95	0.30	0.21	-17.47
6,023.00	0.90	173.70	5,982.40	508.04	-40.24	509.53	0.14	0.10	6.67
6,118.00	1.10	149.70	6,077.39	506.52	-39.70	507.97	0.48	0.21	-25.26
6,213.00	1.50	146.20	6,172.36	504.69	-38.55	506.09	0.43	0.42	-3.68
6,309.00	1.80	134.10	6,268.32	502.60	-36.77	503.89	0.48	0.31	-12.60
6,404.00	0.60	181.00	6,363.30	501.07	-35.71	502.30	1.53	-1.26	49.37
6,499.00	0.60	177.90	6,458.30	500.07	-35.70	501.31	0.03	0.00	-3.26
6,595.00	1.20	160.90	6,554.29	498.62	-35.35	499.84	0.68	0.63	-17.71
6,690.00	1.60	145.80	6,649.26	496.58	-34.28	497.74	0.57	0.42	-15.89
6,786.00	1.40	159.00	6,745.23	494.38	-33.10	495.47	0.41	-0.21	13.75
6,881.00	1.80	194.00	6,840.19	491.85	-33.05	492.94	1.09	0.42	36.84
6,976.00	1.60	211.70	6,935.15	489.27	-34.11	490.43	0.59	-0.21	18.63
7,072.00	1.10	192.80	7,031.12	487.23	-35.02	488.45	0.69	-0.52	-19.69
7,167.00	0.90	184.60	7,126.11	485.60	-35.28	486.83	0.26	-0.21	-8.63
7,263.00	0.90	136.00	7,222.10	484.31	-34.81	485.52	0.77	0.00	-50.63
7,303.00	1.00	134.20	7,262.09	483.84	-34.35	485.02	0.26	0.25	-4.50
7,350.00	1.00	134.20	7,309.09	483.26	-33.76	484.41	0.00	0.00	0.00

Design Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
745.00	745.00	0.10	-0.73	End of Gyros
2,018.00	2,010.18	103.72	-24.72	As of June 8
5,260.00	5,219.55	510.55	-32.86	As of June 9
7,350.00	7,309.09	483.26	-33.76	Projected TD

Sharewell
Survey Report

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Project:	Garfield County, Colorado [NAD83]	TVD Reference:	KB @ 5846.00ft
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Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Compass VM

Checked By: _____ Approved By: _____ Date: _____