

Bill Barrett Corp. (II)

Garfield County, Colorado [NAD83]

Kaufman 6 Pad

Kaufman 22D-24-692

Wellbore #1

Design: Wellbore #1

Standard Survey Report

14 November, 2011



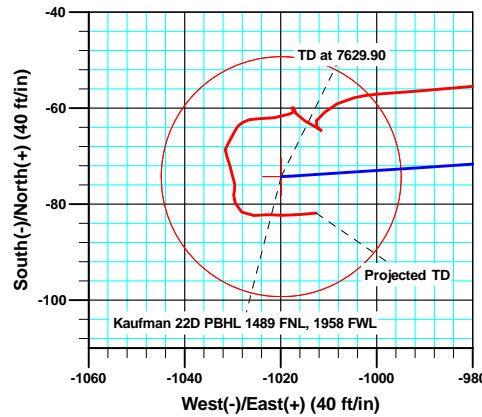
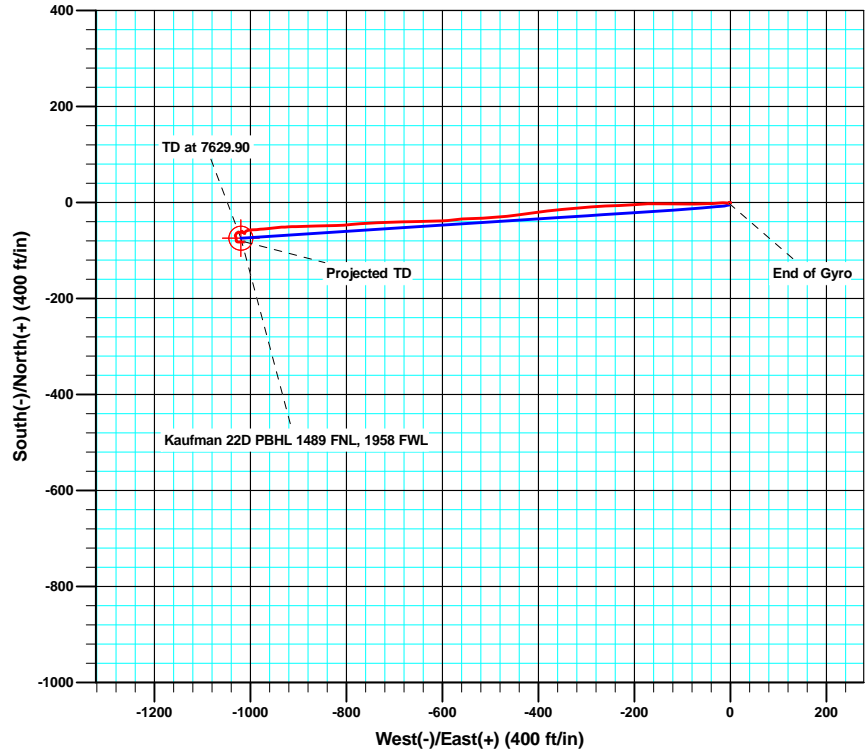
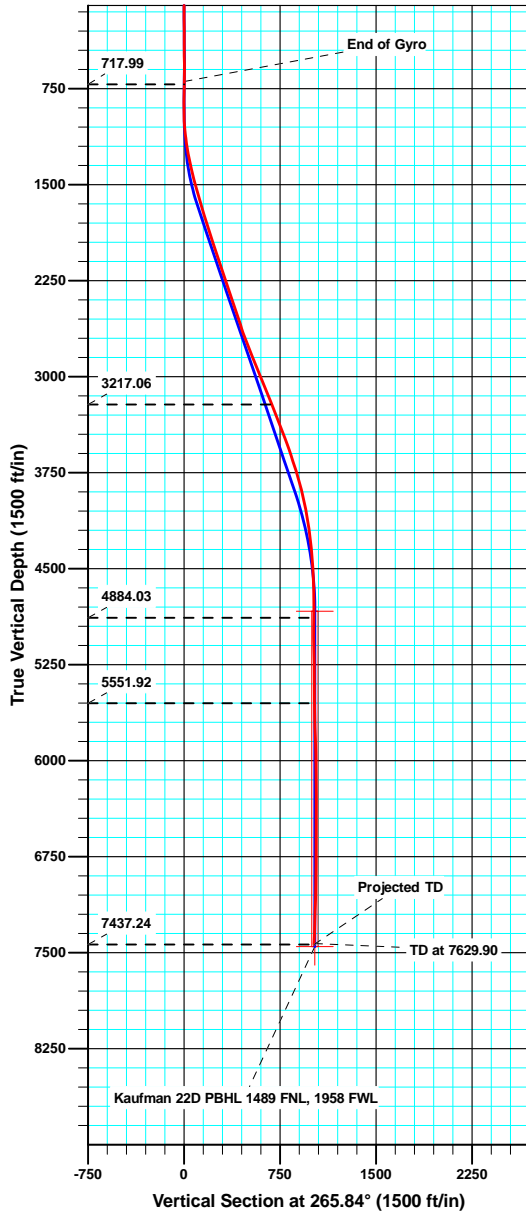
WELL DETAILS: Kaufman 22D-24-692

North American Datum 1983 , US State Plane 1983 , Colorado Central Zone

+N/-S +E/-W Northing Easting Latitude Longitude
0.00 0.00 1619783.72 2403552.80 39.516030 -107.614351

Ground Level: 5771.00

GL @ 5771.00ft (Original Well Elev)



Azimuths to True North
Magnetic North: 10.29°

Magnetic Field
Strength: 52446.2snT
Dip Angle: 65.87°
Date: 6/2/2010
Model: IGRF200510

ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	VSec	Departure	Annotation
717.99	718.00	0.63	155.55	-1.52	-2.88	2.98	4.07	End of Gyro
3217.06	3328.00	21.60	268.30	-40.16	-685.04	686.15	695.39	As of Nov 9
4884.03	5042.00	1.10	129.60	-63.80	-1012.47	1014.43	1026.98	As of Nov 10
5551.92	5710.00	0.40	119.10	-60.59	-1017.25	1018.96	1038.71	As of Nov 11
7437.24	7596.00	2.60	85.10	-81.87	-1012.59	1015.86	1087.53	Projected TD

Sharewell

Survey Report

Company:	Bill Barrett Corp. (II)	Local Co-ordinate Reference:	Well Kaufman 22D-24-692
Project:	Garfield County, Colorado [NAD83]	TVD Reference:	GL @ 5771.00ft (Original Well Elev)
Site:	Kaufman 6 Pad	MD Reference:	GL @ 5771.00ft (Original Well Elev)
Well:	Kaufman 22D-24-692	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	Kaufman 6 Pad				
Site Position:		Northing:	1,619,793.95 usft	Latitude:	39.516058
From:	Lat/Long	Easting:	2,403,552.20 usft	Longitude:	-107.614354
Position Uncertainty:	0.00 ft	Slot Radius:	0.00 ft	Grid Convergence:	-1.33 °

Well	Kaufman 22D-24-692					
Well Position	+N/-S	0.00 ft	Northing:	1,619,783.71 usft	Latitude:	39.516030
	+E/-W	0.00 ft	Easting:	2,403,552.81 usft	Longitude:	-107.614351
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	5,771.00 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	6/2/2010	10.29	65.87	52,446

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	265.84	

Survey Program	Date	11/14/2011			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
100.00	718.00	Survey #1 (Wellbore #1)	MWD	MWD - Standard	
859.00	7,596.00	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	
100.00	0.42	281.02	100.00	0.07	-0.36	0.35	0.42	0.42	0.00	
200.00	0.57	256.54	200.00	0.02	-1.20	1.20	0.26	0.15	-24.48	
300.00	0.35	248.22	299.99	-0.20	-1.97	1.98	0.23	-0.22	-8.32	
400.00	0.29	255.32	399.99	-0.38	-2.50	2.52	0.07	-0.06	7.10	
500.00	0.21	227.95	499.99	-0.57	-2.88	2.91	0.14	-0.08	-27.37	
600.00	0.19	187.20	599.99	-0.86	-3.04	3.09	0.14	-0.02	-40.75	
700.00	0.42	161.20	699.99	-1.37	-2.94	3.03	0.26	0.23	-26.00	
718.00	0.63	155.55	717.99	-1.52	-2.88	2.98	1.20	1.17	-31.39	
859.00	1.50	74.90	858.97	-1.75	-0.77	0.90	1.08	0.62	-57.20	

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Site:	Kaufman 6 Pad	MD Reference:	GL @ 5771.00ft (Original Well Elev)
Well:	Kaufman 22D-24-692	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)
952.00	0.80	293.00	951.96	-1.17	-0.20	0.28	2.35	-0.75	-152.58
1,044.00	4.50	269.70	1,043.84	-0.94	-4.40	4.46	4.11	4.02	-25.33
1,136.00	7.00	272.70	1,135.37	-0.70	-13.61	13.62	2.74	2.72	3.26
1,231.00	9.80	264.70	1,229.35	-1.17	-27.45	27.46	3.19	2.95	-8.42
1,327.00	11.70	267.60	1,323.66	-2.33	-45.31	45.36	2.06	1.98	3.02
1,422.00	14.40	269.00	1,416.20	-2.94	-66.75	66.78	2.86	2.84	1.47
1,517.00	15.60	268.90	1,507.96	-3.39	-91.33	91.33	1.26	1.26	-0.11
1,612.00	16.00	272.00	1,599.37	-3.18	-117.19	117.11	0.98	0.42	3.26
1,707.00	16.40	271.70	1,690.60	-2.33	-143.68	143.47	0.43	0.42	-0.32
1,803.00	17.80	266.90	1,782.36	-2.72	-171.88	171.62	2.07	1.46	-5.00
1,898.00	18.00	266.10	1,872.76	-4.50	-201.02	200.82	0.33	0.21	-0.84
1,993.00	18.10	267.80	1,963.09	-6.07	-230.41	230.24	0.56	0.11	1.79
2,089.00	18.20	268.00	2,054.31	-7.16	-260.30	260.13	0.12	0.10	0.21
2,184.00	18.50	264.60	2,144.48	-9.10	-290.13	290.02	1.17	0.32	-3.58
2,279.00	18.70	265.20	2,234.52	-11.79	-320.31	320.32	0.29	0.21	0.63
2,374.00	18.40	265.40	2,324.58	-14.27	-350.43	350.54	0.32	-0.32	0.21
2,470.00	18.80	263.20	2,415.57	-17.32	-380.89	381.15	0.84	0.42	-2.29
2,565.00	18.40	262.00	2,505.61	-21.22	-410.94	411.40	0.58	-0.42	-1.26
2,660.00	18.20	262.50	2,595.80	-25.24	-440.50	441.17	0.27	-0.21	0.53
2,756.00	20.20	263.50	2,686.46	-29.07	-471.83	472.70	2.11	2.08	1.04
2,851.00	21.80	267.20	2,775.15	-31.79	-505.75	506.72	2.19	1.68	3.89
2,946.00	21.80	268.10	2,863.36	-33.24	-541.00	541.99	0.35	0.00	0.95
3,042.00	22.30	263.10	2,952.34	-36.02	-576.90	577.99	2.02	0.52	-5.21
3,137.00	22.50	268.70	3,040.19	-38.60	-612.97	614.16	2.26	0.21	5.89
3,232.00	22.30	269.00	3,128.02	-39.32	-649.17	650.31	0.24	-0.21	0.32
3,328.00	21.60	268.30	3,217.06	-40.16	-685.04	686.15	0.78	-0.73	-0.73
3,423.00	21.60	267.70	3,305.39	-41.38	-719.99	721.09	0.23	0.00	-0.63
3,518.00	21.20	267.30	3,393.84	-42.90	-754.62	755.74	0.45	-0.42	-0.42
3,613.00	20.60	264.00	3,482.59	-45.45	-788.40	789.62	1.39	-0.63	-3.47
3,708.00	19.30	267.70	3,571.89	-47.83	-820.71	822.02	1.91	-1.37	3.89
3,803.00	17.50	268.90	3,662.03	-48.73	-850.68	851.97	1.94	-1.89	1.26
3,898.00	16.50	269.10	3,752.88	-49.22	-878.45	879.71	1.05	-1.05	0.21
3,994.00	15.20	267.40	3,845.23	-50.00	-904.66	905.90	1.44	-1.35	-1.77
4,089.00	13.20	268.40	3,937.32	-50.87	-927.94	929.19	2.12	-2.11	1.05
4,184.00	11.60	261.70	4,030.10	-52.55	-948.24	949.55	2.26	-1.68	-7.05
4,279.00	9.50	266.40	4,123.49	-54.43	-965.52	966.92	2.39	-2.21	4.95
4,375.00	7.60	265.00	4,218.42	-55.48	-979.75	981.19	1.99	-1.98	-1.46
4,470.00	6.30	265.70	4,312.72	-56.41	-991.21	992.68	1.37	-1.37	0.74
4,566.00	3.80	265.70	4,408.34	-57.05	-999.63	1,001.13	2.60	-2.60	0.00
4,661.00	2.50	254.30	4,503.20	-57.84	-1,004.77	1,006.31	1.51	-1.37	-12.00
4,756.00	2.00	245.80	4,598.13	-59.09	-1,008.27	1,009.90	0.63	-0.53	-8.95
4,852.00	1.80	223.10	4,694.07	-60.87	-1,010.83	1,012.58	0.81	-0.21	-23.65
4,947.00	1.10	226.30	4,789.04	-62.59	-1,012.51	1,014.38	0.74	-0.74	3.37

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5,042.00	1.10	129.60	4,884.03	-63.80	-1,012.47	1,014.43	1.73	0.00	-101.79	
5,138.00	0.40	142.80	4,980.02	-64.66	-1,011.55	1,013.58	0.75	-0.73	13.75	
5,233.00	1.70	307.50	5,075.01	-64.06	-1,012.47	1,014.45	2.20	1.37	173.37	
5,328.00	1.80	292.60	5,169.97	-62.63	-1,014.97	1,016.83	0.49	0.11	-15.68	
5,424.00	1.10	338.70	5,265.94	-61.19	-1,016.69	1,018.45	1.36	-0.73	48.02	
5,518.00	0.70	321.10	5,359.93	-59.91	-1,017.38	1,019.05	0.51	-0.43	-18.72	
5,615.00	0.60	167.80	5,456.93	-59.94	-1,017.65	1,019.31	1.30	-0.10	-158.04	
5,710.00	0.40	119.10	5,551.92	-60.59	-1,017.25	1,018.97	0.47	-0.21	-51.26	
5,805.00	1.70	248.50	5,646.91	-61.27	-1,018.27	1,020.03	2.08	1.37	136.21	
5,901.00	2.10	263.20	5,742.86	-62.00	-1,021.34	1,023.15	0.65	0.42	15.31	
5,996.00	2.10	269.80	5,837.79	-62.21	-1,024.81	1,026.62	0.25	0.00	6.95	
6,091.00	1.80	240.70	5,932.74	-62.95	-1,027.85	1,029.71	1.08	-0.32	-30.63	
6,187.00	1.50	198.90	6,028.70	-64.87	-1,029.58	1,031.57	1.26	-0.31	-43.54	
6,282.00	1.40	218.90	6,123.67	-66.95	-1,030.71	1,032.85	0.54	-0.11	21.05	
6,378.00	0.90	186.70	6,219.66	-68.61	-1,031.53	1,033.79	0.83	-0.52	-33.54	
6,473.00	1.20	150.20	6,314.64	-70.22	-1,031.13	1,033.50	0.75	0.32	-38.42	
6,568.00	1.00	175.50	6,409.62	-71.91	-1,030.57	1,033.07	0.55	-0.21	26.63	
6,663.00	1.30	157.30	6,504.60	-73.73	-1,030.08	1,032.72	0.49	0.32	-19.16	
6,759.00	1.20	174.50	6,600.58	-75.73	-1,029.57	1,032.35	0.40	-0.10	17.92	
6,854.00	0.40	197.60	6,695.57	-77.04	-1,029.57	1,032.45	0.89	-0.84	24.32	
6,949.00	0.80	188.60	6,790.57	-78.01	-1,029.77	1,032.72	0.43	0.42	-9.47	
7,045.00	1.30	158.10	6,886.55	-79.69	-1,029.47	1,032.54	0.76	0.52	-31.77	
7,140.00	1.70	134.20	6,981.52	-81.67	-1,028.05	1,031.27	0.77	0.42	-25.16	
7,235.00	1.80	78.70	7,076.48	-82.36	-1,025.58	1,028.85	1.72	0.11	-58.42	
7,330.00	1.80	94.00	7,171.44	-82.17	-1,022.63	1,025.90	0.50	0.00	16.11	
7,426.00	1.80	91.30	7,267.39	-82.31	-1,019.62	1,022.90	0.09	0.00	-2.81	
7,521.00	2.60	85.10	7,362.32	-82.16	-1,015.98	1,019.26	0.88	0.84	-6.53	
7,596.00	2.60	85.10	7,437.24	-81.87	-1,012.59	1,015.86	0.00	0.00	0.00	

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
718.00	717.99	-1.52	-2.88	End of Gyro	
3,328.00	3,217.06	-40.16	-685.04	As of Nov 9	
5,042.00	4,884.03	-63.80	-1,012.47	As of Nov 10	
5,710.00	5,551.92	-60.59	-1,017.25	As of Nov 11	
7,596.00	7,437.24	-81.87	-1,012.59	Projected TD	

Checked By: _____ Approved By: _____ Date: _____