

Bill Barrett Corp.

Garfield Co., CO (NAD83)

Kaufman Pad #4 (Sec.30-T6S-R91W)

Kaufman 41D-25-692

Wellbore #1

Design: Wellbore #1

Standard Survey Report

23 March, 2012



Project: Garfield Co., CO (NAD83)
Site: Kaufman Pad #4 (Sec.30-T6S-R91W)
Well: Kaufman 41D-25-692
Wellbore: Wellbore #1
Design: Wellbore #1
Latitude: 39° 30' 11.42 N
Longitude: 107° 36' 16.57 W
Ground Level: 5786.01
WELL @ 5808.01ft



PROJECT DETAILS: Garfield Co., CO (NAD83)

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Central Zone
System Datum: Mean Sea Level

REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well Kaufman 41D-25-692, True North
Vertical (TVD) Reference: WELL @ 5808.01ft
Section (VS) Reference: Slot - (0.00N, 0.00E)
Measured Depth Reference: WELL @ 5808.01ft
Calculation Method: Minimum Curvature

WELL DETAILS: Kaufman 41D-25-692

+N/-S	+E/-W	Northing	Ground Level:	Easting	Latitude	Longitude	Slot
0.00	0.00	1615037.35	5786.01	2406193.67	39° 30' 11.42 N	107° 36' 16.57 W	

WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)

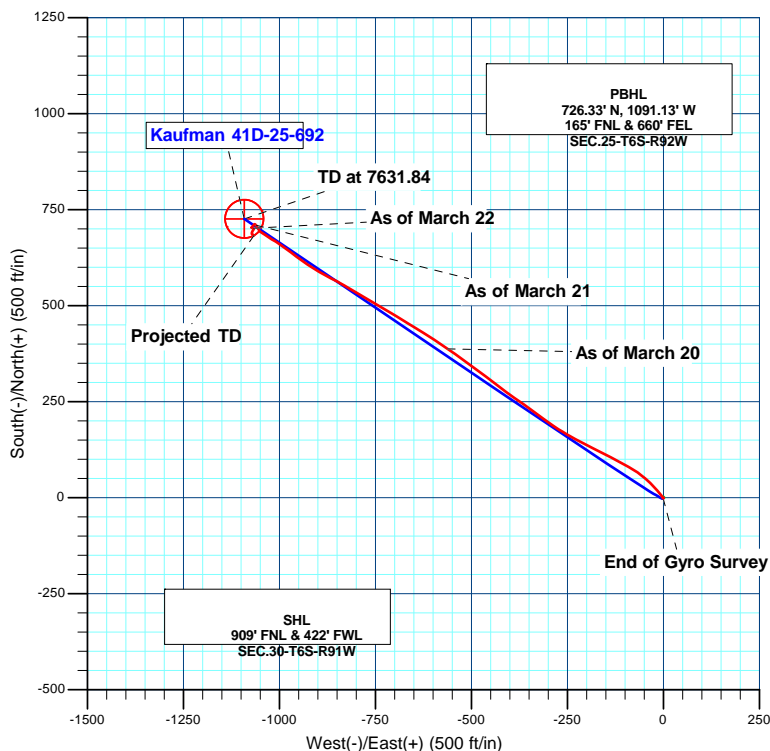
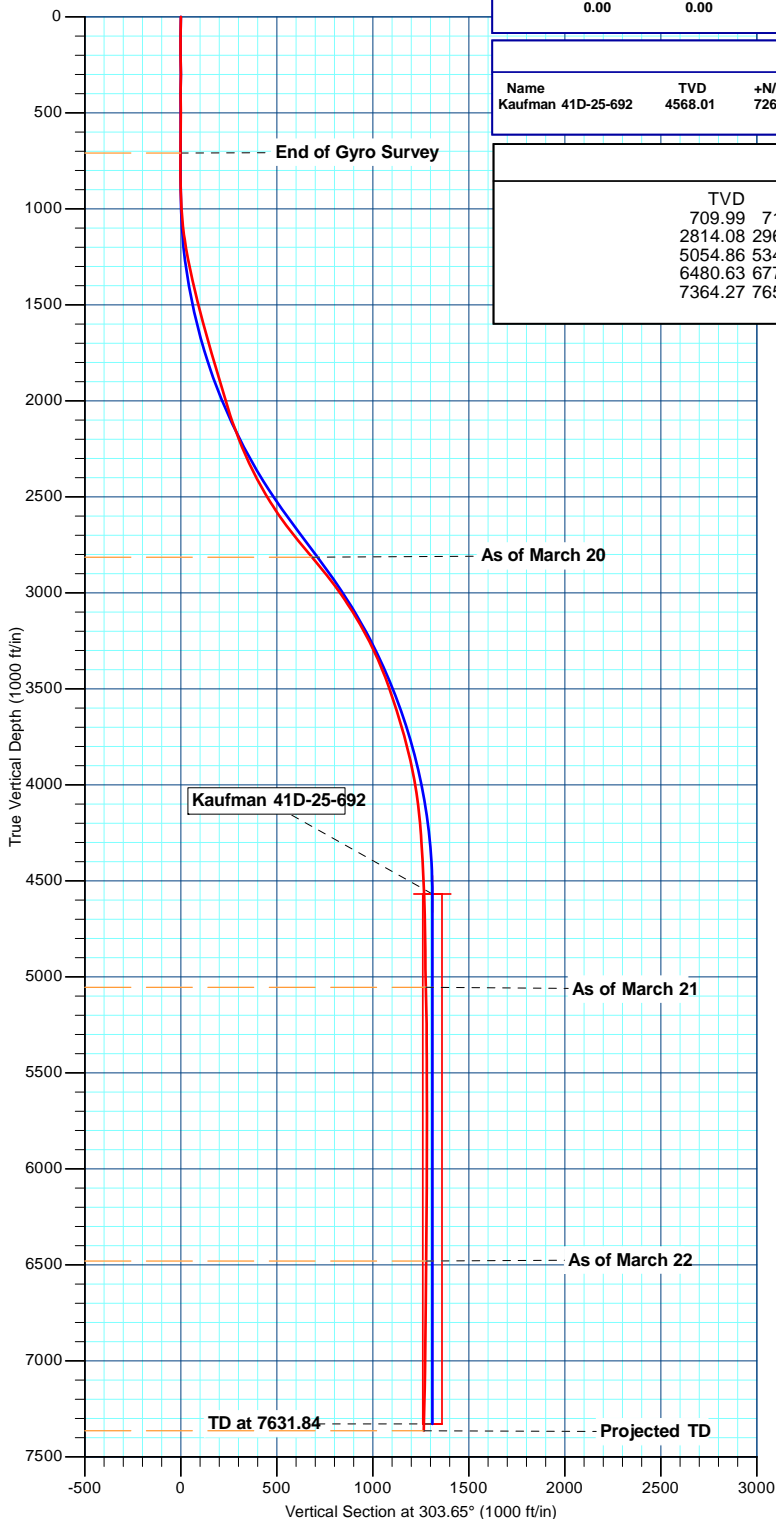
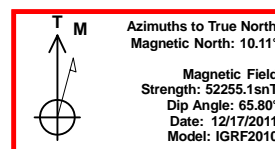
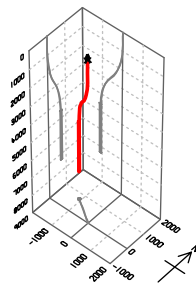
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Kaufman 41D-25-692	4568.01	726.33	-1091.13	1615788.76	2405119.66	39° 30' 18.59 N	107° 36' 30.49 W	Circle (Radius: 50.00)

ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	VSD	Departure	Annotation
709.99	710.00	0.490	237.87	-1.39	-0.06	-0.72	4.69	End of Gyro Survey
2814.08	2967.00	39.800	305.20	387.77	-562.47	683.09	693.16	As of March 20
5054.86	5344.00	1.800	316.80	709.87	-1060.63	1276.26	1289.67	As of March 21
6480.63	6770.00	1.000	155.50	701.84	-1067.67	1277.67	1312.24	As of March 22
7364.27	7654.00	1.100	111.70	683.12	-1065.95	1265.86	1336.27	Projected TD

FORMATION TOP DETAILS

No formation data is available



Design: Wellbore #1 (Kaufman 41D-25-692/Wellbore #1)

Created By: Bret Wolford Date: 8:28, March 23 2012

Sharewell

Survey Report

Company:	Bill Barrett Corp.	Local Co-ordinate Reference:	Well Kaufman 41D-25-692
Project:	Garfield Co., CO (NAD83)	TVD Reference:	WELL @ 5808.01ft
Site:	Kaufman Pad #4 (Sec.30-T6S-R91W)	MD Reference:	WELL @ 5808.01ft
Well:	Kaufman 41D-25-692	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	CompassVM

Project	Garfield Co., CO (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 Pad #4 (Sec.30-T6S-R91W)			
Site Position:		Northing:	1,615,037.35 usft	Latitude:	39° 30' 11.42 N
From:	Lat/Long	Easting:	2,406,193.68 usft	Longitude:	107° 36' 16.57 W
Position Uncertainty:	0.00 ft	Slot Radius:	1.10 ft	Grid Convergence:	-1.33 °

Well	Kaufman 41D-25-692					
Well Position	+N/-S	0.00 ft	Northing:	1,615,037.35 usft	Latitude:	39° 30' 11.42 N
	+E/-W	0.00 ft	Easting:	2,406,193.68 usft	Longitude:	107° 36' 16.57 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	5,786.01 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	12/17/2011	10.11	65.80	52,255

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	303.65	

Survey Program	Date	3/23/2012			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
100.00	710.00	Survey #1 (Wellbore #1)	MWD	MWD - Standard	
875.00	7,654.00	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	
100.00	0.310	138.11	100.00	-0.20	0.18	-0.26	0.31	0.31	0.00	
200.00	0.360	280.16	200.00	-0.35	0.05	-0.24	0.63	0.05	142.05	
300.00	0.360	37.90	300.00	-0.04	-0.06	0.03	0.62	0.00	117.74	
400.00	0.690	187.72	400.00	-0.39	0.05	-0.26	1.02	0.33	149.82	
500.00	0.270	284.25	499.99	-0.93	-0.26	-0.30	0.77	-0.42	96.53	
600.00	0.450	107.55	599.99	-0.99	-0.12	-0.45	0.72	0.18	-176.70	
700.00	0.400	228.34	699.99	-1.34	0.00	-0.74	0.74	-0.05	120.79	
710.00	0.490	237.87	709.99	-1.39	-0.06	-0.72	1.16	0.90	95.30	
875.00	0.400	337.40	874.99	-1.23	-0.88	0.05	0.41	-0.05	60.32	

Sharewell

Survey Report

Company:	Bill Barrett Corp.	Local Co-ordinate Reference:	Well Kaufman 41D-25-692
Project:	Garfield Co., CO (NAD83)	TVD Reference:	WELL @ 5808.01ft
Site:	Kaufman Pad #4 (Sec.30-T6S-R91W)	MD Reference:	WELL @ 5808.01ft
Well:	Kaufman 41D-25-692	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	CompassVM

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)
970.00	2.400	334.20	969.95	0.87	-1.88	2.04	2.11	2.11	-3.37
1,065.00	5.800	323.60	1,064.70	6.52	-5.59	8.27	3.65	3.58	-11.16
1,160.00	9.100	318.10	1,158.88	15.98	-13.46	20.06	3.55	3.47	-5.79
1,255.00	10.800	319.70	1,252.45	28.36	-24.23	35.89	1.81	1.79	1.68
1,350.00	12.600	310.60	1,345.48	41.89	-37.86	54.73	2.71	1.89	-9.58
1,445.00	14.400	311.00	1,437.85	56.39	-54.64	76.73	1.90	1.89	0.42
1,540.00	14.900	300.60	1,529.78	70.36	-74.08	100.65	2.81	0.53	-10.95
1,635.00	14.600	298.80	1,621.65	82.34	-95.08	124.78	0.58	-0.32	-1.89
1,730.00	16.300	298.70	1,713.21	94.51	-117.27	149.99	1.79	1.79	-0.11
1,825.00	16.500	299.70	1,804.35	107.60	-140.68	176.73	0.36	0.21	1.05
1,920.00	16.000	294.10	1,895.56	119.63	-164.35	203.10	1.73	-0.53	-5.89
2,015.00	16.900	296.50	1,986.67	131.14	-188.66	229.72	1.19	0.95	2.53
2,110.00	18.500	298.90	2,077.17	144.59	-214.22	258.44	1.85	1.68	2.53
2,205.00	20.900	299.20	2,166.61	160.14	-242.21	290.36	2.53	2.53	0.32
2,300.00	22.800	302.30	2,254.78	178.24	-272.56	325.66	2.34	2.00	3.26
2,395.00	25.600	305.90	2,341.43	200.12	-304.76	364.58	3.33	2.95	3.79
2,490.00	28.600	307.10	2,425.99	225.88	-339.52	407.80	3.21	3.16	1.26
2,585.00	31.200	304.00	2,508.34	253.36	-378.07	455.11	3.18	2.74	-3.26
2,680.00	34.100	306.80	2,588.33	283.08	-419.80	506.32	3.44	3.05	2.95
2,777.00	37.800	308.30	2,666.84	317.80	-464.92	563.12	3.92	3.81	1.55
2,872.00	39.600	304.60	2,740.99	353.05	-512.70	622.42	3.08	1.89	-3.89
2,967.00	39.800	305.20	2,814.08	387.77	-562.47	683.09	0.46	0.21	0.63
3,062.00	39.700	302.80	2,887.12	421.73	-612.82	743.82	1.62	-0.11	-2.53
3,157.00	36.400	300.90	2,961.93	452.65	-662.53	802.34	3.69	-3.47	-2.00
3,252.00	33.700	302.20	3,039.69	481.18	-709.02	856.85	2.95	-2.84	1.37
3,347.00	31.000	298.40	3,119.95	506.87	-752.86	907.57	3.56	-2.84	-4.00
3,443.00	29.300	302.20	3,202.97	531.15	-794.49	955.68	2.66	-1.77	3.96
3,538.00	26.000	299.70	3,287.11	553.86	-832.26	999.71	3.68	-3.47	-2.63
3,633.00	22.700	297.00	3,373.65	572.50	-866.69	1,038.70	3.67	-3.47	-2.84
3,728.00	20.300	298.70	3,462.03	588.74	-897.48	1,073.33	2.61	-2.53	1.79
3,823.00	18.700	305.90	3,551.59	605.59	-924.28	1,104.97	3.04	-1.68	7.58
3,918.00	16.900	307.30	3,642.04	622.89	-947.60	1,133.97	1.95	-1.89	1.47
4,013.00	15.800	305.90	3,733.20	638.84	-969.06	1,160.68	1.23	-1.16	-1.47
4,108.00	13.400	305.30	3,825.12	652.78	-988.53	1,184.61	2.53	-2.53	-0.63
4,203.00	12.100	303.10	3,917.78	664.58	-1,005.85	1,205.57	1.46	-1.37	-2.32
4,298.00	9.100	301.30	4,011.15	673.93	-1,020.62	1,223.03	3.18	-3.16	-1.89
4,394.00	6.600	302.60	4,106.24	680.84	-1,031.75	1,236.14	2.61	-2.60	1.35
4,489.00	5.800	308.90	4,200.69	686.80	-1,040.09	1,246.38	1.10	-0.84	6.63
4,584.00	3.500	289.10	4,295.37	690.76	-1,046.56	1,253.96	2.92	-2.42	-20.84
4,679.00	3.400	323.80	4,390.21	693.99	-1,050.97	1,259.42	2.17	-0.11	36.53
4,774.00	3.200	334.00	4,485.05	698.64	-1,053.79	1,264.35	0.65	-0.21	10.74
4,869.00	1.500	307.50	4,579.97	701.78	-1,055.94	1,267.88	2.08	-1.79	-27.89
4,964.00	1.900	338.30	4,674.93	704.00	-1,057.51	1,270.41	1.03	0.42	32.42

Sharewell
Survey Report

Company:	Bill Barrett Corp.	Local Co-ordinate Reference:	Well Kaufman 41D-25-692
Project:	Garfield Co., CO (NAD83)	TVD Reference:	WELL @ 5808.01ft
Site:	Kaufman Pad #4 (Sec.30-T6S-R91W)	MD Reference:	WELL @ 5808.01ft
Well:	Kaufman 41D-25-692	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	CompassVM

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)	
5,059.00	1.100	333.30	4,769.90	706.28	-1,058.50	1,272.50	0.85	-0.84	-5.26	
5,154.00	1.100	337.50	4,864.88	707.94	-1,059.26	1,274.05	0.08	0.00	4.42	
5,249.00	0.000	352.60	4,959.88	708.78	-1,059.61	1,274.81	1.16	-1.16	0.00	
5,344.00	1.800	316.80	5,054.86	709.87	-1,060.63	1,276.26	1.89	1.89	0.00	
5,439.00	1.300	300.80	5,149.83	711.51	-1,062.58	1,278.79	0.69	-0.53	-16.84	
5,534.00	0.600	286.20	5,244.81	712.20	-1,063.98	1,280.34	0.77	-0.74	-15.37	
5,629.00	0.400	228.90	5,339.81	712.12	-1,064.71	1,280.90	0.54	-0.21	-60.32	
5,724.00	1.300	228.70	5,434.80	711.19	-1,065.77	1,281.27	0.95	0.95	-0.21	
5,820.00	1.400	214.40	5,530.77	709.50	-1,067.25	1,281.57	0.36	0.10	-14.90	
5,915.00	1.200	227.60	5,625.75	707.87	-1,068.64	1,281.82	0.38	-0.21	13.89	
6,010.00	2.400	209.80	5,720.70	705.48	-1,070.37	1,281.93	1.38	1.26	-18.74	
6,105.00	0.300	217.00	5,815.67	703.55	-1,071.50	1,281.81	2.21	-2.21	7.58	
6,200.00	0.400	320.60	5,910.67	703.61	-1,071.86	1,282.14	0.58	0.11	109.05	
6,295.00	0.100	191.50	6,005.67	703.79	-1,072.09	1,282.43	0.49	-0.32	-135.89	
6,390.00	0.800	75.10	6,100.66	703.87	-1,071.47	1,281.96	0.89	0.74	-122.53	
6,485.00	0.100	166.70	6,195.66	703.96	-1,070.81	1,281.46	0.85	-0.74	96.42	
6,580.00	0.700	96.70	6,290.66	703.82	-1,070.21	1,280.88	0.71	0.63	-73.68	
6,675.00	1.200	125.40	6,385.65	703.17	-1,068.82	1,279.37	0.71	0.53	30.21	
6,770.00	1.000	155.50	6,480.63	701.84	-1,067.67	1,277.67	0.63	-0.21	31.68	
6,865.00	1.000	148.20	6,575.61	700.38	-1,066.89	1,276.21	0.13	0.00	-7.68	
6,960.00	1.100	220.90	6,670.60	698.99	-1,067.05	1,275.57	1.31	0.11	76.53	
7,055.00	2.100	206.60	6,765.56	696.74	-1,068.42	1,275.48	1.13	1.05	-15.05	
7,150.00	2.500	212.90	6,860.49	693.45	-1,070.33	1,275.23	0.50	0.42	6.63	
7,247.00	2.800	185.60	6,957.39	689.31	-1,071.71	1,274.09	1.32	0.31	-28.14	
7,342.00	1.100	141.70	7,052.33	686.29	-1,071.37	1,272.13	2.26	-1.79	-46.21	
7,437.00	1.200	106.00	7,147.32	685.30	-1,069.85	1,270.32	0.75	0.11	-37.58	
7,532.00	1.300	130.20	7,242.29	684.33	-1,068.07	1,268.30	0.56	0.11	25.47	
7,604.00	1.100	115.70	7,314.28	683.50	-1,066.82	1,266.81	0.50	-0.28	-20.14	
7,654.00	1.100	111.70	7,364.27	683.12	-1,065.95	1,265.86	0.15	0.00	-8.00	

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name		Casing Diameter (ft)	Hole Diameter (ft)
818.40	818.39	9 5/8" Csg.		0.80	1.02

Sharewell

Survey Report

Company:	Bill Barrett Corp.	Local Co-ordinate Reference:	Well Kaufman 41D-25-692
Project:	Garfield Co., CO (NAD83)	TVD Reference:	WELL @ 5808.01ft
Site:	Kaufman Pad #4 (Sec.30-T6S-R91W)	MD Reference:	WELL @ 5808.01ft
Well:	Kaufman 41D-25-692	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	CompassVM

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
710.00	709.99	-1.39	-0.06	End of Gyro Survey	
2,967.00	2,814.08	387.77	-562.47	As of March 20	
5,344.00	5,054.86	709.87	-1,060.63	As of March 21	
6,770.00	6,480.63	701.84	-1,067.67	As of March 22	
7,654.00	7,364.27	683.12	-1,065.95	Projected TD	

Checked By: _____	Approved By: _____	Date: _____
-------------------	--------------------	-------------