

Bill Barrett Corp.

Garfield Co., CO (NAD83)

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

Kaufman 42D-25-692

Wellbore #1

Design: Wellbore #1

Standard Survey Report

05 March, 2012



Project: Garfield Co., CO (NAD83)
 Site: Kaufman Pad #4 (Sec.30-T6S-R91W)
 Well: Kaufman 42D-25-692
 Wellbore: Wellbore #1
 Design: Wellbore #1
 Latitude: 39° 30' 11.13 N
 Longitude: 107° 36' 16.39 W
 Ground Level: 5786.01
 WELL @ 5808.01ft



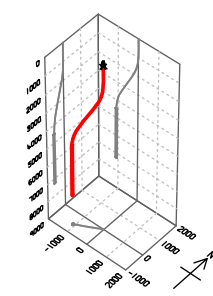
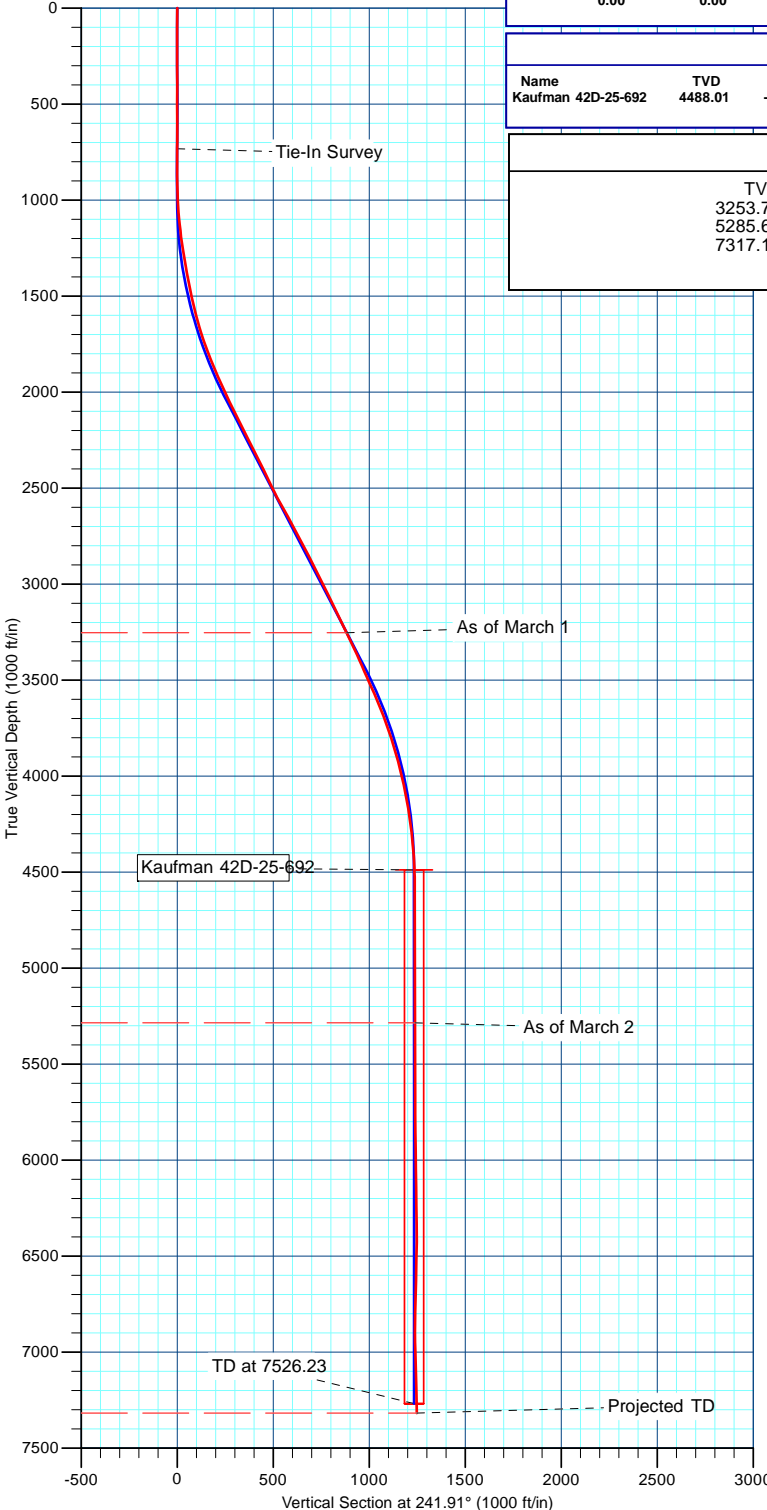
PROJECT DETAILS: Garfield Co., CO (NAD83)
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Central Zone
System Datum: Mean Sea Level

REFERENCE INFORMATION
Co-ordinate (NE) Reference: Well Kaufman 42D-25-692, True North
Vertical (VS) Reference: WELL @ 5808.01ft
Section (SD) Reference: Slot - (0.00N, 0.00E)
Measured Depth Reference: WELL @ 5808.01ft
Calculation Method: Minimum Curvature

WELL DETAILS: Kaufman 42D-25-692						
+N/-S	+E/-W	Northing	Easting	Ground Level: 5786.01	Latitude	Longitude
0.00	0.00	1615008.26	2406206.83		39° 30' 11.13 N	107° 36' 16.39 W

WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)								
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Kaufman 42D-25-692	4488.01	-580.57	-1087.80	1614453.05	2405105.87	39° 30' 5.39 N	107° 36' 30.27 W	Circle (Radius: 50.00)

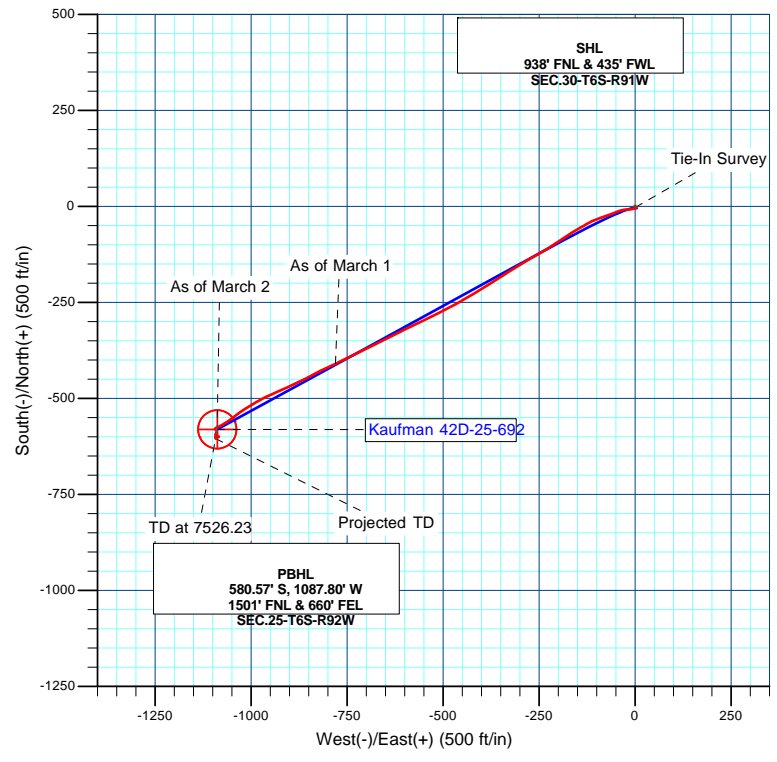
ANNOTATIONS									
TVD	MD	Inc	Azi	+N/-S	+E/-W	VSec	Departure	Annotation	
3253.70	3442.00	25.400	245.60	-409.70	-780.39	881.38	892.60	As of March 1	
5285.65	5535.00	1.200	169.90	-589.61	-1088.35	1237.77	1262.33	As of March 2	
7317.16	7567.00	1.600	203.10	-604.59	-1091.56	1247.66	1305.73	Projected TD	



FORMATION TOP DETAILS
No formation data is available

Azimuths to True North
 Magnetic North: 10.11°

Magnetic Field Strength: 52255.1snT
 Dip Angle: 65.80°
 Date: 12/17/2011
 Model: IGRF2010



Design: Wellbore #1 (Kaufman 42D-25-692/Wellbore #1)

Created By: Bret Wolford Date: 8:18, March 05 2012

Sharewell Survey Report

Company: Bill Barrett Corp.	Local Co-ordinate Reference: Well Kaufman 42D-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 42D-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 42D-25-692					
Well Position	+N/-S	0.00 ft	Northing:	1,615,008.26 usft	Latitude: 39° 30' 11.13 N
	+E/-W	0.00 ft	Easting:	2,406,206.83 usft	Longitude: 107° 36' 16.39 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	241.91	

Survey Program		Date 3/5/2012
From (ft)	To (ft)	Survey (Wellbore)
100.00	733.00	Survey #1 (Wellbore #1)
733.00	7,567.00	MWD (Wellbore #1)
		Tool Name
		MWD
		Description
		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	0.00
100.00	0.160	18.61	100.00	0.13	0.04	-0.10	0.16	0.16	0.00	
200.00	0.410	123.66	200.00	0.07	0.39	-0.37	0.48	0.25	105.05	
300.00	0.500	207.57	300.00	-0.52	0.48	-0.18	0.61	0.09	83.91	
400.00	0.060	43.72	400.00	-0.87	0.32	0.13	0.56	-0.44	-163.85	
500.00	0.680	139.58	499.99	-1.28	0.74	-0.05	0.69	0.62	95.86	
600.00	0.410	237.81	599.99	-1.92	0.82	0.18	0.84	-0.27	98.23	
700.00	0.510	106.67	699.99	-2.24	0.94	0.22	0.84	0.10	-131.14	
733.00	1.090	118.78	732.99	-2.44	1.36	-0.05	1.82	1.76	36.70	
875.00	0.300	201.00	874.98	-3.43	2.41	-0.51	0.77	-0.56	57.90	

Sharewell Survey Report

Company:	Bill Barrett Corp.	Local Co-ordinate Reference:	Well Kaufman 42D-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 42D-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	1.800	241.40	969.96	-4.38	1.01	1.17	1.67	1.58	42.53
1,065.00	4.900	256.40	1,064.79	-6.05	-4.24	6.59	3.36	3.26	15.79
1,160.00	7.300	265.20	1,159.24	-7.51	-14.20	16.07	2.70	2.53	9.26
1,255.00	9.600	263.80	1,253.21	-8.87	-28.10	28.96	2.43	2.42	-1.47
1,350.00	10.500	248.50	1,346.76	-12.90	-44.03	44.91	2.96	0.95	-16.11
1,445.00	10.800	248.10	1,440.13	-19.39	-60.34	62.36	0.33	0.32	-0.42
1,540.00	12.900	251.90	1,533.10	-26.00	-78.68	81.66	2.36	2.21	4.00
1,636.00	15.700	248.70	1,626.12	-34.05	-100.97	105.11	3.03	2.92	-3.33
1,731.00	18.100	241.10	1,717.02	-45.86	-125.87	132.64	3.43	2.53	-8.00
1,826.00	21.400	239.00	1,806.42	-61.92	-153.66	164.71	3.55	3.47	-2.21
1,921.00	23.300	235.90	1,894.28	-81.38	-184.08	200.71	2.35	2.00	-3.26
2,016.00	25.000	237.40	1,980.96	-102.73	-216.55	239.41	1.90	1.79	1.58
2,111.00	26.600	239.50	2,066.49	-124.35	-251.79	280.68	1.94	1.68	2.21
2,206.00	26.900	239.20	2,151.33	-146.14	-288.57	323.40	0.35	0.32	-0.32
2,301.00	26.400	239.40	2,236.23	-167.90	-325.21	365.96	0.53	-0.53	0.21
2,396.00	25.900	235.50	2,321.52	-190.40	-360.49	407.68	1.88	-0.53	-4.11
2,491.00	26.100	239.60	2,406.91	-212.73	-395.62	449.19	1.90	0.21	4.32
2,587.00	26.600	238.80	2,492.93	-234.55	-432.22	491.75	0.64	0.52	-0.83
2,682.00	28.500	242.00	2,577.16	-256.21	-470.43	535.66	2.53	2.00	3.37
2,777.00	28.900	243.40	2,660.49	-277.13	-510.97	581.27	0.82	0.42	1.47
2,872.00	28.100	243.40	2,743.98	-297.43	-551.50	626.58	0.84	-0.84	0.00
2,967.00	27.900	244.60	2,827.86	-316.98	-591.58	671.15	0.63	-0.21	1.26
3,062.00	26.600	243.40	2,912.31	-336.04	-630.68	714.62	1.49	-1.37	-1.26
3,157.00	26.500	243.30	2,997.30	-355.09	-668.63	757.07	0.12	-0.11	-0.11
3,252.00	26.400	244.60	3,082.35	-373.67	-706.64	799.35	0.62	-0.11	1.37
3,347.00	25.300	242.80	3,167.85	-392.01	-743.78	840.75	1.42	-1.16	-1.89
3,442.00	25.400	245.60	3,253.70	-409.70	-780.39	881.38	1.27	0.11	2.95
3,538.00	25.600	243.40	3,340.35	-427.50	-817.69	922.66	1.01	0.21	-2.29
3,633.00	23.400	241.70	3,426.80	-445.63	-852.65	962.05	2.43	-2.32	-1.79
3,728.00	24.700	246.20	3,513.55	-462.59	-887.43	1,000.71	2.37	1.37	4.74
3,823.00	23.000	244.70	3,600.44	-478.53	-922.37	1,039.04	1.90	-1.79	-1.58
3,918.00	20.800	246.70	3,688.58	-493.14	-954.65	1,074.39	2.44	-2.32	2.11
4,013.00	18.500	238.40	3,778.06	-507.71	-982.98	1,106.26	3.80	-2.42	-8.74
4,108.00	16.800	239.60	3,868.58	-522.56	-1,007.66	1,135.02	1.83	-1.79	1.26
4,203.00	13.700	233.70	3,960.23	-536.17	-1,028.58	1,159.88	3.65	-3.26	-6.21
4,298.00	12.500	232.90	4,052.76	-549.03	-1,045.85	1,181.17	1.28	-1.26	-0.84
4,393.00	9.300	233.90	4,146.03	-559.76	-1,060.25	1,198.93	3.37	-3.37	1.05
4,489.00	8.300	242.80	4,240.91	-567.50	-1,072.68	1,213.54	1.76	-1.04	9.27
4,584.00	5.900	238.90	4,335.17	-573.15	-1,082.96	1,225.27	2.58	-2.53	-4.11
4,679.00	3.400	252.00	4,429.85	-576.55	-1,089.83	1,232.92	2.84	-2.63	13.79
4,774.00	0.500	203.90	4,524.79	-577.80	-1,092.67	1,236.03	3.25	-3.05	-50.63
4,869.00	0.400	210.80	4,619.79	-578.46	-1,093.01	1,236.64	0.12	-0.11	7.26
4,964.00	0.900	189.00	4,714.78	-579.48	-1,093.30	1,237.37	0.58	0.53	-22.95

Sharewell

Survey Report

Company:	Bill Barrett Corp.	Local Co-ordinate Reference:	Well Kaufman 42D-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 42D-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	0.400	110.70	4,809.78	-580.34	-1,093.10	1,237.60	0.96	-0.53	-82.42	
5,154.00	1.300	153.50	4,904.77	-581.42	-1,092.31	1,237.41	1.10	0.95	45.05	
5,249.00	1.400	134.10	4,999.74	-583.19	-1,091.00	1,237.09	0.49	0.11	-20.42	
5,344.00	1.400	140.60	5,094.71	-584.89	-1,089.43	1,236.51	0.17	0.00	6.84	
5,440.00	1.700	176.80	5,190.68	-587.22	-1,088.60	1,236.87	1.05	0.31	37.71	
5,535.00	1.200	169.90	5,285.65	-589.61	-1,088.35	1,237.77	0.56	-0.53	-7.26	
5,630.00	2.100	187.60	5,380.61	-592.31	-1,088.41	1,239.10	1.08	0.95	18.63	
5,725.00	0.600	334.30	5,475.59	-593.59	-1,088.85	1,240.09	2.76	-1.58	154.42	
5,820.00	0.400	341.00	5,570.59	-592.83	-1,089.18	1,240.02	0.22	-0.21	7.05	
5,915.00	0.400	352.30	5,665.58	-592.19	-1,089.33	1,239.85	0.08	0.00	11.89	
6,010.00	0.600	313.10	5,760.58	-591.52	-1,089.74	1,239.90	0.40	0.21	-41.26	
6,105.00	0.600	269.10	5,855.58	-591.19	-1,090.60	1,240.50	0.47	0.00	-46.32	
6,200.00	0.400	222.40	5,950.57	-591.44	-1,091.32	1,241.25	0.46	-0.21	-49.16	
6,295.00	1.300	209.30	6,045.56	-592.62	-1,092.07	1,242.47	0.96	0.95	-13.79	
6,391.00	1.400	186.10	6,141.54	-594.74	-1,092.73	1,244.05	0.57	0.10	-24.17	
6,486.00	1.500	175.50	6,236.51	-597.13	-1,092.75	1,245.20	0.30	0.11	-11.16	
6,581.00	1.600	177.00	6,331.47	-599.70	-1,092.59	1,246.26	0.11	0.11	1.58	
6,676.00	2.000	162.80	6,426.42	-602.60	-1,092.03	1,247.14	0.63	0.42	-14.95	
6,771.00	1.800	55.60	6,521.39	-603.34	-1,090.30	1,245.97	3.22	-0.21	-112.84	
6,866.00	1.100	65.70	6,616.36	-602.13	-1,088.24	1,243.57	0.78	-0.74	10.63	
6,961.00	1.800	79.30	6,711.33	-601.47	-1,085.95	1,241.24	0.82	0.74	14.32	
7,056.00	1.400	36.70	6,806.30	-600.27	-1,083.79	1,238.77	1.28	-0.42	-44.84	
7,151.00	0.700	275.50	6,901.29	-599.28	-1,083.67	1,238.20	1.96	-0.74	-127.58	
7,246.00	1.700	259.60	6,996.27	-599.48	-1,085.63	1,240.02	1.10	1.05	-16.74	
7,342.00	1.800	237.80	7,092.22	-600.54	-1,088.31	1,242.89	0.70	0.10	-22.71	
7,437.00	0.900	226.50	7,187.20	-601.85	-1,090.11	1,245.09	0.98	-0.95	-11.89	
7,517.00	1.600	203.10	7,267.18	-603.31	-1,091.01	1,246.57	1.07	0.88	-29.25	
7,567.00	1.600	203.10	7,317.16	-604.59	-1,091.56	1,247.66	0.00	0.00	0.00	

Casing Points				
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (ft)	Hole Diameter (ft)
819.10	819.08	9 5/8" Csg.	0.80	1.02

Design Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
3,442.00	3,253.70	-409.70	-780.39	As of March 1
5,535.00	5,285.65	-589.61	-1,088.35	As of March 2
7,567.00	7,317.16	-604.59	-1,091.56	Projected TD

Sharewell
Survey Report

Company:	Bill Barrett Corp.	Local Co-ordinate Reference:	Well Kaufman 42D-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 42D-25-692	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	CompassVM

Checked By: _____ Approved By: _____ Date: _____