

Bill Barrett Corp. (II)

Garfield County, Colorado [NAD83]

Werner Pad

Werner 41D-26-692

Wellbore #1

Design: Wellbore #1

Standard Survey Report

19 December, 2011

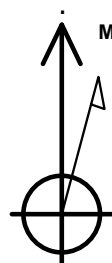
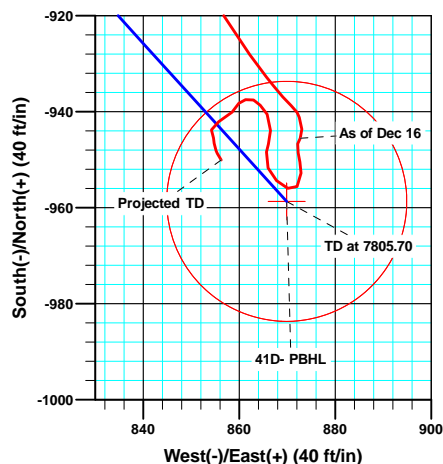
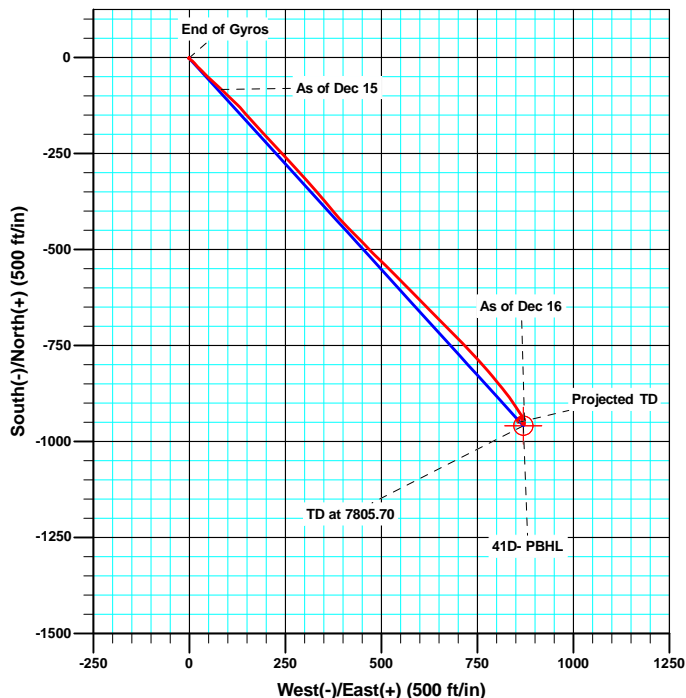
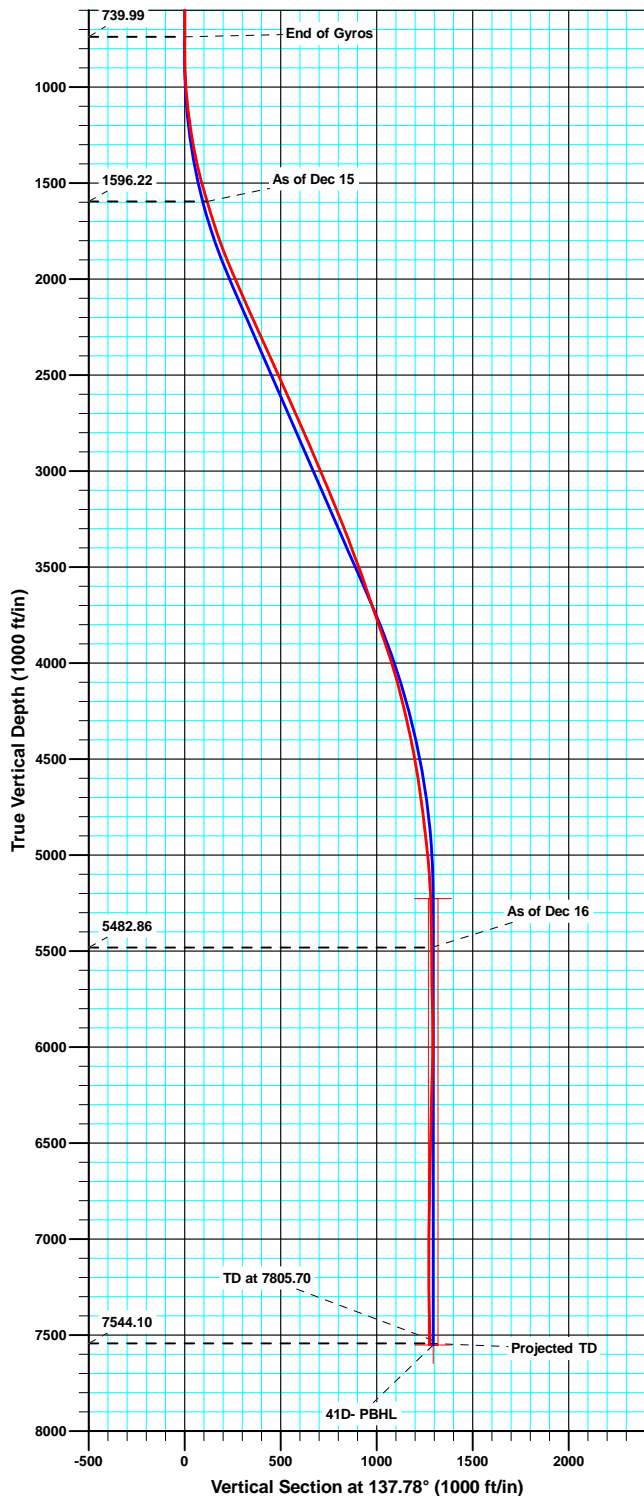
WELL DETAILS: Werner 41D-26-692



US State Plane 1983 North American Datum 1983 Colorado Central Zone
 +N/-S +E/-W Northing Easting Latitude Longitude
 0.00 0.00 1616800.71 2399005.49 39° 30' 27.18 N 107° 37' 48.78 W



Ground Level: 5943.00 KB: 23'



Azimuths to True North
 Magnetic North: 10.28°

Magnetic Field
 Strength: 52372.7snT
 Dip Angle: 65.84°
 Date: 10/12/2010
 Model: IGRF2010

ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	Vsect	Departure	Annotation
739.99	740.00	0.240	118.62	-1.63	-1.36	0.29	4.04	End of Gyros
1596.22	1608.00	16.300	133.40	-83.05	83.33	117.50	121.68	As of Dec 15
5482.86	5702.00	1.000	245.40	-945.48	872.74	1286.66	1294.22	As of Dec 16
7544.10	7764.00	2.000	147.70	-950.01	856.27	1278.94	1349.92	Projected TD

Sharewell

Survey Report

Company:	Bill Barrett Corp. (II)	Local Co-ordinate Reference:	Well Werner 41D-26-692
Project:	Garfield County, Colorado [NAD83]	TVD Reference:	GL @ 5943.00ft (Original Well Elev)
Site:	Werner Pad	MD Reference:	GL @ 5943.00ft (Original Well Elev)
Well:	Werner 41D-26-692	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		Werner Pad			
Site Position:		Northing:	1,616,752.90 usft	Latitude:	39° 30' 26.71 N
From:	Lat/Long	Easting:	2,398,994.50 usft	Longitude:	107° 37' 48.91 W
Position Uncertainty:	0.00 ft	Slot Radius:	1.10 ft	Grid Convergence:	-1.34 °

Well	Werner 41D-26-692					
Well Position	+N/-S	0.00 ft	Northing:	1,616,800.71 usft	Latitude:	39° 30' 27.18 N
	+E/-W	0.00 ft	Easting:	2,399,005.50 usft	Longitude:	107° 37' 48.78 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	5,943.00 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	10/12/2010	10.28	65.84	52,373

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	137.78	

Survey Program	Date	12/19/2011			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
50.00	740.00	Gyro Surveys (Wellbore #1)	MWD	MWD - Standard	
856.00	7,764.00	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	
50.00	0.620	199.74	50.00	-0.25	-0.09	0.13	1.24	1.24	0.00	
100.00	0.720	203.69	100.00	-0.80	-0.31	0.38	0.22	0.20	7.90	
150.00	0.350	198.46	149.99	-1.23	-0.48	0.59	0.75	-0.74	-10.46	
200.00	0.370	243.28	199.99	-1.45	-0.68	0.62	0.55	0.04	89.64	
250.00	0.280	322.88	249.99	-1.42	-0.89	0.45	0.84	-0.18	159.20	
300.00	0.340	72.90	299.99	-1.28	-0.83	0.39	1.02	0.12	220.04	
350.00	0.510	205.64	349.99	-1.44	-0.78	0.54	1.56	0.34	265.48	
400.00	0.270	251.77	399.99	-1.68	-0.99	0.58	0.75	-0.48	92.26	
450.00	0.280	337.62	449.99	-1.60	-1.15	0.41	0.75	0.02	171.70	

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Site:	Werner Pad	MD Reference:	GL @ 5943.00ft (Original Well Elev)
Well:	Werner 41D-26-692	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)
500.00	0.100	97.87	499.99	-1.49	-1.15	0.33	0.68	-0.36	240.50
550.00	0.300	228.40	549.99	-1.59	-1.21	0.36	0.75	0.40	261.06
600.00	0.160	266.88	599.99	-1.68	-1.37	0.32	0.40	-0.28	76.96
650.00	0.130	312.64	649.99	-1.64	-1.48	0.22	0.23	-0.06	91.52
700.00	0.120	81.80	699.99	-1.60	-1.47	0.19	0.45	-0.02	258.32
740.00	0.240	118.62	739.99	-1.63	-1.36	0.29	0.40	0.30	92.05
856.00	0.600	129.00	855.98	-2.13	-0.67	1.12	0.32	0.31	8.95
948.00	2.500	134.50	947.95	-3.84	1.13	3.60	2.07	2.07	5.98
1,040.00	5.100	125.10	1,039.74	-7.60	5.91	9.60	2.90	2.83	-10.22
1,132.00	7.000	137.70	1,131.23	-14.09	13.03	19.19	2.51	2.07	13.70
1,228.00	8.800	137.00	1,226.31	-23.79	21.97	32.39	1.88	1.88	-0.73
1,323.00	10.500	134.10	1,319.96	-35.13	33.15	48.29	1.86	1.79	-3.05
1,418.00	12.900	134.40	1,412.98	-48.58	46.94	67.52	2.53	2.53	0.32
1,513.00	16.000	133.10	1,504.97	-64.95	64.08	91.16	3.28	3.26	-1.37
1,608.00	16.300	133.40	1,596.22	-83.05	83.33	117.50	0.33	0.32	0.32
1,703.00	17.300	133.30	1,687.16	-101.90	103.30	144.88	1.05	1.05	-0.11
1,799.00	19.200	135.40	1,778.33	-122.93	124.77	174.88	2.09	1.98	2.19
1,893.00	21.200	138.20	1,866.55	-146.61	146.96	207.33	2.36	2.13	2.98
1,989.00	23.500	138.20	1,955.33	-173.82	171.29	243.83	2.40	2.40	0.00
2,084.00	23.600	137.60	2,042.42	-201.99	196.73	281.79	0.27	0.11	-0.63
2,179.00	24.300	136.40	2,129.24	-230.18	223.04	320.34	0.90	0.74	-1.26
2,274.00	24.200	136.70	2,215.85	-258.51	249.87	359.35	0.17	-0.11	0.32
2,369.00	24.400	138.60	2,302.44	-287.40	276.20	398.44	0.85	0.21	2.00
2,464.00	24.300	138.10	2,388.99	-316.67	302.23	437.61	0.24	-0.11	-0.53
2,559.00	24.100	138.30	2,475.64	-345.70	328.19	476.55	0.23	-0.21	0.21
2,654.00	24.400	139.90	2,562.26	-375.19	353.73	515.56	0.76	0.32	1.68
2,749.00	24.300	140.60	2,648.81	-405.31	378.78	554.69	0.32	-0.11	0.74
2,844.00	23.000	135.70	2,735.83	-433.70	404.15	592.76	2.48	-1.37	-5.16
2,939.00	23.800	134.90	2,823.02	-460.51	430.69	630.46	0.91	0.84	-0.84
3,034.00	24.400	137.10	2,909.74	-488.42	457.63	669.22	1.14	0.63	2.32
3,129.00	22.300	134.00	2,996.96	-515.32	483.95	706.83	2.56	-2.21	-3.26
3,225.00	22.600	134.00	3,085.68	-540.78	510.32	743.41	0.31	0.31	0.00
3,320.00	22.500	135.80	3,173.42	-566.49	536.13	779.80	0.73	-0.11	1.89
3,414.00	22.000	134.00	3,260.42	-591.62	561.33	815.34	0.90	-0.53	-1.91
3,510.00	20.700	136.50	3,349.83	-616.42	585.95	850.25	1.65	-1.35	2.60
3,605.00	20.800	135.00	3,438.67	-640.53	609.43	883.88	0.57	0.11	-1.58
3,701.00	20.100	134.30	3,528.62	-664.10	633.29	917.37	0.77	-0.73	-0.73
3,796.00	18.000	137.10	3,618.42	-686.26	654.97	948.35	2.41	-2.21	2.95
3,891.00	19.000	136.30	3,708.51	-708.19	675.65	978.48	1.09	1.05	-0.84
3,986.00	20.000	134.70	3,798.06	-730.80	697.88	1,010.17	1.19	1.05	-1.68
4,082.00	18.900	136.70	3,888.58	-753.66	720.21	1,042.11	1.34	-1.15	2.08
4,177.00	17.800	135.20	3,978.75	-775.16	741.00	1,072.00	1.26	-1.16	-1.58
4,269.00	16.100	138.10	4,066.75	-794.64	759.43	1,098.80	2.06	-1.85	3.15

Sharewell

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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)
4,365.00	13.900	140.80	4,159.47	-813.48	775.61	1,123.63	2.40	-2.29	2.81
4,460.00	13.500	140.50	4,251.77	-830.88	789.87	1,146.10	0.43	-0.42	-0.32
4,556.00	12.700	140.40	4,345.27	-847.66	803.73	1,167.84	0.83	-0.83	-0.10
4,653.00	10.800	140.90	4,440.23	-862.93	816.25	1,187.57	1.96	-1.96	0.52
4,749.00	9.300	143.90	4,534.76	-876.18	826.50	1,204.26	1.65	-1.56	3.13
4,844.00	9.000	141.70	4,628.55	-888.21	835.63	1,219.31	0.49	-0.32	-2.32
4,939.00	7.700	146.40	4,722.54	-899.35	843.75	1,233.01	1.54	-1.37	4.95
5,035.00	7.100	147.70	4,817.74	-909.72	850.48	1,245.22	0.65	-0.63	1.35
5,130.00	6.600	149.10	4,912.06	-919.36	856.42	1,256.35	0.55	-0.53	1.47
5,225.00	6.000	143.70	5,006.49	-928.05	862.17	1,266.65	0.89	-0.63	-5.68
5,321.00	3.900	141.10	5,102.13	-934.64	867.19	1,274.90	2.20	-2.19	-2.71
5,416.00	2.700	134.10	5,196.97	-938.71	870.82	1,280.35	1.33	-1.26	-7.37
5,512.00	1.100	173.70	5,292.92	-941.20	872.55	1,283.36	2.06	-1.67	41.25
5,607.00	1.900	164.50	5,387.88	-943.62	873.07	1,285.50	0.88	0.84	-9.68
5,702.00	1.000	245.40	5,482.86	-945.48	872.74	1,286.66	2.11	-0.95	85.16
5,798.00	1.000	167.00	5,578.85	-946.65	872.16	1,287.14	1.32	0.00	-81.67
5,893.00	1.300	181.70	5,673.83	-948.53	872.32	1,288.64	0.44	0.32	15.47
5,988.00	1.100	155.80	5,768.81	-950.44	872.66	1,290.28	0.60	-0.21	-27.26
6,083.00	1.800	184.90	5,863.78	-952.76	872.91	1,292.16	1.05	0.74	30.63
6,179.00	1.800	209.20	5,959.73	-955.58	872.04	1,293.67	0.79	0.00	25.31
6,274.00	1.800	309.00	6,054.70	-955.94	870.15	1,292.67	2.90	0.00	105.05
6,369.00	1.700	298.90	6,149.66	-954.32	867.76	1,289.86	0.34	-0.11	-10.63
6,464.00	2.400	345.50	6,244.60	-951.72	866.03	1,286.77	1.84	0.74	49.05
6,559.00	1.700	7.30	6,339.54	-948.39	865.71	1,284.09	1.09	-0.74	22.95
6,654.00	0.400	40.30	6,434.53	-946.74	866.10	1,283.13	1.45	-1.37	34.74
6,750.00	3.100	4.80	6,530.47	-943.90	866.54	1,281.32	2.90	2.81	-36.98
6,845.00	1.500	312.70	6,625.40	-940.50	865.84	1,278.33	2.61	-1.68	-54.84
6,940.00	1.400	331.60	6,720.37	-938.63	864.37	1,275.96	0.51	-0.11	19.89
7,035.00	1.000	274.90	6,815.36	-937.54	863.00	1,274.23	1.26	-0.42	-59.68
7,131.00	1.000	269.40	6,911.34	-937.48	861.32	1,273.06	0.10	0.00	-5.73
7,226.00	1.100	217.70	7,006.33	-938.21	859.94	1,272.67	0.97	0.11	-54.42
7,321.00	1.700	216.50	7,101.30	-940.06	858.54	1,273.10	0.63	0.63	-1.26
7,416.00	2.600	245.80	7,196.23	-942.08	855.74	1,272.71	1.47	0.95	30.84
7,512.00	1.100	149.20	7,292.20	-943.76	854.22	1,272.94	3.06	-1.56	-100.63
7,607.00	1.100	181.50	7,387.18	-945.46	854.67	1,274.49	0.64	0.00	34.00
7,702.00	2.200	162.90	7,482.14	-948.11	855.18	1,276.80	1.27	1.16	-19.58
7,720.00	2.000	147.70	7,500.13	-948.71	855.45	1,277.43	3.28	-1.11	-84.44
7,764.00	2.000	147.70	7,544.10	-950.01	856.27	1,278.94	0.00	0.00	0.00

Sharewell
Survey Report

Company:	Bill Barrett Corp. (II)	Local Co-ordinate Reference:	Well Werner 41D-26-692
Project:	Garfield County, Colorado [NAD83]	TVD Reference:	GL @ 5943.00ft (Original Well Elev)
Site:	Werner Pad	MD Reference:	GL @ 5943.00ft (Original Well Elev)
Well:	Werner 41D-26-692	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Compass VM

Design Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
740.00	739.99	-1.63	-1.36	End of Gyros
1,608.00	1,596.22	-83.05	83.33	As of Dec 15
5,702.00	5,482.86	-945.48	872.74	As of Dec 16
7,764.00	7,544.10	-950.01	856.27	Projected TD

Checked By: _____	Approved By: _____	Date: _____
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