

# Well Planning Proposal FOR

**Bill Barrett Corp.  
Siebring 5-63-32-17H  
Weld Co., CO**

Well File: Design #1 (1/31/12)

Presented By:

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Pat Rasmussen  
Regional Manager

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Bret Wolford  
Well Planner



**Sharewell**  
Energy Services, LP



Bill Barrett Corp.  
Project: Weld Co., CO  
Site: Sec.32-T5N-R63W  
Well: Siebring 5-63-32-17H  
Wellbore: Wellbore #1  
Design: Design #1  
Lat: 40° 21' 28.152 N  
Long: 104° 27' 4.536 W  
Pad GL: 4570.00  
KB: WELL @ 4588.00usft



#### PROJECT DETAILS: Weld Co., CO

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



Azimuths to True North  
Magnetic North: 8.61°  
Magnetic Field  
Strength: 53078.4snT  
Dip Angle: 67.05°  
Date: 2012/01/31  
Model: IGRF2010

#### WELL DETAILS: Siebring 5-63-32-17H

	Ground Level:	4570.00
+N/-S	Eastings	Latitude
0.00	1374922.681	3292259.868
+E/-W	0.00	40° 21' 28.152 N
		104° 27' 4.536 W

#### WELLBORE TARGET DETAILS (LAT/LONG)

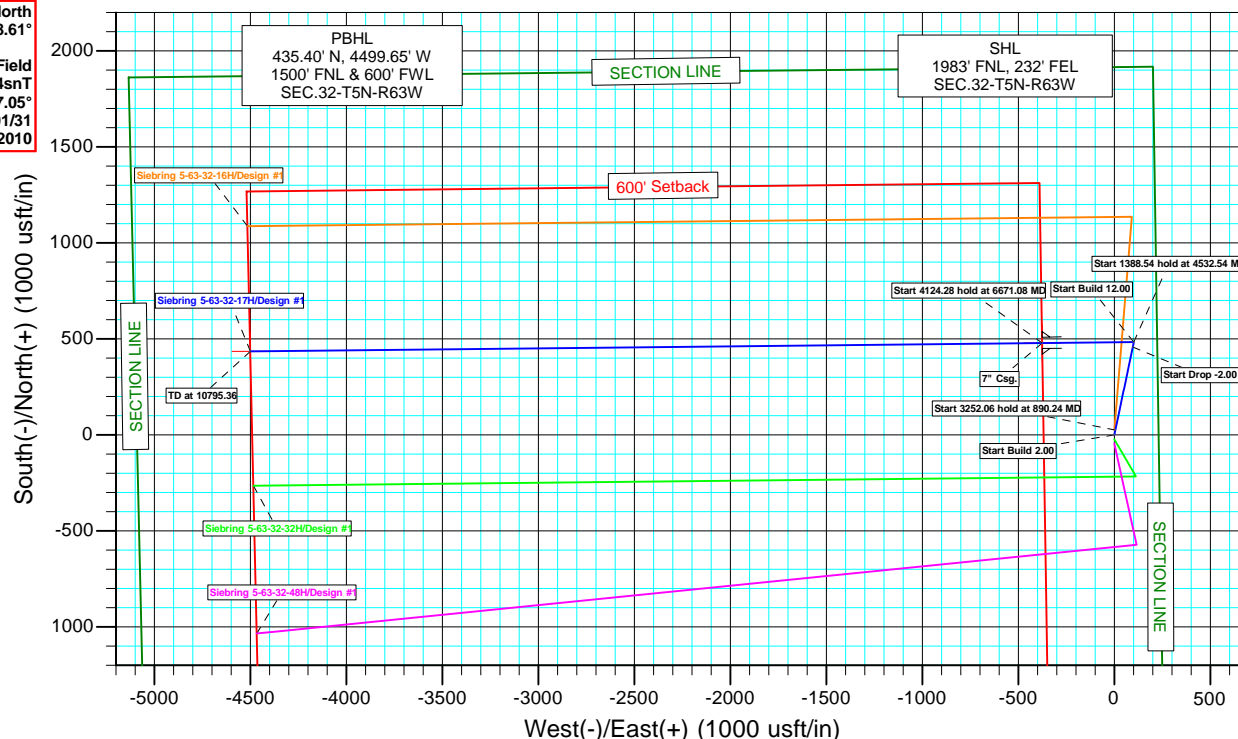
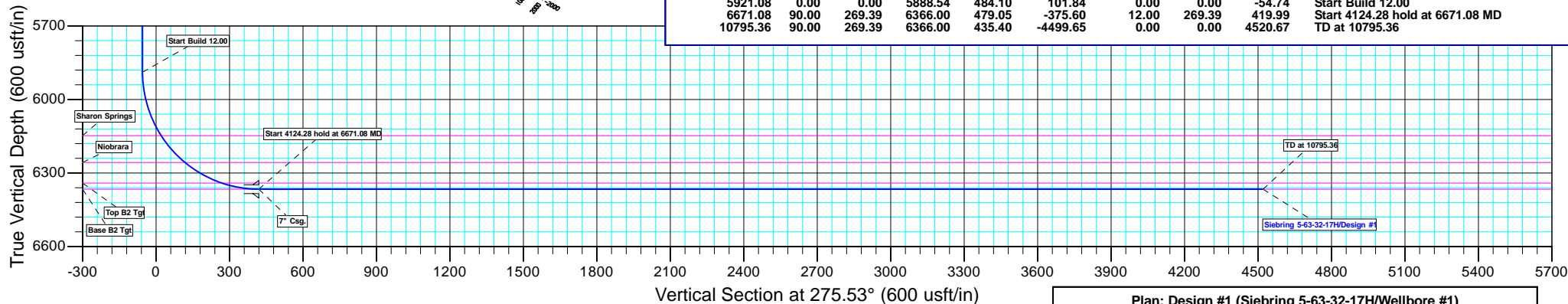
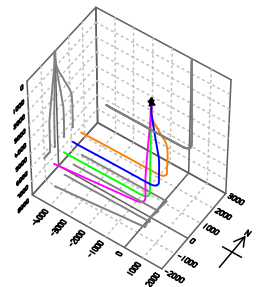
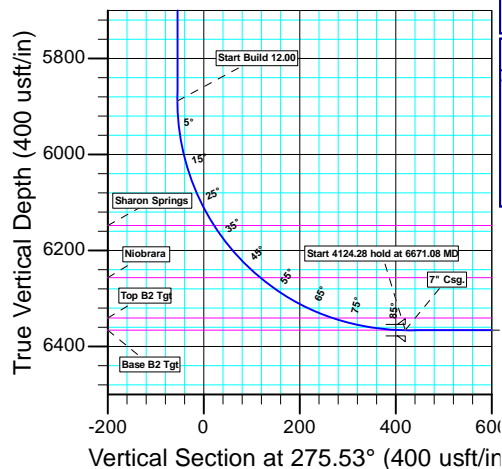
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
17H LP	6366.00	479.05	-375.59	40° 21' 32.886 N	104° 27' 9.388 W	Point
17H PBHL	6366.00	435.40	-4499.65	40° 21' 32.451 N	104° 28' 2.663 W	Point

#### CASING DETAILS

TVD	MD	Name	Size
6366.00	6671.08	7" Csg.	7

#### FORMATION TOP DETAILS

TVDPath	MDPath	Formation
238.00	238.00	Pierre
3988.00	4018.18	Terry/Sussex
4638.00	4670.54	Shannon
6148.00	6195.38	Sharon Springs
6257.00	6341.97	Niobrara
6341.00	6515.87	Top B2 Tgt
6366.00	6668.93	Base B2 Tgt



#### SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	Start Build 2.00
890.24	7.80	11.88	889.03	25.97	5.46	2.00	11.88	-2.94	Start 3252.06 hold at 890.24 MD
4142.30	7.80	11.88	4110.97	458.13	96.38	0.00	0.00	-51.80	Start Drop -2.00
4532.54	0.00	0.00	4500.00	484.10	101.84	2.00	180.00	-54.74	Start 1388.54 hold at 4532.54 MD
5921.08	0.00	0.00	5888.54	484.10	101.84	0.00	0.00	-54.74	Start Build 12.00
6671.08	90.00	269.39	6366.00	479.05	-375.60	12.00	269.39	419.99	Start 4124.28 hold at 6671.08 MD
10795.36	90.00	269.39	6366.00	435.40	-4499.65	0.00	0.00	4520.67	TD at 10795.36

Plan: Design #1 (Siebring 5-63-32-17H/Wellbore #1)

Created By: Bret Wolford

Date: 15:14, January 31 2012





**Bill Barrett Corporation**

## **Bill Barrett Corp.**

Weld Co., CO

Sec.32-T5N-R63W

Siebring 5-63-32-17H

Wellbore #1

Plan: Design #1

## **Standard Planning Report**

31 January, 2012



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Siebring 5-63-32-17H
<b>Company:</b>	Bill Barrett Corp.	<b>TVD Reference:</b>	WELL @ 4588.00usft
<b>Project:</b>	Weld Co., CO	<b>MD Reference:</b>	WELL @ 4588.00usft
<b>Site:</b>	Sec.32-T5N-R63W	<b>North Reference:</b>	True
<b>Well:</b>	Siebring 5-63-32-17H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

<b>Project</b>	Weld Co., CO		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Northern Zone		

Site		Sec.32-T5N-R63W			
Site Position:		Northing:	1,374,948.188 usft	Latitude:	40° 21' 28.404 N
From:	Lat/Long	Easting:	3,292,259.567 usft	Longitude:	104° 27' 4.536 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16"	Grid Convergence:	0.68 °

Well	Siebring 5-63-32-17H					
Well Position	+N/-S	-25.51 usft	Northing:	1,374,922.681 usft	Latitude:	40° 21' 28.152 N
	+E/-W	0.00 usft	Easting:	3,292,259.868 usft	Longitude:	104° 27' 4.536 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	4,570.00 usft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	01/31/12	8.61	67.05	53,078

<b>Design</b>	Design #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	275.53

<b>Plan Sections</b>										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
890.24	7.80	11.88	889.03	25.97	5.46	2.00	2.00	0.00	11.88	
4,142.30	7.80	11.88	4,110.97	458.13	96.38	0.00	0.00	0.00	0.00	
4,532.54	0.00	0.00	4,500.00	484.10	101.84	2.00	-2.00	0.00	180.00	
5,921.08	0.00	0.00	5,888.54	484.10	101.84	0.00	0.00	0.00	0.00	
6,671.08	90.00	269.39	6,366.00	479.05	-375.60	12.00	12.00	0.00	269.39	17H PBHL
10,795.36	90.00	269.39	6,366.00	435.40	-4,499.65	0.00	0.00	0.00	0.00	17H PBHL

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Siebring 5-63-32-17H
<b>Company:</b>	Bill Barrett Corp.	<b>TVD Reference:</b>	WELL @ 4588.00usft
<b>Project:</b>	Weld Co., CO	<b>MD Reference:</b>	WELL @ 4588.00usft
<b>Site:</b>	Sec.32-T5N-R63W	<b>North Reference:</b>	True
<b>Well:</b>	Siebring 5-63-32-17H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Pierre</b>									
238.00	0.00	0.00	238.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Start Build 2.00</b>									
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	2.00	11.88	599.98	1.71	0.36	-0.19	2.00	2.00	0.00
700.00	4.00	11.88	699.84	6.83	1.44	-0.77	2.00	2.00	0.00
800.00	6.00	11.88	799.45	15.36	3.23	-1.74	2.00	2.00	0.00
<b>Start 3252.06 hold at 890.24 MD</b>									
890.24	7.80	11.88	889.03	25.97	5.46	-2.94	2.00	2.00	0.00
900.00	7.80	11.88	898.70	27.27	5.74	-3.08	0.00	0.00	0.00
1,000.00	7.80	11.88	997.78	40.56	8.53	-4.59	0.00	0.00	0.00
1,100.00	7.80	11.88	1,096.85	53.84	11.33	-6.09	0.00	0.00	0.00
1,200.00	7.80	11.88	1,195.92	67.13	14.12	-7.59	0.00	0.00	0.00
1,300.00	7.80	11.88	1,295.00	80.42	16.92	-9.09	0.00	0.00	0.00
1,400.00	7.80	11.88	1,394.07	93.71	19.71	-10.60	0.00	0.00	0.00
1,500.00	7.80	11.88	1,493.15	107.00	22.51	-12.10	0.00	0.00	0.00
1,600.00	7.80	11.88	1,592.22	120.29	25.31	-13.60	0.00	0.00	0.00
1,700.00	7.80	11.88	1,691.29	133.58	28.10	-15.10	0.00	0.00	0.00
1,800.00	7.80	11.88	1,790.37	146.87	30.90	-16.61	0.00	0.00	0.00
1,900.00	7.80	11.88	1,889.44	160.16	33.69	-18.11	0.00	0.00	0.00
2,000.00	7.80	11.88	1,988.51	173.44	36.49	-19.61	0.00	0.00	0.00
2,100.00	7.80	11.88	2,087.59	186.73	39.28	-21.12	0.00	0.00	0.00
2,200.00	7.80	11.88	2,186.66	200.02	42.08	-22.62	0.00	0.00	0.00
2,300.00	7.80	11.88	2,285.74	213.31	44.87	-24.12	0.00	0.00	0.00
2,400.00	7.80	11.88	2,384.81	226.60	47.67	-25.62	0.00	0.00	0.00
2,500.00	7.80	11.88	2,483.88	239.89	50.47	-27.13	0.00	0.00	0.00
2,600.00	7.80	11.88	2,582.96	253.18	53.26	-28.63	0.00	0.00	0.00
2,700.00	7.80	11.88	2,682.03	266.47	56.06	-30.13	0.00	0.00	0.00
2,800.00	7.80	11.88	2,781.10	279.75	58.85	-31.63	0.00	0.00	0.00
2,900.00	7.80	11.88	2,880.18	293.04	61.65	-33.14	0.00	0.00	0.00
3,000.00	7.80	11.88	2,979.25	306.33	64.44	-34.64	0.00	0.00	0.00
3,100.00	7.80	11.88	3,078.32	319.62	67.24	-36.14	0.00	0.00	0.00
3,200.00	7.80	11.88	3,177.40	332.91	70.03	-37.64	0.00	0.00	0.00
3,300.00	7.80	11.88	3,276.47	346.20	72.83	-39.15	0.00	0.00	0.00
3,400.00	7.80	11.88	3,375.55	359.49	75.63	-40.65	0.00	0.00	0.00
3,500.00	7.80	11.88	3,474.62	372.78	78.42	-42.15	0.00	0.00	0.00
3,600.00	7.80	11.88	3,573.69	386.07	81.22	-43.66	0.00	0.00	0.00
3,700.00	7.80	11.88	3,672.77	399.35	84.01	-45.16	0.00	0.00	0.00
3,800.00	7.80	11.88	3,771.84	412.64	86.81	-46.66	0.00	0.00	0.00
3,900.00	7.80	11.88	3,870.91	425.93	89.60	-48.16	0.00	0.00	0.00
4,000.00	7.80	11.88	3,969.99	439.22	92.40	-49.67	0.00	0.00	0.00
<b>Terry/Sussex</b>									
4,018.18	7.80	11.88	3,988.00	441.64	92.91	-49.94	0.00	0.00	0.00
4,100.00	7.80	11.88	4,069.06	452.51	95.19	-51.17	0.00	0.00	0.00
<b>Start Drop -2.00</b>									
4,142.30	7.80	11.88	4,110.97	458.13	96.38	-51.80	0.00	0.00	0.00
4,200.00	6.65	11.88	4,168.21	465.23	97.87	-52.61	2.00	-2.00	0.00
4,300.00	4.65	11.88	4,267.72	474.87	99.90	-53.70	2.00	-2.00	0.00
4,400.00	2.65	11.88	4,367.51	481.10	101.21	-54.40	2.00	-2.00	0.00

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Siebring 5-63-32-17H
<b>Company:</b>	Bill Barrett Corp.	<b>TVD Reference:</b>	WELL @ 4588.00usft
<b>Project:</b>	Weld Co., CO	<b>MD Reference:</b>	WELL @ 4588.00usft
<b>Site:</b>	Sec.32-T5N-R63W	<b>North Reference:</b>	True
<b>Well:</b>	Siebring 5-63-32-17H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,500.00	0.65	11.88	4,467.46	483.92	101.80	-54.72	2.00	-2.00	0.00
<b>Start 1388.54 hold at 4532.54 MD</b>									
4,532.54	0.00	0.00	4,500.00	484.10	101.84	-54.74	2.00	-2.00	-36.51
4,600.00	0.00	0.00	4,567.46	484.10	101.84	-54.74	0.00	0.00	0.00
<b>Shannon</b>									
4,670.54	0.00	0.00	4,638.00	484.10	101.84	-54.74	0.00	0.00	0.00
4,700.00	0.00	0.00	4,667.46	484.10	101.84	-54.74	0.00	0.00	0.00
4,800.00	0.00	0.00	4,767.46	484.10	101.84	-54.74	0.00	0.00	0.00
4,900.00	0.00	0.00	4,867.46	484.10	101.84	-54.74	0.00	0.00	0.00
5,000.00	0.00	0.00	4,967.46	484.10	101.84	-54.74	0.00	0.00	0.00
5,100.00	0.00	0.00	5,067.46	484.10	101.84	-54.74	0.00	0.00	0.00
5,200.00	0.00	0.00	5,167.46	484.10	101.84	-54.74	0.00	0.00	0.00
5,300.00	0.00	0.00	5,267.46	484.10	101.84	-54.74	0.00	0.00	0.00
5,400.00	0.00	0.00	5,367.46	484.10	101.84	-54.74	0.00	0.00	0.00
5,500.00	0.00	0.00	5,467.46	484.10	101.84	-54.74	0.00	0.00	0.00
5,600.00	0.00	0.00	5,567.46	484.10	101.84	-54.74	0.00	0.00	0.00
5,700.00	0.00	0.00	5,667.46	484.10	101.84	-54.74	0.00	0.00	0.00
5,800.00	0.00	0.00	5,767.46	484.10	101.84	-54.74	0.00	0.00	0.00
5,900.00	0.00	0.00	5,867.46	484.10	101.84	-54.74	0.00	0.00	0.00
<b>Start Build 12.00</b>									
5,921.08	0.00	0.00	5,888.54	484.10	101.84	-54.74	0.00	0.00	0.00
5,925.00	0.47	269.39	5,892.46	484.10	101.82	-54.73	12.00	12.00	0.00
5,950.00	3.47	269.39	5,917.45	484.09	100.96	-53.87	12.00	12.00	0.00
5,975.00	6.47	269.39	5,942.35	484.07	98.80	-51.72	12.00	12.00	0.00
6,000.00	9.47	269.39	5,967.10	484.03	95.33	-48.27	12.00	12.00	0.00
6,025.00	12.47	269.39	5,991.64	483.98	90.58	-43.54	12.00	12.00	0.00
6,050.00	15.47	269.39	6,015.90	483.92	84.54	-37.54	12.00	12.00	0.00
6,075.00	18.47	269.39	6,039.81	483.84	77.24	-30.29	12.00	12.00	0.00
6,100.00	21.47	269.39	6,063.31	483.75	68.71	-21.80	12.00	12.00	0.00
6,125.00	24.47	269.39	6,086.32	483.65	58.95	-12.10	12.00	12.00	0.00
6,150.00	27.47	269.39	6,108.79	483.53	48.01	-1.21	12.00	12.00	0.00
6,175.00	30.47	269.39	6,130.66	483.40	35.90	10.83	12.00	12.00	0.00
<b>Sharon Springs</b>									
6,195.38	32.92	269.39	6,148.00	483.29	25.20	21.47	12.00	12.00	0.00
6,200.00	33.47	269.39	6,151.87	483.26	22.66	23.99	12.00	12.00	0.00
6,225.00	36.47	269.39	6,172.35	483.11	8.34	38.23	12.00	12.00	0.00
6,250.00	39.47	269.39	6,192.06	482.95	-7.04	53.52	12.00	12.00	0.00
6,275.00	42.47	269.39	6,210.93	482.77	-23.43	69.82	12.00	12.00	0.00
6,300.00	45.47	269.39	6,228.92	482.59	-40.78	87.07	12.00	12.00	0.00
6,325.00	48.47	269.39	6,245.98	482.40	-59.06	105.24	12.00	12.00	0.00
<b>Niobrara</b>									
6,341.97	50.51	269.39	6,257.00	482.26	-71.95	118.07	12.00	12.00	0.00
6,350.00	51.47	269.39	6,262.06	482.19	-78.20	124.27	12.00	12.00	0.00
6,375.00	54.47	269.39	6,277.11	481.98	-98.15	144.12	12.00	12.00	0.00
6,400.00	57.47	269.39	6,291.10	481.76	-118.87	164.71	12.00	12.00	0.00
6,425.00	60.47	269.39	6,303.98	481.54	-140.28	186.01	12.00	12.00	0.00
6,450.00	63.47	269.39	6,315.73	481.30	-162.35	207.95	12.00	12.00	0.00
6,475.00	66.47	269.39	6,326.31	481.06	-185.00	230.47	12.00	12.00	0.00
6,500.00	69.47	269.39	6,335.68	480.82	-208.17	253.51	12.00	12.00	0.00
<b>Top B2 Tgt</b>									
6,515.87	71.38	269.39	6,341.00	480.66	-223.12	268.38	12.00	12.00	0.00
6,525.00	72.47	269.39	6,343.83	480.57	-231.80	277.01	12.00	12.00	0.00
6,550.00	75.47	269.39	6,350.74	480.31	-255.82	300.89	12.00	12.00	0.00

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<b>Company:</b>	Bill Barrett Corp.	<b>TVD Reference:</b>	WELL @ 4588.00usft
<b>Project:</b>	Weld Co., CO	<b>MD Reference:</b>	WELL @ 4588.00usft
<b>Site:</b>	Sec.32-T5N-R63W	<b>North Reference:</b>	True
<b>Well:</b>	Siebring 5-63-32-17H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
6,575.00	78.47	269.39	6,356.37	480.06	-280.17	325.11	12.00	12.00	0.00	
6,600.00	81.47	269.39	6,360.72	479.80	-304.79	349.58	12.00	12.00	0.00	
6,625.00	84.47	269.39	6,363.78	479.53	-329.60	374.25	12.00	12.00	0.00	
6,650.00	87.47	269.39	6,365.54	479.27	-354.53	399.04	12.00	12.00	0.00	
<b>Base B2 Tgt</b>										
6,668.93	89.74	269.39	6,366.00	479.07	-373.45	417.86	12.00	12.00	0.00	
<b>17H LP</b>										
6,671.07	90.00	269.39	6,366.00	479.05	-375.59	419.98	11.98	11.98	0.00	
<b>Start 4124.28 hold at 6671.08 MD - 7" Csg.</b>										
6,671.08	90.00	269.39	6,366.00	479.05	-375.60	419.99	11.98	11.98	0.00	
6,700.00	90.00	269.39	6,366.00	478.74	-404.52	448.75	0.00	0.00	0.00	
6,800.00	90.00	269.39	6,366.00	477.68	-504.51	548.18	0.00	0.00	0.00	
6,900.00	90.00	269.39	6,366.00	476.62	-604.51	647.60	0.00	0.00	0.00	
7,000.00	90.00	269.39	6,366.00	475.57	-704.50	747.03	0.00	0.00	0.00	
7,100.00	90.00	269.39	6,366.00	474.51	-804.50	846.46	0.00	0.00	0.00	
7,200.00	90.00	269.39	6,366.00	473.45	-904.49	945.89	0.00	0.00	0.00	
7,300.00	90.00	269.39	6,366.00	472.39	-1,004.49	1,045.31	0.00	0.00	0.00	
7,400.00	90.00	269.39	6,366.00	471.33	-1,104.48	1,144.74	0.00	0.00	0.00	
7,500.00	90.00	269.39	6,366.00	470.27	-1,204.48	1,244.17	0.00	0.00	0.00	
7,600.00	90.00	269.39	6,366.00	469.22	-1,304.47	1,343.60	0.00	0.00	0.00	
7,700.00	90.00	269.39	6,366.00	468.16	-1,404.46	1,443.02	0.00	0.00	0.00	
7,800.00	90.00	269.39	6,366.00	467.10	-1,504.46	1,542.45	0.00	0.00	0.00	
7,900.00	90.00	269.39	6,366.00	466.04	-1,604.45	1,641.88	0.00	0.00	0.00	
8,000.00	90.00	269.39	6,366.00	464.98	-1,704.45	1,741.31	0.00	0.00	0.00	
8,100.00	90.00	269.39	6,366.00	463.92	-1,804.44	1,840.74	0.00	0.00	0.00	
8,200.00	90.00	269.39	6,366.00	462.87	-1,904.44	1,940.16	0.00	0.00	0.00	
8,300.00	90.00	269.39	6,366.00	461.81	-2,004.43	2,039.59	0.00	0.00	0.00	
8,400.00	90.00	269.39	6,366.00	460.75	-2,104.42	2,139.02	0.00	0.00	0.00	
8,500.00	90.00	269.39	6,366.00	459.69	-2,204.42	2,238.45	0.00	0.00	0.00	
8,600.00	90.00	269.39	6,366.00	458.63	-2,304.41	2,337.87	0.00	0.00	0.00	
8,700.00	90.00	269.39	6,366.00	457.58	-2,404.41	2,437.30	0.00	0.00	0.00	
8,800.00	90.00	269.39	6,366.00	456.52	-2,504.40	2,536.73	0.00	0.00	0.00	
8,900.00	90.00	269.39	6,366.00	455.46	-2,604.40	2,636.16	0.00	0.00	0.00	
9,000.00	90.00	269.39	6,366.00	454.40	-2,704.39	2,735.58	0.00	0.00	0.00	
9,100.00	90.00	269.39	6,366.00	453.34	-2,804.39	2,835.01	0.00	0.00	0.00	
9,200.00	90.00	269.39	6,366.00	452.28	-2,904.38	2,934.44	0.00	0.00	0.00	
9,300.00	90.00	269.39	6,366.00	451.23	-3,004.37	3,033.87	0.00	0.00	0.00	
9,400.00	90.00	269.39	6,366.00	450.17	-3,104.37	3,133.29	0.00	0.00	0.00	
9,500.00	90.00	269.39	6,366.00	449.11	-3,204.36	3,232.72	0.00	0.00	0.00	
9,600.00	90.00	269.39	6,366.00	448.05	-3,304.36	3,332.15	0.00	0.00	0.00	
9,700.00	90.00	269.39	6,366.00	446.99	-3,404.35	3,431.58	0.00	0.00	0.00	
9,800.00	90.00	269.39	6,366.00	445.93	-3,504.35	3,531.00	0.00	0.00	0.00	
9,900.00	90.00	269.39	6,366.00	444.88	-3,604.34	3,630.43	0.00	0.00	0.00	
10,000.00	90.00	269.39	6,366.00	443.82	-3,704.34	3,729.86	0.00	0.00	0.00	
10,100.00	90.00	269.39	6,366.00	442.76	-3,804.33	3,829.29	0.00	0.00	0.00	
10,200.00	90.00	269.39	6,366.00	441.70	-3,904.32	3,928.71	0.00	0.00	0.00	
10,300.00	90.00	269.39	6,366.00	440.64	-4,004.32	4,028.14	0.00	0.00	0.00	
10,400.00	90.00	269.39	6,366.00	439.58	-4,104.31	4,127.57	0.00	0.00	0.00	
10,500.00	90.00	269.39	6,366.00	438.53	-4,204.31	4,227.00	0.00	0.00	0.00	
10,600.00	90.00	269.39	6,366.00	437.47	-4,304.30	4,326.43	0.00	0.00	0.00	
10,700.00	90.00	269.39	6,366.00	436.41	-4,404.30	4,425.85	0.00	0.00	0.00	
<b>TD at 10795.36 - 17H PBHL</b>										
10,795.36	90.00	269.39	6,366.00	435.40	-4,499.65	4,520.67	0.00	0.00	0.00	



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Siebring 5-63-32-17H
<b>Company:</b>	Bill Barrett Corp.	<b>TVD Reference:</b>	WELL @ 4588.00usft
<b>Project:</b>	Weld Co., CO	<b>MD Reference:</b>	WELL @ 4588.00usft
<b>Site:</b>	Sec.32-T5N-R63W	<b>North Reference:</b>	True
<b>Well:</b>	Siebring 5-63-32-17H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
17H LP	0.00	0.00	6,366.00	479.05	-375.59	1,375,397.255	3,291,878.639	40° 21' 32.886 N	104° 27' 9.388 W
- plan misses target center by 0.01usft at 6671.07usft MD (6366.00 TVD, 479.05 N, -375.59 E)									
- Point									
17H PBHL	0.00	0.00	6,366.00	435.40	-4,499.65	1,375,304.835	3,287,755.384	40° 21' 32.451 N	104° 28' 2.663 W
- plan hits target center									
- Point									

Casing Points					
Measured Depth	Vertical Depth	Name		Casing Diameter	Hole Diameter
(usft)	(usft)			(")	(")
6,671.08	6,366.00	7" Csg.		7	8-3/4

Formations						
Measured Depth	Vertical Depth	Name		Lithology	Dip	Dip Direction
(usft)	(usft)				(°)	(°)
238.00	238.00	Pierre			0.00	
4,018.18	3,988.00	Terry/Sussex			0.00	
4,670.54	4,638.00	Shannon			0.00	
6,195.38	6,148.00	Sharon Springs			0.00	
6,341.97	6,257.00	Niobrara			0.00	
6,515.87	6,341.00	Top B2 Tgt			0.00	
6,668.93	6,366.00	Base B2 Tgt			0.00	

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates		Comment	
(usft)	(usft)	+N/-S (usft)	+E/-W (usft)		
500.00	500.00	0.00	0.00	Start Build 2.00	
890.24	889.03	25.97	5.46	Start 3252.06 hold at 890.24 MD	
4,142.30	4,110.97	458.13	96.38	Start Drop -2.00	
4,532.54	4,500.00	484.10	101.84	Start 1388.54 hold at 4532.54 MD	
5,921.08	5,888.54	484.10	101.84	Start Build 12.00	
6,671.08	6,366.00	479.05	-375.60	Start 4124.28 hold at 6671.08 MD	
10,795.36	6,366.00	435.40	-4,499.65	TD at 10795.36	