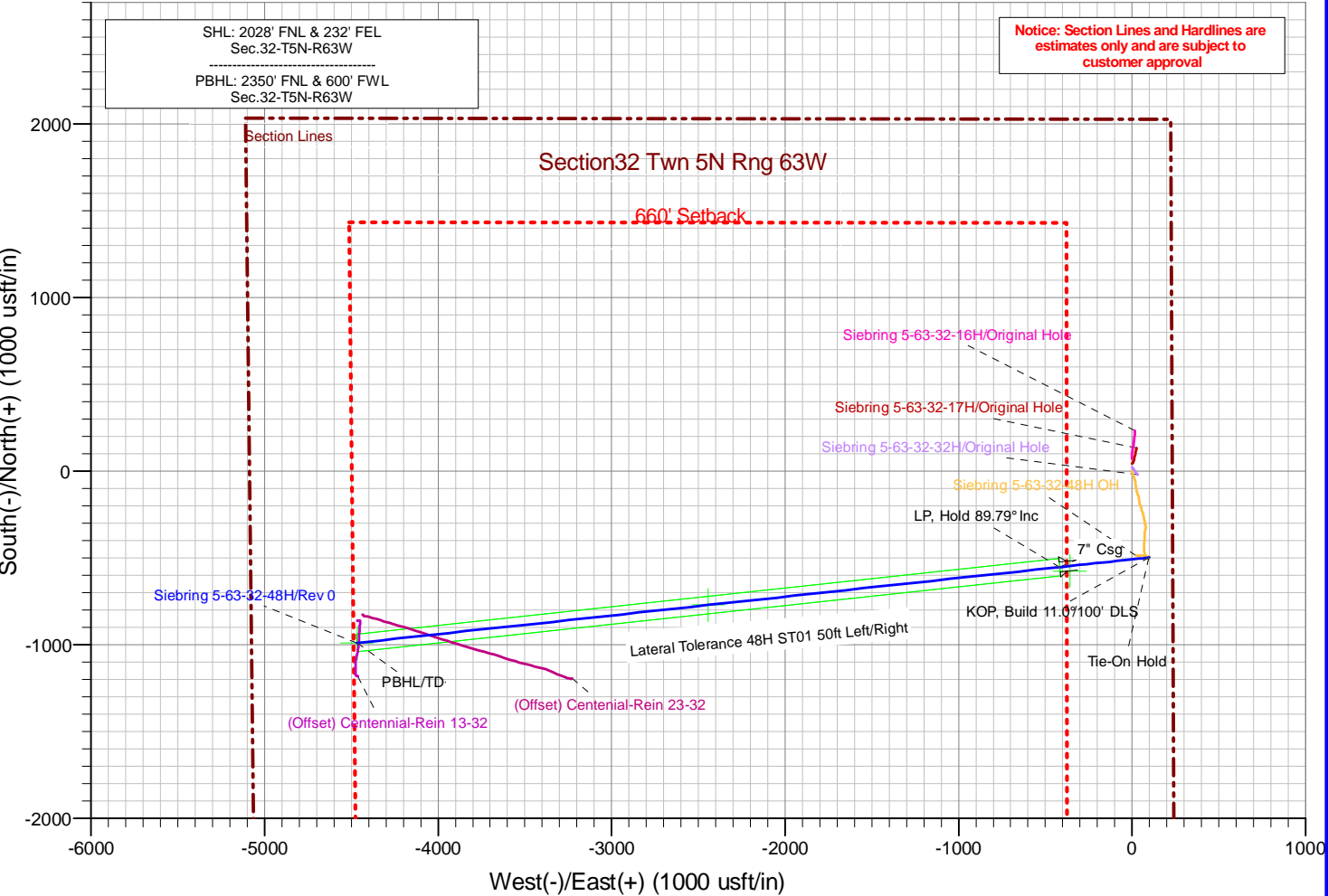
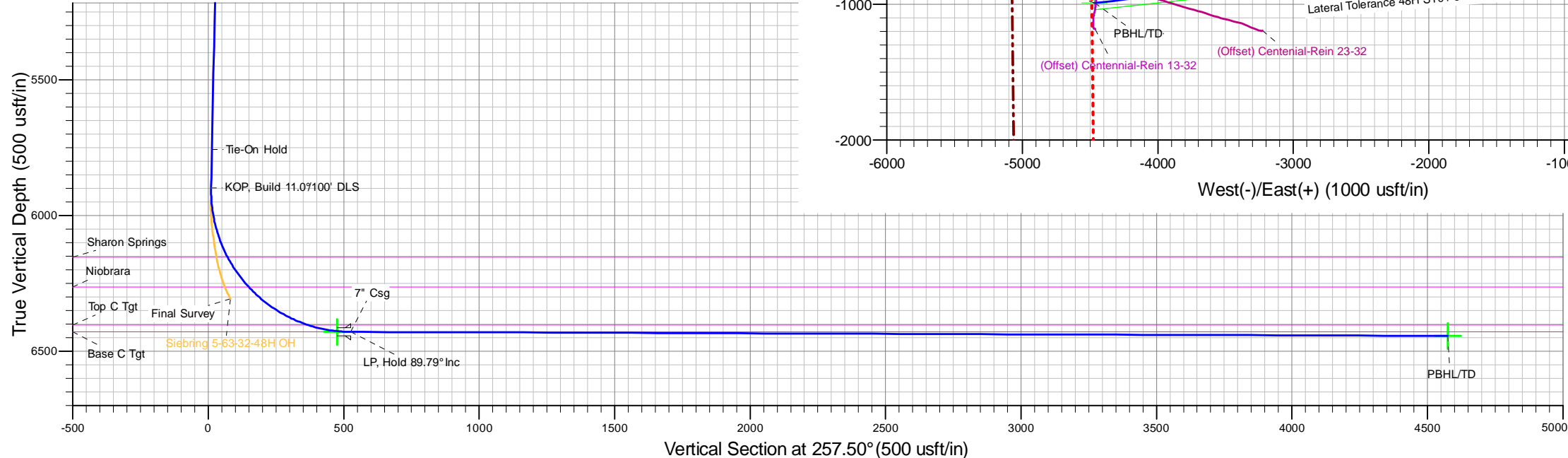
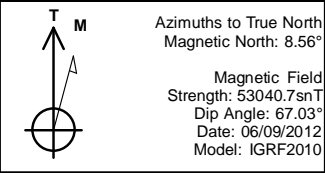


WELL DETAILS: Siebring 5-63-32-48H												
+N/-S		+E/-W		KB @ 18ft @ 4588.00usft (H&P 278)		Ground Level: 4570.00						
0.00		0.00		Northing 1374878.97		Easting 3292260.39		Latitude 40°21' 27.720 N		Longitude 104°27 ' 4.536 W		
WELLBORE TARGET DETAILS												
Name				TVD	+N/-S	+E/-W	Latitude		Longitude		Shape	
LP - Siebring 5-63-48H				6429.00	-575.83	-358.97	40°21' 22.029 N		104°27' 9.173 W		Point	
PBHL - Siebring 5-63-32-48H				6444.00	-990.01	-4466.64	40°21' 17.932 N		104°28' 2.233 W		Point	
SECTION DETAILS												
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation		
1	5793.00	1.14	80.10	5757.03	-498.12	96.54	0.00	0.00	13.53	Tie-On Hold		
2	5934.00	1.14	80.10	5898.00	-497.64	99.30	0.00	0.00	10.73	KOP, Build 11.0°/100' DLS		
3	6760.26	89.79	263.84	6429.00	-552.63	-416.40	11.00	-176.26	526.11	LP, Hold 89.79° Inc		
4	10834.08	89.79	263.84	6444.00	-990.01	-4466.64	0.00	-7.86	4575.04	PBHL/TD		
CASING DETAILS						FORMATION TOP DETAILS						
TVD		MD		Name		Size		TVDPath		MDPath		Formation
6429.00		6760.26		7" Csg		7.000		244.00		244.03		Pierre
								3994.00		4028.21		Terry/Sussex
								4644.00		4679.74		Shannon
								6154.00		6200.17		Sharon Springs
								6264.00		6335.87		Niobrara
								6404.00		6600.19		Top C Tgt
								6429.00		6760.26		Base C Tgt



Notice: Section Lines and Hardlines are estimates only and are subject to customer approval



Bill Barrett Corporation

Bill Barrett Corp.

Weld Co., CO

Sec.32-T5N-R63W

Siebring 5-63-32-48H

ST01

Plan: Rev 0

Standard Planning Report

09 June, 2012

PATHFINDER[®]

A Schlumberger Company

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Siebring 5-63-32-48H
Company:	Bill Barrett Corp.	TVD Reference:	KB @ 18ft @ 4588.00usft (H&P 278)
Project:	Weld Co., CO	MD Reference:	KB @ 18ft @ 4588.00usft (H&P 278)
Site:	Sec.32-T5N-R63W	North Reference:	True
Well:	Siebring 5-63-32-48H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ST01		
Design:	Rev 0		

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

Site	Sec.32-T5N-R63W				
Site Position:		Northing:	1,374,948.19 usft	Latitude:	40° 21' 28.404 N
From:	Lat/Long	Easting:	3,292,259.57 usft	Longitude:	104° 27' 4.536 W
Position Uncertainty:	6.00 usft	Slot Radius:	13.200 in	Grid Convergence:	0.68 °

Well	Siebring 5-63-32-48H, 2028 FNL 232 FEL					
Well Position	+N/-S	-69.22 usft	Northing:	1,374,878.97 usft	Latitude:	40° 21' 27.720 N
	+E/-W	0.00 usft	Easting:	3,292,260.39 usft	Longitude:	104° 27' 4.536 W
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	4,570.00 usft

Wellbore	ST01				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	06/09/12	8.56	67.03	53,041

Design	Rev 0				
Audit Notes:					
Version:	Phase:	PROTOTYPE		Tie On Depth:	5,793.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	257.50	

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
5,793.00	1.14	80.10	5,757.03	-498.12	96.54	0.00	0.00	0.00	0.00	
5,934.00	1.14	80.10	5,898.00	-497.64	99.30	0.00	0.00	0.00	0.00	
6,760.26	89.79	263.84	6,429.00	-552.63	-416.40	11.00	10.73	-21.33	-176.26	
10,834.08	89.79	263.84	6,444.00	-990.01	-4,466.64	0.00	0.00	0.00	-7.86	PBHL - Siebring 5-63-

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Siebring 5-63-32-48H
Company:	Bill Barrett Corp.	TVD Reference:	KB @ 18ft @ 4588.00usft (H&P 278)
Project:	Weld Co., CO	MD Reference:	KB @ 18ft @ 4588.00usft (H&P 278)
Site:	Sec.32-T5N-R63W	North Reference:	True
Well:	Siebring 5-63-32-48H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ST01		
Design:	Rev 0		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
5,793.00	1.14	80.10	5,757.03	-498.12	96.54	13.53	0.00	0.00	0.00	
Tie-On Hold - Lateral Tolerance 48H ST01										
5,800.00	1.14	80.10	5,764.03	-498.09	96.68	13.39	0.00	0.00	0.00	
5,900.00	1.14	80.10	5,864.01	-497.75	98.64	11.41	0.00	0.00	0.00	
5,934.00	1.14	80.10	5,898.00	-497.64	99.30	10.73	0.00	0.00	0.00	
KOP, Build 11.0°/100' DLS										
6,000.00	6.13	264.53	5,963.89	-497.86	96.44	13.57	11.00	7.55	-266.02	
6,100.00	17.13	264.08	6,061.69	-499.89	76.42	33.56	11.00	11.00	-0.45	
6,200.00	28.13	263.98	6,153.85	-503.90	38.21	71.73	11.00	11.00	-0.10	
6,200.17	28.13	263.98	6,154.00	-503.91	38.13	71.81	0.00	0.00	0.00	
Sharon Springs										
6,300.00	39.14	263.93	6,236.98	-509.73	-16.79	126.69	11.02	11.02	-0.05	
6,335.87	43.09	263.92	6,264.00	-512.23	-40.24	150.13	11.00	11.00	-0.03	
Niobrara										
6,400.00	50.14	263.90	6,308.02	-517.17	-86.55	196.41	11.00	11.00	-0.03	
6,500.00	61.15	263.88	6,364.37	-525.95	-168.51	278.33	11.00	11.00	-0.02	
6,600.00	72.15	263.86	6,403.94	-535.74	-259.66	369.43	11.00	11.00	-0.02	
6,600.19	72.15	263.86	6,404.00	-535.76	-259.83	369.61	0.00	0.00	0.00	
Top C Tgt										
6,700.00	83.16	263.85	6,425.29	-546.18	-356.63	466.37	11.02	11.02	-0.02	
6,705.72	83.79	263.84	6,425.94	-546.79	-362.29	472.02	11.00	11.00	-0.01	
LP - Siebring 5-63-48H										
6,760.26	89.79	263.84	6,429.00	-552.63	-416.40	526.11	11.00	11.00	-0.01	
LP, Hold 89.79° Inc - Base C Tgt - 7" Csg										
6,800.00	89.79	263.84	6,429.15	-556.90	-455.91	565.61	0.00	0.00	0.00	
6,900.00	89.79	263.84	6,429.52	-567.63	-555.33	665.00	0.00	0.00	0.00	
7,000.00	89.79	263.84	6,429.89	-578.37	-654.75	764.39	0.00	0.00	0.00	
7,100.00	89.79	263.84	6,430.27	-589.10	-754.17	863.78	0.00	0.00	0.00	
7,200.00	89.79	263.84	6,430.64	-599.84	-853.59	963.17	0.00	0.00	0.00	
7,300.00	89.79	263.84	6,431.01	-610.58	-953.02	1,062.56	0.00	0.00	0.00	
7,400.00	89.79	263.84	6,431.38	-621.31	-1,052.44	1,161.94	0.00	0.00	0.00	
7,500.00	89.79	263.84	6,431.75	-632.05	-1,151.86	1,261.33	0.00	0.00	0.00	
7,600.00	89.79	263.84	6,432.13	-642.78	-1,251.28	1,360.72	0.00	0.00	0.00	
7,700.00	89.79	263.84	6,432.50	-653.52	-1,350.70	1,460.11	0.00	0.00	0.00	
7,800.00	89.79	263.84	6,432.87	-664.26	-1,450.12	1,559.50	0.00	0.00	0.00	
7,900.00	89.79	263.84	6,433.24	-674.99	-1,549.54	1,658.89	0.00	0.00	0.00	
8,000.00	89.79	263.84	6,433.61	-685.73	-1,648.97	1,758.28	0.00	0.00	0.00	
8,100.00	89.79	263.84	6,433.98	-696.46	-1,748.39	1,857.67	0.00	0.00	0.00	
8,200.00	89.79	263.84	6,434.35	-707.20	-1,847.81	1,957.06	0.00	0.00	0.00	
8,300.00	89.79	263.84	6,434.72	-717.94	-1,947.23	2,056.45	0.00	0.00	0.00	
8,400.00	89.79	263.84	6,435.09	-728.67	-2,046.65	2,155.83	0.00	0.00	0.00	
8,500.00	89.79	263.84	6,435.46	-739.41	-2,146.07	2,255.22	0.00	0.00	0.00	
8,600.00	89.79	263.84	6,435.82	-750.15	-2,245.49	2,354.61	0.00	0.00	0.00	
8,700.00	89.79	263.84	6,436.19	-760.88	-2,344.91	2,454.00	0.00	0.00	0.00	
8,800.00	89.79	263.84	6,436.56	-771.62	-2,444.34	2,553.39	0.00	0.00	0.00	
8,900.00	89.79	263.84	6,436.93	-782.35	-2,543.76	2,652.78	0.00	0.00	0.00	
9,000.00	89.79	263.84	6,437.30	-793.09	-2,643.18	2,752.17	0.00	0.00	0.00	
9,100.00	89.79	263.84	6,437.66	-803.83	-2,742.60	2,851.56	0.00	0.00	0.00	
9,200.00	89.79	263.84	6,438.03	-814.56	-2,842.02	2,950.95	0.00	0.00	0.00	
9,300.00	89.79	263.84	6,438.40	-825.30	-2,941.44	3,050.34	0.00	0.00	0.00	
9,400.00	89.79	263.84	6,438.77	-836.04	-3,040.86	3,149.73	0.00	0.00	0.00	
9,500.00	89.79	263.84	6,439.13	-846.77	-3,140.28	3,249.11	0.00	0.00	0.00	
9,600.00	89.79	263.84	6,439.50	-857.51	-3,239.71	3,348.50	0.00	0.00	0.00	

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Siebring 5-63-32-48H
Company:	Bill Barrett Corp.	TVD Reference:	KB @ 18ft @ 4588.00usft (H&P 278)
Project:	Weld Co., CO	MD Reference:	KB @ 18ft @ 4588.00usft (H&P 278)
Site:	Sec.32-T5N-R63W	North Reference:	True
Well:	Siebring 5-63-32-48H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ST01		
Design:	Rev 0		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
9,700.00	89.79	263.84	6,439.87	-868.25	-3,339.13	3,447.89	0.00	0.00	0.00	
9,800.00	89.79	263.84	6,440.23	-878.98	-3,438.55	3,547.28	0.00	0.00	0.00	
9,900.00	89.79	263.84	6,440.60	-889.72	-3,537.97	3,646.67	0.00	0.00	0.00	
10,000.00	89.79	263.84	6,440.96	-900.46	-3,637.39	3,746.06	0.00	0.00	0.00	
10,100.00	89.79	263.84	6,441.33	-911.19	-3,736.81	3,845.45	0.00	0.00	0.00	
10,200.00	89.79	263.84	6,441.69	-921.93	-3,836.23	3,944.84	0.00	0.00	0.00	
10,300.00	89.79	263.84	6,442.06	-932.67	-3,935.65	4,044.23	0.00	0.00	0.00	
10,400.00	89.79	263.84	6,442.42	-943.40	-4,035.08	4,143.62	0.00	0.00	0.00	
10,500.00	89.79	263.84	6,442.79	-954.14	-4,134.50	4,243.00	0.00	0.00	0.00	
10,600.00	89.79	263.84	6,443.15	-964.88	-4,233.92	4,342.39	0.00	0.00	0.00	
10,700.00	89.79	263.84	6,443.51	-975.61	-4,333.34	4,441.78	0.00	0.00	0.00	
10,800.00	89.79	263.84	6,443.88	-986.35	-4,432.76	4,541.17	0.00	0.00	0.00	
10,834.08	89.79	263.84	6,444.00	-990.01	-4,466.64	4,575.04	0.00	0.00	0.00	
PBHL/TD - PBHL - Siebring 5-63-32-48H										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude		
- hit/miss target										
- Shape								Longitude		
Lateral Tolerance 48H S	0.00	263.84	0.00	-771.32	-2,441.52	1,374,078.83	3,289,828.16	40° 21' 20.096 N		
- plan misses target center by 6297.60usft at 5793.00usft MD (5757.03 TVD, -498.12 N, 96.54 E)										
- Rectangle (sides W100.00 H4,073.85 D0.00)										
LP - Siebring 5-63-48H	0.00	0.00	6,429.00	-575.83	-358.97	1,374,298.93	3,291,908.25	40° 21' 22.029 N		
- plan misses target center by 29.39usft at 6705.72usft MD (6425.94 TVD, -546.79 N, -362.29 E)										
- Point										
PBHL - Siebring 5-63-32	0.00	0.00	6,444.00	-990.01	-4,466.64	1,373,836.20	3,287,805.77	40° 21' 17.932 N		
- plan hits target center										
- Point										

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name		Casing Diameter (in)	Hole Diameter (in)
6,760.26	6,429.00	7" Csg		7.000	8.750

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
244.03	244.00	Pierre		0.00		
4,028.21	3,994.00	Terry/Sussex		0.00		
4,679.74	4,644.00	Shannon		0.00		
6,200.17	6,154.00	Sharon Springs		0.00		
6,335.87	6,264.00	Niobrara		0.00		
6,600.19	6,404.00	Top C Tgt		0.00		
6,760.26	6,429.00	Base C Tgt				

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Siebring 5-63-32-48H
Company:	Bill Barrett Corp.	TVD Reference:	KB @ 18ft @ 4588.00usft (H&P 278)
Project:	Weld Co., CO	MD Reference:	KB @ 18ft @ 4588.00usft (H&P 278)
Site:	Sec.32-T5N-R63W	North Reference:	True
Well:	Siebring 5-63-32-48H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ST01		
Design:	Rev 0		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
5,793.00	5,757.03	-498.12	96.54	Tie-On Hold
5,934.00	5,898.00	-497.64	99.30	KOP, Build 11.0°/100' DLS
6,760.26	6,429.00	-552.63	-416.40	LP, Hold 89.79° Inc
10,834.08	6,444.00	-990.01	-4,466.64	PBHL/TD