

BILL BARRETT CORP

Weld County, CO

State of Colorado 1S-66-36 Pad

STATE OF COLORADO 1S-66-36 0108 CH

Wellbore #1

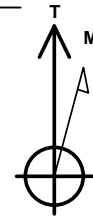
Plan: Design #1

Standard Planning Report

15 October, 2013

BILL BARRETT CORP
STATE OF COLORADO 1S-66-36 0108 CH
Weld County, CO

Geodetic System: US State Plane 1983
Zone: Colorado Northern Zone
WELL @ 5200.0usft (Original Well Elev)
Ground Level: 5180.0
Latitude: 39° 55' 30.112 N
Longitude: 104° 43' 56.690 W
Magnetic North is 8.49° East of True North (Magnetic Declination)



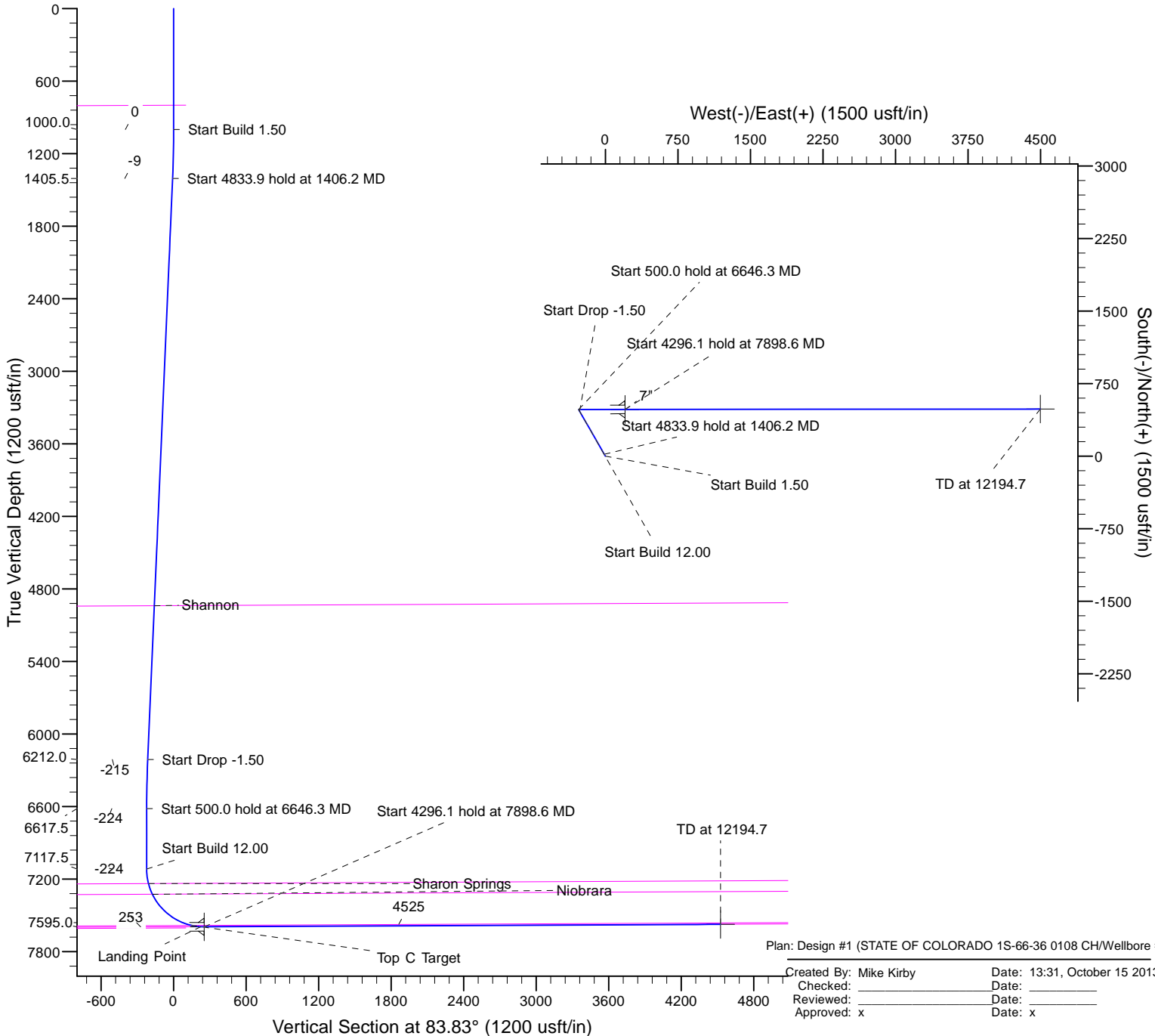
Azimuths to True North
Magnetic North: 8.49°

Magnetic Field
Strength: 52636.0snT
Dip Angle: 66.59°
Date: 10/15/2013
Model: IGRF2010

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0
1000.0	0.00	0.00	1000.0	0.0	0.0	0.00	0.00	0.0
1406.2	6.09	330.14	1405.5	18.7	-10.7	1.50	330.14	-8.7
6240.1	6.09	330.14	6212.0	463.7	-266.3	0.00	0.00	-214.9
6646.3	0.00	0.00	6617.5	482.4	-277.0	1.50	180.00	-223.5
7146.3	0.00	0.00	7117.5	482.4	-277.0	0.00	0.00	-223.5
7898.6	90.27	89.95	7595.0	482.8	202.7	12.00	89.95	253.4
12194.7	90.27	89.95	7575.0	486.5	4498.8	0.00	0.00	4525.0

FORMATION TOP DETAILS

TVDPPath	MDPath	Formation
800.0	800.0	Base Fox Hills
4939.9	4960.8	Shannon
7238.2	7268.4	Sharon Springs
7326.1	7362.2	Niobrara
7583.5	7791.7	Top C Target
7594.2	7869.0	Landing Point



Planning Report

Database:	Rocky Mountain R5000 Database	Local Co-ordinate Reference:	Well STATE OF COLORADO 1S-66-36 0108 CH
Company:	BILL BARRETT CORP	TVD Reference:	WELL @ 5200.0usft (Original Well Elev)
Project:	Weld County, CO	MD Reference:	WELL @ 5200.0usft (Original Well Elev)
Site:	State of Colorado 1S-66-36 Pad	North Reference:	True
Well:	STATE OF COLORADO 1S-66-36 0108 CH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

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

Site	State of Colorado 1S-66-36 Pad			
Site Position:		Northing:	1,216,469.41 usft	Latitude: 39° 55' 30.112 N
From:	Lat/Long	Easting:	3,215,275.68 usft	Longitude: 104° 43' 56.690 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence: 0.50 °

Well	STATE OF COLORADO 1S-66-36 0108 CH			
Well Position	+N/-S	119.9 usft	Northing:	1,216,589.30 usft
	+E/-W	0.5 usft	Easting:	3,215,275.10 usft
Position Uncertainty		0.0 usft	Wellhead Elevation:	Ground Level: 5,180.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	10/15/2013	8.49	66.59	52,636

Design	Design #1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	83.83

Plan Sections										
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
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,406.2	6.09	330.14	1,405.5	18.7	-10.7	1.50	1.50	0.00	330.14	
6,240.1	6.09	330.14	6,212.0	463.7	-266.3	0.00	0.00	0.00	0.00	
6,646.3	0.00	0.00	6,617.5	482.4	-277.0	1.50	-1.50	0.00	180.00	
7,146.3	0.00	0.00	7,117.5	482.4	-277.0	0.00	0.00	0.00	0.00	
7,898.6	90.27	89.95	7,595.0	482.8	202.7	12.00	12.00	0.00	89.95	
12,194.7	90.27	89.95	7,575.0	486.5	4,498.8	0.00	0.00	0.00	0.00	SOC 0108 CH PBHL

Planning Report

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Company:	BILL BARRETT CORP	TVD Reference:	WELL @ 5200.0usft (Original Well Elev)
Project:	Weld County, CO	MD Reference:	WELL @ 5200.0usft (Original Well Elev)
Site:	State of Colorado 1S-66-36 Pad	North Reference:	True
Well:	STATE OF COLORADO 1S-66-36 0108 CH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00	
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00	
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00	
Base Fox Hills										
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,100.0	1.50	330.14	1,100.0	1.1	-0.7	-0.5	1.50	1.50	0.00	
1,200.0	3.00	330.14	1,199.9	4.5	-2.6	-2.1	1.50	1.50	0.00	
1,300.0	4.50	330.14	1,299.7	10.2	-5.9	-4.7	1.50	1.50	0.00	
1,400.0	6.00	330.14	1,399.3	18.1	-10.4	-8.4	1.50	1.50	0.00	
1,406.2	6.09	330.14	1,405.5	18.7	-10.7	-8.7	1.50	1.50	0.00	
1,500.0	6.09	330.14	1,498.7	27.3	-15.7	-12.7	0.00	0.00	0.00	
1,600.0	6.09	330.14	1,598.1	36.6	-21.0	-16.9	0.00	0.00	0.00	
1,700.0	6.09	330.14	1,697.6	45.8	-26.3	-21.2	0.00	0.00	0.00	
1,800.0	6.09	330.14	1,797.0	55.0	-31.6	-25.5	0.00	0.00	0.00	
1,900.0	6.09	330.14	1,896.4	64.2	-36.8	-29.7	0.00	0.00	0.00	
2,000.0	6.09	330.14	1,995.9	73.4	-42.1	-34.0	0.00	0.00	0.00	
2,100.0	6.09	330.14	2,095.3	82.6	-47.4	-38.3	0.00	0.00	0.00	
2,200.0	6.09	330.14	2,194.8	91.8	-52.7	-42.5	0.00	0.00	0.00	
2,300.0	6.09	330.14	2,294.2	101.0	-58.0	-46.8	0.00	0.00	0.00	
2,400.0	6.09	330.14	2,393.6	110.2	-63.3	-51.1	0.00	0.00	0.00	
2,500.0	6.09	330.14	2,493.1	119.4	-68.6	-55.3	0.00	0.00	0.00	
2,600.0	6.09	330.14	2,592.5	128.6	-73.8	-59.6	0.00	0.00	0.00	
2,700.0	6.09	330.14	2,691.9	137.8	-79.1	-63.9	0.00	0.00	0.00	
2,800.0	6.09	330.14	2,791.4	147.0	-84.4	-68.1	0.00	0.00	0.00	
2,900.0	6.09	330.14	2,890.8	156.2	-89.7	-72.4	0.00	0.00	0.00	
3,000.0	6.09	330.14	2,990.2	165.4	-95.0	-76.7	0.00	0.00	0.00	
3,100.0	6.09	330.14	3,089.7	174.6	-100.3	-80.9	0.00	0.00	0.00	
3,200.0	6.09	330.14	3,189.1	183.8	-105.6	-85.2	0.00	0.00	0.00	
3,300.0	6.09	330.14	3,288.5	193.0	-110.8	-89.5	0.00	0.00	0.00	
3,400.0	6.09	330.14	3,388.0	202.2	-116.1	-93.7	0.00	0.00	0.00	
3,500.0	6.09	330.14	3,487.4	211.5	-121.4	-98.0	0.00	0.00	0.00	
3,600.0	6.09	330.14	3,586.8	220.7	-126.7	-102.2	0.00	0.00	0.00	
3,700.0	6.09	330.14	3,686.3	229.9	-132.0	-106.5	0.00	0.00	0.00	
3,800.0	6.09	330.14	3,785.7	239.1	-137.3	-110.8	0.00	0.00	0.00	
3,900.0	6.09	330.14	3,885.1	248.3	-142.6	-115.0	0.00	0.00	0.00	
4,000.0	6.09	330.14	3,984.6	257.5	-147.8	-119.3	0.00	0.00	0.00	
4,100.0	6.09	330.14	4,084.0	266.7	-153.1	-123.6	0.00	0.00	0.00	
4,200.0	6.09	330.14	4,183.5	275.9	-158.4	-127.8	0.00	0.00	0.00	
4,300.0	6.09	330.14	4,282.9	285.1	-163.7	-132.1	0.00	0.00	0.00	
4,400.0	6.09	330.14	4,382.3	294.3	-169.0	-136.4	0.00	0.00	0.00	
4,500.0	6.09	330.14	4,481.8	303.5	-174.3	-140.6	0.00	0.00	0.00	
4,600.0	6.09	330.14	4,581.2	312.7	-179.6	-144.9	0.00	0.00	0.00	
4,700.0	6.09	330.14	4,680.6	321.9	-184.8	-149.2	0.00	0.00	0.00	
4,800.0	6.09	330.14	4,780.1	331.1	-190.1	-153.4	0.00	0.00	0.00	
4,900.0	6.09	330.14	4,879.5	340.3	-195.4	-157.7	0.00	0.00	0.00	
4,960.8	6.09	330.14	4,939.9	345.9	-198.6	-160.3	0.00	0.00	0.00	

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Well:	STATE OF COLORADO 1S-66-36 0108 CH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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)
Shannon									
5,000.0	6.09	330.14	4,978.9	349.5	-200.7	-162.0	0.00	0.00	0.00
5,100.0	6.09	330.14	5,078.4	358.7	-206.0	-166.2	0.00	0.00	0.00
5,200.0	6.09	330.14	5,177.8	367.9	-211.3	-170.5	0.00	0.00	0.00
5,300.0	6.09	330.14	5,277.2	377.1	-216.6	-174.8	0.00	0.00	0.00
5,400.0	6.09	330.14	5,376.7	386.4	-221.8	-179.0	0.00	0.00	0.00
5,500.0	6.09	330.14	5,476.1	395.6	-227.1	-183.3	0.00	0.00	0.00
5,600.0	6.09	330.14	5,575.5	404.8	-232.4	-187.6	0.00	0.00	0.00
5,700.0	6.09	330.14	5,675.0	414.0	-237.7	-191.8	0.00	0.00	0.00
5,800.0	6.09	330.14	5,774.4	423.2	-243.0	-196.1	0.00	0.00	0.00
5,900.0	6.09	330.14	5,873.8	432.4	-248.3	-200.4	0.00	0.00	0.00
6,000.0	6.09	330.14	5,973.3	441.6	-253.6	-204.6	0.00	0.00	0.00
6,100.0	6.09	330.14	6,072.7	450.8	-258.8	-208.9	0.00	0.00	0.00
6,200.0	6.09	330.14	6,172.2	460.0	-264.1	-213.1	0.00	0.00	0.00
6,240.1	6.09	330.14	6,212.0	463.7	-266.3	-214.9	0.00	0.00	0.00
6,300.0	5.20	330.14	6,271.6	468.8	-269.2	-217.2	1.50	-1.50	0.00
6,400.0	3.70	330.14	6,371.3	475.5	-273.0	-220.3	1.50	-1.50	0.00
6,500.0	2.20	330.14	6,471.2	480.0	-275.6	-222.4	1.50	-1.50	0.00
6,600.0	0.70	330.14	6,571.2	482.2	-276.9	-223.4	1.50	-1.50	0.00
6,646.3	0.00	0.00	6,617.5	482.4	-277.0	-223.5	1.50	-1.50	0.00
6,700.0	0.00	0.00	6,671.2	482.4	-277.0	-223.5	0.00	0.00	0.00
6,800.0	0.00	0.00	6,771.2	482.4	-277.0	-223.5	0.00	0.00	0.00
6,900.0	0.00	0.00	6,871.2	482.4	-277.0	-223.5	0.00	0.00	0.00
7,000.0	0.00	0.00	6,971.2	482.4	-277.0	-223.5	0.00	0.00	0.00
7,100.0	0.00	0.00	7,071.2	482.4	-277.0	-223.5	0.00	0.00	0.00
7,146.3	0.00	0.00	7,117.5	482.4	-277.0	-223.5	0.00	0.00	0.00
7,200.0	6.44	89.95	7,171.0	482.4	-274.0	-220.5	12.00	12.00	0.00
7,268.4	14.65	89.95	7,238.2	482.4	-261.5	-208.1	12.00	12.00	0.00
Sharon Springs									
7,300.0	18.44	89.95	7,268.5	482.4	-252.5	-199.2	12.00	12.00	0.00
7,362.2	25.90	89.95	7,326.1	482.4	-229.0	-175.8	12.00	12.00	0.00
Niobrara									
7,400.0	30.44	89.95	7,359.4	482.5	-211.2	-158.1	12.00	12.00	0.00
7,500.0	42.44	89.95	7,439.7	482.5	-151.9	-99.1	12.00	12.00	0.00
7,600.0	54.44	89.95	7,505.9	482.6	-77.2	-24.9	12.00	12.00	0.00
7,700.0	66.44	89.95	7,555.2	482.6	9.6	61.4	12.00	12.00	0.00
7,791.7	77.44	89.95	7,583.5	482.7	96.7	148.0	12.00	12.00	0.00
Top C Target									
7,800.0	78.44	89.95	7,585.3	482.7	104.8	156.1	12.00	12.00	0.00
7,869.0	86.72	89.95	7,594.2	482.8	173.1	224.0	12.00	12.00	0.00
Landing Point									
7,898.6	90.27	89.95	7,595.0	482.8	202.7	253.5	11.98	11.98	0.00
7"									
7,900.0	90.27	89.95	7,595.0	482.8	204.1	254.8	0.00	0.00	0.00
8,000.0	90.27	89.95	7,594.5	482.9	304.1	354.3	0.00	0.00	0.00
8,100.0	90.27	89.95	7,594.0	483.0	404.1	453.7	0.00	0.00	0.00
8,200.0	90.27	89.95	7,593.6	483.1	504.1	553.1	0.00	0.00	0.00
8,300.0	90.27	89.95	7,593.1	483.2	604.1	652.6	0.00	0.00	0.00
8,400.0	90.27	89.95	7,592.6	483.2	704.1	752.0	0.00	0.00	0.00
8,500.0	90.27	89.95	7,592.2	483.3	804.1	851.4	0.00	0.00	0.00
8,600.0	90.27	89.95	7,591.7	483.4	904.1	950.8	0.00	0.00	0.00
8,700.0	90.27	89.95	7,591.2	483.5	1,004.1	1,050.3	0.00	0.00	0.00

Planning Report

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Company:	BILL BARRETT CORP	TVD Reference:	WELL @ 5200.0usft (Original Well Elev)
Project:	Weld County, CO	MD Reference:	WELL @ 5200.0usft (Original Well Elev)
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Design:	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)	
8,800.0	90.27	89.95	7,590.8	483.6	1,104.1	1,149.7	0.00	0.00	0.00	
8,900.0	90.27	89.95	7,590.3	483.7	1,204.1	1,249.1	0.00	0.00	0.00	
9,000.0	90.27	89.95	7,589.8	483.8	1,304.1	1,348.6	0.00	0.00	0.00	
9,100.0	90.27	89.95	7,589.4	483.8	1,404.1	1,448.0	0.00	0.00	0.00	
9,200.0	90.27	89.95	7,588.9	483.9	1,504.1	1,547.4	0.00	0.00	0.00	
9,300.0	90.27	89.95	7,588.5	484.0	1,604.1	1,646.8	0.00	0.00	0.00	
9,400.0	90.27	89.95	7,588.0	484.1	1,704.1	1,746.3	0.00	0.00	0.00	
9,500.0	90.27	89.95	7,587.5	484.2	1,804.1	1,845.7	0.00	0.00	0.00	
9,600.0	90.27	89.95	7,587.1	484.3	1,904.1	1,945.1	0.00	0.00	0.00	
9,700.0	90.27	89.95	7,586.6	484.4	2,004.1	2,044.6	0.00	0.00	0.00	
9,800.0	90.27	89.95	7,586.1	484.4	2,104.1	2,144.0	0.00	0.00	0.00	
9,900.0	90.27	89.95	7,585.7	484.5	2,204.1	2,243.4	0.00	0.00	0.00	
10,000.0	90.27	89.95	7,585.2	484.6	2,304.1	2,342.8	0.00	0.00	0.00	
10,100.0	90.27	89.95	7,584.7	484.7	2,404.1	2,442.3	0.00	0.00	0.00	
10,200.0	90.27	89.95	7,584.3	484.8	2,504.1	2,541.7	0.00	0.00	0.00	
10,300.0	90.27	89.95	7,583.8	484.9	2,604.1	2,641.1	0.00	0.00	0.00	
10,400.0	90.27	89.95	7,583.3	484.9	2,704.1	2,740.6	0.00	0.00	0.00	
10,500.0	90.27	89.95	7,582.9	485.0	2,804.1	2,840.0	0.00	0.00	0.00	
10,600.0	90.27	89.95	7,582.4	485.1	2,904.1	2,939.4	0.00	0.00	0.00	
10,700.0	90.27	89.95	7,582.0	485.2	3,004.1	3,038.8	0.00	0.00	0.00	
10,800.0	90.27	89.95	7,581.5	485.3	3,104.1	3,138.3	0.00	0.00	0.00	
10,900.0	90.27	89.95	7,581.0	485.4	3,204.1	3,237.7	0.00	0.00	0.00	
11,000.0	90.27	89.95	7,580.6	485.5	3,304.1	3,337.1	0.00	0.00	0.00	
11,100.0	90.27	89.95	7,580.1	485.5	3,404.1	3,436.6	0.00	0.00	0.00	
11,200.0	90.27	89.95	7,579.6	485.6	3,504.1	3,536.0	0.00	0.00	0.00	
11,300.0	90.27	89.95	7,579.2	485.7	3,604.1	3,635.4	0.00	0.00	0.00	
11,400.0	90.27	89.95	7,578.7	485.8	3,704.1	3,734.8	0.00	0.00	0.00	
11,500.0	90.27	89.95	7,578.2	485.9	3,804.1	3,834.3	0.00	0.00	0.00	
11,600.0	90.27	89.95	7,577.8	486.0	3,904.1	3,933.7	0.00	0.00	0.00	
11,700.0	90.27	89.95	7,577.3	486.1	4,004.1	4,033.1	0.00	0.00	0.00	
11,800.0	90.27	89.95	7,576.8	486.1	4,104.1	4,132.6	0.00	0.00	0.00	
11,900.0	90.27	89.95	7,576.4	486.2	4,204.1	4,232.0	0.00	0.00	0.00	
12,000.0	90.27	89.95	7,575.9	486.3	4,304.1	4,331.4	0.00	0.00	0.00	
12,100.0	90.27	89.95	7,575.5	486.4	4,404.1	4,430.8	0.00	0.00	0.00	
12,194.7	90.27	89.95	7,575.0	486.5	4,498.8	4,525.0	0.00	0.00	0.00	

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
SOC 0108 CH PBHL	0.00	0.00	7,575.0	486.5	4,498.8	1,217,114.70	3,219,769.50	39° 55' 36.100 N	104° 42' 58.937 W
- plan hits target center									
- Point									
SOC 0108 CH LP	0.00	0.00	7,595.0	482.8	202.7	1,217,073.83	3,215,473.62	39° 55' 36.068 N	104° 43' 54.083 W
- plan hits target center									
- Point									

Planning Report

Database:	Rocky Mountain R5000 Database	Local Co-ordinate Reference:	Well STATE OF COLORADO 1S-66-36 0108 CH
Company:	BILL BARRETT CORP	TVD Reference:	WELL @ 5200.0usft (Original Well Elev)
Project:	Weld County, CO	MD Reference:	WELL @ 5200.0usft (Original Well Elev)
Site:	State of Colorado 1S-66-36 Pad	North Reference:	True
Well:	STATE OF COLORADO 1S-66-36 0108 CH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
7,898.6	7,595.0	7"	7	8-3/4	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
800.0	800.0	Base Fox Hills		-0.27	89.95	
4,960.8	4,939.9	Shannon		-0.27	89.95	
7,268.4	7,238.2	Sharon Springs		-0.27	89.95	
7,362.2	7,326.1	Niobrara		-0.27	89.95	
7,791.7	7,583.5	Top C Target		-0.27	89.95	
7,869.0	7,594.2	Landing Point		-0.27	89.95	