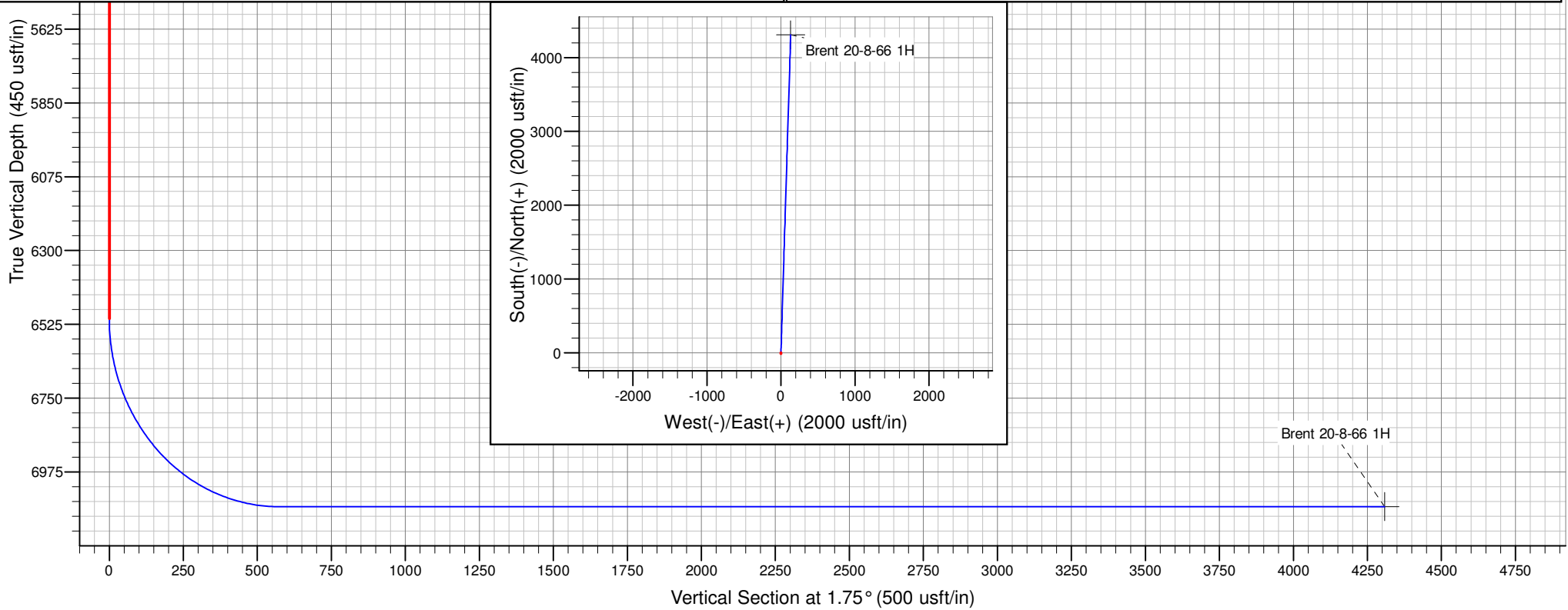


Project: Weld - DJ Basin  
 Site: Brent 20-8-66 1H  
 Well: Brent 20-8-66 1H  
 Wellbore: Brent 20-8-66 1H  
 Design: Design #1

**PROJECT DETAILS: Weld - DJ Basin**

Geodetic System: US State Plane 1927 (Exact solution)  
 Datum: NAD 1927 (NADCON CONUS)  
 Ellipsoid: Clarke 1866  
 Zone: Colorado North 501  
 System Datum: Mean Sea Level



**SECTION DETAILS**

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	6508.0	0.00	0.00	6508.0	0.0	0.0	0.00	0.00	0.0	
3	7408.0	90.00	1.75	7081.0	572.7	17.5	10.00	1.75	573.0	
4	11144.0	90.00	1.75	7081.0	4306.9	131.6	0.00	0.00	4309.0	Brent 20-8-66 1H

# **Chesapeake Energy -Rockies District**

**Weld - DJ Basin**

**Brent 20-8-66 1H**

**Brent 20-8-66 1H**

**Brent 20-8-66 1H**

**Plan: Design #1**

## **Standard Planning Report**

**30 September, 2011**

# Chesapeake Operating

## Planning Report

<b>Database:</b>	Drilling Database	<b>Local Co-ordinate Reference:</b>	Well Brent 20-8-66 1H
<b>Company:</b>	Chesapeake Energy -Rockies District	<b>TVD Reference:</b>	WELL @ 0.0usft (Original Well Elev)
<b>Project:</b>	Weld - DJ Basin	<b>MD Reference:</b>	WELL @ 0.0usft (Original Well Elev)
<b>Site:</b>	Brent 20-8-66 1H	<b>North Reference:</b>	Grid
<b>Well:</b>	Brent 20-8-66 1H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Brent 20-8-66 1H		
<b>Design:</b>	Design #1		

<b>Project</b>	Weld - DJ Basin		
<b>Map System:</b>	US State Plane 1927 (Exact solution)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 (NADCON CONUS)		
<b>Map Zone:</b>	Colorado North 501		

<b>Site</b>	Brent 20-8-66 1H				
<b>Site Position:</b>		<b>Northing:</b>	477,114.05 ft	<b>Latitude:</b>	40° 38' 27.65327503 N
<b>From:</b>	Map	<b>Easting:</b>	2,193,111.43 ft	<b>Longitude:</b>	104° 48' 15.05085204 W
<b>Position Uncertainty:</b>	0.0 usft	<b>Slot Radius:</b>	13.200 in	<b>Grid Convergence:</b>	0.45 °

<b>Well</b>	Brent 20-8-66 1H					
<b>Well Position</b>	<b>+N/-S</b>	0.0 usft	<b>Northing:</b>	477,114.05 ft	<b>Latitude:</b>	40° 38' 27.65327503 N
	<b>+E/-W</b>	0.0 usft	<b>Easting:</b>	2,193,111.43 ft	<b>Longitude:</b>	104° 48' 15.05085204 W
<b>Position Uncertainty</b>		0.0 usft	<b>Wellhead Elevation:</b>		<b>Ground Level:</b>	0.0 usft

<b>Wellbore</b>	Brent 20-8-66 1H				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF200510	9/30/2011	8.83	67.24	53,285

<b>Design</b>	Design #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	1.75

<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
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
6,508.0	0.00	0.00	6,508.0	0.0	0.0	0.00	0.00	0.00	0.00	
7,408.0	90.00	1.75	7,081.0	572.7	17.5	10.00	10.00	0.00	1.75	
11,144.0	90.00	1.75	7,081.0	4,306.9	131.6	0.00	0.00	0.00	0.00	Brent 20-8-66 1H

# Chesapeake Operating

## Planning Report

<b>Database:</b>	Drilling Database	<b>Local Co-ordinate Reference:</b>	Well Brent 20-8-66 1H
<b>Company:</b>	Chesapeake Energy -Rockies District	<b>TVD Reference:</b>	WELL @ 0.0usft (Original Well Elev)
<b>Project:</b>	Weld - DJ Basin	<b>MD Reference:</b>	WELL @ 0.0usft (Original Well Elev)
<b>Site:</b>	Brent 20-8-66 1H	<b>North Reference:</b>	Grid
<b>Well:</b>	Brent 20-8-66 1H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Brent 20-8-66 1H		
<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)
0.0	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
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	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00

# Chesapeake Operating

## Planning Report

<b>Database:</b>	Drilling Database	<b>Local Co-ordinate Reference:</b>	Well Brent 20-8-66 1H
<b>Company:</b>	Chesapeake Energy -Rockies District	<b>TVD Reference:</b>	WELL @ 0.0usft (Original Well Elev)
<b>Project:</b>	Weld - DJ Basin	<b>MD Reference:</b>	WELL @ 0.0usft (Original Well Elev)
<b>Site:</b>	Brent 20-8-66 1H	<b>North Reference:</b>	Grid
<b>Well:</b>	Brent 20-8-66 1H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Brent 20-8-66 1H		
<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)	
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00	
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00	
5,600.0	0.00	0.00	5,600.0	0.0	0.0	0.0	0.00	0.00	0.00	
5,700.0	0.00	0.00	5,700.0	0.0	0.0	0.0	0.00	0.00	0.00	
5,800.0	0.00	0.00	5,800.0	0.0	0.0	0.0	0.00	0.00	0.00	
5,900.0	0.00	0.00	5,900.0	0.0	0.0	0.0	0.00	0.00	0.00	
6,000.0	0.00	0.00	6,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
6,100.0	0.00	0.00	6,100.0	0.0	0.0	0.0	0.00	0.00	0.00	
6,200.0	0.00	0.00	6,200.0	0.0	0.0	0.0	0.00	0.00	0.00	
6,300.0	0.00	0.00	6,300.0	0.0	0.0	0.0	0.00	0.00	0.00	
6,400.0	0.00	0.00	6,400.0	0.0	0.0	0.0	0.00	0.00	0.00	
6,500.0	0.00	0.00	6,500.0	0.0	0.0	0.0	0.00	0.00	0.00	
6,508.0	0.00	0.00	6,508.0	0.0	0.0	0.0	0.00	0.00	0.00	
6,600.0	9.20	1.75	6,599.6	7.4	0.2	7.4	10.00	10.00	0.00	
6,700.0	19.20	1.75	6,696.4	31.8	1.0	31.9	10.00	10.00	0.00	
6,800.0	29.20	1.75	6,787.5	72.8	2.2	72.8	10.00	10.00	0.00	
6,900.0	39.20	1.75	6,870.1	128.9	3.9	128.9	10.00	10.00	0.00	
7,000.0	49.20	1.75	6,941.7	198.5	6.1	198.5	10.00	10.00	0.00	
7,100.0	59.20	1.75	7,000.2	279.4	8.5	279.5	10.00	10.00	0.00	
7,200.0	69.20	1.75	7,043.6	369.3	11.3	369.5	10.00	10.00	0.00	
7,300.0	79.20	1.75	7,070.8	465.3	14.2	465.6	10.00	10.00	0.00	
7,400.0	89.20	1.75	7,080.9	564.7	17.2	564.9	10.00	10.00	0.00	
7,408.0	90.00	1.75	7,081.0	572.7	17.5	573.0	10.00	10.00	0.00	
7,500.0	90.00	1.75	7,081.0	664.6	20.3	664.9	0.00	0.00	0.00	
7,600.0	90.00	1.75	7,081.0	764.6	23.4	764.9	0.00	0.00	0.00	
7,700.0	90.00	1.75	7,081.0	864.5	26.4	864.9	0.00	0.00	0.00	
7,800.0	90.00	1.75	7,081.0	964.5	29.5	964.9	0.00	0.00	0.00	
7,900.0	90.00	1.75	7,081.0	1,064.4	32.5	1,064.9	0.00	0.00	0.00	
8,000.0	90.00	1.75	7,081.0	1,164.4	35.6	1,164.9	0.00	0.00	0.00	
8,100.0	90.00	1.75	7,081.0	1,264.3	38.6	1,264.9	0.00	0.00	0.00	
8,200.0	90.00	1.75	7,081.0	1,364.3	41.7	1,364.9	0.00	0.00	0.00	
8,300.0	90.00	1.75	7,081.0	1,464.2	44.7	1,464.9	0.00	0.00	0.00	
8,400.0	90.00	1.75	7,081.0	1,564.2	47.8	1,564.9	0.00	0.00	0.00	
8,500.0	90.00	1.75	7,081.0	1,664.1	50.8	1,664.9	0.00	0.00	0.00	
8,600.0	90.00	1.75	7,081.0	1,764.1	53.9	1,764.9	0.00	0.00	0.00	
8,700.0	90.00	1.75	7,081.0	1,864.0	56.9	1,864.9	0.00	0.00	0.00	
8,800.0	90.00	1.75	7,081.0	1,964.0	60.0	1,964.9	0.00	0.00	0.00	
8,900.0	90.00	1.75	7,081.0	2,064.0	63.1	2,064.9	0.00	0.00	0.00	
9,000.0	90.00	1.75	7,081.0	2,163.9	66.1	2,164.9	0.00	0.00	0.00	
9,100.0	90.00	1.75	7,081.0	2,263.9	69.2	2,264.9	0.00	0.00	0.00	
9,200.0	90.00	1.75	7,081.0	2,363.8	72.2	2,364.9	0.00	0.00	0.00	
9,300.0	90.00	1.75	7,081.0	2,463.8	75.3	2,464.9	0.00	0.00	0.00	
9,400.0	90.00	1.75	7,081.0	2,563.7	78.3	2,564.9	0.00	0.00	0.00	
9,500.0	90.00	1.75	7,081.0	2,663.7	81.4	2,664.9	0.00	0.00	0.00	
9,600.0	90.00	1.75	7,081.0	2,763.6	84.4	2,764.9	0.00	0.00	0.00	
9,700.0	90.00	1.75	7,081.0	2,863.6	87.5	2,864.9	0.00	0.00	0.00	
9,800.0	90.00	1.75	7,081.0	2,963.5	90.5	2,964.9	0.00	0.00	0.00	
9,900.0	90.00	1.75	7,081.0	3,063.5	93.6	3,064.9	0.00	0.00	0.00	
10,000.0	90.00	1.75	7,081.0	3,163.4	96.6	3,164.9	0.00	0.00	0.00	
10,100.0	90.00	1.75	7,081.0	3,263.4	99.7	3,264.9	0.00	0.00	0.00	
10,200.0	90.00	1.75	7,081.0	3,363.3	102.7	3,364.9	0.00	0.00	0.00	
10,300.0	90.00	1.75	7,081.0	3,463.3	105.8	3,464.9	0.00	0.00	0.00	
10,400.0	90.00	1.75	7,081.0	3,563.3	108.9	3,564.9	0.00	0.00	0.00	
10,500.0	90.00	1.75	7,081.0	3,663.2	111.9	3,664.9	0.00	0.00	0.00	

# Chesapeake Operating

## Planning Report

<b>Database:</b>	Drilling Database	<b>Local Co-ordinate Reference:</b>	Well Brent 20-8-66 1H
<b>Company:</b>	Chesapeake Energy -Rockies District	<b>TVD Reference:</b>	WELL @ 0.0usft (Original Well Elev)
<b>Project:</b>	Weld - DJ Basin	<b>MD Reference:</b>	WELL @ 0.0usft (Original Well Elev)
<b>Site:</b>	Brent 20-8-66 1H	<b>North Reference:</b>	Grid
<b>Well:</b>	Brent 20-8-66 1H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Brent 20-8-66 1H		
<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)	
10,600.0	90.00	1.75	7,081.0	3,763.2	115.0	3,764.9	0.00	0.00	0.00	
10,700.0	90.00	1.75	7,081.0	3,863.1	118.0	3,864.9	0.00	0.00	0.00	
10,800.0	90.00	1.75	7,081.0	3,963.1	121.1	3,964.9	0.00	0.00	0.00	
10,900.0	90.00	1.75	7,081.0	4,063.0	124.1	4,064.9	0.00	0.00	0.00	
11,000.0	90.00	1.75	7,081.0	4,163.0	127.2	4,164.9	0.00	0.00	0.00	
11,100.0	90.00	1.75	7,081.0	4,262.9	130.2	4,264.9	0.00	0.00	0.00	
11,144.0	90.00	1.75	7,081.0	4,306.9	131.6	4,309.0	0.00	0.00	0.00	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (ft)	Easting (ft)	Latitude	Longitude	
Brent 20-8-66 1H - hit/miss target - Shape - Point	0.00	0.00	7,081.0	4,306.9	131.6	481,421.00	2,193,243.00	0° 39' 10.20117268 N	4° 48' 12.90546205 W	