

# **BILL BARRETT CORP**

**GARFIELD COUNTY, COLORADO NAD 1983**

**MDP #26**

**Federal 44C-33-691**

**Wellbore #1**

**Plan: Design #1**

## **Standard Planning Report**

**18 November, 2010**

# BBC

## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well Federal 44C-33-691
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	WELL @ 6748.00ft (Original Well Elev)
<b>Project:</b>	GARFIELD COUNTY, COLORADO NAD 1983	<b>MD Reference:</b>	WELL @ 6748.00ft (Original Well Elev)
<b>Site:</b>	MDP #26	<b>North Reference:</b>	True
<b>Well:</b>	Federal 44C-33-691	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

<b>Project</b>	GARFIELD COUNTY, COLORADO NAD 1983		
<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 Central Zone		

<b>Site</b>	MDP #26		
<b>Site Position:</b>		<b>Northing:</b>	1,605,944.154 ft
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,420,639.729 ft
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	"
		<b>Latitude:</b>	39° 28' 44.832 N
		<b>Longitude:</b>	107° 33' 9.6912 W
		<b>Grid Convergence:</b>	-1.29 °

<b>Well</b>	Federal 44C-33-691		
<b>Well Position</b>	<b>+N/-S</b>	81.22 ft	<b>Northing:</b> 1,606,028.749 ft
	<b>+E/-W</b>	-150.45 ft	<b>Easting:</b> 2,420,491.154 ft
<b>Position Uncertainty</b>		0.00 ft	<b>Wellhead Elevation:</b> ft
			<b>Latitude:</b> 39° 28' 45.635 N
			<b>Longitude:</b> 107° 33' 11.6100 W
			<b>Ground Level:</b> 0.00 ft

<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>
	BGGM2007	10/25/2010	10.30	65.80	52,327

<b>Design</b>	Design #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	71.63

<b>Plan Sections</b>										
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Dogleg Rate (°/100ft)</b>	<b>Build Rate (°/100ft)</b>	<b>Turn Rate (°/100ft)</b>	<b>TFO (°)</b>	<b>Target</b>
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,024.06	5.60	71.63	1,023.71	3.45	10.39	2.50	2.50	0.00	71.63	
5,237.63	5.60	71.63	5,217.15	133.04	400.73	0.00	0.00	0.00	0.00	
5,611.07	0.00	0.00	5,590.00	138.79	418.04	1.50	-1.50	0.00	180.00	
8,611.07	0.00	0.00	8,590.00	138.79	418.04	0.00	0.00	0.00	0.00	Federal 44C-33-69'

# BBC

## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well Federal 44C-33-691
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	WELL @ 6748.00ft (Original Well Elev)
<b>Project:</b>	GARFIELD COUNTY, COLORADO NAD 1983	<b>MD Reference:</b>	WELL @ 6748.00ft (Original Well Elev)
<b>Site:</b>	MDP #26	<b>North Reference:</b>	True
<b>Well:</b>	Federal 44C-33-691	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned 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	0.00	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	
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	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00	
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00	
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00	
900.00	2.50	71.63	899.97	0.69	2.07	2.18	2.50	2.50	0.00	
1,000.00	5.00	71.63	999.75	2.75	8.28	8.72	2.50	2.50	0.00	
1,024.06	5.60	71.63	1,023.71	3.45	10.39	10.94	2.50	2.50	0.00	
1,100.00	5.60	71.63	1,099.28	5.78	17.42	18.36	0.00	0.00	0.00	
1,200.00	5.60	71.63	1,198.80	8.86	26.69	28.12	0.00	0.00	0.00	
1,300.00	5.60	71.63	1,298.33	11.93	35.95	37.88	0.00	0.00	0.00	
1,400.00	5.60	71.63	1,397.85	15.01	45.21	47.64	0.00	0.00	0.00	
1,500.00	5.60	71.63	1,497.37	18.09	54.48	57.40	0.00	0.00	0.00	
1,600.00	5.60	71.63	1,596.89	21.16	63.74	67.16	0.00	0.00	0.00	
1,700.00	5.60	71.63	1,696.42	24.24	73.00	76.92	0.00	0.00	0.00	
1,800.00	5.60	71.63	1,795.94	27.31	82.27	86.68	0.00	0.00	0.00	
1,900.00	5.60	71.63	1,895.46	30.39	91.53	96.44	0.00	0.00	0.00	
2,000.00	5.60	71.63	1,994.98	33.46	100.80	106.21	0.00	0.00	0.00	
2,100.00	5.60	71.63	2,094.51	36.54	110.06	115.97	0.00	0.00	0.00	
2,200.00	5.60	71.63	2,194.03	39.62	119.32	125.73	0.00	0.00	0.00	
2,300.00	5.60	71.63	2,293.55	42.69	128.59	135.49	0.00	0.00	0.00	
2,400.00	5.60	71.63	2,393.07	45.77	137.85	145.25	0.00	0.00	0.00	
2,500.00	5.60	71.63	2,492.60	48.84	147.12	155.01	0.00	0.00	0.00	
2,600.00	5.60	71.63	2,592.12	51.92	156.38	164.77	0.00	0.00	0.00	
2,700.00	5.60	71.63	2,691.64	54.99	165.64	174.53	0.00	0.00	0.00	
2,800.00	5.60	71.63	2,791.16	58.07	174.91	184.29	0.00	0.00	0.00	
2,900.00	5.60	71.63	2,890.69	61.14	184.17	194.06	0.00	0.00	0.00	
3,000.00	5.60	71.63	2,990.21	64.22	193.43	203.82	0.00	0.00	0.00	
3,100.00	5.60	71.63	3,089.73	67.30	202.70	213.58	0.00	0.00	0.00	
3,200.00	5.60	71.63	3,189.25	70.37	211.96	223.34	0.00	0.00	0.00	
3,300.00	5.60	71.63	3,288.77	73.45	221.23	233.10	0.00	0.00	0.00	
3,400.00	5.60	71.63	3,388.30	76.52	230.49	242.86	0.00	0.00	0.00	
3,500.00	5.60	71.63	3,487.82	79.60	239.75	252.62	0.00	0.00	0.00	
3,600.00	5.60	71.63	3,587.34	82.67	249.02	262.38	0.00	0.00	0.00	
3,700.00	5.60	71.63	3,686.86	85.75	258.28	272.14	0.00	0.00	0.00	
3,739.32	5.60	71.63	3,726.00	86.96	261.92	275.98	0.00	0.00	0.00	
<b>Mesaverde</b>										
3,800.00	5.60	71.63	3,786.39	88.82	267.55	281.90	0.00	0.00	0.00	
3,900.00	5.60	71.63	3,885.91	91.90	276.81	291.67	0.00	0.00	0.00	
4,000.00	5.60	71.63	3,985.43	94.98	286.07	301.43	0.00	0.00	0.00	
4,100.00	5.60	71.63	4,084.95	98.05	295.34	311.19	0.00	0.00	0.00	
4,200.00	5.60	71.63	4,184.48	101.13	304.60	320.95	0.00	0.00	0.00	
4,300.00	5.60	71.63	4,284.00	104.20	313.86	330.71	0.00	0.00	0.00	
4,400.00	5.60	71.63	4,383.52	107.28	323.13	340.47	0.00	0.00	0.00	
4,500.00	5.60	71.63	4,483.04	110.35	332.39	350.23	0.00	0.00	0.00	
4,600.00	5.60	71.63	4,582.57	113.43	341.66	359.99	0.00	0.00	0.00	
4,700.00	5.60	71.63	4,682.09	116.50	350.92	369.75	0.00	0.00	0.00	
4,713.98	5.60	71.63	4,696.00	116.93	352.21	371.12	0.00	0.00	0.00	
<b>Price Coal</b>										

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<b>Project:</b>	GARFIELD COUNTY, COLORADO NAD 1983	<b>MD Reference:</b>	WELL @ 6748.00ft (Original Well Elev)
<b>Site:</b>	MDP #26	<b>North Reference:</b>	True
<b>Well:</b>	Federal 44C-33-691	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned 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)
4,800.00	5.60	71.63	4,781.61	119.58	360.18	379.51	0.00	0.00	0.00
4,900.00	5.60	71.63	4,881.13	122.66	369.45	389.28	0.00	0.00	0.00
5,000.00	5.60	71.63	4,980.66	125.73	378.71	399.04	0.00	0.00	0.00
5,100.00	5.60	71.63	5,080.18	128.81	387.98	408.80	0.00	0.00	0.00
5,200.00	5.60	71.63	5,179.70	131.88	397.24	418.56	0.00	0.00	0.00
5,216.38	5.60	71.63	5,196.00	132.39	398.76	420.16	0.00	0.00	0.00
<b>Top Gas</b>									
5,237.63	5.60	71.63	5,217.15	133.04	400.73	422.23	0.00	0.00	0.00
5,300.00	4.67	71.63	5,279.27	134.80	406.02	427.81	1.50	-1.50	0.00
5,400.00	3.17	71.63	5,379.03	136.95	412.50	434.64	1.50	-1.50	0.00
5,500.00	1.67	71.63	5,478.94	138.28	416.50	438.86	1.50	-1.50	0.00
5,600.00	0.17	71.63	5,578.93	138.78	418.02	440.46	1.50	-1.50	0.00
5,611.07	0.00	0.00	5,590.00	138.79	418.04	440.47	1.50	-1.50	0.00
5,700.00	0.00	0.00	5,678.93	138.79	418.04	440.47	0.00	0.00	0.00
5,800.00	0.00	0.00	5,778.93	138.79	418.04	440.47	0.00	0.00	0.00
5,900.00	0.00	0.00	5,878.93	138.79	418.04	440.47	0.00	0.00	0.00
6,000.00	0.00	0.00	5,978.93	138.79	418.04	440.47	0.00	0.00	0.00
6,100.00	0.00	0.00	6,078.93	138.79	418.04	440.47	0.00	0.00	0.00
6,200.00	0.00	0.00	6,178.93	138.79	418.04	440.47	0.00	0.00	0.00
6,300.00	0.00	0.00	6,278.93	138.79	418.04	440.47	0.00	0.00	0.00
6,400.00	0.00	0.00	6,378.93	138.79	418.04	440.47	0.00	0.00	0.00
6,500.00	0.00	0.00	6,478.93	138.79	418.04	440.47	0.00	0.00	0.00
6,600.00	0.00	0.00	6,578.93	138.79	418.04	440.47	0.00	0.00	0.00
6,700.00	0.00	0.00	6,678.93	138.79	418.04	440.47	0.00	0.00	0.00
6,800.00	0.00	0.00	6,778.93	138.79	418.04	440.47	0.00	0.00	0.00
6,900.00	0.00	0.00	6,878.93	138.79	418.04	440.47	0.00	0.00	0.00
7,000.00	0.00	0.00	6,978.93	138.79	418.04	440.47	0.00	0.00	0.00
7,100.00	0.00	0.00	7,078.93	138.79	418.04	440.47	0.00	0.00	0.00
7,200.00	0.00	0.00	7,178.93	138.79	418.04	440.47	0.00	0.00	0.00
7,300.00	0.00	0.00	7,278.93	138.79	418.04	440.47	0.00	0.00	0.00
7,400.00	0.00	0.00	7,378.93	138.79	418.04	440.47	0.00	0.00	0.00
7,500.00	0.00	0.00	7,478.93	138.79	418.04	440.47	0.00	0.00	0.00
7,600.00	0.00	0.00	7,578.93	138.79	418.04	440.47	0.00	0.00	0.00
7,617.07	0.00	0.00	7,596.00	138.79	418.04	440.47	0.00	0.00	0.00
<b>Rollins</b>									
7,700.00	0.00	0.00	7,678.93	138.79	418.04	440.47	0.00	0.00	0.00
7,800.00	0.00	0.00	7,778.93	138.79	418.04	440.47	0.00	0.00	0.00
7,900.00	0.00	0.00	7,878.93	138.79	418.04	440.47	0.00	0.00	0.00
8,000.00	0.00	0.00	7,978.93	138.79	418.04	440.47	0.00	0.00	0.00
8,100.00	0.00	0.00	8,078.93	138.79	418.04	440.47	0.00	0.00	0.00
8,200.00	0.00	0.00	8,178.93	138.79	418.04	440.47	0.00	0.00	0.00
8,300.00	0.00	0.00	8,278.93	138.79	418.04	440.47	0.00	0.00	0.00
8,311.07	0.00	0.00	8,290.00	138.79	418.04	440.47	0.00	0.00	0.00
<b>CRCN</b>									
8,400.00	0.00	0.00	8,378.93	138.79	418.04	440.47	0.00	0.00	0.00
8,500.00	0.00	0.00	8,478.93	138.79	418.04	440.47	0.00	0.00	0.00
8,600.00	0.00	0.00	8,578.93	138.79	418.04	440.47	0.00	0.00	0.00
8,611.07	0.00	0.00	8,590.00	138.79	418.04	440.47	0.00	0.00	0.00
<b>TD</b>									

# BBC

## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well Federal 44C-33-691
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	WELL @ 6748.00ft (Original Well Elev)
<b>Project:</b>	GARFIELD COUNTY, COLORADO NAD 1983	<b>MD Reference:</b>	WELL @ 6748.00ft (Original Well Elev)
<b>Site:</b>	MDP #26	<b>North Reference:</b>	True
<b>Well:</b>	Federal 44C-33-691	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

### Casing Points

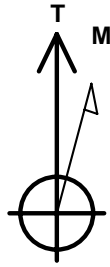
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
	9 5/8"		9-5/8	12-1/4

### Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,739.32	3,726.00	Mesaverde		0.00	
4,713.98	4,696.00	Price Coal		0.00	
5,216.38	5,196.00	Top Gas		0.00	
7,617.07	7,596.00	Rollins		0.00	
8,311.07	8,290.00	CRCN		0.00	
8,611.07	8,590.00	TD		0.00	

## WELL DETAILS: Federal 44C-33-691

Ground Level: 0.00  
 +N/-S+E/-W Northing Easting Latitude Longitude Slot  
 0.00 0.001606028.7492420491.39428' 45.1033' 11.6100 W



Azimuths to True North  
 Magnetic North: 10.30°

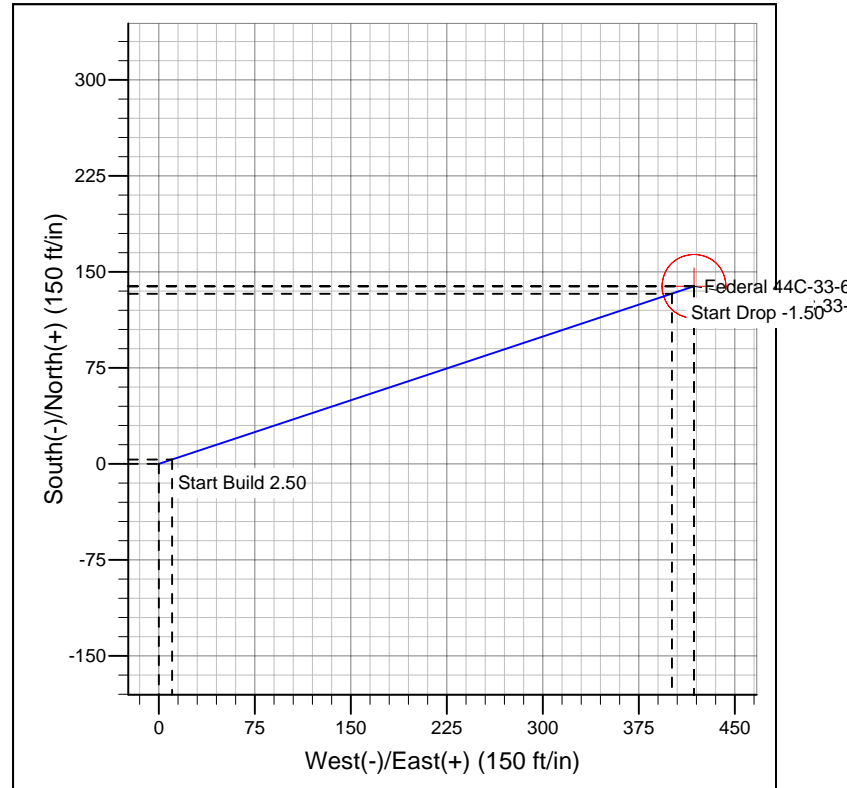
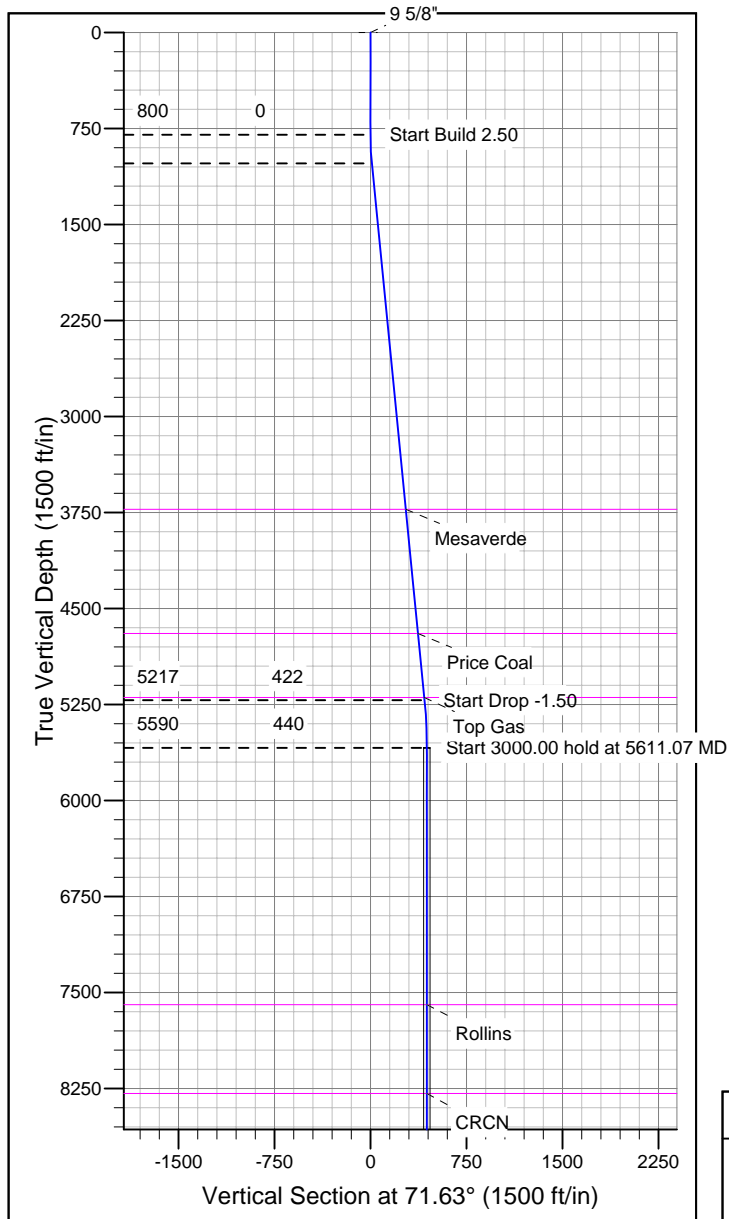
Magnetic Field  
 Strength: 52327.3snT  
 Dip Angle: 65.80°  
 Date: 10/25/2010  
 Model: BGGM2007

## SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	200.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	
3	1024.06	5.60	71.63	1023.71	3.45	10.39	2.50	71.63	10.94	
4	5237.63	5.60	71.63	5217.15	133.04	400.73	0.00	0.00	422.23	
5	5511.07	0.00	0.00	5590.00	138.79	418.04	1.50	180.00	440.47	
6	5511.07	0.00	0.00	5590.00	138.79	418.04	0.00	0.00	440.47	Federal 44C-33-691 (TD)

## WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
Federal 44C-33-691 (TD)	5590.00	138.79	418.04	Circle (Radius: 25.00)



## FORMATION TOP DETAILS

TVD	MD	Formation
3726.00	739.32	Mesaverde
4696.00	713.98	Price Coal
5196.00	6216.38	Top Gas
7596.00	617.07	Rollins
8290.00	6311.07	CRCN
8590.00	6611.07	TD

## REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well Federal 44C-33-691, True North  
 Vertical (TVD) Reference: WELL @ 6748.00ft (Original Well Elev)  
 Section (VS) Reference: Slot - (0.00N, 0.00E)  
 Measured Depth Reference: WELL @ 6748.00ft (Original Well Elev)  
 Calculation Method: Minimum Curvature