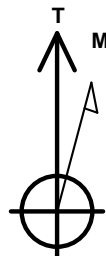


#### SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0
2	1000.0	0.00	0.00	1000.0	0.0	0.0	0.00	0.00	0.0
3	1725.0	14.50	245.59	1717.3	-37.7	-83.1	2.00	245.59	91.3
4	4620.9	14.50	245.59	4521.0	-337.4	-743.4	0.00	0.00	816.3
5	5587.6	0.00	0.00	5477.4	-387.6	-854.2	1.50	180.00	938.0
6	8032.2	0.00	0.00	7922.0	-387.6	-854.2	0.00	0.00	938.0



Azimuths to True North  
Magnetic North: 9.10°

Magnetic Field  
Strength: 53269.8snT  
Dip Angle: 66.99°  
Date: 6/30/2009  
Model: IGRF200510

# **ROCKIES - PLANNING**

**COLORADO NORTHERN ZONE - 83**

**WELD\_BELLA 4-8 PAD**

**P\_BELLA FEDERAL 41-7**

**P\_BELLA FEDERAL 41-7**

**Plan: Plan #1 06-30-09 ZJRA6**

## **Standard Planning Report - Geographic**

**30 June, 2009**

# APC

## Planning Report - Geographic

<b>Database:</b>	apc_edmp	<b>Local Co-ordinate Reference:</b>	Well P_BELLA FEDERAL 41-7
<b>Company:</b>	ROCKIES - PLANNING	<b>TVD Reference:</b>	WELL @ 4820.0ft (Original Well Elev)
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	WELL @ 4820.0ft (Original Well Elev)
<b>Site:</b>	WELD_BELLA 4-8 PAD	<b>North Reference:</b>	True
<b>Well:</b>	P_BELLA FEDERAL 41-7	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	P_BELLA FEDERAL 41-7		
<b>Design:</b>	Plan #1 06-30-09 ZJRA6		

<b>Project</b>	COLORADO NORTHERN ZONE - 83		
<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		WELD_BELLA 4-8 PAD			
Site Position:		Northing:	1,332,565.14ft	Latitude:	40.244220
From:	Lat/Long	Easting:	3,193,206.35ft	Longitude:	-104.807870
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.45 °

Well		P_BELLA FEDERAL 41-7				
Well Position	+N/-S	0.0 ft	Northing:	1,332,565.13 ft	Latitude:	40.244220
	+E/-W	0.0 ft	Easting:	3,193,206.35 ft	Longitude:	-104.807870
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,820.0 ft

<b>Wellbore</b>	P_BELLA FEDERAL 41-7				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF200510	6/30/2009	9.10	66.99	53,270

<b>Design</b>	Plan #1 06-30-09 ZJRA6				
<b>Audit Notes:</b>					
<b>Version:</b>	<b>Phase:</b>	PLAN		<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>	
	7,922.0	0.0	0.0	245.59	

<b>Plan Sections</b>										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	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	
1,725.0	14.50	245.59	1,717.3	-37.7	-83.1	2.00	2.00	0.00	245.59	
4,620.9	14.50	245.59	4,521.0	-337.4	-743.4	0.00	0.00	0.00	0.00	
5,587.6	0.00	0.00	5,477.4	-387.6	-854.2	1.50	-1.50	0.00	180.00	
8,032.2	0.00	0.00	7,922.0	-387.6	-854.2	0.00	0.00	0.00	0.00	PBHL_BELLA FED

# APC

## Planning Report - Geographic

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<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	WELL @ 4820.0ft (Original Well Elev)
<b>Site:</b>	WELD_BELLA 4-8 PAD	<b>North Reference:</b>	True
<b>Well:</b>	P_BELLA FEDERAL 41-7	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	P_BELLA FEDERAL 41-7		
<b>Design:</b>	Plan #1 06-30-09 ZJRA6		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude
0.0	0.00	0.00	0.0	0.0	0.0	1,332,565.13	3,193,206.35	40.244220	-104.807870
650.0	0.00	0.00	650.0	0.0	0.0	1,332,565.13	3,193,206.35	40.244220	-104.807870
<b>Surface Casing</b>									
1,000.0	0.00	0.00	1,000.0	0.0	0.0	1,332,565.13	3,193,206.35	40.244220	-104.807870
1,725.0	14.50	245.59	1,717.3	-37.7	-83.1	1,332,526.77	3,193,123.56	40.244116	-104.808168
3,890.7	14.50	245.59	3,814.0	-261.8	-576.9	1,332,298.84	3,192,631.55	40.243501	-104.809936
<b>Parkman</b>									
4,477.4	14.50	245.59	4,382.0	-322.5	-710.6	1,332,237.09	3,192,498.26	40.243335	-104.810416
<b>Sussex</b>									
4,620.9	14.50	245.59	4,521.0	-337.4	-743.4	1,332,221.98	3,192,465.65	40.243294	-104.810533
4,958.4	9.44	245.59	4,851.0	-366.3	-807.1	1,332,192.57	3,192,402.17	40.243214	-104.810761
<b>Shannon</b>									
5,587.6	0.00	0.00	5,477.4	-387.6	-854.2	1,332,170.84	3,192,355.25	40.243156	-104.810930
7,152.2	0.00	0.00	7,042.0	-387.6	-854.2	1,332,170.84	3,192,355.25	40.243156	-104.810930
<b>Niobrara "A"</b>									
7,437.2	0.00	0.00	7,327.0	-387.6	-854.2	1,332,170.84	3,192,355.25	40.243156	-104.810930
<b>Codell</b>									
7,882.2	0.00	0.00	7,772.0	-387.6	-854.2	1,332,170.84	3,192,355.25	40.243156	-104.810930
<b>JSand</b>									
8,032.2	0.00	0.00	7,922.0	-387.6	-854.2	1,332,170.84	3,192,355.25	40.243156	-104.810930

Targets									
Target Name	- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude
- Shape									Longitude
PBHL_BELLA FEDEF		0.00	0.00	7,922.0	-387.6	-854.2	1,332,170.84	3,192,355.25	40.243156
- plan hits target center									-104.810930
- Point									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
650.0	650.0	Surface Casing	8-5/8	12-1/4	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,890.7	3,814.0	Parkman		0.00		
7,882.2	7,772.0	JSand		0.00		
7,152.2	7,042.0	Niobrara "A"		0.00		
4,477.4	4,382.0	Sussex		0.00		
7,437.2	7,327.0	Codell		0.00		
4,958.4	4,851.0	Shannon		0.00		

**APC**  
Planning Report - Geographic

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<b>Company:</b>	ROCKIES - PLANNING	<b>TVD Reference:</b>	WELL @ 4820.0ft (Original Well Elev)
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<b>Wellbore:</b>	P_BELLA FEDERAL 41-7		
<b>Design:</b>	Plan #1 06-30-09 ZJRA6		