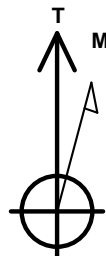


#### SECTION DETAILS

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	2000.0	20.00	92.65	1979.8	-8.0	172.6	2.00	92.65	172.8
4	4967.1	20.00	92.65	4767.9	-54.9	1186.3	0.00	0.00	1187.6
5	6300.4	0.00	0.00	6074.4	-65.5	1416.4	1.50	180.00	1417.9
6	7755.0	0.00	0.00	7529.0	-65.5	1416.4	0.00	0.00	1417.9



Azimuths to True North  
Magnetic North: 9.07°

Magnetic Field  
Strength: 53261.3snT  
Dip Angle: 66.97°  
Date: 5/20/2009  
Model: IGRF200510

# **ROCKIES - PLANNING**

**COLORADO NORTHERN ZONE - 83**

**WELD\_CAMP 15-25 PAD (3N 66W)**

**P\_CAMP 16-25**

**P\_CAMP 16-25**

**Plan: Plan #2 07-09-09 ZJRA6**

## **Standard Planning Report - Geographic**

**09 July, 2009**

# APC

## Planning Report - Geographic

<b>Database:</b>	apc_edmp	<b>Local Co-ordinate Reference:</b>	Well P_CAMP 16-25
<b>Company:</b>	ROCKIES - PLANNING	<b>TVD Reference:</b>	WELL @ 4977.0ft
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	WELL @ 4977.0ft
<b>Site:</b>	WELD_CAMP 15-25 PAD (3N 66W)	<b>North Reference:</b>	True
<b>Well:</b>	P_CAMP 16-25	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	P_CAMP 16-25		
<b>Design:</b>	Plan #2 07-09-09 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_CAMP 15-25 PAD (3N 66W)			
Site Position:		Northing:	1,313,324.30ft	Latitude:	40.190860
From:	Lat/Long	Easting:	3,217,109.30ft	Longitude:	-104.722850
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.50 °

Well	P_CAMP 16-25					
Well Position	+N-S	0.0 ft	Northing:	1,313,324.82 ft	Latitude:	40.190860
	+E-W	0.0 ft	Easting:	3,217,170.71 ft	Longitude:	-104.722630
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,977.0 ft

<b>Wellbore</b>	P_CAMP 16-25				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF200510	5/20/2009	9.07	66.97	53,261

<b>Design</b>	Plan #2 07-09-09 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>
	7,529.0	0.0	0.0	92.65

<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	
2,000.0	20.00	92.65	1,979.8	-8.0	172.6	2.00	2.00	0.00	92.65	
4,967.1	20.00	92.65	4,767.9	-54.9	1,186.3	0.00	0.00	0.00	0.00	
6,300.4	0.00	0.00	6,074.4	-65.5	1,416.4	1.50	-1.50	0.00	180.00	
7,755.0	0.00	0.00	7,529.0	-65.5	1,416.4	0.00	0.00	0.00	0.00	PBHL_CAMP 16-25

# APC

## Planning Report - Geographic

<b>Database:</b>	apc_edmp	<b>Local Co-ordinate Reference:</b>	Well P_CAMP 16-25
<b>Company:</b>	ROCKIES - PLANNING	<b>TVD Reference:</b>	WELL @ 4977.0ft
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	WELL @ 4977.0ft
<b>Site:</b>	WELD_CAMP 15-25 PAD (3N 66W)	<b>North Reference:</b>	True
<b>Well:</b>	P_CAMP 16-25	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	P_CAMP 16-25		
<b>Design:</b>	Plan #2 07-09-09 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	1,313,324.82	3,217,170.71	40.190860	-104.722630
799.0	0.00	0.00	799.0	0.0	0.0	1,313,324.82	3,217,170.71	40.190860	-104.722630
<b>Surface Casing</b>									
1,000.0	0.00	0.00	1,000.0	0.0	0.0	1,313,324.82	3,217,170.71	40.190860	-104.722630
2,000.0	20.00	92.65	1,979.8	-8.0	172.6	1,313,318.35	3,217,343.36	40.190838	-104.722012
4,574.4	20.00	92.65	4,399.0	-48.7	1,052.2	1,313,285.38	3,218,223.25	40.190726	-104.718864
<b>Sussex</b>									
4,967.1	20.00	92.65	4,767.9	-54.9	1,186.3	1,313,280.35	3,218,357.45	40.190709	-104.718384
6,300.4	0.00	0.00	6,074.4	-65.5	1,416.4	1,313,271.73	3,218,587.64	40.190680	-104.717560
7,317.0	0.00	0.00	7,091.0	-65.5	1,416.4	1,313,271.73	3,218,587.64	40.190680	-104.717560
<b>Niobrara "A"</b>									
7,605.0	0.00	0.00	7,379.0	-65.5	1,416.4	1,313,271.73	3,218,587.64	40.190680	-104.717560
<b>Codell</b>									
7,755.0	0.00	0.00	7,529.0	-65.5	1,416.4	1,313,271.73	3,218,587.64	40.190680	-104.717560

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
PBHL_CAMP 16-25	0.00	0.00	7,529.0	-65.5	1,416.4	1,313,271.73	3,218,587.64	40.190680	-104.717560
- plan hits target center									
- Point									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
799.0	799.0	Surface Casing	8-5/8	12-1/4	

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
7,317.0	7,091.0	Niobrara "A"		0.00	
7,605.0	7,379.0	Codell		0.00	
4,574.4	4,399.0	Sussex		0.00	