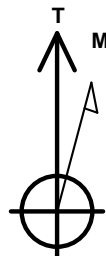


SECTION DETAILS

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	1300.0	0.00	0.00	1300.0	0.0	0.0	0.00	0.00	0.0
3	1950.0	13.00	138.53	1944.4	-55.0	48.6	2.00	138.53	73.4
4	4798.1	13.00	138.53	4719.5	-535.1	472.9	0.00	0.00	714.1
5	5664.7	0.00	0.00	5578.8	-608.4	537.7	1.50	180.00	812.0
6	8054.0	0.00	0.00	7968.0	-608.4	537.7	0.00	0.00	812.0



Azimuths to True North
Magnetic North: 9.04°

Magnetic Field
Strength: 53240.5snT
Dip Angle: 66.95°
Date: 7/9/2009
Model: IGRF200510

ROCKIES - PLANNING

COLORADO NORTHERN ZONE - 83

WELD_CAMP 13-31 PAD

P_CAMP 35-31

P_CAMP 35-31

Plan: Plan #1 07-09-09 ZJRA6

Standard Planning Report - Geographic

09 July, 2009

APC

Planning Report - Geographic

Database:	apc_edmp	Local Co-ordinate Reference:	Well P_CAMP 35-31
Company:	ROCKIES - PLANNING	TVD Reference:	WELL @ 4982.0ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 4982.0ft (Original Well Elev)
Site:	WELD_CAMP 13-31 PAD	North Reference:	True
Well:	P_CAMP 35-31	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_CAMP 35-31		
Design:	Plan #1 07-09-09 ZJRA6		

Project	COLORADO NORTHERN ZONE - 83		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site		WELD_CAMP 13-31 PAD			
Site Position:		Northing:	1,308,124.27 ft	Latitude:	40.176520
From:	Lat/Long	Easting:	3,219,829.06 ft	Longitude:	-104.713280
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.51 °

Well	P_CAMP 35-31					
Well Position	+N-S	0.0 ft	Northing:	1,308,124.27 ft	Latitude:	40.176520
	+E-W	0.0 ft	Easting:	3,219,829.06 ft	Longitude:	-104.713280
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,982.0 ft

Wellbore	P_CAMP 35-31				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	7/9/2009	9.04	66.95	53,241

Design	Plan #1 07-09-09 ZJRA6			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	7,968.0	0.0	0.0	138.53

Plan Sections										
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	
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,950.0	13.00	138.53	1,944.4	-55.0	48.6	2.00	2.00	0.00	138.53	
4,798.1	13.00	138.53	4,719.5	-535.1	472.9	0.00	0.00	0.00	0.00	
5,664.7	0.00	0.00	5,578.8	-608.4	537.7	1.50	-1.50	0.00	180.00	
8,054.0	0.00	0.00	7,968.0	-608.4	537.7	0.00	0.00	0.00	0.00	PBHL_CAMP 35-31

APC

Planning Report - Geographic

Database:	apc_edmp	Local Co-ordinate Reference:	Well P_CAMP 35-31
Company:	ROCKIES - PLANNING	TVD Reference:	WELL @ 4982.0ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 4982.0ft (Original Well Elev)
Site:	WELD_CAMP 13-31 PAD	North Reference:	True
Well:	P_CAMP 35-31	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_CAMP 35-31		
Design:	Plan #1 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	1,308,124.27	3,219,829.06	40.176520	-104.713280
900.0	0.00	0.00	900.0	0.0	0.0	1,308,124.27	3,219,829.06	40.176520	-104.713280
Surface Casing									
1,300.0	0.00	0.00	1,300.0	0.0	0.0	1,308,124.27	3,219,829.06	40.176520	-104.713280
1,950.0	13.00	138.53	1,944.4	-55.0	48.6	1,308,069.68	3,219,878.17	40.176369	-104.713106
4,039.1	13.00	138.53	3,980.0	-407.1	359.8	1,307,720.33	3,220,192.50	40.175402	-104.711992
Parkman									
4,418.8	13.00	138.53	4,350.0	-471.2	416.4	1,307,656.82	3,220,249.63	40.175227	-104.711790
Sussex									
4,798.1	13.00	138.53	4,719.5	-535.1	472.9	1,307,593.41	3,220,306.69	40.175051	-104.711588
5,664.7	0.00	0.00	5,578.8	-608.4	537.7	1,307,520.63	3,220,372.17	40.174850	-104.711356
7,170.0	0.00	0.00	7,084.0	-608.4	537.7	1,307,520.63	3,220,372.17	40.174850	-104.711356
Niobrara "A"									
7,462.0	0.00	0.00	7,376.0	-608.4	537.7	1,307,520.63	3,220,372.17	40.174850	-104.711356
Codell									
7,904.0	0.00	0.00	7,818.0	-608.4	537.7	1,307,520.63	3,220,372.17	40.174850	-104.711356
JSand									
8,054.0	0.00	0.00	7,968.0	-608.4	537.7	1,307,520.63	3,220,372.17	40.174850	-104.711356

Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting		
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)	Latitude	Longitude
PBHL_CAMP 35-31	0.00	0.00	7,968.0	-608.4	537.7	1,307,520.63	3,220,372.17	40.174850	-104.711356
- plan hits target center									
- Point									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
900.0	900.0	Surface Casing	8-5/8	12-1/4	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
7,462.0	7,376.0	Codell		0.00		
7,170.0	7,084.0	Niobrara "A"		0.00		
4,418.8	4,350.0	Sussex		0.00		
7,904.0	7,818.0	JSand		0.00		
4,039.1	3,980.0	Parkman		0.00		