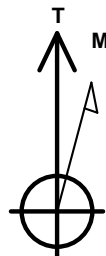


SECTION DETAILS

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	1500.0	0.00	0.00	1500.0	0.0	0.0	0.00	0.00	0.0
3	2250.0	15.00	61.28	2241.5	46.9	85.6	2.00	61.28	97.6
4	5206.6	15.00	61.28	5097.3	414.6	756.7	0.00	0.00	862.8
5	6206.6	0.00	0.00	6086.0	477.2	870.8	1.50	180.00	993.0
6	7626.7	0.00	0.00	7506.0	477.2	870.8	0.00	0.00	993.0



Azimuths to True North
Magnetic North: 9.14°

Magnetic Field
Strength: 53222.0snT
Dip Angle: 66.92°
Date: 6/30/2009
Model: IGRF200510

ROCKIES - PLANNING

COLORADO NORTHERN ZONE - 83

WELD_HOMESTEAD 4-4 PAD

P_HOMESTEAD 29-4

P_HOMESTEAD 29-4

Plan: Plan #1 06-30-09 ZJRA6

Standard Planning Report - Geographic

30 June, 2009

APC

Planning Report - Geographic

Database:	apc_edmp	Local Co-ordinate Reference:	Well P_HOMESTEAD 29-4
Company:	ROCKIES - PLANNING	TVD Reference:	WELL @ 4854.0ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 4854.0ft (Original Well Elev)
Site:	WELD_HOMESTEAD 4-4 PAD	North Reference:	True
Well:	P_HOMESTEAD 29-4	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_HOMESTEAD 29-4		
Design:	Plan #1 06-30-09 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_HOMESTEAD 4-4 PAD							
Site Position: From: Position Uncertainty:			Lat/Long 0.0 ft			Northing:		1,306,640.54 ft		Latitude:		40.173580	
						Easting:		3,166,950.48 ft		Longitude:		-104.902550	
						Slot Radius:		"		Grid Convergence:		0.39 °	

Well	P_HOMESTEAD 29-4					
Well Position	+N/-S	0.0 ft	Northing:	1,306,640.75 ft	Latitude:	40.173580
	+E/-W	0.0 ft	Easting:	3,166,984.01 ft	Longitude:	-104.902430
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,854.0 ft

Wellbore	P_HOMESTEAD 29-4				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	6/30/2009	9.15	66.92	53,222

Design	Plan #1 06-30-09 ZJRA6			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	7,506.0	0.0	0.0	61.28

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	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,250.0	15.00	61.28	2,241.5	46.9	85.6	2.00	2.00	0.00	61.28	
5,206.6	15.00	61.28	5,097.3	414.6	756.7	0.00	0.00	0.00	0.00	
6,206.6	0.00	0.00	6,086.0	477.2	870.8	1.50	-1.50	0.00	180.00	
7,626.7	0.00	0.00	7,506.0	477.2	870.8	0.00	0.00	0.00	0.00	PBHL_HOMESTEAD

APC

Planning Report - Geographic

Database:	apc_edmp	Local Co-ordinate Reference:	Well P_HOMESTEAD 29-4
Company:	ROCKIES - PLANNING	TVD Reference:	WELL @ 4854.0ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 4854.0ft (Original Well Elev)
Site:	WELD_HOMESTEAD 4-4 PAD	North Reference:	True
Well:	P_HOMESTEAD 29-4	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_HOMESTEAD 29-4		
Design:	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	1,306,640.75	3,166,984.01	40.173580	-104.902430
780.0	0.00	0.00	780.0	0.0	0.0	1,306,640.75	3,166,984.01	40.173580	-104.902430
Surface Casing									
1,500.0	0.00	0.00	1,500.0	0.0	0.0	1,306,640.75	3,166,984.01	40.173580	-104.902430
2,250.0	15.00	61.28	2,241.5	46.9	85.6	1,306,688.24	3,167,069.30	40.173709	-104.902124
3,844.9	15.00	61.28	3,782.0	245.3	447.6	1,306,889.03	3,167,429.96	40.174253	-104.900828
Parkman									
4,360.4	15.00	61.28	4,280.0	309.4	564.6	1,306,953.93	3,167,546.55	40.174429	-104.900409
Sussex									
4,851.2	15.00	61.28	4,754.0	370.4	676.0	1,307,015.71	3,167,657.51	40.174597	-104.900011
Formation 6									
5,206.6	15.00	61.28	5,097.3	414.6	756.7	1,307,060.47	3,167,737.90	40.174718	-104.899722
6,206.6	0.00	0.00	6,086.0	477.2	870.8	1,307,123.78	3,167,851.61	40.174890	-104.899314
7,216.7	0.00	0.00	7,096.0	477.2	870.8	1,307,123.78	3,167,851.61	40.174890	-104.899314
Niobrara "A"									
7,466.7	0.00	0.00	7,346.0	477.2	870.8	1,307,123.78	3,167,851.61	40.174890	-104.899314
Codell									
7,626.7	0.00	0.00	7,506.0	477.2	870.8	1,307,123.78	3,167,851.61	40.174890	-104.899314

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_HOMESTEAD	0.00	0.00	7,506.0	477.2	870.8	1,307,123.78	3,167,851.61	40.174890	-104.899314
- plan hits target center									
- Point									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
780.0	780.0	Surface Casing	8-5/8	12-1/4	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
7,216.7	7,096.0	Niobrara "A"		0.00		
3,844.9	3,782.0	Parkman		0.00		
4,360.4	4,280.0	Sussex		0.00		
7,466.7	7,346.0	Codell		0.00		
4,851.2	4,754.0	Formation 6		0.00		