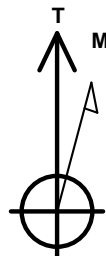


SECTION DETAILS

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	950.0	0.00	0.00	950.0	0.0	0.0	0.00	0.00	0.0
3	2450.0	30.00	156.34	2382.4	-351.5	154.0	2.00	156.34	383.8
4	5416.9	30.00	156.34	4951.8	-1710.3	749.3	0.00	0.00	1867.3
5	7416.9	0.00	0.00	6861.7	-2179.0	954.7	1.50	180.00	2379.0
6	8061.2	0.00	0.00	7506.0	-2179.0	954.7	0.00	0.00	2379.0



Azimuths to True North
Magnetic North: 9.15°

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 22-4

P_HOMESTEAD 22-4

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 22-4
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 22-4	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_HOMESTEAD 22-4		
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 22-4					
Well Position	+N/-S	0.0 ft	Northing:	1,306,640.64 ft	Latitude:	40.173580
	+E/-W	0.0 ft	Easting:	3,166,967.24 ft	Longitude:	-104.902490
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,854.0 ft

Wellbore	P_HOMESTEAD 22-4				
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 (°)
	0.0	0.0	0.0	156.34

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	
950.0	0.00	0.00	950.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,450.0	30.00	156.34	2,382.4	-351.5	154.0	2.00	2.00	0.00	156.34	
5,416.9	30.00	156.34	4,951.8	-1,710.3	749.3	0.00	0.00	0.00	0.00	
7,416.9	0.00	0.00	6,861.7	-2,179.0	954.7	1.50	-1.50	0.00	180.00	
8,061.2	0.00	0.00	7,506.0	-2,179.0	954.7	0.00	0.00	0.00	0.00	PBHL_HOMESTEAD

APC

Planning Report - Geographic

Database:	apc_edmp	Local Co-ordinate Reference:	Well P_HOMESTEAD 22-4
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 22-4	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_HOMESTEAD 22-4		
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	1,306,640.64	3,166,967.24	40.173580	-104.902490
780.0	0.00	0.00	780.0	0.0	0.0	1,306,640.64	3,166,967.24	40.173580	-104.902490
Surface Casing									
950.0	0.00	0.00	950.0	0.0	0.0	1,306,640.64	3,166,967.24	40.173580	-104.902490
2,450.0	30.00	156.34	2,382.4	-351.5	154.0	1,306,290.14	3,167,123.63	40.172615	-104.901939
4,112.3	30.00	156.34	3,822.0	-1,112.8	487.6	1,305,531.11	3,167,462.31	40.170525	-104.900745
Parkman									
4,687.4	30.00	156.34	4,320.0	-1,376.2	603.0	1,305,268.54	3,167,579.46	40.169802	-104.900332
Sussex									
5,234.7	30.00	156.34	4,794.0	-1,626.9	712.8	1,305,018.63	3,167,690.97	40.169114	-104.899939
Formation 6									
5,416.9	30.00	156.34	4,951.8	-1,710.3	749.3	1,304,935.43	3,167,728.10	40.168885	-104.899809
7,416.9	0.00	0.00	6,861.7	-2,179.0	954.7	1,304,468.10	3,167,936.62	40.167598	-104.899074
7,691.2	0.00	0.00	7,136.0	-2,179.0	954.7	1,304,468.10	3,167,936.62	40.167598	-104.899074
Niobrara "A"									
7,941.2	0.00	0.00	7,386.0	-2,179.0	954.7	1,304,468.10	3,167,936.62	40.167598	-104.899074
Codell									
8,061.2	0.00	0.00	7,506.0	-2,179.0	954.7	1,304,468.10	3,167,936.62	40.167598	-104.899074

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	-2,179.0	954.7	1,304,468.10	3,167,936.62	40.167598	-104.899074
- 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 (°)
7,691.2	7,136.0	Niobrara "A"		0.00	
4,687.4	4,320.0	Sussex		0.00	
4,112.3	3,822.0	Parkman		0.00	
7,941.2	7,386.0	Codell		0.00	
5,234.7	4,794.0	Formation 6		0.00	