



# **US ROCKIES REGION PLANNING**

COLORADO NORTHERN ZONE - 83

WELD\_BADDING 17-26 PAD

P\_Badding 41-26

P\_Badding 41-26

Plan: PLAN #1 6-23-10 RHS

## **Standard Planning Report**

23 June, 2010

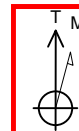




Project: COLORADO NORTHERN ZONE - 83  
 Site: WELD\_BADDING 17-26 PAD  
 Well: P\_Badding 41-26  
 Wellbore: P\_Badding 41-26  
 Section: SECTION 26 T2N R66W  
 SHL: 1464 FNL 1159 FEL  
 Design: PLAN #1 6-23-10 RHS  
 Latitude: 40° 6' 44.895 N  
 Longitude: 104° 44' 20.692 W  
 GL: 5067.00  
 KB: WELL @ 5082.00ft (Original Well Elev)



**Weatherford®**



Azimuths to True North  
 Magnetic North: 8.96°  
 Magnetic Field  
 Strength: 53084.0snT  
 Dip Angle: 66.85°  
 Date: 6/23/2010  
 Model: IGRF2010

#### FORMATION TOP DETAILS

TVDPath	MDPath	Formation
4251.00	4338.25	PARKMAN
4669.00	4770.20	SUSSEX
7172.00	7307.13	NIO
7487.00	7632.13	CODELL
7587.00	7722.13	GREENHORN
7942.00	8077.13	JSAND

#### CASING DETAILS

TVD	MD	Name	Size
1050.00	1050.00	8 5/8"	8.62

#### SECTION DETAILS

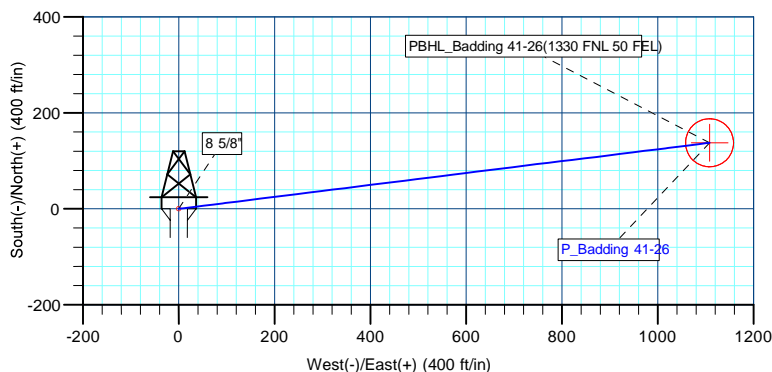
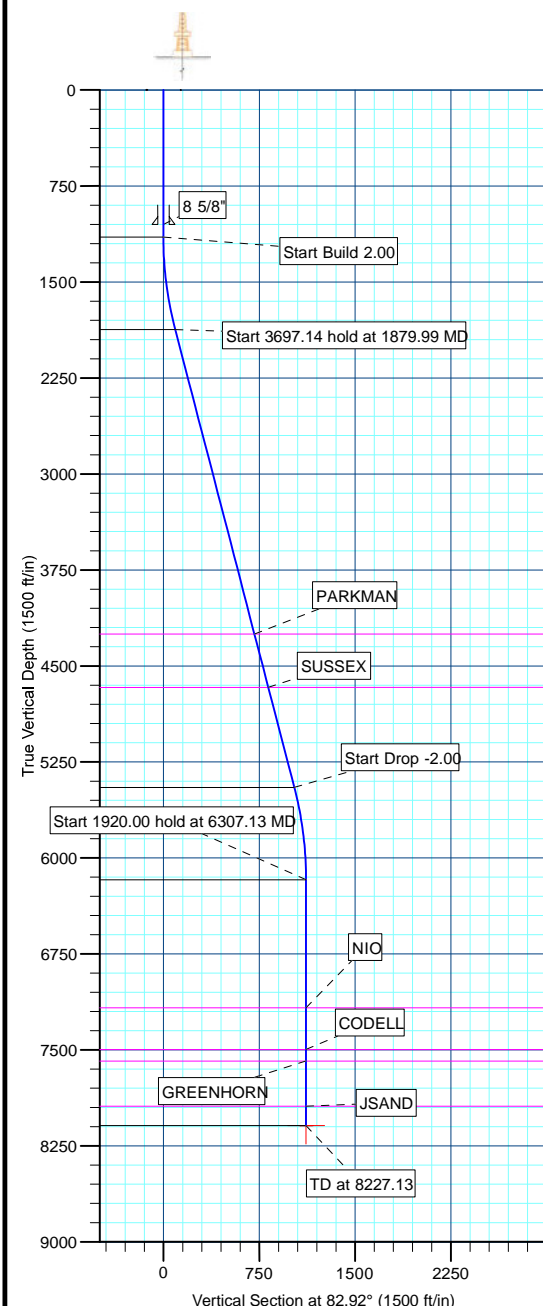
MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1150.00	0.00	0.00	1150.00	0.00	0.00	0.00	0.00	0.00	Start Build 2.00
1879.99	14.60	82.92	1872.12	11.41	91.80	2.00	82.92	92.50	Start 3697.14 hold at 1879.99 MD
5577.14	14.60	82.92	5449.88	126.33	1016.61	0.00	0.00	1024.43	Start Drop -2.00
6307.13	0.00	0.00	6172.00	137.73	1108.41	2.00	180.00	1116.94	Start 1920.00 hold at 6307.13 MD
8227.13	0.00	0.00	8092.00	137.73	1108.41	0.00	0.00	1116.94	TD at 8227.13

#### WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
PBHL	8092.00	137.73	1108.41	40° 6' 46.256 N	104° 44' 6.425 W	Circle (Radius: 50.00)

#### WELL DETAILS: P\_Badding 41-26

+N/-S	+E/-W	Northing	Ground Level: Easting	5067.00 Latitude	Longitude	Slot
0.00	0.00	1284730.43	3212820.01	40° 6' 44.895 N	104° 44' 20.692 W	



Plan: PLAN #1 6-23-10 RHS (P\_Badding 41-26/P\_Badding 41-26)

Created By: Robert H. Scott Date: 13:47, June 23 2010

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_Badding 41-26
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 5082.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 5082.00ft (Original Well Elev)
Site:	WELD_BADDING 17-26 PAD	North Reference:	True
Well:	P_Badding 41-26	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_Badding 41-26		
Design:	PLAN #1 6-23-10 RHS		

Project	COLORADO NORTHERN ZONE - 83, KERR MCGEE OIL & GAS ONSHORE LP		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site						WELD_BADDING 17-26 PAD, SECTION 26 T2N R66W					
Site Position:				Northing:		1,284,730.01 ft		Latitude:		40° 6' 44.896 N	
From:		Lat/Long		Easting:		3,212,770.23ft		Longitude:		104° 44' 21.332 W	
Position Uncertainty:		0.00 ft		Slot Radius:		in		Grid Convergence:		0.49 °	

Well	P_Badding 41-26					
Well Position	+N/-S	-0.01 ft	Northing:	1,284,730.43 ft	Latitude:	40° 6' 44.895 N
	+E/-W	49.79 ft	Easting:	3,212,820.01 ft	Longitude:	104° 44' 20.692 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	5,067.00 ft

Wellbore	P_Badding 41-26				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	6/23/2010	8.96	66.86	53,084

Design	PLAN #1 6-23-10 RHS			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	82.92

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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,150.00	0.00	0.00	1,150.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,879.99	14.60	82.92	1,872.12	11.41	91.80	2.00	2.00	0.00	82.92	
5,577.14	14.60	82.92	5,449.88	126.33	1,016.61	0.00	0.00	0.00	0.00	
6,307.13	0.00	0.00	6,172.00	137.73	1,108.41	2.00	-2.00	0.00	180.00	
8,227.13	0.00	0.00	8,092.00	137.73	1,108.41	0.00	0.00	0.00	0.00	PBHL_Badding 41-

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_Badding 41-26
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 5082.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 5082.00ft (Original Well Elev)
Site:	WELD_BADDING 17-26 PAD	North Reference:	True
Well:	P_Badding 41-26	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_Badding 41-26		
Design:	PLAN #1 6-23-10 RHS		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
Start Build 2.00									
1,150.00	0.00	0.00	1,150.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	1.00	82.92	1,200.00	0.05	0.43	0.44	2.00	2.00	0.00
1,300.00	3.00	82.92	1,299.93	0.48	3.90	3.93	2.00	2.00	0.00
1,400.00	5.00	82.92	1,399.68	1.34	10.82	10.90	2.00	2.00	0.00
1,500.00	7.00	82.92	1,499.13	2.63	21.19	21.35	2.00	2.00	0.00
1,600.00	9.00	82.92	1,598.15	4.35	35.00	35.27	2.00	2.00	0.00
1,700.00	11.00	82.92	1,696.63	6.49	52.23	52.63	2.00	2.00	0.00
1,800.00	13.00	82.92	1,794.44	9.05	72.86	73.42	2.00	2.00	0.00
Start 3697.14 hold at 1879.99 MD									
1,879.99	14.60	82.92	1,872.12	11.41	91.80	92.50	2.00	2.00	0.00
1,900.00	14.60	82.92	1,891.48	12.03	96.80	97.55	0.00	0.00	0.00
2,000.00	14.60	82.92	1,988.25	15.14	121.82	122.75	0.00	0.00	0.00
2,100.00	14.60	82.92	2,085.02	18.25	146.83	147.96	0.00	0.00	0.00
2,200.00	14.60	82.92	2,181.79	21.35	171.85	173.17	0.00	0.00	0.00
2,300.00	14.60	82.92	2,278.56	24.46	196.86	198.37	0.00	0.00	0.00
2,400.00	14.60	82.92	2,375.33	27.57	221.87	223.58	0.00	0.00	0.00
2,500.00	14.60	82.92	2,472.11	30.68	246.89	248.79	0.00	0.00	0.00
2,600.00	14.60	82.92	2,568.88	33.79	271.90	273.99	0.00	0.00	0.00
2,700.00	14.60	82.92	2,665.65	36.90	296.92	299.20	0.00	0.00	0.00
2,800.00	14.60	82.92	2,762.42	40.00	321.93	324.41	0.00	0.00	0.00
2,900.00	14.60	82.92	2,859.19	43.11	346.95	349.62	0.00	0.00	0.00
3,000.00	14.60	82.92	2,955.96	46.22	371.96	374.82	0.00	0.00	0.00
3,100.00	14.60	82.92	3,052.73	49.33	396.98	400.03	0.00	0.00	0.00
3,200.00	14.60	82.92	3,149.50	52.44	421.99	425.24	0.00	0.00	0.00
3,300.00	14.60	82.92	3,246.27	55.55	447.00	450.44	0.00	0.00	0.00
3,400.00	14.60	82.92	3,343.04	58.65	472.02	475.65	0.00	0.00	0.00
3,500.00	14.60	82.92	3,439.82	61.76	497.03	500.86	0.00	0.00	0.00
3,600.00	14.60	82.92	3,536.59	64.87	522.05	526.06	0.00	0.00	0.00
3,700.00	14.60	82.92	3,633.36	67.98	547.06	551.27	0.00	0.00	0.00
3,800.00	14.60	82.92	3,730.13	71.09	572.08	576.48	0.00	0.00	0.00
3,900.00	14.60	82.92	3,826.90	74.20	597.09	601.68	0.00	0.00	0.00
4,000.00	14.60	82.92	3,923.67	77.30	622.10	626.89	0.00	0.00	0.00
4,100.00	14.60	82.92	4,020.44	80.41	647.12	652.10	0.00	0.00	0.00
4,200.00	14.60	82.92	4,117.21	83.52	672.13	677.30	0.00	0.00	0.00
4,300.00	14.60	82.92	4,213.98	86.63	697.15	702.51	0.00	0.00	0.00
PARKMAN									
4,338.25	14.60	82.92	4,251.00	87.82	706.72	712.15	0.00	0.00	0.00
4,400.00	14.60	82.92	4,310.75	89.74	722.16	727.72	0.00	0.00	0.00
4,500.00	14.60	82.92	4,407.52	92.85	747.18	752.92	0.00	0.00	0.00
4,600.00	14.60	82.92	4,504.30	95.95	772.19	778.13	0.00	0.00	0.00
4,700.00	14.60	82.92	4,601.07	99.06	797.20	803.34	0.00	0.00	0.00
SUSSEX									
4,770.20	14.60	82.92	4,669.00	101.25	814.76	821.03	0.00	0.00	0.00
4,800.00	14.60	82.92	4,697.84	102.17	822.22	828.54	0.00	0.00	0.00
4,900.00	14.60	82.92	4,794.61	105.28	847.23	853.75	0.00	0.00	0.00
5,000.00	14.60	82.92	4,891.38	108.39	872.25	878.96	0.00	0.00	0.00
5,100.00	14.60	82.92	4,988.15	111.50	897.26	904.16	0.00	0.00	0.00
5,200.00	14.60	82.92	5,084.92	114.60	922.28	929.37	0.00	0.00	0.00
5,300.00	14.60	82.92	5,181.69	117.71	947.29	954.58	0.00	0.00	0.00
5,400.00	14.60	82.92	5,278.46	120.82	972.31	979.78	0.00	0.00	0.00
5,500.00	14.60	82.92	5,375.23	123.93	997.32	1,004.99	0.00	0.00	0.00
Start Drop -2.00									

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_Badding 41-26
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 5082.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 5082.00ft (Original Well Elev)
Site:	WELD_BADDING 17-26 PAD	North Reference:	True
Well:	P_Badding 41-26	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_Badding 41-26		
Design:	PLAN #1 6-23-10 RHS		

#### Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,577.14	14.60	82.92	5,449.88	126.33	1,016.61	1,024.43	0.00	0.00	0.00
5,600.00	14.14	82.92	5,472.03	127.03	1,022.25	1,030.11	2.00	-2.00	0.00
5,700.00	12.14	82.92	5,569.40	129.83	1,044.81	1,052.84	2.00	-2.00	0.00
5,800.00	10.14	82.92	5,667.51	132.21	1,063.99	1,072.17	2.00	-2.00	0.00
5,900.00	8.14	82.92	5,766.24	134.17	1,079.75	1,088.06	2.00	-2.00	0.00
6,000.00	6.14	82.92	5,865.46	135.71	1,092.09	1,100.49	2.00	-2.00	0.00
6,100.00	4.14	82.92	5,965.05	136.81	1,100.99	1,109.45	2.00	-2.00	0.00
6,200.00	2.14	82.92	6,064.89	137.49	1,106.43	1,114.94	2.00	-2.00	0.00
6,300.00	0.14	82.92	6,164.87	137.73	1,108.40	1,116.93	2.00	-2.00	0.00
Start 1920.00 hold at 6307.13 MD									
6,307.13	0.00	0.00	6,172.00	137.73	1,108.41	1,116.94	2.00	-2.00	-1,162.86
6,400.00	0.00	0.00	6,264.87	137.73	1,108.41	1,116.94	0.00	0.00	0.00
6,500.00	0.00	0.00	6,364.87	137.73	1,108.41	1,116.94	0.00	0.00	0.00
6,600.00	0.00	0.00	6,464.87	137.73	1,108.41	1,116.94	0.00	0.00	0.00
6,700.00	0.00	0.00	6,564.87	137.73	1,108.41	1,116.94	0.00	0.00	0.00
6,800.00	0.00	0.00	6,664.87	137.73	1,108.41	1,116.94	0.00	0.00	0.00
6,900.00	0.00	0.00	6,764.87	137.73	1,108.41	1,116.94	0.00	0.00	0.00
7,000.00	0.00	0.00	6,864.87	137.73	1,108.41	1,116.94	0.00	0.00	0.00
7,100.00	0.00	0.00	6,964.87	137.73	1,108.41	1,116.94	0.00	0.00	0.00
7,200.00	0.00	0.00	7,064.87	137.73	1,108.41	1,116.94	0.00	0.00	0.00
7,300.00	0.00	0.00	7,164.87	137.73	1,108.41	1,116.94	0.00	0.00	0.00
NIO									
7,307.13	0.00	0.00	7,172.00	137.73	1,108.41	1,116.94	0.00	0.00	0.00
7,400.00	0.00	0.00	7,264.87	137.73	1,108.41	1,116.94	0.00	0.00	0.00
7,500.00	0.00	0.00	7,364.87	137.73	1,108.41	1,116.94	0.00	0.00	0.00
7,600.00	0.00	0.00	7,464.87	137.73	1,108.41	1,116.94	0.00	0.00	0.00
CODELL									
7,632.13	0.00	0.00	7,497.00	137.73	1,108.41	1,116.94	0.00	0.00	0.00
7,700.00	0.00	0.00	7,564.87	137.73	1,108.41	1,116.94	0.00	0.00	0.00
GREENHORN									
7,722.13	0.00	0.00	7,587.00	137.73	1,108.41	1,116.94	0.00	0.00	0.00
7,800.00	0.00	0.00	7,664.87	137.73	1,108.41	1,116.94	0.00	0.00	0.00
7,900.00	0.00	0.00	7,764.87	137.73	1,108.41	1,116.94	0.00	0.00	0.00
8,000.00	0.00	0.00	7,864.87	137.73	1,108.41	1,116.94	0.00	0.00	0.00
JSAND									
8,077.13	0.00	0.00	7,942.00	137.73	1,108.41	1,116.94	0.00	0.00	0.00
8,100.00	0.00	0.00	7,964.87	137.73	1,108.41	1,116.94	0.00	0.00	0.00
8,200.00	0.00	0.00	8,064.87	137.73	1,108.41	1,116.94	0.00	0.00	0.00
PBHL_Badding 41-26(1330 FNL 50 FEL)									
8,227.13	0.00	0.00	8,092.00	137.73	1,108.41	1,116.94	0.00	0.00	0.00

#### Design 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_Badding 41-26	0.00	0.00	8,092.00	137.73	1,108.41	1,284,877.67	3,213,927.20	40° 6' 46.256 N	104° 44' 6.425 W
- plan hits target center									
- Circle (radius 50.00)									

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_Badding 41-26
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 5082.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 5082.00ft (Original Well Elev)
Site:	WELD_BADDING 17-26 PAD	North Reference:	True
Well:	P_Badding 41-26	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_Badding 41-26		
Design:	PLAN #1 6-23-10 RHS		

#### Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)
1,050.00	1,050.00	8 5/8"	8.62	11.00

#### Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,338.25	4,251.00	PARKMAN			
4,770.20	4,669.00	SUSSEX			
7,307.13	7,172.00	NIO			
7,632.13	7,497.00	CODELL			
7,722.13	7,587.00	GREENHORN			
8,077.13	7,942.00	JSAND			

#### Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
1,150.00	1,150.00	0.00	0.00	Start Build 2.00
1,879.99	1,872.12	11.41	91.80	Start 3697.14 hold at 1879.99 MD
5,577.14	5,449.88	126.33	1,016.61	Start Drop -2.00
6,307.13	6,172.00	137.73	1,108.41	Start 1920.00 hold at 6307.13 MD
8,227.13	8,092.00	137.73	1,108.41	TD at 8227.13