



# **US ROCKIES REGION PLANNING**

COLORADO NORTHERN ZONE - 83

WELD\_BADDING 17-26 PAD

P\_Badding 27-26

P\_Badding 27-26

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 27-26  
 Wellbore: P\_Badding 27-26  
 Section: SECTION 26 T2N R66W  
 SHL: 1464 FNL 1219 FEL  
 Design: PLAN #1 6-23-10 RHS  
 Latitude: 40° 6' 44.895 N  
 Longitude: 104° 44' 21.462 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
4241.00	4388.06	PARKMAN
4659.00	4831.19	SUSSEX
7162.00	7385.77	NIO
7487.00	7710.77	CODELL
7577.00	7800.77	GREENHORN
7932.00	8155.77	JSAND

#### CASING DETAILS

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

#### SECTION DETAILS

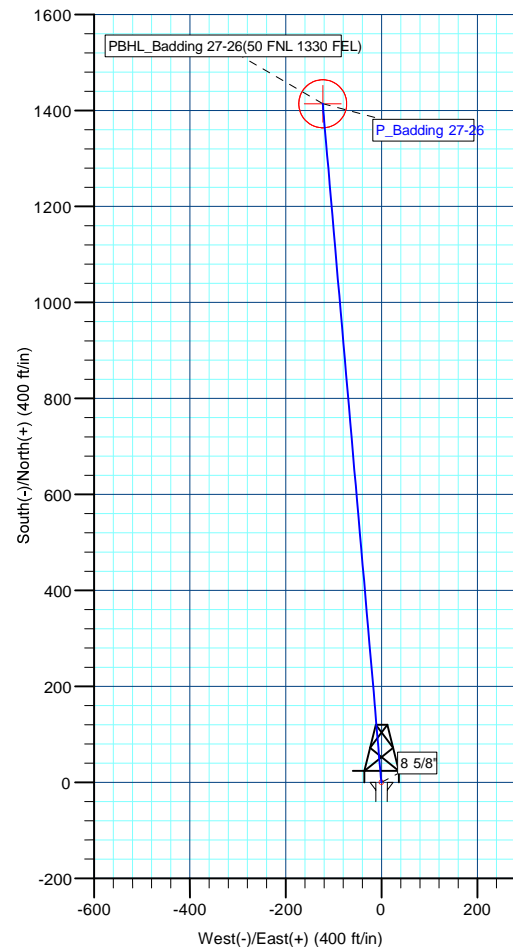
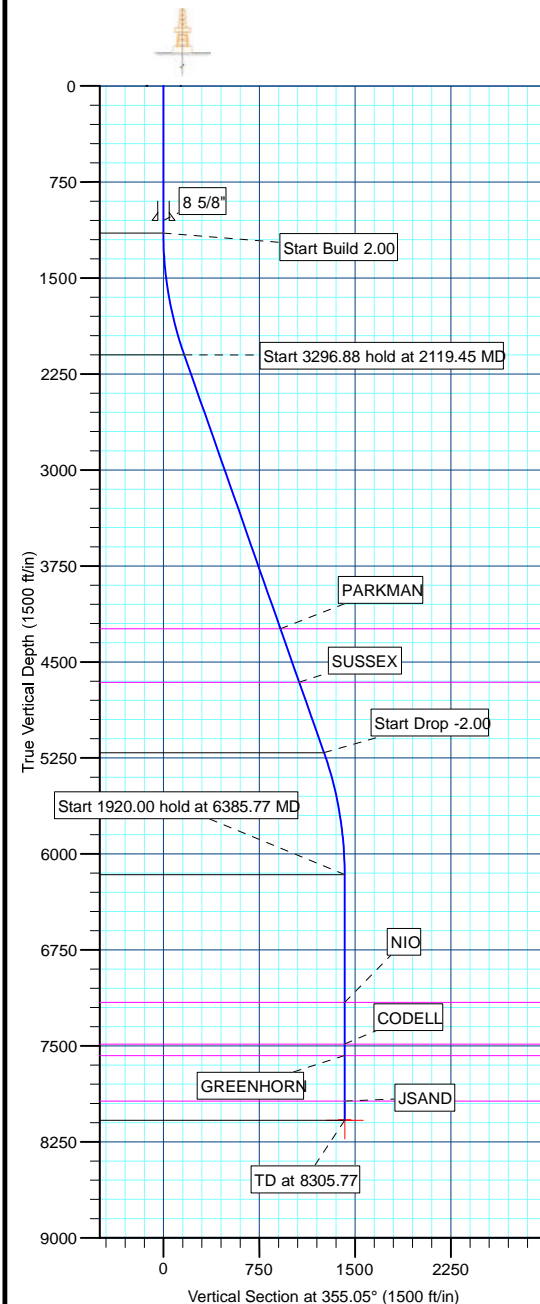
MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1150.00	0.00	0.00	1150.00	0.00	0.00	0.00	0.00	0.00	Start Build 2.00
2119.45	19.39	355.05	2101.05	161.87	-14.02	2.00	355.05	162.47	Start 3296.88 hold at 2119.45 MD
5416.32	19.39	355.05	5210.95	1252.28	-108.48	0.00	0.00	1256.97	Start Drop -2.00
6385.77	0.00	0.00	6162.00	1414.14	-122.50	2.00	180.00	1419.44	Start 1920.00 hold at 6385.77 MD
8305.77	0.00	0.00	8082.00	1414.14	-122.50	0.00	0.00	1419.44	TD at 8305.77

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

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
PBHL	8082.00	1414.14	-122.50	40° 6' 58.871 N	104° 44' 23.039 W	Circle (Radius: 50.00)

#### WELL DETAILS: P\_Badding 27-26

+N/-S	+E/-W	Northing	Ground Level: Easting	5067.00 Latitude	Longitude	Slot
0.00	0.00	1284729.92	3212760.16	40° 6' 44.895 N	104° 44' 21.462 W	



Plan: PLAN #1 6-23-10 RHS (P\_Badding 27-26/P\_Badding 27-26)

Created By: Robert H. Scott Date: 13:43, June 23 2010

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_Badding 27-26
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 27-26	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_Badding 27-26		
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 27-26					
Well Position	+N/-S	-0.01 ft	Northing:	1,284,729.92 ft	Latitude:	40° 6' 44.895 N
	+E/-W	-10.07 ft	Easting:	3,212,760.16 ft	Longitude:	104° 44' 21.462 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	5,067.00 ft

Wellbore	P_Badding 27-26				
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	355.05

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	
2,119.45	19.39	355.05	2,101.05	161.87	-14.02	2.00	2.00	0.00	355.05	
5,416.32	19.39	355.05	5,210.95	1,252.28	-108.48	0.00	0.00	0.00	0.00	
6,385.77	0.00	0.00	6,162.00	1,414.14	-122.50	2.00	-2.00	0.00	180.00	
8,305.77	0.00	0.00	8,082.00	1,414.14	-122.50	0.00	0.00	0.00	0.00	PBHL_Badding 27-

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_Badding 27-26
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 27-26	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_Badding 27-26		
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	355.05	1,200.00	0.43	-0.04	0.44	2.00	2.00	0.00
1,300.00	3.00	355.05	1,299.93	3.91	-0.34	3.93	2.00	2.00	0.00
1,400.00	5.00	355.05	1,399.68	10.86	-0.94	10.90	2.00	2.00	0.00
1,500.00	7.00	355.05	1,499.13	21.27	-1.84	21.35	2.00	2.00	0.00
1,600.00	9.00	355.05	1,598.15	35.14	-3.04	35.27	2.00	2.00	0.00
1,700.00	11.00	355.05	1,696.63	52.44	-4.54	52.63	2.00	2.00	0.00
1,800.00	13.00	355.05	1,794.44	73.15	-6.34	73.42	2.00	2.00	0.00
1,900.00	15.00	355.05	1,891.46	97.25	-8.42	97.62	2.00	2.00	0.00
2,000.00	17.00	355.05	1,987.58	124.71	-10.80	125.18	2.00	2.00	0.00
2,100.00	19.00	355.05	2,082.68	155.50	-13.47	156.08	2.00	2.00	0.00
Start 3296.88 hold at 2119.45 MD									
2,119.45	19.39	355.05	2,101.05	161.87	-14.02	162.47	2.00	2.00	0.00
2,200.00	19.39	355.05	2,177.03	188.51	-16.33	189.21	0.00	0.00	0.00
2,300.00	19.39	355.05	2,271.36	221.58	-19.19	222.41	0.00	0.00	0.00
2,400.00	19.39	355.05	2,365.69	254.66	-22.06	255.61	0.00	0.00	0.00
2,500.00	19.39	355.05	2,460.02	287.73	-24.92	288.81	0.00	0.00	0.00
2,600.00	19.39	355.05	2,554.35	320.80	-27.79	322.00	0.00	0.00	0.00
2,700.00	19.39	355.05	2,648.68	353.88	-30.65	355.20	0.00	0.00	0.00
2,800.00	19.39	355.05	2,743.01	386.95	-33.52	388.40	0.00	0.00	0.00
2,900.00	19.39	355.05	2,837.34	420.03	-36.38	421.60	0.00	0.00	0.00
3,000.00	19.39	355.05	2,931.66	453.10	-39.25	454.80	0.00	0.00	0.00
3,100.00	19.39	355.05	3,025.99	486.17	-42.11	487.99	0.00	0.00	0.00
3,200.00	19.39	355.05	3,120.32	519.25	-44.98	521.19	0.00	0.00	0.00
3,300.00	19.39	355.05	3,214.65	552.32	-47.84	554.39	0.00	0.00	0.00
3,400.00	19.39	355.05	3,308.98	585.40	-50.71	587.59	0.00	0.00	0.00
3,500.00	19.39	355.05	3,403.31	618.47	-53.57	620.79	0.00	0.00	0.00
3,600.00	19.39	355.05	3,497.64	651.54	-56.44	653.98	0.00	0.00	0.00
3,700.00	19.39	355.05	3,591.96	684.62	-59.30	687.18	0.00	0.00	0.00
3,800.00	19.39	355.05	3,686.29	717.69	-62.17	720.38	0.00	0.00	0.00
3,900.00	19.39	355.05	3,780.62	750.77	-65.03	753.58	0.00	0.00	0.00
4,000.00	19.39	355.05	3,874.95	783.84	-67.90	786.78	0.00	0.00	0.00
4,100.00	19.39	355.05	3,969.28	816.91	-70.76	819.97	0.00	0.00	0.00
4,200.00	19.39	355.05	4,063.61	849.99	-73.63	853.17	0.00	0.00	0.00
4,300.00	19.39	355.05	4,157.94	883.06	-76.49	886.37	0.00	0.00	0.00
PARKMAN									
4,388.06	19.39	355.05	4,241.00	912.19	-79.02	915.60	0.00	0.00	0.00
4,400.00	19.39	355.05	4,252.27	916.14	-79.36	919.57	0.00	0.00	0.00
4,500.00	19.39	355.05	4,346.59	949.21	-82.22	952.77	0.00	0.00	0.00
4,600.00	19.39	355.05	4,440.92	982.28	-85.09	985.96	0.00	0.00	0.00
4,700.00	19.39	355.05	4,535.25	1,015.36	-87.95	1,019.16	0.00	0.00	0.00
4,800.00	19.39	355.05	4,629.58	1,048.43	-90.82	1,052.36	0.00	0.00	0.00
SUSSEX									
4,831.19	19.39	355.05	4,659.00	1,058.75	-91.71	1,062.71	0.00	0.00	0.00
4,900.00	19.39	355.05	4,723.91	1,081.51	-93.68	1,085.56	0.00	0.00	0.00
5,000.00	19.39	355.05	4,818.24	1,114.58	-96.55	1,118.75	0.00	0.00	0.00
5,100.00	19.39	355.05	4,912.57	1,147.65	-99.41	1,151.95	0.00	0.00	0.00
5,200.00	19.39	355.05	5,006.89	1,180.73	-102.28	1,185.15	0.00	0.00	0.00
5,300.00	19.39	355.05	5,101.22	1,213.80	-105.14	1,218.35	0.00	0.00	0.00
5,400.00	19.39	355.05	5,195.55	1,246.88	-108.01	1,251.55	0.00	0.00	0.00
Start Drop -2.00									
5,416.32	19.39	355.05	5,210.95	1,252.28	-108.48	1,256.97	0.00	0.00	0.00

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_Badding 27-26
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 27-26	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_Badding 27-26		
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)
5,500.00	17.72	355.05	5,290.28	1,278.80	-110.77	1,283.59	2.00	-2.00	0.00
5,600.00	15.72	355.05	5,386.04	1,307.45	-113.26	1,312.35	2.00	-2.00	0.00
5,700.00	13.72	355.05	5,482.76	1,332.76	-115.45	1,337.75	2.00	-2.00	0.00
5,800.00	11.72	355.05	5,580.30	1,354.69	-117.35	1,359.76	2.00	-2.00	0.00
5,900.00	9.72	355.05	5,678.55	1,373.21	-118.95	1,378.35	2.00	-2.00	0.00
6,000.00	7.72	355.05	5,777.39	1,388.30	-120.26	1,393.50	2.00	-2.00	0.00
6,100.00	5.72	355.05	5,876.70	1,399.95	-121.27	1,405.20	2.00	-2.00	0.00
6,200.00	3.72	355.05	5,976.36	1,408.14	-121.98	1,413.42	2.00	-2.00	0.00
6,300.00	1.72	355.05	6,076.24	1,412.86	-122.39	1,418.15	2.00	-2.00	0.00
Start 1920.00 hold at 6385.77 MD									
6,385.77	0.00	0.00	6,162.00	1,414.14	-122.50	1,419.44	2.00	-2.00	0.00
6,400.00	0.00	0.00	6,176.23	1,414.14	-122.50	1,419.44	0.00	0.00	0.00
6,500.00	0.00	0.00	6,276.23	1,414.14	-122.50	1,419.44	0.00	0.00	0.00
6,600.00	0.00	0.00	6,376.23	1,414.14	-122.50	1,419.44	0.00	0.00	0.00
6,700.00	0.00	0.00	6,476.23	1,414.14	-122.50	1,419.44	0.00	0.00	0.00
6,800.00	0.00	0.00	6,576.23	1,414.14	-122.50	1,419.44	0.00	0.00	0.00
6,900.00	0.00	0.00	6,676.23	1,414.14	-122.50	1,419.44	0.00	0.00	0.00
7,000.00	0.00	0.00	6,776.23	1,414.14	-122.50	1,419.44	0.00	0.00	0.00
7,100.00	0.00	0.00	6,876.23	1,414.14	-122.50	1,419.44	0.00	0.00	0.00
7,200.00	0.00	0.00	6,976.23	1,414.14	-122.50	1,419.44	0.00	0.00	0.00
7,300.00	0.00	0.00	7,076.23	1,414.14	-122.50	1,419.44	0.00	0.00	0.00
NIO									
7,385.77	0.00	0.00	7,162.00	1,414.14	-122.50	1,419.44	0.00	0.00	0.00
7,400.00	0.00	0.00	7,176.23	1,414.14	-122.50	1,419.44	0.00	0.00	0.00
7,500.00	0.00	0.00	7,276.23	1,414.14	-122.50	1,419.44	0.00	0.00	0.00
7,600.00	0.00	0.00	7,376.23	1,414.14	-122.50	1,419.44	0.00	0.00	0.00
7,700.00	0.00	0.00	7,476.23	1,414.14	-122.50	1,419.44	0.00	0.00	0.00
CODELL									
7,710.77	0.00	0.00	7,487.00	1,414.14	-122.50	1,419.44	0.00	0.00	0.00
7,800.00	0.00	0.00	7,576.23	1,414.14	-122.50	1,419.44	0.00	0.00	0.00
GREENHORN									
7,800.77	0.00	0.00	7,577.00	1,414.14	-122.50	1,419.44	0.00	0.00	0.00
7,900.00	0.00	0.00	7,676.23	1,414.14	-122.50	1,419.44	0.00	0.00	0.00
8,000.00	0.00	0.00	7,776.23	1,414.14	-122.50	1,419.44	0.00	0.00	0.00
8,100.00	0.00	0.00	7,876.23	1,414.14	-122.50	1,419.44	0.00	0.00	0.00
JSAND									
8,155.77	0.00	0.00	7,932.00	1,414.14	-122.50	1,419.44	0.00	0.00	0.00
8,200.00	0.00	0.00	7,976.23	1,414.14	-122.50	1,419.44	0.00	0.00	0.00
8,300.00	0.00	0.00	8,076.23	1,414.14	-122.50	1,419.44	0.00	0.00	0.00
PBHL_Badding 27-26(50 FNL 1330 FEL)									
8,305.77	0.00	0.00	8,082.00	1,414.14	-122.50	1,419.44	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 27-26	0.00	0.00	8,082.00	1,414.14	-122.50	1,286,142.95	3,212,625.53	40° 6' 58.871 N	104° 44' 23.039 W
- plan hits target center									
- Circle (radius 50.00)									

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_Badding 27-26
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 27-26	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_Badding 27-26		
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 (°)
4,388.06	4,241.00	PARKMAN			
4,831.19	4,659.00	SUSSEX			
7,385.77	7,162.00	NIO			
7,710.77	7,487.00	CODELL			
7,800.77	7,577.00	GREENHORN			
8,155.77	7,932.00	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
2,119.45	2,101.05	161.87	-14.02	Start 3296.88 hold at 2119.45 MD
5,416.32	5,210.95	1,252.28	-108.48	Start Drop -2.00
6,385.77	6,162.00	1,414.14	-122.50	Start 1920.00 hold at 6385.77 MD
8,305.77	8,082.00	1,414.14	-122.50	TD at 8305.77