



US ROCKIES REGION PLANNING

COLORADO NORTHERN ZONE - 83

WELD_WIEDMAN PAD

P_WIEDEMAN 4-5

P_WIEDEMAN 4-5

Plan: PLAN #1 5-25-10 RHS

Standard Planning Report

26 May, 2010





Project: COLORADO NORTHERN ZONE - 83
 Site: WELD_WIEDMAN PAD
 Well: P_WIEDEMAN 4-5
 Wellbore: P_WIEDEMAN 4-5
 Section: SECTION 5 T5N R65W
 SHL: 1087 FNL 1352 FWL
 Design: PLAN #1 5-25-10 RHS
 Latitude: 40° 26' 2.821 N
 Longitude: 104° 48' 25.103 W
 GL: 4753.00
 KB: WELL @ 4768.00ft (Original Well Elev)



Weatherford®



Azimuths to True North
 Magnetic North: 9.03°
 Magnetic Field
 Strength: 53256.9snT
 Dip Angle: 67.11°
 Date: 5/25/2010
 Model: IGRF2010

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3433.00	3467.87	PARKMAN
4143.00	4189.15	SUSSEX
6739.00	6805.13	NIO
7074.00	7140.13	CODELL
7151.00	7217.13	GREENHORN

CASING DETAILS

TVD	MD	Name	Size
800.00	800.00	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	
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	Start Build 2.00
1407.30	10.15	302.34	1404.66	23.97	-37.85	2.00	302.34	44.80	Start 3890.53 hold at 1407.30 MD
5297.83	10.15	302.34	5234.34	390.63	-616.87	0.00	0.00	730.15	Start Drop -2.00
5805.13	0.00	0.00	5739.00	414.59	-654.72	2.00	180.00	774.95	Start 1495.00 hold at 5805.13 MD
7300.13	0.00	0.00	7234.00	414.59	-654.72	0.00	0.00	774.95	TD at 7300.13

LEGEND

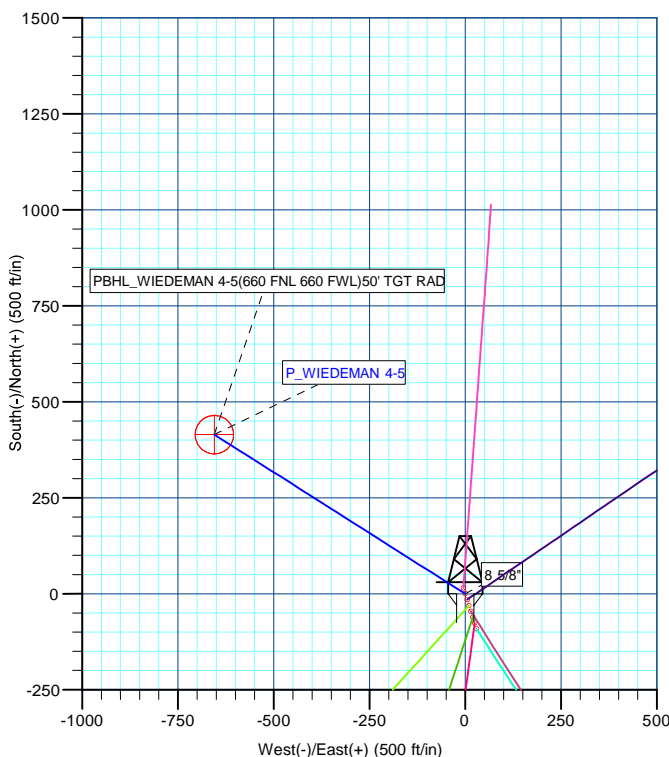
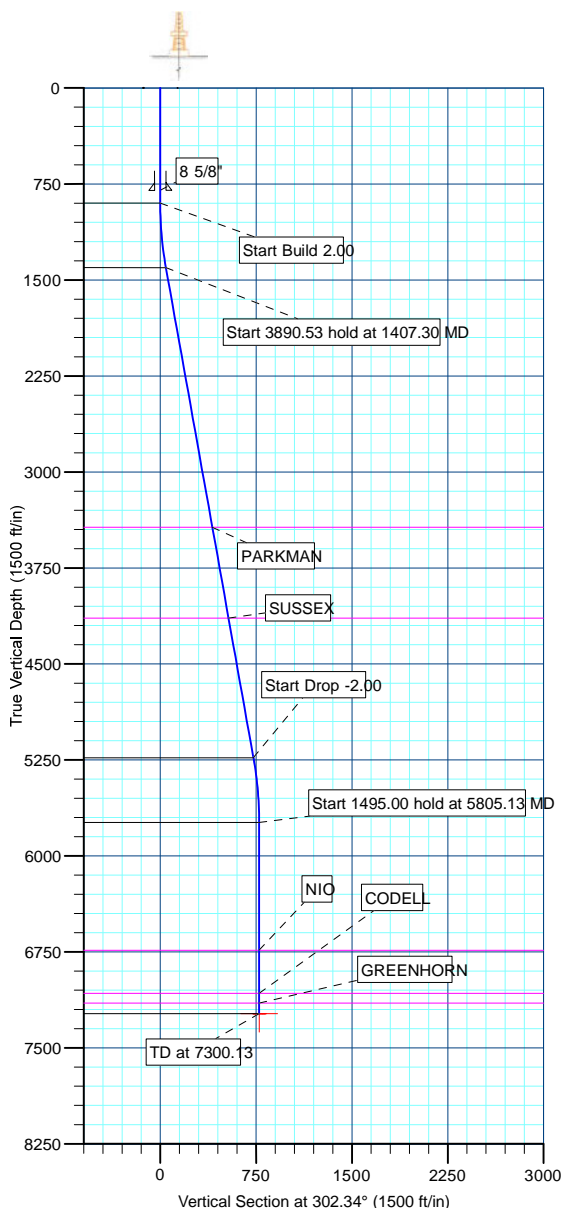
- P_WIEDEMAN 18-5, P_WIEDEMAN 18-5, PLAN #1 5-25-10 RHS V0
- P_WIEDEMAN 22-5, P_WIEDEMAN 22-5, PLAN #1 5-25-10 RHS V0
- P_WIEDEMAN 25-5, P_WIEDEMAN 25-5, PLAN #1 5-25-10 RHS V0
- P_WIEDEMAN 29-5, P_WIEDEMAN 29-5, PLAN #1 5-25-10 RHS V0
- P_WIEDEMAN 3-5, P_WIEDEMAN 3-5, PLAN #1 5-25-10 RHS V0
- P_WIEDEMAN 5-5, P_WIEDEMAN 5-5, PLAN #1 5-25-10 RHS V0
- P_WIEDEMAN 6-5, P_WIEDEMAN 6-5, PLAN #1 5-25-10 RHS V0
- PLAN #1 5-25-10 RHS

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

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
PBHL	7234.00	414.59	-654.72	40° 26' 6.918 N	104° 48' 33.570 W	Circle (Radius: 50.00)

WELL DETAILS: P_WIEDEMAN 4-5

+N/-S	+E/-W	Northing	Ground Level:	4753.00	Latitude	Longitude	Slot
0.00	0.00	1401743.00	Easting	3192916.10	40° 26' 2.821 N	104° 48' 25.103 W	



Plan: PLAN #1 5-25-10 RHS (P_WIEDEMAN 4-5/P_WIEDEMAN 4-5)

Created By: Robert H. Scott Date: 8:45, May 26 2010

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_WIEDEMAN 4-5
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 4768.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 4768.00ft (Original Well Elev)
Site:	WELD_WIEDMAN PAD	North Reference:	True
Well:	P_WIEDEMAN 4-5	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_WIEDEMAN 4-5		
Design:	PLAN #1 5-25-10 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_WIEDMAN PAD, SECTION 5 T5N R65W											
Site Position:			Northing:			1,401,682.33ft			Latitude:			40° 26' 2.220 N					
From:			Lat/Long			Easting:			3,192,936.34ft			Longitude:			104° 48' 24.847 W		
Position Uncertainty:			0.00 ft			Slot Radius:			in			Grid Convergence:			0.45 °		

Well	P_WIEDEMAN 4-5					
Well Position	+N/-S	60.83 ft	Northing:	1,401,743.00 ft	Latitude:	40° 26' 2.821 N
	+E/-W	-19.76 ft	Easting:	3,192,916.10 ft	Longitude:	104° 48' 25.103 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	4,753.00 ft

Wellbore	P_WIEDEMAN 4-5				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	5/25/2010	9.03	67.11	53,257

Design	PLAN #1 5-25-10 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	302.34

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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,407.30	10.15	302.34	1,404.66	23.97	-37.85	2.00	2.00	0.00	302.34	
5,297.83	10.15	302.34	5,234.34	390.63	-616.87	0.00	0.00	0.00	0.00	
5,805.13	0.00	0.00	5,739.00	414.59	-654.72	2.00	-2.00	0.00	180.00	
7,300.13	0.00	0.00	7,234.00	414.59	-654.72	0.00	0.00	0.00	0.00	PBHL_WIEDEMAN

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_WIEDEMAN 4-5
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 4768.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 4768.00ft (Original Well Elev)
Site:	WELD_WIEDMAN PAD	North Reference:	True
Well:	P_WIEDEMAN 4-5	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_WIEDEMAN 4-5		
Design:	PLAN #1 5-25-10 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									
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	2.00	302.34	999.98	0.93	-1.47	1.75	2.00	2.00	0.00
1,100.00	4.00	302.34	1,099.84	3.73	-5.90	6.98	2.00	2.00	0.00
1,200.00	6.00	302.34	1,199.45	8.40	-13.26	15.69	2.00	2.00	0.00
1,300.00	8.00	302.34	1,298.70	14.92	-23.55	27.88	2.00	2.00	0.00
1,400.00	10.00	302.34	1,397.47	23.28	-36.77	43.52	2.00	2.00	0.00
Start 3890.53 hold at 1407.30 MD									
1,407.30	10.15	302.34	1,404.66	23.97	-37.85	44.80	2.00	2.00	0.00
1,500.00	10.15	302.34	1,495.90	32.70	-51.65	61.13	0.00	0.00	0.00
1,600.00	10.15	302.34	1,594.34	42.13	-66.53	78.75	0.00	0.00	0.00
1,700.00	10.15	302.34	1,692.78	51.55	-81.41	96.36	0.00	0.00	0.00
1,800.00	10.15	302.34	1,791.21	60.98	-96.29	113.98	0.00	0.00	0.00
1,900.00	10.15	302.34	1,889.65	70.40	-111.18	131.59	0.00	0.00	0.00
2,000.00	10.15	302.34	1,988.08	79.83	-126.06	149.21	0.00	0.00	0.00
2,100.00	10.15	302.34	2,086.52	89.25	-140.94	166.82	0.00	0.00	0.00
2,200.00	10.15	302.34	2,184.96	98.67	-155.82	184.44	0.00	0.00	0.00
2,300.00	10.15	302.34	2,283.39	108.10	-170.71	202.06	0.00	0.00	0.00
2,400.00	10.15	302.34	2,381.83	117.52	-185.59	219.67	0.00	0.00	0.00
2,500.00	10.15	302.34	2,480.27	126.95	-200.47	237.29	0.00	0.00	0.00
2,600.00	10.15	302.34	2,578.70	136.37	-215.36	254.90	0.00	0.00	0.00
2,700.00	10.15	302.34	2,677.14	145.80	-230.24	272.52	0.00	0.00	0.00
2,800.00	10.15	302.34	2,775.57	155.22	-245.12	290.13	0.00	0.00	0.00
2,900.00	10.15	302.34	2,874.01	164.65	-260.00	307.75	0.00	0.00	0.00
3,000.00	10.15	302.34	2,972.45	174.07	-274.89	325.37	0.00	0.00	0.00
3,100.00	10.15	302.34	3,070.88	183.49	-289.77	342.98	0.00	0.00	0.00
3,200.00	10.15	302.34	3,169.32	192.92	-304.65	360.60	0.00	0.00	0.00
3,300.00	10.15	302.34	3,267.75	202.34	-319.54	378.21	0.00	0.00	0.00
3,400.00	10.15	302.34	3,366.19	211.77	-334.42	395.83	0.00	0.00	0.00
PARKMAN									
3,467.87	10.15	302.34	3,433.00	218.16	-344.52	407.79	0.00	0.00	0.00
3,500.00	10.15	302.34	3,464.63	221.19	-349.30	413.45	0.00	0.00	0.00
3,600.00	10.15	302.34	3,563.06	230.62	-364.18	431.06	0.00	0.00	0.00
3,700.00	10.15	302.34	3,661.50	240.04	-379.07	448.68	0.00	0.00	0.00
3,800.00	10.15	302.34	3,759.94	249.47	-393.95	466.29	0.00	0.00	0.00
3,900.00	10.15	302.34	3,858.37	258.89	-408.83	483.91	0.00	0.00	0.00
4,000.00	10.15	302.34	3,956.81	268.31	-423.71	501.52	0.00	0.00	0.00
4,100.00	10.15	302.34	4,055.24	277.74	-438.60	519.14	0.00	0.00	0.00
SUSSEX									
4,189.15	10.15	302.34	4,143.00	286.14	-451.87	534.84	0.00	0.00	0.00
4,200.00	10.15	302.34	4,153.68	287.16	-453.48	536.76	0.00	0.00	0.00
4,300.00	10.15	302.34	4,252.12	296.59	-468.36	554.37	0.00	0.00	0.00
4,400.00	10.15	302.34	4,350.55	306.01	-483.25	571.99	0.00	0.00	0.00
4,500.00	10.15	302.34	4,448.99	315.44	-498.13	589.60	0.00	0.00	0.00
4,600.00	10.15	302.34	4,547.43	324.86	-513.01	607.22	0.00	0.00	0.00
4,700.00	10.15	302.34	4,645.86	334.28	-527.89	624.83	0.00	0.00	0.00
4,800.00	10.15	302.34	4,744.30	343.71	-542.78	642.45	0.00	0.00	0.00
4,900.00	10.15	302.34	4,842.73	353.13	-557.66	660.07	0.00	0.00	0.00
5,000.00	10.15	302.34	4,941.17	362.56	-572.54	677.68	0.00	0.00	0.00
5,100.00	10.15	302.34	5,039.61	371.98	-587.42	695.30	0.00	0.00	0.00
5,200.00	10.15	302.34	5,138.04	381.41	-602.31	712.91	0.00	0.00	0.00
Start Drop -2.00									
5,297.83	10.15	302.34	5,234.34	390.63	-616.87	730.15	0.00	0.00	0.00

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_WIEDEMAN 4-5
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 4768.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 4768.00ft (Original Well Elev)
Site:	WELD_WIEDMAN PAD	North Reference:	True
Well:	P_WIEDEMAN 4-5	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_WIEDEMAN 4-5		
Design:	PLAN #1 5-25-10 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)
5,300.00	10.10	302.34	5,236.48	390.83	-617.19	730.53	2.00	-2.00	0.00
5,400.00	8.10	302.34	5,335.21	399.29	-630.55	746.35	2.00	-2.00	0.00
5,500.00	6.10	302.34	5,434.44	405.91	-641.00	758.71	2.00	-2.00	0.00
5,600.00	4.10	302.34	5,534.04	410.67	-648.51	767.61	2.00	-2.00	0.00
5,700.00	2.10	302.34	5,633.89	413.56	-653.09	773.02	2.00	-2.00	0.00
5,800.00	0.10	302.34	5,733.87	414.59	-654.71	774.94	2.00	-2.00	0.00
Start 1495.00 hold at 5805.13 MD									
5,805.13	0.00	0.00	5,739.00	414.59	-654.72	774.95	2.00	-2.00	0.00
5,900.00	0.00	0.00	5,833.87	414.59	-654.72	774.95	0.00	0.00	0.00
6,000.00	0.00	0.00	5,933.87	414.59	-654.72	774.95	0.00	0.00	0.00
6,100.00	0.00	0.00	6,033.87	414.59	-654.72	774.95	0.00	0.00	0.00
6,200.00	0.00	0.00	6,133.87	414.59	-654.72	774.95	0.00	0.00	0.00
6,300.00	0.00	0.00	6,233.87	414.59	-654.72	774.95	0.00	0.00	0.00
6,400.00	0.00	0.00	6,333.87	414.59	-654.72	774.95	0.00	0.00	0.00
6,500.00	0.00	0.00	6,433.87	414.59	-654.72	774.95	0.00	0.00	0.00
6,600.00	0.00	0.00	6,533.87	414.59	-654.72	774.95	0.00	0.00	0.00
6,700.00	0.00	0.00	6,633.87	414.59	-654.72	774.95	0.00	0.00	0.00
6,800.00	0.00	0.00	6,733.87	414.59	-654.72	774.95	0.00	0.00	0.00
NIO									
6,805.13	0.00	0.00	6,739.00	414.59	-654.72	774.95	0.00	0.00	0.00
6,900.00	0.00	0.00	6,833.87	414.59	-654.72	774.95	0.00	0.00	0.00
7,000.00	0.00	0.00	6,933.87	414.59	-654.72	774.95	0.00	0.00	0.00
7,100.00	0.00	0.00	7,033.87	414.59	-654.72	774.95	0.00	0.00	0.00
CODELL									
7,140.13	0.00	0.00	7,074.00	414.59	-654.72	774.95	0.00	0.00	0.00
7,200.00	0.00	0.00	7,133.87	414.59	-654.72	774.95	0.00	0.00	0.00
GREENHORN									
7,217.13	0.00	0.00	7,151.00	414.59	-654.72	774.95	0.00	0.00	0.00
7,300.00	0.00	0.00	7,233.87	414.59	-654.72	774.95	0.00	0.00	0.00
PBHL_WIEDEMAN 4-5(660 FNL 660 FWL)50' TGT RAD									
7,300.13	0.00	0.00	7,234.00	414.59	-654.72	774.95	0.00	0.00	0.00

Design Targets

Target Name

- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- Shape									
PBHL_WIEDEMAN 4- - plan hits target center - Circle (radius 50.00)	0.00	0.00	7,234.00	414.59	-654.72	1,402,152.47	3,192,258.16	40° 26' 6.918 N	104° 48' 33.570 W

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)
800.00	800.00	8 5/8"	8.62	11.00

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_WIEDEMAN 4-5
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 4768.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 4768.00ft (Original Well Elev)
Site:	WELD_WIEDMAN PAD	North Reference:	True
Well:	P_WIEDEMAN 4-5	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_WIEDEMAN 4-5		
Design:	PLAN #1 5-25-10 RHS		

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,467.87	3,433.00	PARKMAN			
4,189.15	4,143.00	SUSSEX			
6,805.13	6,739.00	NIO			
7,140.13	7,074.00	CODELL			
7,217.13	7,151.00	GREENHORN			

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
900.00	900.00	0.00	0.00	Start Build 2.00
1,407.30	1,404.66	23.97	-37.85	Start 3890.53 hold at 1407.30 MD
5,297.83	5,234.34	390.63	-616.87	Start Drop -2.00
5,805.13	5,739.00	414.59	-654.72	Start 1495.00 hold at 5805.13 MD
7,300.13	7,234.00	414.59	-654.72	TD at 7300.13