



US ROCKIES REGION PLANNING

COLORADO NORTHERN ZONE - 83

WELD_WIEDMAN PAD

P_WIEDEMAN 18-5

P_WIEDEMAN 18-5

Plan: PLAN #1 5-25-10 RHS

Standard Planning Report

26 May, 2010

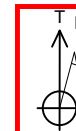




Project: COLORADO NORTHERN ZONE - 83
 Site: WELD_WIEDMAN PAD
 Well: P_WIEDEMAN 18-5
 Wellbore: P_WIEDEMAN 18-5
 Section: SECTION 5 T5N R65W
 SHL: 1148 FNL 1378 FWL
 Design: PLAN #1 5-25-10 RHS
 Latitude: 40° 26' 2.220 N
 Longitude: 104° 48' 24.847 W
 GL: 4753.00
 KB: WELL @ 4768.00ft (Original Well Elev)



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
3434.00	3437.93	PARKMAN
4144.00	4149.08	SUSSEX
6748.00	6755.50	NIO
7083.00	7090.50	CODELL
7160.00	7167.50	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
1062.95	3.26	198.12	1062.87	-4.40	-1.44	2.00	198.12	4.63	Start 4529.59 hold at 1062.95 MD
5592.55	3.26	198.12	5585.13	-249.15	-81.51	0.00	0.00	262.15	Start Drop -2.00
5755.50	0.00	0.00	5748.00	-253.55	-82.96	2.00	180.00	266.78	Start 1495.00 hold at 5755.50 MD
7250.50	0.00	0.00	7243.00	-253.55	-82.96	0.00	0.00	266.78	TD at 7250.50

LEGEND

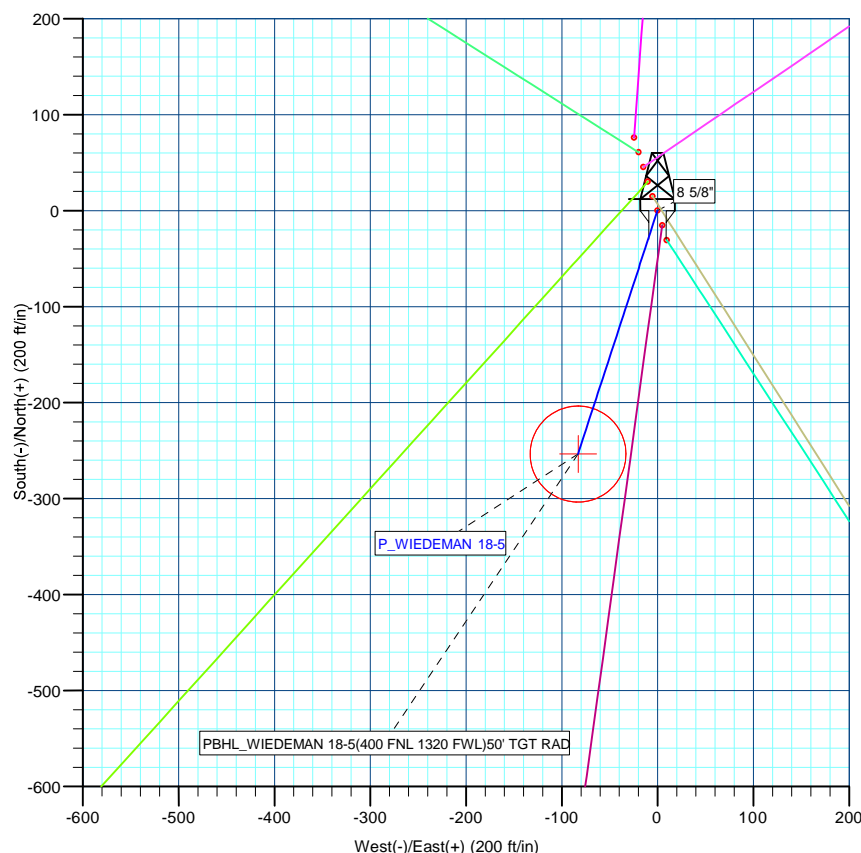
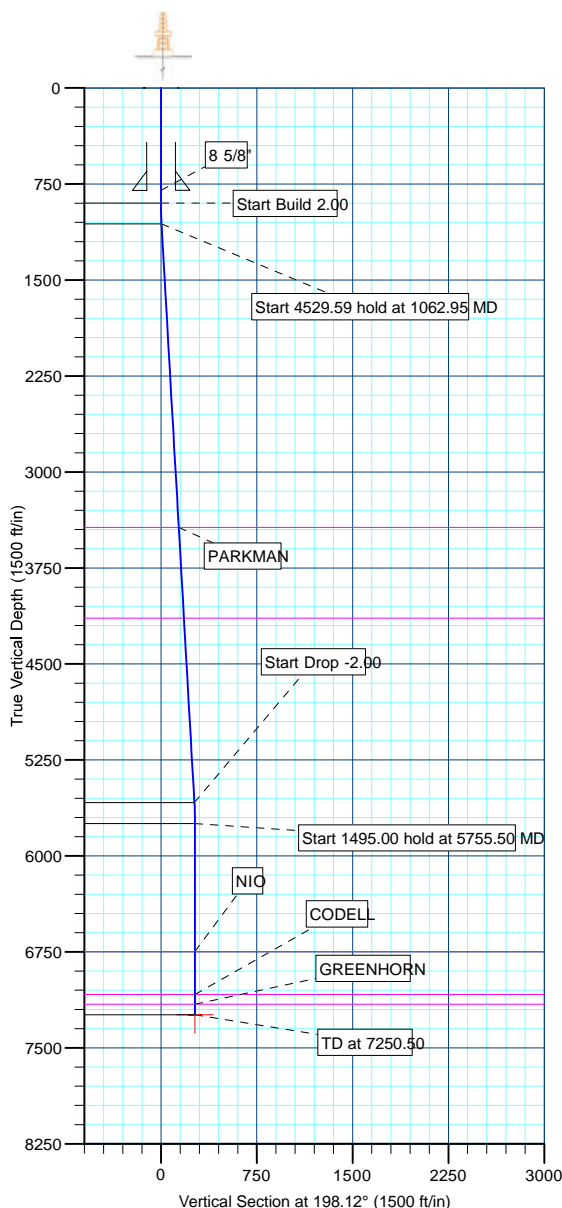
- P_WIEDEMAN 22-5, P_WIEDEMAN 22-5, PLAN #1 5-25-10 RHS V0
- P_WIEDEMAN 25-5, P_WIEDEMAN 25-5, PLAN #1 5-25-10 RHS V0
- P_WIEDEMAN 29-5, P_WIEDEMAN 29-5, PLAN #1 5-25-10 RHS V0
- P_WIEDEMAN 3-5, P_WIEDEMAN 3-5, PLAN #1 5-25-10 RHS V0
- P_WIEDEMAN 4-5, P_WIEDEMAN 4-5, PLAN #1 5-25-10 RHS V0
- P_WIEDEMAN 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	7243.00	-253.55	-82.96	40° 25' 59.714 N	104° 48' 25.920 W	Circle (Radius: 50.00)

WELL DETAILS: P_WIEDEMAN 18-5

+N/-S	+E/-W	Northing	Ground Level:	4753.00	Latitude	Longitude	Slot
0.00	0.00	1401682.33	Easting	3192936.34	40° 26' 2.220 N	104° 48' 24.847 W	



Plan: PLAN #1 5-25-10 RHS (P_WIEDEMAN 18-5/P_WIEDEMAN 18-5)

Created By: Robert H. Scott Date: 8:00, May 26 2010

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_WIEDEMAN 18-5
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 18-5	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_WIEDEMAN 18-5		
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 18-5					
Well Position	+N/-S	0.00 ft	Northing:	1,401,682.33 ft	Latitude:	40° 26' 2.220 N
	+E/-W	0.00 ft	Easting:	3,192,936.34 ft	Longitude:	104° 48' 24.847 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	4,753.00 ft

Wellbore	P_WIEDEMAN 18-5				
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	198.12

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	
1,062.95	3.26	198.12	1,062.87	-4.40	-1.44	2.00	2.00	0.00	198.12	
5,592.55	3.26	198.12	5,585.13	-249.15	-81.51	0.00	0.00	0.00	0.00	
5,755.50	0.00	0.00	5,748.00	-253.55	-82.96	2.00	-2.00	0.00	180.00	
7,250.50	0.00	0.00	7,243.00	-253.55	-82.96	0.00	0.00	0.00	0.00	PBHL_WIEDEMAN

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_WIEDEMAN 18-5
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 18-5	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_WIEDEMAN 18-5		
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	198.12	999.98	-1.66	-0.54	1.75	2.00	2.00	0.00
Start 4529.59 hold at 1062.95 MD									
1,062.95	3.26	198.12	1,062.87	-4.40	-1.44	4.63	2.00	2.00	0.00
1,100.00	3.26	198.12	1,099.85	-6.41	-2.10	6.74	0.00	0.00	0.00
1,200.00	3.26	198.12	1,199.69	-11.81	-3.86	12.42	0.00	0.00	0.00
1,300.00	3.26	198.12	1,299.53	-17.21	-5.63	18.11	0.00	0.00	0.00
1,400.00	3.26	198.12	1,399.37	-22.62	-7.40	23.79	0.00	0.00	0.00
1,500.00	3.26	198.12	1,499.21	-28.02	-9.17	29.48	0.00	0.00	0.00
1,600.00	3.26	198.12	1,599.04	-33.42	-10.93	35.16	0.00	0.00	0.00
1,700.00	3.26	198.12	1,698.88	-38.82	-12.70	40.85	0.00	0.00	0.00
1,800.00	3.26	198.12	1,798.72	-44.23	-14.47	46.54	0.00	0.00	0.00
1,900.00	3.26	198.12	1,898.56	-49.63	-16.24	52.22	0.00	0.00	0.00
2,000.00	3.26	198.12	1,998.40	-55.03	-18.01	57.91	0.00	0.00	0.00
2,100.00	3.26	198.12	2,098.23	-60.44	-19.77	63.59	0.00	0.00	0.00
2,200.00	3.26	198.12	2,198.07	-65.84	-21.54	69.28	0.00	0.00	0.00
2,300.00	3.26	198.12	2,297.91	-71.24	-23.31	74.96	0.00	0.00	0.00
2,400.00	3.26	198.12	2,397.75	-76.65	-25.08	80.65	0.00	0.00	0.00
2,500.00	3.26	198.12	2,497.59	-82.05	-26.84	86.33	0.00	0.00	0.00
2,600.00	3.26	198.12	2,597.43	-87.45	-28.61	92.02	0.00	0.00	0.00
2,700.00	3.26	198.12	2,697.26	-92.86	-30.38	97.70	0.00	0.00	0.00
2,800.00	3.26	198.12	2,797.10	-98.26	-32.15	103.39	0.00	0.00	0.00
2,900.00	3.26	198.12	2,896.94	-103.66	-33.92	109.07	0.00	0.00	0.00
3,000.00	3.26	198.12	2,996.78	-109.07	-35.68	114.76	0.00	0.00	0.00
3,100.00	3.26	198.12	3,096.62	-114.47	-37.45	120.44	0.00	0.00	0.00
3,200.00	3.26	198.12	3,196.46	-119.87	-39.22	126.13	0.00	0.00	0.00
3,300.00	3.26	198.12	3,296.29	-125.28	-40.99	131.81	0.00	0.00	0.00
3,400.00	3.26	198.12	3,396.13	-130.68	-42.75	137.50	0.00	0.00	0.00
PARKMAN									
3,437.93	3.26	198.12	3,434.00	-132.73	-43.43	139.65	0.00	0.00	0.00
3,500.00	3.26	198.12	3,495.97	-136.08	-44.52	143.18	0.00	0.00	0.00
3,600.00	3.26	198.12	3,595.81	-141.49	-46.29	148.87	0.00	0.00	0.00
3,700.00	3.26	198.12	3,695.65	-146.89	-48.06	154.55	0.00	0.00	0.00
3,800.00	3.26	198.12	3,795.49	-152.29	-49.83	160.24	0.00	0.00	0.00
3,900.00	3.26	198.12	3,895.32	-157.70	-51.59	165.92	0.00	0.00	0.00
4,000.00	3.26	198.12	3,995.16	-163.10	-53.36	171.61	0.00	0.00	0.00
4,100.00	3.26	198.12	4,095.00	-168.50	-55.13	177.29	0.00	0.00	0.00
SUSSEX									
4,149.08	3.26	198.12	4,144.00	-171.15	-56.00	180.08	0.00	0.00	0.00
4,200.00	3.26	198.12	4,194.84	-173.91	-56.90	182.98	0.00	0.00	0.00
4,300.00	3.26	198.12	4,294.68	-179.31	-58.67	188.66	0.00	0.00	0.00
4,400.00	3.26	198.12	4,394.52	-184.71	-60.43	194.35	0.00	0.00	0.00
4,500.00	3.26	198.12	4,494.35	-190.12	-62.20	200.03	0.00	0.00	0.00
4,600.00	3.26	198.12	4,594.19	-195.52	-63.97	205.72	0.00	0.00	0.00
4,700.00	3.26	198.12	4,694.03	-200.92	-65.74	211.40	0.00	0.00	0.00
4,800.00	3.26	198.12	4,793.87	-206.33	-67.50	217.09	0.00	0.00	0.00
4,900.00	3.26	198.12	4,893.71	-211.73	-69.27	222.77	0.00	0.00	0.00
5,000.00	3.26	198.12	4,993.54	-217.13	-71.04	228.46	0.00	0.00	0.00
5,100.00	3.26	198.12	5,093.38	-222.54	-72.81	234.14	0.00	0.00	0.00
5,200.00	3.26	198.12	5,193.22	-227.94	-74.58	239.83	0.00	0.00	0.00
5,300.00	3.26	198.12	5,293.06	-233.34	-76.34	245.51	0.00	0.00	0.00
5,400.00	3.26	198.12	5,392.90	-238.75	-78.11	251.20	0.00	0.00	0.00

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_WIEDEMAN 18-5
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 18-5	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_WIEDEMAN 18-5		
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)
5,500.00	3.26	198.12	5,492.74	-244.15	-79.88	256.88	0.00	0.00	0.00
Start Drop -2.00									
5,592.55	3.26	198.12	5,585.13	-249.15	-81.51	262.15	0.00	0.00	0.00
5,600.00	3.11	198.12	5,592.57	-249.54	-81.64	262.56	2.00	-2.00	0.00
5,700.00	1.11	198.12	5,692.50	-253.04	-82.79	266.24	2.00	-2.00	0.00
Start 1495.00 hold at 5755.50 MD									
5,755.50	0.00	0.00	5,748.00	-253.55	-82.96	266.78	2.00	-2.00	0.00
5,800.00	0.00	0.00	5,792.50	-253.55	-82.96	266.78	0.00	0.00	0.00
5,900.00	0.00	0.00	5,892.50	-253.55	-82.96	266.78	0.00	0.00	0.00
6,000.00	0.00	0.00	5,992.50	-253.55	-82.96	266.78	0.00	0.00	0.00
6,100.00	0.00	0.00	6,092.50	-253.55	-82.96	266.78	0.00	0.00	0.00
6,200.00	0.00	0.00	6,192.50	-253.55	-82.96	266.78	0.00	0.00	0.00
6,300.00	0.00	0.00	6,292.50	-253.55	-82.96	266.78	0.00	0.00	0.00
6,400.00	0.00	0.00	6,392.50	-253.55	-82.96	266.78	0.00	0.00	0.00
6,500.00	0.00	0.00	6,492.50	-253.55	-82.96	266.78	0.00	0.00	0.00
6,600.00	0.00	0.00	6,592.50	-253.55	-82.96	266.78	0.00	0.00	0.00
6,700.00	0.00	0.00	6,692.50	-253.55	-82.96	266.78	0.00	0.00	0.00
NIO									
6,755.50	0.00	0.00	6,748.00	-253.55	-82.96	266.78	0.00	0.00	0.00
6,800.00	0.00	0.00	6,792.50	-253.55	-82.96	266.78	0.00	0.00	0.00
6,900.00	0.00	0.00	6,892.50	-253.55	-82.96	266.78	0.00	0.00	0.00
7,000.00	0.00	0.00	6,992.50	-253.55	-82.96	266.78	0.00	0.00	0.00
CODELL									
7,090.50	0.00	0.00	7,083.00	-253.55	-82.96	266.78	0.00	0.00	0.00
7,100.00	0.00	0.00	7,092.50	-253.55	-82.96	266.78	0.00	0.00	0.00
GREENHORN									
7,167.50	0.00	0.00	7,160.00	-253.55	-82.96	266.78	0.00	0.00	0.00
7,200.00	0.00	0.00	7,192.50	-253.55	-82.96	266.78	0.00	0.00	0.00
PBHL_WIEDEMAN 18-5(400 FNL 1320 FWL)50' TGT RAD									
7,250.50	0.00	0.00	7,243.00	-253.55	-82.96	266.78	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 18-5	0.00	0.00	7,243.00	-253.55	-82.96	1,401,428.14	3,192,855.37	40° 25' 59.714 N	104° 48' 25.920 W
- plan hits target center									
- Circle (radius 50.00)									

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 18-5
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Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 4768.00ft (Original Well Elev)
Site:	WELD_WIEDEMAN PAD	North Reference:	True
Well:	P_WIEDEMAN 18-5	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_WIEDEMAN 18-5		
Design:	PLAN #1 5-25-10 RHS		

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,437.93	3,434.00	PARKMAN			
4,149.08	4,144.00	SUSSEX			
6,755.50	6,748.00	NIO			
7,090.50	7,083.00	CODELL			
7,167.50	7,160.00	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
1,062.95	1,062.87	-4.40	-1.44	Start 4529.59 hold at 1062.95 MD
5,592.55	5,585.13	-249.15	-81.51	Start Drop -2.00
5,755.50	5,748.00	-253.55	-82.96	Start 1495.00 hold at 5755.50 MD
7,250.50	7,243.00	-253.55	-82.96	TD at 7250.50