

# **US ROCKIES WATTENBERG PLANNING**

**WELD-NAD83-UTMFT13N  
1N-66W-26 BEIERLE 2-26HZ PAD  
BEIERLE 26-10HZ**

**Plan A**

**Plan: Permit Rev-1**

SHL Lat/Long: 40.028280/-104.741296  
Survey Program: MWD+IFR

## **Standard Planning Report**

**05 May, 2018**

Project: WELD-NAD83-UTMFT13N  
 Site: 1N-66W-26 BEIERLE 2-26HZ PAD  
 Well: BEIERLE 26-10HZ  
 Wellbore: Plan A  
 Design: Permit Rev-1

# US ROCKIES WATTENBERG PLANNING

CASING DETAILS		
TVD	MD	Size
1500.00	1513.89	9-5/8
7667.00	8135.89	5-1/2

WELL DETAILS: BEIERLE 26-10HZ  
 GL = 5118'  
 RKB = 17' @ 5135.00usft (Drilling Rig)

SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	
3	970.00	10.80	250.80	965.74	-22.25	-63.89	1.50	250.80	-23.61	
4	3770.00	10.80	250.80	3716.15	-194.80	-559.38	0.00	0.00	-206.66	
5	4310.00	0.00	0.00	4252.96	-211.48	-607.30	2.00	180.00	-224.37	
6	7007.85	0.00	0.00	6950.81	-211.48	-607.30	0.00	0.00	-224.37	
7	8135.89	90.24	1.22	7667.00	507.59	-591.98	8.00	1.22	494.87	
8	13320.40	90.24	1.22	7645.00	5690.88	-481.59	0.00	0.00	5679.33	BEIERLE 26-10HZ_BHL

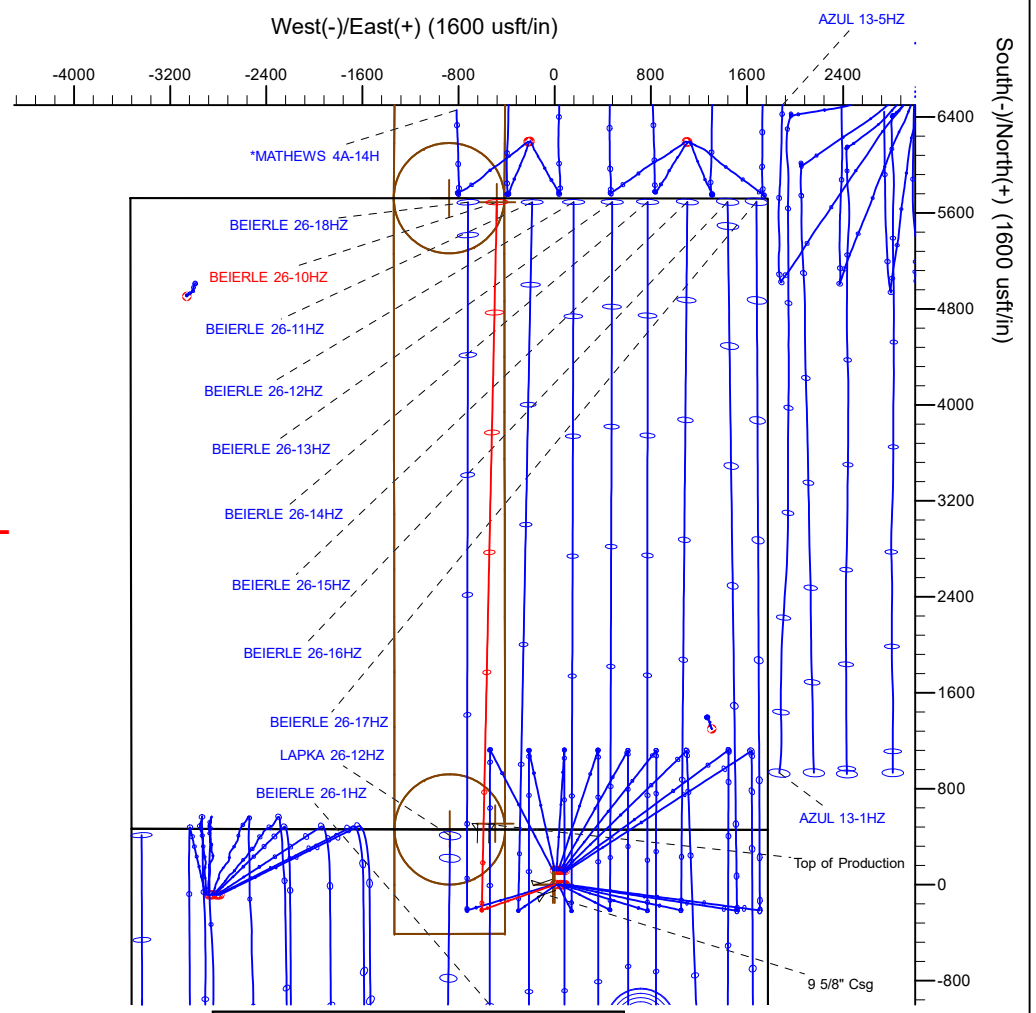
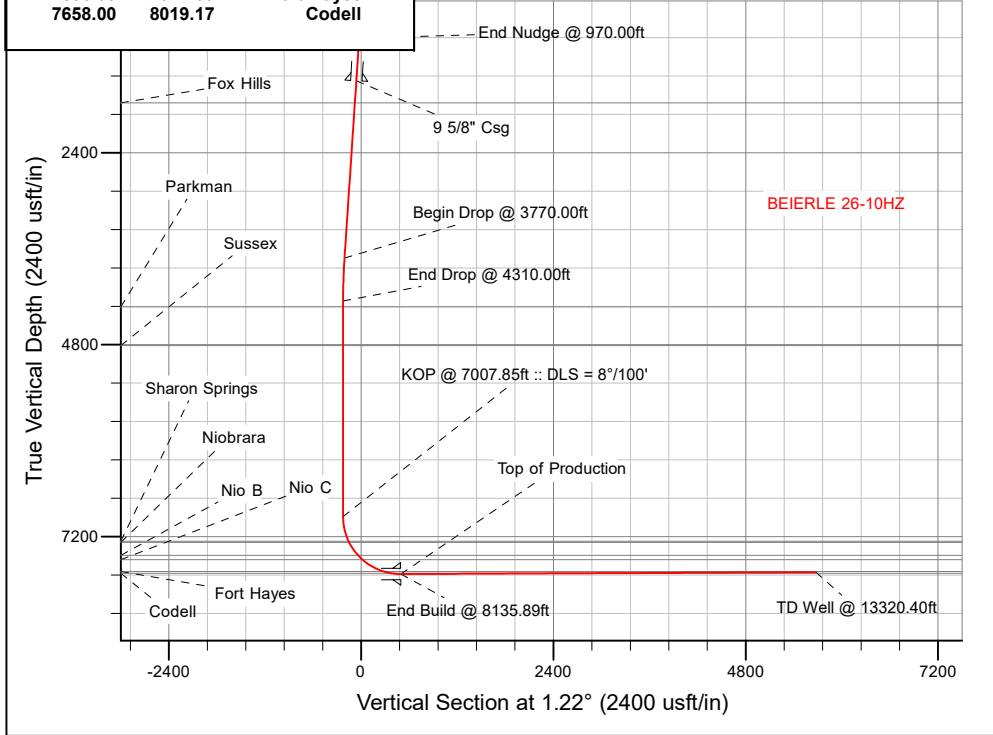
WELLBORE TARGET DETAILS (LAT/LONG)					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
BEIERLE 26-10HZ_SHL	0.00	0.00	0.00	40.028280	-104.741296
BEIERLE 26-10HZ_BHL	7645.00	5690.88	-481.59	40.043908	-104.743017

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
1775.00	1793.85	Fox Hills
4327.00	4384.04	Parkman
4811.00	4868.04	Sussex
7257.00	7324.23	Sharon Springs
7272.00	7340.92	Niobrara
7434.00	7538.20	Nio B
7487.00	7613.79	Nio C
7636.00	7921.35	Fort Hayes
7658.00	8019.17	Codell

**SHL**  
**460' FNL**  
**1774' FEL**

**HEEL**  
**48' FSL**  
**2366' FEL**

**TOE**  
**50' FNL**  
**2266' FEL**



**T**  
**M**  
 Azimuths to True North  
 Magnetic North: 8.09°

Magnetic Field  
 Strength: 52111.7snT  
 Dip Angle: 66.54°  
 Date: 3/23/2018  
 Model: IGRF2015

Plan: Permit Rev-1 (BEIERLE 26-10HZ/Plan A)  
 Date: 5/5/2018

## Corporate Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well BEIERLE 26-10HZ
<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>TVD Reference:</b>	RKB = 17' @ 5135.00usft (Drilling Rig)
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>MD Reference:</b>	RKB = 17' @ 5135.00usft (Drilling Rig)
<b>Site:</b>	1N-66W-26 BEIERLE 2-26HZ PAD	<b>North Reference:</b>	True
<b>Well:</b>	BEIERLE 26-10HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	Permit Rev-1		

<b>Project</b> WELD-NAD83-UTMFT13N			
<b>Map System:</b>	Universal Transverse Mercator (US Survey Feet)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Zone 13N (108 W to 102 W)		

<b>Site</b> 1N-66W-26 BEIERLE 2-26HZ PAD			
<b>Site Position:</b>		<b>Northing:</b>	14,537,256.31 usft
<b>From:</b>	Lat/Long	<b>Easting:</b>	1,712,821.93 usft
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13-3/16 "
		<b>Latitude:</b>	40.028609
		<b>Longitude:</b>	-104.741349
		<b>Grid Convergence:</b>	0.17 °

<b>Well</b> BEIERLE 26-10HZ			
<b>Well Position</b>	<b>+N-S</b>	-119.80 usft	<b>Northing:</b> 14,537,136.55 usft
	<b>+E-W</b>	14.84 usft	<b>Easting:</b> 1,712,837.11 usft
<b>Position Uncertainty</b>		3.28 usft	<b>Wellhead Elevation:</b>
			<b>Latitude:</b> 40.028280
			<b>Longitude:</b> -104.741296
			<b>Ground Level:</b> 5,118.00 usft

<b>Wellbore</b> Plan A					
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2015	3/23/2018	8.09	66.54	52,111.68170260

<b>Design</b> Permit Rev-1				
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	1.22

<b>Plan Survey Tool Program</b>		<b>Date</b> 5/5/2018
<b>Depth From (usft)</b>	<b>Depth To (usft)</b>	<b>Survey (Wellbore)</b>
1	0.00	1,500.00 Permit Rev-1 (Plan A)
		<b>Tool Name</b> APC_ISCWSA REV 2 MWD+II
		Fixed:v2:crustal field declinatio
2	1,500.00	13,320.40 Permit Rev-1 (Plan A)
		<b>Tool Name</b> APC_ISCWSA REV 2 MWD+II
		Fixed:v2:crustal field declinatio

## Corporate Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well BEIERLE 26-10HZ
<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>TVD Reference:</b>	RKB = 17' @ 5135.00usft (Drilling Rig)
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>MD Reference:</b>	RKB = 17' @ 5135.00usft (Drilling Rig)
<b>Site:</b>	1N-66W-26 BEIERLE 2-26HZ PAD	<b>North Reference:</b>	True
<b>Well:</b>	BEIERLE 26-10HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	Permit Rev-1		

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	0.00	
970.00	10.80	250.80	965.74	-22.25	-63.89	1.50	1.50	0.00	250.80	
3,770.00	10.80	250.80	3,716.15	-194.80	-559.38	0.00	0.00	0.00	0.00	
4,310.00	0.00	0.00	4,252.96	-211.48	-607.30	2.00	-2.00	20.22	180.00	
7,007.85	0.00	0.00	6,950.81	-211.48	-607.30	0.00	0.00	0.00	0.00	
8,135.89	90.24	1.22	7,667.00	507.59	-591.98	8.00	8.00	0.11	1.22	
13,320.40	90.24	1.22	7,645.00	5,690.88	-481.59	0.00	0.00	0.00	0.00	BEIERLE 26-10HZ_B

## Corporate Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well BEIERLE 26-10HZ
<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>TVD Reference:</b>	RKB = 17' @ 5135.00usft (Drilling Rig)
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>MD Reference:</b>	RKB = 17' @ 5135.00usft (Drilling Rig)
<b>Site:</b>	1N-66W-26 BEIERLE 2-26HZ PAD	<b>North Reference:</b>	True
<b>Well:</b>	BEIERLE 26-10HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	Permit Rev-1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Begin Nudge @ 250.00ft</b>										
300.00	0.75	250.80	300.00	-0.11	-0.31	-0.11	1.50	1.50	0.00	
400.00	2.25	250.80	399.96	-0.97	-2.78	-1.03	1.50	1.50	0.00	
500.00	3.75	250.80	499.82	-2.69	-7.72	-2.85	1.50	1.50	0.00	
600.00	5.25	250.80	599.51	-5.27	-15.13	-5.59	1.50	1.50	0.00	
700.00	6.75	250.80	698.96	-8.71	-25.00	-9.24	1.50	1.50	0.00	
800.00	8.25	250.80	798.10	-13.00	-37.33	-13.79	1.50	1.50	0.00	
900.00	9.75	250.80	896.87	-18.14	-52.10	-19.25	1.50	1.50	0.00	
970.00	10.80	250.80	965.74	-22.25	-63.89	-23.61	1.50	1.50	0.00	
<b>End Nudge @ 970.00ft</b>										
1,000.00	10.80	250.80	995.21	-24.10	-69.20	-25.57	0.00	0.00	0.00	
1,100.00	10.80	250.80	1,093.44	-30.26	-86.90	-32.10	0.00	0.00	0.00	
1,200.00	10.80	250.80	1,191.67	-36.42	-104.59	-38.64	0.00	0.00	0.00	
1,300.00	10.80	250.80	1,289.90	-42.59	-122.29	-45.18	0.00	0.00	0.00	
1,400.00	10.80	250.80	1,388.13	-48.75	-139.99	-51.72	0.00	0.00	0.00	
1,500.00	10.80	250.80	1,486.36	-54.91	-157.68	-58.26	0.00	0.00	0.00	
1,513.89	10.80	250.80	1,500.00	-55.77	-160.14	-59.16	0.00	0.00	0.00	
<b>9 5/8" Csg</b>										
1,600.00	10.80	250.80	1,584.58	-61.07	-175.38	-64.79	0.00	0.00	0.00	
1,700.00	10.80	250.80	1,682.81	-67.24	-193.07	-71.33	0.00	0.00	0.00	
1,793.85	10.80	250.80	1,775.00	-73.02	-209.68	-77.47	0.00	0.00	0.00	
<b>Fox Hills</b>										
1,800.00	10.80	250.80	1,781.04	-73.40	-210.77	-77.87	0.00	0.00	0.00	
1,900.00	10.80	250.80	1,879.27	-79.56	-228.47	-84.41	0.00	0.00	0.00	
2,000.00	10.80	250.80	1,977.50	-85.72	-246.16	-90.94	0.00	0.00	0.00	
2,100.00	10.80	250.80	2,075.73	-91.88	-263.86	-97.48	0.00	0.00	0.00	
2,200.00	10.80	250.80	2,173.96	-98.05	-281.55	-104.02	0.00	0.00	0.00	
2,300.00	10.80	250.80	2,272.19	-104.21	-299.25	-110.56	0.00	0.00	0.00	
2,400.00	10.80	250.80	2,370.41	-110.37	-316.94	-117.10	0.00	0.00	0.00	
2,500.00	10.80	250.80	2,468.64	-116.53	-334.64	-123.63	0.00	0.00	0.00	
2,600.00	10.80	250.80	2,566.87	-122.70	-352.34	-130.17	0.00	0.00	0.00	
2,700.00	10.80	250.80	2,665.10	-128.86	-370.03	-136.71	0.00	0.00	0.00	
2,800.00	10.80	250.80	2,763.33	-135.02	-387.73	-143.25	0.00	0.00	0.00	
2,900.00	10.80	250.80	2,861.56	-141.18	-405.42	-149.78	0.00	0.00	0.00	
3,000.00	10.80	250.80	2,959.79	-147.35	-423.12	-156.32	0.00	0.00	0.00	
3,100.00	10.80	250.80	3,058.02	-153.51	-440.82	-162.86	0.00	0.00	0.00	
3,200.00	10.80	250.80	3,156.24	-159.67	-458.51	-169.40	0.00	0.00	0.00	
3,300.00	10.80	250.80	3,254.47	-165.83	-476.21	-175.93	0.00	0.00	0.00	
3,400.00	10.80	250.80	3,352.70	-172.00	-493.90	-182.47	0.00	0.00	0.00	
3,500.00	10.80	250.80	3,450.93	-178.16	-511.60	-189.01	0.00	0.00	0.00	
3,600.00	10.80	250.80	3,549.16	-184.32	-529.30	-195.55	0.00	0.00	0.00	
3,700.00	10.80	250.80	3,647.39	-190.48	-546.99	-202.09	0.00	0.00	0.00	
3,770.00	10.80	250.80	3,716.15	-194.80	-559.38	-206.66	0.00	0.00	0.00	
<b>Begin Drop @ 3770.00ft</b>										
3,800.00	10.20	250.80	3,745.65	-196.59	-564.54	-208.57	2.00	-2.00	0.00	
3,900.00	8.20	250.80	3,844.35	-201.85	-579.64	-214.15	2.00	-2.00	0.00	
4,000.00	6.20	250.80	3,943.56	-205.97	-591.47	-218.52	2.00	-2.00	0.00	
4,100.00	4.20	250.80	4,043.14	-208.95	-600.03	-221.68	2.00	-2.00	0.00	
4,200.00	2.20	250.80	4,142.98	-210.79	-605.30	-223.63	2.00	-2.00	0.00	
4,300.00	0.20	250.80	4,242.96	-211.48	-607.28	-224.36	2.00	-2.00	0.00	

## Corporate Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well BEIERLE 26-10HZ
<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>TVD Reference:</b>	RKB = 17' @ 5135.00usft (Drilling Rig)
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>MD Reference:</b>	RKB = 17' @ 5135.00usft (Drilling Rig)
<b>Site:</b>	1N-66W-26 BEIERLE 2-26HZ PAD	<b>North Reference:</b>	True
<b>Well:</b>	BEIERLE 26-10HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	Permit Rev-1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,310.00	0.00	0.00	4,252.96	-211.48	-607.30	-224.37	2.00	-2.00	1,091.99
<b>End Drop @ 4310.00ft</b>									
4,384.04	0.00	0.00	4,327.00	-211.48	-607.30	-224.37	0.00	0.00	0.00
<b>Parkman</b>									
4,400.00	0.00	0.00	4,342.96	-211.48	-607.30	-224.37	0.00	0.00	0.00
4,500.00	0.00	0.00	4,442.96	-211.48	-607.30	-224.37	0.00	0.00	0.00
4,600.00	0.00	0.00	4,542.96	-211.48	-607.30	-224.37	0.00	0.00	0.00
4,700.00	0.00	0.00	4,642.96	-211.48	-607.30	-224.37	0.00	0.00	0.00
4,800.00	0.00	0.00	4,742.96	-211.48	-607.30	-224.37	0.00	0.00	0.00
4,868.04	0.00	0.00	4,811.00	-211.48	-607.30	-224.37	0.00	0.00	0.00
<b>Sussex</b>									
4,900.00	0.00	0.00	4,842.96	-211.48	-607.30	-224.37	0.00	0.00	0.00
5,000.00	0.00	0.00	4,942.96	-211.48	-607.30	-224.37	0.00	0.00	0.00
5,100.00	0.00	0.00	5,042.96	-211.48	-607.30	-224.37	0.00	0.00	0.00
5,200.00	0.00	0.00	5,142.96	-211.48	-607.30	-224.37	0.00	0.00	0.00
5,300.00	0.00	0.00	5,242.96	-211.48	-607.30	-224.37	0.00	0.00	0.00
5,400.00	0.00	0.00	5,342.96	-211.48	-607.30	-224.37	0.00	0.00	0.00
5,500.00	0.00	0.00	5,442.96	-211.48	-607.30	-224.37	0.00	0.00	0.00
5,600.00	0.00	0.00	5,542.96	-211.48	-607.30	-224.37	0.00	0.00	0.00
5,700.00	0.00	0.00	5,642.96	-211.48	-607.30	-224.37	0.00	0.00	0.00
5,800.00	0.00	0.00	5,742.96	-211.48	-607.30	-224.37	0.00	0.00	0.00
5,900.00	0.00	0.00	5,842.96	-211.48	-607.30	-224.37	0.00	0.00	0.00
6,000.00	0.00	0.00	5,942.96	-211.48	-607.30	-224.37	0.00	0.00	0.00
6,100.00	0.00	0.00	6,042.96	-211.48	-607.30	-224.37	0.00	0.00	0.00
6,200.00	0.00	0.00	6,142.96	-211.48	-607.30	-224.37	0.00	0.00	0.00
6,300.00	0.00	0.00	6,242.96	-211.48	-607.30	-224.37	0.00	0.00	0.00
6,400.00	0.00	0.00	6,342.96	-211.48	-607.30	-224.37	0.00	0.00	0.00
6,500.00	0.00	0.00	6,442.96	-211.48	-607.30	-224.37	0.00	0.00	0.00
6,600.00	0.00	0.00	6,542.96	-211.48	-607.30	-224.37	0.00	0.00	0.00
6,700.00	0.00	0.00	6,642.96	-211.48	-607.30	-224.37	0.00	0.00	0.00
6,800.00	0.00	0.00	6,742.96	-211.48	-607.30	-224.37	0.00	0.00	0.00
6,900.00	0.00	0.00	6,842.96	-211.48	-607.30	-224.37	0.00	0.00	0.00
7,000.00	0.00	0.00	6,942.96	-211.48	-607.30	-224.37	0.00	0.00	0.00
7,007.85	0.00	0.00	6,950.81	-211.48	-607.30	-224.37	0.00	0.00	0.00
<b>KOP @ 7007.85ft :: DLS = 8°/100'</b>									
7,100.00	7.37	1.22	7,042.70	-205.57	-607.17	-218.45	8.00	8.00	1.32
7,200.00	15.37	1.22	7,140.66	-185.87	-606.75	-198.74	8.00	8.00	0.00
7,300.00	23.37	1.22	7,234.92	-152.73	-606.05	-165.60	8.00	8.00	0.00
7,324.23	25.31	1.22	7,257.00	-142.75	-605.83	-155.61	8.00	8.00	0.00
<b>Sharon Springs</b>									
7,340.92	26.65	1.22	7,272.00	-135.44	-605.68	-148.30	8.00	8.00	0.00
<b>Niobrara</b>									
7,400.00	31.37	1.22	7,323.65	-106.80	-605.07	-119.66	8.00	8.00	0.00
7,500.00	39.37	1.22	7,405.13	-48.98	-603.84	-61.82	8.00	8.00	0.00
7,538.20	42.43	1.22	7,434.00	-23.97	-603.31	-36.81	8.00	8.00	0.00
<b>Nio B</b>									
7,600.00	47.37	1.22	7,477.76	19.63	-602.38	6.80	8.00	8.00	0.00
7,613.79	48.48	1.22	7,487.00	29.86	-602.16	17.03	8.00	8.00	0.00
<b>Nio C</b>									
7,700.00	55.37	1.22	7,540.14	97.67	-600.71	84.85	8.00	8.00	0.00
7,800.00	63.37	1.22	7,591.04	183.63	-598.88	170.83	8.00	8.00	0.00
7,900.00	71.37	1.22	7,629.48	275.83	-596.92	263.06	8.00	8.00	0.00
7,921.35	73.08	1.22	7,636.00	296.16	-596.49	283.39	8.00	8.00	0.00

## Corporate Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well BEIERLE 26-10HZ
<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>TVD Reference:</b>	RKB = 17' @ 5135.00usft (Drilling Rig)
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>MD Reference:</b>	RKB = 17' @ 5135.00usft (Drilling Rig)
<b>Site:</b>	1N-66W-26 BEIERLE 2-26HZ PAD	<b>North Reference:</b>	True
<b>Well:</b>	BEIERLE 26-10HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	Permit Rev-1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
<b>Fort Hayes</b>									
8,000.00	79.37	1.22	7,654.72	372.49	-594.86	359.74	8.00	8.00	0.00
8,019.17	80.91	1.22	7,658.00	391.37	-594.46	378.63	8.00	8.00	0.00
<b>Codell</b>									
8,100.00	87.37	1.22	7,666.25	471.72	-592.75	458.99	8.00	8.00	0.00
8,135.89	90.24	1.22	7,667.00	507.59	-591.98	494.87	8.00	8.00	0.00
<b>End Build @ 8135.89ft - Top of Production</b>									
8,200.00	90.24	1.22	7,666.73	571.69	-590.62	558.98	0.00	0.00	0.00
8,300.00	90.24	1.22	7,666.30	671.66	-588.49	658.98	0.00	0.00	0.00
8,400.00	90.24	1.22	7,665.88	771.64	-586.36	758.98	0.00	0.00	0.00
8,500.00	90.24	1.22	7,665.45	871.61	-584.23	858.98	0.00	0.00	0.00
8,600.00	90.24	1.22	7,665.03	971.59	-582.10	958.98	0.00	0.00	0.00
8,700.00	90.24	1.22	7,664.60	1,071.57	-579.97	1,058.98	0.00	0.00	0.00
8,800.00	90.24	1.22	7,664.18	1,171.54	-577.84	1,158.98	0.00	0.00	0.00
8,900.00	90.24	1.22	7,663.76	1,271.52	-575.71	1,258.97	0.00	0.00	0.00
9,000.00	90.24	1.22	7,663.33	1,371.50	-573.58	1,358.97	0.00	0.00	0.00
9,100.00	90.24	1.22	7,662.91	1,471.47	-571.45	1,458.97	0.00	0.00	0.00
9,200.00	90.24	1.22	7,662.48	1,571.45	-569.33	1,558.97	0.00	0.00	0.00
9,300.00	90.24	1.22	7,662.06	1,671.43	-567.20	1,658.97	0.00	0.00	0.00
9,400.00	90.24	1.22	7,661.63	1,771.40	-565.07	1,758.97	0.00	0.00	0.00
9,500.00	90.24	1.22	7,661.21	1,871.38	-562.94	1,858.97	0.00	0.00	0.00
9,600.00	90.24	1.22	7,660.79	1,971.36	-560.81	1,958.97	0.00	0.00	0.00
9,700.00	90.24	1.22	7,660.36	2,071.33	-558.68	2,058.97	0.00	0.00	0.00
9,800.00	90.24	1.22	7,659.94	2,171.31	-556.55	2,158.97	0.00	0.00	0.00
9,900.00	90.24	1.22	7,659.51	2,271.28	-554.42	2,258.97	0.00	0.00	0.00
10,000.00	90.24	1.22	7,659.09	2,371.26	-552.29	2,358.96	0.00	0.00	0.00
10,100.00	90.24	1.22	7,658.66	2,471.24	-550.16	2,458.96	0.00	0.00	0.00
10,200.00	90.24	1.22	7,658.24	2,571.21	-548.03	2,558.96	0.00	0.00	0.00
10,300.00	90.24	1.22	7,657.82	2,671.19	-545.90	2,658.96	0.00	0.00	0.00
10,400.00	90.24	1.22	7,657.39	2,771.17	-543.77	2,758.96	0.00	0.00	0.00
10,500.00	90.24	1.22	7,656.97	2,871.14	-541.64	2,858.96	0.00	0.00	0.00
10,600.00	90.24	1.22	7,656.54	2,971.12	-539.51	2,958.96	0.00	0.00	0.00
10,700.00	90.24	1.22	7,656.12	3,071.10	-537.38	3,058.96	0.00	0.00	0.00
10,800.00	90.24	1.22	7,655.69	3,171.07	-535.26	3,158.96	0.00	0.00	0.00
10,900.00	90.24	1.22	7,655.27	3,271.05	-533.13	3,258.96	0.00	0.00	0.00
11,000.00	90.24	1.22	7,654.85	3,371.03	-531.00	3,358.96	0.00	0.00	0.00
11,100.00	90.24	1.22	7,654.42	3,471.00	-528.87	3,458.95	0.00	0.00	0.00
11,200.00	90.24	1.22	7,654.00	3,570.98	-526.74	3,558.95	0.00	0.00	0.00
11,300.00	90.24	1.22	7,653.57	3,670.95	-524.61	3,658.95	0.00	0.00	0.00
11,400.00	90.24	1.22	7,653.15	3,770.93	-522.48	3,758.95	0.00	0.00	0.00
11,500.00	90.24	1.22	7,652.72	3,870.91	-520.35	3,858.95	0.00	0.00	0.00
11,600.00	90.24	1.22	7,652.30	3,970.88	-518.22	3,958.95	0.00	0.00	0.00
11,700.00	90.24	1.22	7,651.88	4,070.86	-516.09	4,058.95	0.00	0.00	0.00
11,800.00	90.24	1.22	7,651.45	4,170.84	-513.96	4,158.95	0.00	0.00	0.00
11,900.00	90.24	1.22	7,651.03	4,270.81	-511.83	4,258.95	0.00	0.00	0.00
12,000.00	90.24	1.22	7,650.60	4,370.79	-509.70	4,358.95	0.00	0.00	0.00
12,100.00	90.24	1.22	7,650.18	4,470.77	-507.57	4,458.95	0.00	0.00	0.00
12,200.00	90.24	1.22	7,649.75	4,570.74	-505.44	4,558.94	0.00	0.00	0.00
12,300.00	90.24	1.22	7,649.33	4,670.72	-503.32	4,658.94	0.00	0.00	0.00
12,400.00	90.24	1.22	7,648.91	4,770.70	-501.19	4,758.94	0.00	0.00	0.00
12,500.00	90.24	1.22	7,648.48	4,870.67	-499.06	4,858.94	0.00	0.00	0.00
12,600.00	90.24	1.22	7,648.06	4,970.65	-496.93	4,958.94	0.00	0.00	0.00
12,700.00	90.24	1.22	7,647.63	5,070.62	-494.80	5,058.94	0.00	0.00	0.00

## Corporate Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well BEIERLE 26-10HZ
<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>TVD Reference:</b>	RKB = 17' @ 5135.00usft (Drilling Rig)
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>MD Reference:</b>	RKB = 17' @ 5135.00usft (Drilling Rig)
<b>Site:</b>	1N-66W-26 BEIERLE 2-26HZ PAD	<b>North Reference:</b>	True
<b>Well:</b>	BEIERLE 26-10HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	Permit Rev-1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
12,800.00	90.24	1.22	7,647.21	5,170.60	-492.67	5,158.94	0.00	0.00	0.00	
12,900.00	90.24	1.22	7,646.78	5,270.58	-490.54	5,258.94	0.00	0.00	0.00	
13,000.00	90.24	1.22	7,646.36	5,370.55	-488.41	5,358.94	0.00	0.00	0.00	
13,100.00	90.24	1.22	7,645.94	5,470.53	-486.28	5,458.94	0.00	0.00	0.00	
13,200.00	90.24	1.22	7,645.51	5,570.51	-484.15	5,558.94	0.00	0.00	0.00	
13,300.00	90.24	1.22	7,645.09	5,670.48	-482.02	5,658.93	0.00	0.00	0.00	
13,320.40	90.24	1.22	7,645.00	5,690.88	-481.59	5,679.33	0.00	0.00	0.00	
TD Well @ 13320.40ft										

Casing Points						
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")		
1,513.89	1,500.00	9 5/8" Csg	9-5/8	13-1/2		
8,135.89	7,667.00	Top of Production	5-1/2	7-7/8		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,793.85	1,775.00	Fox Hills				
4,384.04	4,327.00	Parkman				
4,868.04	4,811.00	Sussex				
7,324.23	7,257.00	Sharon Springs				
7,340.92	7,272.00	Niobrara				
7,538.20	7,434.00	Nio B				
7,613.79	7,487.00	Nio C				
7,921.35	7,636.00	Fort Hayes				
8,019.17	7,658.00	Codell				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
250.00	250.00	0.00	0.00	Begin Nudge @ 250.00ft	
970.00	965.74	-22.25	-63.89	End Nudge @ 970.00ft	
3,770.00	3,716.15	-194.80	-559.38	Begin Drop @ 3770.00ft	
4,310.00	4,252.96	-211.48	-607.30	End Drop @ 4310.00ft	
7,007.85	6,950.81	-211.48	-607.30	KOP @ 7007.85ft :: DLS = 8°/100'	
8,135.89	7,667.00	507.59	-591.98	End Build @ 8135.89ft	
13,320.40	7,645.00	5,690.88	-481.59	TD Well @ 13320.40ft	