

# **US ROCKIES WATTENBERG PLANNING**

**WELD-NAD83-UTMFT13N**

**1N-66W-26 BEIERLE 2-26HZ PAD**

**BEIERLE 26-14HZ**

## **Plan A**

### **Plan: Permit Rev-2**

Surface Location Lat/Long: 40.028280/-104.741135

Survey Program: MWD+IFR

## **Standard Planning Report**

**04 March, 2020**

Project: WELD-NAD83-UTMFT13N  
 Site: 1N-66W-26 BEIERLE 2-26HZ PAD  
 Well: BEIERLE 26-14HZ  
 Wellbore: Plan A  
 Design: Permit Rev-2

# US ROCKIES WATTENBERG PLANNING

## CASING DETAILS

TVD	MD	Name	Size
1500.00	1526.50	9 5/8" Csg	9-5/8
7299.00	8371.79	Top of Production	5-1/2

## SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	
3	2080.00	28.20	183.55	2005.01	-452.52	-28.07	1.50	183.55	-452.05	
4	6895.40	28.20	183.55	6248.84	-2723.67	-168.97	0.00	0.00	-2720.87	
5	8371.79	90.13	356.78	7299.00	-2094.40	-271.11	8.00	172.32	-2090.15	
6	10308.17	90.13	356.78	7294.75	-161.09	-380.00	0.00	0.00	-155.44	BEIERLE 26-14HZ_Lateral Target
7	10523.33	90.13	0.00	7294.28	53.95	-386.04	1.50	90.01	59.67	
8	16142.93	90.13	0.00	7282.00	5673.54	-385.70	0.00	0.00	5678.64	BEIERLE 26-14HZ_BHL

## WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
BEIERLE 26-14HZ_SHL	0.00	0.00	0.00	40.028280	-104.741135
BEIERLE 26-14HZ_BHL	7282.00	5673.54	-385.70	40.043860	-104.742513

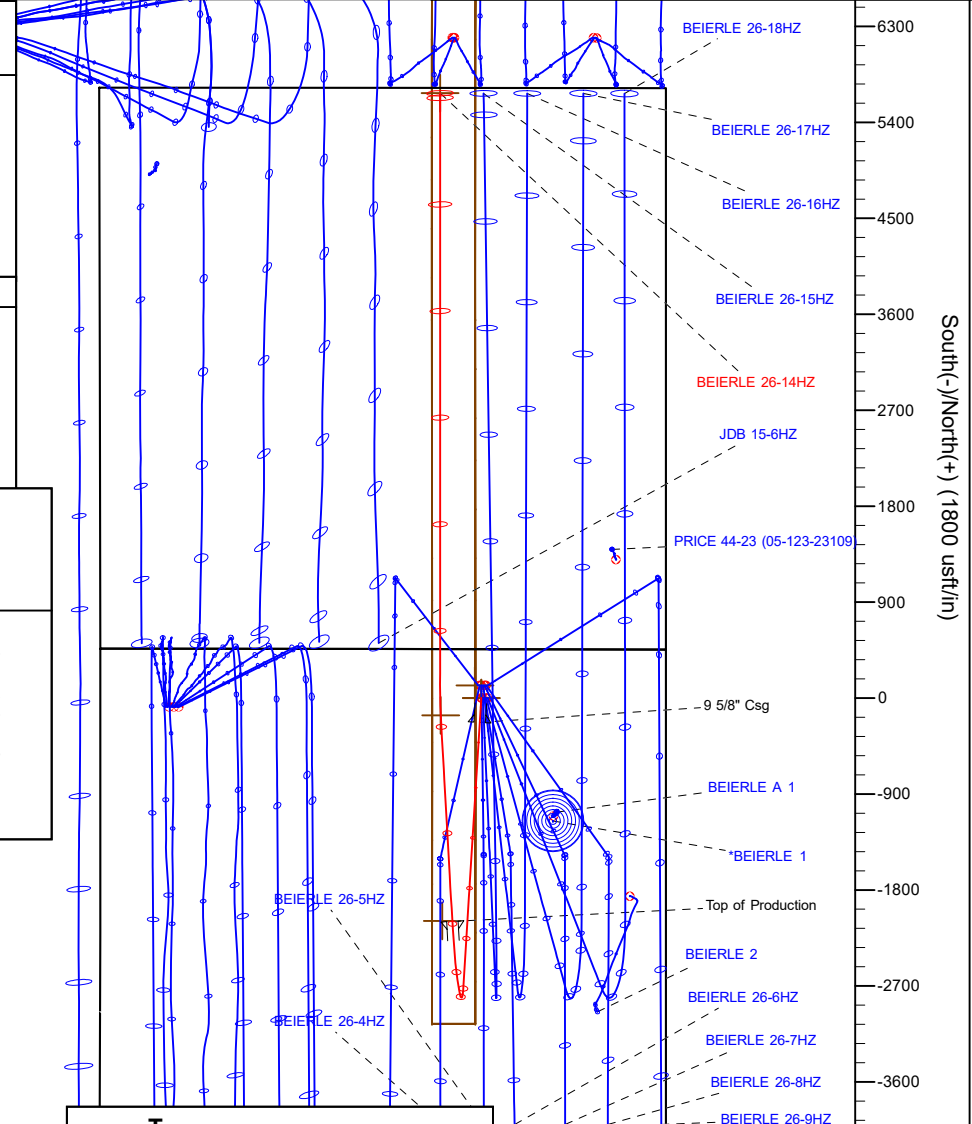
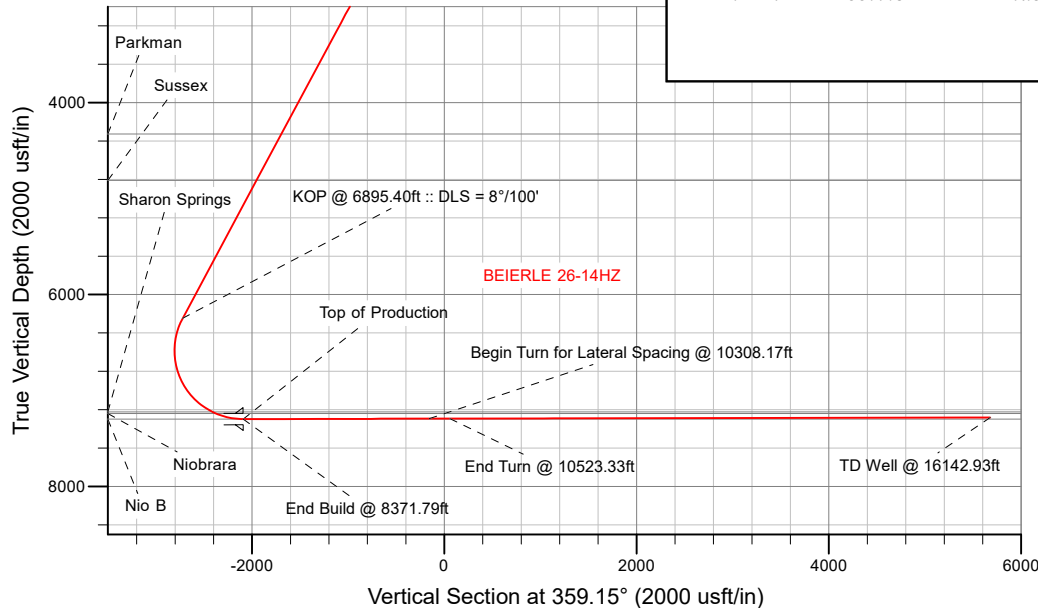
## FORMATION TOP DETAILS

TVDPath	MDPath	Formation
1775.00	1823.44	Fox Hills
4327.00	4714.72	Parkman
4811.00	5263.91	Sussex
7225.00	8041.43	Sharon Springs
7240.00	8077.16	Niobrara
7299.00	8367.45	Nio B

**SHL**  
**460' FNL**  
**1729' FEL**

**HEEL**  
**2555' FNL**  
**2001' FEL**

**BHL**  
**50' FNL**  
**2114' FEL**



Azimuths to True North  
 Magnetic North: 7.88°

Magnetic Field  
 Strength: 51891.3snT  
 Dip Angle: 66.49°  
 Date: 2/29/2020  
 Model: IGRF2015

## WELL DETAILS: BEIERLE 26-14HZ

GL = 5118'

RKB = 17" @ 5135.00usft (Drilling Rig)

Plan: Permit Rev-2 (BEIERLE 26-14HZ/Plan A)

Date: 3/5/2020

## Corporate Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well BEIERLE 26-14HZ
<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 26-14HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	Permit Rev-2		

<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>Latitude:</b> 40.028609
<b>From:</b>	Lat/Long	<b>Easting:</b>	1,712,821.93 usft	<b>Longitude:</b> -104.741349
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13-3/16 "	<b>Grid Convergence:</b> 0.17 °

<b>Well</b>	BEIERLE 26-14HZ			
<b>Well Position</b>	<b>+N/-S</b>	-119.80 usft	<b>Northing:</b>	14,537,136.68 usft
	<b>+E/-W</b>	59.91 usft	<b>Easting:</b>	1,712,882.18 usft
<b>Position Uncertainty</b>		3.28 usft	<b>Wellhead Elevation:</b>	<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	2/29/2020	7.88	66.49	51,891.33263755

<b>Design</b>	Permit Rev-2			
<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	359.15

<b>Plan Survey Tool Program</b>		<b>Date</b>	3/4/2020		
<b>Depth From (usft)</b>	<b>Depth To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>	
1	0.00	1,500.00	Permit Rev-2 (Plan A)	APC_ISCWSA REV 2 MWD+II Fixed:v2:crustal field declinatio	
2	1,500.00	16,142.93	Permit Rev-2 (Plan A)	APC_ISCWSA REV 2 MWD+II Fixed:v2:crustal field declinatio	

Corporate  
Planning Report

Database:	PLANNING	Local Co-ordinate Reference:	Well BEIERLE 26-14HZ
Company:	US ROCKIES WATTENBERG PLANNING	TVD Reference:	RKB = 17' @ 5135.00usft (Drilling Rig)
Project:	WELD-NAD83-UTMFT13N	MD Reference:	RKB = 17' @ 5135.00usft (Drilling Rig)
Site:	1N-66W-26 BEIERLE 2-26HZ PAD	North Reference:	True
Well:	BEIERLE 26-14HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
Design:	Permit Rev-2		

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	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,080.00	28.20	183.55	2,005.01	-452.52	-28.07	1.50	1.50	0.00	183.55	
6,895.40	28.20	183.55	6,248.84	-2,723.67	-168.97	0.00	0.00	0.00	0.00	
8,371.79	90.13	356.78	7,299.00	-2,094.40	-271.11	8.00	4.19	11.73	172.32	
10,308.17	90.13	356.78	7,294.75	-161.09	-380.00	0.00	0.00	0.00	0.00	BEIERLE 26-14HZ_Li
10,523.33	90.13	0.00	7,294.28	53.95	-386.04	1.50	0.00	1.50	90.01	
16,142.93	90.13	0.00	7,282.00	5,673.54	-385.70	0.00	0.00	0.00	0.00	BEIERLE 26-14HZ_B

# Corporate Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well BEIERLE 26-14HZ
<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 26-14HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	Permit Rev-2		

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
100.00	0.00	0.00	100.00	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
Begin Nudge @ 200.00ft									
300.00	1.50	183.55	299.99	-1.31	-0.08	-1.31	1.50	1.50	0.00
400.00	3.00	183.55	399.91	-5.22	-0.32	-5.22	1.50	1.50	0.00
500.00	4.50	183.55	499.69	-11.75	-0.73	-11.74	1.50	1.50	0.00
600.00	6.00	183.55	599.27	-20.88	-1.30	-20.86	1.50	1.50	0.00
700.00	7.50	183.55	698.57	-32.62	-2.02	-32.58	1.50	1.50	0.00
800.00	9.00	183.55	797.54	-46.94	-2.91	-46.89	1.50	1.50	0.00
900.00	10.50	183.55	896.09	-63.84	-3.96	-63.77	1.50	1.50	0.00
1,000.00	12.00	183.55	994.16	-83.31	-5.17	-83.22	1.50	1.50	0.00
1,100.00	13.50	183.55	1,091.70	-105.34	-6.53	-105.23	1.50	1.50	0.00
1,200.00	15.00	183.55	1,188.62	-129.90	-8.06	-129.77	1.50	1.50	0.00
1,300.00	16.50	183.55	1,284.86	-157.00	-9.74	-156.83	1.50	1.50	0.00
1,400.00	18.00	183.55	1,380.36	-186.59	-11.58	-186.40	1.50	1.50	0.00
1,500.00	19.50	183.55	1,475.05	-218.67	-13.57	-218.45	1.50	1.50	0.00
1,526.50	19.90	183.55	1,500.00	-227.59	-14.12	-227.35	1.50	1.50	0.00
9 5/8" Csg									
1,600.00	21.00	183.55	1,568.86	-253.22	-15.71	-252.96	1.50	1.50	0.00
1,700.00	22.50	183.55	1,661.74	-290.20	-18.00	-289.90	1.50	1.50	0.00
1,800.00	24.00	183.55	1,753.62	-329.60	-20.45	-329.26	1.50	1.50	0.00
1,823.44	24.35	183.55	1,775.00	-339.18	-21.04	-338.83	1.50	1.50	0.00
Fox Hills									
1,900.00	25.50	183.55	1,844.43	-371.38	-23.04	-371.00	1.50	1.50	0.00
2,000.00	27.00	183.55	1,934.12	-415.53	-25.78	-415.10	1.50	1.50	0.00
2,080.00	28.20	183.55	2,005.01	-452.52	-28.07	-452.05	1.50	1.50	0.00
Hold Tangent @ 2080.00ft									
2,100.00	28.20	183.55	2,022.64	-461.95	-28.66	-461.47	0.00	0.00	0.00
2,200.00	28.20	183.55	2,110.77	-509.11	-31.58	-508.59	0.00	0.00	0.00
2,300.00	28.20	183.55	2,198.90	-556.28	-34.51	-555.71	0.00	0.00	0.00
2,400.00	28.20	183.55	2,287.03	-603.44	-37.44	-602.82	0.00	0.00	0.00
2,500.00	28.20	183.55	2,375.16	-650.61	-40.36	-649.94	0.00	0.00	0.00
2,600.00	28.20	183.55	2,463.29	-697.77	-43.29	-697.05	0.00	0.00	0.00
2,700.00	28.20	183.55	2,551.42	-744.94	-46.21	-744.17	0.00	0.00	0.00
2,800.00	28.20	183.55	2,639.55	-792.10	-49.14	-791.28	0.00	0.00	0.00
2,900.00	28.20	183.55	2,727.68	-839.27	-52.07	-838.40	0.00	0.00	0.00
3,000.00	28.20	183.55	2,815.81	-886.43	-54.99	-885.52	0.00	0.00	0.00
3,100.00	28.20	183.55	2,903.94	-933.59	-57.92	-932.63	0.00	0.00	0.00
3,200.00	28.20	183.55	2,992.07	-980.76	-60.84	-979.75	0.00	0.00	0.00
3,300.00	28.20	183.55	3,080.20	-1,027.92	-63.77	-1,026.86	0.00	0.00	0.00
3,400.00	28.20	183.55	3,168.33	-1,075.09	-66.70	-1,073.98	0.00	0.00	0.00
3,500.00	28.20	183.55	3,256.46	-1,122.25	-69.62	-1,121.10	0.00	0.00	0.00
3,600.00	28.20	183.55	3,344.59	-1,169.42	-72.55	-1,168.21	0.00	0.00	0.00
3,700.00	28.20	183.55	3,432.72	-1,216.58	-75.47	-1,215.33	0.00	0.00	0.00
3,800.00	28.20	183.55	3,520.85	-1,263.75	-78.40	-1,262.44	0.00	0.00	0.00
3,900.00	28.20	183.55	3,608.98	-1,310.91	-81.33	-1,309.56	0.00	0.00	0.00
4,000.00	28.20	183.55	3,697.11	-1,358.07	-84.25	-1,356.67	0.00	0.00	0.00
4,100.00	28.20	183.55	3,785.24	-1,405.24	-87.18	-1,403.79	0.00	0.00	0.00
4,200.00	28.20	183.55	3,873.37	-1,452.40	-90.11	-1,450.91	0.00	0.00	0.00
4,300.00	28.20	183.55	3,961.50	-1,499.57	-93.03	-1,498.02	0.00	0.00	0.00
4,400.00	28.20	183.55	4,049.64	-1,546.73	-95.96	-1,545.14	0.00	0.00	0.00
4,500.00	28.20	183.55	4,137.77	-1,593.90	-98.88	-1,592.25	0.00	0.00	0.00
4,600.00	28.20	183.55	4,225.90	-1,641.06	-101.81	-1,639.37	0.00	0.00	0.00

# Corporate Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well BEIERLE 26-14HZ
<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 26-14HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	Permit Rev-2		

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)
4,700.00	28.20	183.55	4,314.03	-1,688.22	-104.74	-1,686.49	0.00	0.00	0.00
4,714.72	28.20	183.55	4,327.00	-1,695.17	-105.17	-1,693.42	0.00	0.00	0.00
<b>Parkman</b>									
4,800.00	28.20	183.55	4,402.16	-1,735.39	-107.66	-1,733.60	0.00	0.00	0.00
4,900.00	28.20	183.55	4,490.29	-1,782.55	-110.59	-1,780.72	0.00	0.00	0.00
5,000.00	28.20	183.55	4,578.42	-1,829.72	-113.51	-1,827.83	0.00	0.00	0.00
5,100.00	28.20	183.55	4,666.55	-1,876.88	-116.44	-1,874.95	0.00	0.00	0.00
5,200.00	28.20	183.55	4,754.68	-1,924.05	-119.37	-1,922.06	0.00	0.00	0.00
5,263.91	28.20	183.55	4,811.00	-1,954.19	-121.24	-1,952.18	0.00	0.00	0.00
<b>Sussex</b>									
5,300.00	28.20	183.55	4,842.81	-1,971.21	-122.29	-1,969.18	0.00	0.00	0.00
5,400.00	28.20	183.55	4,930.94	-2,018.38	-125.22	-2,016.30	0.00	0.00	0.00
5,500.00	28.20	183.55	5,019.07	-2,065.54	-128.14	-2,063.41	0.00	0.00	0.00
5,600.00	28.20	183.55	5,107.20	-2,112.70	-131.07	-2,110.53	0.00	0.00	0.00
5,700.00	28.20	183.55	5,195.33	-2,159.87	-134.00	-2,157.64	0.00	0.00	0.00
5,800.00	28.20	183.55	5,283.46	-2,207.03	-136.92	-2,204.76	0.00	0.00	0.00
5,900.00	28.20	183.55	5,371.59	-2,254.20	-139.85	-2,251.87	0.00	0.00	0.00
6,000.00	28.20	183.55	5,459.72	-2,301.36	-142.77	-2,298.99	0.00	0.00	0.00
6,100.00	28.20	183.55	5,547.85	-2,348.53	-145.70	-2,346.11	0.00	0.00	0.00
6,200.00	28.20	183.55	5,635.98	-2,395.69	-148.63	-2,393.22	0.00	0.00	0.00
6,300.00	28.20	183.55	5,724.11	-2,442.86	-151.55	-2,440.34	0.00	0.00	0.00
6,400.00	28.20	183.55	5,812.24	-2,490.02	-154.48	-2,487.45	0.00	0.00	0.00
6,500.00	28.20	183.55	5,900.37	-2,537.18	-157.40	-2,534.57	0.00	0.00	0.00
6,600.00	28.20	183.55	5,988.50	-2,584.35	-160.33	-2,581.69	0.00	0.00	0.00
6,700.00	28.20	183.55	6,076.63	-2,631.51	-163.26	-2,628.80	0.00	0.00	0.00
6,800.00	28.20	183.55	6,164.76	-2,678.68	-166.18	-2,675.92	0.00	0.00	0.00
6,895.40	28.20	183.55	6,248.84	-2,723.67	-168.97	-2,720.87	0.00	0.00	0.00
<b>KOP @ 6895.40ft :: DLS = 8°/100'</b>									
6,900.00	27.84	183.66	6,252.90	-2,725.83	-169.11	-2,723.02	8.00	-7.93	2.29
7,000.00	19.94	186.82	6,344.27	-2,766.12	-172.63	-2,763.26	8.00	-7.90	3.17
7,100.00	12.16	193.85	6,440.31	-2,793.32	-177.18	-2,790.38	8.00	-7.77	7.03
7,200.00	5.12	221.76	6,539.14	-2,806.90	-182.68	-2,803.88	8.00	-7.04	27.90
7,300.00	5.68	317.26	6,638.86	-2,806.59	-189.03	-2,803.47	8.00	0.57	95.51
7,400.00	12.89	340.71	6,737.51	-2,792.39	-196.08	-2,789.18	8.00	7.21	23.45
7,500.00	20.69	347.12	6,833.19	-2,764.60	-203.72	-2,761.27	8.00	7.79	6.41
7,600.00	28.59	350.10	6,924.01	-2,723.74	-211.79	-2,720.30	8.00	7.91	2.98
7,700.00	36.54	351.87	7,008.22	-2,670.61	-220.13	-2,667.05	8.00	7.94	1.77
7,800.00	44.50	353.07	7,084.18	-2,606.25	-228.58	-2,602.57	8.00	7.96	1.21
7,900.00	52.47	353.98	7,150.41	-2,531.90	-236.98	-2,528.11	8.00	7.97	0.91
8,000.00	60.45	354.71	7,205.62	-2,449.03	-245.16	-2,445.12	8.00	7.98	0.73
8,041.43	63.75	354.98	7,225.00	-2,412.57	-248.45	-2,408.62	8.00	7.98	0.65
<b>Sharon Springs</b>									
8,077.16	66.61	355.20	7,240.00	-2,380.25	-251.22	-2,376.27	8.00	7.98	0.61
<b>Niobrara</b>									
8,100.00	68.43	355.33	7,248.73	-2,359.23	-252.96	-2,355.21	8.00	7.98	0.59
8,200.00	76.41	355.89	7,278.91	-2,264.25	-260.24	-2,260.14	8.00	7.98	0.56
8,300.00	84.39	356.41	7,295.57	-2,165.95	-266.85	-2,161.76	8.00	7.98	0.52
8,367.45	89.78	356.75	7,299.00	-2,098.73	-270.86	-2,094.48	8.00	7.98	0.51
<b>Nio B</b>									
8,371.79	90.13	356.78	7,299.00	-2,094.40	-271.11	-2,090.15	8.00	7.98	0.51
<b>End Build @ 8371.79ft - Top of Production</b>									
8,400.00	90.13	356.78	7,298.94	-2,066.24	-272.69	-2,061.97	0.00	0.00	0.00
8,500.00	90.13	356.78	7,298.72	-1,966.40	-278.32	-1,962.05	0.00	0.00	0.00

# Corporate Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well BEIERLE 26-14HZ
<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 26-14HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	Permit Rev-2		

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)	
8,600.00	90.13	356.78	7,298.50	-1,866.56	-283.94	-1,862.14	0.00	0.00	0.00	
8,700.00	90.13	356.78	7,298.28	-1,766.71	-289.56	-1,762.22	0.00	0.00	0.00	
8,800.00	90.13	356.78	7,298.06	-1,666.87	-295.19	-1,662.31	0.00	0.00	0.00	
8,900.00	90.13	356.78	7,297.84	-1,567.03	-300.81	-1,562.40	0.00	0.00	0.00	
9,000.00	90.13	356.78	7,297.62	-1,467.19	-306.43	-1,462.48	0.00	0.00	0.00	
9,100.00	90.13	356.78	7,297.40	-1,367.35	-312.06	-1,362.57	0.00	0.00	0.00	
9,200.00	90.13	356.78	7,297.18	-1,267.51	-317.68	-1,262.65	0.00	0.00	0.00	
9,300.00	90.13	356.78	7,296.96	-1,167.66	-323.30	-1,162.74	0.00	0.00	0.00	
9,400.00	90.13	356.78	7,296.75	-1,067.82	-328.93	-1,062.83	0.00	0.00	0.00	
9,500.00	90.13	356.78	7,296.53	-967.98	-334.55	-962.91	0.00	0.00	0.00	
9,600.00	90.13	356.78	7,296.31	-868.14	-340.18	-863.00	0.00	0.00	0.00	
9,700.00	90.13	356.78	7,296.09	-768.30	-345.80	-763.08	0.00	0.00	0.00	
9,800.00	90.13	356.78	7,295.87	-668.46	-351.42	-663.17	0.00	0.00	0.00	
9,900.00	90.13	356.78	7,295.65	-568.62	-357.05	-563.26	0.00	0.00	0.00	
10,000.00	90.13	356.78	7,295.43	-468.77	-362.67	-463.34	0.00	0.00	0.00	
10,100.00	90.13	356.78	7,295.21	-368.93	-368.29	-363.43	0.00	0.00	0.00	
10,200.00	90.13	356.78	7,294.99	-269.09	-373.92	-263.51	0.00	0.00	0.00	
10,300.00	90.13	356.78	7,294.77	-169.25	-379.54	-163.60	0.00	0.00	0.00	
10,308.17	90.13	356.78	7,294.75	-161.09	-380.00	-155.44	0.00	0.00	0.00	
Begin Turn for Lateral Spacing @ 10308.17ft										
10,400.00	90.13	358.15	7,294.55	-69.35	-384.06	-63.65	1.50	0.00	1.50	
10,500.00	90.13	359.65	7,294.33	30.62	-385.97	36.35	1.50	0.00	1.50	
10,523.33	90.13	0.00	7,294.28	53.95	-386.04	59.67	1.50	0.00	1.50	
End Turn @ 10523.33ft										
10,600.00	90.13	0.00	7,294.11	130.62	-386.04	136.34	0.00	0.00	0.00	
10,700.00	90.13	0.00	7,293.89	230.62	-386.03	236.32	0.00	0.00	0.00	
10,800.00	90.13	0.00	7,293.67	330.62	-386.03	336.31	0.00	0.00	0.00	
10,900.00	90.13	0.00	7,293.46	430.62	-386.02	436.30	0.00	0.00	0.00	
11,000.00	90.13	0.00	7,293.24	530.62	-386.02	536.29	0.00	0.00	0.00	
11,100.00	90.13	0.00	7,293.02	630.62	-386.01	636.28	0.00	0.00	0.00	
11,200.00	90.13	0.00	7,292.80	730.62	-386.00	736.27	0.00	0.00	0.00	
11,300.00	90.13	0.00	7,292.58	830.62	-386.00	836.26	0.00	0.00	0.00	
11,400.00	90.13	0.00	7,292.36	930.62	-385.99	936.25	0.00	0.00	0.00	
11,500.00	90.13	0.00	7,292.14	1,030.62	-385.98	1,036.23	0.00	0.00	0.00	
11,600.00	90.13	0.00	7,291.93	1,130.62	-385.98	1,136.22	0.00	0.00	0.00	
11,700.00	90.13	0.00	7,291.71	1,230.62	-385.97	1,236.21	0.00	0.00	0.00	
11,800.00	90.13	0.00	7,291.49	1,330.62	-385.97	1,336.20	0.00	0.00	0.00	
11,900.00	90.13	0.00	7,291.27	1,430.62	-385.96	1,436.19	0.00	0.00	0.00	
12,000.00	90.13	0.00	7,291.05	1,530.62	-385.95	1,536.18	0.00	0.00	0.00	
12,100.00	90.13	0.00	7,290.83	1,630.62	-385.95	1,636.17	0.00	0.00	0.00	
12,200.00	90.13	0.00	7,290.62	1,730.62	-385.94	1,736.15	0.00	0.00	0.00	
12,300.00	90.13	0.00	7,290.40	1,830.62	-385.94	1,836.14	0.00	0.00	0.00	
12,400.00	90.13	0.00	7,290.18	1,930.62	-385.93	1,936.13	0.00	0.00	0.00	
12,500.00	90.13	0.00	7,289.96	2,030.62	-385.92	2,036.12	0.00	0.00	0.00	
12,600.00	90.13	0.00	7,289.74	2,130.62	-385.92	2,136.11	0.00	0.00	0.00	
12,700.00	90.13	0.00	7,289.52	2,230.62	-385.91	2,236.10	0.00	0.00	0.00	
12,800.00	90.13	0.00	7,289.30	2,330.62	-385.91	2,336.09	0.00	0.00	0.00	
12,900.00	90.13	0.00	7,289.09	2,430.62	-385.90	2,436.08	0.00	0.00	0.00	
13,000.00	90.13	0.00	7,288.87	2,530.62	-385.89	2,536.06	0.00	0.00	0.00	
13,100.00	90.13	0.00	7,288.65	2,630.62	-385.89	2,636.05	0.00	0.00	0.00	
13,200.00	90.13	0.00	7,288.43	2,730.62	-385.88	2,736.04	0.00	0.00	0.00	
13,300.00	90.13	0.00	7,288.21	2,830.62	-385.87	2,836.03	0.00	0.00	0.00	
13,400.00	90.13	0.00	7,287.99	2,930.62	-385.87	2,936.02	0.00	0.00	0.00	
13,500.00	90.13	0.00	7,287.77	3,030.62	-385.86	3,036.01	0.00	0.00	0.00	

# Corporate Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well BEIERLE 26-14HZ
<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 26-14HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	Permit Rev-2		

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)
13,600.00	90.13	0.00	7,287.56	3,130.62	-385.86	3,136.00	0.00	0.00	0.00
13,700.00	90.13	0.00	7,287.34	3,230.62	-385.85	3,235.98	0.00	0.00	0.00
13,800.00	90.13	0.00	7,287.12	3,330.62	-385.84	3,335.97	0.00	0.00	0.00
13,900.00	90.13	0.00	7,286.90	3,430.62	-385.84	3,435.96	0.00	0.00	0.00
14,000.00	90.13	0.00	7,286.68	3,530.62	-385.83	3,535.95	0.00	0.00	0.00
14,100.00	90.13	0.00	7,286.46	3,630.62	-385.83	3,635.94	0.00	0.00	0.00
14,200.00	90.13	0.00	7,286.25	3,730.61	-385.82	3,735.93	0.00	0.00	0.00
14,300.00	90.13	0.00	7,286.03	3,830.61	-385.81	3,835.92	0.00	0.00	0.00
14,400.00	90.13	0.00	7,285.81	3,930.61	-385.81	3,935.91	0.00	0.00	0.00
14,500.00	90.13	0.00	7,285.59	4,030.61	-385.80	4,035.89	0.00	0.00	0.00
14,600.00	90.13	0.00	7,285.37	4,130.61	-385.79	4,135.88	0.00	0.00	0.00
14,700.00	90.13	0.00	7,285.15	4,230.61	-385.79	4,235.87	0.00	0.00	0.00
14,800.00	90.13	0.00	7,284.93	4,330.61	-385.78	4,335.86	0.00	0.00	0.00
14,900.00	90.13	0.00	7,284.72	4,430.61	-385.78	4,435.85	0.00	0.00	0.00
15,000.00	90.13	0.00	7,284.50	4,530.61	-385.77	4,535.84	0.00	0.00	0.00
15,100.00	90.13	0.00	7,284.28	4,630.61	-385.76	4,635.83	0.00	0.00	0.00
15,200.00	90.13	0.00	7,284.06	4,730.61	-385.76	4,735.81	0.00	0.00	0.00
15,300.00	90.13	0.00	7,283.84	4,830.61	-385.75	4,835.80	0.00	0.00	0.00
15,400.00	90.13	0.00	7,283.62	4,930.61	-385.75	4,935.79	0.00	0.00	0.00
15,500.00	90.13	0.00	7,283.40	5,030.61	-385.74	5,035.78	0.00	0.00	0.00
15,600.00	90.13	0.00	7,283.19	5,130.61	-385.73	5,135.77	0.00	0.00	0.00
15,700.00	90.13	0.00	7,282.97	5,230.61	-385.73	5,235.76	0.00	0.00	0.00
15,800.00	90.13	0.00	7,282.75	5,330.61	-385.72	5,335.75	0.00	0.00	0.00
15,900.00	90.13	0.00	7,282.53	5,430.61	-385.71	5,435.74	0.00	0.00	0.00
16,000.00	90.13	0.00	7,282.31	5,530.61	-385.71	5,535.72	0.00	0.00	0.00
16,100.00	90.13	0.00	7,282.09	5,630.61	-385.70	5,635.71	0.00	0.00	0.00
16,142.93	90.13	0.00	7,282.00	5,673.54	-385.70	5,678.64	0.00	0.00	0.00
TD Well @ 16142.93ft									

Casing Points				
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
1,526.50	1,500.00	9 5/8" Csg	9-5/8	13-1/2
8,371.79	7,299.00	Top of Production	5-1/2	7-7/8

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,823.44	1,775.00	Fox Hills			
4,714.72	4,327.00	Parkman			
5,263.91	4,811.00	Sussex			
8,041.43	7,225.00	Sharon Springs			
8,077.16	7,240.00	Niobrara			
8,367.45	7,299.00	Nio B		0.00	

# Corporate Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well BEIERLE 26-14HZ
<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 26-14HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	Permit Rev-2		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
200.00	200.00	0.00	0.00	Begin Nudge @ 200.00ft
2,080.00	2,005.01	-452.52	-28.07	Hold Tangent @ 2080.00ft
6,895.40	6,248.84	-2,723.67	-168.97	KOP @ 6895.40ft :: DLS = 8°/100'
8,371.79	7,299.00	-2,094.40	-271.11	End Build @ 8371.79ft
10,308.17	7,294.75	-161.09	-380.00	Begin Turn for Lateral Spacing @ 10308.17ft
10,523.33	7,294.28	53.95	-386.04	End Turn @ 10523.33ft
16,142.93	7,282.00	5,673.54	-385.70	TD Well @ 16142.93ft