

# **US ROCKIES WATTENBERG PLANNING**

**WELD-NAD83-UTMFT13N**

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

**BEIERLE 26-16HZ**

**Plan A**

**Plan: Permit Rev-2**

Surface Location Lat/Long: 40.028279/-104.741028

Survey Program: MWD+IFR

## **Standard Planning Report**

**04 March, 2020**

Project: WELD-NAD83-UTMFT13N  
 Site: 1N-66W-26 BEIERLE 2-26HZ PAD  
 Well: BEIERLE 26-16HZ  
 Wellbore: Plan A  
 Design: Permit Rev-2

# US ROCKIES WATTENBERG PLANNING

## CASING DETAILS

TVD	MD	Name	Size
1500.00	1518.12	9 5/8" Csg	9-5/8
7297.00	8394.77	Top of Production	5-1/2

## 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	350.00	0.00	0.00	350.00	0.00	0.00	0.00	0.00	0.00	
3	2298.67	29.23	173.55	2215.23	-483.30	54.64	1.50	173.55	-483.14	
4	6905.68	29.23	173.55	6235.62	-2718.74	307.36	0.00	0.00	-2717.82	
5	8394.77	90.11	0.17	7297.00	-2091.26	377.77	8.00	-172.42	-2090.13	
6	16158.54	90.11	0.17	7282.00	5672.46	400.36	0.00	0.00	5673.62	BEIERLE 26-16HZ_BHL

## WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
BEIERLE 26-16HZ_SHL	0.00	0.00	0.00	40.028279	-104.741028
BEIERLE 26-16HZ_BHL	7282.00	5672.46	400.36	40.043856	-104.739598

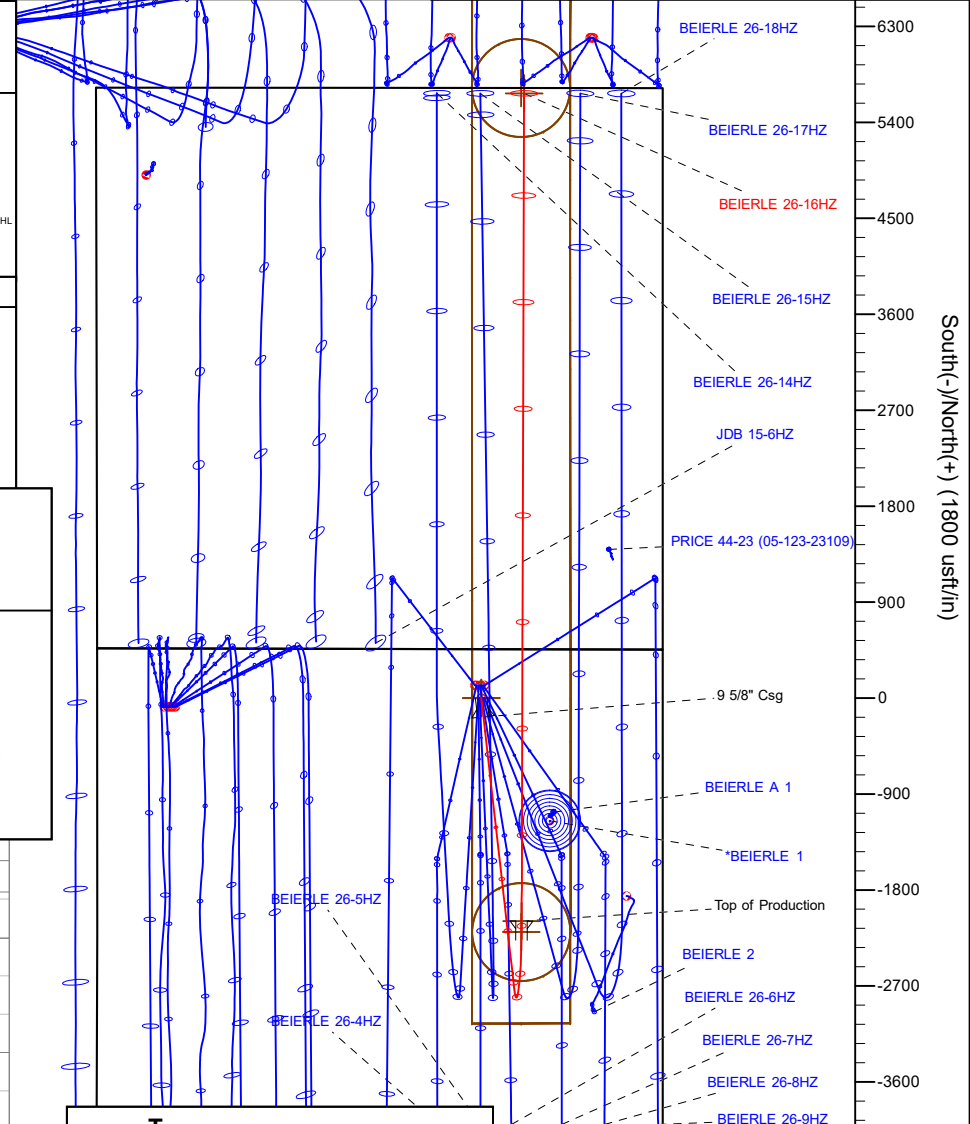
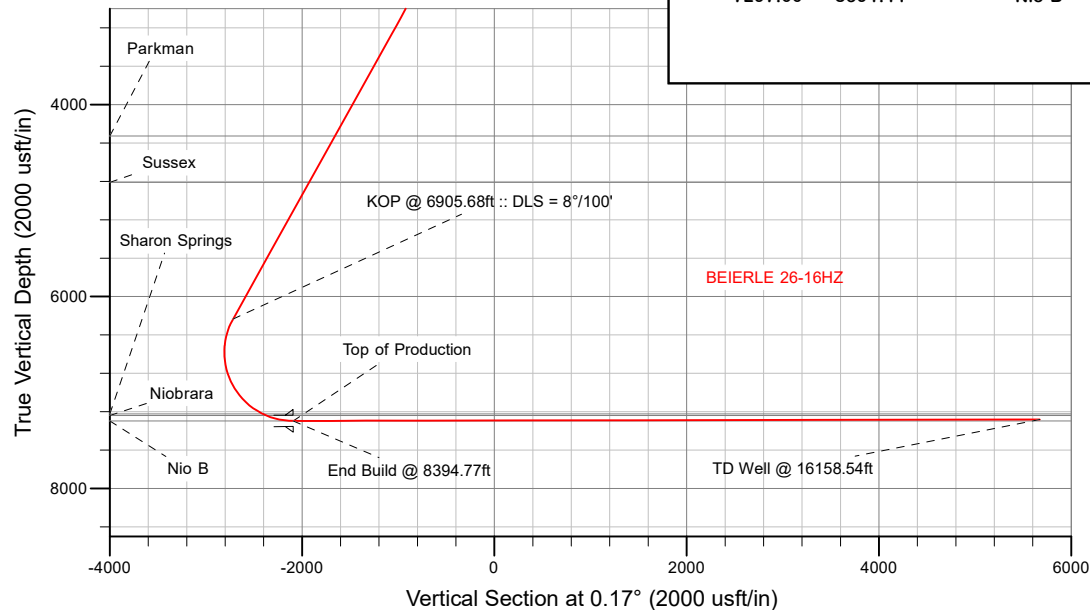
## FORMATION TOP DETAILS

TVDPath	MDPath	Formation
1775.00	1810.31	Fox Hills
4327.00	4718.57	Parkman
4811.00	5273.19	Sussex
7225.00	8069.14	Sharon Springs
7240.00	8105.40	Niobrara
7297.00	8391.11	Nio B

**SHL**  
**460' FNL**  
**1699' FEL**

**HEEL**  
**2550' FNL**  
**1321' FEL**

**BHL**  
**50' FNL**  
**1298' 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 26-16HZ

GL = 5118'

RKB = 17' @ 5135.00usft (Drilling Rig)

Plan: Permit Rev-2 (BEIERLE 26-16HZ/Plan A)

Date: 3/5/2020

# Corporate Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well BEIERLE 26-16HZ
<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 26-16HZ	<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 26-16HZ			
<b>Well Position</b>	<b>+N/-S</b>	-120.17 usft	<b>Northing:</b>	14,537,136.41 usft
	<b>+E/-W</b>	89.86 usft	<b>Easting:</b>	1,712,912.14 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	51,891.34330370

<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	0.17

<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 declination
2	1,500.00	16,158.54	Permit Rev-2 (Plan A)	APC_ISCWSA REV 2 MWD+II Fixed:v2:crustal field declination

<b>Plan Sections</b>										
<b>Measured Depth (usft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Dogleg Rate (°/100usft)</b>	<b>Build Rate (°/100usft)</b>	<b>Turn Rate (°/100usft)</b>	<b>TFO (°)</b>	<b>Target</b>
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
350.00	0.00	0.00	350.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,298.67	29.23	173.55	2,215.23	-483.30	54.64	1.50	1.50	0.00	173.55	
6,905.68	29.23	173.55	6,235.62	-2,718.74	307.36	0.00	0.00	0.00	0.00	
8,394.77	90.11	0.17	7,297.00	-2,091.26	377.77	8.00	4.09	-11.64	-172.42	
16,158.54	90.11	0.17	7,282.00	5,672.46	400.36	0.00	0.00	0.00	0.00	BEIERLE 26-16HZ_B

# Corporate Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well BEIERLE 26-16HZ
<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 26-16HZ	<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
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
350.00	0.00	0.00	350.00	0.00	0.00	0.00	0.00	0.00	0.00
Begin Nudge @ 350.00ft									
400.00	0.75	173.55	400.00	-0.33	0.04	-0.33	1.50	1.50	0.00
500.00	2.25	173.55	499.96	-2.93	0.33	-2.93	1.50	1.50	0.00
600.00	3.75	173.55	599.82	-8.13	0.92	-8.12	1.50	1.50	0.00
700.00	5.25	173.55	699.51	-15.92	1.80	-15.92	1.50	1.50	0.00
800.00	6.75	173.55	798.96	-26.31	2.97	-26.30	1.50	1.50	0.00
900.00	8.25	173.55	898.10	-39.28	4.44	-39.27	1.50	1.50	0.00
1,000.00	9.75	173.55	996.87	-54.82	6.20	-54.80	1.50	1.50	0.00
1,100.00	11.25	173.55	1,095.19	-72.93	8.24	-72.91	1.50	1.50	0.00
1,200.00	12.75	173.55	1,193.00	-93.59	10.58	-93.56	1.50	1.50	0.00
1,300.00	14.25	173.55	1,290.24	-116.79	13.20	-116.75	1.50	1.50	0.00
1,400.00	15.75	173.55	1,386.83	-142.50	16.11	-142.45	1.50	1.50	0.00
1,500.00	17.25	173.55	1,482.71	-170.72	19.30	-170.67	1.50	1.50	0.00
1,518.12	17.52	173.55	1,500.00	-176.10	19.91	-176.04	1.50	1.50	0.00
9 5/8" Csg									
1,600.00	18.75	173.55	1,577.81	-201.43	22.77	-201.36	1.50	1.50	0.00
1,700.00	20.25	173.55	1,672.07	-234.60	26.52	-234.52	1.50	1.50	0.00
1,800.00	21.75	173.55	1,765.43	-270.21	30.55	-270.11	1.50	1.50	0.00
1,810.31	21.90	173.55	1,775.00	-274.02	30.98	-273.92	1.50	1.50	0.00
Fox Hills									
1,900.00	23.25	173.55	1,857.81	-308.23	34.85	-308.13	1.50	1.50	0.00
2,000.00	24.75	173.55	1,949.16	-348.65	39.42	-348.53	1.50	1.50	0.00
2,100.00	26.25	173.55	2,039.42	-391.42	44.25	-391.29	1.50	1.50	0.00
2,200.00	27.75	173.55	2,128.52	-436.53	49.35	-436.39	1.50	1.50	0.00
2,298.67	29.23	173.55	2,215.23	-483.30	54.64	-483.14	1.50	1.50	0.00
Hold Tangent @ 2298.67ft									
2,300.00	29.23	173.55	2,216.40	-483.95	54.71	-483.78	0.00	0.00	0.00
2,400.00	29.23	173.55	2,303.66	-532.47	60.20	-532.29	0.00	0.00	0.00
2,500.00	29.23	173.55	2,390.93	-580.99	65.68	-580.79	0.00	0.00	0.00
2,600.00	29.23	173.55	2,478.20	-629.51	71.17	-629.30	0.00	0.00	0.00
2,700.00	29.23	173.55	2,565.46	-678.04	76.65	-677.81	0.00	0.00	0.00
2,800.00	29.23	173.55	2,652.73	-726.56	82.14	-726.31	0.00	0.00	0.00
2,900.00	29.23	173.55	2,740.00	-775.08	87.62	-774.82	0.00	0.00	0.00
3,000.00	29.23	173.55	2,827.26	-823.60	93.11	-823.32	0.00	0.00	0.00
3,100.00	29.23	173.55	2,914.53	-872.13	98.60	-871.83	0.00	0.00	0.00
3,200.00	29.23	173.55	3,001.80	-920.65	104.08	-920.34	0.00	0.00	0.00
3,300.00	29.23	173.55	3,089.06	-969.17	109.57	-968.84	0.00	0.00	0.00
3,400.00	29.23	173.55	3,176.33	-1,017.69	115.05	-1,017.35	0.00	0.00	0.00
3,500.00	29.23	173.55	3,263.60	-1,066.22	120.54	-1,065.85	0.00	0.00	0.00
3,600.00	29.23	173.55	3,350.86	-1,114.74	126.02	-1,114.36	0.00	0.00	0.00
3,700.00	29.23	173.55	3,438.13	-1,163.26	131.51	-1,162.87	0.00	0.00	0.00
3,800.00	29.23	173.55	3,525.40	-1,211.79	136.99	-1,211.37	0.00	0.00	0.00
3,900.00	29.23	173.55	3,612.66	-1,260.31	142.48	-1,259.88	0.00	0.00	0.00
4,000.00	29.23	173.55	3,699.93	-1,308.83	147.97	-1,308.39	0.00	0.00	0.00
4,100.00	29.23	173.55	3,787.20	-1,357.35	153.45	-1,356.89	0.00	0.00	0.00
4,200.00	29.23	173.55	3,874.46	-1,405.88	158.94	-1,405.40	0.00	0.00	0.00
4,300.00	29.23	173.55	3,961.73	-1,454.40	164.42	-1,453.90	0.00	0.00	0.00
4,400.00	29.23	173.55	4,049.00	-1,502.92	169.91	-1,502.41	0.00	0.00	0.00

## Planning Report

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<b>Site:</b>	1N-66W-26 BEIERLE 2-26HZ PAD	<b>North Reference:</b>	True
<b>Well:</b>	BEIERLE 26-16HZ	<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)
4,500.00	29.23	173.55	4,136.26	-1,551.44	175.39	-1,550.92	0.00	0.00	0.00
4,600.00	29.23	173.55	4,223.53	-1,599.97	180.88	-1,599.42	0.00	0.00	0.00
4,700.00	29.23	173.55	4,310.80	-1,648.49	186.36	-1,647.93	0.00	0.00	0.00
4,718.57	29.23	173.55	4,327.00	-1,657.50	187.38	-1,656.94	0.00	0.00	0.00
Parkman									
4,800.00	29.23	173.55	4,398.06	-1,697.01	191.85	-1,696.43	0.00	0.00	0.00
4,900.00	29.23	173.55	4,485.33	-1,745.53	197.34	-1,744.94	0.00	0.00	0.00
5,000.00	29.23	173.55	4,572.60	-1,794.06	202.82	-1,793.45	0.00	0.00	0.00
5,100.00	29.23	173.55	4,659.86	-1,842.58	208.31	-1,841.95	0.00	0.00	0.00
5,200.00	29.23	173.55	4,747.13	-1,891.10	213.79	-1,890.46	0.00	0.00	0.00
5,273.19	29.23	173.55	4,811.00	-1,926.62	217.81	-1,925.96	0.00	0.00	0.00
Sussex									
5,300.00	29.23	173.55	4,834.40	-1,939.62	219.28	-1,938.96	0.00	0.00	0.00
5,400.00	29.23	173.55	4,921.66	-1,988.15	224.76	-1,987.47	0.00	0.00	0.00
5,500.00	29.23	173.55	5,008.93	-2,036.67	230.25	-2,035.98	0.00	0.00	0.00
5,600.00	29.23	173.55	5,096.20	-2,085.19	235.73	-2,084.48	0.00	0.00	0.00
5,700.00	29.23	173.55	5,183.46	-2,133.71	241.22	-2,132.99	0.00	0.00	0.00
5,800.00	29.23	173.55	5,270.73	-2,182.24	246.71	-2,181.49	0.00	0.00	0.00
5,900.00	29.23	173.55	5,358.00	-2,230.76	252.19	-2,230.00	0.00	0.00	0.00
6,000.00	29.23	173.55	5,445.26	-2,279.28	257.68	-2,278.51	0.00	0.00	0.00
6,100.00	29.23	173.55	5,532.53	-2,327.80	263.16	-2,327.01	0.00	0.00	0.00
6,200.00	29.23	173.55	5,619.80	-2,376.33	268.65	-2,375.52	0.00	0.00	0.00
6,300.00	29.23	173.55	5,707.06	-2,424.85	274.13	-2,424.03	0.00	0.00	0.00
6,400.00	29.23	173.55	5,794.33	-2,473.37	279.62	-2,472.53	0.00	0.00	0.00
6,500.00	29.23	173.55	5,881.60	-2,521.89	285.10	-2,521.04	0.00	0.00	0.00
6,600.00	29.23	173.55	5,968.86	-2,570.42	290.59	-2,569.54	0.00	0.00	0.00
6,700.00	29.23	173.55	6,056.13	-2,618.94	296.08	-2,618.05	0.00	0.00	0.00
6,800.00	29.23	173.55	6,143.40	-2,667.46	301.56	-2,666.56	0.00	0.00	0.00
6,900.00	29.23	173.55	6,230.66	-2,715.98	307.05	-2,715.06	0.00	0.00	0.00
6,905.68	29.23	173.55	6,235.62	-2,718.74	307.36	-2,717.82	0.00	0.00	0.00
KOP @ 6905.68ft :: DLS = 8°/100'									
7,000.00	21.77	170.87	6,320.69	-2,758.95	312.73	-2,758.01	8.00	-7.91	-2.84
7,100.00	13.96	165.12	6,415.80	-2,788.97	318.78	-2,788.01	8.00	-7.81	-5.75
7,200.00	6.60	146.25	6,514.16	-2,805.43	325.07	-2,804.45	8.00	-7.36	-18.87
7,300.00	4.48	55.73	6,613.84	-2,808.01	331.50	-2,807.02	8.00	-2.12	-90.52
7,400.00	11.15	19.29	6,712.90	-2,796.67	337.93	-2,795.65	8.00	6.68	-36.44
7,500.00	18.88	11.05	6,809.42	-2,771.62	344.23	-2,770.59	8.00	7.73	-8.24
7,600.00	26.77	7.53	6,901.52	-2,733.35	350.30	-2,732.30	8.00	7.89	-3.53
7,700.00	34.70	5.52	6,987.41	-2,682.62	355.99	-2,681.55	8.00	7.94	-2.00
7,800.00	42.66	4.19	7,065.42	-2,620.39	361.22	-2,619.31	8.00	7.96	-1.33
7,900.00	50.63	3.21	7,134.01	-2,547.89	365.87	-2,546.79	8.00	7.97	-0.98
8,000.00	58.60	2.43	7,191.88	-2,466.53	369.85	-2,465.42	8.00	7.97	-0.78
8,069.14	64.12	1.97	7,225.00	-2,405.92	372.17	-2,404.80	8.00	7.98	-0.67
Sharon Springs									
8,100.00	66.58	1.78	7,237.87	-2,377.88	373.08	-2,376.77	8.00	7.98	-0.62
8,105.40	67.01	1.74	7,240.00	-2,372.92	373.24	-2,371.80	8.00	7.98	-0.61
Niobrara									
8,200.00	74.56	1.20	7,271.11	-2,283.69	375.52	-2,282.56	8.00	7.98	-0.58
8,300.00	82.54	0.66	7,290.94	-2,185.77	377.09	-2,184.64	8.00	7.98	-0.54
8,391.11	89.82	0.19	7,297.00	-2,094.92	377.76	-2,093.79	8.00	7.98	-0.52
Nio B									
8,394.77	90.11	0.17	7,297.00	-2,091.26	377.77	-2,090.13	8.00	7.98	-0.52
End Build @ 8394.77ft - Top of Production									

# Corporate Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well BEIERLE 26-16HZ
<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 26-16HZ	<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)
8,400.00	90.11	0.17	7,296.99	-2,086.03	377.79	-2,084.90	0.00	0.00	0.00
8,500.00	90.11	0.17	7,296.80	-1,986.03	378.08	-1,984.90	0.00	0.00	0.00
8,600.00	90.11	0.17	7,296.61	-1,886.03	378.37	-1,884.90	0.00	0.00	0.00
8,700.00	90.11	0.17	7,296.41	-1,786.03	378.66	-1,784.90	0.00	0.00	0.00
8,800.00	90.11	0.17	7,296.22	-1,686.03	378.95	-1,684.90	0.00	0.00	0.00
8,900.00	90.11	0.17	7,296.03	-1,586.04	379.24	-1,584.90	0.00	0.00	0.00
9,000.00	90.11	0.17	7,295.83	-1,486.04	379.53	-1,484.90	0.00	0.00	0.00
9,100.00	90.11	0.17	7,295.64	-1,386.04	379.82	-1,384.90	0.00	0.00	0.00
9,200.00	90.11	0.17	7,295.45	-1,286.04	380.11	-1,284.90	0.00	0.00	0.00
9,300.00	90.11	0.17	7,295.25	-1,186.04	380.40	-1,184.90	0.00	0.00	0.00
9,400.00	90.11	0.17	7,295.06	-1,086.04	380.69	-1,084.90	0.00	0.00	0.00
9,500.00	90.11	0.17	7,294.87	-986.04	380.99	-984.90	0.00	0.00	0.00
9,600.00	90.11	0.17	7,294.67	-886.04	381.28	-884.90	0.00	0.00	0.00
9,700.00	90.11	0.17	7,294.48	-786.04	381.57	-784.90	0.00	0.00	0.00
9,800.00	90.11	0.17	7,294.29	-686.04	381.86	-684.90	0.00	0.00	0.00
9,900.00	90.11	0.17	7,294.09	-586.04	382.15	-584.91	0.00	0.00	0.00
10,000.00	90.11	0.17	7,293.90	-486.04	382.44	-484.91	0.00	0.00	0.00
10,100.00	90.11	0.17	7,293.71	-386.04	382.73	-384.91	0.00	0.00	0.00
10,200.00	90.11	0.17	7,293.51	-286.04	383.02	-284.91	0.00	0.00	0.00
10,300.00	90.11	0.17	7,293.32	-186.04	383.31	-184.91	0.00	0.00	0.00
10,400.00	90.11	0.17	7,293.13	-86.04	383.60	-84.91	0.00	0.00	0.00
10,500.00	90.11	0.17	7,292.93	13.95	383.89	15.09	0.00	0.00	0.00
10,600.00	90.11	0.17	7,292.74	113.95	384.19	115.09	0.00	0.00	0.00
10,700.00	90.11	0.17	7,292.55	213.95	384.48	215.09	0.00	0.00	0.00
10,800.00	90.11	0.17	7,292.35	313.95	384.77	315.09	0.00	0.00	0.00
10,900.00	90.11	0.17	7,292.16	413.95	385.06	415.09	0.00	0.00	0.00
11,000.00	90.11	0.17	7,291.97	513.95	385.35	515.09	0.00	0.00	0.00
11,100.00	90.11	0.17	7,291.77	613.95	385.64	615.09	0.00	0.00	0.00
11,200.00	90.11	0.17	7,291.58	713.95	385.93	715.09	0.00	0.00	0.00
11,300.00	90.11	0.17	7,291.39	813.95	386.22	815.09	0.00	0.00	0.00
11,400.00	90.11	0.17	7,291.20	913.95	386.51	915.09	0.00	0.00	0.00
11,500.00	90.11	0.17	7,291.00	1,013.95	386.80	1,015.09	0.00	0.00	0.00
11,600.00	90.11	0.17	7,290.81	1,113.95	387.09	1,115.09	0.00	0.00	0.00
11,700.00	90.11	0.17	7,290.62	1,213.95	387.39	1,215.09	0.00	0.00	0.00
11,800.00	90.11	0.17	7,290.42	1,313.95	387.68	1,315.09	0.00	0.00	0.00
11,900.00	90.11	0.17	7,290.23	1,413.95	387.97	1,415.09	0.00	0.00	0.00
12,000.00	90.11	0.17	7,290.04	1,513.95	388.26	1,515.09	0.00	0.00	0.00
12,100.00	90.11	0.17	7,289.84	1,613.95	388.55	1,615.09	0.00	0.00	0.00
12,200.00	90.11	0.17	7,289.65	1,713.94	388.84	1,715.09	0.00	0.00	0.00
12,300.00	90.11	0.17	7,289.46	1,813.94	389.13	1,815.09	0.00	0.00	0.00
12,400.00	90.11	0.17	7,289.26	1,913.94	389.42	1,915.09	0.00	0.00	0.00
12,500.00	90.11	0.17	7,289.07	2,013.94	389.71	2,015.09	0.00	0.00	0.00
12,600.00	90.11	0.17	7,288.88	2,113.94	390.00	2,115.09	0.00	0.00	0.00
12,700.00	90.11	0.17	7,288.68	2,213.94	390.29	2,215.09	0.00	0.00	0.00
12,800.00	90.11	0.17	7,288.49	2,313.94	390.59	2,315.09	0.00	0.00	0.00
12,900.00	90.11	0.17	7,288.30	2,413.94	390.88	2,415.09	0.00	0.00	0.00
13,000.00	90.11	0.17	7,288.10	2,513.94	391.17	2,515.09	0.00	0.00	0.00
13,100.00	90.11	0.17	7,287.91	2,613.94	391.46	2,615.09	0.00	0.00	0.00
13,200.00	90.11	0.17	7,287.72	2,713.94	391.75	2,715.09	0.00	0.00	0.00
13,300.00	90.11	0.17	7,287.52	2,813.94	392.04	2,815.09	0.00	0.00	0.00
13,400.00	90.11	0.17	7,287.33	2,913.94	392.33	2,915.09	0.00	0.00	0.00
13,500.00	90.11	0.17	7,287.14	3,013.94	392.62	3,015.09	0.00	0.00	0.00
13,600.00	90.11	0.17	7,286.94	3,113.94	392.91	3,115.09	0.00	0.00	0.00
13,700.00	90.11	0.17	7,286.75	3,213.94	393.20	3,215.09	0.00	0.00	0.00

# Corporate Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well BEIERLE 26-16HZ
<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 26-16HZ	<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)
13,800.00	90.11	0.17	7,286.56	3,313.93	393.49	3,315.09	0.00	0.00	0.00
13,900.00	90.11	0.17	7,286.36	3,413.93	393.79	3,415.09	0.00	0.00	0.00
14,000.00	90.11	0.17	7,286.17	3,513.93	394.08	3,515.09	0.00	0.00	0.00
14,100.00	90.11	0.17	7,285.98	3,613.93	394.37	3,615.09	0.00	0.00	0.00
14,200.00	90.11	0.17	7,285.78	3,713.93	394.66	3,715.09	0.00	0.00	0.00
14,300.00	90.11	0.17	7,285.59	3,813.93	394.95	3,815.09	0.00	0.00	0.00
14,400.00	90.11	0.17	7,285.40	3,913.93	395.24	3,915.09	0.00	0.00	0.00
14,500.00	90.11	0.17	7,285.21	4,013.93	395.53	4,015.09	0.00	0.00	0.00
14,600.00	90.11	0.17	7,285.01	4,113.93	395.82	4,115.09	0.00	0.00	0.00
14,700.00	90.11	0.17	7,284.82	4,213.93	396.11	4,215.09	0.00	0.00	0.00
14,800.00	90.11	0.17	7,284.63	4,313.93	396.40	4,315.09	0.00	0.00	0.00
14,900.00	90.11	0.17	7,284.43	4,413.93	396.69	4,415.09	0.00	0.00	0.00
15,000.00	90.11	0.17	7,284.24	4,513.93	396.99	4,515.09	0.00	0.00	0.00
15,100.00	90.11	0.17	7,284.05	4,613.93	397.28	4,615.09	0.00	0.00	0.00
15,200.00	90.11	0.17	7,283.85	4,713.93	397.57	4,715.09	0.00	0.00	0.00
15,300.00	90.11	0.17	7,283.66	4,813.93	397.86	4,815.08	0.00	0.00	0.00
15,400.00	90.11	0.17	7,283.47	4,913.93	398.15	4,915.08	0.00	0.00	0.00
15,500.00	90.11	0.17	7,283.27	5,013.92	398.44	5,015.08	0.00	0.00	0.00
15,600.00	90.11	0.17	7,283.08	5,113.92	398.73	5,115.08	0.00	0.00	0.00
15,700.00	90.11	0.17	7,282.89	5,213.92	399.02	5,215.08	0.00	0.00	0.00
15,800.00	90.11	0.17	7,282.69	5,313.92	399.31	5,315.08	0.00	0.00	0.00
15,900.00	90.11	0.17	7,282.50	5,413.92	399.60	5,415.08	0.00	0.00	0.00
16,000.00	90.11	0.17	7,282.31	5,513.92	399.89	5,515.08	0.00	0.00	0.00
16,100.00	90.11	0.17	7,282.11	5,613.92	400.19	5,615.08	0.00	0.00	0.00
16,158.54	90.11	0.17	7,282.00	5,672.46	400.36	5,673.62	0.00	0.00	0.00
TD Well @ 16158.54ft									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
1,518.12	1,500.00	9 5/8" Csg	9-5/8	13-1/2	
8,394.77	7,297.00	Top of Production	5-1/2	7-7/8	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,810.31	1,775.00	Fox Hills				
4,718.57	4,327.00	Parkman				
5,273.19	4,811.00	Sussex				
8,069.14	7,225.00	Sharon Springs				
8,105.40	7,240.00	Niobrara				
8,391.11	7,297.00	Nio B		0.00		

Corporate  
Planning Report

Database:	PLANNING	Local Co-ordinate Reference:	Well BEIERLE 26-16HZ
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 26-16HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
Design:	Permit Rev-2		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
350.00	350.00	0.00	0.00	Begin Nudge @ 350.00ft
2,298.67	2,215.23	-483.30	54.64	Hold Tangent @ 2298.67ft
6,905.68	6,235.62	-2,718.74	307.36	KOP @ 6905.68ft :: DLS = 8°/100'
8,394.77	7,297.00	-2,091.26	377.77	End Build @ 8394.77ft
16,158.54	7,282.00	5,672.46	400.36	TD Well @ 16158.54ft