

US ROCKIES WATTENBERG PLANNING

WELD-NAD83-UTMFT13N

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

BEIERLE 26-12HZ

Plan A

Plan: Permit Rev-1

SHL Lat/Long: 40.028280/-104.741189

Survey Program: MWD+IFR

Standard Planning Report

05 May, 2018

Project: WELD-NAD83-UTMFT13N
 Site: 1N-66W-26 BEIERLE 2-26HZ PAD
 Well: BEIERLE 26-12HZ
 Wellbore: Plan A
 Design: Permit Rev-1

US ROCKIES WATTENBERG PLANNING

CASING DETAILS		
TVD	MD	Size
1500.00	1508.79	9-5/8
7533.00	7966.72	5-1/2

WELL DETAILS: BEIERLE 26-12HZ
 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	783.33	8.00	153.25	781.60	-33.19	16.73	1.50	153.25	-33.15	
4	2075.33	8.00	153.25	2061.03	-193.76	97.66	0.00	0.00	-193.47	
5	2475.33	0.00	0.00	2459.73	-218.66	110.21	2.00	180.00	-218.33	
6	6832.47	0.00	0.00	6816.87	-218.66	110.21	0.00	0.00	-218.33	
7	7966.72	90.74	0.17	7533.00	506.79	112.33	8.00	0.17	507.12	
8	13152.41	90.74	0.17	7466.00	5692.02	127.47	0.00	0.00	5692.37	BEIERLE 26-12HZ_BHL

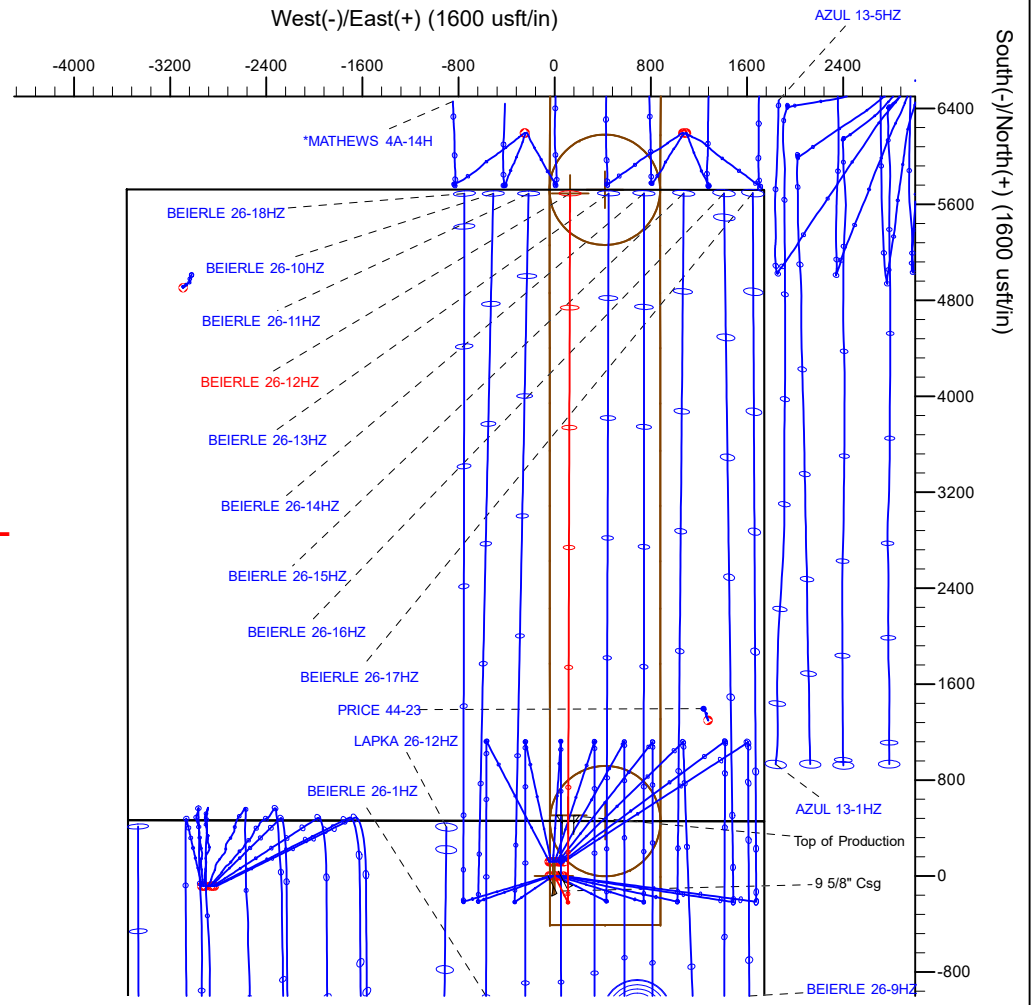
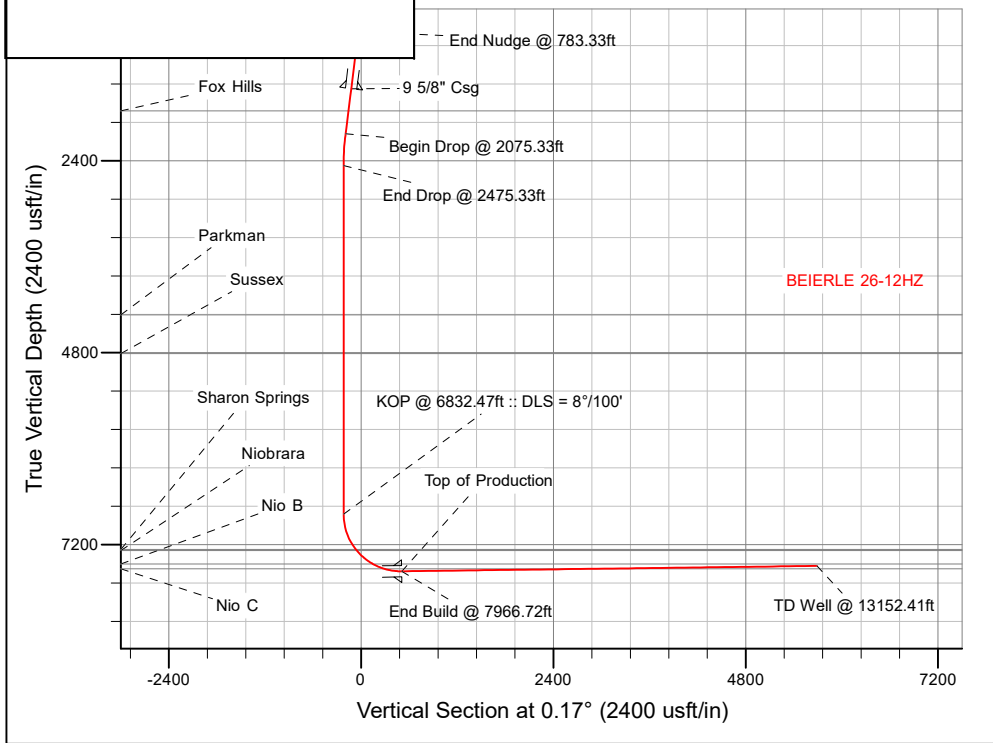
WELLBORE TARGET DETAILS (LAT/LONG)					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
BEIERLE 26-12HZ_SHL	0.00	0.00	0.00	40.028280	-104.741189
BEIERLE 26-12HZ_BHL	7466.00	5692.02	127.47	40.043911	-104.740734

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
1775.00	1786.49	Fox Hills
4327.00	4342.60	Parkman
4811.00	4826.60	Sussex
7260.00	7310.26	Sharon Springs
7275.00	7329.56	Niobrara
7443.00	7594.42	Nio B
7502.00	7745.76	Nio C

SHL
460' FNL
1744' FEL

HEEL
48' FSL
1631' FEL

TOE
50' FNL
1627' FEL



T
M
 Azimuths to True North
 Magnetic North: 8.09°

Magnetic Field
 Strength: 52111.4snT
 Dip Angle: 66.54°
 Date: 3/24/2018
 Model: IGRF2015

Plan: Permit Rev-1 (BEIERLE 26-12HZ/Plan A)
 Date: 5/5/2018

Corporate Planning Report

Database:	PLANNING	Local Co-ordinate Reference:	Well BEIERLE 26-12HZ
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 26-12HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
Design:	Permit Rev-1		

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

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

Well	BEIERLE 26-12HZ					
Well Position	+N-S	-119.80 usft	Northing:	14,537,136.64 usft	Latitude:	40.028280
	+E-W	44.79 usft	Easting:	1,712,867.06 usft	Longitude:	-104.741189
Position Uncertainty		3.28 usft	Wellhead Elevation:		Ground Level:	5,118.00 usft

Wellbore	Plan A				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	3/24/2018	8.09	66.54	52,111.37998661

Design	Permit Rev-1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N-S (usft)	+E-W (usft)	Direction (°)
	0.00	0.00	0.00	0.17

Plan Survey Tool Program	Date	5/5/2018		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	1,500.00	Permit Rev-1 (Plan A)	APC_ISCWSA REV 2 MWD+II Fixed:v2:crustal field declinatio
2	1,500.00	13,152.41	Permit Rev-1 (Plan A)	APC_ISCWSA REV 2 MWD+II Fixed:v2:crustal field declinatio

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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 26-12HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
Design:	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	
783.33	8.00	153.25	781.60	-33.19	16.73	1.50	1.50	0.00	153.25	
2,075.33	8.00	153.25	2,061.03	-193.76	97.66	0.00	0.00	0.00	0.00	
2,475.33	0.00	0.00	2,459.73	-218.66	110.21	2.00	-2.00	0.00	180.00	
6,832.47	0.00	0.00	6,816.87	-218.66	110.21	0.00	0.00	0.00	0.00	
7,966.72	90.74	0.17	7,533.00	506.79	112.33	8.00	8.00	0.01	0.17	
13,152.41	90.74	0.17	7,466.00	5,692.02	127.47	0.00	0.00	0.00	0.00	BEIERLE 26-12HZ_B

Corporate Planning Report

Database:	PLANNING	Local Co-ordinate Reference:	Well BEIERLE 26-12HZ
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 26-12HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
Design:	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
Begin Nudge @ 250.00ft										
300.00	0.75	153.25	300.00	-0.29	0.15	-0.29	1.50	1.50	0.00	
400.00	2.25	153.25	399.96	-2.63	1.33	-2.63	1.50	1.50	0.00	
500.00	3.75	153.25	499.82	-7.30	3.68	-7.29	1.50	1.50	0.00	
600.00	5.25	153.25	599.51	-14.31	7.21	-14.29	1.50	1.50	0.00	
700.00	6.75	153.25	698.96	-23.64	11.92	-23.61	1.50	1.50	0.00	
783.33	8.00	153.25	781.60	-33.19	16.73	-33.15	1.50	1.50	0.00	
End Nudge @ 783.33ft										
800.00	8.00	153.25	798.11	-35.27	17.78	-35.21	0.00	0.00	0.00	
900.00	8.00	153.25	897.13	-47.69	24.04	-47.62	0.00	0.00	0.00	
1,000.00	8.00	153.25	996.16	-60.12	30.30	-60.03	0.00	0.00	0.00	
1,100.00	8.00	153.25	1,095.19	-72.55	36.57	-72.44	0.00	0.00	0.00	
1,200.00	8.00	153.25	1,194.21	-84.98	42.83	-84.85	0.00	0.00	0.00	
1,300.00	8.00	153.25	1,293.24	-97.41	49.10	-97.26	0.00	0.00	0.00	
1,400.00	8.00	153.25	1,392.27	-109.83	55.36	-109.67	0.00	0.00	0.00	
1,500.00	8.00	153.25	1,491.29	-122.26	61.62	-122.08	0.00	0.00	0.00	
1,508.79	8.00	153.25	1,500.00	-123.35	62.18	-123.17	0.00	0.00	0.00	
9 5/8" Csg										
1,600.00	8.00	153.25	1,590.32	-134.69	67.89	-134.49	0.00	0.00	0.00	
1,700.00	8.00	153.25	1,689.35	-147.12	74.15	-146.90	0.00	0.00	0.00	
1,786.49	8.00	153.25	1,775.00	-157.87	79.57	-157.63	0.00	0.00	0.00	
Fox Hills										
1,800.00	8.00	153.25	1,788.37	-159.54	80.42	-159.31	0.00	0.00	0.00	
1,900.00	8.00	153.25	1,887.40	-171.97	86.68	-171.71	0.00	0.00	0.00	
2,000.00	8.00	153.25	1,986.43	-184.40	92.95	-184.12	0.00	0.00	0.00	
2,075.33	8.00	153.25	2,061.03	-193.76	97.66	-193.47	0.00	0.00	0.00	
Begin Drop @ 2075.33ft										
2,100.00	7.51	153.25	2,085.47	-196.73	99.16	-196.44	2.00	-2.00	0.00	
2,200.00	5.51	153.25	2,184.82	-206.85	104.26	-206.54	2.00	-2.00	0.00	
2,300.00	3.51	153.25	2,284.51	-213.87	107.80	-213.55	2.00	-2.00	0.00	
2,400.00	1.51	153.25	2,384.41	-217.77	109.77	-217.45	2.00	-2.00	0.00	
2,475.33	0.00	0.00	2,459.73	-218.66	110.21	-218.33	2.00	-2.00	0.00	
End Drop @ 2475.33ft										
2,500.00	0.00	0.00	2,484.40	-218.66	110.21	-218.33	0.00	0.00	0.00	
2,600.00	0.00	0.00	2,584.40	-218.66	110.21	-218.33	0.00	0.00	0.00	
2,700.00	0.00	0.00	2,684.40	-218.66	110.21	-218.33	0.00	0.00	0.00	
2,800.00	0.00	0.00	2,784.40	-218.66	110.21	-218.33	0.00	0.00	0.00	
2,900.00	0.00	0.00	2,884.40	-218.66	110.21	-218.33	0.00	0.00	0.00	
3,000.00	0.00	0.00	2,984.40	-218.66	110.21	-218.33	0.00	0.00	0.00	
3,100.00	0.00	0.00	3,084.40	-218.66	110.21	-218.33	0.00	0.00	0.00	
3,200.00	0.00	0.00	3,184.40	-218.66	110.21	-218.33	0.00	0.00	0.00	
3,300.00	0.00	0.00	3,284.40	-218.66	110.21	-218.33	0.00	0.00	0.00	
3,400.00	0.00	0.00	3,384.40	-218.66	110.21	-218.33	0.00	0.00	0.00	
3,500.00	0.00	0.00	3,484.40	-218.66	110.21	-218.33	0.00	0.00	0.00	
3,600.00	0.00	0.00	3,584.40	-218.66	110.21	-218.33	0.00	0.00	0.00	
3,700.00	0.00	0.00	3,684.40	-218.66	110.21	-218.33	0.00	0.00	0.00	
3,800.00	0.00	0.00	3,784.40	-218.66	110.21	-218.33	0.00	0.00	0.00	
3,900.00	0.00	0.00	3,884.40	-218.66	110.21	-218.33	0.00	0.00	0.00	
4,000.00	0.00	0.00	3,984.40	-218.66	110.21	-218.33	0.00	0.00	0.00	

Corporate Planning Report

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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 26-12HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
Design:	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)
4,100.00	0.00	0.00	4,084.40	-218.66	110.21	-218.33	0.00	0.00	0.00
4,200.00	0.00	0.00	4,184.40	-218.66	110.21	-218.33	0.00	0.00	0.00
4,300.00	0.00	0.00	4,284.40	-218.66	110.21	-218.33	0.00	0.00	0.00
4,342.60	0.00	0.00	4,327.00	-218.66	110.21	-218.33	0.00	0.00	0.00
Parkman									
4,400.00	0.00	0.00	4,384.40	-218.66	110.21	-218.33	0.00	0.00	0.00
4,500.00	0.00	0.00	4,484.40	-218.66	110.21	-218.33	0.00	0.00	0.00
4,600.00	0.00	0.00	4,584.40	-218.66	110.21	-218.33	0.00	0.00	0.00
4,700.00	0.00	0.00	4,684.40	-218.66	110.21	-218.33	0.00	0.00	0.00
4,800.00	0.00	0.00	4,784.40	-218.66	110.21	-218.33	0.00	0.00	0.00
4,826.60	0.00	0.00	4,811.00	-218.66	110.21	-218.33	0.00	0.00	0.00
Sussex									
4,900.00	0.00	0.00	4,884.40	-218.66	110.21	-218.33	0.00	0.00	0.00
5,000.00	0.00	0.00	4,984.40	-218.66	110.21	-218.33	0.00	0.00	0.00
5,100.00	0.00	0.00	5,084.40	-218.66	110.21	-218.33	0.00	0.00	0.00
5,200.00	0.00	0.00	5,184.40	-218.66	110.21	-218.33	0.00	0.00	0.00
5,300.00	0.00	0.00	5,284.40	-218.66	110.21	-218.33	0.00	0.00	0.00
5,400.00	0.00	0.00	5,384.40	-218.66	110.21	-218.33	0.00	0.00	0.00
5,500.00	0.00	0.00	5,484.40	-218.66	110.21	-218.33	0.00	0.00	0.00
5,600.00	0.00	0.00	5,584.40	-218.66	110.21	-218.33	0.00	0.00	0.00
5,700.00	0.00	0.00	5,684.40	-218.66	110.21	-218.33	0.00	0.00	0.00
5,800.00	0.00	0.00	5,784.40	-218.66	110.21	-218.33	0.00	0.00	0.00
5,900.00	0.00	0.00	5,884.40	-218.66	110.21	-218.33	0.00	0.00	0.00
6,000.00	0.00	0.00	5,984.40	-218.66	110.21	-218.33	0.00	0.00	0.00
6,100.00	0.00	0.00	6,084.40	-218.66	110.21	-218.33	0.00	0.00	0.00
6,200.00	0.00	0.00	6,184.40	-218.66	110.21	-218.33	0.00	0.00	0.00
6,300.00	0.00	0.00	6,284.40	-218.66	110.21	-218.33	0.00	0.00	0.00
6,400.00	0.00	0.00	6,384.40	-218.66	110.21	-218.33	0.00	0.00	0.00
6,500.00	0.00	0.00	6,484.40	-218.66	110.21	-218.33	0.00	0.00	0.00
6,600.00	0.00	0.00	6,584.40	-218.66	110.21	-218.33	0.00	0.00	0.00
6,700.00	0.00	0.00	6,684.40	-218.66	110.21	-218.33	0.00	0.00	0.00
6,800.00	0.00	0.00	6,784.40	-218.66	110.21	-218.33	0.00	0.00	0.00
6,832.47	0.00	0.00	6,816.87	-218.66	110.21	-218.33	0.00	0.00	0.00
KOP @ 6832.47ft :: DLS = 8°/100'									
6,900.00	5.40	0.17	6,884.30	-215.48	110.22	-215.15	8.00	8.00	0.00
7,000.00	13.40	0.17	6,982.87	-199.15	110.27	-198.83	8.00	8.00	0.00
7,100.00	21.40	0.17	7,078.22	-169.27	110.36	-168.94	8.00	8.00	0.00
7,200.00	29.40	0.17	7,168.48	-126.41	110.48	-126.08	8.00	8.00	0.00
7,300.00	37.40	0.17	7,251.89	-71.40	110.64	-71.07	8.00	8.00	0.00
7,310.26	38.22	0.17	7,260.00	-65.11	110.66	-64.78	8.00	8.00	0.00
Sharon Springs									
7,329.56	39.77	0.17	7,275.00	-52.96	110.70	-52.64	8.00	8.00	0.00
Niobrara									
7,400.00	45.40	0.17	7,326.84	-5.32	110.84	-4.99	8.00	8.00	0.00
7,500.00	53.40	0.17	7,391.86	70.55	111.06	70.88	8.00	8.00	0.00
7,594.42	60.96	0.17	7,443.00	149.84	111.29	150.17	8.00	8.00	0.00
Nio B									
7,600.00	61.40	0.17	7,445.69	154.73	111.30	155.06	8.00	8.00	0.00
7,700.00	69.40	0.17	7,487.28	245.58	111.57	245.91	8.00	8.00	0.00
7,745.76	73.06	0.17	7,502.00	288.90	111.70	289.23	8.00	8.00	0.00
Nio C									
7,800.00	77.40	0.17	7,515.82	341.33	111.85	341.66	8.00	8.00	0.00
7,900.00	85.40	0.17	7,530.76	440.13	112.14	440.46	8.00	8.00	0.00

Corporate Planning Report

Database:	PLANNING	Local Co-ordinate Reference:	Well BEIERLE 26-12HZ
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 26-12HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
Design:	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)
7,966.72	90.74	0.17	7,533.00	506.79	112.33	507.12	8.00	8.00	0.00
End Build @ 7966.72ft - Top of Production									
8,000.00	90.74	0.17	7,532.57	540.06	112.43	540.39	0.00	0.00	0.00
8,100.00	90.74	0.17	7,531.28	640.05	112.72	640.39	0.00	0.00	0.00
8,200.00	90.74	0.17	7,529.99	740.04	113.01	740.38	0.00	0.00	0.00
8,300.00	90.74	0.17	7,528.70	840.04	113.30	840.37	0.00	0.00	0.00
8,400.00	90.74	0.17	7,527.41	940.03	113.60	940.36	0.00	0.00	0.00
8,500.00	90.74	0.17	7,526.11	1,040.02	113.89	1,040.35	0.00	0.00	0.00
8,600.00	90.74	0.17	7,524.82	1,140.01	114.18	1,140.34	0.00	0.00	0.00
8,700.00	90.74	0.17	7,523.53	1,240.00	114.47	1,240.34	0.00	0.00	0.00
8,800.00	90.74	0.17	7,522.24	1,339.99	114.76	1,340.33	0.00	0.00	0.00
8,900.00	90.74	0.17	7,520.95	1,439.98	115.06	1,440.32	0.00	0.00	0.00
9,000.00	90.74	0.17	7,519.65	1,539.97	115.35	1,540.31	0.00	0.00	0.00
9,100.00	90.74	0.17	7,518.36	1,639.97	115.64	1,640.30	0.00	0.00	0.00
9,200.00	90.74	0.17	7,517.07	1,739.96	115.93	1,740.29	0.00	0.00	0.00
9,300.00	90.74	0.17	7,515.78	1,839.95	116.22	1,840.28	0.00	0.00	0.00
9,400.00	90.74	0.17	7,514.48	1,939.94	116.52	1,940.28	0.00	0.00	0.00
9,500.00	90.74	0.17	7,513.19	2,039.93	116.81	2,040.27	0.00	0.00	0.00
9,600.00	90.74	0.17	7,511.90	2,139.92	117.10	2,140.26	0.00	0.00	0.00
9,700.00	90.74	0.17	7,510.61	2,239.91	117.39	2,240.25	0.00	0.00	0.00
9,800.00	90.74	0.17	7,509.32	2,339.90	117.68	2,340.24	0.00	0.00	0.00
9,900.00	90.74	0.17	7,508.02	2,439.90	117.98	2,440.23	0.00	0.00	0.00
10,000.00	90.74	0.17	7,506.73	2,539.89	118.27	2,540.23	0.00	0.00	0.00
10,100.00	90.74	0.17	7,505.44	2,639.88	118.56	2,640.22	0.00	0.00	0.00
10,200.00	90.74	0.17	7,504.15	2,739.87	118.85	2,740.21	0.00	0.00	0.00
10,300.00	90.74	0.17	7,502.86	2,839.86	119.14	2,840.20	0.00	0.00	0.00
10,400.00	90.74	0.17	7,501.56	2,939.85	119.44	2,940.19	0.00	0.00	0.00
10,500.00	90.74	0.17	7,500.27	3,039.84	119.73	3,040.18	0.00	0.00	0.00
10,600.00	90.74	0.17	7,498.98	3,139.83	120.02	3,140.18	0.00	0.00	0.00
10,700.00	90.74	0.17	7,497.69	3,239.83	120.31	3,240.17	0.00	0.00	0.00
10,800.00	90.74	0.17	7,496.40	3,339.82	120.60	3,340.16	0.00	0.00	0.00
10,900.00	90.74	0.17	7,495.10	3,439.81	120.90	3,440.15	0.00	0.00	0.00
11,000.00	90.74	0.17	7,493.81	3,539.80	121.19	3,540.14	0.00	0.00	0.00
11,100.00	90.74	0.17	7,492.52	3,639.79	121.48	3,640.13	0.00	0.00	0.00
11,200.00	90.74	0.17	7,491.23	3,739.78	121.77	3,740.13	0.00	0.00	0.00
11,300.00	90.74	0.17	7,489.94	3,839.77	122.06	3,840.12	0.00	0.00	0.00
11,400.00	90.74	0.17	7,488.64	3,939.76	122.36	3,940.11	0.00	0.00	0.00
11,500.00	90.74	0.17	7,487.35	4,039.76	122.65	4,040.10	0.00	0.00	0.00
11,600.00	90.74	0.17	7,486.06	4,139.75	122.94	4,140.09	0.00	0.00	0.00
11,700.00	90.74	0.17	7,484.77	4,239.74	123.23	4,240.08	0.00	0.00	0.00
11,800.00	90.74	0.17	7,483.47	4,339.73	123.52	4,340.08	0.00	0.00	0.00
11,900.00	90.74	0.17	7,482.18	4,439.72	123.82	4,440.07	0.00	0.00	0.00
12,000.00	90.74	0.17	7,480.89	4,539.71	124.11	4,540.06	0.00	0.00	0.00
12,100.00	90.74	0.17	7,479.60	4,639.70	124.40	4,640.05	0.00	0.00	0.00
12,200.00	90.74	0.17	7,478.31	4,739.69	124.69	4,740.04	0.00	0.00	0.00
12,300.00	90.74	0.17	7,477.01	4,839.69	124.98	4,840.03	0.00	0.00	0.00
12,400.00	90.74	0.17	7,475.72	4,939.68	125.28	4,940.03	0.00	0.00	0.00
12,500.00	90.74	0.17	7,474.43	5,039.67	125.57	5,040.02	0.00	0.00	0.00
12,600.00	90.74	0.17	7,473.14	5,139.66	125.86	5,140.01	0.00	0.00	0.00
12,700.00	90.74	0.17	7,471.85	5,239.65	126.15	5,240.00	0.00	0.00	0.00
12,800.00	90.74	0.17	7,470.55	5,339.64	126.44	5,339.99	0.00	0.00	0.00
12,900.00	90.74	0.17	7,469.26	5,439.63	126.74	5,439.98	0.00	0.00	0.00
13,000.00	90.74	0.17	7,467.97	5,539.62	127.03	5,539.98	0.00	0.00	0.00

Corporate Planning Report

Database:	PLANNING	Local Co-ordinate Reference:	Well BEIERLE 26-12HZ
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 26-12HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
Design:	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)
13,100.00	90.74	0.17	7,466.68	5,639.61	127.32	5,639.97	0.00	0.00	0.00
13,152.41	90.74	0.17	7,466.00	5,692.02	127.47	5,692.37	0.00	0.00	0.00
TD Well @ 13152.41ft									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
1,508.79	1,500.00	9 5/8" Csg	9-5/8	13-1/2	
7,966.72	7,533.00	Top of Production	5-1/2	7-7/8	

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,786.49	1,775.00	Fox Hills			
4,342.60	4,327.00	Parkman			
4,826.60	4,811.00	Sussex			
7,310.26	7,260.00	Sharon Springs			
7,329.56	7,275.00	Niobrara			
7,594.42	7,443.00	Nio B			
7,745.76	7,502.00	Nio C			

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	
783.33	781.60	-33.19	16.73	End Nudge @ 783.33ft	
2,075.33	2,061.03	-193.76	97.66	Begin Drop @ 2075.33ft	
2,475.33	2,459.73	-218.66	110.21	End Drop @ 2475.33ft	
6,832.47	6,816.87	-218.66	110.21	KOP @ 6832.47ft :: DLS = 8°/100'	
7,966.72	7,533.00	506.79	112.33	End Build @ 7966.72ft	
13,152.41	7,466.00	5,692.02	127.47	TD Well @ 13152.41ft	