

# **US ROCKIES WATTENBERG PLANNING**

**WELD-NAD83-UTMFT13N  
2N-68W-15 Camenisch 7-15 Pad  
CAMENISCH 10N-34HZ**

**Plan A**

**Plan: Permit Rev-2**

## **Standard Planning Report**

**05 October, 2016**



Azimuths to True North  
Magnetic North: 8.39°

Magnetic Field  
Strength: 52521.4snT  
Dip Angle: 66.66°  
Date: 9/22/2015  
Model: IGRF2010

SITE: 2N-68W-15 Camenisch 7-15 Pad

Well: CAMENISCH 10N-34HZ  
Wellbore: Plan A  
Design: Permit Rev-2

#### FORMATION TOP DETAILS

TVDPath	MDPath	Formation
749.00	749.96	Fox Hills Mkr
3786.00	3796.92	Parkman
4523.00	4536.34	Sussex
7078.00	7119.67	Sharon Springs
7170.00	7244.39	Niobrara
7233.00	7348.36	Nio B
7309.00	7533.45	Nio C

#### WELL DETAILS: CAMENISCH 10N-34HZ

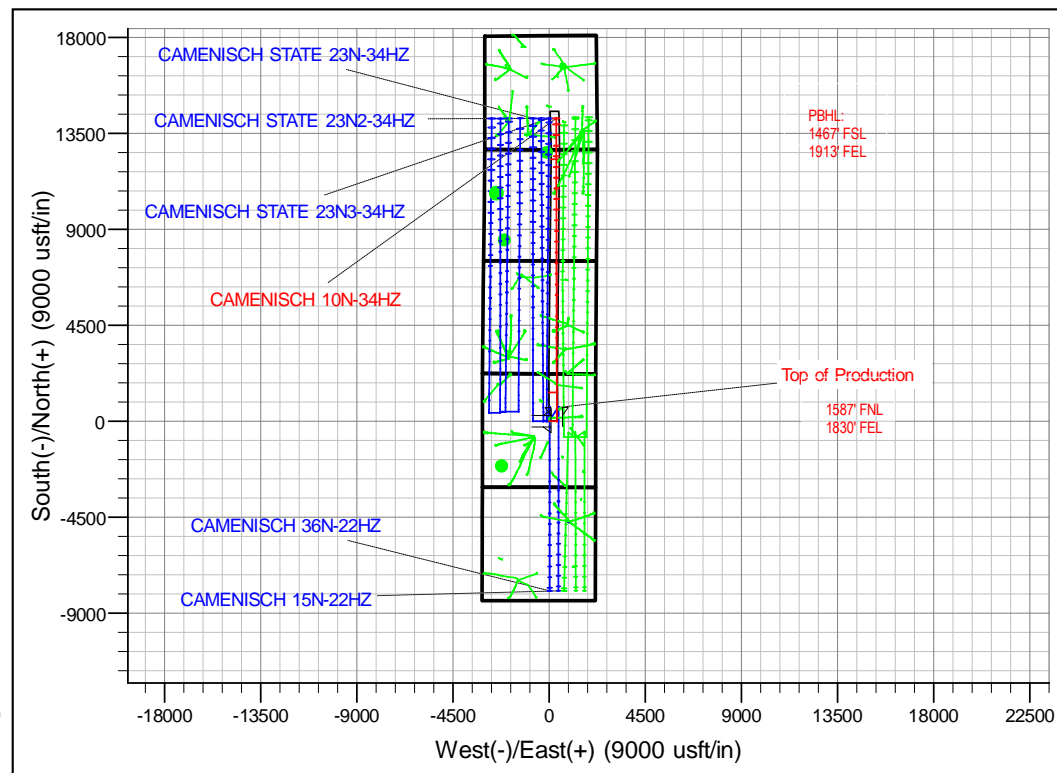
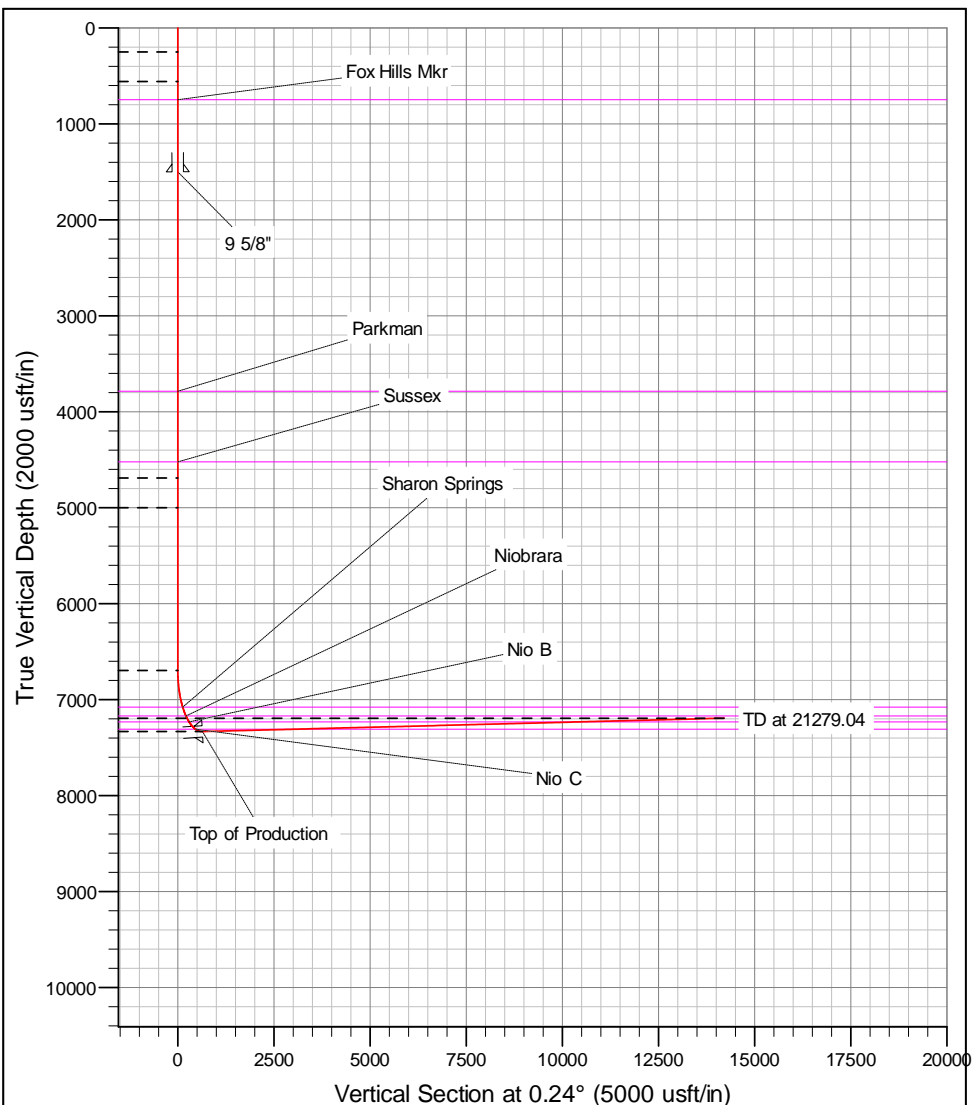
+N/-S	+E/-W	GL: 4876.00 Northing	RKB = 17' @ 4893.00usft (D Rig) Easting	Latitude	Longitude	Slot
0.00	0.00	14577706.35	1643895.61	40.139979	-104.987552	

#### SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	VSECT
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
558.97	4.63	90.00	558.63	0.00	12.49	1.50	0.05
4705.26	4.63	90.00	4691.37	0.00	347.51	0.00	1.46
5014.23	0.00	0.00	5000.00	0.00	360.00	1.50	1.51
6711.29	0.00	0.00	6697.06	0.00	360.00	0.00	1.51
7717.84	90.59	359.88	7333.64	643.17	358.64	9.00	644.67
21279.04	90.59	359.88	7194.00	14203.62	330.00	0.00	4204.88

#### DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
CAMENISCH 10N-34HZ_PBL	7194.00	14203.62	330.00	14591910.01	1644223.62	40.178984	-104.986371



# Corporate Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well CAMENISCH 10N-34HZ
<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>TVD Reference:</b>	RKB = 17' @ 4893.00usft (D Rig)
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>MD Reference:</b>	RKB = 17' @ 4893.00usft (D Rig)
<b>Site:</b>	2N-68W-15 Camenisch 7-15 Pad	<b>North Reference:</b>	True
<b>Well:</b>	CAMENISCH 10N-34HZ	<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)		

Site		2N-68W-15 Camenisch 7-15 Pad				
Site Position:		Northing:	14,577,706.69 usft	Latitude:	40.139980	
From:	Lat/Long	Easting:	1,643,790.52 usft	Longitude:	-104.987928	
Position Uncertainty:		0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.01 °

Well		CAMENISCH 10N-34HZ				
Well Position	+N-S	-0.36 usft	Northing:	14,577,706.34 usft	Latitude:	40.139979
	+E-W	105.08 usft	Easting:	1,643,895.61 usft	Longitude:	-104.987552
Position Uncertainty		3.28 usft	Wellhead Elevation:	0.00 usft	Ground Level:	4,876.00 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>
	IGRF2010	9/22/2015	8.39	66.66	52,521

<b>Design</b>	Permit Rev-2			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<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	0.24

<b>Plan Sections</b>										
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	
558.97	4.63	90.00	558.63	0.00	12.49	1.50	1.50	0.00	90.00	
4,705.26	4.63	90.00	4,691.37	0.00	347.51	0.00	0.00	0.00	0.00	
5,014.23	0.00	0.00	5,000.00	0.00	360.00	1.50	-1.50	0.00	180.00	
6,711.29	0.00	0.00	6,697.06	0.00	360.00	0.00	0.00	0.00	0.00	
7,717.84	90.59	359.88	7,333.64	643.17	358.64	9.00	9.00	0.00	359.88	
21,279.04	90.59	359.88	7,194.00	14,203.62	330.00	0.00	0.00	0.00	0.00	CAMENISCH 10N-3

# Corporate Planning Report

**Database:** PLANNING  
**Company:** US ROCKIES WATTENBERG PLANNING  
**Project:** WELD-NAD83-UTMFT13N  
**Site:** 2N-68W-15 Camenisch 7-15 Pad  
**Well:** CAMENISCH 10N-34HZ  
**Wellbore:** Plan A  
**Design:** Permit Rev-2

**Local Co-ordinate Reference:** Well CAMENISCH 10N-34HZ  
**TVD Reference:** RKB = 17' @ 4893.00usft (D Rig)  
**MD Reference:** RKB = 17' @ 4893.00usft (D Rig)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature

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
250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.75	90.00	300.00	0.00	0.33	0.00	1.50	1.50	0.00
400.00	2.25	90.00	399.96	0.00	2.94	0.01	1.50	1.50	0.00
500.00	3.75	90.00	499.82	0.00	8.18	0.03	1.50	1.50	0.00
558.97	4.63	90.00	558.63	0.00	12.49	0.05	1.50	1.50	0.00
600.00	4.63	90.00	599.53	0.00	15.80	0.07	0.00	0.00	0.00
700.00	4.63	90.00	699.20	0.00	23.88	0.10	0.00	0.00	0.00
749.96	4.63	90.00	749.00	0.00	27.92	0.12	0.00	0.00	0.00
Fox Hills Mkr									
800.00	4.63	90.00	798.88	0.00	31.96	0.13	0.00	0.00	0.00
900.00	4.63	90.00	898.55	0.00	40.04	0.17	0.00	0.00	0.00
1,000.00	4.63	90.00	998.22	0.00	48.12	0.20	0.00	0.00	0.00
1,100.00	4.63	90.00	1,097.89	0.00	56.20	0.24	0.00	0.00	0.00
1,200.00	4.63	90.00	1,197.57	0.00	64.28	0.27	0.00	0.00	0.00
1,300.00	4.63	90.00	1,297.24	0.00	72.36	0.30	0.00	0.00	0.00
1,400.00	4.63	90.00	1,396.91	0.00	80.44	0.34	0.00	0.00	0.00
1,500.00	4.63	90.00	1,496.59	0.00	88.52	0.37	0.00	0.00	0.00
1,503.42	4.63	90.00	1,500.00	0.00	88.80	0.37	0.00	0.00	0.00
9 5/8"									
1,600.00	4.63	90.00	1,596.26	0.00	96.60	0.40	0.00	0.00	0.00
1,700.00	4.63	90.00	1,695.93	0.00	104.68	0.44	0.00	0.00	0.00
1,800.00	4.63	90.00	1,795.61	0.00	112.76	0.47	0.00	0.00	0.00
1,900.00	4.63	90.00	1,895.28	0.00	120.84	0.51	0.00	0.00	0.00
2,000.00	4.63	90.00	1,994.95	0.00	128.92	0.54	0.00	0.00	0.00
2,100.00	4.63	90.00	2,094.62	0.00	137.00	0.57	0.00	0.00	0.00
2,200.00	4.63	90.00	2,194.30	0.00	145.08	0.61	0.00	0.00	0.00
2,300.00	4.63	90.00	2,293.97	0.00	153.16	0.64	0.00	0.00	0.00
2,400.00	4.63	90.00	2,393.64	0.00	161.25	0.68	0.00	0.00	0.00
2,500.00	4.63	90.00	2,493.32	0.00	169.33	0.71	0.00	0.00	0.00
2,600.00	4.63	90.00	2,592.99	0.00	177.41	0.74	0.00	0.00	0.00
2,700.00	4.63	90.00	2,692.66	0.00	185.49	0.78	0.00	0.00	0.00
2,800.00	4.63	90.00	2,792.34	0.00	193.57	0.81	0.00	0.00	0.00
2,900.00	4.63	90.00	2,892.01	0.00	201.65	0.84	0.00	0.00	0.00
3,000.00	4.63	90.00	2,991.68	0.00	209.73	0.88	0.00	0.00	0.00
3,100.00	4.63	90.00	3,091.35	0.00	217.81	0.91	0.00	0.00	0.00
3,200.00	4.63	90.00	3,191.03	0.00	225.89	0.95	0.00	0.00	0.00
3,300.00	4.63	90.00	3,290.70	0.00	233.97	0.98	0.00	0.00	0.00
3,400.00	4.63	90.00	3,390.37	0.00	242.05	1.01	0.00	0.00	0.00
3,500.00	4.63	90.00	3,490.05	0.00	250.13	1.05	0.00	0.00	0.00
3,600.00	4.63	90.00	3,589.72	0.00	258.21	1.08	0.00	0.00	0.00
3,700.00	4.63	90.00	3,689.39	0.00	266.29	1.12	0.00	0.00	0.00
3,796.92	4.63	90.00	3,786.00	0.00	274.12	1.15	0.00	0.00	0.00
Parkman									
3,800.00	4.63	90.00	3,789.07	0.00	274.37	1.15	0.00	0.00	0.00
3,900.00	4.63	90.00	3,888.74	0.00	282.45	1.18	0.00	0.00	0.00
4,000.00	4.63	90.00	3,988.41	0.00	290.53	1.22	0.00	0.00	0.00
4,100.00	4.63	90.00	4,088.09	0.00	298.61	1.25	0.00	0.00	0.00
4,200.00	4.63	90.00	4,187.76	0.00	306.69	1.28	0.00	0.00	0.00
4,300.00	4.63	90.00	4,287.43	0.00	314.77	1.32	0.00	0.00	0.00
4,400.00	4.63	90.00	4,387.10	0.00	322.85	1.35	0.00	0.00	0.00

# Corporate Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well CAMENISCH 10N-34HZ
<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>TVD Reference:</b>	RKB = 17' @ 4893.00usft (D Rig)
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>MD Reference:</b>	RKB = 17' @ 4893.00usft (D Rig)
<b>Site:</b>	2N-68W-15 Camenisch 7-15 Pad	<b>North Reference:</b>	True
<b>Well:</b>	CAMENISCH 10N-34HZ	<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	4.63	90.00	4,486.78	0.00	330.93	1.39	0.00	0.00	0.00
4,536.34	4.63	90.00	4,523.00	0.00	333.86	1.40	0.00	0.00	0.00
<b>Sussex</b>									
4,600.00	4.63	90.00	4,586.45	0.00	339.01	1.42	0.00	0.00	0.00
4,700.00	4.63	90.00	4,686.12	0.00	347.09	1.45	0.00	0.00	0.00
4,705.26	4.63	90.00	4,691.37	0.00	347.51	1.46	0.00	0.00	0.00
4,800.00	3.21	90.00	4,785.88	0.00	353.99	1.48	1.50	-1.50	0.00
4,900.00	1.71	90.00	4,885.79	0.00	358.29	1.50	1.50	-1.50	0.00
5,000.00	0.21	90.00	4,985.77	0.00	359.97	1.51	1.50	-1.50	0.00
5,014.23	0.00	0.00	5,000.00	0.00	360.00	1.51	1.50	-1.50	0.00
5,100.00	0.00	0.00	5,085.77	0.00	360.00	1.51	0.00	0.00	0.00
5,200.00	0.00	0.00	5,185.77	0.00	360.00	1.51	0.00	0.00	0.00
5,300.00	0.00	0.00	5,285.77	0.00	360.00	1.51	0.00	0.00	0.00
5,400.00	0.00	0.00	5,385.77	0.00	360.00	1.51	0.00	0.00	0.00
5,500.00	0.00	0.00	5,485.77	0.00	360.00	1.51	0.00	0.00	0.00
5,600.00	0.00	0.00	5,585.77	0.00	360.00	1.51	0.00	0.00	0.00
5,700.00	0.00	0.00	5,685.77	0.00	360.00	1.51	0.00	0.00	0.00
5,800.00	0.00	0.00	5,785.77	0.00	360.00	1.51	0.00	0.00	0.00
5,900.00	0.00	0.00	5,885.77	0.00	360.00	1.51	0.00	0.00	0.00
6,000.00	0.00	0.00	5,985.77	0.00	360.00	1.51	0.00	0.00	0.00
6,100.00	0.00	0.00	6,085.77	0.00	360.00	1.51	0.00	0.00	0.00
6,200.00	0.00	0.00	6,185.77	0.00	360.00	1.51	0.00	0.00	0.00
6,300.00	0.00	0.00	6,285.77	0.00	360.00	1.51	0.00	0.00	0.00
6,400.00	0.00	0.00	6,385.77	0.00	360.00	1.51	0.00	0.00	0.00
6,500.00	0.00	0.00	6,485.77	0.00	360.00	1.51	0.00	0.00	0.00
6,600.00	0.00	0.00	6,585.77	0.00	360.00	1.51	0.00	0.00	0.00
6,700.00	0.00	0.00	6,685.77	0.00	360.00	1.51	0.00	0.00	0.00
6,711.29	0.00	0.00	6,697.06	0.00	360.00	1.51	0.00	0.00	0.00
6,800.00	7.98	359.88	6,785.48	6.17	359.99	7.68	9.00	9.00	0.00
6,900.00	16.98	359.88	6,883.02	27.77	359.94	29.27	9.00	9.00	0.00
7,000.00	25.98	359.88	6,975.97	64.35	359.86	65.86	9.00	9.00	0.00
7,100.00	34.98	359.88	7,062.06	115.03	359.76	116.54	9.00	9.00	0.00
7,119.67	36.75	359.88	7,078.00	126.55	359.73	128.06	9.00	9.00	0.00
<b>Sharon Springs</b>									
7,200.00	43.98	359.88	7,139.16	178.55	359.62	180.06	9.00	9.00	0.00
7,244.39	47.98	359.88	7,170.00	210.46	359.56	211.97	9.00	9.00	0.00
<b>Niobrara</b>									
7,300.00	52.98	359.88	7,205.38	253.35	359.46	254.85	9.00	9.00	0.00
7,348.36	57.34	359.88	7,233.00	293.04	359.38	294.54	9.00	9.00	0.00
<b>Nio B</b>									
7,400.00	61.98	359.88	7,259.08	337.59	359.29	339.09	9.00	9.00	0.00
7,500.00	70.98	359.88	7,298.94	429.19	359.09	430.69	9.00	9.00	0.00
7,533.45	73.99	359.88	7,309.00	461.09	359.03	462.59	9.00	9.00	0.00
<b>Nio C</b>									
7,600.00	79.98	359.88	7,323.97	525.90	358.89	527.40	9.00	9.00	0.00
7,700.00	88.98	359.88	7,333.58	625.33	358.68	626.83	9.00	9.00	0.00
7,717.84	90.59	359.88	7,333.64	643.17	358.64	644.67	9.00	9.00	0.00
<b>Top of Production - CAMENISCH 10N-34HZ_PHL</b>									
7,800.00	90.59	359.88	7,332.80	725.33	358.47	726.82	0.00	0.00	0.00
7,900.00	90.59	359.88	7,331.77	825.32	358.26	826.81	0.00	0.00	0.00
8,000.00	90.59	359.88	7,330.74	925.31	358.05	926.81	0.00	0.00	0.00
8,100.00	90.59	359.88	7,329.71	1,025.31	357.83	1,026.80	0.00	0.00	0.00
8,200.00	90.59	359.88	7,328.68	1,125.30	357.62	1,126.79	0.00	0.00	0.00

# Corporate Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well CAMENISCH 10N-34HZ
<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>TVD Reference:</b>	RKB = 17' @ 4893.00usft (D Rig)
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>MD Reference:</b>	RKB = 17' @ 4893.00usft (D Rig)
<b>Site:</b>	2N-68W-15 Camenisch 7-15 Pad	<b>North Reference:</b>	True
<b>Well:</b>	CAMENISCH 10N-34HZ	<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)
8,300.00	90.59	359.88	7,327.65	1,225.30	357.41	1,226.78	0.00	0.00	0.00
8,400.00	90.59	359.88	7,326.62	1,325.29	357.20	1,326.78	0.00	0.00	0.00
8,500.00	90.59	359.88	7,325.59	1,425.29	356.99	1,426.77	0.00	0.00	0.00
8,600.00	90.59	359.88	7,324.56	1,525.28	356.78	1,526.76	0.00	0.00	0.00
8,700.00	90.59	359.88	7,323.53	1,625.28	356.57	1,626.76	0.00	0.00	0.00
8,800.00	90.59	359.88	7,322.50	1,725.27	356.36	1,726.75	0.00	0.00	0.00
8,900.00	90.59	359.88	7,321.47	1,825.27	356.14	1,826.74	0.00	0.00	0.00
9,000.00	90.59	359.88	7,320.44	1,925.26	355.93	1,926.73	0.00	0.00	0.00
9,100.00	90.59	359.88	7,319.41	2,025.25	355.72	2,026.73	0.00	0.00	0.00
9,200.00	90.59	359.88	7,318.38	2,125.25	355.51	2,126.72	0.00	0.00	0.00
9,300.00	90.59	359.88	7,317.35	2,225.24	355.30	2,226.71	0.00	0.00	0.00
9,400.00	90.59	359.88	7,316.32	2,325.24	355.09	2,326.70	0.00	0.00	0.00
9,500.00	90.59	359.88	7,315.29	2,425.23	354.88	2,426.70	0.00	0.00	0.00
9,600.00	90.59	359.88	7,314.26	2,525.23	354.67	2,526.69	0.00	0.00	0.00
9,700.00	90.59	359.88	7,313.23	2,625.22	354.46	2,626.68	0.00	0.00	0.00
9,800.00	90.59	359.88	7,312.20	2,725.22	354.24	2,726.68	0.00	0.00	0.00
9,900.00	90.59	359.88	7,311.17	2,825.21	354.03	2,826.67	0.00	0.00	0.00
10,000.00	90.59	359.88	7,310.14	2,925.20	353.82	2,926.66	0.00	0.00	0.00
10,100.00	90.59	359.88	7,309.11	3,025.20	353.61	3,026.65	0.00	0.00	0.00
10,200.00	90.59	359.88	7,308.08	3,125.19	353.40	3,126.65	0.00	0.00	0.00
10,300.00	90.59	359.88	7,307.05	3,225.19	353.19	3,226.64	0.00	0.00	0.00
10,400.00	90.59	359.88	7,306.02	3,325.18	352.98	3,326.63	0.00	0.00	0.00
10,500.00	90.59	359.88	7,304.99	3,425.18	352.77	3,426.62	0.00	0.00	0.00
10,600.00	90.59	359.88	7,303.97	3,525.17	352.55	3,526.62	0.00	0.00	0.00
10,700.00	90.59	359.88	7,302.94	3,625.17	352.34	3,626.61	0.00	0.00	0.00
10,800.00	90.59	359.88	7,301.91	3,725.16	352.13	3,726.60	0.00	0.00	0.00
10,900.00	90.59	359.88	7,300.88	3,825.15	351.92	3,826.60	0.00	0.00	0.00
11,000.00	90.59	359.88	7,299.85	3,925.15	351.71	3,926.59	0.00	0.00	0.00
11,100.00	90.59	359.88	7,298.82	4,025.14	351.50	4,026.58	0.00	0.00	0.00
11,200.00	90.59	359.88	7,297.79	4,125.14	351.29	4,126.57	0.00	0.00	0.00
11,300.00	90.59	359.88	7,296.76	4,225.13	351.08	4,226.57	0.00	0.00	0.00
11,400.00	90.59	359.88	7,295.73	4,325.13	350.86	4,326.56	0.00	0.00	0.00
11,500.00	90.59	359.88	7,294.70	4,425.12	350.65	4,426.55	0.00	0.00	0.00
11,600.00	90.59	359.88	7,293.67	4,525.12	350.44	4,526.54	0.00	0.00	0.00
11,700.00	90.59	359.88	7,292.64	4,625.11	350.23	4,626.54	0.00	0.00	0.00
11,800.00	90.59	359.88	7,291.61	4,725.10	350.02	4,726.53	0.00	0.00	0.00
11,900.00	90.59	359.88	7,290.58	4,825.10	349.81	4,826.52	0.00	0.00	0.00
12,000.00	90.59	359.88	7,289.55	4,925.09	349.60	4,926.52	0.00	0.00	0.00
12,100.00	90.59	359.88	7,288.52	5,025.09	349.39	5,026.51	0.00	0.00	0.00
12,200.00	90.59	359.88	7,287.49	5,125.08	349.18	5,126.50	0.00	0.00	0.00
12,300.00	90.59	359.88	7,286.46	5,225.08	348.96	5,226.49	0.00	0.00	0.00
12,400.00	90.59	359.88	7,285.43	5,325.07	348.75	5,326.49	0.00	0.00	0.00
12,500.00	90.59	359.88	7,284.40	5,425.07	348.54	5,426.48	0.00	0.00	0.00
12,600.00	90.59	359.88	7,283.37	5,525.06	348.33	5,526.47	0.00	0.00	0.00
12,700.00	90.59	359.88	7,282.34	5,625.06	348.12	5,626.46	0.00	0.00	0.00
12,800.00	90.59	359.88	7,281.31	5,725.05	347.91	5,726.46	0.00	0.00	0.00
12,900.00	90.59	359.88	7,280.28	5,825.04	347.70	5,826.45	0.00	0.00	0.00
13,000.00	90.59	359.88	7,279.25	5,925.04	347.49	5,926.44	0.00	0.00	0.00
13,100.00	90.59	359.88	7,278.22	6,025.03	347.27	6,026.43	0.00	0.00	0.00
13,200.00	90.59	359.88	7,277.19	6,125.03	347.06	6,126.43	0.00	0.00	0.00
13,300.00	90.59	359.88	7,276.16	6,225.02	346.85	6,226.42	0.00	0.00	0.00
13,400.00	90.59	359.88	7,275.13	6,325.02	346.64	6,326.41	0.00	0.00	0.00
13,500.00	90.59	359.88	7,274.10	6,425.01	346.43	6,426.41	0.00	0.00	0.00
13,600.00	90.59	359.88	7,273.07	6,525.01	346.22	6,526.40	0.00	0.00	0.00

# Corporate Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well CAMENISCH 10N-34HZ
<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>TVD Reference:</b>	RKB = 17' @ 4893.00usft (D Rig)
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>MD Reference:</b>	RKB = 17' @ 4893.00usft (D Rig)
<b>Site:</b>	2N-68W-15 Camenisch 7-15 Pad	<b>North Reference:</b>	True
<b>Well:</b>	CAMENISCH 10N-34HZ	<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)
13,700.00	90.59	359.88	7,272.04	6,625.00	346.01	6,626.39	0.00	0.00	0.00
13,800.00	90.59	359.88	7,271.01	6,724.99	345.80	6,726.38	0.00	0.00	0.00
13,900.00	90.59	359.88	7,269.98	6,824.99	345.58	6,826.38	0.00	0.00	0.00
14,000.00	90.59	359.88	7,268.95	6,924.98	345.37	6,926.37	0.00	0.00	0.00
14,100.00	90.59	359.88	7,267.92	7,024.98	345.16	7,026.36	0.00	0.00	0.00
14,200.00	90.59	359.88	7,266.89	7,124.97	344.95	7,126.35	0.00	0.00	0.00
14,300.00	90.59	359.88	7,265.87	7,224.97	344.74	7,226.35	0.00	0.00	0.00
14,400.00	90.59	359.88	7,264.84	7,324.96	344.53	7,326.34	0.00	0.00	0.00
14,500.00	90.59	359.88	7,263.81	7,424.96	344.32	7,426.33	0.00	0.00	0.00
14,600.00	90.59	359.88	7,262.78	7,524.95	344.11	7,526.33	0.00	0.00	0.00
14,700.00	90.59	359.88	7,261.75	7,624.94	343.90	7,626.32	0.00	0.00	0.00
14,800.00	90.59	359.88	7,260.72	7,724.94	343.68	7,726.31	0.00	0.00	0.00
14,900.00	90.59	359.88	7,259.69	7,824.93	343.47	7,826.30	0.00	0.00	0.00
15,000.00	90.59	359.88	7,258.66	7,924.93	343.26	7,926.30	0.00	0.00	0.00
15,100.00	90.59	359.88	7,257.63	8,024.92	343.05	8,026.29	0.00	0.00	0.00
15,200.00	90.59	359.88	7,256.60	8,124.92	342.84	8,126.28	0.00	0.00	0.00
15,300.00	90.59	359.88	7,255.57	8,224.91	342.63	8,226.27	0.00	0.00	0.00
15,400.00	90.59	359.88	7,254.54	8,324.91	342.42	8,326.27	0.00	0.00	0.00
15,500.00	90.59	359.88	7,253.51	8,424.90	342.21	8,426.26	0.00	0.00	0.00
15,600.00	90.59	359.88	7,252.48	8,524.90	341.99	8,526.25	0.00	0.00	0.00
15,700.00	90.59	359.88	7,251.45	8,624.89	341.78	8,626.25	0.00	0.00	0.00
15,800.00	90.59	359.88	7,250.42	8,724.88	341.57	8,726.24	0.00	0.00	0.00
15,900.00	90.59	359.88	7,249.39	8,824.88	341.36	8,826.23	0.00	0.00	0.00
16,000.00	90.59	359.88	7,248.36	8,924.87	341.15	8,926.22	0.00	0.00	0.00
16,100.00	90.59	359.88	7,247.33	9,024.87	340.94	9,026.22	0.00	0.00	0.00
16,200.00	90.59	359.88	7,246.30	9,124.86	340.73	9,126.21	0.00	0.00	0.00
16,300.00	90.59	359.88	7,245.27	9,224.86	340.52	9,226.20	0.00	0.00	0.00
16,400.00	90.59	359.88	7,244.24	9,324.85	340.30	9,326.19	0.00	0.00	0.00
16,500.00	90.59	359.88	7,243.21	9,424.85	340.09	9,426.19	0.00	0.00	0.00
16,600.00	90.59	359.88	7,242.18	9,524.84	339.88	9,526.18	0.00	0.00	0.00
16,700.00	90.59	359.88	7,241.15	9,624.83	339.67	9,626.17	0.00	0.00	0.00
16,800.00	90.59	359.88	7,240.12	9,724.83	339.46	9,726.17	0.00	0.00	0.00
16,900.00	90.59	359.88	7,239.09	9,824.82	339.25	9,826.16	0.00	0.00	0.00
17,000.00	90.59	359.88	7,238.06	9,924.82	339.04	9,926.15	0.00	0.00	0.00
17,100.00	90.59	359.88	7,237.03	10,024.81	338.83	10,026.14	0.00	0.00	0.00
17,200.00	90.59	359.88	7,236.00	10,124.81	338.62	10,126.14	0.00	0.00	0.00
17,300.00	90.59	359.88	7,234.97	10,224.80	338.40	10,226.13	0.00	0.00	0.00
17,400.00	90.59	359.88	7,233.94	10,324.80	338.19	10,326.12	0.00	0.00	0.00
17,500.00	90.59	359.88	7,232.91	10,424.79	337.98	10,426.11	0.00	0.00	0.00
17,600.00	90.59	359.88	7,231.88	10,524.78	337.77	10,526.11	0.00	0.00	0.00
17,700.00	90.59	359.88	7,230.85	10,624.78	337.56	10,626.10	0.00	0.00	0.00
17,800.00	90.59	359.88	7,229.82	10,724.77	337.35	10,726.09	0.00	0.00	0.00
17,900.00	90.59	359.88	7,228.80	10,824.77	337.14	10,826.09	0.00	0.00	0.00
18,000.00	90.59	359.88	7,227.77	10,924.76	336.93	10,926.08	0.00	0.00	0.00
18,100.00	90.59	359.88	7,226.74	11,024.76	336.71	11,026.07	0.00	0.00	0.00
18,200.00	90.59	359.88	7,225.71	11,124.75	336.50	11,126.06	0.00	0.00	0.00
18,300.00	90.59	359.88	7,224.68	11,224.75	336.29	11,226.06	0.00	0.00	0.00
18,400.00	90.59	359.88	7,223.65	11,324.74	336.08	11,326.05	0.00	0.00	0.00
18,500.00	90.59	359.88	7,222.62	11,424.73	335.87	11,426.04	0.00	0.00	0.00
18,600.00	90.59	359.88	7,221.59	11,524.73	335.66	11,526.03	0.00	0.00	0.00
18,700.00	90.59	359.88	7,220.56	11,624.72	335.45	11,626.03	0.00	0.00	0.00
18,800.00	90.59	359.88	7,219.53	11,724.72	335.24	11,726.02	0.00	0.00	0.00
18,900.00	90.59	359.88	7,218.50	11,824.71	335.02	11,826.01	0.00	0.00	0.00
19,000.00	90.59	359.88	7,217.47	11,924.71	334.81	11,926.01	0.00	0.00	0.00

# Corporate Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well CAMENISCH 10N-34HZ
<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>TVD Reference:</b>	RKB = 17' @ 4893.00usft (D Rig)
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>MD Reference:</b>	RKB = 17' @ 4893.00usft (D Rig)
<b>Site:</b>	2N-68W-15 Camenisch 7-15 Pad	<b>North Reference:</b>	True
<b>Well:</b>	CAMENISCH 10N-34HZ	<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)
19,100.00	90.59	359.88	7,216.44	12,024.70	334.60	12,026.00	0.00	0.00	0.00
19,200.00	90.59	359.88	7,215.41	12,124.70	334.39	12,125.99	0.00	0.00	0.00
19,300.00	90.59	359.88	7,214.38	12,224.69	334.18	12,225.98	0.00	0.00	0.00
19,400.00	90.59	359.88	7,213.35	12,324.69	333.97	12,325.98	0.00	0.00	0.00
19,500.00	90.59	359.88	7,212.32	12,424.68	333.76	12,425.97	0.00	0.00	0.00
19,600.00	90.59	359.88	7,211.29	12,524.67	333.55	12,525.96	0.00	0.00	0.00
19,700.00	90.59	359.88	7,210.26	12,624.67	333.33	12,625.95	0.00	0.00	0.00
19,800.00	90.59	359.88	7,209.23	12,724.66	333.12	12,725.95	0.00	0.00	0.00
19,900.00	90.59	359.88	7,208.20	12,824.66	332.91	12,825.94	0.00	0.00	0.00
20,000.00	90.59	359.88	7,207.17	12,924.65	332.70	12,925.93	0.00	0.00	0.00
20,100.00	90.59	359.88	7,206.14	13,024.65	332.49	13,025.93	0.00	0.00	0.00
20,200.00	90.59	359.88	7,205.11	13,124.64	332.28	13,125.92	0.00	0.00	0.00
20,300.00	90.59	359.88	7,204.08	13,224.64	332.07	13,225.91	0.00	0.00	0.00
20,400.00	90.59	359.88	7,203.05	13,324.63	331.86	13,325.90	0.00	0.00	0.00
20,500.00	90.59	359.88	7,202.02	13,424.62	331.65	13,425.90	0.00	0.00	0.00
20,600.00	90.59	359.88	7,200.99	13,524.62	331.43	13,525.89	0.00	0.00	0.00
20,700.00	90.59	359.88	7,199.96	13,624.61	331.22	13,625.88	0.00	0.00	0.00
20,800.00	90.59	359.88	7,198.93	13,724.61	331.01	13,725.87	0.00	0.00	0.00
20,900.00	90.59	359.88	7,197.90	13,824.60	330.80	13,825.87	0.00	0.00	0.00
21,000.00	90.59	359.88	7,196.87	13,924.60	330.59	13,925.86	0.00	0.00	0.00
21,100.00	90.59	359.88	7,195.84	14,024.59	330.38	14,025.85	0.00	0.00	0.00
21,200.00	90.59	359.88	7,194.81	14,124.59	330.17	14,125.84	0.00	0.00	0.00
21,279.04	90.59	359.88	7,194.00	14,203.62	330.00	14,204.88	0.00	0.00	0.00
CAMENISCH 10N-34HZ_PBHL									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
CAMENISCH 10N-34H	0.00	0.00	7,194.00	14,203.62	330.00	14,591,910.01	1,644,223.62	40.178984	-104.986371
- plan hits target center									
- Point									
CAMENISCH 10N-34H	0.00	0.00	7,333.64	643.17	358.64	14,578,349.56	1,644,254.16	40.141745	-104.986269
- plan hits target center									
- Point									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
1,503.42	1,500.00	9 5/8"	9-5/8	13-1/2	
7,717.84	7,333.64	Top of Production	5-1/2	8-1/2	



# Corporate Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well CAMENISCH 10N-34HZ
<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>TVD Reference:</b>	RKB = 17' @ 4893.00usft (D Rig)
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>MD Reference:</b>	RKB = 17' @ 4893.00usft (D Rig)
<b>Site:</b>	2N-68W-15 Camenisch 7-15 Pad	<b>North Reference:</b>	True
<b>Well:</b>	CAMENISCH 10N-34HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	Permit Rev-2		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
749.96	749.00	Fox Hills Mkr				
3,796.92	3,786.00	Parkman				
4,536.34	4,523.00	Sussex				
7,119.67	7,078.00	Sharon Springs				
7,244.39	7,170.00	Niobrara				
7,348.36	7,233.00	Nio B				
7,533.45	7,309.00	Nio C				