

# **US ROCKIES WATTENBERG PLANNING**

**WELD-NAD83-UTMFT13N  
2N-68W-15 Camenisch 7-15 Pad  
CAMENISCH STATE 23N3-34HZ**

**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 STATE 23N3-34HZ  
Wellbore: Plan A  
Design: Permit Rev-2

#### FORMATION TOP DETAILS

TVDPath	MDPath	Formation
749.00	749.09	Fox Hills Mkr
3786.00	3786.70	Parkman
4523.00	4523.73	Sussex
7077.00	7128.63	Sharon Springs
7169.00	7278.65	Niobrara
7233.00	7435.73	Nio B

#### WELL DETAILS: CAMENISCH STATE 23N3-34HZ

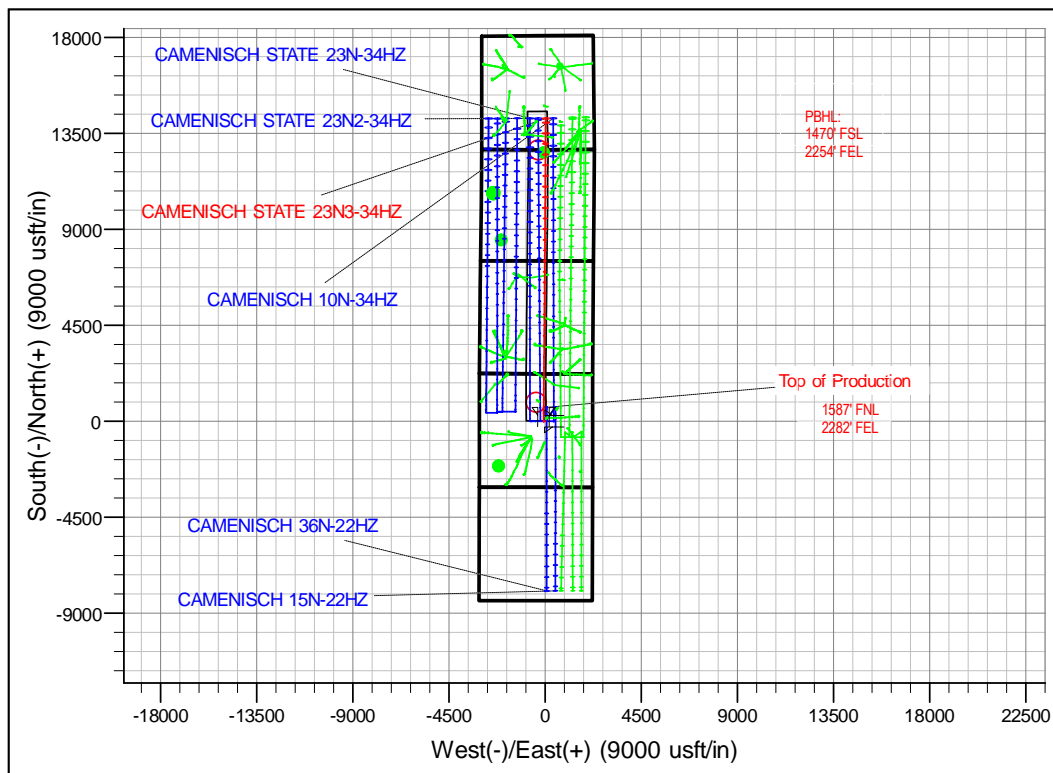
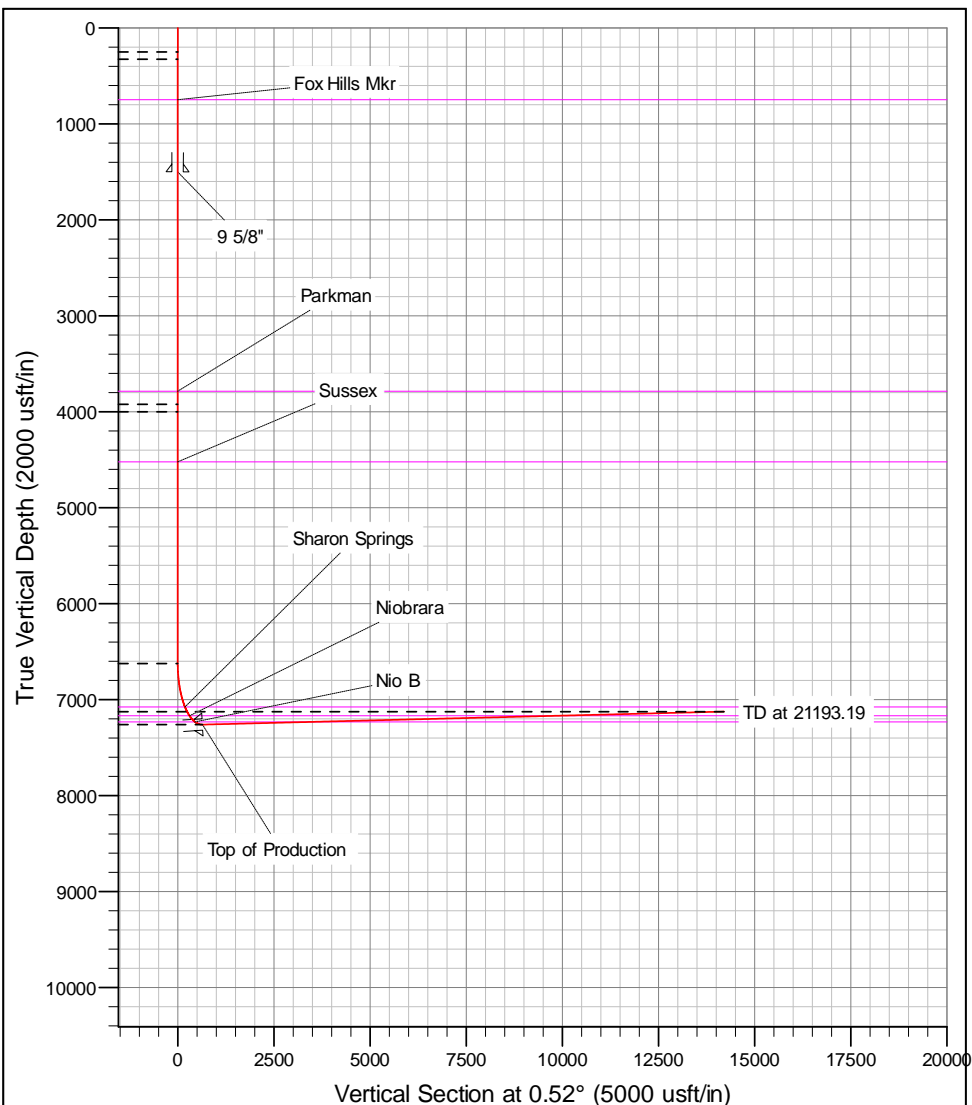
+N/-S	+E/-W	GL: 4876.00 Northing	RKB = 17' @ 4893.00usft (D Rig) Easting	Latitude	Longitude	Slot
0.00	0.00	14577706.34	1643850.62	40.139979	-104.987713	

#### 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
326.57	1.15	270.00	326.57	0.00	-0.77	1.50	-0.01
3924.16	1.15	270.00	3923.43	0.00	-72.88	0.00	-0.66
4000.73	0.00	0.00	4000.00	0.00	-73.65	1.50	-0.67
6625.06	0.00	0.00	6624.33	0.00	-73.65	0.00	-0.67
7631.39	90.57	0.43	7260.92	642.93	-68.78	9.00	642.28
21193.19	90.57	0.43	7126.00	14203.67	34.00	0.00	4203.39

#### DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
CAMENISCH STATE 23N3-34HZ_PBHL	7126.00	14203.67	34.00	14591910.01	1643882.65	40.178984	-104.987591



# Corporate Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well CAMENISCH STATE 23N3-34HZ
<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 STATE 23N3-34HZ	<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 STATE 23N3-34HZ					
Well Position	+N/-S	-0.36 usft	Northing:	14,577,706.34 usft	Latitude:	40.139979
	+E/-W	60.09 usft	Easting:	1,643,850.61 usft	Longitude:	-104.987713
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	0.52

<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	
326.57	1.15	270.00	326.57	0.00	-0.77	1.50	1.50	0.00	270.00	
3,924.16	1.15	270.00	3,923.43	0.00	-72.88	0.00	0.00	0.00	0.00	
4,000.73	0.00	0.00	4,000.00	0.00	-73.65	1.50	-1.50	0.00	180.00	
6,625.06	0.00	0.00	6,624.33	0.00	-73.65	0.00	0.00	0.00	0.00	
7,631.39	90.57	0.43	7,260.92	642.93	-68.78	9.00	9.00	0.00	0.43	
21,193.19	90.57	0.43	7,126.00	14,203.67	34.00	0.00	0.00	0.00	0.00	CAMENISCH STAT

# Corporate Planning Report

**Database:** PLANNING  
**Company:** US ROCKIES WATTENBERG PLANNING  
**Project:** WELD-NAD83-UTMFT13N  
**Site:** 2N-68W-15 Camenisch 7-15 Pad  
**Well:** CAMENISCH STATE 23N3-34HZ  
**Wellbore:** Plan A  
**Design:** Permit Rev-2

**Local Co-ordinate Reference:**  
**TVD Reference:**  
**MD Reference:**  
**North Reference:**  
**Survey Calculation Method:**

Well CAMENISCH STATE 23N3-34HZ  
 RKB = 17' @ 4893.00usft (D Rig)  
 RKB = 17' @ 4893.00usft (D Rig)  
 True  
 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	270.00	300.00	0.00	-0.33	0.00	1.50	1.50	0.00
326.57	1.15	270.00	326.57	0.00	-0.77	-0.01	1.50	1.50	0.00
400.00	1.15	270.00	399.98	0.00	-2.24	-0.02	0.00	0.00	0.00
500.00	1.15	270.00	499.96	0.00	-4.24	-0.04	0.00	0.00	0.00
600.00	1.15	270.00	599.94	0.00	-6.25	-0.06	0.00	0.00	0.00
700.00	1.15	270.00	699.92	0.00	-8.25	-0.07	0.00	0.00	0.00
749.09	1.15	270.00	749.00	0.00	-9.24	-0.08	0.00	0.00	0.00
Fox Hills Mkr									
800.00	1.15	270.00	799.90	0.00	-10.26	-0.09	0.00	0.00	0.00
900.00	1.15	270.00	899.88	0.00	-12.26	-0.11	0.00	0.00	0.00
1,000.00	1.15	270.00	999.86	0.00	-14.27	-0.13	0.00	0.00	0.00
1,100.00	1.15	270.00	1,099.84	0.00	-16.27	-0.15	0.00	0.00	0.00
1,200.00	1.15	270.00	1,199.82	0.00	-18.28	-0.17	0.00	0.00	0.00
1,300.00	1.15	270.00	1,299.80	0.00	-20.28	-0.18	0.00	0.00	0.00
1,400.00	1.15	270.00	1,399.78	0.00	-22.28	-0.20	0.00	0.00	0.00
1,500.00	1.15	270.00	1,499.76	0.00	-24.29	-0.22	0.00	0.00	0.00
1,500.24	1.15	270.00	1,500.00	0.00	-24.29	-0.22	0.00	0.00	0.00
9 5/8"									
1,600.00	1.15	270.00	1,599.74	0.00	-26.29	-0.24	0.00	0.00	0.00
1,700.00	1.15	270.00	1,699.72	0.00	-28.30	-0.26	0.00	0.00	0.00
1,800.00	1.15	270.00	1,799.70	0.00	-30.30	-0.28	0.00	0.00	0.00
1,900.00	1.15	270.00	1,899.68	0.00	-32.31	-0.29	0.00	0.00	0.00
2,000.00	1.15	270.00	1,999.66	0.00	-34.31	-0.31	0.00	0.00	0.00
2,100.00	1.15	270.00	2,099.64	0.00	-36.32	-0.33	0.00	0.00	0.00
2,200.00	1.15	270.00	2,199.62	0.00	-38.32	-0.35	0.00	0.00	0.00
2,300.00	1.15	270.00	2,299.60	0.00	-40.33	-0.37	0.00	0.00	0.00
2,400.00	1.15	270.00	2,399.58	0.00	-42.33	-0.38	0.00	0.00	0.00
2,500.00	1.15	270.00	2,499.56	0.00	-44.33	-0.40	0.00	0.00	0.00
2,600.00	1.15	270.00	2,599.54	0.00	-46.34	-0.42	0.00	0.00	0.00
2,700.00	1.15	270.00	2,699.52	0.00	-48.34	-0.44	0.00	0.00	0.00
2,800.00	1.15	270.00	2,799.50	0.00	-50.35	-0.46	0.00	0.00	0.00
2,900.00	1.15	270.00	2,899.48	0.00	-52.35	-0.48	0.00	0.00	0.00
3,000.00	1.15	270.00	2,999.46	0.00	-54.36	-0.49	0.00	0.00	0.00
3,100.00	1.15	270.00	3,099.44	0.00	-56.36	-0.51	0.00	0.00	0.00
3,200.00	1.15	270.00	3,199.42	0.00	-58.37	-0.53	0.00	0.00	0.00
3,300.00	1.15	270.00	3,299.40	0.00	-60.37	-0.55	0.00	0.00	0.00
3,400.00	1.15	270.00	3,399.38	0.00	-62.38	-0.57	0.00	0.00	0.00
3,500.00	1.15	270.00	3,499.36	0.00	-64.38	-0.58	0.00	0.00	0.00
3,600.00	1.15	270.00	3,599.34	0.00	-66.38	-0.60	0.00	0.00	0.00
3,700.00	1.15	270.00	3,699.32	0.00	-68.39	-0.62	0.00	0.00	0.00
3,786.70	1.15	270.00	3,786.00	0.00	-70.13	-0.64	0.00	0.00	0.00
Parkman									
3,800.00	1.15	270.00	3,799.30	0.00	-70.39	-0.64	0.00	0.00	0.00
3,900.00	1.15	270.00	3,899.28	0.00	-72.40	-0.66	0.00	0.00	0.00
3,924.16	1.15	270.00	3,923.43	0.00	-72.88	-0.66	0.00	0.00	0.00
4,000.00	0.01	270.00	3,999.27	0.00	-73.65	-0.67	1.50	-1.50	0.00
4,000.73	0.00	0.00	4,000.00	0.00	-73.65	-0.67	1.50	-1.50	0.00
4,100.00	0.00	0.00	4,099.27	0.00	-73.65	-0.67	0.00	0.00	0.00
4,200.00	0.00	0.00	4,199.27	0.00	-73.65	-0.67	0.00	0.00	0.00

# Corporate Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well CAMENISCH STATE 23N3-34HZ
<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 STATE 23N3-34HZ	<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)
4,300.00	0.00	0.00	4,299.27	0.00	-73.65	-0.67	0.00	0.00	0.00
4,400.00	0.00	0.00	4,399.27	0.00	-73.65	-0.67	0.00	0.00	0.00
4,500.00	0.00	0.00	4,499.27	0.00	-73.65	-0.67	0.00	0.00	0.00
4,523.73	0.00	0.00	4,523.00	0.00	-73.65	-0.67	0.00	0.00	0.00
<b>Sussex</b>									
4,600.00	0.00	0.00	4,599.27	0.00	-73.65	-0.67	0.00	0.00	0.00
4,700.00	0.00	0.00	4,699.27	0.00	-73.65	-0.67	0.00	0.00	0.00
4,800.00	0.00	0.00	4,799.27	0.00	-73.65	-0.67	0.00	0.00	0.00
4,900.00	0.00	0.00	4,899.27	0.00	-73.65	-0.67	0.00	0.00	0.00
5,000.00	0.00	0.00	4,999.27	0.00	-73.65	-0.67	0.00	0.00	0.00
5,100.00	0.00	0.00	5,099.27	0.00	-73.65	-0.67	0.00	0.00	0.00
5,200.00	0.00	0.00	5,199.27	0.00	-73.65	-0.67	0.00	0.00	0.00
5,300.00	0.00	0.00	5,299.27	0.00	-73.65	-0.67	0.00	0.00	0.00
5,400.00	0.00	0.00	5,399.27	0.00	-73.65	-0.67	0.00	0.00	0.00
5,500.00	0.00	0.00	5,499.27	0.00	-73.65	-0.67	0.00	0.00	0.00
5,600.00	0.00	0.00	5,599.27	0.00	-73.65	-0.67	0.00	0.00	0.00
5,700.00	0.00	0.00	5,699.27	0.00	-73.65	-0.67	0.00	0.00	0.00
5,800.00	0.00	0.00	5,799.27	0.00	-73.65	-0.67	0.00	0.00	0.00
5,900.00	0.00	0.00	5,899.27	0.00	-73.65	-0.67	0.00	0.00	0.00
6,000.00	0.00	0.00	5,999.27	0.00	-73.65	-0.67	0.00	0.00	0.00
6,100.00	0.00	0.00	6,099.27	0.00	-73.65	-0.67	0.00	0.00	0.00
6,200.00	0.00	0.00	6,199.27	0.00	-73.65	-0.67	0.00	0.00	0.00
6,300.00	0.00	0.00	6,299.27	0.00	-73.65	-0.67	0.00	0.00	0.00
6,400.00	0.00	0.00	6,399.27	0.00	-73.65	-0.67	0.00	0.00	0.00
6,500.00	0.00	0.00	6,499.27	0.00	-73.65	-0.67	0.00	0.00	0.00
6,600.00	0.00	0.00	6,599.27	0.00	-73.65	-0.67	0.00	0.00	0.00
6,625.06	0.00	0.00	6,624.33	0.00	-73.65	-0.67	0.00	0.00	0.00
6,700.00	6.74	0.43	6,699.09	4.41	-73.62	3.74	9.00	9.00	0.00
6,800.00	15.74	0.43	6,797.07	23.88	-73.47	23.22	9.00	9.00	0.00
6,900.00	24.74	0.43	6,890.80	58.45	-73.21	57.78	9.00	9.00	0.00
7,000.00	33.74	0.43	6,977.96	107.25	-72.84	106.59	9.00	9.00	0.00
7,100.00	42.74	0.43	7,056.42	169.09	-72.37	168.43	9.00	9.00	0.00
7,128.63	45.32	0.43	7,077.00	188.98	-72.22	188.32	9.00	9.00	0.00
<b>Sharon Springs</b>									
7,200.00	51.74	0.43	7,124.24	242.44	-71.81	241.78	9.00	9.00	0.00
7,278.65	58.82	0.43	7,169.00	307.04	-71.32	306.38	9.00	9.00	0.00
<b>Niobrara</b>									
7,300.00	60.74	0.43	7,179.75	325.49	-71.18	324.83	9.00	9.00	0.00
7,400.00	69.74	0.43	7,221.58	416.21	-70.50	415.55	9.00	9.00	0.00
7,435.73	72.96	0.43	7,233.00	450.05	-70.24	449.40	9.00	9.00	0.00
<b>Nio B</b>									
7,500.00	78.74	0.43	7,248.70	512.35	-69.77	511.69	9.00	9.00	0.00
7,600.00	87.74	0.43	7,260.45	611.55	-69.02	610.90	9.00	9.00	0.00
7,631.39	90.57	0.43	7,260.92	642.93	-68.78	642.28	9.00	9.00	0.00
<b>Top of Production - CAMENISCH STATE 23N3-34HZ_PHL</b>									
7,700.00	90.57	0.43	7,260.23	711.54	-68.26	710.89	0.00	0.00	0.00
7,800.00	90.57	0.43	7,259.24	811.53	-67.50	810.88	0.00	0.00	0.00
7,900.00	90.57	0.43	7,258.24	911.52	-66.74	910.88	0.00	0.00	0.00
8,000.00	90.57	0.43	7,257.25	1,011.51	-65.98	1,010.87	0.00	0.00	0.00
8,100.00	90.57	0.43	7,256.25	1,111.50	-65.23	1,110.87	0.00	0.00	0.00
8,200.00	90.57	0.43	7,255.26	1,211.50	-64.47	1,210.86	0.00	0.00	0.00
8,300.00	90.57	0.43	7,254.26	1,311.49	-63.71	1,310.86	0.00	0.00	0.00
8,400.00	90.57	0.43	7,253.27	1,411.48	-62.95	1,410.85	0.00	0.00	0.00
8,500.00	90.57	0.43	7,252.27	1,511.47	-62.19	1,510.85	0.00	0.00	0.00

# Corporate Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well CAMENISCH STATE 23N3-34HZ
<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 STATE 23N3-34HZ	<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)
8,600.00	90.57	0.43	7,251.28	1,611.47	-61.44	1,610.84	0.00	0.00	0.00
8,700.00	90.57	0.43	7,250.29	1,711.46	-60.68	1,710.84	0.00	0.00	0.00
8,800.00	90.57	0.43	7,249.29	1,811.45	-59.92	1,810.83	0.00	0.00	0.00
8,900.00	90.57	0.43	7,248.30	1,911.44	-59.16	1,910.83	0.00	0.00	0.00
9,000.00	90.57	0.43	7,247.30	2,011.43	-58.41	2,010.82	0.00	0.00	0.00
9,100.00	90.57	0.43	7,246.31	2,111.43	-57.65	2,110.82	0.00	0.00	0.00
9,200.00	90.57	0.43	7,245.31	2,211.42	-56.89	2,210.81	0.00	0.00	0.00
9,300.00	90.57	0.43	7,244.32	2,311.41	-56.13	2,310.81	0.00	0.00	0.00
9,400.00	90.57	0.43	7,243.32	2,411.40	-55.37	2,410.80	0.00	0.00	0.00
9,500.00	90.57	0.43	7,242.33	2,511.39	-54.62	2,510.80	0.00	0.00	0.00
9,600.00	90.57	0.43	7,241.33	2,611.39	-53.86	2,610.79	0.00	0.00	0.00
9,700.00	90.57	0.43	7,240.34	2,711.38	-53.10	2,710.79	0.00	0.00	0.00
9,800.00	90.57	0.43	7,239.34	2,811.37	-52.34	2,810.78	0.00	0.00	0.00
9,900.00	90.57	0.43	7,238.35	2,911.36	-51.58	2,910.78	0.00	0.00	0.00
10,000.00	90.57	0.43	7,237.35	3,011.36	-50.83	3,010.77	0.00	0.00	0.00
10,100.00	90.57	0.43	7,236.36	3,111.35	-50.07	3,110.77	0.00	0.00	0.00
10,200.00	90.57	0.43	7,235.36	3,211.34	-49.31	3,210.76	0.00	0.00	0.00
10,300.00	90.57	0.43	7,234.37	3,311.33	-48.55	3,310.76	0.00	0.00	0.00
10,400.00	90.57	0.43	7,233.37	3,411.32	-47.80	3,410.75	0.00	0.00	0.00
10,500.00	90.57	0.43	7,232.38	3,511.32	-47.04	3,510.74	0.00	0.00	0.00
10,600.00	90.57	0.43	7,231.38	3,611.31	-46.28	3,610.74	0.00	0.00	0.00
10,700.00	90.57	0.43	7,230.39	3,711.30	-45.52	3,710.73	0.00	0.00	0.00
10,800.00	90.57	0.43	7,229.39	3,811.29	-44.76	3,810.73	0.00	0.00	0.00
10,900.00	90.57	0.43	7,228.40	3,911.29	-44.01	3,910.72	0.00	0.00	0.00
11,000.00	90.57	0.43	7,227.40	4,011.28	-43.25	4,010.72	0.00	0.00	0.00
11,100.00	90.57	0.43	7,226.41	4,111.27	-42.49	4,110.71	0.00	0.00	0.00
11,200.00	90.57	0.43	7,225.41	4,211.26	-41.73	4,210.71	0.00	0.00	0.00
11,300.00	90.57	0.43	7,224.42	4,311.25	-40.97	4,310.70	0.00	0.00	0.00
11,400.00	90.57	0.43	7,223.42	4,411.25	-40.22	4,410.70	0.00	0.00	0.00
11,500.00	90.57	0.43	7,222.43	4,511.24	-39.46	4,510.69	0.00	0.00	0.00
11,600.00	90.57	0.43	7,221.44	4,611.23	-38.70	4,610.69	0.00	0.00	0.00
11,700.00	90.57	0.43	7,220.44	4,711.22	-37.94	4,710.68	0.00	0.00	0.00
11,800.00	90.57	0.43	7,219.45	4,811.21	-37.19	4,810.68	0.00	0.00	0.00
11,900.00	90.57	0.43	7,218.45	4,911.21	-36.43	4,910.67	0.00	0.00	0.00
12,000.00	90.57	0.43	7,217.46	5,011.20	-35.67	5,010.67	0.00	0.00	0.00
12,100.00	90.57	0.43	7,216.46	5,111.19	-34.91	5,110.66	0.00	0.00	0.00
12,200.00	90.57	0.43	7,215.47	5,211.18	-34.15	5,210.66	0.00	0.00	0.00
12,300.00	90.57	0.43	7,214.47	5,311.18	-33.40	5,310.65	0.00	0.00	0.00
12,400.00	90.57	0.43	7,213.48	5,411.17	-32.64	5,410.65	0.00	0.00	0.00
12,500.00	90.57	0.43	7,212.48	5,511.16	-31.88	5,510.64	0.00	0.00	0.00
12,600.00	90.57	0.43	7,211.49	5,611.15	-31.12	5,610.64	0.00	0.00	0.00
12,700.00	90.57	0.43	7,210.49	5,711.14	-30.37	5,710.63	0.00	0.00	0.00
12,800.00	90.57	0.43	7,209.50	5,811.14	-29.61	5,810.63	0.00	0.00	0.00
12,900.00	90.57	0.43	7,208.50	5,911.13	-28.85	5,910.62	0.00	0.00	0.00
13,000.00	90.57	0.43	7,207.51	6,011.12	-28.09	6,010.62	0.00	0.00	0.00
13,100.00	90.57	0.43	7,206.51	6,111.11	-27.33	6,110.61	0.00	0.00	0.00
13,200.00	90.57	0.43	7,205.52	6,211.11	-26.58	6,210.61	0.00	0.00	0.00
13,300.00	90.57	0.43	7,204.52	6,311.10	-25.82	6,310.60	0.00	0.00	0.00
13,400.00	90.57	0.43	7,203.53	6,411.09	-25.06	6,410.60	0.00	0.00	0.00
13,500.00	90.57	0.43	7,202.53	6,511.08	-24.30	6,510.59	0.00	0.00	0.00
13,600.00	90.57	0.43	7,201.54	6,611.07	-23.54	6,610.59	0.00	0.00	0.00
13,700.00	90.57	0.43	7,200.54	6,711.07	-22.79	6,710.58	0.00	0.00	0.00
13,800.00	90.57	0.43	7,199.55	6,811.06	-22.03	6,810.58	0.00	0.00	0.00
13,900.00	90.57	0.43	7,198.55	6,911.05	-21.27	6,910.57	0.00	0.00	0.00

# Corporate Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well CAMENISCH STATE 23N3-34HZ
<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 STATE 23N3-34HZ	<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)
14,000.00	90.57	0.43	7,197.56	7,011.04	-20.51	7,010.57	0.00	0.00	0.00
14,100.00	90.57	0.43	7,196.56	7,111.04	-19.76	7,110.56	0.00	0.00	0.00
14,200.00	90.57	0.43	7,195.57	7,211.03	-19.00	7,210.56	0.00	0.00	0.00
14,300.00	90.57	0.43	7,194.58	7,311.02	-18.24	7,310.55	0.00	0.00	0.00
14,400.00	90.57	0.43	7,193.58	7,411.01	-17.48	7,410.55	0.00	0.00	0.00
14,500.00	90.57	0.43	7,192.59	7,511.00	-16.72	7,510.54	0.00	0.00	0.00
14,600.00	90.57	0.43	7,191.59	7,611.00	-15.97	7,610.54	0.00	0.00	0.00
14,700.00	90.57	0.43	7,190.60	7,710.99	-15.21	7,710.53	0.00	0.00	0.00
14,800.00	90.57	0.43	7,189.60	7,810.98	-14.45	7,810.53	0.00	0.00	0.00
14,900.00	90.57	0.43	7,188.61	7,910.97	-13.69	7,910.52	0.00	0.00	0.00
15,000.00	90.57	0.43	7,187.61	8,010.96	-12.93	8,010.52	0.00	0.00	0.00
15,100.00	90.57	0.43	7,186.62	8,110.96	-12.18	8,110.51	0.00	0.00	0.00
15,200.00	90.57	0.43	7,185.62	8,210.95	-11.42	8,210.51	0.00	0.00	0.00
15,300.00	90.57	0.43	7,184.63	8,310.94	-10.66	8,310.50	0.00	0.00	0.00
15,400.00	90.57	0.43	7,183.63	8,410.93	-9.90	8,410.50	0.00	0.00	0.00
15,500.00	90.57	0.43	7,182.64	8,510.93	-9.15	8,510.49	0.00	0.00	0.00
15,600.00	90.57	0.43	7,181.64	8,610.92	-8.39	8,610.49	0.00	0.00	0.00
15,700.00	90.57	0.43	7,180.65	8,710.91	-7.63	8,710.48	0.00	0.00	0.00
15,800.00	90.57	0.43	7,179.65	8,810.90	-6.87	8,810.48	0.00	0.00	0.00
15,900.00	90.57	0.43	7,178.66	8,910.89	-6.11	8,910.47	0.00	0.00	0.00
16,000.00	90.57	0.43	7,177.66	9,010.89	-5.36	9,010.47	0.00	0.00	0.00
16,100.00	90.57	0.43	7,176.67	9,110.88	-4.60	9,110.46	0.00	0.00	0.00
16,200.00	90.57	0.43	7,175.67	9,210.87	-3.84	9,210.46	0.00	0.00	0.00
16,300.00	90.57	0.43	7,174.68	9,310.86	-3.08	9,310.45	0.00	0.00	0.00
16,400.00	90.57	0.43	7,173.68	9,410.86	-2.32	9,410.45	0.00	0.00	0.00
16,500.00	90.57	0.43	7,172.69	9,510.85	-1.57	9,510.44	0.00	0.00	0.00
16,600.00	90.57	0.43	7,171.69	9,610.84	-0.81	9,610.44	0.00	0.00	0.00
16,700.00	90.57	0.43	7,170.70	9,710.83	-0.05	9,710.43	0.00	0.00	0.00
16,800.00	90.57	0.43	7,169.70	9,810.82	0.71	9,810.43	0.00	0.00	0.00
16,900.00	90.57	0.43	7,168.71	9,910.82	1.46	9,910.42	0.00	0.00	0.00
17,000.00	90.57	0.43	7,167.71	10,010.81	2.22	10,010.42	0.00	0.00	0.00
17,100.00	90.57	0.43	7,166.72	10,110.80	2.98	10,110.41	0.00	0.00	0.00
17,200.00	90.57	0.43	7,165.73	10,210.79	3.74	10,210.41	0.00	0.00	0.00
17,300.00	90.57	0.43	7,164.73	10,310.78	4.50	10,310.40	0.00	0.00	0.00
17,400.00	90.57	0.43	7,163.74	10,410.78	5.25	10,410.40	0.00	0.00	0.00
17,500.00	90.57	0.43	7,162.74	10,510.77	6.01	10,510.39	0.00	0.00	0.00
17,600.00	90.57	0.43	7,161.75	10,610.76	6.77	10,610.39	0.00	0.00	0.00
17,700.00	90.57	0.43	7,160.75	10,710.75	7.53	10,710.38	0.00	0.00	0.00
17,800.00	90.57	0.43	7,159.76	10,810.75	8.28	10,810.38	0.00	0.00	0.00
17,900.00	90.57	0.43	7,158.76	10,910.74	9.04	10,910.37	0.00	0.00	0.00
18,000.00	90.57	0.43	7,157.77	11,010.73	9.80	11,010.37	0.00	0.00	0.00
18,100.00	90.57	0.43	7,156.77	11,110.72	10.56	11,110.36	0.00	0.00	0.00
18,200.00	90.57	0.43	7,155.78	11,210.71	11.32	11,210.36	0.00	0.00	0.00
18,300.00	90.57	0.43	7,154.78	11,310.71	12.07	11,310.35	0.00	0.00	0.00
18,400.00	90.57	0.43	7,153.79	11,410.70	12.83	11,410.35	0.00	0.00	0.00
18,500.00	90.57	0.43	7,152.79	11,510.69	13.59	11,510.34	0.00	0.00	0.00
18,600.00	90.57	0.43	7,151.80	11,610.68	14.35	11,610.34	0.00	0.00	0.00
18,700.00	90.57	0.43	7,150.80	11,710.68	15.11	11,710.33	0.00	0.00	0.00
18,800.00	90.57	0.43	7,149.81	11,810.67	15.86	11,810.33	0.00	0.00	0.00
18,900.00	90.57	0.43	7,148.81	11,910.66	16.62	11,910.32	0.00	0.00	0.00
19,000.00	90.57	0.43	7,147.82	12,010.65	17.38	12,010.32	0.00	0.00	0.00
19,100.00	90.57	0.43	7,146.82	12,110.64	18.14	12,110.31	0.00	0.00	0.00
19,200.00	90.57	0.43	7,145.83	12,210.64	18.89	12,210.30	0.00	0.00	0.00
19,300.00	90.57	0.43	7,144.83	12,310.63	19.65	12,310.30	0.00	0.00	0.00

# Corporate Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well CAMENISCH STATE 23N3-34HZ
<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 STATE 23N3-34HZ	<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)
19,400.00	90.57	0.43	7,143.84	12,410.62	20.41	12,410.29	0.00	0.00	0.00
19,500.00	90.57	0.43	7,142.84	12,510.61	21.17	12,510.29	0.00	0.00	0.00
19,600.00	90.57	0.43	7,141.85	12,610.61	21.93	12,610.28	0.00	0.00	0.00
19,700.00	90.57	0.43	7,140.85	12,710.60	22.68	12,710.28	0.00	0.00	0.00
19,800.00	90.57	0.43	7,139.86	12,810.59	23.44	12,810.27	0.00	0.00	0.00
19,900.00	90.57	0.43	7,138.87	12,910.58	24.20	12,910.27	0.00	0.00	0.00
20,000.00	90.57	0.43	7,137.87	13,010.57	24.96	13,010.26	0.00	0.00	0.00
20,100.00	90.57	0.43	7,136.88	13,110.57	25.72	13,110.26	0.00	0.00	0.00
20,200.00	90.57	0.43	7,135.88	13,210.56	26.47	13,210.25	0.00	0.00	0.00
20,300.00	90.57	0.43	7,134.89	13,310.55	27.23	13,310.25	0.00	0.00	0.00
20,400.00	90.57	0.43	7,133.89	13,410.54	27.99	13,410.24	0.00	0.00	0.00
20,500.00	90.57	0.43	7,132.90	13,510.53	28.75	13,510.24	0.00	0.00	0.00
20,600.00	90.57	0.43	7,131.90	13,610.53	29.50	13,610.23	0.00	0.00	0.00
20,700.00	90.57	0.43	7,130.91	13,710.52	30.26	13,710.23	0.00	0.00	0.00
20,800.00	90.57	0.43	7,129.91	13,810.51	31.02	13,810.22	0.00	0.00	0.00
20,900.00	90.57	0.43	7,128.92	13,910.50	31.78	13,910.22	0.00	0.00	0.00
21,000.00	90.57	0.43	7,127.92	14,010.50	32.54	14,010.21	0.00	0.00	0.00
21,100.00	90.57	0.43	7,126.93	14,110.49	33.29	14,110.21	0.00	0.00	0.00
21,193.19	90.57	0.43	7,126.00	14,203.67	34.00	14,203.39	0.00	0.00	0.00
CAMENISCH STATE 23N3-34HZ_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 STATE	0.00	0.00	7,126.00	14,203.67	34.00	14,591,910.01	1,643,882.65	40.178984	-104.987592
- plan hits target center									
- Point									
CAMENISCH STATE	0.00	0.00	7,260.92	642.93	-68.78	14,578,349.26	1,643,781.75	40.141745	-104.987959
- plan hits target center									
- Point									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
1,500.24	1,500.00	9 5/8"	9-5/8	13-1/2	
7,631.39	7,260.92	Top of Production	5-1/2	8-1/2	



# Corporate Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well CAMENISCH STATE 23N3-34HZ
<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 STATE 23N3-34HZ	<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 (°)	
749.09	749.00	Fox Hills Mkr				
3,786.70	3,786.00	Parkman				
4,523.73	4,523.00	Sussex				
7,128.63	7,077.00	Sharon Springs				
7,278.65	7,169.00	Niobrara				
7,435.73	7,233.00	Nio B				