

# **US ROCKIES WATTENBERG PLANNING**

**WELD-NAD83-UTMFT13N**

**1N-66W-17 Burough 20-17HZ Pad**

**BUROUGH 27C-17HZ**

**Plan A**

**Plan: Permit Rev-3**

## **Standard Planning Report**

**05 April, 2016**



Azimuths to True North  
Magnetic North: 8.28°

Magnetic Field  
Strength: 52494.2snT  
Dip Angle: 66.61°  
Date: 9/12/2015  
Model: IGRF2010

SITE: 1N-66W-17 Borough 20-17HZ Pad

Well: BURGHO 27C-17HZ  
Wellbore: Plan A  
Design: Permit Rev-2

#### FORMATION TOP DETAILS

TVDPath	MDPath	Formation
1402.00	1415.83	Fox Hills
4582.00	4637.38	Sussex
7143.00	7202.59	Sharon Springs
7164.00	7225.03	Niobrara
7307.00	7388.96	Nio B
7378.00	7482.52	Nio C
7521.00	7743.70	Fort Hayes
7543.00	7812.69	Codell

#### WELL DETAILS: BURGHO 27C-17HZ

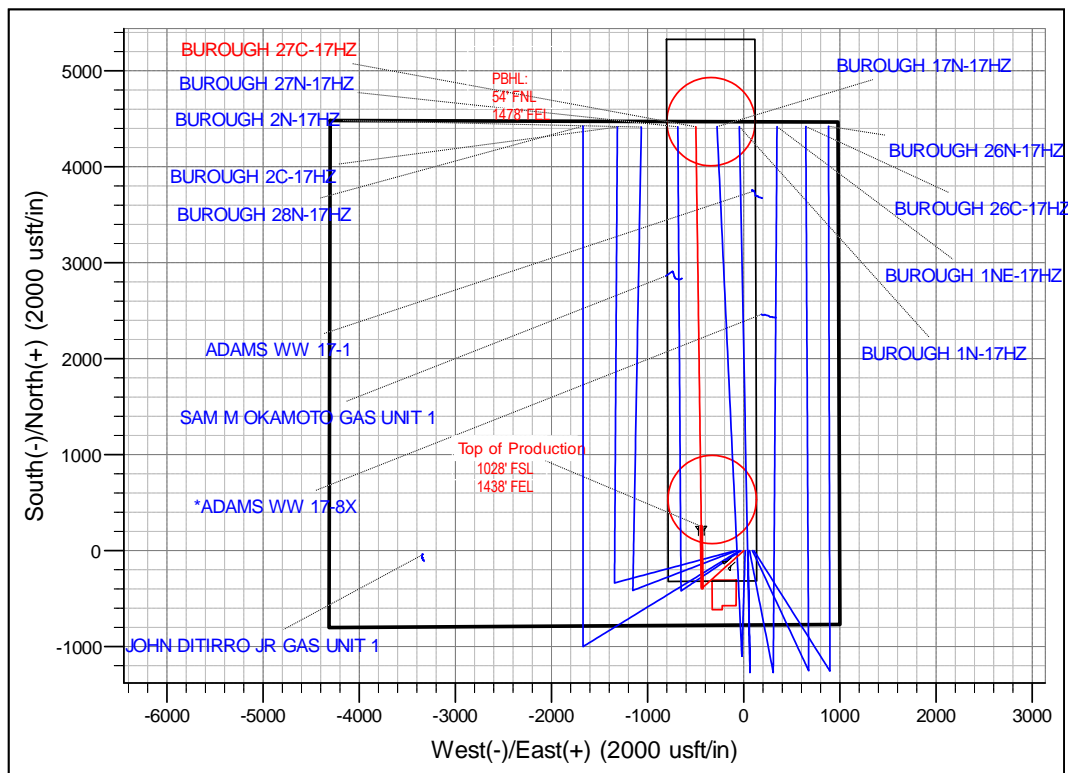
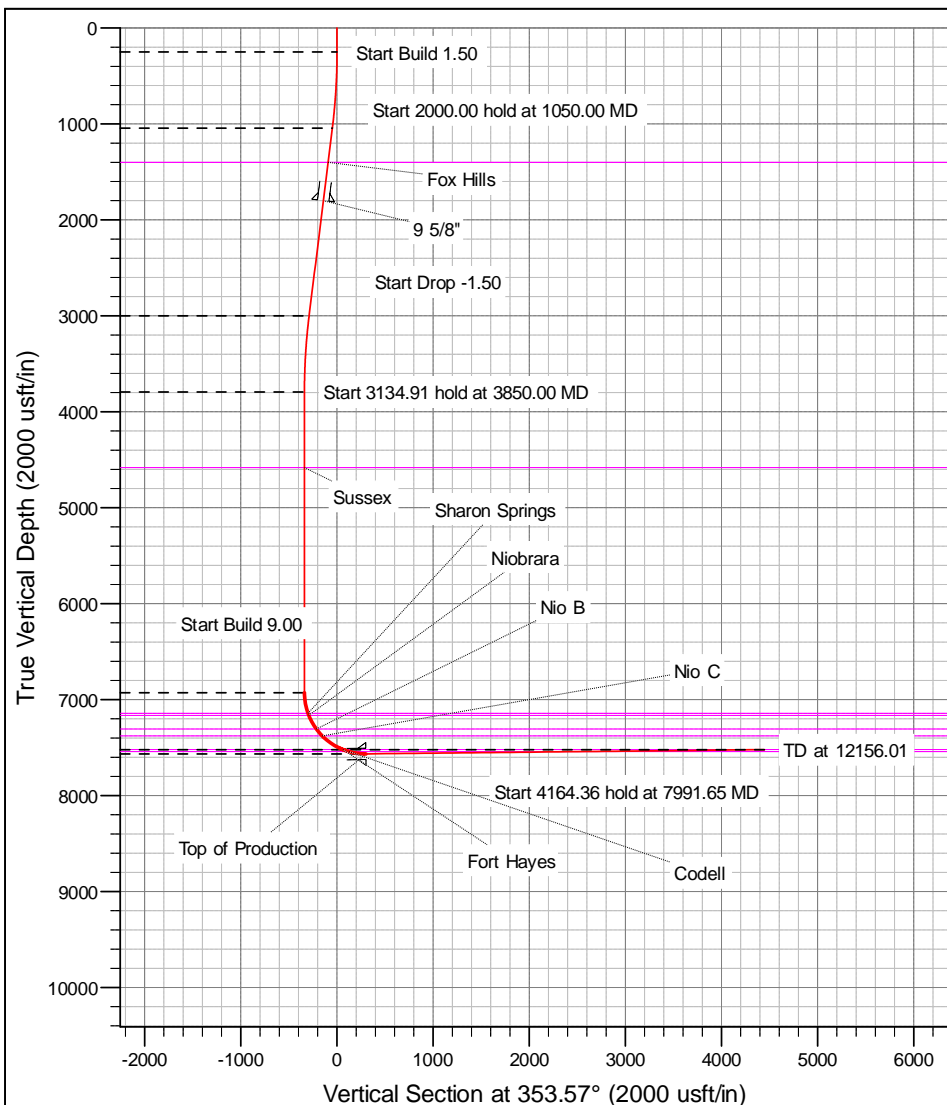
+N/-S	+E/-W	GL: 4981.00 Northing	RKB = 17' @ 4998.00usft (D Rig) Easting	Latitude 40.046171	Longitude -104.795083	Slot
0.00	0.00	14543612.25	1697765.22			

#### 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
1050.00	12.00	228.00	1044.16	-55.85	-62.03	1.50	-48.55
3050.00	12.00	228.00	3000.46	-334.09	-371.05	0.00	-290.41
3850.00	0.00	0.00	3794.62	-389.94	-433.08	1.50	-338.95
6984.91	0.00	0.00	6929.53	-389.94	-433.08	0.00	-338.95
7991.65	90.61	359.22	7566.12	253.36	-441.79	9.00	301.27
12156.01	90.61	359.22	7522.00	4417.11	-498.15	0.004445.11	

#### DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Borough 27C-17HZ PBHL	7522.00	4417.11	-498.15	14548028.20	1697256.90	40.058301	-104.796863	Point



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## Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well BURGESS 2C-17HZ
<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>TVD Reference:</b>	RKB = 17' @ 4998.00usft (D Rig)
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>MD Reference:</b>	RKB = 17' @ 4998.00usft (D Rig)
<b>Site:</b>	1N-66W-17 Burough 20-17HZ Pad	<b>North Reference:</b>	True
<b>Well:</b>	BURGESS 2C-17HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	Permit Rev-3		

<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		1N-66W-17 Burough 20-17HZ Pad			
Site Position:		Northing:	14,543,611.68 usft	Latitude:	40.046170
From:	Lat/Long	Easting:	1,697,675.10 usft	Longitude:	-104.795405
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.13

Well	BUROUGH 2C-17HZ					
Well Position	+N-S	0.00 usft	Northing:	14,543,611.68 usft	Latitude:	40.046170
	+E-W	0.00 usft	Easting:	1,697,675.10 usft	Longitude:	-104.795405
Position Uncertainty		3.28 usft	Wellhead Elevation:	0.00 usft	Ground Level:	4,981.00 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	9/12/2015	8.28	66.61	52,494

<b>Design</b>	Permit Rev-3			
<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	344.49

<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	
1,383.33	17.00	255.00	1,366.78	-43.20	-161.22	1.50	1.50	0.00	255.00	
4,683.33	17.00	255.00	4,522.58	-292.91	-1,093.17	0.00	0.00	0.00	0.00	
5,816.67	0.00	0.00	5,639.36	-336.11	-1,254.38	1.50	-1.50	9.26	180.00	
7,051.83	0.00	0.00	6,874.52	-336.11	-1,254.38	0.00	0.00	0.00	0.00	
8,047.98	89.65	0.35	7,511.13	296.65	-1,250.48	9.00	9.00	0.00	0.35	
12,166.43	89.65	0.35	7,536.00	4,414.95	-1,225.06	0.00	0.00	0.00	0.00	Burgess 2C-17HZ F

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## Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well BURGESS 2C-17HZ
<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>TVD Reference:</b>	RKB = 17' @ 4998.00usft (D Rig)
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>MD Reference:</b>	RKB = 17' @ 4998.00usft (D Rig)
<b>Site:</b>	1N-66W-17 Burough 20-17HZ Pad	<b>North Reference:</b>	True
<b>Well:</b>	BURGESS 2C-17HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	Permit Rev-3		

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	255.00	300.00	-0.08	-0.32	0.00	1.50	1.50	0.00
400.00	2.25	255.00	399.96	-0.76	-2.84	0.03	1.50	1.50	0.00
500.00	3.75	255.00	499.82	-2.12	-7.90	0.07	1.50	1.50	0.00
600.00	5.25	255.00	599.51	-4.15	-15.48	0.14	1.50	1.50	0.00
700.00	6.75	255.00	698.96	-6.85	-25.57	0.23	1.50	1.50	0.00
800.00	8.25	255.00	798.10	-10.23	-38.18	0.35	1.50	1.50	0.00
900.00	9.75	255.00	896.87	-14.28	-53.29	0.49	1.50	1.50	0.00
1,000.00	11.25	255.00	995.19	-19.00	-70.89	0.65	1.50	1.50	0.00
1,100.00	12.75	255.00	1,093.00	-24.38	-90.98	0.83	1.50	1.50	0.00
1,200.00	14.25	255.00	1,190.24	-30.42	-113.52	1.04	1.50	1.50	0.00
1,300.00	15.75	255.00	1,286.83	-37.12	-138.52	1.27	1.50	1.50	0.00
1,383.33	17.00	255.00	1,366.78	-43.20	-161.22	1.48	1.50	1.50	0.00
1,400.00	17.00	255.00	1,382.72	-44.46	-165.92	1.52	0.00	0.00	0.00
1,420.17	17.00	255.00	1,402.00	-45.98	-171.62	1.57	0.00	0.00	0.00
<b>Fox Hills</b>									
1,500.00	17.00	255.00	1,478.35	-52.03	-194.16	1.78	0.00	0.00	0.00
1,600.00	17.00	255.00	1,573.98	-59.59	-222.41	2.04	0.00	0.00	0.00
1,700.00	17.00	255.00	1,669.61	-67.16	-250.65	2.30	0.00	0.00	0.00
1,800.00	17.00	255.00	1,765.24	-74.73	-278.89	2.55	0.00	0.00	0.00
1,836.35	17.00	255.00	1,800.00	-77.48	-289.15	2.65	0.00	0.00	0.00
<b>9 5/8"</b>									
1,900.00	17.00	255.00	1,860.87	-82.29	-307.13	2.81	0.00	0.00	0.00
2,000.00	17.00	255.00	1,956.50	-89.86	-335.37	3.07	0.00	0.00	0.00
2,100.00	17.00	255.00	2,052.13	-97.43	-363.61	3.33	0.00	0.00	0.00
2,200.00	17.00	255.00	2,147.76	-105.00	-391.85	3.59	0.00	0.00	0.00
2,300.00	17.00	255.00	2,243.39	-112.56	-420.09	3.85	0.00	0.00	0.00
2,400.00	17.00	255.00	2,339.02	-120.13	-448.33	4.11	0.00	0.00	0.00
2,500.00	17.00	255.00	2,434.65	-127.70	-476.57	4.36	0.00	0.00	0.00
2,600.00	17.00	255.00	2,530.28	-135.26	-504.81	4.62	0.00	0.00	0.00
2,700.00	17.00	255.00	2,625.91	-142.83	-533.06	4.88	0.00	0.00	0.00
2,800.00	17.00	255.00	2,721.54	-150.40	-561.30	5.14	0.00	0.00	0.00
2,900.00	17.00	255.00	2,817.17	-157.97	-589.54	5.40	0.00	0.00	0.00
3,000.00	17.00	255.00	2,912.80	-165.53	-617.78	5.66	0.00	0.00	0.00
3,100.00	17.00	255.00	3,008.43	-173.10	-646.02	5.92	0.00	0.00	0.00
3,200.00	17.00	255.00	3,104.06	-180.67	-674.26	6.17	0.00	0.00	0.00
3,300.00	17.00	255.00	3,199.70	-188.23	-702.50	6.43	0.00	0.00	0.00
3,400.00	17.00	255.00	3,295.33	-195.80	-730.74	6.69	0.00	0.00	0.00
3,500.00	17.00	255.00	3,390.96	-203.37	-758.98	6.95	0.00	0.00	0.00
3,600.00	17.00	255.00	3,486.59	-210.94	-787.22	7.21	0.00	0.00	0.00
3,700.00	17.00	255.00	3,582.22	-218.50	-815.46	7.47	0.00	0.00	0.00
3,800.00	17.00	255.00	3,677.85	-226.07	-843.71	7.73	0.00	0.00	0.00
3,900.00	17.00	255.00	3,773.48	-233.64	-871.95	7.99	0.00	0.00	0.00
4,000.00	17.00	255.00	3,869.11	-241.20	-900.19	8.24	0.00	0.00	0.00
4,100.00	17.00	255.00	3,964.74	-248.77	-928.43	8.50	0.00	0.00	0.00
4,200.00	17.00	255.00	4,060.37	-256.34	-956.67	8.76	0.00	0.00	0.00
4,300.00	17.00	255.00	4,156.00	-263.91	-984.91	9.02	0.00	0.00	0.00
4,400.00	17.00	255.00	4,251.63	-271.47	-1,013.15	9.28	0.00	0.00	0.00
4,500.00	17.00	255.00	4,347.26	-279.04	-1,041.39	9.54	0.00	0.00	0.00
4,600.00	17.00	255.00	4,442.89	-286.61	-1,069.63	9.80	0.00	0.00	0.00
4,683.33	17.00	255.00	4,522.58	-292.91	-1,093.17	10.01	0.00	0.00	0.00

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## Planning Report

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<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>TVD Reference:</b>	RKB = 17' @ 4998.00usft (D Rig)
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>MD Reference:</b>	RKB = 17' @ 4998.00usft (D Rig)
<b>Site:</b>	1N-66W-17 Burough 20-17HZ Pad	<b>North Reference:</b>	True
<b>Well:</b>	BURGESS 2C-17HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	Permit Rev-3		

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	16.75	255.00	4,538.53	-294.17	-1,097.84	10.05	1.50	-1.50	0.00
4,745.31	16.07	255.00	4,582.00	-297.48	-1,110.21	10.17	1.50	-1.50	0.00
<b>Sussex</b>									
4,800.00	15.25	255.00	4,634.66	-301.30	-1,124.46	10.30	1.50	-1.50	0.00
4,900.00	13.75	255.00	4,731.47	-307.78	-1,148.65	10.52	1.50	-1.50	0.00
5,000.00	12.25	255.00	4,828.90	-313.60	-1,170.38	10.72	1.50	-1.50	0.00
5,100.00	10.75	255.00	4,926.89	-318.76	-1,189.63	10.89	1.50	-1.50	0.00
5,200.00	9.25	255.00	5,025.37	-323.26	-1,206.41	11.05	1.50	-1.50	0.00
5,300.00	7.75	255.00	5,124.27	-327.08	-1,220.68	11.18	1.50	-1.50	0.00
5,400.00	6.25	255.00	5,223.52	-330.24	-1,232.45	11.29	1.50	-1.50	0.00
5,500.00	4.75	255.00	5,323.06	-332.72	-1,241.71	11.37	1.50	-1.50	0.00
5,600.00	3.25	255.00	5,422.81	-334.52	-1,248.45	11.43	1.50	-1.50	0.00
5,700.00	1.75	255.00	5,522.71	-335.65	-1,252.66	11.47	1.50	-1.50	0.00
5,800.00	0.25	255.00	5,622.69	-336.10	-1,254.35	11.49	1.50	-1.50	0.00
5,816.67	0.00	0.00	5,639.36	-336.11	-1,254.38	11.49	1.50	-1.50	630.00
5,900.00	0.00	0.00	5,722.69	-336.11	-1,254.38	11.49	0.00	0.00	0.00
6,000.00	0.00	0.00	5,822.69	-336.11	-1,254.38	11.49	0.00	0.00	0.00
6,100.00	0.00	0.00	5,922.69	-336.11	-1,254.38	11.49	0.00	0.00	0.00
6,200.00	0.00	0.00	6,022.69	-336.11	-1,254.38	11.49	0.00	0.00	0.00
6,300.00	0.00	0.00	6,122.69	-336.11	-1,254.38	11.49	0.00	0.00	0.00
6,400.00	0.00	0.00	6,222.69	-336.11	-1,254.38	11.49	0.00	0.00	0.00
6,500.00	0.00	0.00	6,322.69	-336.11	-1,254.38	11.49	0.00	0.00	0.00
6,600.00	0.00	0.00	6,422.69	-336.11	-1,254.38	11.49	0.00	0.00	0.00
6,700.00	0.00	0.00	6,522.69	-336.11	-1,254.38	11.49	0.00	0.00	0.00
6,800.00	0.00	0.00	6,622.69	-336.11	-1,254.38	11.49	0.00	0.00	0.00
6,900.00	0.00	0.00	6,722.69	-336.11	-1,254.38	11.49	0.00	0.00	0.00
7,000.00	0.00	0.00	6,822.69	-336.11	-1,254.38	11.49	0.00	0.00	0.00
7,051.83	0.00	0.00	6,874.52	-336.11	-1,254.38	11.49	0.00	0.00	0.00
7,100.00	4.34	0.35	6,922.65	-334.29	-1,254.37	13.24	9.00	9.00	0.73
7,200.00	13.34	0.35	7,021.36	-318.95	-1,254.28	28.00	9.00	9.00	0.00
7,300.00	22.34	0.35	7,116.46	-288.35	-1,254.09	57.43	9.00	9.00	0.00
7,311.44	23.37	0.35	7,127.00	-283.91	-1,254.06	61.71	9.00	9.00	0.00
<b>Sharon Springs</b>									
7,334.50	25.44	0.35	7,148.00	-274.38	-1,254.00	70.87	9.00	9.00	0.00
<b>Niobrara</b>									
7,400.00	31.34	0.35	7,205.60	-243.25	-1,253.81	100.81	9.00	9.00	0.00
7,500.00	40.34	0.35	7,286.58	-184.77	-1,253.45	157.07	9.00	9.00	0.00
7,505.82	40.86	0.35	7,291.00	-180.98	-1,253.43	160.71	9.00	9.00	0.00
<b>Nio B</b>									
7,584.23	47.92	0.35	7,347.00	-126.17	-1,253.09	213.44	9.00	9.00	0.00
<b>Nio C</b>									
7,600.00	49.34	0.35	7,357.42	-114.33	-1,253.02	224.83	9.00	9.00	0.00
7,700.00	58.34	0.35	7,416.37	-33.69	-1,252.52	302.40	9.00	9.00	0.00
7,800.00	67.34	0.35	7,461.98	55.19	-1,251.97	387.90	9.00	9.00	0.00
7,839.32	70.87	0.35	7,476.00	91.91	-1,251.74	423.23	9.00	9.00	0.00
<b>Fort Hayes</b>									
7,900.00	76.34	0.35	7,493.12	150.11	-1,251.38	479.21	9.00	9.00	0.00
7,922.25	78.34	0.35	7,498.00	171.82	-1,251.25	500.09	9.00	9.00	0.00
<b>Codell</b>									
8,000.00	85.34	0.35	7,509.03	248.73	-1,250.77	574.07	9.00	9.00	0.00
8,047.98	89.65	0.35	7,511.13	296.65	-1,250.48	620.17	9.00	9.00	0.00
<b>Top of Production</b>									
8,100.00	89.65	0.35	7,511.44	348.67	-1,250.16	670.21	0.00	0.00	0.00

# Anadarko

## Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well BURGESS 2C-17HZ
<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>TVD Reference:</b>	RKB = 17' @ 4998.00usft (D Rig)
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>MD Reference:</b>	RKB = 17' @ 4998.00usft (D Rig)
<b>Site:</b>	1N-66W-17 Burough 20-17HZ Pad	<b>North Reference:</b>	True
<b>Well:</b>	BURGESS 2C-17HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	Permit Rev-3		

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)	
8,200.00	89.65	0.35	7,512.05	448.66	-1,249.54	766.40	0.00	0.00	0.00	
8,300.00	89.65	0.35	7,512.65	548.66	-1,248.92	862.59	0.00	0.00	0.00	
8,400.00	89.65	0.35	7,513.26	648.66	-1,248.31	958.78	0.00	0.00	0.00	
8,500.00	89.65	0.35	7,513.86	748.65	-1,247.69	1,054.97	0.00	0.00	0.00	
8,600.00	89.65	0.35	7,514.46	848.65	-1,247.07	1,151.17	0.00	0.00	0.00	
8,700.00	89.65	0.35	7,515.07	948.65	-1,246.45	1,247.36	0.00	0.00	0.00	
8,800.00	89.65	0.35	7,515.67	1,048.64	-1,245.84	1,343.55	0.00	0.00	0.00	
8,900.00	89.65	0.35	7,516.27	1,148.64	-1,245.22	1,439.74	0.00	0.00	0.00	
9,000.00	89.65	0.35	7,516.88	1,248.63	-1,244.60	1,535.93	0.00	0.00	0.00	
9,100.00	89.65	0.35	7,517.48	1,348.63	-1,243.99	1,632.12	0.00	0.00	0.00	
9,200.00	89.65	0.35	7,518.09	1,448.63	-1,243.37	1,728.31	0.00	0.00	0.00	
9,300.00	89.65	0.35	7,518.69	1,548.62	-1,242.75	1,824.50	0.00	0.00	0.00	
9,400.00	89.65	0.35	7,519.29	1,648.62	-1,242.14	1,920.70	0.00	0.00	0.00	
9,500.00	89.65	0.35	7,519.90	1,748.62	-1,241.52	2,016.89	0.00	0.00	0.00	
9,600.00	89.65	0.35	7,520.50	1,848.61	-1,240.90	2,113.08	0.00	0.00	0.00	
9,700.00	89.65	0.35	7,521.11	1,948.61	-1,240.28	2,209.27	0.00	0.00	0.00	
9,800.00	89.65	0.35	7,521.71	2,048.60	-1,239.67	2,305.46	0.00	0.00	0.00	
9,900.00	89.65	0.35	7,522.31	2,148.60	-1,239.05	2,401.65	0.00	0.00	0.00	
10,000.00	89.65	0.35	7,522.92	2,248.60	-1,238.43	2,497.84	0.00	0.00	0.00	
10,100.00	89.65	0.35	7,523.52	2,348.59	-1,237.82	2,594.04	0.00	0.00	0.00	
10,200.00	89.65	0.35	7,524.13	2,448.59	-1,237.20	2,690.23	0.00	0.00	0.00	
10,300.00	89.65	0.35	7,524.73	2,548.59	-1,236.58	2,786.42	0.00	0.00	0.00	
10,400.00	89.65	0.35	7,525.33	2,648.58	-1,235.96	2,882.61	0.00	0.00	0.00	
10,500.00	89.65	0.35	7,525.94	2,748.58	-1,235.35	2,978.80	0.00	0.00	0.00	
10,600.00	89.65	0.35	7,526.54	2,848.57	-1,234.73	3,074.99	0.00	0.00	0.00	
10,700.00	89.65	0.35	7,527.14	2,948.57	-1,234.11	3,171.18	0.00	0.00	0.00	
10,800.00	89.65	0.35	7,527.75	3,048.57	-1,233.50	3,267.37	0.00	0.00	0.00	
10,900.00	89.65	0.35	7,528.35	3,148.56	-1,232.88	3,363.57	0.00	0.00	0.00	
11,000.00	89.65	0.35	7,528.96	3,248.56	-1,232.26	3,459.76	0.00	0.00	0.00	
11,100.00	89.65	0.35	7,529.56	3,348.56	-1,231.64	3,555.95	0.00	0.00	0.00	
11,200.00	89.65	0.35	7,530.16	3,448.55	-1,231.03	3,652.14	0.00	0.00	0.00	
11,300.00	89.65	0.35	7,530.77	3,548.55	-1,230.41	3,748.33	0.00	0.00	0.00	
11,400.00	89.65	0.35	7,531.37	3,648.54	-1,229.79	3,844.52	0.00	0.00	0.00	
11,500.00	89.65	0.35	7,531.98	3,748.54	-1,229.18	3,940.71	0.00	0.00	0.00	
11,600.00	89.65	0.35	7,532.58	3,848.54	-1,228.56	4,036.90	0.00	0.00	0.00	
11,700.00	89.65	0.35	7,533.18	3,948.53	-1,227.94	4,133.10	0.00	0.00	0.00	
11,800.00	89.65	0.35	7,533.79	4,048.53	-1,227.32	4,229.29	0.00	0.00	0.00	
11,900.00	89.65	0.35	7,534.39	4,148.53	-1,226.71	4,325.48	0.00	0.00	0.00	
12,000.00	89.65	0.35	7,535.00	4,248.52	-1,226.09	4,421.67	0.00	0.00	0.00	
12,100.00	89.65	0.35	7,535.60	4,348.52	-1,225.47	4,517.86	0.00	0.00	0.00	
12,166.43	89.65	0.35	7,536.00	4,414.95	-1,225.06	4,581.76	0.00	0.00	0.00	
Borough 2C-17HZ PBHL										

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Borough 2C-17HZ PBI	0.00	0.00	7,536.00	4,414.95	-1,225.06	14,548,023.80	1,696,439.90	40.058294	-104.799783
- hit/miss target									
- Shape									
- plan hits target center									
- Point									

# Anadarko

## Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well BURGESS 2C-17HZ
<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>TVD Reference:</b>	RKB = 17' @ 4998.00usft (D Rig)
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>MD Reference:</b>	RKB = 17' @ 4998.00usft (D Rig)
<b>Site:</b>	1N-66W-17 Burrough 20-17HZ Pad	<b>North Reference:</b>	True
<b>Well:</b>	BURGESS 2C-17HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	Permit Rev-3		

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
1,836.35	1,800.00	9 5/8"	9-5/8	13-1/2	
8,047.98	7,511.13	Top of Production	5-1/2	7-7/8	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,420.17	1,402.00	Fox Hills		0.00		
4,745.31	4,582.00	Sussex		0.00		
7,311.44	7,127.00	Sharon Springs				
7,334.50	7,148.00	Niobrara				
7,505.82	7,291.00	Nio B				
7,584.23	7,347.00	Nio C				
7,839.32	7,476.00	Fort Hayes				
7,922.25	7,498.00	Codell				