

US ROCKIES WATTENBERG PLANNING

WELD-NAD83-UTMFT13N

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

BURROUGH 2N-17HZ

Plan A

Plan: Permit Rev-3

Standard Planning Report

05 April, 2016



Azimuths to True North
Magnetic North: 8.28°

Magnetic Field
Strength: 52494.1snT
Dip Angle: 66.61°
Date: 9/12/2015
Model: IGRF2010

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

Well: BUROUGH 2N-17HZ
Wellbore: Plan A
Design: Permit Rev-3

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
1402.00	1420.22	Fox Hills
4582.00	4770.06	Sussex
7152.00	7367.64	Sharon Springs
7173.00	7394.29	Niobrara
7307.00	7596.68	Nio B
7357.00	7704.28	Nio C

WELL DETAILS: BUROUGH 2N-17HZ

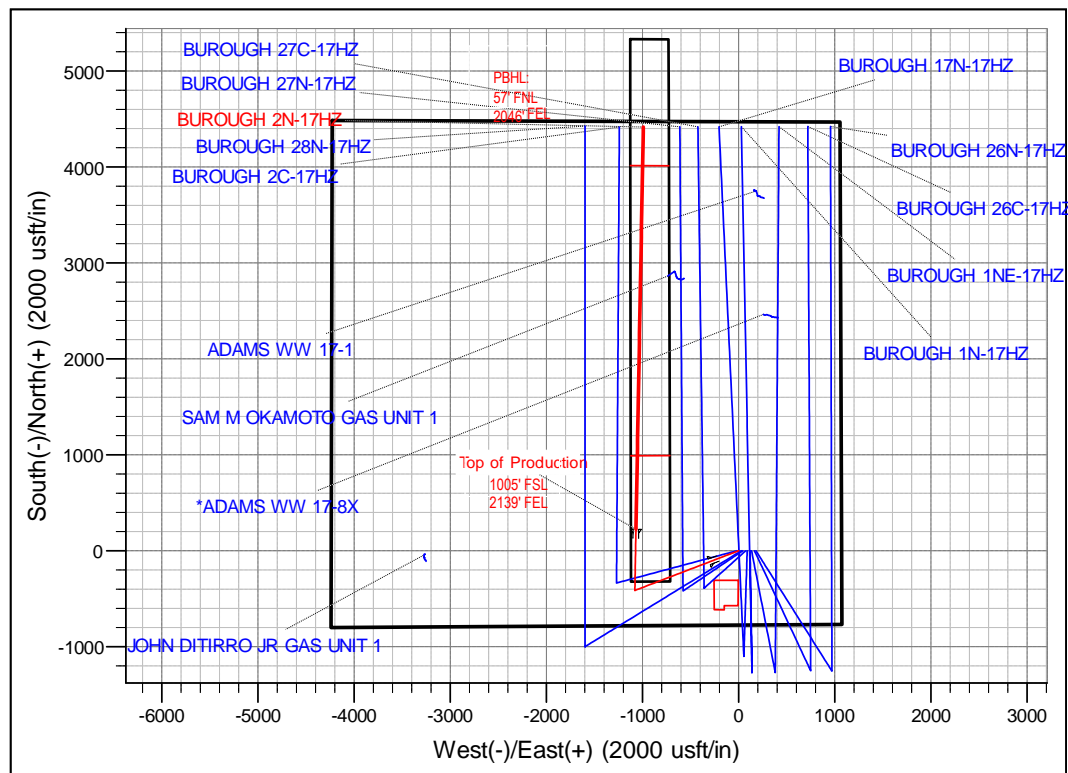
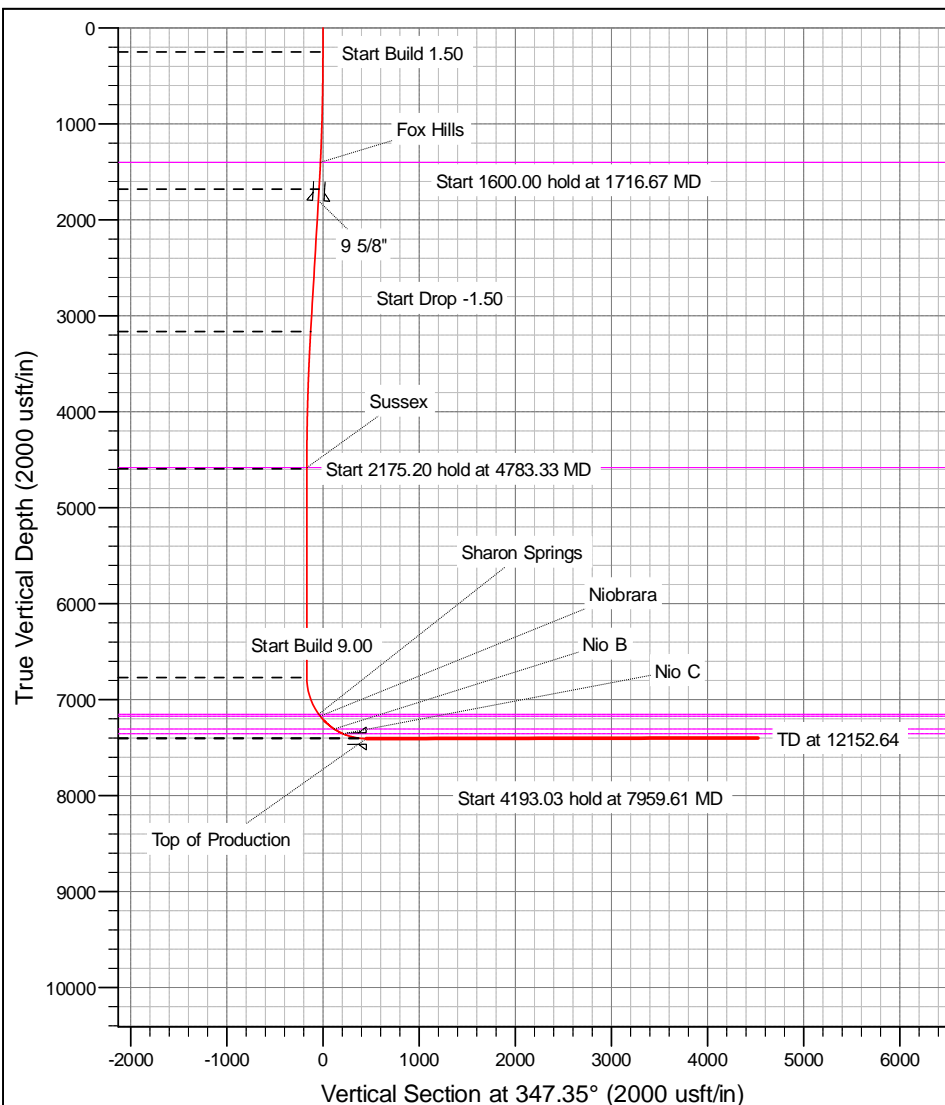
+N/-S	+E/-W	GL: 4981.00	RKB = 17' @ 4998.00usft (D Rig)	Longitude	Slot
0.00	0.00	Northing 14543611.72	Easting 1697690.22	Latitude 40.046170	-104.795351

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
1716.67	22.00	248.00	1680.89	-99.68	-259.66	1.50	-40.39
3316.67	22.00	249.00	3164.39	-314.47	-819.22	0.00	-127.42
4783.33	0.00	0.00	4595.28	-414.15	-1078.89	1.50	-167.80
6958.54	0.00	0.00	6770.48	-414.15	-1078.89	0.00	-167.80
7959.61	90.10	1.04	7407.10	223.45	-1067.31	9.00	451.77
12152.64	90.10	1.04	7400.00	4415.77	-991.17	0.00	4525.65

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Borough 2C-17HZ PBHL	7400.00	4415.77	-991.17	14548025.20	1696688.90	40.058296	-104.798893	Point



Anadarko

Planning Report

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

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-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 2N-17HZ					
Well Position	+N/-S	0.00 usft	Northing:	14,543,611.71 usft	Latitude:	40.046170
	+E/-W	15.11 usft	Easting:	1,697,690.21 usft	Longitude:	-104.795351
Position Uncertainty		3.28 usft	Wellhead Elevation:	0.00 usft	Ground Level:	4,981.00 usft

Wellbore	Plan A				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	9/12/2015	8.28	66.61	52,494

Design	Permit Rev-3			
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	347.35

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	
1,716.67	22.00	249.00	1,680.89	-99.68	-259.66	1.50	1.50	0.00	249.00	
3,316.67	22.00	249.00	3,164.39	-314.47	-819.22	0.00	0.00	0.00	0.00	
4,783.33	0.00	0.00	4,595.28	-414.15	-1,078.89	1.50	-1.50	0.00	180.00	
6,958.54	0.00	0.00	6,770.48	-414.15	-1,078.89	0.00	0.00	0.00	0.00	
7,959.61	90.10	1.04	7,407.10	223.45	-1,067.31	9.00	9.00	0.00	1.04	
12,152.64	90.10	1.04	7,400.00	4,415.77	-991.17	0.00	0.00	0.00	0.00	Burgess 2N-17HZ PBHL

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Planning Report

Database:	PLANNING	Local Co-ordinate Reference:	Well BURGESS 2N-17HZ
Company:	US ROCKIES WATTENBERG PLANNING	TVD Reference:	RKB = 17' @ 4998.00usft (D Rig)
Project:	WELD-NAD83-UTMFT13N	MD Reference:	RKB = 17' @ 4998.00usft (D Rig)
Site:	1N-66W-17 Burough 20-17HZ Pad	North Reference:	True
Well:	BURGESS 2N-17HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
Design:	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	249.00	300.00	-0.12	-0.31	-0.05	1.50	1.50	0.00
400.00	2.25	249.00	399.96	-1.06	-2.75	-0.43	1.50	1.50	0.00
500.00	3.75	249.00	499.82	-2.93	-7.64	-1.19	1.50	1.50	0.00
600.00	5.25	249.00	599.51	-5.74	-14.96	-2.33	1.50	1.50	0.00
700.00	6.75	249.00	698.96	-9.49	-24.72	-3.84	1.50	1.50	0.00
800.00	8.25	249.00	798.10	-14.17	-36.90	-5.74	1.50	1.50	0.00
900.00	9.75	249.00	896.87	-19.77	-51.51	-8.01	1.50	1.50	0.00
1,000.00	11.25	249.00	995.19	-26.30	-68.52	-10.66	1.50	1.50	0.00
1,100.00	12.75	249.00	1,093.00	-33.75	-87.93	-13.68	1.50	1.50	0.00
1,200.00	14.25	249.00	1,190.24	-42.12	-109.72	-17.07	1.50	1.50	0.00
1,300.00	15.75	249.00	1,286.83	-51.39	-133.89	-20.82	1.50	1.50	0.00
1,400.00	17.25	249.00	1,382.71	-61.57	-160.40	-24.95	1.50	1.50	0.00
1,420.22	17.55	249.00	1,402.00	-63.74	-166.05	-25.83	1.50	1.50	0.00
Fox Hills									
1,500.00	18.75	249.00	1,477.81	-72.65	-189.25	-29.43	1.50	1.50	0.00
1,600.00	20.25	249.00	1,572.07	-84.61	-220.41	-34.28	1.50	1.50	0.00
1,700.00	21.75	249.00	1,665.43	-97.45	-253.87	-39.48	1.50	1.50	0.00
1,716.67	22.00	249.00	1,680.89	-99.68	-259.66	-40.39	1.50	1.50	0.00
1,800.00	22.00	249.00	1,758.16	-110.86	-288.81	-44.92	0.00	0.00	0.00
1,845.13	22.00	249.00	1,800.00	-116.92	-304.59	-47.37	0.00	0.00	0.00
9 5/8"									
1,900.00	22.00	249.00	1,850.88	-124.29	-323.78	-50.36	0.00	0.00	0.00
2,000.00	22.00	249.00	1,943.59	-137.71	-358.75	-55.80	0.00	0.00	0.00
2,100.00	22.00	249.00	2,036.31	-151.14	-393.72	-61.24	0.00	0.00	0.00
2,200.00	22.00	249.00	2,129.03	-164.56	-428.70	-66.68	0.00	0.00	0.00
2,300.00	22.00	249.00	2,221.75	-177.99	-463.67	-72.12	0.00	0.00	0.00
2,400.00	22.00	249.00	2,314.47	-191.41	-498.64	-77.56	0.00	0.00	0.00
2,500.00	22.00	249.00	2,407.19	-204.84	-533.61	-82.99	0.00	0.00	0.00
2,600.00	22.00	249.00	2,499.90	-218.26	-568.59	-88.43	0.00	0.00	0.00
2,700.00	22.00	249.00	2,592.62	-231.69	-603.56	-93.87	0.00	0.00	0.00
2,800.00	22.00	249.00	2,685.34	-245.11	-638.53	-99.31	0.00	0.00	0.00
2,900.00	22.00	249.00	2,778.06	-258.53	-673.51	-104.75	0.00	0.00	0.00
3,000.00	22.00	249.00	2,870.78	-271.96	-708.48	-110.19	0.00	0.00	0.00
3,100.00	22.00	249.00	2,963.50	-285.38	-743.45	-115.63	0.00	0.00	0.00
3,200.00	22.00	249.00	3,056.21	-298.81	-778.42	-121.07	0.00	0.00	0.00
3,300.00	22.00	249.00	3,148.93	-312.23	-813.40	-126.51	0.00	0.00	0.00
3,316.67	22.00	249.00	3,164.39	-314.47	-819.22	-127.42	0.00	0.00	0.00
3,400.00	20.75	249.00	3,241.99	-325.35	-847.58	-131.83	1.50	-1.50	0.00
3,500.00	19.25	249.00	3,335.95	-337.61	-879.51	-136.79	1.50	-1.50	0.00
3,600.00	17.75	249.00	3,430.78	-348.98	-909.13	-141.40	1.50	-1.50	0.00
3,700.00	16.25	249.00	3,526.41	-359.46	-936.42	-145.64	1.50	-1.50	0.00
3,800.00	14.75	249.00	3,622.77	-369.04	-961.37	-149.53	1.50	-1.50	0.00
3,900.00	13.25	249.00	3,719.80	-377.71	-983.96	-153.04	1.50	-1.50	0.00
4,000.00	11.75	249.00	3,817.42	-385.46	-1,004.16	-156.18	1.50	-1.50	0.00
4,100.00	10.25	249.00	3,915.58	-392.30	-1,021.98	-158.95	1.50	-1.50	0.00
4,200.00	8.75	249.00	4,014.21	-398.21	-1,037.38	-161.35	1.50	-1.50	0.00
4,300.00	7.25	249.00	4,113.23	-403.20	-1,050.38	-163.37	1.50	-1.50	0.00
4,400.00	5.75	249.00	4,212.59	-407.26	-1,060.95	-165.01	1.50	-1.50	0.00
4,500.00	4.25	249.00	4,312.20	-410.38	-1,069.08	-166.28	1.50	-1.50	0.00
4,600.00	2.75	249.00	4,412.01	-412.57	-1,074.78	-167.16	1.50	-1.50	0.00

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Planning Report

Database:	PLANNING	Local Co-ordinate Reference:	Well BURGESS 2N-17HZ
Company:	US ROCKIES WATTENBERG PLANNING	TVD Reference:	RKB = 17' @ 4998.00usft (D Rig)
Project:	WELD-NAD83-UTMFT13N	MD Reference:	RKB = 17' @ 4998.00usft (D Rig)
Site:	1N-66W-17 Burough 20-17HZ Pad	North Reference:	True
Well:	BURGESS 2N-17HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
Design:	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	1.25	249.00	4,511.95	-413.82	-1,078.04	-167.67	1.50	-1.50	0.00
4,770.06	0.20	249.00	4,582.00	-414.14	-1,078.87	-167.80	1.50	-1.50	0.00
Sussex									
4,783.33	0.00	0.00	4,595.28	-414.15	-1,078.89	-167.80	1.50	-1.50	0.00
4,800.00	0.00	0.00	4,611.94	-414.15	-1,078.89	-167.80	0.00	0.00	0.00
4,900.00	0.00	0.00	4,711.94	-414.15	-1,078.89	-167.80	0.00	0.00	0.00
5,000.00	0.00	0.00	4,811.94	-414.15	-1,078.89	-167.80	0.00	0.00	0.00
5,100.00	0.00	0.00	4,911.94	-414.15	-1,078.89	-167.80	0.00	0.00	0.00
5,200.00	0.00	0.00	5,011.94	-414.15	-1,078.89	-167.80	0.00	0.00	0.00
5,300.00	0.00	0.00	5,111.94	-414.15	-1,078.89	-167.80	0.00	0.00	0.00
5,400.00	0.00	0.00	5,211.94	-414.15	-1,078.89	-167.80	0.00	0.00	0.00
5,500.00	0.00	0.00	5,311.94	-414.15	-1,078.89	-167.80	0.00	0.00	0.00
5,600.00	0.00	0.00	5,411.94	-414.15	-1,078.89	-167.80	0.00	0.00	0.00
5,700.00	0.00	0.00	5,511.94	-414.15	-1,078.89	-167.80	0.00	0.00	0.00
5,800.00	0.00	0.00	5,611.94	-414.15	-1,078.89	-167.80	0.00	0.00	0.00
5,900.00	0.00	0.00	5,711.94	-414.15	-1,078.89	-167.80	0.00	0.00	0.00
6,000.00	0.00	0.00	5,811.94	-414.15	-1,078.89	-167.80	0.00	0.00	0.00
6,100.00	0.00	0.00	5,911.94	-414.15	-1,078.89	-167.80	0.00	0.00	0.00
6,200.00	0.00	0.00	6,011.94	-414.15	-1,078.89	-167.80	0.00	0.00	0.00
6,300.00	0.00	0.00	6,111.94	-414.15	-1,078.89	-167.80	0.00	0.00	0.00
6,400.00	0.00	0.00	6,211.94	-414.15	-1,078.89	-167.80	0.00	0.00	0.00
6,500.00	0.00	0.00	6,311.94	-414.15	-1,078.89	-167.80	0.00	0.00	0.00
6,600.00	0.00	0.00	6,411.94	-414.15	-1,078.89	-167.80	0.00	0.00	0.00
6,700.00	0.00	0.00	6,511.94	-414.15	-1,078.89	-167.80	0.00	0.00	0.00
6,800.00	0.00	0.00	6,611.94	-414.15	-1,078.89	-167.80	0.00	0.00	0.00
6,900.00	0.00	0.00	6,711.94	-414.15	-1,078.89	-167.80	0.00	0.00	0.00
6,958.54	0.00	0.00	6,770.48	-414.15	-1,078.89	-167.80	0.00	0.00	0.00
7,000.00	3.73	1.04	6,811.92	-412.80	-1,078.86	-166.49	9.00	9.00	0.00
7,100.00	12.73	1.04	6,910.78	-398.50	-1,078.60	-152.59	9.00	9.00	0.00
7,200.00	21.73	1.04	7,006.20	-368.91	-1,078.07	-123.84	9.00	9.00	0.00
7,300.00	30.73	1.04	7,095.81	-324.76	-1,077.26	-80.94	9.00	9.00	0.00
7,367.64	36.82	1.04	7,152.00	-287.18	-1,076.58	-44.43	9.00	9.00	0.00
Sharon Springs									
7,394.29	39.22	1.04	7,173.00	-270.77	-1,076.28	-28.47	9.00	9.00	0.00
Niobrara									
7,400.00	39.73	1.04	7,177.40	-267.14	-1,076.22	-24.95	9.00	9.00	0.00
7,500.00	48.73	1.04	7,248.98	-197.47	-1,074.95	42.75	9.00	9.00	0.00
7,596.68	57.43	1.04	7,307.00	-120.26	-1,073.55	117.78	9.00	9.00	0.00
Nio B									
7,600.00	57.73	1.04	7,308.78	-117.46	-1,073.50	120.50	9.00	9.00	0.00
7,700.00	66.73	1.04	7,355.32	-29.08	-1,071.89	206.39	9.00	9.00	0.00
7,704.28	67.12	1.04	7,357.00	-25.14	-1,071.82	210.22	9.00	9.00	0.00
Nio C									
7,800.00	75.73	1.04	7,387.46	65.49	-1,070.18	298.28	9.00	9.00	0.00
7,900.00	84.73	1.04	7,404.41	163.93	-1,068.39	393.94	9.00	9.00	0.00
7,959.61	90.10	1.04	7,407.10	223.44	-1,067.31	451.77	9.00	9.00	0.00
Top of Production									
8,000.00	90.10	1.04	7,407.03	263.83	-1,066.57	491.01	0.00	0.00	0.00
8,100.00	90.10	1.04	7,406.86	363.81	-1,064.76	588.17	0.00	0.00	0.00
8,200.00	90.10	1.04	7,406.69	463.79	-1,062.94	685.33	0.00	0.00	0.00
8,300.00	90.10	1.04	7,406.52	563.78	-1,061.13	782.49	0.00	0.00	0.00
8,400.00	90.10	1.04	7,406.35	663.76	-1,059.31	879.65	0.00	0.00	0.00
8,500.00	90.10	1.04	7,406.18	763.74	-1,057.50	976.81	0.00	0.00	0.00

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Planning Report

Database:	PLANNING	Local Co-ordinate Reference:	Well BURGESS 2N-17HZ
Company:	US ROCKIES WATTENBERG PLANNING	TVD Reference:	RKB = 17' @ 4998.00usft (D Rig)
Project:	WELD-NAD83-UTMFT13N	MD Reference:	RKB = 17' @ 4998.00usft (D Rig)
Site:	1N-66W-17 Burough 20-17HZ Pad	North Reference:	True
Well:	BURGESS 2N-17HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
Design:	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)
8,600.00	90.10	1.04	7,406.01	863.73	-1,055.68	1,073.96	0.00	0.00	0.00
8,700.00	90.10	1.04	7,405.85	963.71	-1,053.86	1,171.12	0.00	0.00	0.00
8,800.00	90.10	1.04	7,405.68	1,063.69	-1,052.05	1,268.28	0.00	0.00	0.00
8,900.00	90.10	1.04	7,405.51	1,163.68	-1,050.23	1,365.44	0.00	0.00	0.00
9,000.00	90.10	1.04	7,405.34	1,263.66	-1,048.42	1,462.60	0.00	0.00	0.00
9,100.00	90.10	1.04	7,405.17	1,363.64	-1,046.60	1,559.76	0.00	0.00	0.00
9,200.00	90.10	1.04	7,405.00	1,463.63	-1,044.78	1,656.91	0.00	0.00	0.00
9,300.00	90.10	1.04	7,404.83	1,563.61	-1,042.97	1,754.07	0.00	0.00	0.00
9,400.00	90.10	1.04	7,404.66	1,663.59	-1,041.15	1,851.23	0.00	0.00	0.00
9,500.00	90.10	1.04	7,404.49	1,763.58	-1,039.34	1,948.39	0.00	0.00	0.00
9,600.00	90.10	1.04	7,404.32	1,863.56	-1,037.52	2,045.55	0.00	0.00	0.00
9,700.00	90.10	1.04	7,404.15	1,963.54	-1,035.71	2,142.70	0.00	0.00	0.00
9,800.00	90.10	1.04	7,403.98	2,063.53	-1,033.89	2,239.86	0.00	0.00	0.00
9,900.00	90.10	1.04	7,403.81	2,163.51	-1,032.07	2,337.02	0.00	0.00	0.00
10,000.00	90.10	1.04	7,403.64	2,263.49	-1,030.26	2,434.18	0.00	0.00	0.00
10,100.00	90.10	1.04	7,403.48	2,363.48	-1,028.44	2,531.34	0.00	0.00	0.00
10,200.00	90.10	1.04	7,403.31	2,463.46	-1,026.63	2,628.50	0.00	0.00	0.00
10,300.00	90.10	1.04	7,403.14	2,563.44	-1,024.81	2,725.65	0.00	0.00	0.00
10,400.00	90.10	1.04	7,402.97	2,663.43	-1,022.99	2,822.81	0.00	0.00	0.00
10,500.00	90.10	1.04	7,402.80	2,763.41	-1,021.18	2,919.97	0.00	0.00	0.00
10,600.00	90.10	1.04	7,402.63	2,863.39	-1,019.36	3,017.13	0.00	0.00	0.00
10,700.00	90.10	1.04	7,402.46	2,963.38	-1,017.55	3,114.29	0.00	0.00	0.00
10,800.00	90.10	1.04	7,402.29	3,063.36	-1,015.73	3,211.45	0.00	0.00	0.00
10,900.00	90.10	1.04	7,402.12	3,163.34	-1,013.92	3,308.60	0.00	0.00	0.00
11,000.00	90.10	1.04	7,401.95	3,263.33	-1,012.10	3,405.76	0.00	0.00	0.00
11,100.00	90.10	1.04	7,401.78	3,363.31	-1,010.28	3,502.92	0.00	0.00	0.00
11,200.00	90.10	1.04	7,401.61	3,463.29	-1,008.47	3,600.08	0.00	0.00	0.00
11,300.00	90.10	1.04	7,401.44	3,563.28	-1,006.65	3,697.24	0.00	0.00	0.00
11,400.00	90.10	1.04	7,401.27	3,663.26	-1,004.84	3,794.40	0.00	0.00	0.00
11,500.00	90.10	1.04	7,401.11	3,763.24	-1,003.02	3,891.55	0.00	0.00	0.00
11,600.00	90.10	1.04	7,400.94	3,863.23	-1,001.20	3,988.71	0.00	0.00	0.00
11,700.00	90.10	1.04	7,400.77	3,963.21	-999.39	4,085.87	0.00	0.00	0.00
11,800.00	90.10	1.04	7,400.60	4,063.19	-997.57	4,183.03	0.00	0.00	0.00
11,900.00	90.10	1.04	7,400.43	4,163.18	-995.76	4,280.19	0.00	0.00	0.00
12,000.00	90.10	1.04	7,400.26	4,263.16	-993.94	4,377.35	0.00	0.00	0.00
12,100.00	90.10	1.04	7,400.09	4,363.14	-992.13	4,474.50	0.00	0.00	0.00
12,152.64	90.10	1.04	7,400.00	4,415.77	-991.17	4,525.65	0.00	0.00	0.00
Burrough 2N-17HZ 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									
Burrough 2N-17HZ PBHL	0.00	0.00	7,400.00	4,415.77	-991.17	14,548,025.20	1,696,688.90	40.058296	-104.798894
- plan hits target center									
- Point									

Anadarko

Planning Report

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

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
1,845.13	1,800.00	9 5/8"	9-5/8	13-1/2	
7,959.61	7,407.10	Top of Production	5-1/2	7-7/8	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,420.22	1,402.00	Fox Hills		0.00		
4,770.06	4,582.00	Sussex		0.00		
7,367.64	7,152.00	Sharon Springs				
7,394.29	7,173.00	Niobrara				
7,596.68	7,307.00	Nio B				
7,704.28	7,357.00	Nio C				