

# **US ROCKIES WATTENBERG PLANNING**

**WELD-NAD83-UTMFT13N  
2N-65W-13 Guest 11-13HZ Pad  
GUEST 28C-12HZ**

**Plan A**

**Plan: Permit Rev-3**

## **Standard Planning Report**

**15 November, 2016**

Project: WELD-NAD83-UTMFT13N  
 Site: 2N-65W-13 Guest 11-13HZ Pad  
 Well: GUEST 28C-12HZ  
 Wellbore: Plan A  
 Design: Permit Rev-3

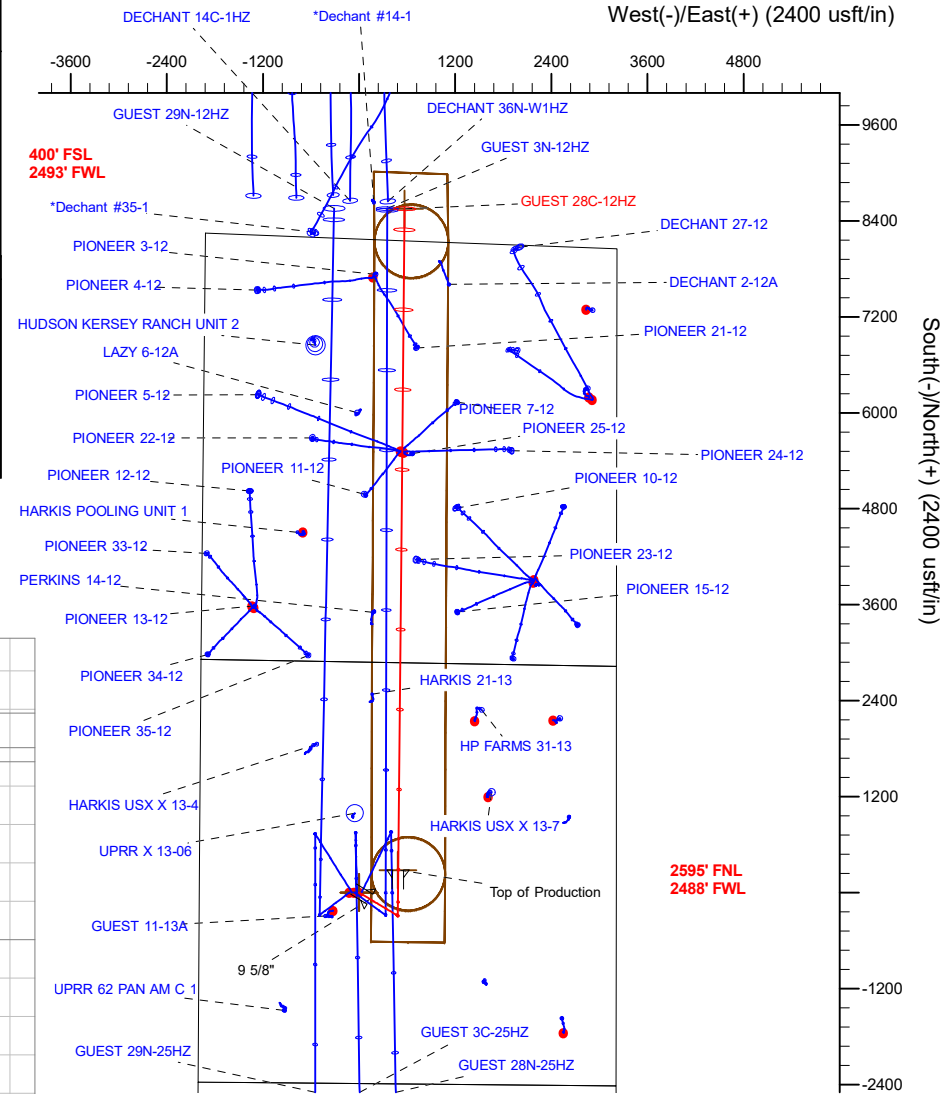
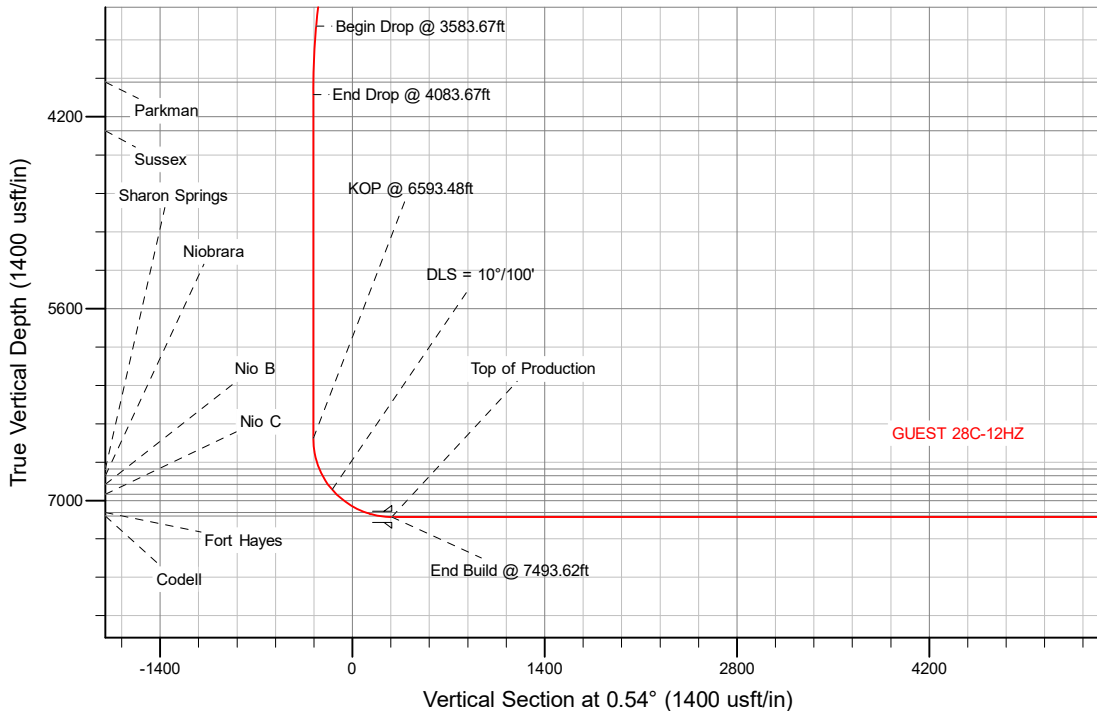
# US ROCKIES WATTENBERG PLANNING

## 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	916.67	10.00	121.00	913.29	-29.89	49.74	1.50	121.00	-29.42	
4	3583.67	10.00	121.00	3539.77	-268.41	446.71	0.00	0.00	-264.19	
5	4083.67	0.00	0.00	4037.23	-290.83	484.02	2.00	180.00	-286.25	
6	6593.48	0.00	0.00	6547.04	-290.83	484.02	0.00	0.00	-286.25	
7	7493.62	90.01	0.54	7120.00	282.24	489.43	10.00	0.54	286.84	
8	15763.29	90.01	0.54	7118.00	8551.55	567.52	0.00	0.00	8556.52	GUEST 28C-12HZ_Toe

## WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
GUEST 28C-12HZ_SHL	0.00	0.00	0.00	40.137758	-104.614427	Point
GUEST 28C-12HZ_Toe	7118.00	8551.55	567.52	40.161241	-104.612396	Point



WELL DETAILS: GUEST 28C-12HZ	
Ground Level:	4872.00
GL 4872 & KB 17 @ 4889.00usft (ASSUMED)	
Plan: Permit Rev-3 (GUEST 28C-12HZ/Plan A)	
Created By:	Date: 11/15/2016
Reviewed:	Date:

## Corporate Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well GUEST 28C-12HZ
<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>TVD Reference:</b>	GL 4872 & KB 17 @ 4889.00usft (ASSUMED)
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>MD Reference:</b>	GL 4872 & KB 17 @ 4889.00usft (ASSUMED)
<b>Site:</b>	2N-65W-13 Guest 11-13HZ Pad	<b>North Reference:</b>	True
<b>Well:</b>	GUEST 28C-12HZ	<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)		

<b>Site</b>	2N-65W-13 Guest 11-13HZ Pad				
<b>Site Position:</b>		<b>Northing:</b>	14,577,131.06 usft	<b>Latitude:</b>	40.137758
<b>From:</b>	Lat/Long	<b>Easting:</b>	1,748,179.59 usft	<b>Longitude:</b>	-104.614427
<b>Position Uncertainty:</b>	2.68 usft	<b>Slot Radius:</b>	0 "	<b>Grid Convergence:</b>	0.25 °

<b>Well</b>	GUEST 28C-12HZ					
<b>Well Position</b>	<b>+N/-S</b>	0.00 usft	<b>Northing:</b>	14,577,131.06 usft	<b>Latitude:</b>	40.137758
	<b>+E/-W</b>	0.00 usft	<b>Easting:</b>	1,748,179.59 usft	<b>Longitude:</b>	-104.614427
<b>Position Uncertainty</b>		3.28 usft	<b>Wellhead Elevation:</b>	0.00 usft	<b>Ground Level:</b>	4,872.00 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	11/12/2014	8.30	66.75	52,649.68995350

<b>Design</b>	Permit Rev-3			
<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	0.54

<b>Plan Survey Tool Program</b>	<b>Date</b>	11/15/2016		
<b>Depth From (usft)</b>	<b>Depth To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>
1	0.00	1,500.00 Permit Rev-3 (Plan A)	APC_ISCWSA REV 2 MWD+I	Fixed:v2:crustal field declinatio
2	1,500.00	15,763.29 Permit Rev-3 (Plan A)	APC_ISCWSA REV 2 MWD+I	Fixed:v2:crustal field declinatio

## Corporate Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well GUEST 28C-12HZ
<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>TVD Reference:</b>	GL 4872 & KB 17 @ 4889.00usft (ASSUMED)
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>MD Reference:</b>	GL 4872 & KB 17 @ 4889.00usft (ASSUMED)
<b>Site:</b>	2N-65W-13 Guest 11-13HZ Pad	<b>North Reference:</b>	True
<b>Well:</b>	GUEST 28C-12HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	Permit Rev-3		

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	
916.67	10.00	121.00	913.29	-29.89	49.74	1.50	1.50	0.00	121.00	
3,583.67	10.00	121.00	3,539.77	-268.41	446.71	0.00	0.00	0.00	0.00	
4,083.67	0.00	0.00	4,037.23	-290.83	484.02	2.00	-2.00	0.00	180.00	
6,593.48	0.00	0.00	6,547.04	-290.83	484.02	0.00	0.00	0.00	0.00	
7,493.62	90.01	0.54	7,120.00	282.24	489.43	10.00	10.00	0.06	0.54	
15,763.29	90.01	0.54	7,118.00	8,551.55	567.52	0.00	0.00	0.00	0.00	GUEST 28C-12HZ_Tr

## Corporate Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well GUEST 28C-12HZ
<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>TVD Reference:</b>	GL 4872 & KB 17 @ 4889.00usft (ASSUMED)
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>MD Reference:</b>	GL 4872 & KB 17 @ 4889.00usft (ASSUMED)
<b>Site:</b>	2N-65W-13 Guest 11-13HZ Pad	<b>North Reference:</b>	True
<b>Well:</b>	GUEST 28C-12HZ	<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	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
<b>Begin Nudge @ 250.00ft</b>										
300.00	0.75	121.00	300.00	-0.17	0.28	-0.17	1.50	1.50	0.00	0.00
400.00	2.25	121.00	399.96	-1.52	2.52	-1.49	1.50	1.50	0.00	0.00
500.00	3.75	121.00	499.82	-4.21	7.01	-4.15	1.50	1.50	0.00	0.00
600.00	5.25	121.00	599.51	-8.25	13.74	-8.12	1.50	1.50	0.00	0.00
700.00	6.75	121.00	698.96	-13.64	22.69	-13.42	1.50	1.50	0.00	0.00
800.00	8.25	121.00	798.10	-20.36	33.88	-20.04	1.50	1.50	0.00	0.00
900.00	9.75	121.00	896.87	-28.42	47.29	-27.97	1.50	1.50	0.00	0.00
916.67	10.00	121.00	913.29	-29.89	49.74	-29.42	1.50	1.50	0.00	0.00
<b>End Nudge @ 916.67ft</b>										
1,000.00	10.00	121.00	995.35	-37.34	62.15	-36.75	0.00	0.00	0.00	0.00
1,100.00	10.00	121.00	1,093.84	-46.28	77.03	-45.56	0.00	0.00	0.00	0.00
1,200.00	10.00	121.00	1,192.32	-55.23	91.91	-54.36	0.00	0.00	0.00	0.00
1,300.00	10.00	121.00	1,290.80	-64.17	106.80	-63.16	0.00	0.00	0.00	0.00
1,342.85	10.00	121.00	1,333.00	-68.00	113.18	-66.93	0.00	0.00	0.00	0.00
<b>Fox Hills Mkr</b>										
1,400.00	10.00	121.00	1,389.28	-73.11	121.68	-71.96	0.00	0.00	0.00	0.00
1,500.00	10.00	121.00	1,487.76	-82.06	136.57	-80.77	0.00	0.00	0.00	0.00
1,512.43	10.00	121.00	1,500.00	-83.17	138.42	-81.86	0.00	0.00	0.00	0.00
<b>9 5/8"</b>										
1,600.00	10.00	121.00	1,586.24	-91.00	151.45	-89.57	0.00	0.00	0.00	0.00
1,700.00	10.00	121.00	1,684.72	-99.95	166.34	-98.37	0.00	0.00	0.00	0.00
1,800.00	10.00	121.00	1,783.20	-108.89	181.22	-107.18	0.00	0.00	0.00	0.00
1,900.00	10.00	121.00	1,881.68	-117.83	196.11	-115.98	0.00	0.00	0.00	0.00
2,000.00	10.00	121.00	1,980.16	-126.78	210.99	-124.78	0.00	0.00	0.00	0.00
2,100.00	10.00	121.00	2,078.64	-135.72	225.88	-133.58	0.00	0.00	0.00	0.00
2,200.00	10.00	121.00	2,177.12	-144.66	240.76	-142.39	0.00	0.00	0.00	0.00
2,300.00	10.00	121.00	2,275.60	-153.61	255.64	-151.19	0.00	0.00	0.00	0.00
2,400.00	10.00	121.00	2,374.09	-162.55	270.53	-159.99	0.00	0.00	0.00	0.00
2,500.00	10.00	121.00	2,472.57	-171.49	285.41	-168.80	0.00	0.00	0.00	0.00
2,600.00	10.00	121.00	2,571.05	-180.44	300.30	-177.60	0.00	0.00	0.00	0.00
2,700.00	10.00	121.00	2,669.53	-189.38	315.18	-186.40	0.00	0.00	0.00	0.00
2,800.00	10.00	121.00	2,768.01	-198.32	330.07	-195.20	0.00	0.00	0.00	0.00
2,900.00	10.00	121.00	2,866.49	-207.27	344.95	-204.01	0.00	0.00	0.00	0.00
3,000.00	10.00	121.00	2,964.97	-216.21	359.84	-212.81	0.00	0.00	0.00	0.00
3,100.00	10.00	121.00	3,063.45	-225.16	374.72	-221.61	0.00	0.00	0.00	0.00
3,200.00	10.00	121.00	3,161.93	-234.10	389.61	-230.42	0.00	0.00	0.00	0.00
3,300.00	10.00	121.00	3,260.41	-243.04	404.49	-239.22	0.00	0.00	0.00	0.00
3,400.00	10.00	121.00	3,358.89	-251.99	419.37	-248.02	0.00	0.00	0.00	0.00
3,500.00	10.00	121.00	3,457.37	-260.93	434.26	-256.82	0.00	0.00	0.00	0.00
3,583.67	10.00	121.00	3,539.77	-268.41	446.71	-264.19	0.00	0.00	0.00	0.00
<b>Begin Drop @ 3583.67ft</b>										
3,600.00	9.67	121.00	3,555.86	-269.85	449.10	-265.60	2.00	-2.00	0.00	0.00
3,700.00	7.67	121.00	3,654.71	-277.62	462.03	-273.25	2.00	-2.00	0.00	0.00
3,800.00	5.67	121.00	3,754.03	-283.60	471.99	-279.14	2.00	-2.00	0.00	0.00
3,900.00	3.67	121.00	3,853.69	-287.80	478.97	-283.27	2.00	-2.00	0.00	0.00
3,992.42	1.83	121.00	3,946.00	-290.08	482.77	-285.52	2.00	-2.00	0.00	0.00

## Corporate Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well GUEST 28C-12HZ
<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>TVD Reference:</b>	GL 4872 & KB 17 @ 4889.00usft (ASSUMED)
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>MD Reference:</b>	GL 4872 & KB 17 @ 4889.00usft (ASSUMED)
<b>Site:</b>	2N-65W-13 Guest 11-13HZ Pad	<b>North Reference:</b>	True
<b>Well:</b>	GUEST 28C-12HZ	<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)	
<b>Parkman</b>										
4,000.00	1.67	121.00	3,953.58	-290.20	482.97	-285.63	2.00	-2.00	0.00	
4,083.67	0.00	0.00	4,037.24	-290.83	484.02	-286.25	2.00	-2.00	0.00	
<b>End Drop @ 4083.67ft</b>										
4,100.00	0.00	0.00	4,053.57	-290.83	484.02	-286.25	0.00	0.00	0.00	
4,200.00	0.00	0.00	4,153.57	-290.83	484.02	-286.25	0.00	0.00	0.00	
4,300.00	0.00	0.00	4,253.57	-290.83	484.02	-286.25	0.00	0.00	0.00	
4,348.43	0.00	0.00	4,302.00	-290.83	484.02	-286.25	0.00	0.00	0.00	
<b>Sussex</b>										
4,400.00	0.00	0.00	4,353.57	-290.83	484.02	-286.25	0.00	0.00	0.00	
4,500.00	0.00	0.00	4,453.57	-290.83	484.02	-286.25	0.00	0.00	0.00	
4,600.00	0.00	0.00	4,553.57	-290.83	484.02	-286.25	0.00	0.00	0.00	
4,700.00	0.00	0.00	4,653.57	-290.83	484.02	-286.25	0.00	0.00	0.00	
4,800.00	0.00	0.00	4,753.57	-290.83	484.02	-286.25	0.00	0.00	0.00	
4,900.00	0.00	0.00	4,853.57	-290.83	484.02	-286.25	0.00	0.00	0.00	
5,000.00	0.00	0.00	4,953.57	-290.83	484.02	-286.25	0.00	0.00	0.00	
5,100.00	0.00	0.00	5,053.57	-290.83	484.02	-286.25	0.00	0.00	0.00	
5,200.00	0.00	0.00	5,153.57	-290.83	484.02	-286.25	0.00	0.00	0.00	
5,300.00	0.00	0.00	5,253.57	-290.83	484.02	-286.25	0.00	0.00	0.00	
5,400.00	0.00	0.00	5,353.57	-290.83	484.02	-286.25	0.00	0.00	0.00	
5,500.00	0.00	0.00	5,453.57	-290.83	484.02	-286.25	0.00	0.00	0.00	
5,600.00	0.00	0.00	5,553.57	-290.83	484.02	-286.25	0.00	0.00	0.00	
5,700.00	0.00	0.00	5,653.57	-290.83	484.02	-286.25	0.00	0.00	0.00	
5,800.00	0.00	0.00	5,753.57	-290.83	484.02	-286.25	0.00	0.00	0.00	
5,900.00	0.00	0.00	5,853.57	-290.83	484.02	-286.25	0.00	0.00	0.00	
6,000.00	0.00	0.00	5,953.57	-290.83	484.02	-286.25	0.00	0.00	0.00	
6,100.00	0.00	0.00	6,053.57	-290.83	484.02	-286.25	0.00	0.00	0.00	
6,200.00	0.00	0.00	6,153.57	-290.83	484.02	-286.25	0.00	0.00	0.00	
6,300.00	0.00	0.00	6,253.57	-290.83	484.02	-286.25	0.00	0.00	0.00	
6,400.00	0.00	0.00	6,353.57	-290.83	484.02	-286.25	0.00	0.00	0.00	
6,500.00	0.00	0.00	6,453.57	-290.83	484.02	-286.25	0.00	0.00	0.00	
6,593.48	0.00	0.00	6,547.05	-290.83	484.02	-286.25	0.00	0.00	0.00	
<b>KOP @ 6593.48ft</b>										
6,600.00	0.65	0.54	6,553.57	-290.79	484.02	-286.22	10.01	10.01	0.00	
6,700.00	10.65	0.54	6,652.96	-280.95	484.11	-276.38	10.00	10.00	0.00	
6,800.00	20.65	0.54	6,749.13	-254.01	484.37	-249.43	10.00	10.00	0.00	
6,821.40	22.79	0.54	6,769.00	-246.09	484.44	-241.52	10.00	10.00	0.00	
<b>Sharon Springs</b>										
6,876.84	28.34	0.54	6,819.00	-222.18	484.67	-217.60	10.00	10.00	0.00	
<b>Niobrara</b>										
6,900.00	30.65	0.54	6,839.15	-210.78	484.77	-206.20	10.00	10.00	0.00	
6,950.00	35.65	0.54	6,881.00	-183.44	485.03	-178.86	10.00	10.00	0.00	
<b>Nio B</b>										
7,000.00	40.65	0.54	6,920.31	-152.57	485.32	-147.99	10.00	10.00	0.00	
<b>DLS = 10°/100'</b>										
7,047.47	45.40	0.54	6,955.00	-120.19	485.63	-115.61	10.00	10.00	0.00	
<b>Nio C</b>										
7,100.00	50.65	0.54	6,990.12	-81.15	486.00	-76.56	10.00	10.00	0.00	
7,200.00	60.65	0.54	7,046.47	1.31	486.78	5.89	10.00	10.00	0.00	
7,300.00	70.65	0.54	7,087.65	92.29	487.64	96.88	10.00	10.00	0.00	
7,301.07	70.76	0.54	7,088.00	93.31	487.65	97.90	10.00	10.00	0.00	

## Corporate Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well GUEST 28C-12HZ
<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>TVD Reference:</b>	GL 4872 & KB 17 @ 4889.00usft (ASSUMED)
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>MD Reference:</b>	GL 4872 & KB 17 @ 4889.00usft (ASSUMED)
<b>Site:</b>	2N-65W-13 Guest 11-13HZ Pad	<b>North Reference:</b>	True
<b>Well:</b>	GUEST 28C-12HZ	<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)	
<b>Fort Hayes</b>										
7,397.60	80.41	0.54	7,112.00	186.68	488.53	191.28	10.00	10.00	0.00	
<b>Codell</b>										
7,400.00	80.65	0.54	7,112.39	189.05	488.55	193.64	10.00	10.00	0.00	
7,493.62	90.01	0.54	7,120.00	282.25	489.43	286.85	10.00	10.00	0.00	
<b>End Build @ 7493.62ft - Top of Production</b>										
7,500.00	90.01	0.54	7,120.00	288.63	489.49	293.23	0.00	0.00	0.00	
7,600.00	90.01	0.54	7,119.98	388.62	490.43	393.23	0.00	0.00	0.00	
7,700.00	90.01	0.54	7,119.95	488.62	491.38	493.23	0.00	0.00	0.00	
7,800.00	90.01	0.54	7,119.93	588.61	492.32	593.23	0.00	0.00	0.00	
7,900.00	90.01	0.54	7,119.90	688.61	493.27	693.23	0.00	0.00	0.00	
8,000.00	90.01	0.54	7,119.88	788.61	494.21	793.23	0.00	0.00	0.00	
8,100.00	90.01	0.54	7,119.86	888.60	495.16	893.23	0.00	0.00	0.00	
8,200.00	90.01	0.54	7,119.83	988.60	496.10	993.23	0.00	0.00	0.00	
8,300.00	90.01	0.54	7,119.81	1,088.59	497.04	1,093.23	0.00	0.00	0.00	
8,400.00	90.01	0.54	7,119.78	1,188.59	497.99	1,193.23	0.00	0.00	0.00	
8,500.00	90.01	0.54	7,119.76	1,288.58	498.93	1,293.23	0.00	0.00	0.00	
8,600.00	90.01	0.54	7,119.73	1,388.58	499.88	1,393.23	0.00	0.00	0.00	
8,700.00	90.01	0.54	7,119.71	1,488.57	500.82	1,493.23	0.00	0.00	0.00	
8,800.00	90.01	0.54	7,119.69	1,588.57	501.77	1,593.23	0.00	0.00	0.00	
8,900.00	90.01	0.54	7,119.66	1,688.57	502.71	1,693.23	0.00	0.00	0.00	
9,000.00	90.01	0.54	7,119.64	1,788.56	503.65	1,793.23	0.00	0.00	0.00	
9,100.00	90.01	0.54	7,119.61	1,888.56	504.60	1,893.23	0.00	0.00	0.00	
9,200.00	90.01	0.54	7,119.59	1,988.55	505.54	1,993.23	0.00	0.00	0.00	
9,300.00	90.01	0.54	7,119.57	2,088.55	506.49	2,093.23	0.00	0.00	0.00	
9,400.00	90.01	0.54	7,119.54	2,188.54	507.43	2,193.23	0.00	0.00	0.00	
9,500.00	90.01	0.54	7,119.52	2,288.54	508.38	2,293.23	0.00	0.00	0.00	
9,600.00	90.01	0.54	7,119.49	2,388.53	509.32	2,393.23	0.00	0.00	0.00	
9,700.00	90.01	0.54	7,119.47	2,488.53	510.26	2,493.23	0.00	0.00	0.00	
9,800.00	90.01	0.54	7,119.44	2,588.52	511.21	2,593.23	0.00	0.00	0.00	
9,900.00	90.01	0.54	7,119.42	2,688.52	512.15	2,693.23	0.00	0.00	0.00	
10,000.00	90.01	0.54	7,119.40	2,788.52	513.10	2,793.23	0.00	0.00	0.00	
10,100.00	90.01	0.54	7,119.37	2,888.51	514.04	2,893.23	0.00	0.00	0.00	
10,200.00	90.01	0.54	7,119.35	2,988.51	514.99	2,993.23	0.00	0.00	0.00	
10,300.00	90.01	0.54	7,119.32	3,088.50	515.93	3,093.23	0.00	0.00	0.00	
10,400.00	90.01	0.54	7,119.30	3,188.50	516.87	3,193.23	0.00	0.00	0.00	
10,500.00	90.01	0.54	7,119.27	3,288.49	517.82	3,293.23	0.00	0.00	0.00	
10,600.00	90.01	0.54	7,119.25	3,388.49	518.76	3,393.23	0.00	0.00	0.00	
10,700.00	90.01	0.54	7,119.23	3,488.48	519.71	3,493.23	0.00	0.00	0.00	
10,800.00	90.01	0.54	7,119.20	3,588.48	520.65	3,593.23	0.00	0.00	0.00	
10,900.00	90.01	0.54	7,119.18	3,688.48	521.60	3,693.23	0.00	0.00	0.00	
11,000.00	90.01	0.54	7,119.15	3,788.47	522.54	3,793.23	0.00	0.00	0.00	
11,100.00	90.01	0.54	7,119.13	3,888.47	523.48	3,893.23	0.00	0.00	0.00	
11,200.00	90.01	0.54	7,119.11	3,988.46	524.43	3,993.23	0.00	0.00	0.00	
11,300.00	90.01	0.54	7,119.08	4,088.46	525.37	4,093.23	0.00	0.00	0.00	
11,400.00	90.01	0.54	7,119.06	4,188.45	526.32	4,193.23	0.00	0.00	0.00	
11,500.00	90.01	0.54	7,119.03	4,288.45	527.26	4,293.23	0.00	0.00	0.00	
11,600.00	90.01	0.54	7,119.01	4,388.44	528.20	4,393.23	0.00	0.00	0.00	
11,700.00	90.01	0.54	7,118.98	4,488.44	529.15	4,493.23	0.00	0.00	0.00	
11,800.00	90.01	0.54	7,118.96	4,588.44	530.09	4,593.23	0.00	0.00	0.00	
11,900.00	90.01	0.54	7,118.94	4,688.43	531.04	4,693.23	0.00	0.00	0.00	

## Corporate Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well GUEST 28C-12HZ
<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>TVD Reference:</b>	GL 4872 & KB 17 @ 4889.00usft (ASSUMED)
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>MD Reference:</b>	GL 4872 & KB 17 @ 4889.00usft (ASSUMED)
<b>Site:</b>	2N-65W-13 Guest 11-13HZ Pad	<b>North Reference:</b>	True
<b>Well:</b>	GUEST 28C-12HZ	<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)	
12,000.00	90.01	0.54	7,118.91	4,788.43	531.98	4,793.23	0.00	0.00	0.00	
12,100.00	90.01	0.54	7,118.89	4,888.42	532.93	4,893.23	0.00	0.00	0.00	
12,200.00	90.01	0.54	7,118.86	4,988.42	533.87	4,993.23	0.00	0.00	0.00	
12,300.00	90.01	0.54	7,118.84	5,088.41	534.81	5,093.23	0.00	0.00	0.00	
12,400.00	90.01	0.54	7,118.81	5,188.41	535.76	5,193.23	0.00	0.00	0.00	
12,500.00	90.01	0.54	7,118.79	5,288.40	536.70	5,293.23	0.00	0.00	0.00	
12,600.00	90.01	0.54	7,118.77	5,388.40	537.65	5,393.23	0.00	0.00	0.00	
12,700.00	90.01	0.54	7,118.74	5,488.40	538.59	5,493.23	0.00	0.00	0.00	
12,800.00	90.01	0.54	7,118.72	5,588.39	539.54	5,593.23	0.00	0.00	0.00	
12,900.00	90.01	0.54	7,118.69	5,688.39	540.48	5,693.23	0.00	0.00	0.00	
13,000.00	90.01	0.54	7,118.67	5,788.38	541.42	5,793.23	0.00	0.00	0.00	
13,100.00	90.01	0.54	7,118.65	5,888.38	542.37	5,893.23	0.00	0.00	0.00	
13,200.00	90.01	0.54	7,118.62	5,988.37	543.31	5,993.23	0.00	0.00	0.00	
13,300.00	90.01	0.54	7,118.60	6,088.37	544.26	6,093.23	0.00	0.00	0.00	
13,400.00	90.01	0.54	7,118.57	6,188.36	545.20	6,193.23	0.00	0.00	0.00	
13,500.00	90.01	0.54	7,118.55	6,288.36	546.15	6,293.23	0.00	0.00	0.00	
13,600.00	90.01	0.54	7,118.52	6,388.36	547.09	6,393.23	0.00	0.00	0.00	
13,700.00	90.01	0.54	7,118.50	6,488.35	548.03	6,493.23	0.00	0.00	0.00	
13,800.00	90.01	0.54	7,118.48	6,588.35	548.98	6,593.23	0.00	0.00	0.00	
13,900.00	90.01	0.54	7,118.45	6,688.34	549.92	6,693.23	0.00	0.00	0.00	
14,000.00	90.01	0.54	7,118.43	6,788.34	550.87	6,793.23	0.00	0.00	0.00	
14,100.00	90.01	0.54	7,118.40	6,888.33	551.81	6,893.23	0.00	0.00	0.00	
14,200.00	90.01	0.54	7,118.38	6,988.33	552.76	6,993.23	0.00	0.00	0.00	
14,300.00	90.01	0.54	7,118.35	7,088.32	553.70	7,093.23	0.00	0.00	0.00	
14,400.00	90.01	0.54	7,118.33	7,188.32	554.64	7,193.23	0.00	0.00	0.00	
14,500.00	90.01	0.54	7,118.31	7,288.32	555.59	7,293.23	0.00	0.00	0.00	
14,600.00	90.01	0.54	7,118.28	7,388.31	556.53	7,393.23	0.00	0.00	0.00	
14,700.00	90.01	0.54	7,118.26	7,488.31	557.48	7,493.23	0.00	0.00	0.00	
14,800.00	90.01	0.54	7,118.23	7,588.30	558.42	7,593.23	0.00	0.00	0.00	
14,900.00	90.01	0.54	7,118.21	7,688.30	559.37	7,693.23	0.00	0.00	0.00	
15,000.00	90.01	0.54	7,118.19	7,788.29	560.31	7,793.23	0.00	0.00	0.00	
15,100.00	90.01	0.54	7,118.16	7,888.29	561.25	7,893.23	0.00	0.00	0.00	
15,200.00	90.01	0.54	7,118.14	7,988.28	562.20	7,993.23	0.00	0.00	0.00	
15,300.00	90.01	0.54	7,118.11	8,088.28	563.14	8,093.23	0.00	0.00	0.00	
15,400.00	90.01	0.54	7,118.09	8,188.28	564.09	8,193.23	0.00	0.00	0.00	
15,500.00	90.01	0.54	7,118.06	8,288.27	565.03	8,293.23	0.00	0.00	0.00	
15,600.00	90.01	0.54	7,118.04	8,388.27	565.98	8,393.23	0.00	0.00	0.00	
15,700.00	90.01	0.54	7,118.02	8,488.26	566.92	8,493.23	0.00	0.00	0.00	
15,763.29	90.01	0.54	7,118.00	8,551.55	567.52	8,556.52	0.00	0.00	0.00	
<b>TD Well @ 15763.29ft</b>										

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
1,512.43	1,500.00	9 5/8"	9-5/8	13-1/2	
7,493.62	7,120.00	Top of Production	5-1/2	7-7/8	

## Corporate Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well GUEST 28C-12HZ
<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>TVD Reference:</b>	GL 4872 & KB 17 @ 4889.00usft (ASSUMED)
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>MD Reference:</b>	GL 4872 & KB 17 @ 4889.00usft (ASSUMED)
<b>Site:</b>	2N-65W-13 Guest 11-13HZ Pad	<b>North Reference:</b>	True
<b>Well:</b>	GUEST 28C-12HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	Permit Rev-3		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,342.85	1,333.00	Fox Hills Mkr				
3,992.42	3,946.00	Parkman				
4,348.43	4,302.00	Sussex				
6,821.40	6,769.00	Sharon Springs				
6,876.84	6,819.00	Niobrara				
6,950.00	6,881.00	Nio B				
7,047.47	6,955.00	Nio C				
7,301.07	7,088.00	Fort Hayes				
7,397.60	7,112.00	Codell				