

# **US ROCKIES WATTENBERG PLANNING**

**WELD-NAD83-UTMFT13N  
5N-67W-22 BLUE CHIP 6-22HZ PAD  
BLUE CHIP 22-7HZ**

**Plan A**

**Plan: Permit Rev-2**

## **Standard Planning Report**

**09 September, 2022**



## Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BLUE CHIP 22-7HZ
<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>TVD Reference:</b>	RKB = 17' @ 5053.00usft (RIG)
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>MD Reference:</b>	RKB = 17' @ 5053.00usft (RIG)
<b>Site:</b>	5N-67W-22 BLUE CHIP 6-22HZ PAD	<b>North Reference:</b>	True
<b>Well:</b>	BLUE CHIP 22-7HZ	<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		5N-67W-22 BLUE CHIP 6-22HZ PAD				
Site Position:		Northing:	14,668,179.77	usft	Latitude:	40.388364
From:	Map	Easting:	1,673,746.93	usft	Longitude:	-104.880304
Position Uncertainty:		0.00	usft	Slot Radius:	13-3/16	"

Well		BLUE CHIP 22-7HZ				
Well Position	+N/-S	0.00 usft	Northing:	14,668,089.80 usft	Latitude:	40.388117
	+E/-W	0.00 usft	Easting:	1,673,746.42 usft	Longitude:	-104.880307
Position Uncertainty		3.28 usft	Wellhead Elevation:	usft	Ground Level:	5,036.00 usft
Grid Convergence:		0.08 °				

<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>
	IGRF202013	9/3/2022	7.78	66.58	51,805.36307087

<b>Design</b>	Permit Rev-2				
<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	269.67	

<b>Plan Survey Tool Program</b>	<b>Date</b>	9/8/2022			
<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-2 (Plan A)	APC_ISCWSA REV 2 MWD+I	
				Fixed:v2:crustal field declinatio	
2	1,500.00	22,973.26	Permit Rev-2 (Plan A)	APC_ISCWSA REV 2 MWD+I	
				Fixed:v2:Rockies, crustal dec +	

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well BLUE CHIP 22-7HZ
Company:	US ROCKIES WATTENBERG PLANNING	TVD Reference:	RKB = 17' @ 5053.00usft (RIG)
Project:	WELD-NAD83-UTMFT13N	MD Reference:	RKB = 17' @ 5053.00usft (RIG)
Site:	5N-67W-22 BLUE CHIP 6-22HZ PAD	North Reference:	True
Well:	BLUE CHIP 22-7HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
Design:	Permit Rev-2		

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	
280.00	0.00	0.00	280.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,466.00	32.79	115.38	2,348.61	-260.87	549.89	1.50	1.50	0.00	115.38	
6,694.70	32.79	115.38	5,903.52	-1,242.45	2,618.96	0.00	0.00	0.00	0.00	
8,183.65	89.91	269.67	6,930.00	-1,532.35	1,996.59	8.00	3.84	10.36	150.23	
10,900.00	89.91	269.67	6,934.41	-1,547.99	-719.71	0.00	0.00	0.00	0.00	BLUE CHIP 22-7HZ_
10,961.99	89.91	270.60	6,934.51	-1,547.84	-781.70	1.50	0.00	1.50	89.81	
11,831.99	89.91	270.60	6,935.88	-1,538.73	-1,651.65	0.00	0.00	0.00	0.00	
11,899.19	89.91	269.59	6,935.98	-1,538.62	-1,718.85	1.50	0.00	-1.50	-90.18	
22,973.26	89.91	269.59	6,954.00	-1,617.48	-12,792.62	0.00	0.00	0.00	0.00	BLUE CHIP 22-7HZ_I

## Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BLUE CHIP 22-7HZ
<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>TVD Reference:</b>	RKB = 17' @ 5053.00usft (RIG)
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>MD Reference:</b>	RKB = 17' @ 5053.00usft (RIG)
<b>Site:</b>	5N-67W-22 BLUE CHIP 6-22HZ PAD	<b>North Reference:</b>	True
<b>Well:</b>	BLUE CHIP 22-7HZ	<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)
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
280.00	0.00	0.00	280.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Begin Nudge @ 280.00ft</b>									
300.00	0.30	115.38	300.00	-0.02	0.05	-0.05	1.50	1.50	0.00
400.00	1.80	115.38	399.98	-0.81	1.70	-1.70	1.50	1.50	0.00
500.00	3.30	115.38	499.88	-2.71	5.72	-5.71	1.50	1.50	0.00
600.00	4.80	115.38	599.63	-5.74	12.10	-12.07	1.50	1.50	0.00
700.00	6.30	115.38	699.15	-9.89	20.84	-20.78	1.50	1.50	0.00
800.00	7.80	115.38	798.40	-15.15	31.93	-31.84	1.50	1.50	0.00
900.00	9.30	115.38	897.28	-21.52	45.36	-45.24	1.50	1.50	0.00
922.02	9.63	115.38	919.00	-23.07	48.63	-48.50	1.50	1.50	0.00
<b>Fox Hills</b>									
1,000.00	10.80	115.38	995.74	-29.00	61.13	-60.96	1.50	1.50	0.00
1,100.00	12.30	115.38	1,093.72	-37.58	79.22	-79.00	1.50	1.50	0.00
1,200.00	13.80	115.38	1,191.13	-47.26	99.62	-99.34	1.50	1.50	0.00
1,300.00	15.30	115.38	1,287.92	-58.03	122.31	-121.98	1.50	1.50	0.00
1,400.00	16.80	115.38	1,384.02	-69.88	147.29	-146.89	1.50	1.50	0.00
1,500.00	18.30	115.38	1,479.36	-82.80	174.54	-174.06	1.50	1.50	0.00
1,521.76	18.63	115.38	1,500.00	-85.75	180.76	-180.26	1.50	1.50	0.00
<b>9 5/8"</b>									
1,600.00	19.80	115.38	1,573.88	-96.79	204.02	-203.46	1.50	1.50	0.00
1,700.00	21.30	115.38	1,667.52	-111.84	235.74	-235.09	1.50	1.50	0.00
1,800.00	22.80	115.38	1,760.20	-127.93	269.65	-268.91	1.50	1.50	0.00
1,900.00	24.30	115.38	1,851.87	-145.05	305.75	-304.91	1.50	1.50	0.00
2,000.00	25.80	115.38	1,942.46	-163.20	344.01	-343.06	1.50	1.50	0.00
2,100.00	27.30	115.38	2,031.91	-182.36	384.39	-383.33	1.50	1.50	0.00
2,200.00	28.80	115.38	2,120.16	-202.51	426.87	-425.70	1.50	1.50	0.00
2,300.00	30.30	115.38	2,207.15	-223.65	471.43	-470.13	1.50	1.50	0.00
2,400.00	31.80	115.38	2,292.82	-245.76	518.03	-516.61	1.50	1.50	0.00
2,466.00	32.79	115.38	2,348.61	-260.87	549.89	-548.38	1.50	1.50	0.00
<b>Hold Tangent @ 2466.00ft</b>									
2,500.00	32.79	115.38	2,377.20	-268.76	566.52	-564.97	0.00	0.00	0.00
2,600.00	32.79	115.38	2,461.26	-291.98	615.45	-613.76	0.00	0.00	0.00
2,700.00	32.79	115.38	2,545.33	-315.19	664.38	-662.56	0.00	0.00	0.00
2,800.00	32.79	115.38	2,629.39	-338.40	713.31	-711.35	0.00	0.00	0.00
2,900.00	32.79	115.38	2,713.46	-361.61	762.24	-760.15	0.00	0.00	0.00
3,000.00	32.79	115.38	2,797.53	-384.82	811.17	-808.94	0.00	0.00	0.00
3,100.00	32.79	115.38	2,881.59	-408.04	860.10	-857.73	0.00	0.00	0.00
3,200.00	32.79	115.38	2,965.66	-431.25	909.03	-906.53	0.00	0.00	0.00
3,300.00	32.79	115.38	3,049.72	-454.46	957.96	-955.32	0.00	0.00	0.00
3,400.00	32.79	115.38	3,133.79	-477.67	1,006.89	-1,004.12	0.00	0.00	0.00
3,500.00	32.79	115.38	3,217.86	-500.89	1,055.82	-1,052.91	0.00	0.00	0.00
3,600.00	32.79	115.38	3,301.92	-524.10	1,104.75	-1,101.71	0.00	0.00	0.00
3,700.00	32.79	115.38	3,385.99	-547.31	1,153.67	-1,150.50	0.00	0.00	0.00
3,800.00	32.79	115.38	3,470.05	-570.52	1,202.60	-1,199.30	0.00	0.00	0.00
3,900.00	32.79	115.38	3,554.12	-593.74	1,251.53	-1,248.09	0.00	0.00	0.00
4,000.00	32.79	115.38	3,638.19	-616.95	1,300.46	-1,296.89	0.00	0.00	0.00
4,037.84	32.79	115.38	3,670.00	-625.73	1,318.98	-1,315.35	0.00	0.00	0.00
<b>Parkman</b>									
4,100.00	32.79	115.38	3,722.25	-640.16	1,349.39	-1,345.68	0.00	0.00	0.00
4,200.00	32.79	115.38	3,806.32	-663.37	1,398.32	-1,394.48	0.00	0.00	0.00
4,300.00	32.79	115.38	3,890.39	-686.59	1,447.25	-1,443.27	0.00	0.00	0.00

# Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BLUE CHIP 22-7HZ
<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>TVD Reference:</b>	RKB = 17' @ 5053.00usft (RIG)
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>MD Reference:</b>	RKB = 17' @ 5053.00usft (RIG)
<b>Site:</b>	5N-67W-22 BLUE CHIP 6-22HZ PAD	<b>North Reference:</b>	True
<b>Well:</b>	BLUE CHIP 22-7HZ	<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)
4,400.00	32.79	115.38	3,974.45	-709.80	1,496.18	-1,492.07	0.00	0.00	0.00
4,500.00	32.79	115.38	4,058.52	-733.01	1,545.11	-1,540.86	0.00	0.00	0.00
4,593.36	32.79	115.38	4,137.00	-754.68	1,590.79	-1,586.42	0.00	0.00	0.00
Sussex									
4,600.00	32.79	115.38	4,142.58	-756.22	1,594.04	-1,589.66	0.00	0.00	0.00
4,700.00	32.79	115.38	4,226.65	-779.44	1,642.97	-1,638.45	0.00	0.00	0.00
4,800.00	32.79	115.38	4,310.72	-802.65	1,691.90	-1,687.25	0.00	0.00	0.00
4,900.00	32.79	115.38	4,394.78	-825.86	1,740.83	-1,736.04	0.00	0.00	0.00
5,000.00	32.79	115.38	4,478.85	-849.07	1,789.76	-1,784.84	0.00	0.00	0.00
5,100.00	32.79	115.38	4,562.91	-872.29	1,838.68	-1,833.63	0.00	0.00	0.00
5,200.00	32.79	115.38	4,646.98	-895.50	1,887.61	-1,882.42	0.00	0.00	0.00
5,300.00	32.79	115.38	4,731.05	-918.71	1,936.54	-1,931.22	0.00	0.00	0.00
5,400.00	32.79	115.38	4,815.11	-941.92	1,985.47	-1,980.01	0.00	0.00	0.00
5,500.00	32.79	115.38	4,899.18	-965.13	2,034.40	-2,028.81	0.00	0.00	0.00
5,600.00	32.79	115.38	4,983.24	-988.35	2,083.33	-2,077.60	0.00	0.00	0.00
5,700.00	32.79	115.38	5,067.31	-1,011.56	2,132.26	-2,126.40	0.00	0.00	0.00
5,800.00	32.79	115.38	5,151.38	-1,034.77	2,181.19	-2,175.19	0.00	0.00	0.00
5,900.00	32.79	115.38	5,235.44	-1,057.98	2,230.12	-2,223.99	0.00	0.00	0.00
6,000.00	32.79	115.38	5,319.51	-1,081.20	2,279.05	-2,272.78	0.00	0.00	0.00
6,100.00	32.79	115.38	5,403.58	-1,104.41	2,327.98	-2,321.58	0.00	0.00	0.00
6,200.00	32.79	115.38	5,487.64	-1,127.62	2,376.91	-2,370.37	0.00	0.00	0.00
6,300.00	32.79	115.38	5,571.71	-1,150.83	2,425.84	-2,419.17	0.00	0.00	0.00
6,400.00	32.79	115.38	5,655.77	-1,174.05	2,474.77	-2,467.96	0.00	0.00	0.00
6,500.00	32.79	115.38	5,739.84	-1,197.26	2,523.69	-2,516.76	0.00	0.00	0.00
6,600.00	32.79	115.38	5,823.91	-1,220.47	2,572.62	-2,565.55	0.00	0.00	0.00
6,694.70	32.79	115.38	5,903.52	-1,242.45	2,618.96	-2,611.76	0.00	0.00	0.00
KOP @ 6694.70ft :: DLS = 8°/100'									
6,700.00	32.42	115.77	5,907.98	-1,243.69	2,621.54	-2,614.33	8.00	-6.93	7.41
6,750.00	29.02	119.91	5,950.96	-1,255.57	2,644.13	-2,636.85	8.00	-6.80	8.27
6,800.00	25.78	125.01	5,995.35	-1,267.86	2,663.56	-2,656.21	8.00	-6.48	10.20
6,850.00	22.76	131.41	6,040.93	-1,280.50	2,679.73	-2,672.31	8.00	-6.04	12.80
6,900.00	20.07	139.53	6,087.49	-1,293.43	2,692.56	-2,685.06	8.00	-5.39	16.24
6,950.00	17.85	149.80	6,134.79	-1,306.58	2,701.98	-2,694.41	8.00	-4.44	20.54
7,000.00	16.30	162.39	6,182.60	-1,319.90	2,707.96	-2,700.32	8.00	-3.10	25.18
7,050.00	15.62	176.77	6,230.69	-1,333.32	2,710.47	-2,702.74	8.00	-1.36	28.74
7,100.00	15.92	191.48	6,278.82	-1,346.76	2,709.48	-2,701.68	8.00	0.60	29.43
7,150.00	17.15	204.89	6,326.77	-1,360.17	2,705.01	-2,697.13	8.00	2.46	26.83
7,200.00	19.13	216.09	6,374.30	-1,373.49	2,697.08	-2,689.12	8.00	3.96	22.39
7,250.00	21.66	225.01	6,421.18	-1,386.63	2,685.72	-2,677.69	8.00	5.05	17.85
7,300.00	24.56	232.04	6,467.17	-1,399.55	2,671.00	-2,662.90	8.00	5.81	14.05
7,350.00	27.72	237.60	6,512.05	-1,412.18	2,652.98	-2,644.80	8.00	6.33	11.13
7,400.00	31.07	242.09	6,555.62	-1,424.46	2,631.75	-2,623.50	8.00	6.69	8.96
7,450.00	34.54	245.76	6,597.64	-1,436.32	2,607.42	-2,599.10	8.00	6.94	7.35
7,500.00	38.10	248.84	6,637.93	-1,447.71	2,580.10	-2,571.72	8.00	7.13	6.15
7,550.00	41.73	251.45	6,676.27	-1,458.58	2,549.92	-2,541.48	8.00	7.26	5.24
7,600.00	45.41	253.72	6,712.49	-1,468.87	2,517.04	-2,508.54	8.00	7.36	4.54
7,650.00	49.14	255.72	6,746.41	-1,478.52	2,481.61	-2,473.06	8.00	7.44	3.99
7,700.00	52.89	257.50	6,777.87	-1,487.51	2,443.81	-2,435.21	8.00	7.51	3.56
7,750.00	56.66	259.11	6,806.70	-1,495.77	2,403.82	-2,395.17	8.00	7.55	3.23
7,800.00	60.46	260.59	6,832.78	-1,503.27	2,361.84	-2,353.14	8.00	7.59	2.96
7,850.00	64.27	261.96	6,855.96	-1,509.98	2,318.06	-2,309.33	8.00	7.62	2.74
7,900.00	68.10	263.25	6,876.15	-1,515.86	2,272.71	-2,263.94	8.00	7.65	2.57
7,950.00	71.93	264.47	6,893.24	-1,520.87	2,226.00	-2,217.20	8.00	7.67	2.44

# Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BLUE CHIP 22-7HZ
<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>TVD Reference:</b>	RKB = 17' @ 5053.00usft (RIG)
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>MD Reference:</b>	RKB = 17' @ 5053.00usft (RIG)
<b>Site:</b>	5N-67W-22 BLUE CHIP 6-22HZ PAD	<b>North Reference:</b>	True
<b>Well:</b>	BLUE CHIP 22-7HZ	<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)	
7,999.40	75.72	265.62	6,907.00	-1,524.97	2,178.74	-2,169.92	8.00	7.68	2.33	
<b>Sharon Springs</b>										
8,000.00	75.77	265.64	6,907.15	-1,525.01	2,178.16	-2,169.34	8.00	7.69	2.29	
8,050.00	79.61	266.76	6,917.81	-1,528.25	2,129.43	-2,120.59	8.00	7.69	2.25	
8,100.00	83.46	267.86	6,925.16	-1,530.56	2,080.04	-2,071.19	8.00	7.70	2.20	
8,150.00	87.31	268.95	6,929.18	-1,531.95	2,030.23	-2,021.37	8.00	7.70	2.17	
8,183.65	89.91	269.67	6,930.00	-1,532.35	1,996.59	-1,987.73	8.00	7.71	2.15	
<b>End Build @ 8183.65ft</b>										
8,185.19	89.91	269.67	6,930.00	-1,532.36	1,995.06	-1,986.20	0.00	0.00	0.00	
<b>Niobrara</b>										
8,200.00	89.91	269.67	6,930.02	-1,532.45	1,980.24	-1,971.38	0.00	0.00	0.00	
8,300.00	89.91	269.67	6,930.19	-1,533.02	1,880.24	-1,871.38	0.00	0.00	0.00	
8,400.00	89.91	269.67	6,930.35	-1,533.60	1,780.25	-1,771.38	0.00	0.00	0.00	
8,500.00	89.91	269.67	6,930.51	-1,534.18	1,680.25	-1,671.38	0.00	0.00	0.00	
8,600.00	89.91	269.67	6,930.67	-1,534.75	1,580.25	-1,571.38	0.00	0.00	0.00	
8,700.00	89.91	269.67	6,930.84	-1,535.33	1,480.25	-1,471.38	0.00	0.00	0.00	
8,800.00	89.91	269.67	6,931.00	-1,535.90	1,380.25	-1,371.38	0.00	0.00	0.00	
8,900.00	89.91	269.67	6,931.16	-1,536.48	1,280.25	-1,271.38	0.00	0.00	0.00	
9,000.00	89.91	269.67	6,931.32	-1,537.05	1,180.26	-1,171.38	0.00	0.00	0.00	
9,100.00	89.91	269.67	6,931.49	-1,537.63	1,080.26	-1,071.38	0.00	0.00	0.00	
9,200.00	89.91	269.67	6,931.65	-1,538.20	980.26	-971.38	0.00	0.00	0.00	
9,300.00	89.91	269.67	6,931.81	-1,538.78	880.26	-871.38	0.00	0.00	0.00	
9,400.00	89.91	269.67	6,931.97	-1,539.36	780.26	-771.38	0.00	0.00	0.00	
9,500.00	89.91	269.67	6,932.14	-1,539.93	680.27	-671.39	0.00	0.00	0.00	
9,600.00	89.91	269.67	6,932.30	-1,540.51	580.27	-571.39	0.00	0.00	0.00	
9,700.00	89.91	269.67	6,932.46	-1,541.08	480.27	-471.39	0.00	0.00	0.00	
9,800.00	89.91	269.67	6,932.62	-1,541.66	380.27	-371.39	0.00	0.00	0.00	
9,900.00	89.91	269.67	6,932.79	-1,542.23	280.27	-271.39	0.00	0.00	0.00	
10,000.00	89.91	269.67	6,932.95	-1,542.81	180.27	-171.39	0.00	0.00	0.00	
10,100.00	89.91	269.67	6,933.11	-1,543.39	80.28	-71.39	0.00	0.00	0.00	
10,200.00	89.91	269.67	6,933.27	-1,543.96	-19.72	28.61	0.00	0.00	0.00	
10,300.00	89.91	269.67	6,933.44	-1,544.54	-119.72	128.61	0.00	0.00	0.00	
10,400.00	89.91	269.67	6,933.60	-1,545.11	-219.72	228.61	0.00	0.00	0.00	
10,500.00	89.91	269.67	6,933.76	-1,545.69	-319.72	328.61	0.00	0.00	0.00	
10,600.00	89.91	269.67	6,933.92	-1,546.26	-419.71	428.61	0.00	0.00	0.00	
10,700.00	89.91	269.67	6,934.09	-1,546.84	-519.71	528.61	0.00	0.00	0.00	
10,800.00	89.91	269.67	6,934.25	-1,547.41	-619.71	628.61	0.00	0.00	0.00	
10,900.00	89.91	269.67	6,934.41	-1,547.99	-719.71	728.61	0.00	0.00	0.00	
<b>Begin Turn for AC @ 10900.00ft</b>										
10,961.99	89.91	270.60	6,934.51	-1,547.84	-781.70	790.60	1.50	0.00	1.50	
<b>End Turn @ 10961.99ft</b>										
11,000.00	89.91	270.60	6,934.57	-1,547.45	-819.71	828.61	0.00	0.00	0.00	
11,100.00	89.91	270.60	6,934.73	-1,546.40	-919.70	928.59	0.00	0.00	0.00	
11,200.00	89.91	270.60	6,934.88	-1,545.35	-1,019.70	1,028.58	0.00	0.00	0.00	
11,300.00	89.91	270.60	6,935.04	-1,544.30	-1,119.69	1,128.57	0.00	0.00	0.00	
11,400.00	89.91	270.60	6,935.20	-1,543.26	-1,219.68	1,228.55	0.00	0.00	0.00	
11,500.00	89.91	270.60	6,935.35	-1,542.21	-1,319.68	1,328.54	0.00	0.00	0.00	
11,600.00	89.91	270.60	6,935.51	-1,541.16	-1,419.67	1,428.53	0.00	0.00	0.00	
11,700.00	89.91	270.60	6,935.67	-1,540.12	-1,519.67	1,528.51	0.00	0.00	0.00	
11,800.00	89.91	270.60	6,935.83	-1,539.07	-1,619.66	1,628.50	0.00	0.00	0.00	
11,831.99	89.91	270.60	6,935.88	-1,538.73	-1,651.65	1,660.48	0.00	0.00	0.00	
<b>Begin Turn to BHL @ 11831.99ft</b>										
11,899.19	89.91	269.59	6,935.98	-1,538.62	-1,718.85	1,727.68	1.50	0.00	-1.50	

## Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BLUE CHIP 22-7HZ
<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>TVD Reference:</b>	RKB = 17' @ 5053.00usft (RIG)
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>MD Reference:</b>	RKB = 17' @ 5053.00usft (RIG)
<b>Site:</b>	5N-67W-22 BLUE CHIP 6-22HZ PAD	<b>North Reference:</b>	True
<b>Well:</b>	BLUE CHIP 22-7HZ	<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)
End Turn @ 11899.19ft									
12,000.00	89.91	269.59	6,936.15	-1,539.34	-1,819.66	1,828.49	0.00	0.00	0.00
12,100.00	89.91	269.59	6,936.31	-1,540.05	-1,919.65	1,928.49	0.00	0.00	0.00
12,200.00	89.91	269.59	6,936.47	-1,540.76	-2,019.65	2,028.49	0.00	0.00	0.00
12,300.00	89.91	269.59	6,936.64	-1,541.48	-2,119.65	2,128.49	0.00	0.00	0.00
12,400.00	89.91	269.59	6,936.80	-1,542.19	-2,219.65	2,228.49	0.00	0.00	0.00
12,500.00	89.91	269.59	6,936.96	-1,542.90	-2,319.64	2,328.49	0.00	0.00	0.00
12,600.00	89.91	269.59	6,937.12	-1,543.61	-2,419.64	2,428.49	0.00	0.00	0.00
12,700.00	89.91	269.59	6,937.29	-1,544.32	-2,519.64	2,528.49	0.00	0.00	0.00
12,800.00	89.91	269.59	6,937.45	-1,545.04	-2,619.63	2,628.49	0.00	0.00	0.00
12,900.00	89.91	269.59	6,937.61	-1,545.75	-2,719.63	2,728.49	0.00	0.00	0.00
13,000.00	89.91	269.59	6,937.77	-1,546.46	-2,819.63	2,828.49	0.00	0.00	0.00
13,100.00	89.91	269.59	6,937.94	-1,547.17	-2,919.63	2,928.49	0.00	0.00	0.00
13,200.00	89.91	269.59	6,938.10	-1,547.88	-3,019.62	3,028.49	0.00	0.00	0.00
13,300.00	89.91	269.59	6,938.26	-1,548.60	-3,119.62	3,128.49	0.00	0.00	0.00
13,400.00	89.91	269.59	6,938.42	-1,549.31	-3,219.62	3,228.49	0.00	0.00	0.00
13,500.00	89.91	269.59	6,938.59	-1,550.02	-3,319.62	3,328.49	0.00	0.00	0.00
13,600.00	89.91	269.59	6,938.75	-1,550.73	-3,419.61	3,428.49	0.00	0.00	0.00
13,700.00	89.91	269.59	6,938.91	-1,551.45	-3,519.61	3,528.49	0.00	0.00	0.00
13,800.00	89.91	269.59	6,939.08	-1,552.16	-3,619.61	3,628.49	0.00	0.00	0.00
13,900.00	89.91	269.59	6,939.24	-1,552.87	-3,719.61	3,728.49	0.00	0.00	0.00
14,000.00	89.91	269.59	6,939.40	-1,553.58	-3,819.60	3,828.49	0.00	0.00	0.00
14,100.00	89.91	269.59	6,939.56	-1,554.29	-3,919.60	3,928.49	0.00	0.00	0.00
14,200.00	89.91	269.59	6,939.73	-1,555.01	-4,019.60	4,028.49	0.00	0.00	0.00
14,300.00	89.91	269.59	6,939.89	-1,555.72	-4,119.59	4,128.49	0.00	0.00	0.00
14,400.00	89.91	269.59	6,940.05	-1,556.43	-4,219.59	4,228.49	0.00	0.00	0.00
14,500.00	89.91	269.59	6,940.21	-1,557.14	-4,319.59	4,328.49	0.00	0.00	0.00
14,600.00	89.91	269.59	6,940.38	-1,557.85	-4,419.59	4,428.49	0.00	0.00	0.00
14,700.00	89.91	269.59	6,940.54	-1,558.57	-4,519.58	4,528.49	0.00	0.00	0.00
14,800.00	89.91	269.59	6,940.70	-1,559.28	-4,619.58	4,628.49	0.00	0.00	0.00
14,900.00	89.91	269.59	6,940.87	-1,559.99	-4,719.58	4,728.49	0.00	0.00	0.00
15,000.00	89.91	269.59	6,941.03	-1,560.70	-4,819.58	4,828.48	0.00	0.00	0.00
15,100.00	89.91	269.59	6,941.19	-1,561.42	-4,919.57	4,928.48	0.00	0.00	0.00
15,200.00	89.91	269.59	6,941.35	-1,562.13	-5,019.57	5,028.48	0.00	0.00	0.00
15,300.00	89.91	269.59	6,941.52	-1,562.84	-5,119.57	5,128.48	0.00	0.00	0.00
15,400.00	89.91	269.59	6,941.68	-1,563.55	-5,219.57	5,228.48	0.00	0.00	0.00
15,500.00	89.91	269.59	6,941.84	-1,564.26	-5,319.56	5,328.48	0.00	0.00	0.00
15,600.00	89.91	269.59	6,942.00	-1,564.98	-5,419.56	5,428.48	0.00	0.00	0.00
15,700.00	89.91	269.59	6,942.17	-1,565.69	-5,519.56	5,528.48	0.00	0.00	0.00
15,800.00	89.91	269.59	6,942.33	-1,566.40	-5,619.55	5,628.48	0.00	0.00	0.00
15,900.00	89.91	269.59	6,942.49	-1,567.11	-5,719.55	5,728.48	0.00	0.00	0.00
16,000.00	89.91	269.59	6,942.66	-1,567.82	-5,819.55	5,828.48	0.00	0.00	0.00
16,100.00	89.91	269.59	6,942.82	-1,568.54	-5,919.55	5,928.48	0.00	0.00	0.00
16,200.00	89.91	269.59	6,942.98	-1,569.25	-6,019.54	6,028.48	0.00	0.00	0.00
16,300.00	89.91	269.59	6,943.14	-1,569.96	-6,119.54	6,128.48	0.00	0.00	0.00
16,400.00	89.91	269.59	6,943.31	-1,570.67	-6,219.54	6,228.48	0.00	0.00	0.00
16,500.00	89.91	269.59	6,943.47	-1,571.39	-6,319.54	6,328.48	0.00	0.00	0.00
16,600.00	89.91	269.59	6,943.63	-1,572.10	-6,419.53	6,428.48	0.00	0.00	0.00
16,700.00	89.91	269.59	6,943.79	-1,572.81	-6,519.53	6,528.48	0.00	0.00	0.00
16,800.00	89.91	269.59	6,943.96	-1,573.52	-6,619.53	6,628.48	0.00	0.00	0.00
16,900.00	89.91	269.59	6,944.12	-1,574.23	-6,719.53	6,728.48	0.00	0.00	0.00
17,000.00	89.91	269.59	6,944.28	-1,574.95	-6,819.52	6,828.48	0.00	0.00	0.00
17,100.00	89.91	269.59	6,944.44	-1,575.66	-6,919.52	6,928.48	0.00	0.00	0.00
17,200.00	89.91	269.59	6,944.61	-1,576.37	-7,019.52	7,028.48	0.00	0.00	0.00



## Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BLUE CHIP 22-7HZ
<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>TVD Reference:</b>	RKB = 17' @ 5053.00usft (RIG)
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>MD Reference:</b>	RKB = 17' @ 5053.00usft (RIG)
<b>Site:</b>	5N-67W-22 BLUE CHIP 6-22HZ PAD	<b>North Reference:</b>	True
<b>Well:</b>	BLUE CHIP 22-7HZ	<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)
17,300.00	89.91	269.59	6,944.77	-1,577.08	-7,119.51	7,128.48	0.00	0.00	0.00
17,400.00	89.91	269.59	6,944.93	-1,577.79	-7,219.51	7,228.48	0.00	0.00	0.00
17,500.00	89.91	269.59	6,945.10	-1,578.51	-7,319.51	7,328.48	0.00	0.00	0.00
17,600.00	89.91	269.59	6,945.26	-1,579.22	-7,419.51	7,428.48	0.00	0.00	0.00
17,700.00	89.91	269.59	6,945.42	-1,579.93	-7,519.50	7,528.48	0.00	0.00	0.00
17,800.00	89.91	269.59	6,945.58	-1,580.64	-7,619.50	7,628.48	0.00	0.00	0.00
17,900.00	89.91	269.59	6,945.75	-1,581.36	-7,719.50	7,728.48	0.00	0.00	0.00
18,000.00	89.91	269.59	6,945.91	-1,582.07	-7,819.50	7,828.48	0.00	0.00	0.00
18,100.00	89.91	269.59	6,946.07	-1,582.78	-7,919.49	7,928.48	0.00	0.00	0.00
18,200.00	89.91	269.59	6,946.23	-1,583.49	-8,019.49	8,028.48	0.00	0.00	0.00
18,300.00	89.91	269.59	6,946.40	-1,584.20	-8,119.49	8,128.48	0.00	0.00	0.00
18,400.00	89.91	269.59	6,946.56	-1,584.92	-8,219.49	8,228.48	0.00	0.00	0.00
18,500.00	89.91	269.59	6,946.72	-1,585.63	-8,319.48	8,328.48	0.00	0.00	0.00
18,600.00	89.91	269.59	6,946.89	-1,586.34	-8,419.48	8,428.48	0.00	0.00	0.00
18,700.00	89.91	269.59	6,947.05	-1,587.05	-8,519.48	8,528.48	0.00	0.00	0.00
18,800.00	89.91	269.59	6,947.21	-1,587.76	-8,619.47	8,628.48	0.00	0.00	0.00
18,900.00	89.91	269.59	6,947.37	-1,588.48	-8,719.47	8,728.48	0.00	0.00	0.00
19,000.00	89.91	269.59	6,947.54	-1,589.19	-8,819.47	8,828.48	0.00	0.00	0.00
19,100.00	89.91	269.59	6,947.70	-1,589.90	-8,919.47	8,928.48	0.00	0.00	0.00
19,200.00	89.91	269.59	6,947.86	-1,590.61	-9,019.46	9,028.48	0.00	0.00	0.00
19,300.00	89.91	269.59	6,948.02	-1,591.33	-9,119.46	9,128.48	0.00	0.00	0.00
19,400.00	89.91	269.59	6,948.19	-1,592.04	-9,219.46	9,228.48	0.00	0.00	0.00
19,500.00	89.91	269.59	6,948.35	-1,592.75	-9,319.46	9,328.47	0.00	0.00	0.00
19,600.00	89.91	269.59	6,948.51	-1,593.46	-9,419.45	9,428.47	0.00	0.00	0.00
19,700.00	89.91	269.59	6,948.67	-1,594.17	-9,519.45	9,528.47	0.00	0.00	0.00
19,800.00	89.91	269.59	6,948.84	-1,594.89	-9,619.45	9,628.47	0.00	0.00	0.00
19,900.00	89.91	269.59	6,949.00	-1,595.60	-9,719.45	9,728.47	0.00	0.00	0.00
20,000.00	89.91	269.59	6,949.16	-1,596.31	-9,819.44	9,828.47	0.00	0.00	0.00
20,100.00	89.91	269.59	6,949.33	-1,597.02	-9,919.44	9,928.47	0.00	0.00	0.00
20,200.00	89.91	269.59	6,949.49	-1,597.73	-10,019.44	10,028.47	0.00	0.00	0.00
20,300.00	89.91	269.59	6,949.65	-1,598.45	-10,119.43	10,128.47	0.00	0.00	0.00
20,400.00	89.91	269.59	6,949.81	-1,599.16	-10,219.43	10,228.47	0.00	0.00	0.00
20,500.00	89.91	269.59	6,949.98	-1,599.87	-10,319.43	10,328.47	0.00	0.00	0.00
20,600.00	89.91	269.59	6,950.14	-1,600.58	-10,419.43	10,428.47	0.00	0.00	0.00
20,700.00	89.91	269.59	6,950.30	-1,601.30	-10,519.42	10,528.47	0.00	0.00	0.00
20,800.00	89.91	269.59	6,950.46	-1,602.01	-10,619.42	10,628.47	0.00	0.00	0.00
20,900.00	89.91	269.59	6,950.63	-1,602.72	-10,719.42	10,728.47	0.00	0.00	0.00
21,000.00	89.91	269.59	6,950.79	-1,603.43	-10,819.42	10,828.47	0.00	0.00	0.00
21,100.00	89.91	269.59	6,950.95	-1,604.14	-10,919.41	10,928.47	0.00	0.00	0.00
21,200.00	89.91	269.59	6,951.12	-1,604.86	-11,019.41	11,028.47	0.00	0.00	0.00
21,300.00	89.91	269.59	6,951.28	-1,605.57	-11,119.41	11,128.47	0.00	0.00	0.00
21,400.00	89.91	269.59	6,951.44	-1,606.28	-11,219.41	11,228.47	0.00	0.00	0.00
21,500.00	89.91	269.59	6,951.60	-1,606.99	-11,319.40	11,328.47	0.00	0.00	0.00
21,600.00	89.91	269.59	6,951.77	-1,607.70	-11,419.40	11,428.47	0.00	0.00	0.00
21,700.00	89.91	269.59	6,951.93	-1,608.42	-11,519.40	11,528.47	0.00	0.00	0.00
21,800.00	89.91	269.59	6,952.09	-1,609.13	-11,619.39	11,628.47	0.00	0.00	0.00
21,900.00	89.91	269.59	6,952.25	-1,609.84	-11,719.39	11,728.47	0.00	0.00	0.00
22,000.00	89.91	269.59	6,952.42	-1,610.55	-11,819.39	11,828.47	0.00	0.00	0.00
22,100.00	89.91	269.59	6,952.58	-1,611.27	-11,919.39	11,928.47	0.00	0.00	0.00
22,200.00	89.91	269.59	6,952.74	-1,611.98	-12,019.38	12,028.47	0.00	0.00	0.00
22,300.00	89.91	269.59	6,952.90	-1,612.69	-12,119.38	12,128.47	0.00	0.00	0.00
22,400.00	89.91	269.59	6,953.07	-1,613.40	-12,219.38	12,228.47	0.00	0.00	0.00
22,500.00	89.91	269.59	6,953.23	-1,614.11	-12,319.38	12,328.47	0.00	0.00	0.00
22,600.00	89.91	269.59	6,953.39	-1,614.83	-12,419.37	12,428.47	0.00	0.00	0.00

## Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BLUE CHIP 22-7HZ
<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>TVD Reference:</b>	RKB = 17' @ 5053.00usft (RIG)
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>MD Reference:</b>	RKB = 17' @ 5053.00usft (RIG)
<b>Site:</b>	5N-67W-22 BLUE CHIP 6-22HZ PAD	<b>North Reference:</b>	True
<b>Well:</b>	BLUE CHIP 22-7HZ	<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)
22,700.00	89.91	269.59	6,953.56	-1,615.54	-12,519.37	12,528.47	0.00	0.00	0.00
22,800.00	89.91	269.59	6,953.72	-1,616.25	-12,619.37	12,628.47	0.00	0.00	0.00
22,900.00	89.91	269.59	6,953.88	-1,616.96	-12,719.37	12,728.47	0.00	0.00	0.00
22,973.26	89.91	269.59	6,954.00	-1,617.48	-12,792.62	12,801.73	0.00	0.00	0.00
TD Well @ 22973.26ft									

Casing Points				
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
1,521.76	1,500.00	9 5/8"	9-5/8	13-1/2
22,973.26	6,954.00	5.5" CSG	5-1/2	7-7/8

Formations				
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)
922.02	919.00	Fox Hills		
4,037.84	3,670.00	Parkman		
4,593.36	4,137.00	Sussex		
7,999.40	6,907.00	Sharon Springs		
8,185.19	6,930.00	Niobrara		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
280.00	280.00	0.00	0.00	Begin Nudge @ 280.00ft
2,466.00	2,348.61	-260.87	549.89	Hold Tangent @ 2466.00ft
6,694.70	5,903.52	-1,242.45	2,618.96	KOP @ 6694.70ft :: DLS = 8°/100'
8,183.65	6,930.00	-1,532.35	1,996.59	End Build @ 8183.65ft
10,900.00	6,934.41	-1,547.99	-719.71	Begin Turn for AC @ 10900.00ft
10,961.99	6,934.51	-1,547.84	-781.70	End Turn @ 10961.99ft
11,831.99	6,935.88	-1,538.73	-1,651.65	Begin Turn to BHL @ 11831.99ft
11,899.19	6,935.98	-1,538.62	-1,718.85	End Turn @ 11899.19ft
22,973.26	6,954.00	-1,617.48	-12,792.62	TD Well @ 22973.26ft