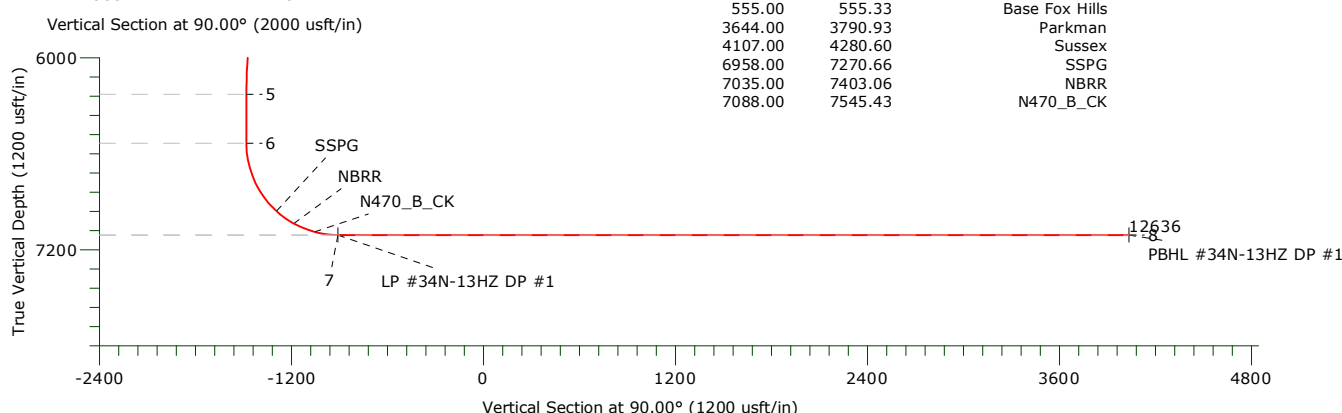
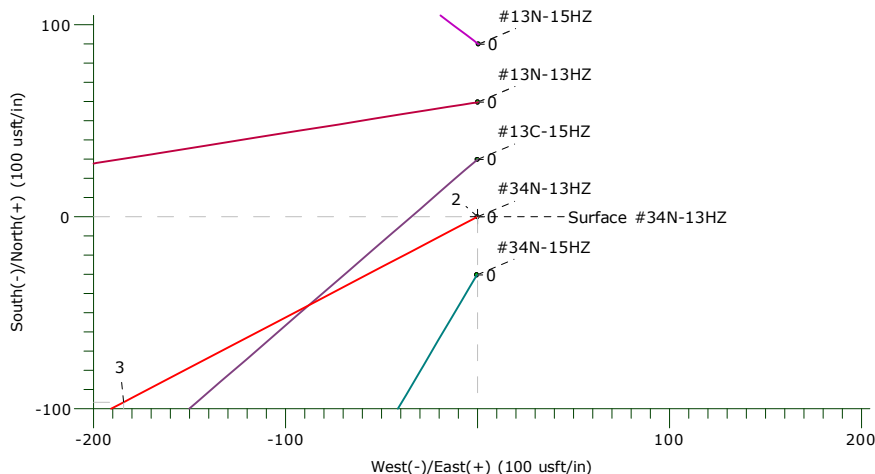
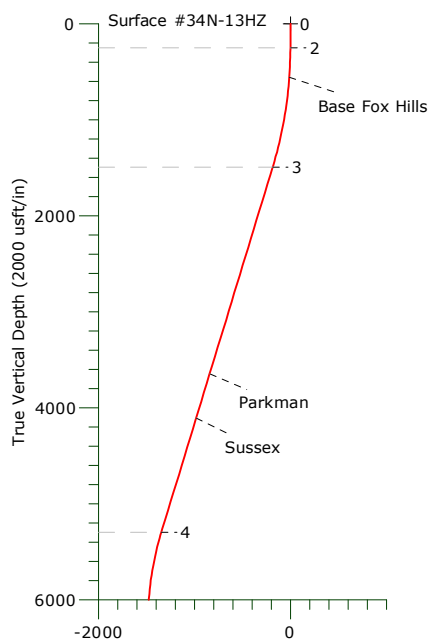
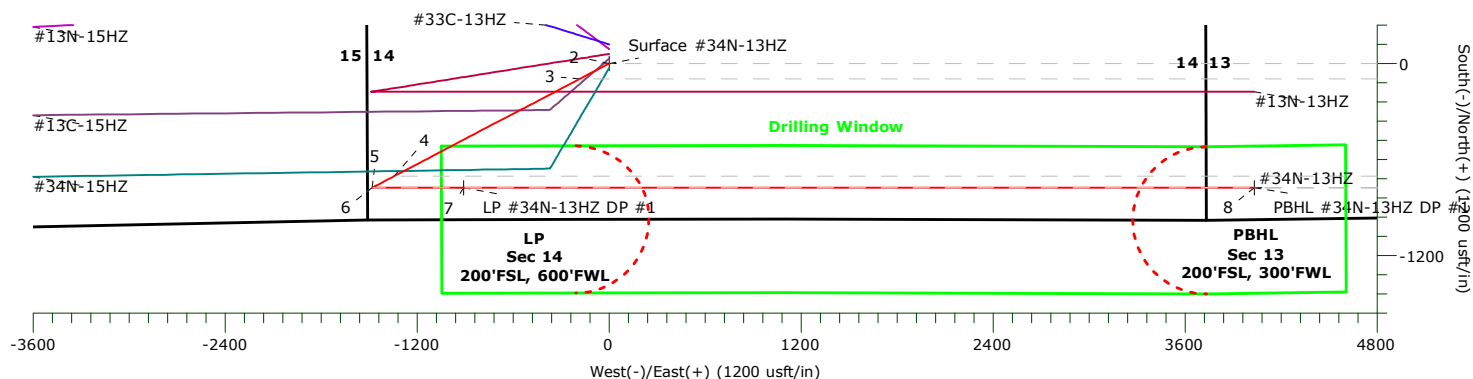


US ROCKIES WATTENBERG PLANNING

Project: WELD-NAD83-UTMFT13N
Site: 3N-68W-14 Docheff 19-14HZ
Well: #34N-13HZ
Wellbore: Original Hole
Design: DP #1



FORMATION TOP DETAILS			
TVDPath	MDPath	Formation	
555.00	555.33	Base Fox Hills	
3644.00	3790.93	Parkman	
4107.00	4280.60	Sussex	
6958.00	7270.66	SSPG	
7035.00	7403.06	NBRR	
7088.00	7545.43	N470_B_CK	

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Surface #34N-13HZ	0.00	0.00	0.00	14607432.86	1647614.10	40.221609°N	104.974216°W	Point
LP #34N-13HZ DP #1	7107.00	-776.83	-908.60	14606655.77	1646705.73	40.219476°N	104.977471°W	Point
PBHL #34N-13HZ DP #1	7107.00	-776.68	4033.73	14606657.35	1651648.06	40.219475°N	104.959766°W	Point

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	1516.35	19.00	242.33	1493.28	-96.59	-184.21	1.50	242.33	-184.21	
4	5537.58	19.00	242.33	5295.54	-704.41	-1343.40	0.00	0.00	-1343.40	
5	6487.35	0.00	0.00	6228.00	-776.85	-1481.56	2.00	180.00	-1481.56	
6	6793.39	0.00	0.00	6534.04	-776.85	-1481.56	0.00	0.00	-1481.56	
7	7693.39	90.00	90.00	7107.00	-776.83	-908.60	10.00	90.00	-908.60	
8	12635.72	90.00	90.00	7107.00	-776.68	4033.73	0.00	0.00	4033.73	

US ROCKIES WATTENBERG PLANNING

**WELD-NAD83-UTMFT13N
3N-68W-14 Docheff 19-14HZ
#34N-13HZ**

Original Hole

Plan: DP #1

Standard Planning Report

30 March, 2016

Precision Drilling Corporation

Planning Report

Database:	Compass_Rockies	Local Co-ordinate Reference:	Well #34N-13HZ
Company:	US ROCKIES WATTENBERG PLANNING	TVD Reference:	4935'GL+20'KB @ 4955.00usft (PD461)
Project:	WELD-NAD83-UTMFT13N	MD Reference:	4935'GL+20'KB @ 4955.00usft (PD461)
Site:	3N-68W-14 Docheff 19-14HZ	North Reference:	True
Well:	#34N-13HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	DP #1		

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	3N-68W-14 Docheff 19-14HZ		
Site Position:		Northing:	14,607,552.66 usft
From:	Lat/Long	Easting:	1,647,614.62 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13.20 in
		Latitude:	40.221938°N
		Longitude:	104.974214°W
		Grid Convergence:	0.02 °

Well	#34N-13HZ		
Well Position	+N-S	-119.81 usft	Northing: 14,607,432.86 usft
	+E-W	-0.56 usft	Easting: 1,647,614.10 usft
Position Uncertainty		3.28 usft	Wellhead Elevation: 0.00 usft
			Latitude: 40.221609°N
			Longitude: 104.974216°W
			Ground Level: 4,935.00 usft

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	03/17/16	8.44	66.71	52,419

Design	DP #1				
Audit Notes:					
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00	
Vertical Section:	Depth From (TVD) (usft)	+N-S (usft)	+E-W (usft)	Direction (°)	
	0.00	0.00	0.00	90.00	

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	
1,516.35	19.00	242.33	1,493.28	-96.59	-184.21	1.50	1.50	0.00	242.33	
5,537.58	19.00	242.33	5,295.54	-704.41	-1,343.40	0.00	0.00	0.00	0.00	
6,487.35	0.00	0.00	6,228.00	-776.85	-1,481.56	2.00	-2.00	0.00	180.00	
6,793.39	0.00	0.00	6,534.04	-776.85	-1,481.56	0.00	0.00	0.00	0.00	
7,693.39	90.00	90.00	7,107.00	-776.83	-908.60	10.00	10.00	10.00	90.00	
12,635.72	90.00	90.00	7,107.00	-776.68	4,033.73	0.00	0.00	0.00	0.00	

Precision Drilling Corporation

Planning Report

Database:	Compass_Rockies	Local Co-ordinate Reference:	Well #34N-13HZ
Company:	US ROCKIES WATTENBERG PLANNING	TVD Reference:	4935'GL+20'KB @ 4955.00usft (PD461)
Project:	WELD-NAD83-UTMFT13N	MD Reference:	4935'GL+20'KB @ 4955.00usft (PD461)
Site:	3N-68W-14 Docheff 19-14HZ	North Reference:	True
Well:	#34N-13HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	DP #1		

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	
1										
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	
2										
300.00	0.75	242.33	300.00	-0.15	-0.29	-0.29	1.50	1.50	0.00	
400.00	2.25	242.33	399.96	-1.37	-2.61	-2.61	1.50	1.50	0.00	
500.00	3.75	242.33	499.82	-3.80	-7.24	-7.24	1.50	1.50	0.00	
555.33	4.58	242.33	555.00	-5.66	-10.80	-10.80	1.50	1.50	0.00	
Base Fox Hills										
600.00	5.25	242.33	599.51	-7.44	-14.19	-14.19	1.50	1.50	0.00	
700.00	6.75	242.33	698.96	-12.30	-23.45	-23.45	1.50	1.50	0.00	
800.00	8.25	242.33	798.10	-18.36	-35.01	-35.01	1.50	1.50	0.00	
900.00	9.75	242.33	896.87	-25.62	-48.86	-48.86	1.50	1.50	0.00	
1,000.00	11.25	242.33	995.19	-34.08	-65.00	-65.00	1.50	1.50	0.00	
1,100.00	12.75	242.33	1,093.00	-43.74	-83.41	-83.41	1.50	1.50	0.00	
1,200.00	14.25	242.33	1,190.24	-54.58	-104.09	-104.09	1.50	1.50	0.00	
1,300.00	15.75	242.33	1,286.83	-66.60	-127.01	-127.01	1.50	1.50	0.00	
1,400.00	17.25	242.33	1,382.71	-79.79	-152.16	-152.16	1.50	1.50	0.00	
1,500.00	18.75	242.33	1,477.81	-94.14	-179.53	-179.53	1.50	1.50	0.00	
1,516.35	19.00	242.33	1,493.28	-96.59	-184.21	-184.21	1.50	1.50	0.00	
3										
1,600.00	19.00	242.33	1,572.37	-109.24	-208.33	-208.33	0.00	0.00	0.00	
1,700.00	19.00	242.33	1,666.93	-124.35	-237.15	-237.15	0.00	0.00	0.00	
1,800.00	19.00	242.33	1,761.48	-139.47	-265.98	-265.98	0.00	0.00	0.00	
1,900.00	19.00	242.33	1,856.04	-154.58	-294.81	-294.81	0.00	0.00	0.00	
2,000.00	19.00	242.33	1,950.59	-169.70	-323.63	-323.63	0.00	0.00	0.00	
2,100.00	19.00	242.33	2,045.15	-184.81	-352.46	-352.46	0.00	0.00	0.00	
2,200.00	19.00	242.33	2,139.70	-199.93	-381.29	-381.29	0.00	0.00	0.00	
2,300.00	19.00	242.33	2,234.26	-215.04	-410.11	-410.11	0.00	0.00	0.00	
2,400.00	19.00	242.33	2,328.81	-230.16	-438.94	-438.94	0.00	0.00	0.00	
2,500.00	19.00	242.33	2,423.36	-245.27	-467.77	-467.77	0.00	0.00	0.00	
2,600.00	19.00	242.33	2,517.92	-260.39	-496.59	-496.59	0.00	0.00	0.00	
2,700.00	19.00	242.33	2,612.47	-275.50	-525.42	-525.42	0.00	0.00	0.00	
2,800.00	19.00	242.33	2,707.03	-290.62	-554.25	-554.25	0.00	0.00	0.00	
2,900.00	19.00	242.33	2,801.58	-305.73	-583.07	-583.07	0.00	0.00	0.00	
3,000.00	19.00	242.33	2,896.14	-320.85	-611.90	-611.90	0.00	0.00	0.00	
3,100.00	19.00	242.33	2,990.69	-335.96	-640.73	-640.73	0.00	0.00	0.00	
3,200.00	19.00	242.33	3,085.25	-351.08	-669.55	-669.55	0.00	0.00	0.00	
3,300.00	19.00	242.33	3,179.80	-366.19	-698.38	-698.38	0.00	0.00	0.00	
3,400.00	19.00	242.33	3,274.36	-381.31	-727.21	-727.21	0.00	0.00	0.00	
3,500.00	19.00	242.33	3,368.91	-396.42	-756.03	-756.03	0.00	0.00	0.00	
3,600.00	19.00	242.33	3,463.46	-411.54	-784.86	-784.86	0.00	0.00	0.00	
3,700.00	19.00	242.33	3,558.02	-426.65	-813.69	-813.69	0.00	0.00	0.00	
3,790.93	19.00	242.33	3,644.00	-440.40	-839.90	-839.90	0.00	0.00	0.00	
Parkman										
3,800.00	19.00	242.33	3,652.57	-441.77	-842.51	-842.51	0.00	0.00	0.00	
3,900.00	19.00	242.33	3,747.13	-456.88	-871.34	-871.34	0.00	0.00	0.00	
4,000.00	19.00	242.33	3,841.68	-472.00	-900.17	-900.17	0.00	0.00	0.00	
4,100.00	19.00	242.33	3,936.24	-487.11	-928.99	-928.99	0.00	0.00	0.00	
4,200.00	19.00	242.33	4,030.79	-502.23	-957.82	-957.82	0.00	0.00	0.00	
4,280.60	19.00	242.33	4,107.00	-514.41	-981.05	-981.05	0.00	0.00	0.00	

Precision Drilling Corporation

Planning Report

Database:	Compass_Rockies	Local Co-ordinate Reference:	Well #34N-13HZ
Company:	US ROCKIES WATTENBERG PLANNING	TVD Reference:	4935'GL+20'KB @ 4955.00usft (PD461)
Project:	WELD-NAD83-UTMFT13N	MD Reference:	4935'GL+20'KB @ 4955.00usft (PD461)
Site:	3N-68W-14 Docheff 19-14HZ	North Reference:	True
Well:	#34N-13HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	DP #1		

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)
Sussex									
4,300.00	19.00	242.33	4,125.35	-517.34	-986.65	-986.65	0.00	0.00	0.00
4,400.00	19.00	242.33	4,219.90	-532.46	-1,015.47	-1,015.47	0.00	0.00	0.00
4,500.00	19.00	242.33	4,314.46	-547.57	-1,044.30	-1,044.30	0.00	0.00	0.00
4,600.00	19.00	242.33	4,409.01	-562.69	-1,073.13	-1,073.13	0.00	0.00	0.00
4,700.00	19.00	242.33	4,503.56	-577.80	-1,101.95	-1,101.95	0.00	0.00	0.00
4,800.00	19.00	242.33	4,598.12	-592.92	-1,130.78	-1,130.78	0.00	0.00	0.00
4,900.00	19.00	242.33	4,692.67	-608.03	-1,159.61	-1,159.61	0.00	0.00	0.00
5,000.00	19.00	242.33	4,787.23	-623.15	-1,188.43	-1,188.43	0.00	0.00	0.00
5,100.00	19.00	242.33	4,881.78	-638.26	-1,217.26	-1,217.26	0.00	0.00	0.00
5,200.00	19.00	242.33	4,976.34	-653.38	-1,246.09	-1,246.09	0.00	0.00	0.00
5,300.00	19.00	242.33	5,070.89	-668.50	-1,274.91	-1,274.91	0.00	0.00	0.00
5,400.00	19.00	242.33	5,165.45	-683.61	-1,303.74	-1,303.74	0.00	0.00	0.00
5,500.00	19.00	242.33	5,260.00	-698.73	-1,332.57	-1,332.57	0.00	0.00	0.00
5,537.58	19.00	242.33	5,295.53	-704.41	-1,343.40	-1,343.40	0.00	0.00	0.00
4									
5,600.00	17.75	242.33	5,354.77	-713.54	-1,360.82	-1,360.82	2.00	-2.00	0.00
5,700.00	15.75	242.33	5,450.53	-726.92	-1,386.34	-1,386.34	2.00	-2.00	0.00
5,800.00	13.75	242.33	5,547.23	-738.74	-1,408.88	-1,408.88	2.00	-2.00	0.00
5,900.00	11.75	242.33	5,644.76	-748.99	-1,428.42	-1,428.42	2.00	-2.00	0.00
6,000.00	9.75	242.33	5,743.00	-757.65	-1,444.94	-1,444.94	2.00	-2.00	0.00
6,100.00	7.75	242.33	5,841.83	-764.71	-1,458.40	-1,458.40	2.00	-2.00	0.00
6,200.00	5.75	242.33	5,941.13	-770.16	-1,468.81	-1,468.81	2.00	-2.00	0.00
6,300.00	3.75	242.33	6,040.78	-774.01	-1,476.14	-1,476.14	2.00	-2.00	0.00
6,400.00	1.75	242.33	6,140.66	-776.23	-1,480.38	-1,480.38	2.00	-2.00	0.00
6,487.35	0.00	0.00	6,228.00	-776.85	-1,481.56	-1,481.56	2.00	-2.00	0.00
5									
6,500.00	0.00	0.00	6,240.65	-776.85	-1,481.56	-1,481.56	0.00	0.00	0.00
6,600.00	0.00	0.00	6,340.65	-776.85	-1,481.56	-1,481.56	0.00	0.00	0.00
6,700.00	0.00	0.00	6,440.65	-776.85	-1,481.56	-1,481.56	0.00	0.00	0.00
6,793.39	0.00	0.00	6,534.04	-776.85	-1,481.56	-1,481.56	0.00	0.00	0.00
6									
6,800.00	0.66	90.00	6,540.65	-776.85	-1,481.52	-1,481.52	10.00	10.00	0.00
6,850.00	5.66	90.00	6,590.56	-776.85	-1,478.77	-1,478.77	10.00	10.00	0.00
6,900.00	10.66	90.00	6,640.04	-776.85	-1,471.67	-1,471.67	10.00	10.00	0.00
6,950.00	15.66	90.00	6,688.71	-776.85	-1,460.29	-1,460.29	10.00	10.00	0.00
7,000.00	20.66	90.00	6,736.20	-776.85	-1,444.71	-1,444.71	10.00	10.00	0.00
7,050.00	25.66	90.00	6,782.16	-776.85	-1,425.05	-1,425.05	10.00	10.00	0.00
7,100.00	30.66	90.00	6,826.22	-776.85	-1,401.46	-1,401.46	10.00	10.00	0.00
7,150.00	35.66	90.00	6,868.07	-776.85	-1,374.12	-1,374.12	10.00	10.00	0.00
7,200.00	40.66	90.00	6,907.37	-776.85	-1,343.23	-1,343.23	10.00	10.00	0.00
7,250.00	45.66	90.00	6,943.83	-776.84	-1,309.04	-1,309.04	10.00	10.00	0.00
7,270.66	47.73	90.00	6,958.00	-776.84	-1,294.01	-1,294.01	10.00	10.00	0.00
SSPG									
7,300.00	50.66	90.00	6,977.17	-776.84	-1,271.80	-1,271.80	10.00	10.00	0.00
7,350.00	55.66	90.00	7,007.14	-776.84	-1,231.80	-1,231.80	10.00	10.00	0.00
7,400.00	60.66	90.00	7,033.51	-776.84	-1,189.34	-1,189.34	10.00	10.00	0.00
7,403.06	60.97	90.00	7,035.00	-776.84	-1,186.67	-1,186.67	10.00	10.00	0.00
NBRR									
7,450.00	65.66	90.00	7,056.08	-776.84	-1,144.74	-1,144.74	10.00	10.00	0.00
7,500.00	70.66	90.00	7,074.67	-776.84	-1,098.34	-1,098.34	10.00	10.00	0.00
7,545.43	75.20	90.00	7,088.00	-776.84	-1,054.92	-1,054.92	10.00	10.00	0.00
N470_B_CK									

Precision Drilling Corporation

Planning Report

Database:	Compass_Rockies	Local Co-ordinate Reference:	Well #34N-13HZ
Company:	US ROCKIES WATTENBERG PLANNING	TVD Reference:	4935'GL+20'KB @ 4955.00usft (PD461)
Project:	WELD-NAD83-UTMFT13N	MD Reference:	4935'GL+20'KB @ 4955.00usft (PD461)
Site:	3N-68W-14 Docheff 19-14HZ	North Reference:	True
Well:	#34N-13HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	DP #1		

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)
7,550.00	75.66	90.00	7,089.15	-776.84	-1,050.50	-1,050.50	10.00	10.00	0.00
7,600.00	80.66	90.00	7,099.40	-776.84	-1,001.58	-1,001.58	10.00	10.00	0.00
7,650.00	85.66	90.00	7,105.36	-776.83	-951.95	-951.95	10.00	10.00	0.00
7,693.39	90.00	90.00	7,107.00	-776.83	-908.60	-908.60	10.00	10.00	0.00
7									
7,700.00	90.00	90.00	7,107.00	-776.83	-901.99	-901.99	0.00	0.00	0.00
7,800.00	90.00	90.00	7,107.00	-776.83	-801.99	-801.99	0.00	0.00	0.00
7,900.00	90.00	90.00	7,107.00	-776.83	-701.99	-701.99	0.00	0.00	0.00
8,000.00	90.00	90.00	7,107.00	-776.82	-601.99	-601.99	0.00	0.00	0.00
8,100.00	90.00	90.00	7,107.00	-776.82	-501.99	-501.99	0.00	0.00	0.00
8,200.00	90.00	90.00	7,107.00	-776.82	-401.99	-401.99	0.00	0.00	0.00
8,300.00	90.00	90.00	7,107.00	-776.81	-301.99	-301.99	0.00	0.00	0.00
8,400.00	90.00	90.00	7,107.00	-776.81	-201.99	-201.99	0.00	0.00	0.00
8,500.00	90.00	90.00	7,107.00	-776.81	-101.99	-101.99	0.00	0.00	0.00
8,600.00	90.00	90.00	7,107.00	-776.80	-1.99	-1.99	0.00	0.00	0.00
8,700.00	90.00	90.00	7,107.00	-776.80	98.01	98.01	0.00	0.00	0.00
8,800.00	90.00	90.00	7,107.00	-776.80	198.01	198.01	0.00	0.00	0.00
8,900.00	90.00	90.00	7,107.00	-776.80	298.01	298.01	0.00	0.00	0.00
9,000.00	90.00	90.00	7,107.00	-776.79	398.01	398.01	0.00	0.00	0.00
9,100.00	90.00	90.00	7,107.00	-776.79	498.01	498.01	0.00	0.00	0.00
9,200.00	90.00	90.00	7,107.00	-776.79	598.01	598.01	0.00	0.00	0.00
9,300.00	90.00	90.00	7,107.00	-776.78	698.01	698.01	0.00	0.00	0.00
9,400.00	90.00	90.00	7,107.00	-776.78	798.01	798.01	0.00	0.00	0.00
9,500.00	90.00	90.00	7,107.00	-776.78	898.01	898.01	0.00	0.00	0.00
9,600.00	90.00	90.00	7,107.00	-776.77	998.01	998.01	0.00	0.00	0.00
9,700.00	90.00	90.00	7,107.00	-776.77	1,098.01	1,098.01	0.00	0.00	0.00
9,800.00	90.00	90.00	7,107.00	-776.77	1,198.01	1,198.01	0.00	0.00	0.00
9,900.00	90.00	90.00	7,107.00	-776.76	1,298.01	1,298.01	0.00	0.00	0.00
10,000.00	90.00	90.00	7,107.00	-776.76	1,398.01	1,398.01	0.00	0.00	0.00
10,100.00	90.00	90.00	7,107.00	-776.76	1,498.01	1,498.01	0.00	0.00	0.00
10,200.00	90.00	90.00	7,107.00	-776.76	1,598.01	1,598.01	0.00	0.00	0.00
10,300.00	90.00	90.00	7,107.00	-776.75	1,698.01	1,698.01	0.00	0.00	0.00
10,400.00	90.00	90.00	7,107.00	-776.75	1,798.01	1,798.01	0.00	0.00	0.00
10,500.00	90.00	90.00	7,107.00	-776.75	1,898.01	1,898.01	0.00	0.00	0.00
10,600.00	90.00	90.00	7,107.00	-776.74	1,998.01	1,998.01	0.00	0.00	0.00
10,700.00	90.00	90.00	7,107.00	-776.74	2,098.01	2,098.01	0.00	0.00	0.00
10,800.00	90.00	90.00	7,107.00	-776.74	2,198.01	2,198.01	0.00	0.00	0.00
10,900.00	90.00	90.00	7,107.00	-776.73	2,298.01	2,298.01	0.00	0.00	0.00
11,000.00	90.00	90.00	7,107.00	-776.73	2,398.01	2,398.01	0.00	0.00	0.00
11,100.00	90.00	90.00	7,107.00	-776.73	2,498.01	2,498.01	0.00	0.00	0.00
11,200.00	90.00	90.00	7,107.00	-776.72	2,598.01	2,598.01	0.00	0.00	0.00
11,300.00	90.00	90.00	7,107.00	-776.72	2,698.01	2,698.01	0.00	0.00	0.00
11,400.00	90.00	90.00	7,107.00	-776.72	2,798.01	2,798.01	0.00	0.00	0.00
11,500.00	90.00	90.00	7,107.00	-776.72	2,898.01	2,898.01	0.00	0.00	0.00
11,600.00	90.00	90.00	7,107.00	-776.71	2,998.01	2,998.01	0.00	0.00	0.00
11,700.00	90.00	90.00	7,107.00	-776.71	3,098.01	3,098.01	0.00	0.00	0.00
11,800.00	90.00	90.00	7,107.00	-776.71	3,198.01	3,198.01	0.00	0.00	0.00
11,900.00	90.00	90.00	7,107.00	-776.70	3,298.01	3,298.01	0.00	0.00	0.00
12,000.00	90.00	90.00	7,107.00	-776.70	3,398.01	3,398.01	0.00	0.00	0.00
12,100.00	90.00	90.00	7,107.00	-776.70	3,498.01	3,498.01	0.00	0.00	0.00
12,200.00	90.00	90.00	7,107.00	-776.69	3,598.01	3,598.01	0.00	0.00	0.00
12,300.00	90.00	90.00	7,107.00	-776.69	3,698.01	3,698.01	0.00	0.00	0.00
12,400.00	90.00	90.00	7,107.00	-776.69	3,798.01	3,798.01	0.00	0.00	0.00

Precision Drilling Corporation

Planning Report

Database:	Compass_Rockies	Local Co-ordinate Reference:	Well #34N-13HZ
Company:	US ROCKIES WATTENBERG PLANNING	TVD Reference:	4935'GL+20'KB @ 4955.00usft (PD461)
Project:	WELD-NAD83-UTMFT13N	MD Reference:	4935'GL+20'KB @ 4955.00usft (PD461)
Site:	3N-68W-14 Docheff 19-14HZ	North Reference:	True
Well:	#34N-13HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	DP #1		

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)
12,500.00	90.00	90.00	7,107.00	-776.68	3,898.01	3,898.01	0.00	0.00	0.00
12,600.00	90.00	90.00	7,107.00	-776.68	3,998.01	3,998.01	0.00	0.00	0.00
12,635.72	90.00	90.00	7,107.00	-776.68	4,033.73	4,033.73	0.00	0.00	0.00
8									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Surface #34N-13HZ - hit/miss target - Shape - Point	0.00	0.00	0.00	0.00	0.00	14,607,432.86	1,647,614.10	40.221609°N	104.974216°W
PBHL #34N-13HZ DP - plan hits target center - Point	0.00	0.00	7,107.00	-776.68	4,033.73	14,606,657.35	1,651,648.06	40.219475°N	104.959766°W
LP #34N-13HZ DP #1 - plan hits target center - Point	0.00	0.00	7,107.00	-776.83	-908.60	14,606,655.76	1,646,705.73	40.219476°N	104.977471°W

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,840.74	1,800.00	9 5/8"	9.63	13.50	
12,638.26		5 1/2"	5.50	7.88	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
555.33	555.00	Base Fox Hills				
3,790.93	3,644.00	Parkman				
4,280.60	4,107.00	Sussex				
7,270.66	6,958.00	SSPG				
7,403.06	7,035.00	NBRR				
7,545.43	7,088.00	N470_B_CK				

Precision Drilling Corporation

Planning Report

Database:	Compass_Rockies	Local Co-ordinate Reference:	Well #34N-13HZ
Company:	US ROCKIES WATTENBERG PLANNING	TVD Reference:	4935'GL+20'KB @ 4955.00usft (PD461)
Project:	WELD-NAD83-UTMFT13N	MD Reference:	4935'GL+20'KB @ 4955.00usft (PD461)
Site:	3N-68W-14 Docheff 19-14HZ	North Reference:	True
Well:	#34N-13HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	DP #1		

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
0.00	0.00	0.00	0.00	1	
250.00	250.00	0.00	0.00	2	
1,516.35	1,493.28	-96.59	-184.21	3	
5,537.58	5,295.53	-704.41	-1,343.40	4	
6,487.35	6,228.00	-776.85	-1,481.56	5	
6,793.39	6,534.04	-776.85	-1,481.56	6	
7,693.39	7,107.00	-776.83	-908.60	7	
12,635.72	7,107.00	-776.68	4,033.73	8	