

# **US ROCKIES REGION PLANNING**

**COLORADO NORTHERN ZONE - 83**

**Van Portfliet 35-10HZ pad**

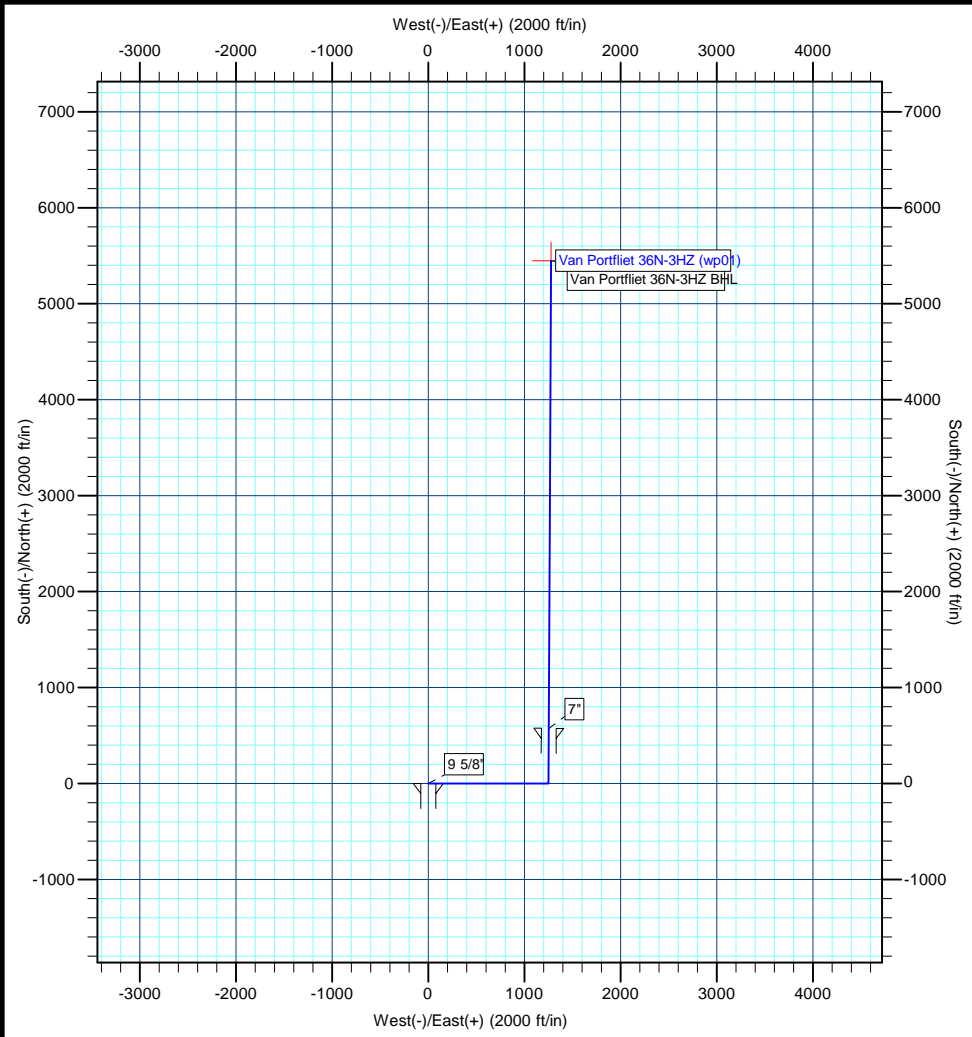
**Van Portfliet 36N-3HZ**

**Van Portfliet 36N-3HZ**

**Plan: Van Portfliet 36N-3HZ (wp01)**

## **Standard Planning Report**

**23 February, 2012**



**Azimuths to True North**  
 Magnetic North: 8.69°  
 Magnetic Field  
 Strength: 52936.7snT  
 Dip Angle: 66.84°  
 Date: 2/23/2012  
 Model: IGRF2010



**Project: COLORADO NORTHERN ZONE - 83**  
 Site: Van Portfliet 35-10HZ pad  
 Well: Van Portfliet 36N-3HZ  
 Wellbore: Van Portfliet 36N-3HZ  
 Section:  
 SHL:  
 Design: Van Portfliet 36N-3HZ (wp01)  
 Latitude: 40.146799  
 Longitude: -104.655731  
 GL: 4862.00  
 KB: gl + rkb @ 4879.00ft

**WELL DETAILS: Van Portfliet 36N-3HZ**

+N/-S	+E/-W	Northing	Ground Level: Easting	4862.00 Latitude	Longitude	Slot
0.00	0.00	1297445.84	3236012.29	40.146799	-104.655731	

**SECTION DETAILS**

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	0.00
3267.52	25.35	90.00	3226.57	0.00	275.86	2.00	90.00	62.91
4898.43	25.35	90.00	4700.43	0.00	974.14	0.00	0.00	222.16
6165.95	0.00	0.00	5927.00	0.00	1250.00	2.00	180.00	285.07
6265.95	0.00	0.00	6027.00	0.00	1250.00	0.00	0.00	285.07
6592.99	0.00	0.00	6354.04	0.00	1250.00	0.00	0.00	285.07
7494.17	90.12	0.27	6927.00	574.13	1252.76	10.00	0.27	844.70
12368.34	90.12	0.27	6917.00	5448.23	1276.15	0.00	0.00	5595.70

**WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)**

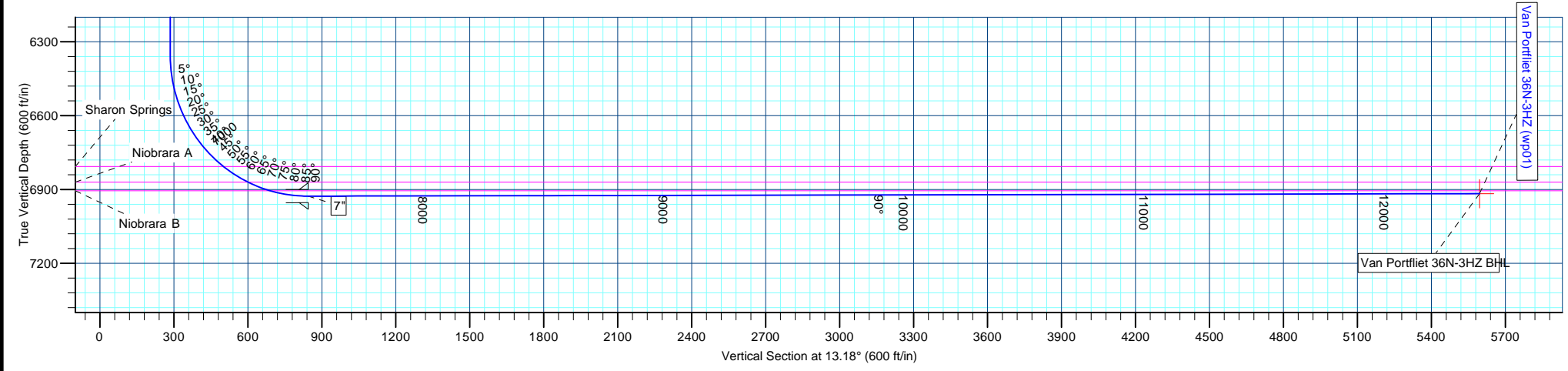
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
Van Portfliet 36N-3HZ BHL	6917.00	5448.23	1276.15	40.161755	-104.651165	Point

**FORMATION TOP DETAILS**

TVDPath	MDPath	Formation
706.00	706.00	Fox Hills
3941.00	4058.08	Parkman
4471.00	4644.55	Sussex
6806.00	7113.74	Sharon Springs
6870.00	7235.25	Niobrara A
6905.00	7333.70	Niobrara B

**CASING DETAILS**

TVD	MD	Name	Size
900.00	900.00	9 5/8"	9-5/8
6927.00	7494.17	7"	7



# Anadarko Petroleum Corp

## Planning Report

<b>Database:</b>	edmp	<b>Local Co-ordinate Reference:</b>	Well Van Portfliet 36N-3HZ
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	gl + rkb @ 4879.00ft
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	gl + rkb @ 4879.00ft
<b>Site:</b>	Van Portfliet 35-10HZ pad	<b>North Reference:</b>	True
<b>Well:</b>	Van Portfliet 36N-3HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Van Portfliet 36N-3HZ		
<b>Design:</b>	Van Portfliet 36N-3HZ (wp01)		

<b>Project</b>	COLORADO NORTHERN ZONE - 83		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Northern Zone		

<b>Site</b>	Van Portfliet 35-10HZ pad				
<b>Site Position:</b>		<b>Northing:</b>	1,297,445.85 usft	<b>Latitude:</b>	40.146799
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,236,012.29 usft	<b>Longitude:</b>	-104.655731
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	13-3/16 "	<b>Grid Convergence:</b>	0.55 °

<b>Well</b>	Van Portfliet 36N-3HZ					
<b>Well Position</b>	<b>+N/-S</b>	-0.01 ft	<b>Northing:</b>	1,297,445.84 usft	<b>Latitude:</b>	40.146799
	<b>+E/-W</b>	0.00 ft	<b>Easting:</b>	3,236,012.29 usft	<b>Longitude:</b>	-104.655731
<b>Position Uncertainty</b>		0.00 ft	<b>Wellhead Elevation:</b>		<b>Ground Level:</b>	4,862.00 ft

<b>Wellbore</b>	Van Portfliet 36N-3HZ				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	2/23/2012	8.69	66.84	52,937

<b>Design</b>	Van Portfliet 36N-3HZ (wp01)			
<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) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	13.18

<b>Plan Sections</b>										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	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	
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,267.52	25.35	90.00	3,226.57	0.00	275.86	2.00	2.00	0.00	90.00	
4,898.43	25.35	90.00	4,700.43	0.00	974.14	0.00	0.00	0.00	0.00	
6,165.95	0.00	0.00	5,927.00	0.00	1,250.00	2.00	-2.00	0.00	180.00	
6,265.95	0.00	0.00	6,027.00	0.00	1,250.00	0.00	0.00	0.00	0.00	
6,592.99	0.00	0.00	6,354.04	0.00	1,250.00	0.00	0.00	0.00	0.00	
7,494.17	90.12	0.27	6,927.00	574.13	1,252.76	10.00	10.00	0.00	0.27	
12,368.34	90.12	0.27	6,917.00	5,448.23	1,276.15	0.00	0.00	0.00	0.00	Van Portfliet 36N-3HZ

# Anadarko Petroleum Corp

## Planning Report

<b>Database:</b>	edmp	<b>Local Co-ordinate Reference:</b>	Well Van Portfliet 36N-3HZ
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	gl + rkb @ 4879.00ft
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	gl + rkb @ 4879.00ft
<b>Site:</b>	Van Portfliet 35-10HZ pad	<b>North Reference:</b>	True
<b>Well:</b>	Van Portfliet 36N-3HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Van Portfliet 36N-3HZ		
<b>Design:</b>	Van Portfliet 36N-3HZ (wp01)		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	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
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
706.00	0.00	0.00	706.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Fox Hills</b>										
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>9 5/8"</b>										
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	2.00	90.00	2,099.98	0.00	1.75	0.40	2.00	2.00	2.00	0.00
2,200.00	4.00	90.00	2,199.84	0.00	6.98	1.59	2.00	2.00	2.00	0.00
2,300.00	6.00	90.00	2,299.45	0.00	15.69	3.58	2.00	2.00	2.00	0.00
2,400.00	8.00	90.00	2,398.70	0.00	27.88	6.36	2.00	2.00	2.00	0.00
2,500.00	10.00	90.00	2,497.47	0.00	43.52	9.93	2.00	2.00	2.00	0.00
2,600.00	12.00	90.00	2,595.62	0.00	62.60	14.28	2.00	2.00	2.00	0.00
2,700.00	14.00	90.00	2,693.06	0.00	85.10	19.41	2.00	2.00	2.00	0.00
2,800.00	16.00	90.00	2,789.64	0.00	110.98	25.31	2.00	2.00	2.00	0.00
2,900.00	18.00	90.00	2,885.27	0.00	140.21	31.98	2.00	2.00	2.00	0.00
3,000.00	20.00	90.00	2,979.82	0.00	172.77	39.40	2.00	2.00	2.00	0.00
3,100.00	22.00	90.00	3,073.17	0.00	208.60	47.57	2.00	2.00	2.00	0.00
3,200.00	24.00	90.00	3,165.21	0.00	247.67	56.48	2.00	2.00	2.00	0.00
3,267.52	25.35	90.00	3,226.57	0.00	275.86	62.91	2.00	2.00	2.00	0.00
3,300.00	25.35	90.00	3,255.92	0.00	289.77	66.08	0.00	0.00	0.00	0.00
3,400.00	25.35	90.00	3,346.29	0.00	332.58	75.85	0.00	0.00	0.00	0.00
3,500.00	25.35	90.00	3,436.66	0.00	375.40	85.61	0.00	0.00	0.00	0.00
3,600.00	25.35	90.00	3,527.03	0.00	418.21	95.38	0.00	0.00	0.00	0.00
3,700.00	25.35	90.00	3,617.40	0.00	461.03	105.14	0.00	0.00	0.00	0.00
3,800.00	25.35	90.00	3,707.77	0.00	503.84	114.91	0.00	0.00	0.00	0.00
3,900.00	25.35	90.00	3,798.14	0.00	546.66	124.67	0.00	0.00	0.00	0.00
4,000.00	25.35	90.00	3,888.52	0.00	589.47	134.44	0.00	0.00	0.00	0.00
4,058.08	25.35	90.00	3,941.00	0.00	614.34	140.11	0.00	0.00	0.00	0.00
<b>Parkman</b>										
4,100.00	25.35	90.00	3,978.89	0.00	632.29	144.20	0.00	0.00	0.00	0.00
4,200.00	25.35	90.00	4,069.26	0.00	675.10	153.96	0.00	0.00	0.00	0.00
4,300.00	25.35	90.00	4,159.63	0.00	717.92	163.73	0.00	0.00	0.00	0.00
4,400.00	25.35	90.00	4,250.00	0.00	760.74	173.49	0.00	0.00	0.00	0.00
4,500.00	25.35	90.00	4,340.37	0.00	803.55	183.26	0.00	0.00	0.00	0.00
4,600.00	25.35	90.00	4,430.74	0.00	846.37	193.02	0.00	0.00	0.00	0.00

# Anadarko Petroleum Corp

## Planning Report

<b>Database:</b>	edmp	<b>Local Co-ordinate Reference:</b>	Well Van Portfliet 36N-3HZ
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	gl + rkb @ 4879.00ft
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	gl + rkb @ 4879.00ft
<b>Site:</b>	Van Portfliet 35-10HZ pad	<b>North Reference:</b>	True
<b>Well:</b>	Van Portfliet 36N-3HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Van Portfliet 36N-3HZ		
<b>Design:</b>	Van Portfliet 36N-3HZ (wp01)		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
4,644.55	25.35	90.00	4,471.00	0.00	865.44	197.37	0.00	0.00	0.00	
<b>Sussex</b>										
4,700.00	25.35	90.00	4,521.11	0.00	889.18	202.79	0.00	0.00	0.00	
4,800.00	25.35	90.00	4,611.48	0.00	932.00	212.55	0.00	0.00	0.00	
4,898.43	25.35	90.00	4,700.43	0.00	974.14	222.16	0.00	0.00	0.00	
4,900.00	25.32	90.00	4,701.85	0.00	974.81	222.31	2.00	-2.00	0.00	
5,000.00	23.32	90.00	4,792.97	0.00	1,015.99	231.71	2.00	-2.00	0.00	
5,100.00	21.32	90.00	4,885.48	0.00	1,053.96	240.37	2.00	-2.00	0.00	
5,200.00	19.32	90.00	4,979.25	0.00	1,088.69	248.29	2.00	-2.00	0.00	
5,300.00	17.32	90.00	5,074.18	0.00	1,120.12	255.45	2.00	-2.00	0.00	
5,400.00	15.32	90.00	5,170.14	0.00	1,148.21	261.86	2.00	-2.00	0.00	
5,500.00	13.32	90.00	5,267.03	0.00	1,172.94	267.50	2.00	-2.00	0.00	
5,600.00	11.32	90.00	5,364.72	0.00	1,194.28	272.37	2.00	-2.00	0.00	
5,700.00	9.32	90.00	5,463.10	0.00	1,212.19	276.45	2.00	-2.00	0.00	
5,800.00	7.32	90.00	5,562.04	0.00	1,226.66	279.75	2.00	-2.00	0.00	
5,900.00	5.32	90.00	5,661.43	0.00	1,237.66	282.26	2.00	-2.00	0.00	
6,000.00	3.32	90.00	5,761.14	0.00	1,245.19	283.98	2.00	-2.00	0.00	
6,100.00	1.32	90.00	5,861.06	0.00	1,249.24	284.90	2.00	-2.00	0.00	
6,165.95	0.00	0.00	5,927.00	0.00	1,250.00	285.07	2.00	-2.00	0.00	
6,200.00	0.00	0.00	5,961.05	0.00	1,250.00	285.07	0.00	0.00	0.00	
6,265.95	0.00	0.00	6,027.00	0.00	1,250.00	285.07	0.00	0.00	0.00	
6,300.00	0.00	0.00	6,061.05	0.00	1,250.00	285.07	0.00	0.00	0.00	
6,400.00	0.00	0.00	6,161.05	0.00	1,250.00	285.07	0.00	0.00	0.00	
6,500.00	0.00	0.00	6,261.05	0.00	1,250.00	285.07	0.00	0.00	0.00	
6,592.99	0.00	0.00	6,354.04	0.00	1,250.00	285.07	0.00	0.00	0.00	
6,600.00	0.70	0.27	6,361.05	0.04	1,250.00	285.12	10.00	10.00	0.00	
6,700.00	10.70	0.27	6,460.43	9.96	1,250.05	294.79	10.00	10.00	0.00	
6,800.00	20.70	0.27	6,556.58	36.99	1,250.18	321.13	10.00	10.00	0.00	
6,900.00	30.70	0.27	6,646.57	80.30	1,250.39	363.35	10.00	10.00	0.00	
7,000.00	40.70	0.27	6,727.67	138.58	1,250.67	420.16	10.00	10.00	0.00	
7,100.00	50.70	0.27	6,797.42	210.06	1,251.01	489.83	10.00	10.00	0.00	
7,113.74	52.08	0.27	6,806.00	220.80	1,251.06	500.30	10.00	10.00	0.00	
<b>Sharon Springs</b>										
7,200.00	60.70	0.27	6,853.70	292.57	1,251.40	570.25	10.00	10.00	0.00	
7,235.25	64.23	0.27	6,870.00	323.82	1,251.55	600.72	10.00	10.00	0.00	
<b>Niobrara A</b>										
7,300.00	70.70	0.27	6,894.80	383.59	1,251.84	658.98	10.00	10.00	0.00	
7,333.70	74.07	0.27	6,905.00	415.71	1,252.00	690.28	10.00	10.00	0.00	
<b>Niobrara B</b>										
7,400.00	80.70	0.27	6,919.47	480.37	1,252.31	753.31	10.00	10.00	0.00	
7,494.17	90.12	0.27	6,927.00	574.13	1,252.76	844.70	10.00	10.00	0.00	
<b>7"</b>										
7,500.00	90.12	0.27	6,926.99	579.96	1,252.78	850.39	0.00	0.00	0.00	
7,600.00	90.12	0.27	6,926.78	679.96	1,253.26	947.86	0.00	0.00	0.00	
7,700.00	90.12	0.27	6,926.58	779.96	1,253.74	1,045.33	0.00	0.00	0.00	
7,800.00	90.12	0.27	6,926.37	879.96	1,254.22	1,142.80	0.00	0.00	0.00	
7,900.00	90.12	0.27	6,926.17	979.95	1,254.70	1,240.28	0.00	0.00	0.00	
8,000.00	90.12	0.27	6,925.96	1,079.95	1,255.18	1,337.75	0.00	0.00	0.00	
8,100.00	90.12	0.27	6,925.76	1,179.95	1,255.66	1,435.22	0.00	0.00	0.00	
8,200.00	90.12	0.27	6,925.55	1,279.95	1,256.14	1,532.70	0.00	0.00	0.00	
8,300.00	90.12	0.27	6,925.35	1,379.95	1,256.62	1,630.17	0.00	0.00	0.00	
8,400.00	90.12	0.27	6,925.14	1,479.95	1,257.10	1,727.64	0.00	0.00	0.00	
8,500.00	90.12	0.27	6,924.94	1,579.95	1,257.58	1,825.11	0.00	0.00	0.00	
8,600.00	90.12	0.27	6,924.73	1,679.94	1,258.06	1,922.59	0.00	0.00	0.00	

# Anadarko Petroleum Corp

## Planning Report

<b>Database:</b>	edmp	<b>Local Co-ordinate Reference:</b>	Well Van Portfliet 36N-3HZ
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	gl + rkb @ 4879.00ft
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	gl + rkb @ 4879.00ft
<b>Site:</b>	Van Portfliet 35-10HZ pad	<b>North Reference:</b>	True
<b>Well:</b>	Van Portfliet 36N-3HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Van Portfliet 36N-3HZ		
<b>Design:</b>	Van Portfliet 36N-3HZ (wp01)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,700.00	90.12	0.27	6,924.53	1,779.94	1,258.54	2,020.06	0.00	0.00	0.00
8,800.00	90.12	0.27	6,924.32	1,879.94	1,259.02	2,117.53	0.00	0.00	0.00
8,900.00	90.12	0.27	6,924.11	1,979.94	1,259.50	2,215.01	0.00	0.00	0.00
9,000.00	90.12	0.27	6,923.91	2,079.94	1,259.98	2,312.48	0.00	0.00	0.00
9,100.00	90.12	0.27	6,923.70	2,179.94	1,260.46	2,409.95	0.00	0.00	0.00
9,200.00	90.12	0.27	6,923.50	2,279.94	1,260.94	2,507.42	0.00	0.00	0.00
9,300.00	90.12	0.27	6,923.29	2,379.94	1,261.42	2,604.90	0.00	0.00	0.00
9,400.00	90.12	0.27	6,923.09	2,479.93	1,261.90	2,702.37	0.00	0.00	0.00
9,500.00	90.12	0.27	6,922.88	2,579.93	1,262.38	2,799.84	0.00	0.00	0.00
9,600.00	90.12	0.27	6,922.68	2,679.93	1,262.86	2,897.32	0.00	0.00	0.00
9,700.00	90.12	0.27	6,922.47	2,779.93	1,263.34	2,994.79	0.00	0.00	0.00
9,800.00	90.12	0.27	6,922.27	2,879.93	1,263.82	3,092.26	0.00	0.00	0.00
9,900.00	90.12	0.27	6,922.06	2,979.93	1,264.30	3,189.73	0.00	0.00	0.00
10,000.00	90.12	0.27	6,921.86	3,079.93	1,264.78	3,287.21	0.00	0.00	0.00
10,100.00	90.12	0.27	6,921.65	3,179.92	1,265.26	3,384.68	0.00	0.00	0.00
10,200.00	90.12	0.27	6,921.45	3,279.92	1,265.74	3,482.15	0.00	0.00	0.00
10,300.00	90.12	0.27	6,921.24	3,379.92	1,266.22	3,579.63	0.00	0.00	0.00
10,400.00	90.12	0.27	6,921.04	3,479.92	1,266.70	3,677.10	0.00	0.00	0.00
10,500.00	90.12	0.27	6,920.83	3,579.92	1,267.18	3,774.57	0.00	0.00	0.00
10,600.00	90.12	0.27	6,920.63	3,679.92	1,267.66	3,872.04	0.00	0.00	0.00
10,700.00	90.12	0.27	6,920.42	3,779.92	1,268.14	3,969.52	0.00	0.00	0.00
10,800.00	90.12	0.27	6,920.22	3,879.91	1,268.62	4,066.99	0.00	0.00	0.00
10,900.00	90.12	0.27	6,920.01	3,979.91	1,269.10	4,164.46	0.00	0.00	0.00
11,000.00	90.12	0.27	6,919.81	4,079.91	1,269.58	4,261.94	0.00	0.00	0.00
11,100.00	90.12	0.27	6,919.60	4,179.91	1,270.06	4,359.41	0.00	0.00	0.00
11,200.00	90.12	0.27	6,919.40	4,279.91	1,270.54	4,456.88	0.00	0.00	0.00
11,300.00	90.12	0.27	6,919.19	4,379.91	1,271.02	4,554.35	0.00	0.00	0.00
11,400.00	90.12	0.27	6,918.99	4,479.91	1,271.50	4,651.83	0.00	0.00	0.00
11,500.00	90.12	0.27	6,918.78	4,579.91	1,271.98	4,749.30	0.00	0.00	0.00
11,600.00	90.12	0.27	6,918.58	4,679.90	1,272.46	4,846.77	0.00	0.00	0.00
11,700.00	90.12	0.27	6,918.37	4,779.90	1,272.94	4,944.25	0.00	0.00	0.00
11,800.00	90.12	0.27	6,918.17	4,879.90	1,273.42	5,041.72	0.00	0.00	0.00
11,900.00	90.12	0.27	6,917.96	4,979.90	1,273.90	5,139.19	0.00	0.00	0.00
12,000.00	90.12	0.27	6,917.76	5,079.90	1,274.38	5,236.66	0.00	0.00	0.00
12,100.00	90.12	0.27	6,917.55	5,179.90	1,274.86	5,334.14	0.00	0.00	0.00
12,200.00	90.12	0.27	6,917.35	5,279.90	1,275.34	5,431.61	0.00	0.00	0.00
12,300.00	90.12	0.27	6,917.14	5,379.89	1,275.82	5,529.08	0.00	0.00	0.00
12,368.34	90.12	0.27	6,917.00	5,448.23	1,276.15	5,595.70	0.00	0.00	0.00
<b>Van Portfliet 36N-3HZ BHL</b>									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Van Portfliet 36N-3HZ B - hit/miss target - Shape - Point	0.00	0.00	6,917.00	5,448.23	1,276.15	1,302,905.97	3,237,236.51	40.161755	-104.651165

**Anadarko Petroleum Corp**  
 Planning Report

<b>Database:</b>	edmp	<b>Local Co-ordinate Reference:</b>	Well Van Portfliet 36N-3HZ
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	gl + rkb @ 4879.00ft
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	gl + rkb @ 4879.00ft
<b>Site:</b>	Van Portfliet 35-10HZ pad	<b>North Reference:</b>	True
<b>Well:</b>	Van Portfliet 36N-3HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Van Portfliet 36N-3HZ		
<b>Design:</b>	Van Portfliet 36N-3HZ (wp01)		

Casing Points						
Measured Depth (ft)	Vertical Depth (ft)		Name	Casing Diameter (")	Hole Diameter (")	
900.00	900.00	9 5/8"		9-5/8	12-1/4	
7,494.17	6,927.00	7"		7	8-3/4	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
706.00	706.00	Fox Hills				
4,058.08	3,941.00	Parkman				
4,644.55	4,471.00	Sussex				
7,113.74	6,806.00	Sharon Springs				
7,235.25	6,870.00	Niobrara A				
7,333.70	6,905.00	Niobrara B				