

US ROCKIES REGION PLANNING

COLORADO NORTHERN ZONE - 83

Van Portfliet 35-10HZ pad

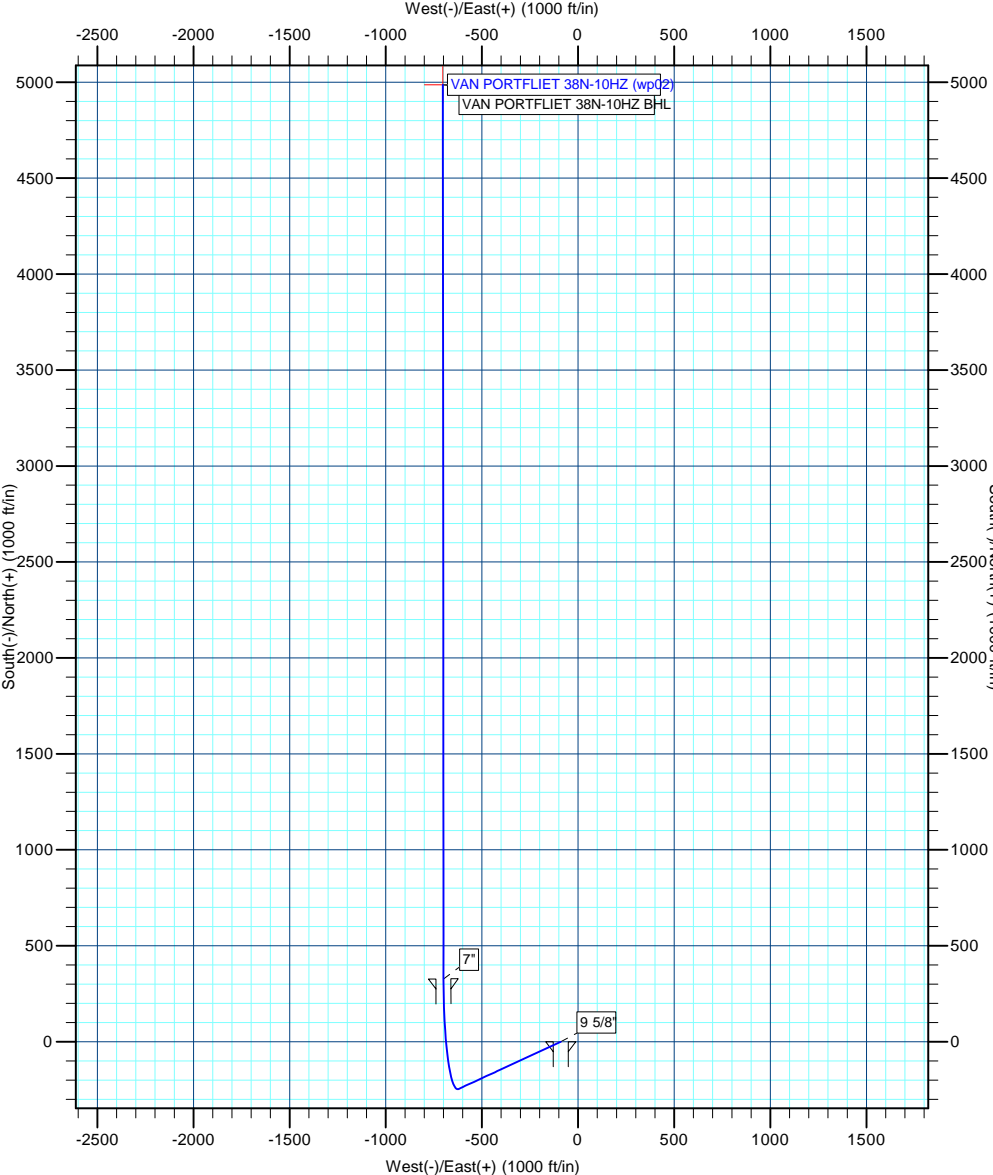
VAN PORTFLIET 38N-10HZ

VAN PORTFLIET 38N-10HZ

Plan: VAN PORTFLIET 38N-10HZ (wp02)

Standard Planning Report

07 June, 2012



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Azimuths to True North
Magnetic North: 8.69°

Magnetic Field
Strength: 52936.6snT
Dip Angle: 66.84°
Date: 2/23/2012
Model: IGRF2010



Project: COLORADO NORTHERN ZONE - 83
Site: Van Portfliet 35-10HZ pad
Well: VAN PORTFLIET 38N-10HZ
Wellbore: VAN PORTFLIET 38N-10HZ
Section:
SHL:
Design: VAN PORTFLIET 38N-10HZ (wp02)
Latitude: 40.146799
Longitude: -104.656053
GL: 4862.00
KB: GL + RKB @ 4879.00ft

WELL DETAILS: VAN PORTFLIET 38N-10HZ

+N/-S	+E/-W	Northing	Ground Level: Easting	4862.00 Latitude	Longitude	Slot
-0.02	-90.02	1297444.97	3235922.28	40.146799	-104.656053	

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
0.00	0.00	0.00	0.00	-0.02	-90.02	0.00	0.00	0.00
2000.00	0.00	0.00	2000.00	-0.02	-90.02	0.00	0.00	0.00
2402.14	8.04	245.14	2400.83	-11.87	-115.58	2.00	245.14	-8.64
6392.92	8.04	245.14	6352.35	-246.63	-622.20	0.00	0.00	-179.77
7328.31	90.17	359.96	6954.00	327.00	-700.00	10.00	114.58	399.06
7329.55	90.18	359.96	6954.00	328.24	-700.00	1.00	-13.09	400.30
11987.26	90.18	359.96	6939.00	4985.93	-703.49	0.00	0.00	5023.55

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

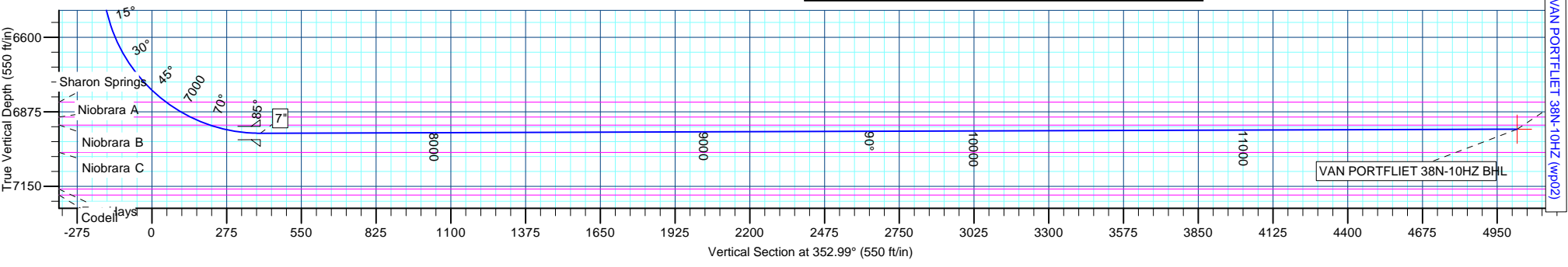
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
VAN PORTFLIET 38N-10HZ BHL	6939.00	4985.93	-703.49	40.160486	-104.658248	Point

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3882.00	3898.03	Parkman
4465.00	4486.83	Sussex
6839.00	6955.62	Sharon Springs
6894.00	7060.91	Niobrara A
6924.00	7139.56	Niobrara B

CASING DETAILS

TVD	MD	Name	Size
900.00	900.00	9 5/8"	9-5/8
6954.00	7328.31	7"	7



Anadarko Petroleum Corp

Planning Report

Database:	edmp	Local Co-ordinate Reference:	Site Van Portfliet 35-10HZ pad
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL + RKB @ 4879.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL + RKB @ 4879.00ft
Site:	Van Portfliet 35-10HZ pad	North Reference:	True
Well:	VAN PORTFLIET 38N-10HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	VAN PORTFLIET 38N-10HZ		
Design:	VAN PORTFLIET 38N-10HZ (wp02)		

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

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

Well	VAN PORTFLIET 38N-10HZ					
Well Position	+N/-S	-0.02 ft	Northing:	1,297,444.97 usft	Latitude:	40.146799
	+E/-W	-90.02 ft	Easting:	3,235,922.28 usft	Longitude:	-104.656053
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	4,862.00 ft

Wellbore	VAN PORTFLIET 38N-10HZ				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2/23/2012	8.69	66.84	52,937

Design	VAN PORTFLIET 38N-10HZ (wp02)			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	-0.02	-90.02	352.99

Plan Sections										
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	-0.02	-90.02	0.00	0.00	0.00	0.00	
2,000.00	0.00	0.00	2,000.00	-0.02	-90.02	0.00	0.00	0.00	0.00	
2,402.14	8.04	245.14	2,400.83	-11.87	-115.58	2.00	2.00	0.00	245.14	
6,392.92	8.04	245.14	6,352.35	-246.63	-622.20	0.00	0.00	0.00	0.00	
7,328.31	90.17	359.96	6,954.00	327.00	-700.00	10.00	8.78	12.28	114.58	
7,329.55	90.18	359.96	6,954.00	328.24	-700.00	1.00	0.97	-0.23	-13.09	
11,987.26	90.18	359.96	6,939.00	4,985.93	-703.49	0.00	0.00	0.00	0.00	VAN PORTFLIET 38N

Anadarko Petroleum Corp

Planning Report

Database:	edmp	Local Co-ordinate Reference:	Site Van Portfliet 35-10HZ pad
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL + RKB @ 4879.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL + RKB @ 4879.00ft
Site:	Van Portfliet 35-10HZ pad	North Reference:	True
Well:	VAN PORTFLIET 38N-10HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	VAN PORTFLIET 38N-10HZ		
Design:	VAN PORTFLIET 38N-10HZ (wp02)		

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	-0.02	-90.02	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	-0.02	-90.02	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	-0.02	-90.02	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	-0.02	-90.02	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	-0.02	-90.02	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	-0.02	-90.02	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	-0.02	-90.02	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	-0.02	-90.02	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	-0.02	-90.02	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	-0.02	-90.02	0.00	0.00	0.00	0.00
9 5/8"									
1,000.00	0.00	0.00	1,000.00	-0.02	-90.02	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	-0.02	-90.02	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	-0.02	-90.02	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	-0.02	-90.02	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	-0.02	-90.02	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	-0.02	-90.02	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	-0.02	-90.02	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	-0.02	-90.02	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	-0.02	-90.02	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	-0.02	-90.02	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	-0.02	-90.02	0.00	0.00	0.00	0.00
Start Build 2.00									
2,100.00	2.00	245.14	2,099.98	-0.75	-91.60	-0.53	2.00	2.00	0.00
2,200.00	4.00	245.14	2,199.84	-2.95	-96.35	-2.14	2.00	2.00	0.00
2,300.00	6.00	245.14	2,299.45	-6.62	-104.25	-4.81	2.00	2.00	0.00
2,400.00	8.00	245.14	2,398.70	-11.74	-115.31	-8.54	2.00	2.00	0.00
2,402.14	8.04	245.14	2,400.83	-11.87	-115.58	-8.64	2.00	2.00	0.00
Start 3990.78 hold at 2402.14 MD									
2,500.00	8.04	245.14	2,497.72	-17.62	-128.01	-12.83	0.00	0.00	0.00
2,600.00	8.04	245.14	2,596.73	-23.51	-140.70	-17.12	0.00	0.00	0.00
2,700.00	8.04	245.14	2,695.75	-29.39	-153.39	-21.41	0.00	0.00	0.00
2,800.00	8.04	245.14	2,794.77	-35.27	-166.09	-25.70	0.00	0.00	0.00
2,900.00	8.04	245.14	2,893.78	-41.15	-178.78	-29.99	0.00	0.00	0.00
3,000.00	8.04	245.14	2,992.80	-47.04	-191.48	-34.27	0.00	0.00	0.00
3,100.00	8.04	245.14	3,091.82	-52.92	-204.17	-38.56	0.00	0.00	0.00
3,200.00	8.04	245.14	3,190.83	-58.80	-216.87	-42.85	0.00	0.00	0.00
3,300.00	8.04	245.14	3,289.85	-64.68	-229.56	-47.14	0.00	0.00	0.00
3,400.00	8.04	245.14	3,388.87	-70.57	-242.26	-51.43	0.00	0.00	0.00
3,500.00	8.04	245.14	3,487.88	-76.45	-254.95	-55.71	0.00	0.00	0.00
3,600.00	8.04	245.14	3,586.90	-82.33	-267.65	-60.00	0.00	0.00	0.00
3,700.00	8.04	245.14	3,685.91	-88.21	-280.34	-64.29	0.00	0.00	0.00
3,800.00	8.04	245.14	3,784.93	-94.10	-293.04	-68.58	0.00	0.00	0.00
3,898.03	8.04	245.14	3,882.00	-99.86	-305.48	-72.78	0.00	0.00	0.00
Parkman									
3,900.00	8.04	245.14	3,883.95	-99.98	-305.73	-72.87	0.00	0.00	0.00
4,000.00	8.04	245.14	3,982.96	-105.86	-318.43	-77.16	0.00	0.00	0.00
4,100.00	8.04	245.14	4,081.98	-111.74	-331.12	-81.44	0.00	0.00	0.00
4,200.00	8.04	245.14	4,181.00	-117.63	-343.82	-85.73	0.00	0.00	0.00
4,300.00	8.04	245.14	4,280.01	-123.51	-356.51	-90.02	0.00	0.00	0.00
4,400.00	8.04	245.14	4,379.03	-129.39	-369.21	-94.31	0.00	0.00	0.00
4,486.83	8.04	245.14	4,465.00	-134.50	-380.23	-98.03	0.00	0.00	0.00
Sussex									
4,500.00	8.04	245.14	4,478.05	-135.27	-381.90	-98.60	0.00	0.00	0.00

Anadarko Petroleum Corp

Planning Report

Database:	edmp	Local Co-ordinate Reference:	Site Van Portfliet 35-10HZ pad
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL + RKB @ 4879.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL + RKB @ 4879.00ft
Site:	Van Portfliet 35-10HZ pad	North Reference:	True
Well:	VAN PORTFLIET 38N-10HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	VAN PORTFLIET 38N-10HZ		
Design:	VAN PORTFLIET 38N-10HZ (wp02)		

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)
4,600.00	8.04	245.14	4,577.06	-141.16	-394.59	-102.88	0.00	0.00	0.00
4,700.00	8.04	245.14	4,676.08	-147.04	-407.29	-107.17	0.00	0.00	0.00
4,800.00	8.04	245.14	4,775.09	-152.92	-419.98	-111.46	0.00	0.00	0.00
4,900.00	8.04	245.14	4,874.11	-158.80	-432.68	-115.75	0.00	0.00	0.00
5,000.00	8.04	245.14	4,973.13	-164.69	-445.37	-120.04	0.00	0.00	0.00
5,100.00	8.04	245.14	5,072.14	-170.57	-458.07	-124.33	0.00	0.00	0.00
5,200.00	8.04	245.14	5,171.16	-176.45	-470.76	-128.61	0.00	0.00	0.00
5,300.00	8.04	245.14	5,270.18	-182.33	-483.46	-132.90	0.00	0.00	0.00
5,400.00	8.04	245.14	5,369.19	-188.22	-496.15	-137.19	0.00	0.00	0.00
5,500.00	8.04	245.14	5,468.21	-194.10	-508.85	-141.48	0.00	0.00	0.00
5,600.00	8.04	245.14	5,567.23	-199.98	-521.54	-145.77	0.00	0.00	0.00
5,700.00	8.04	245.14	5,666.24	-205.86	-534.24	-150.05	0.00	0.00	0.00
5,800.00	8.04	245.14	5,765.26	-211.75	-546.93	-154.34	0.00	0.00	0.00
5,900.00	8.04	245.14	5,864.27	-217.63	-559.63	-158.63	0.00	0.00	0.00
6,000.00	8.04	245.14	5,963.29	-223.51	-572.32	-162.92	0.00	0.00	0.00
6,100.00	8.04	245.14	6,062.31	-229.39	-585.02	-167.21	0.00	0.00	0.00
6,200.00	8.04	245.14	6,161.32	-235.28	-597.71	-171.50	0.00	0.00	0.00
6,300.00	8.04	245.14	6,260.34	-241.16	-610.41	-175.78	0.00	0.00	0.00
6,392.92	8.04	245.14	6,352.35	-246.63	-622.20	-179.77	0.00	0.00	0.00
Start DLS 10.00 TFO 114.58									
6,400.00	7.77	249.90	6,359.36	-247.00	-623.10	-180.03	10.00	-3.79	67.29
6,500.00	10.35	315.30	6,458.34	-242.93	-635.80	-174.44	10.00	2.57	65.40
6,600.00	18.78	337.77	6,555.11	-221.59	-648.24	-151.74	10.00	8.43	22.47
6,700.00	28.23	346.11	6,646.73	-183.64	-660.03	-112.63	10.00	9.45	8.34
6,800.00	37.95	350.47	6,730.43	-130.22	-670.83	-58.29	10.00	9.72	4.36
6,900.00	47.77	353.25	6,803.64	-62.96	-680.29	9.62	10.00	9.82	2.78
6,955.62	53.26	354.44	6,839.00	-20.29	-684.87	52.52	10.00	9.86	2.14
Sharon Springs									
7,000.00	57.64	355.28	6,864.16	16.10	-688.14	89.05	10.00	9.88	1.88
7,060.91	63.67	356.30	6,894.00	69.02	-692.02	142.05	10.00	9.89	1.68
Niobrara A									
7,100.00	67.54	356.90	6,910.15	104.56	-694.13	177.57	10.00	9.90	1.54
7,139.56	71.46	357.47	6,924.00	141.56	-695.95	214.52	10.00	9.91	1.45
Niobrara B									
7,200.00	77.45	358.30	6,940.19	199.72	-698.09	272.51	10.00	9.91	1.37
7,300.00	87.36	359.60	6,953.39	298.70	-699.89	370.97	10.00	9.92	1.30
7,328.31	90.17	359.96	6,954.00	327.00	-700.00	399.07	10.00	9.92	1.27
Start DLS 1.00 TFO -13.09 - 7"									
7,329.55	90.18	359.96	6,954.00	328.24	-700.00	400.30	1.00	0.98	-0.23
Start 4657.71 hold at 7329.55 MD									
7,400.00	90.18	359.96	6,953.77	398.69	-700.05	470.23	0.00	0.00	0.00
7,500.00	90.18	359.96	6,953.45	498.69	-700.13	569.49	0.00	0.00	0.00
7,600.00	90.18	359.96	6,953.13	598.69	-700.20	668.75	0.00	0.00	0.00
7,700.00	90.18	359.96	6,952.80	698.69	-700.28	768.01	0.00	0.00	0.00
7,800.00	90.18	359.96	6,952.48	798.69	-700.35	867.27	0.00	0.00	0.00
7,900.00	90.18	359.96	6,952.16	898.69	-700.43	966.53	0.00	0.00	0.00
8,000.00	90.18	359.96	6,951.84	998.69	-700.50	1,065.79	0.00	0.00	0.00
8,100.00	90.18	359.96	6,951.52	1,098.69	-700.58	1,165.05	0.00	0.00	0.00
8,200.00	90.18	359.96	6,951.19	1,198.69	-700.65	1,264.31	0.00	0.00	0.00
8,300.00	90.18	359.96	6,950.87	1,298.69	-700.73	1,363.57	0.00	0.00	0.00
8,400.00	90.18	359.96	6,950.55	1,398.69	-700.80	1,462.83	0.00	0.00	0.00
8,500.00	90.18	359.96	6,950.23	1,498.69	-700.88	1,562.09	0.00	0.00	0.00
8,600.00	90.18	359.96	6,949.91	1,598.69	-700.95	1,661.35	0.00	0.00	0.00

Anadarko Petroleum Corp

Planning Report

Database:	edmp	Local Co-ordinate Reference:	Site Van Portfliet 35-10HZ pad
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL + RKB @ 4879.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL + RKB @ 4879.00ft
Site:	Van Portfliet 35-10HZ pad	North Reference:	True
Well:	VAN PORTFLIET 38N-10HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	VAN PORTFLIET 38N-10HZ		
Design:	VAN PORTFLIET 38N-10HZ (wp02)		

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	90.18	359.96	6,949.58	1,698.69	-701.03	1,760.61	0.00	0.00	0.00	
8,800.00	90.18	359.96	6,949.26	1,798.69	-701.10	1,859.87	0.00	0.00	0.00	
8,900.00	90.18	359.96	6,948.94	1,898.68	-701.18	1,959.13	0.00	0.00	0.00	
9,000.00	90.18	359.96	6,948.62	1,998.68	-701.25	2,058.39	0.00	0.00	0.00	
9,100.00	90.18	359.96	6,948.30	2,098.68	-701.33	2,157.65	0.00	0.00	0.00	
9,200.00	90.18	359.96	6,947.97	2,198.68	-701.40	2,256.91	0.00	0.00	0.00	
9,300.00	90.18	359.96	6,947.65	2,298.68	-701.48	2,356.17	0.00	0.00	0.00	
9,400.00	90.18	359.96	6,947.33	2,398.68	-701.55	2,455.43	0.00	0.00	0.00	
9,500.00	90.18	359.96	6,947.01	2,498.68	-701.63	2,554.69	0.00	0.00	0.00	
9,600.00	90.18	359.96	6,946.69	2,598.68	-701.70	2,653.95	0.00	0.00	0.00	
9,700.00	90.18	359.96	6,946.36	2,698.68	-701.78	2,753.21	0.00	0.00	0.00	
9,800.00	90.18	359.96	6,946.04	2,798.68	-701.85	2,852.47	0.00	0.00	0.00	
9,900.00	90.18	359.96	6,945.72	2,898.68	-701.93	2,951.73	0.00	0.00	0.00	
10,000.00	90.18	359.96	6,945.40	2,998.68	-702.00	3,050.99	0.00	0.00	0.00	
10,100.00	90.18	359.96	6,945.08	3,098.68	-702.08	3,150.25	0.00	0.00	0.00	
10,200.00	90.18	359.96	6,944.75	3,198.68	-702.15	3,249.51	0.00	0.00	0.00	
10,300.00	90.18	359.96	6,944.43	3,298.68	-702.23	3,348.77	0.00	0.00	0.00	
10,400.00	90.18	359.96	6,944.11	3,398.68	-702.30	3,448.03	0.00	0.00	0.00	
10,500.00	90.18	359.96	6,943.79	3,498.68	-702.37	3,547.29	0.00	0.00	0.00	
10,600.00	90.18	359.96	6,943.47	3,598.68	-702.45	3,646.55	0.00	0.00	0.00	
10,700.00	90.18	359.96	6,943.14	3,698.68	-702.52	3,745.81	0.00	0.00	0.00	
10,800.00	90.18	359.96	6,942.82	3,798.67	-702.60	3,845.07	0.00	0.00	0.00	
10,900.00	90.18	359.96	6,942.50	3,898.67	-702.67	3,944.33	0.00	0.00	0.00	
11,000.00	90.18	359.96	6,942.18	3,998.67	-702.75	4,043.59	0.00	0.00	0.00	
11,100.00	90.18	359.96	6,941.86	4,098.67	-702.82	4,142.85	0.00	0.00	0.00	
11,200.00	90.18	359.96	6,941.53	4,198.67	-702.90	4,242.11	0.00	0.00	0.00	
11,300.00	90.18	359.96	6,941.21	4,298.67	-702.97	4,341.37	0.00	0.00	0.00	
11,400.00	90.18	359.96	6,940.89	4,398.67	-703.05	4,440.63	0.00	0.00	0.00	
11,500.00	90.18	359.96	6,940.57	4,498.67	-703.12	4,539.89	0.00	0.00	0.00	
11,600.00	90.18	359.96	6,940.25	4,598.67	-703.20	4,639.15	0.00	0.00	0.00	
11,700.00	90.18	359.96	6,939.93	4,698.67	-703.27	4,738.41	0.00	0.00	0.00	
11,800.00	90.18	359.96	6,939.60	4,798.67	-703.35	4,837.67	0.00	0.00	0.00	
11,900.00	90.18	359.96	6,939.28	4,898.67	-703.42	4,936.93	0.00	0.00	0.00	
11,987.26	90.18	359.96	6,939.00	4,985.93	-703.49	5,023.55	0.00	0.00	0.00	
TD at 11987.26 - VAN PORTFLIET 38N-10HZ BHL										

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
VAN PORTFLIET 38N-1 - hit/miss target - Shape - Point	0.00	0.00	6,939.00	4,985.93	-703.49	1,302,424.84	3,235,261.37	40.160486	-104.658248

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	
7,328.31	6,954.00	7"	7	8-3/4	

Anadarko Petroleum Corp

Planning Report

Database:	edmp	Local Co-ordinate Reference:	Site Van Portfliet 35-10HZ pad
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL + RKB @ 4879.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL + RKB @ 4879.00ft
Site:	Van Portfliet 35-10HZ pad	North Reference:	True
Well:	VAN PORTFLIET 38N-10HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	VAN PORTFLIET 38N-10HZ		
Design:	VAN PORTFLIET 38N-10HZ (wp02)		

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,898.03	3,882.00	Parkman			
4,486.83	4,465.00	Sussex			
6,955.62	6,839.00	Sharon Springs			
7,060.91	6,894.00	Niobrara A			
7,139.56	6,924.00	Niobrara B			

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
2,000.00	2,000.00	-0.02	-90.02	Start Build 2.00	
2,402.14	2,400.83	-11.87	-115.58	Start 3990.78 hold at 2402.14 MD	
6,392.92	6,352.35	-246.63	-622.20	Start DLS 10.00 TFO 114.58	
7,328.31	6,954.00	327.00	-700.00	Start DLS 1.00 TFO -13.09	
7,329.55	6,954.00	328.24	-700.00	Start 4657.71 hold at 7329.55 MD	
11,987.26	6,939.00	4,985.93	-703.49	TD at 11987.26	