

US ROCKIES REGION PLANNING

COLORADO NORTHERN ZONE - 83

WELD_HAYMAKER 13-9HZ PAD

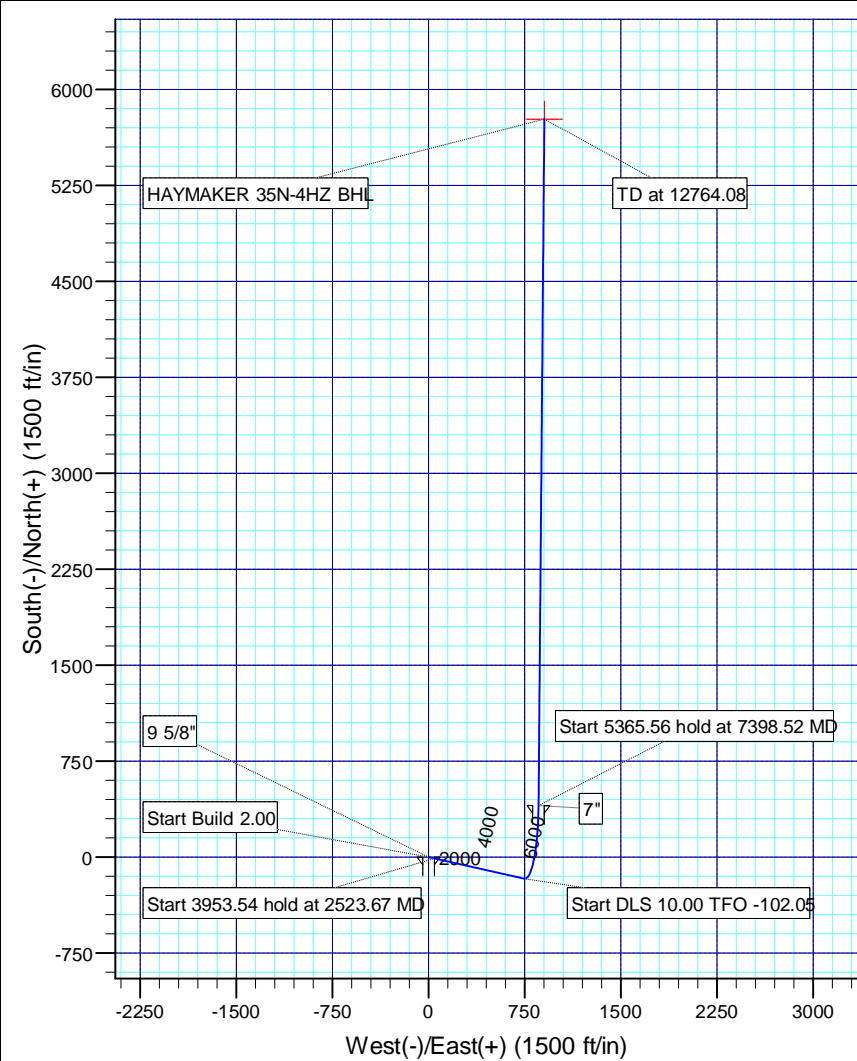
HAYMAKER 35N-4HZ

HAYMAKER 35N-4HZ

Plan: HAYMAKER 35N-4HZ (wp01)

Standard Planning Report

23 February, 2012



PROJECT DETAILS: COLORADO NORTHERN ZONE - 83	
Site:	WELD_HAYMAKER 13-9HZ PAD
Well:	HAYMAKER 35N-4HZ
Wellbore:	HAYMAKER 35N-4HZ
Design:	HAYMAKER 35N-4HZ (wp01)
Latitude:	40.147054
Longitude:	-104.677089
GL:	4897.00
KB:	17' RKB + GL @ 4914.00ft



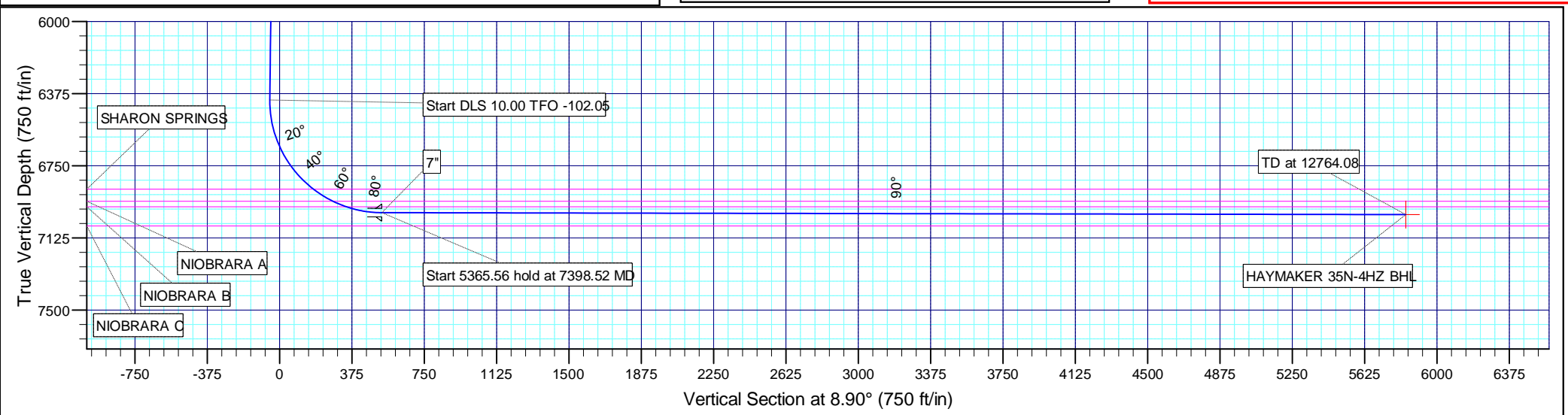
WELL DETAILS: HAYMAKER 35N-4HZ					
		Ground Level:		4897.00	
+N-S	+E-W	Northing	Easting	Latitude	Longitude
0.00	0.00	1297482.60	3230041.05	40.147054	-104.677089

DESIGN TARGET DETAILS						
Name	TVD	+N-S	+E-W	Latitude	Longitude	Shape Point
HAYMAKER 35N-4HZ BHL	7004.00	5767.69	903.02	40.162887	-104.673858	

SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	0.00	
3	2523.67	10.47	102.70	2520.76	-10.50	46.56	2.00	102.70	-3.17	
4	6477.21	10.47	102.70	6408.43	-168.55	747.63	0.00	0.00	-50.88	
5	7398.19	89.89	0.48	6994.00	402.00	858.00	10.00	-102.05	529.88	
6	7398.52	89.89	0.48	6994.00	402.33	858.00	1.00	11.88	530.20	
7	12764.08	89.89	0.48	7004.00	5767.69	903.02	0.00	0.00	5837.95	HAYMAKER 35N-4HZ BHL

CASING DETAILS				
	TVD	MD	Name	Size
	890.00	890.00	9 5/8"	9-5/8
	6994.00	7398.19	7"	7

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
3941.00	3967.97	PARKMAN
4440.00	4475.43	SUSSEX
6872.00	7015.24	SHARON SPRINGS
6935.00	7134.85	NIOBRARA A
6963.00	7208.43	NIOBRARA B



Anadarko Petroleum Corp

Planning Report

Database:	edmp	Local Co-ordinate Reference:	Well HAYMAKER 35N-4HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	17' RKB + GL @ 4914.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	17' RKB + GL @ 4914.00ft
Site:	WELD_HAYMAKER 13-9HZ PAD	North Reference:	True
Well:	HAYMAKER 35N-4HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	HAYMAKER 35N-4HZ		
Design:	HAYMAKER 35N-4HZ (wp01)		

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	WELD_HAYMAKER 13-9HZ PAD			
Site Position:		Northing:	1,297,525.21 usft	Latitude: 40.147172
From:	Lat/Long	Easting:	3,229,999.00 usft	Longitude: -104.677238
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence: 0.53 °

Well	HAYMAKER 35N-4HZ			
Well Position	+N/-S	-42.99 ft	Northing:	1,297,482.60 usft
	+E/-W	41.65 ft	Easting:	3,230,041.05 usft
Position Uncertainty		0.00 ft	Wellhead Elevation:	Ground Level: 4,897.00 ft

Wellbore	HAYMAKER 35N-4HZ				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2/23/2012	8.70	66.84	52,934

Design	HAYMAKER 35N-4HZ (wp01)			
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	0.00	0.00	8.90

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	0.00	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	
2,523.67	10.47	102.70	2,520.76	-10.50	46.56	2.00	2.00	0.00	102.70	
6,477.21	10.47	102.70	6,408.43	-168.55	747.63	0.00	0.00	0.00	0.00	
7,398.19	89.89	0.48	6,994.00	402.00	858.00	10.00	8.62	-11.10	-102.05	
7,398.52	89.89	0.48	6,994.00	402.33	858.00	1.00	0.98	0.21	11.88	
12,764.08	89.89	0.48	7,004.00	5,767.69	903.02	0.00	0.00	0.00	0.00	HAYMAKER 35N-4HZ

Anadarko Petroleum Corp

Planning Report

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Company:	US ROCKIES REGION PLANNING	TVD Reference:	17' RKB + GL @ 4914.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	17' RKB + GL @ 4914.00ft
Site:	WELD_HAYMAKER 13-9HZ PAD	North Reference:	True
Well:	HAYMAKER 35N-4HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	HAYMAKER 35N-4HZ		
Design:	HAYMAKER 35N-4HZ (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
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
300.00	0.00	0.00	300.00	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
500.00	0.00	0.00	500.00	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
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
890.00	0.00	0.00	890.00	0.00	0.00	0.00	0.00	0.00	0.00
9 5/8"									
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	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
1,200.00	0.00	0.00	1,200.00	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
1,400.00	0.00	0.00	1,400.00	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
1,600.00	0.00	0.00	1,600.00	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
1,800.00	0.00	0.00	1,800.00	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
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00									
2,100.00	2.00	102.70	2,099.98	-0.38	1.70	-0.12	2.00	2.00	0.00
2,200.00	4.00	102.70	2,199.84	-1.53	6.81	-0.46	2.00	2.00	0.00
2,300.00	6.00	102.70	2,299.45	-3.45	15.31	-1.04	2.00	2.00	0.00
2,400.00	8.00	102.70	2,398.70	-6.13	27.20	-1.85	2.00	2.00	0.00
2,500.00	10.00	102.70	2,497.47	-9.57	42.46	-2.89	2.00	2.00	0.00
2,523.67	10.47	102.70	2,520.76	-10.50	46.56	-3.17	2.00	2.00	0.00
Start 3953.54 hold at 2523.67 MD									
2,600.00	10.47	102.70	2,595.82	-13.55	60.10	-4.09	0.00	0.00	0.00
2,700.00	10.47	102.70	2,694.15	-17.55	77.83	-5.30	0.00	0.00	0.00
2,800.00	10.47	102.70	2,792.48	-21.54	95.56	-6.50	0.00	0.00	0.00
2,900.00	10.47	102.70	2,890.82	-25.54	113.29	-7.71	0.00	0.00	0.00
3,000.00	10.47	102.70	2,989.15	-29.54	131.03	-8.92	0.00	0.00	0.00
3,100.00	10.47	102.70	3,087.49	-33.54	148.76	-10.12	0.00	0.00	0.00
3,200.00	10.47	102.70	3,185.82	-37.53	166.49	-11.33	0.00	0.00	0.00
3,300.00	10.47	102.70	3,284.15	-41.53	184.22	-12.54	0.00	0.00	0.00
3,400.00	10.47	102.70	3,382.49	-45.53	201.96	-13.74	0.00	0.00	0.00
3,500.00	10.47	102.70	3,480.82	-49.53	219.69	-14.95	0.00	0.00	0.00
3,600.00	10.47	102.70	3,579.16	-53.53	237.42	-16.16	0.00	0.00	0.00
3,700.00	10.47	102.70	3,677.49	-57.52	255.16	-17.36	0.00	0.00	0.00
3,800.00	10.47	102.70	3,775.82	-61.52	272.89	-18.57	0.00	0.00	0.00
3,900.00	10.47	102.70	3,874.16	-65.52	290.62	-19.78	0.00	0.00	0.00
3,967.97	10.47	102.70	3,941.00	-68.24	302.67	-20.60	0.00	0.00	0.00
PARKMAN									
4,000.00	10.47	102.70	3,972.49	-69.52	308.35	-20.98	0.00	0.00	0.00
4,100.00	10.47	102.70	4,070.83	-73.51	326.09	-22.19	0.00	0.00	0.00
4,200.00	10.47	102.70	4,169.16	-77.51	343.82	-23.40	0.00	0.00	0.00
4,300.00	10.47	102.70	4,267.49	-81.51	361.55	-24.60	0.00	0.00	0.00
4,400.00	10.47	102.70	4,365.83	-85.51	379.28	-25.81	0.00	0.00	0.00
4,475.43	10.47	102.70	4,440.00	-88.52	392.66	-26.72	0.00	0.00	0.00
SUSSEX									

Anadarko Petroleum Corp

Planning Report

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Company:	US ROCKIES REGION PLANNING	TVD Reference:	17' RKB + GL @ 4914.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	17' RKB + GL @ 4914.00ft
Site:	WELD_HAYMAKER 13-9HZ PAD	North Reference:	True
Well:	HAYMAKER 35N-4HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	HAYMAKER 35N-4HZ		
Design:	HAYMAKER 35N-4HZ (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)
4,500.00	10.47	102.70	4,464.16	-89.50	397.02	-27.02	0.00	0.00	0.00
4,600.00	10.47	102.70	4,562.50	-93.50	414.75	-28.22	0.00	0.00	0.00
4,700.00	10.47	102.70	4,660.83	-97.50	432.48	-29.43	0.00	0.00	0.00
4,800.00	10.47	102.70	4,759.16	-101.50	450.22	-30.64	0.00	0.00	0.00
4,900.00	10.47	102.70	4,857.50	-105.50	467.95	-31.84	0.00	0.00	0.00
5,000.00	10.47	102.70	4,955.83	-109.49	485.68	-33.05	0.00	0.00	0.00
5,100.00	10.47	102.70	5,054.17	-113.49	503.41	-34.26	0.00	0.00	0.00
5,200.00	10.47	102.70	5,152.50	-117.49	521.15	-35.46	0.00	0.00	0.00
5,300.00	10.47	102.70	5,250.83	-121.49	538.88	-36.67	0.00	0.00	0.00
5,400.00	10.47	102.70	5,349.17	-125.48	556.61	-37.88	0.00	0.00	0.00
5,500.00	10.47	102.70	5,447.50	-129.48	574.34	-39.08	0.00	0.00	0.00
5,600.00	10.47	102.70	5,545.84	-133.48	592.08	-40.29	0.00	0.00	0.00
5,700.00	10.47	102.70	5,644.17	-137.48	609.81	-41.50	0.00	0.00	0.00
5,800.00	10.47	102.70	5,742.50	-141.47	627.54	-42.70	0.00	0.00	0.00
5,900.00	10.47	102.70	5,840.84	-145.47	645.28	-43.91	0.00	0.00	0.00
6,000.00	10.47	102.70	5,939.17	-149.47	663.01	-45.12	0.00	0.00	0.00
6,100.00	10.47	102.70	6,037.51	-153.47	680.74	-46.32	0.00	0.00	0.00
6,200.00	10.47	102.70	6,135.84	-157.47	698.47	-47.53	0.00	0.00	0.00
6,300.00	10.47	102.70	6,234.17	-161.46	716.21	-48.74	0.00	0.00	0.00
6,400.00	10.47	102.70	6,332.51	-165.46	733.94	-49.94	0.00	0.00	0.00
6,477.21	10.47	102.70	6,408.43	-168.55	747.63	-50.88	0.00	0.00	0.00
Start DLS 10.00 TFO -102.05									
6,500.00	10.24	90.07	6,430.85	-169.01	751.68	-50.70	10.00	-1.02	-55.44
6,600.00	14.32	45.49	6,528.75	-160.32	769.43	-39.38	10.00	4.08	-44.58
6,700.00	22.43	26.41	6,623.65	-134.49	786.79	-11.18	10.00	8.11	-19.08
6,800.00	31.61	17.53	6,712.68	-92.31	803.21	33.04	10.00	9.18	-8.88
6,900.00	41.14	12.39	6,793.12	-35.04	818.20	91.94	10.00	9.53	-5.14
7,000.00	50.83	8.92	6,862.53	35.56	831.31	163.72	10.00	9.69	-3.47
7,015.24	52.31	8.48	6,872.00	47.36	833.11	175.66	10.00	9.74	-2.90
SHARON SPRINGS									
7,100.00	60.59	6.30	6,918.80	117.36	842.13	246.21	10.00	9.77	-2.57
7,134.85	64.01	5.51	6,935.00	148.04	845.30	277.01	10.00	9.80	-2.27
NIOBRARA A									
7,200.00	70.40	4.15	6,960.23	207.86	850.34	336.89	10.00	9.81	-2.10
7,208.43	71.23	3.98	6,963.00	215.80	850.90	344.82	10.00	9.82	-1.99
NIOBRARA B									
7,300.00	80.23	2.24	6,985.55	304.32	855.69	433.02	10.00	9.83	-1.90
7,398.19	89.89	0.48	6,994.00	402.00	858.00	529.88	10.00	9.84	-1.80
7"									
7,398.52	89.89	0.48	6,994.00	402.33	858.00	530.20	1.00	0.98	0.21
Start 5365.56 hold at 7398.52 MD									
7,400.00	89.89	0.48	6,994.00	403.81	858.02	531.67	0.00	0.00	0.00
7,500.00	89.89	0.48	6,994.19	503.81	858.85	630.59	0.00	0.00	0.00
7,600.00	89.89	0.48	6,994.38	603.80	859.69	729.51	0.00	0.00	0.00
7,700.00	89.89	0.48	6,994.56	703.80	860.53	828.44	0.00	0.00	0.00
7,800.00	89.89	0.48	6,994.75	803.80	861.37	927.36	0.00	0.00	0.00
7,900.00	89.89	0.48	6,994.94	903.79	862.21	1,026.28	0.00	0.00	0.00
8,000.00	89.89	0.48	6,995.12	1,003.79	863.05	1,125.20	0.00	0.00	0.00
8,100.00	89.89	0.48	6,995.31	1,103.79	863.89	1,224.13	0.00	0.00	0.00
8,200.00	89.89	0.48	6,995.49	1,203.78	864.73	1,323.05	0.00	0.00	0.00
8,300.00	89.89	0.48	6,995.68	1,303.78	865.57	1,421.97	0.00	0.00	0.00
8,400.00	89.89	0.48	6,995.87	1,403.77	866.40	1,520.89	0.00	0.00	0.00
8,500.00	89.89	0.48	6,996.05	1,503.77	867.24	1,619.82	0.00	0.00	0.00

Anadarko Petroleum Corp

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Company:	US ROCKIES REGION PLANNING	TVD Reference:	17' RKB + GL @ 4914.00ft
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Well:	HAYMAKER 35N-4HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	HAYMAKER 35N-4HZ		
Design:	HAYMAKER 35N-4HZ (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)	
8,600.00	89.89	0.48	6,996.24	1,603.77	868.08	1,718.74	0.00	0.00	0.00	
8,700.00	89.89	0.48	6,996.43	1,703.76	868.92	1,817.66	0.00	0.00	0.00	
8,800.00	89.89	0.48	6,996.61	1,803.76	869.76	1,916.59	0.00	0.00	0.00	
8,900.00	89.89	0.48	6,996.80	1,903.76	870.60	2,015.51	0.00	0.00	0.00	
9,000.00	89.89	0.48	6,996.99	2,003.75	871.44	2,114.43	0.00	0.00	0.00	
9,100.00	89.89	0.48	6,997.17	2,103.75	872.28	2,213.35	0.00	0.00	0.00	
9,200.00	89.89	0.48	6,997.36	2,203.74	873.12	2,312.28	0.00	0.00	0.00	
9,300.00	89.89	0.48	6,997.54	2,303.74	873.95	2,411.20	0.00	0.00	0.00	
9,400.00	89.89	0.48	6,997.73	2,403.74	874.79	2,510.12	0.00	0.00	0.00	
9,500.00	89.89	0.48	6,997.92	2,503.73	875.63	2,609.04	0.00	0.00	0.00	
9,600.00	89.89	0.48	6,998.10	2,603.73	876.47	2,707.97	0.00	0.00	0.00	
9,700.00	89.89	0.48	6,998.29	2,703.73	877.31	2,806.89	0.00	0.00	0.00	
9,800.00	89.89	0.48	6,998.48	2,803.72	878.15	2,905.81	0.00	0.00	0.00	
9,900.00	89.89	0.48	6,998.66	2,903.72	878.99	3,004.73	0.00	0.00	0.00	
10,000.00	89.89	0.48	6,998.85	3,003.72	879.83	3,103.66	0.00	0.00	0.00	
10,100.00	89.89	0.48	6,999.04	3,103.71	880.67	3,202.58	0.00	0.00	0.00	
10,200.00	89.89	0.48	6,999.22	3,203.71	881.51	3,301.50	0.00	0.00	0.00	
10,300.00	89.89	0.48	6,999.41	3,303.70	882.34	3,400.42	0.00	0.00	0.00	
10,400.00	89.89	0.48	6,999.59	3,403.70	883.18	3,499.35	0.00	0.00	0.00	
10,500.00	89.89	0.48	6,999.78	3,503.70	884.02	3,598.27	0.00	0.00	0.00	
10,600.00	89.89	0.48	6,999.97	3,603.69	884.86	3,697.19	0.00	0.00	0.00	
10,700.00	89.89	0.48	7,000.15	3,703.69	885.70	3,796.11	0.00	0.00	0.00	
10,800.00	89.89	0.48	7,000.34	3,803.69	886.54	3,895.04	0.00	0.00	0.00	
10,900.00	89.89	0.48	7,000.53	3,903.68	887.38	3,993.96	0.00	0.00	0.00	
11,000.00	89.89	0.48	7,000.71	4,003.68	888.22	4,092.88	0.00	0.00	0.00	
11,100.00	89.89	0.48	7,000.90	4,103.67	889.06	4,191.80	0.00	0.00	0.00	
11,200.00	89.89	0.48	7,001.09	4,203.67	889.89	4,290.73	0.00	0.00	0.00	
11,300.00	89.89	0.48	7,001.27	4,303.67	890.73	4,389.65	0.00	0.00	0.00	
11,400.00	89.89	0.48	7,001.46	4,403.66	891.57	4,488.57	0.00	0.00	0.00	
11,500.00	89.89	0.48	7,001.64	4,503.66	892.41	4,587.49	0.00	0.00	0.00	
11,600.00	89.89	0.48	7,001.83	4,603.66	893.25	4,686.42	0.00	0.00	0.00	
11,700.00	89.89	0.48	7,002.02	4,703.65	894.09	4,785.34	0.00	0.00	0.00	
11,800.00	89.89	0.48	7,002.20	4,803.65	894.93	4,884.26	0.00	0.00	0.00	
11,900.00	89.89	0.48	7,002.39	4,903.65	895.77	4,983.19	0.00	0.00	0.00	
12,000.00	89.89	0.48	7,002.58	5,003.64	896.61	5,082.11	0.00	0.00	0.00	
12,100.00	89.89	0.48	7,002.76	5,103.64	897.44	5,181.03	0.00	0.00	0.00	
12,200.00	89.89	0.48	7,002.95	5,203.63	898.28	5,279.95	0.00	0.00	0.00	
12,300.00	89.89	0.48	7,003.14	5,303.63	899.12	5,378.88	0.00	0.00	0.00	
12,400.00	89.89	0.48	7,003.32	5,403.63	899.96	5,477.80	0.00	0.00	0.00	
12,500.00	89.89	0.48	7,003.51	5,503.62	900.80	5,576.72	0.00	0.00	0.00	
12,600.00	89.89	0.48	7,003.69	5,603.62	901.64	5,675.64	0.00	0.00	0.00	
12,700.00	89.89	0.48	7,003.88	5,703.62	902.48	5,774.57	0.00	0.00	0.00	
12,764.08	89.89	0.48	7,004.00	5,767.69	903.02	5,837.95	0.00	0.00	0.00	
TD at 12764.08 - HAYMAKER 35N-4HZ BHL										

Anadarko Petroleum Corp

Planning Report

Database:	edmp	Local Co-ordinate Reference:	Well HAYMAKER 35N-4HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	17' RKB + GL @ 4914.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	17' RKB + GL @ 4914.00ft
Site:	WELD_HAYMAKER 13-9HZ PAD	North Reference:	True
Well:	HAYMAKER 35N-4HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	HAYMAKER 35N-4HZ		
Design:	HAYMAKER 35N-4HZ (wp01)		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)		
HAYMAKER 35N-4HZ B	0.00	0.00	7,004.00	5,767.69	903.02	1,303,258.41	3,230,890.50	40.162887	-104.673858
- plan hits target center									
- Point									

Casing Points					
Measured Depth	Vertical Depth			Casing Diameter	Hole Diameter
(ft)	(ft)			(")	(")
		Name			
890.00	890.00	9 5/8"		9-5/8	13-1/2
7,398.19	6,994.00	7"		7	8-3/4

Formations					
Measured Depth	Vertical Depth			Dip	Dip Direction
(ft)	(ft)			(°)	(°)
		Name	Lithology		
3,967.97	3,941.00	PARKMAN		0.00	
4,475.43	4,440.00	SUSSEX		0.00	
7,015.24	6,872.00	SHARON SPRINGS		0.00	
7,134.85	6,935.00	NIOBRARA A		0.00	
7,208.43	6,963.00	NIOBRARA B		0.00	

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates			
(ft)	(ft)	+N/-S	+E/-W		
		(ft)	(ft)	Comment	
2,000.00	2,000.00	0.00	0.00	Start Build 2.00	
2,523.67	2,520.76	-10.50	46.56	Start 3953.54 hold at 2523.67 MD	
6,477.21	6,408.43	-168.55	747.63	Start DLS 10.00 TFO -102.05	
7,398.52	6,994.00	402.33	858.00	Start 5365.56 hold at 7398.52 MD	
12,764.08	7,004.00	5,767.69	903.02	TD at 12764.08	