

# **US ROCKIES REGION PLANNING**

**COLORADO NORTHERN ZONE - 83**

**WELD\_BROWN 16-35HZ Pad**

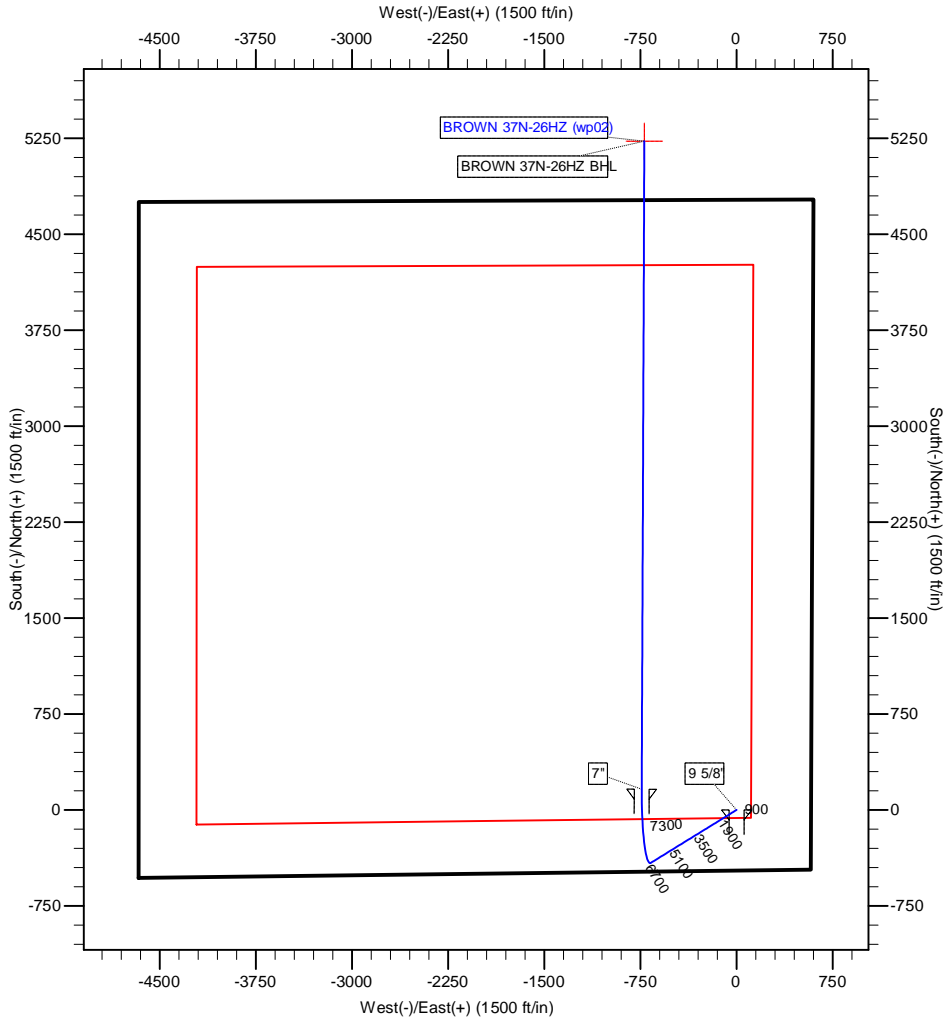
**BROWN 37N-26HZ**

**BROWN 37N-26HZ**

**Plan: BROWN 37N-26HZ (wp02)**

## **Standard Planning Report**

**03 January, 2012**



**Compass Rose:** T (True), M (Magnetic), A (Azimuth)

**Azimuths to True North:** Magnetic North: 8.76°

**Magnetic Field:** Strength: 52958.4snT, Dip Angle: 66.86°, Date: 12/27/2011, Model: IGRF2010



**Project:** COLORADO NORTHERN ZONE - 83  
**Site:** WELD\_BROWN 16-35HZ Pad  
**Well:** BROWN 37N-26HZ  
**Wellbore:** BROWN 37N-26HZ  
**Section:** SHL:  
**Design:** BROWN 37N-26HZ (wp02)  
**Latitude:** 40.175915  
**Longitude:** -104.737074  
**GL:** 5053.00  
**KB:** GL + 17' RKB @ 5070.00ft

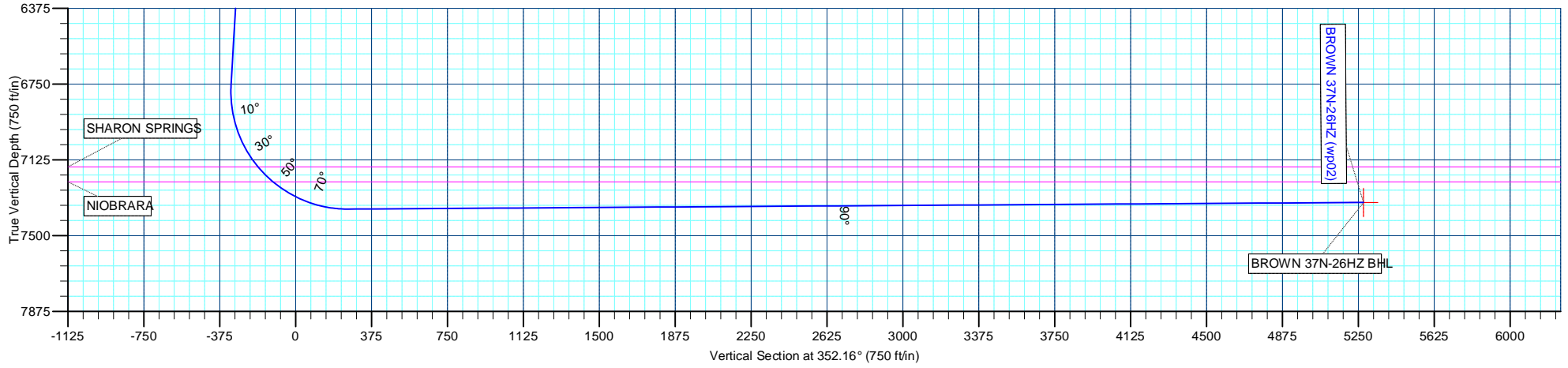
WELL DETAILS: BROWN 37N-26HZ						
+N-S	+E-W	Northing	Ground Level: Easting	5053.00 Latitude	Longitude	Slot
0.00	0.00	1307845.78	3213182.49	40.175915	-104.737074	

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	
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	
1295.98	7.92	238.28	1294.72	-14.37	-23.24	2.00	238.28	-11.06	
6812.44	7.92	238.28	6758.57	-414.00	-669.78	0.00	0.00	-318.78	
7757.93	90.37	0.23	7369.00	161.39	-740.00	10.00	121.66	260.82	
7758.26	90.37	0.23	7369.00	161.72	-740.00	1.00	0.50	261.14	
12823.45	90.37	0.23	7336.00	5226.75	-719.66	0.00	0.00	5276.07	

WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)						
Name	TVD	+N-S	+E-W	Latitude	Longitude	Shape
BROWN 37N-26HZ BHL	7336.00	5226.75	-719.66	40.190263	-104.739650	Point

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
3357.00	3378.12	PARKMAN
4545.00	4577.56	SUSSEX
7160.00	7246.68	SHARON SPRINGS
7234.00	7351.26	NIOBRARA

CASING DETAILS			
TVD	MD	Name	Size
700.00	700.00	9 5/8"	9-5/8
7369.00	7757.93	7"	7



# Anadarko Petroleum Corp

## Planning Report

<b>Database:</b>	edmp	<b>Local Co-ordinate Reference:</b>	Well BROWN 37N-26HZ
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	GL + 17' RKB @ 5070.00ft
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	GL + 17' RKB @ 5070.00ft
<b>Site:</b>	WELD_BROWN 16-35HZ Pad	<b>North Reference:</b>	True
<b>Well:</b>	BROWN 37N-26HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	BROWN 37N-26HZ		
<b>Design:</b>	BROWN 37N-26HZ (wp02)		

<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> WELD_BROWN 16-35HZ Pad			
<b>Site Position:</b>		<b>Northing:</b>	1,307,837.32 usft
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,213,256.34 usft
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	13-3/16 "
		<b>Latitude:</b>	40.175890
		<b>Longitude:</b>	-104.736810
		<b>Grid Convergence:</b>	0.49 °

<b>Well</b> BROWN 37N-26HZ			
<b>Well Position</b>	<b>+N/-S</b>	9.09 ft	<b>Northing:</b> 1,307,845.78 usft
	<b>+E/-W</b>	-73.77 ft	<b>Easting:</b> 3,213,182.49 usft
<b>Position Uncertainty</b>		0.00 ft	<b>Wellhead Elevation:</b>
			<b>Latitude:</b> 40.175915
			<b>Longitude:</b> -104.737074
			<b>Ground Level:</b> 5,053.00 ft

<b>Wellbore</b> BROWN 37N-26HZ					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	12/27/2011	8.76	66.86	52,958

<b>Design</b> BROWN 37N-26HZ (wp02)				
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	352.16

<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	
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,295.98	7.92	238.28	1,294.72	-14.37	-23.24	2.00	2.00	0.00	238.28	
6,812.44	7.92	238.28	6,758.57	-414.00	-669.78	0.00	0.00	0.00	0.00	
7,757.93	90.37	0.23	7,369.00	161.39	-740.00	10.00	8.72	12.90	121.66	
7,758.26	90.37	0.23	7,369.00	161.72	-740.00	1.00	1.00	0.01	0.50	
12,823.45	90.37	0.23	7,336.00	5,226.75	-719.66	0.00	0.00	0.00	0.00	BROWN 37N-26HZ B

# Anadarko Petroleum Corp

## Planning Report

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<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	GL + 17' RKB @ 5070.00ft
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	GL + 17' RKB @ 5070.00ft
<b>Site:</b>	WELD_BROWN 16-35HZ Pad	<b>North Reference:</b>	True
<b>Well:</b>	BROWN 37N-26HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	BROWN 37N-26HZ		
<b>Design:</b>	BROWN 37N-26HZ (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	0.00	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
<b>9 5/8"</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>Start Build 2.00</b>										
1,000.00	2.00	238.28	999.98	-0.92	-1.48	-0.71	2.00	2.00	2.00	0.00
1,100.00	4.00	238.28	1,099.84	-3.67	-5.94	-2.83	2.00	2.00	2.00	0.00
1,200.00	6.00	238.28	1,199.45	-8.25	-13.35	-6.35	2.00	2.00	2.00	0.00
1,295.98	7.92	238.28	1,294.72	-14.37	-23.24	-11.06	2.00	2.00	2.00	0.00
<b>Start 5516.46 hold at 1295.98 MD</b>										
1,300.00	7.92	238.28	1,298.70	-14.66	-23.71	-11.29	0.00	0.00	0.00	0.00
1,400.00	7.92	238.28	1,397.75	-21.90	-35.43	-16.86	0.00	0.00	0.00	0.00
1,500.00	7.92	238.28	1,496.79	-29.15	-47.15	-22.44	0.00	0.00	0.00	0.00
1,600.00	7.92	238.28	1,595.84	-36.39	-58.87	-28.02	0.00	0.00	0.00	0.00
1,700.00	7.92	238.28	1,694.89	-43.64	-70.59	-33.60	0.00	0.00	0.00	0.00
1,800.00	7.92	238.28	1,793.93	-50.88	-82.31	-39.18	0.00	0.00	0.00	0.00
1,900.00	7.92	238.28	1,892.98	-58.12	-94.03	-44.75	0.00	0.00	0.00	0.00
2,000.00	7.92	238.28	1,992.03	-65.37	-105.75	-50.33	0.00	0.00	0.00	0.00
2,100.00	7.92	238.28	2,091.07	-72.61	-117.47	-55.91	0.00	0.00	0.00	0.00
2,200.00	7.92	238.28	2,190.12	-79.86	-129.19	-61.49	0.00	0.00	0.00	0.00
2,300.00	7.92	238.28	2,289.16	-87.10	-140.91	-67.07	0.00	0.00	0.00	0.00
2,400.00	7.92	238.28	2,388.21	-94.35	-152.64	-72.64	0.00	0.00	0.00	0.00
2,500.00	7.92	238.28	2,487.26	-101.59	-164.36	-78.22	0.00	0.00	0.00	0.00
2,600.00	7.92	238.28	2,586.30	-108.84	-176.08	-83.80	0.00	0.00	0.00	0.00
2,700.00	7.92	238.28	2,685.35	-116.08	-187.80	-89.38	0.00	0.00	0.00	0.00
2,800.00	7.92	238.28	2,784.40	-123.32	-199.52	-94.96	0.00	0.00	0.00	0.00
2,900.00	7.92	238.28	2,883.44	-130.57	-211.24	-100.54	0.00	0.00	0.00	0.00
3,000.00	7.92	238.28	2,982.49	-137.81	-222.96	-106.11	0.00	0.00	0.00	0.00
3,100.00	7.92	238.28	3,081.53	-145.06	-234.68	-111.69	0.00	0.00	0.00	0.00
3,200.00	7.92	238.28	3,180.58	-152.30	-246.40	-117.27	0.00	0.00	0.00	0.00
3,300.00	7.92	238.28	3,279.63	-159.55	-258.12	-122.85	0.00	0.00	0.00	0.00
3,378.12	7.92	238.28	3,357.00	-165.21	-267.27	-127.21	0.00	0.00	0.00	0.00
<b>PARKMAN</b>										
3,400.00	7.92	238.28	3,378.67	-166.79	-269.84	-128.43	0.00	0.00	0.00	0.00
3,500.00	7.92	238.28	3,477.72	-174.04	-281.56	-134.00	0.00	0.00	0.00	0.00
3,600.00	7.92	238.28	3,576.77	-181.28	-293.28	-139.58	0.00	0.00	0.00	0.00
3,700.00	7.92	238.28	3,675.81	-188.52	-305.00	-145.16	0.00	0.00	0.00	0.00
3,800.00	7.92	238.28	3,774.86	-195.77	-316.72	-150.74	0.00	0.00	0.00	0.00
3,900.00	7.92	238.28	3,873.90	-203.01	-328.44	-156.32	0.00	0.00	0.00	0.00
4,000.00	7.92	238.28	3,972.95	-210.26	-340.16	-161.89	0.00	0.00	0.00	0.00
4,100.00	7.92	238.28	4,072.00	-217.50	-351.88	-167.47	0.00	0.00	0.00	0.00
4,200.00	7.92	238.28	4,171.04	-224.75	-363.60	-173.05	0.00	0.00	0.00	0.00
4,300.00	7.92	238.28	4,270.09	-231.99	-375.32	-178.63	0.00	0.00	0.00	0.00
4,400.00	7.92	238.28	4,369.13	-239.24	-387.04	-184.21	0.00	0.00	0.00	0.00
4,500.00	7.92	238.28	4,468.18	-246.48	-398.76	-189.79	0.00	0.00	0.00	0.00
4,577.56	7.92	238.28	4,545.00	-252.10	-407.85	-194.11	0.00	0.00	0.00	0.00
<b>SUSSEX</b>										

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## Planning Report

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<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	GL + 17' RKB @ 5070.00ft
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	GL + 17' RKB @ 5070.00ft
<b>Site:</b>	WELD_BROWN 16-35HZ Pad	<b>North Reference:</b>	True
<b>Well:</b>	BROWN 37N-26HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	BROWN 37N-26HZ		
<b>Design:</b>	BROWN 37N-26HZ (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	7.92	238.28	4,567.23	-253.72	-410.48	-195.36	0.00	0.00	0.00
4,700.00	7.92	238.28	4,666.27	-260.97	-422.20	-200.94	0.00	0.00	0.00
4,800.00	7.92	238.28	4,765.32	-268.21	-433.92	-206.52	0.00	0.00	0.00
4,900.00	7.92	238.28	4,864.37	-275.46	-445.64	-212.10	0.00	0.00	0.00
5,000.00	7.92	238.28	4,963.41	-282.70	-457.36	-217.68	0.00	0.00	0.00
5,100.00	7.92	238.28	5,062.46	-289.95	-469.08	-223.25	0.00	0.00	0.00
5,200.00	7.92	238.28	5,161.50	-297.19	-480.80	-228.83	0.00	0.00	0.00
5,300.00	7.92	238.28	5,260.55	-304.44	-492.52	-234.41	0.00	0.00	0.00
5,400.00	7.92	238.28	5,359.60	-311.68	-504.24	-239.99	0.00	0.00	0.00
5,500.00	7.92	238.28	5,458.64	-318.93	-515.96	-245.57	0.00	0.00	0.00
5,600.00	7.92	238.28	5,557.69	-326.17	-527.68	-251.14	0.00	0.00	0.00
5,700.00	7.92	238.28	5,656.74	-333.41	-539.40	-256.72	0.00	0.00	0.00
5,800.00	7.92	238.28	5,755.78	-340.66	-551.12	-262.30	0.00	0.00	0.00
5,900.00	7.92	238.28	5,854.83	-347.90	-562.84	-267.88	0.00	0.00	0.00
6,000.00	7.92	238.28	5,953.87	-355.15	-574.56	-273.46	0.00	0.00	0.00
6,100.00	7.92	238.28	6,052.92	-362.39	-586.28	-279.03	0.00	0.00	0.00
6,200.00	7.92	238.28	6,151.97	-369.64	-598.00	-284.61	0.00	0.00	0.00
6,300.00	7.92	238.28	6,251.01	-376.88	-609.72	-290.19	0.00	0.00	0.00
6,400.00	7.92	238.28	6,350.06	-384.13	-621.44	-295.77	0.00	0.00	0.00
6,500.00	7.92	238.28	6,449.11	-391.37	-633.16	-301.35	0.00	0.00	0.00
6,600.00	7.92	238.28	6,548.15	-398.61	-644.88	-306.93	0.00	0.00	0.00
6,700.00	7.92	238.28	6,647.20	-405.86	-656.60	-312.50	0.00	0.00	0.00
6,800.00	7.92	238.28	6,746.24	-413.10	-668.32	-318.08	0.00	0.00	0.00
6,812.44	7.92	238.28	6,758.57	-414.00	-669.78	-318.78	0.00	0.00	0.00
<b>Start DLS 10.00 TFO 121.66</b>									
6,900.00	8.14	304.52	6,845.44	-413.66	-680.04	-317.04	10.00	0.25	75.65
7,000.00	16.03	335.92	6,943.24	-397.01	-691.54	-298.97	10.00	7.89	31.40
7,100.00	25.43	345.81	7,036.69	-363.50	-702.46	-264.29	10.00	9.40	9.89
7,200.00	35.15	350.53	7,122.94	-314.17	-712.49	-214.05	10.00	9.72	4.73
7,246.68	39.73	352.02	7,160.00	-286.12	-716.77	-185.68	10.00	9.81	3.18
<b>SHARON SPRINGS</b>									
7,300.00	44.98	353.40	7,199.39	-250.51	-721.31	-149.78	10.00	9.85	2.59
7,351.26	50.04	354.51	7,234.00	-212.93	-725.27	-112.01	10.00	9.87	2.16
<b>NIORARA</b>									
7,400.00	54.86	355.42	7,263.70	-174.45	-728.66	-73.43	10.00	9.89	1.87
7,500.00	64.77	357.00	7,313.92	-88.31	-734.31	12.68	10.00	9.91	1.58
<b>BROWN 37N-26HZ heel</b>									
7,600.00	74.69	358.33	7,348.53	5.30	-738.09	105.93	10.00	9.92	1.34
7,700.00	84.62	359.55	7,366.47	103.54	-739.89	203.49	10.00	9.93	1.22
7,757.93	90.37	0.23	7,369.00	161.39	-740.00	260.81	10.00	9.93	1.18
<b>7"</b>									
7,758.26	90.37	0.23	7,369.00	161.72	-740.00	261.14	1.11	1.11	0.02
<b>Start 5065.19 hold at 7758.26 MD</b>									
7,800.00	90.37	0.23	7,368.73	203.45	-739.83	302.47	0.00	0.00	0.00
7,900.00	90.37	0.23	7,368.07	303.45	-739.43	401.48	0.00	0.00	0.00
8,000.00	90.37	0.23	7,367.42	403.45	-739.03	500.48	0.00	0.00	0.00
8,100.00	90.37	0.23	7,366.77	503.45	-738.63	599.49	0.00	0.00	0.00
8,200.00	90.37	0.23	7,366.12	603.44	-738.23	698.50	0.00	0.00	0.00
8,300.00	90.37	0.23	7,365.47	703.44	-737.82	797.51	0.00	0.00	0.00
8,400.00	90.37	0.23	7,364.82	803.44	-737.42	896.51	0.00	0.00	0.00
8,500.00	90.37	0.23	7,364.17	903.43	-737.02	995.52	0.00	0.00	0.00
8,600.00	90.37	0.23	7,363.51	1,003.43	-736.62	1,094.53	0.00	0.00	0.00
8,700.00	90.37	0.23	7,362.86	1,103.43	-736.22	1,193.54	0.00	0.00	0.00

# Anadarko Petroleum Corp

## Planning Report

<b>Database:</b>	edmp	<b>Local Co-ordinate Reference:</b>	Well BROWN 37N-26HZ
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	GL + 17' RKB @ 5070.00ft
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	GL + 17' RKB @ 5070.00ft
<b>Site:</b>	WELD_BROWN 16-35HZ Pad	<b>North Reference:</b>	True
<b>Well:</b>	BROWN 37N-26HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	BROWN 37N-26HZ		
<b>Design:</b>	BROWN 37N-26HZ (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)	
8,800.00	90.37	0.23	7,362.21	1,203.43	-735.82	1,292.54	0.00	0.00	0.00	
8,900.00	90.37	0.23	7,361.56	1,303.42	-735.42	1,391.55	0.00	0.00	0.00	
9,000.00	90.37	0.23	7,360.91	1,403.42	-735.01	1,490.56	0.00	0.00	0.00	
9,100.00	90.37	0.23	7,360.26	1,503.42	-734.61	1,589.57	0.00	0.00	0.00	
9,200.00	90.37	0.23	7,359.61	1,603.41	-734.21	1,688.58	0.00	0.00	0.00	
9,300.00	90.37	0.23	7,358.95	1,703.41	-733.81	1,787.58	0.00	0.00	0.00	
9,400.00	90.37	0.23	7,358.30	1,803.41	-733.41	1,886.59	0.00	0.00	0.00	
9,500.00	90.37	0.23	7,357.65	1,903.41	-733.01	1,985.60	0.00	0.00	0.00	
9,600.00	90.37	0.23	7,357.00	2,003.40	-732.60	2,084.61	0.00	0.00	0.00	
9,700.00	90.37	0.23	7,356.35	2,103.40	-732.20	2,183.61	0.00	0.00	0.00	
9,800.00	90.37	0.23	7,355.70	2,203.40	-731.80	2,282.62	0.00	0.00	0.00	
9,900.00	90.37	0.23	7,355.05	2,303.39	-731.40	2,381.63	0.00	0.00	0.00	
10,000.00	90.37	0.23	7,354.39	2,403.39	-731.00	2,480.64	0.00	0.00	0.00	
10,100.00	90.37	0.23	7,353.74	2,503.39	-730.60	2,579.64	0.00	0.00	0.00	
10,200.00	90.37	0.23	7,353.09	2,603.38	-730.20	2,678.65	0.00	0.00	0.00	
10,300.00	90.37	0.23	7,352.44	2,703.38	-729.79	2,777.66	0.00	0.00	0.00	
10,400.00	90.37	0.23	7,351.79	2,803.38	-729.39	2,876.67	0.00	0.00	0.00	
10,500.00	90.37	0.23	7,351.14	2,903.38	-728.99	2,975.68	0.00	0.00	0.00	
10,600.00	90.37	0.23	7,350.49	3,003.37	-728.59	3,074.68	0.00	0.00	0.00	
10,700.00	90.37	0.23	7,349.83	3,103.37	-728.19	3,173.69	0.00	0.00	0.00	
10,800.00	90.37	0.23	7,349.18	3,203.37	-727.79	3,272.70	0.00	0.00	0.00	
10,900.00	90.37	0.23	7,348.53	3,303.36	-727.39	3,371.71	0.00	0.00	0.00	
11,000.00	90.37	0.23	7,347.88	3,403.36	-726.98	3,470.71	0.00	0.00	0.00	
11,100.00	90.37	0.23	7,347.23	3,503.36	-726.58	3,569.72	0.00	0.00	0.00	
11,200.00	90.37	0.23	7,346.58	3,603.36	-726.18	3,668.73	0.00	0.00	0.00	
11,300.00	90.37	0.23	7,345.92	3,703.35	-725.78	3,767.74	0.00	0.00	0.00	
11,400.00	90.37	0.23	7,345.27	3,803.35	-725.38	3,866.74	0.00	0.00	0.00	
11,500.00	90.37	0.23	7,344.62	3,903.35	-724.98	3,965.75	0.00	0.00	0.00	
11,600.00	90.37	0.23	7,343.97	4,003.34	-724.58	4,064.76	0.00	0.00	0.00	
11,700.00	90.37	0.23	7,343.32	4,103.34	-724.17	4,163.77	0.00	0.00	0.00	
11,800.00	90.37	0.23	7,342.67	4,203.34	-723.77	4,262.78	0.00	0.00	0.00	
11,900.00	90.37	0.23	7,342.02	4,303.33	-723.37	4,361.78	0.00	0.00	0.00	
12,000.00	90.37	0.23	7,341.36	4,403.33	-722.97	4,460.79	0.00	0.00	0.00	
12,100.00	90.37	0.23	7,340.71	4,503.33	-722.57	4,559.80	0.00	0.00	0.00	
12,200.00	90.37	0.23	7,340.06	4,603.33	-722.17	4,658.81	0.00	0.00	0.00	
12,300.00	90.37	0.23	7,339.41	4,703.32	-721.77	4,757.81	0.00	0.00	0.00	
12,400.00	90.37	0.23	7,338.76	4,803.32	-721.36	4,856.82	0.00	0.00	0.00	
12,500.00	90.37	0.23	7,338.11	4,903.32	-720.96	4,955.83	0.00	0.00	0.00	
12,600.00	90.37	0.23	7,337.46	5,003.31	-720.56	5,054.84	0.00	0.00	0.00	
12,700.00	90.37	0.23	7,336.80	5,103.31	-720.16	5,153.84	0.00	0.00	0.00	
12,800.00	90.37	0.23	7,336.15	5,203.31	-719.76	5,252.85	0.00	0.00	0.00	
12,823.45	90.37	0.23	7,336.00	5,226.75	-719.66	5,276.07	0.00	0.00	0.00	
<b>TD at 12823.45 - BROWN 37N-26HZ BHL</b>										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
BROWN 37N-26HZ BHL	0.00	0.00	7,336.00	5,226.75	-719.66	1,313,066.14	3,212,417.89	40.190263	-104.739650	
- hit/miss target										
- Shape										
- plan hits target center										
- Point										

# Anadarko Petroleum Corp

## Planning Report

<b>Database:</b>	edmp	<b>Local Co-ordinate Reference:</b>	Well BROWN 37N-26HZ
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	GL + 17' RKB @ 5070.00ft
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	GL + 17' RKB @ 5070.00ft
<b>Site:</b>	WELD_BROWN 16-35HZ Pad	<b>North Reference:</b>	True
<b>Well:</b>	BROWN 37N-26HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	BROWN 37N-26HZ		
<b>Design:</b>	BROWN 37N-26HZ (wp02)		

Casing Points						
Measured Depth (ft)	Vertical Depth (ft)		Name	Casing Diameter (")	Hole Diameter (")	
700.00	700.00	9 5/8"		9-5/8	12-1/4	
7,757.93	7,369.00	7"		7	8-3/4	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,378.12	3,357.00	PARKMAN		0.00		
4,577.56	4,545.00	SUSSEX		0.00		
7,246.68	7,160.00	SHARON SPRINGS		0.00		
7,351.26	7,234.00	NIOBRARA		0.00		

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
900.00	900.00	0.00	0.00	Start Build 2.00	
1,295.98	1,294.72	-14.37	-23.24	Start 5516.46 hold at 1295.98 MD	
6,812.44	6,758.57	-414.00	-669.78	Start DLS 10.00 TFO 121.66	
7,758.26	7,369.00	161.72	-740.00	Start 5065.19 hold at 7758.26 MD	
12,823.45	7,336.00	5,226.75	-719.66	TD at 12823.45	