

# **US ROCKIES REGION PLANNING**

**COLORADO NORTHERN ZONE - 83**

**WELD\_NILES 14-28HZ PAD**

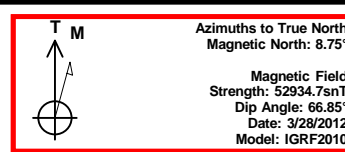
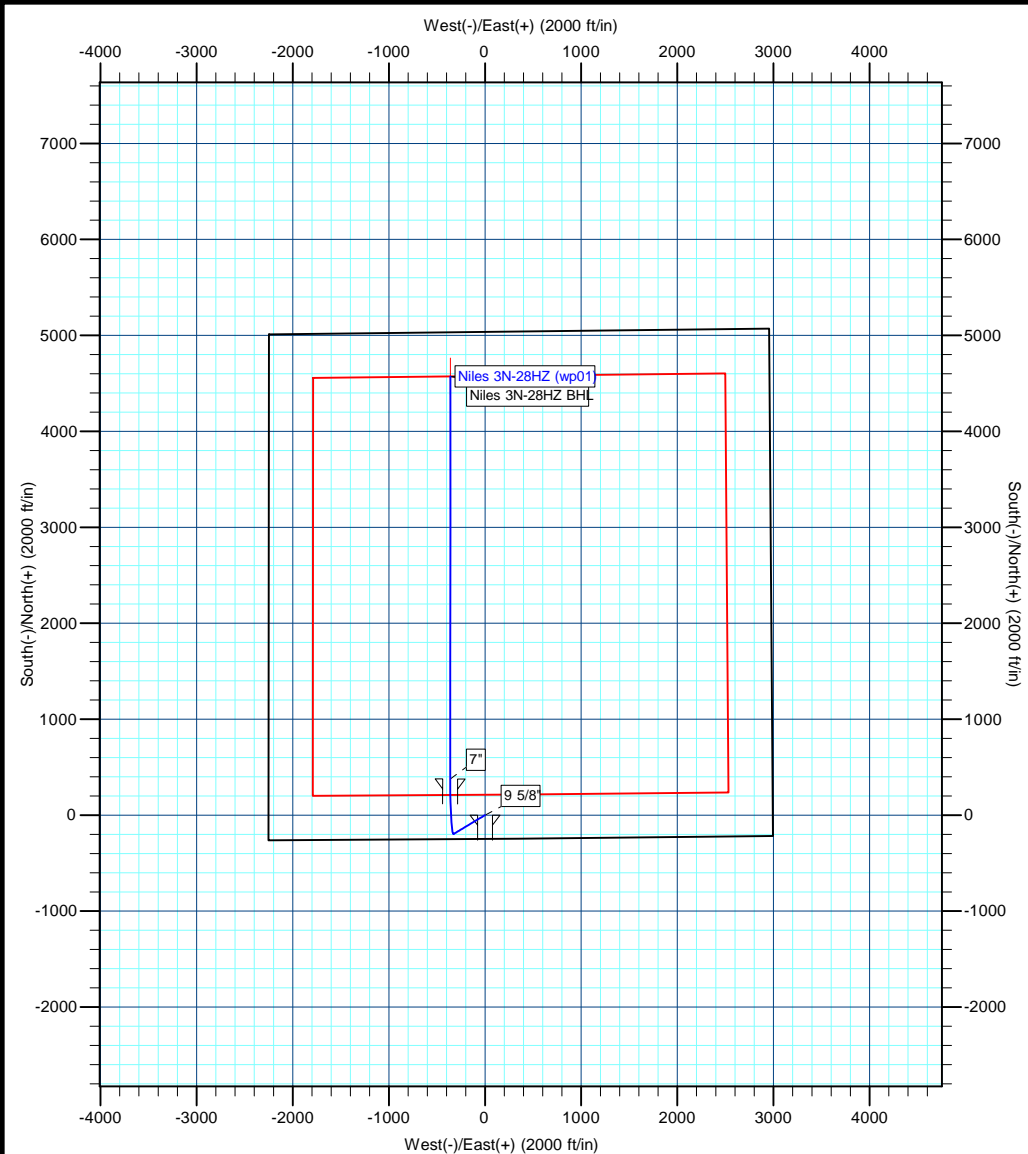
**Niles 3N-28HZ**

**Niles 3N-28HZ**

**Plan: Niles 3N-28HZ (wp01)**

## **Standard Planning Report**

**28 March, 2012**



Project: COLORADO NORTHERN ZONE - 83  
Site: WELD NILES 14-28HZ PAD  
Well: Niles 3N-28HZ  
Wellbore: Niles 3N-28HZ  
Section:  
SHL:  
Design: Niles 3N-28HZ (wp01)  
Latitude: 40.189390  
Longitude: -104.783544  
GL: 4959.00  
KB: GL + RKB @ 4984.00ft

#### WELL DETAILS: Niles 3N-28HZ

+N/-S	+E/-W	Northing	Ground Level: Easting	4959.00 Latitude	Longitude	Slot
0.00	0.00	1312646.02	3200158.13	40.189390	-104.783544	

#### 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
1100.00	0.00	0.00	1100.00	0.00	0.00	0.00	0.00	0.00
1301.39	4.03	238.84	1301.23	-3.66	-6.05	2.00	238.84	-3.18
6619.57	4.03	238.84	6606.26	-196.98	-325.70	0.00	0.00	-170.94
7539.80	89.94	0.04	7199.00	375.00	-361.00	10.00	121.14	402.05
7540.44	89.93	0.04	7199.00	375.65	-361.00	1.00	149.84	402.69
11735.84	89.93	0.04	7204.00	4571.04	-358.09	0.00	0.00	4585.04

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

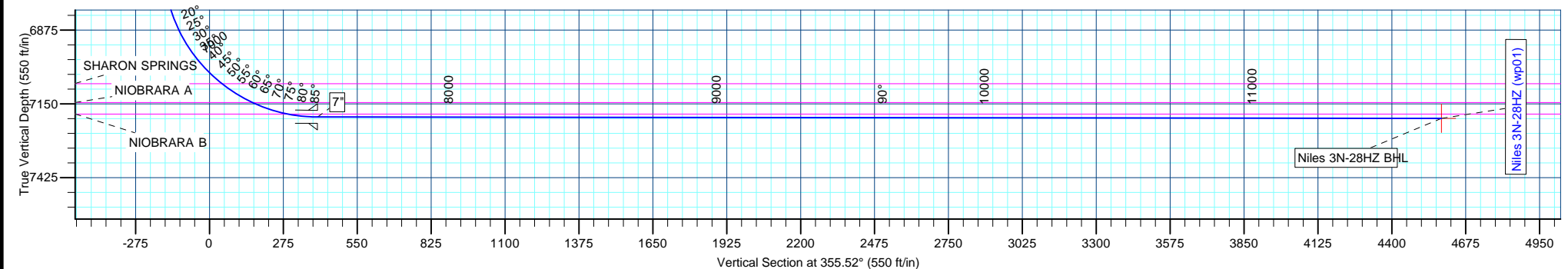
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
Niles 3N-28HZ BHL	7204.00	4571.04	-358.09	40.201938	-104.784826	Point

#### FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3969.00	3975.77	PARKMAN
4393.00	4400.82	SUSSEX
7075.00	7155.96	SHARON SPRINGS
7145.00	7289.44	NIOBRARA A
7188.00	7427.87	NIOBRARA B

#### CASING DETAILS

TVD	MD	Name	Size
900.00	900.00	9 5/8"	9-5/8
7199.00	7539.80	7"	7



# Anadarko Petroleum Corp

## Planning Report

<b>Database:</b>	edmp	<b>Local Co-ordinate Reference:</b>	Well Niles 3N-28HZ
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	GL + RKB @ 4984.00ft
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	GL + RKB @ 4984.00ft
<b>Site:</b>	WELD_NILES 14-28HZ PAD	<b>North Reference:</b>	True
<b>Well:</b>	Niles 3N-28HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Niles 3N-28HZ		
<b>Design:</b>	Niles 3N-28HZ (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		

Site		WELD_NILES 14-28HZ PAD			
Site Position:		Northing:	1,312,646.02 usft	Latitude:	40.189390
From:	Lat/Long	Easting:	3,200,158.13 usft	Longitude:	-104.783544
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence:	0.46 °

Well	Niles 3N-28HZ					
Well Position	+N/-S	0.00 ft	Northing:	1,312,646.02 usft	Latitude:	40.189390
	+E/-W	0.00 ft	Easting:	3,200,158.13 usft	Longitude:	-104.783544
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	4,959.00 ft

<b>Wellbore</b>	Niles 3N-28HZ				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	3/28/2012	8.75	66.85	52,935

<b>Design</b>	Niles 3N-28HZ (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	355.52

<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	
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,301.39	4.03	238.84	1,301.23	-3.66	-6.05	2.00	2.00	0.00	238.84	
6,619.57	4.03	238.84	6,606.26	-196.98	-325.70	0.00	0.00	0.00	0.00	
7,539.80	89.94	0.04	7,199.00	375.00	-361.00	10.00	9.34	13.17	121.14	
7,540.44	89.93	0.04	7,199.00	375.65	-361.00	1.00	-0.86	0.50	149.84	
11,735.84	89.93	0.04	7,204.00	4,571.04	-358.09	0.00	0.00	0.00	0.00	Niles 3N-28HZ BHL

# Anadarko Petroleum Corp

## Planning Report

<b>Database:</b>	edmp	<b>Local Co-ordinate Reference:</b>	Well Niles 3N-28HZ
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	GL + RKB @ 4984.00ft
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	GL + RKB @ 4984.00ft
<b>Site:</b>	WELD_NILES 14-28HZ PAD	<b>North Reference:</b>	True
<b>Well:</b>	Niles 3N-28HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Niles 3N-28HZ		
<b>Design:</b>	Niles 3N-28HZ (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
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
9 5/8"									
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
Start Build 2.00									
1,200.00	2.00	238.84	1,199.98	-0.90	-1.49	-0.78	2.00	2.00	0.00
1,300.00	4.00	238.84	1,299.84	-3.61	-5.97	-3.13	2.00	2.00	0.00
1,301.39	4.03	238.84	1,301.23	-3.66	-6.05	-3.18	2.00	2.00	0.00
Start 5318.17 hold at 1301.39 MD									
1,400.00	4.03	238.84	1,399.59	-7.25	-11.98	-6.29	0.00	0.00	0.00
1,500.00	4.03	238.84	1,499.34	-10.88	-17.99	-9.44	0.00	0.00	0.00
1,600.00	4.03	238.84	1,599.10	-14.52	-24.00	-12.60	0.00	0.00	0.00
1,700.00	4.03	238.84	1,698.85	-18.15	-30.01	-15.75	0.00	0.00	0.00
1,800.00	4.03	238.84	1,798.60	-21.79	-36.02	-18.91	0.00	0.00	0.00
1,900.00	4.03	238.84	1,898.36	-25.42	-42.03	-22.06	0.00	0.00	0.00
2,000.00	4.03	238.84	1,998.11	-29.06	-48.04	-25.21	0.00	0.00	0.00
2,100.00	4.03	238.84	2,097.86	-32.69	-54.05	-28.37	0.00	0.00	0.00
2,200.00	4.03	238.84	2,197.61	-36.33	-60.07	-31.52	0.00	0.00	0.00
2,300.00	4.03	238.84	2,297.37	-39.96	-66.08	-34.68	0.00	0.00	0.00
2,400.00	4.03	238.84	2,397.12	-43.60	-72.09	-37.83	0.00	0.00	0.00
2,500.00	4.03	238.84	2,496.87	-47.23	-78.10	-40.99	0.00	0.00	0.00
2,600.00	4.03	238.84	2,596.63	-50.87	-84.11	-44.14	0.00	0.00	0.00
2,700.00	4.03	238.84	2,696.38	-54.50	-90.12	-47.30	0.00	0.00	0.00
2,800.00	4.03	238.84	2,796.13	-58.14	-96.13	-50.45	0.00	0.00	0.00
2,900.00	4.03	238.84	2,895.89	-61.77	-102.14	-53.61	0.00	0.00	0.00
3,000.00	4.03	238.84	2,995.64	-65.41	-108.15	-56.76	0.00	0.00	0.00
3,100.00	4.03	238.84	3,095.39	-69.04	-114.16	-59.91	0.00	0.00	0.00
3,200.00	4.03	238.84	3,195.14	-72.68	-120.17	-63.07	0.00	0.00	0.00
3,300.00	4.03	238.84	3,294.90	-76.31	-126.18	-66.22	0.00	0.00	0.00
3,400.00	4.03	238.84	3,394.65	-79.95	-132.19	-69.38	0.00	0.00	0.00
3,500.00	4.03	238.84	3,494.40	-83.58	-138.20	-72.53	0.00	0.00	0.00
3,600.00	4.03	238.84	3,594.16	-87.22	-144.21	-75.69	0.00	0.00	0.00
3,700.00	4.03	238.84	3,693.91	-90.85	-150.22	-78.84	0.00	0.00	0.00
3,800.00	4.03	238.84	3,793.66	-94.49	-156.23	-82.00	0.00	0.00	0.00
3,900.00	4.03	238.84	3,893.42	-98.12	-162.24	-85.15	0.00	0.00	0.00
3,975.77	4.03	238.84	3,969.00	-100.87	-166.80	-87.54	0.00	0.00	0.00
PARKMAN									
4,000.00	4.03	238.84	3,993.17	-101.76	-168.25	-88.30	0.00	0.00	0.00
4,100.00	4.03	238.84	4,092.92	-105.39	-174.26	-91.46	0.00	0.00	0.00
4,200.00	4.03	238.84	4,192.67	-109.03	-180.27	-94.61	0.00	0.00	0.00
4,300.00	4.03	238.84	4,292.43	-112.66	-186.29	-97.77	0.00	0.00	0.00
4,400.00	4.03	238.84	4,392.18	-116.30	-192.30	-100.92	0.00	0.00	0.00
4,400.82	4.03	238.84	4,393.00	-116.33	-192.35	-100.95	0.00	0.00	0.00
SUSSEX									
4,500.00	4.03	238.84	4,491.93	-119.93	-198.31	-104.08	0.00	0.00	0.00

# Anadarko Petroleum Corp

## Planning Report

<b>Database:</b>	edmp	<b>Local Co-ordinate Reference:</b>	Well Niles 3N-28HZ
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	GL + RKB @ 4984.00ft
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	GL + RKB @ 4984.00ft
<b>Site:</b>	WELD_NILES 14-28HZ PAD	<b>North Reference:</b>	True
<b>Well:</b>	Niles 3N-28HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Niles 3N-28HZ		
<b>Design:</b>	Niles 3N-28HZ (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)
4,600.00	4.03	238.84	4,591.69	-123.57	-204.32	-107.23	0.00	0.00	0.00
4,700.00	4.03	238.84	4,691.44	-127.20	-210.33	-110.39	0.00	0.00	0.00
4,800.00	4.03	238.84	4,791.19	-130.84	-216.34	-113.54	0.00	0.00	0.00
4,900.00	4.03	238.84	4,890.95	-134.47	-222.35	-116.69	0.00	0.00	0.00
5,000.00	4.03	238.84	4,990.70	-138.11	-228.36	-119.85	0.00	0.00	0.00
5,100.00	4.03	238.84	5,090.45	-141.74	-234.37	-123.00	0.00	0.00	0.00
5,200.00	4.03	238.84	5,190.20	-145.38	-240.38	-126.16	0.00	0.00	0.00
5,300.00	4.03	238.84	5,289.96	-149.01	-246.39	-129.31	0.00	0.00	0.00
5,400.00	4.03	238.84	5,389.71	-152.65	-252.40	-132.47	0.00	0.00	0.00
5,500.00	4.03	238.84	5,489.46	-156.28	-258.41	-135.62	0.00	0.00	0.00
5,600.00	4.03	238.84	5,589.22	-159.92	-264.42	-138.78	0.00	0.00	0.00
5,700.00	4.03	238.84	5,688.97	-163.55	-270.43	-141.93	0.00	0.00	0.00
5,800.00	4.03	238.84	5,788.72	-167.19	-276.44	-145.08	0.00	0.00	0.00
5,900.00	4.03	238.84	5,888.48	-170.82	-282.45	-148.24	0.00	0.00	0.00
6,000.00	4.03	238.84	5,988.23	-174.46	-288.46	-151.39	0.00	0.00	0.00
6,100.00	4.03	238.84	6,087.98	-178.09	-294.47	-154.55	0.00	0.00	0.00
6,200.00	4.03	238.84	6,187.73	-181.73	-300.48	-157.70	0.00	0.00	0.00
6,300.00	4.03	238.84	6,287.49	-185.36	-306.49	-160.86	0.00	0.00	0.00
6,400.00	4.03	238.84	6,387.24	-189.00	-312.51	-164.01	0.00	0.00	0.00
6,500.00	4.03	238.84	6,486.99	-192.63	-318.52	-167.17	0.00	0.00	0.00
6,600.00	4.03	238.84	6,586.75	-196.27	-324.53	-170.32	0.00	0.00	0.00
6,619.57	4.03	238.84	6,606.26	-196.98	-325.70	-170.94	0.00	0.00	0.00
<b>Start DLS 10.00 TFO 121.14</b>									
6,700.00	6.88	330.10	6,686.44	-194.26	-330.53	-167.85	10.00	3.55	113.46
6,800.00	16.32	348.17	6,784.32	-175.27	-336.41	-148.46	10.00	9.44	18.07
6,900.00	26.17	353.00	6,877.41	-139.54	-341.99	-112.41	10.00	9.85	4.83
7,000.00	36.10	355.30	6,962.90	-88.16	-347.11	-60.79	10.00	9.93	2.30
7,100.00	46.06	356.71	7,038.19	-22.69	-351.59	4.84	10.00	9.96	1.41
7,155.96	51.64	357.31	7,075.00	19.36	-353.78	46.94	10.00	9.97	1.06
<b>SHARON SPRINGS</b>									
7,200.00	56.03	357.71	7,100.99	54.88	-355.32	82.46	10.00	9.97	0.92
7,289.44	64.95	358.43	7,145.00	132.59	-357.92	160.14	10.00	9.98	0.80
<b>NIORARA A</b>									
7,300.00	66.00	358.50	7,149.38	142.20	-358.18	169.74	10.00	9.98	0.73
7,400.00	75.98	359.18	7,181.91	236.61	-360.07	264.00	10.00	9.98	0.67
7,427.87	78.76	359.35	7,188.00	263.79	-360.42	291.14	10.00	9.98	0.63
<b>NIORARA B</b>									
7,500.00	85.96	359.80	7,197.58	335.24	-360.94	362.40	10.00	9.98	0.61
7,539.80	89.94	0.04	7,199.00	375.00	-361.00	402.05	10.00	9.98	0.60
<b>Start DLS 1.00 TFO 149.84 - 7"</b>									
7,540.44	89.93	0.04	7,199.00	375.65	-361.00	402.69	1.01	-0.87	0.51
<b>Start 4195.39 hold at 7540.44 MD</b>									
7,600.00	89.93	0.04	7,199.07	435.20	-360.96	462.07	0.00	0.00	0.00
7,700.00	89.93	0.04	7,199.19	535.20	-360.89	561.75	0.00	0.00	0.00
7,800.00	89.93	0.04	7,199.31	635.20	-360.82	661.44	0.00	0.00	0.00
7,900.00	89.93	0.04	7,199.43	735.20	-360.75	761.13	0.00	0.00	0.00
8,000.00	89.93	0.04	7,199.55	835.20	-360.68	860.82	0.00	0.00	0.00
8,100.00	89.93	0.04	7,199.67	935.20	-360.61	960.51	0.00	0.00	0.00
8,200.00	89.93	0.04	7,199.79	1,035.20	-360.54	1,060.20	0.00	0.00	0.00
8,300.00	89.93	0.04	7,199.91	1,135.20	-360.47	1,159.89	0.00	0.00	0.00
8,400.00	89.93	0.04	7,200.03	1,235.20	-360.40	1,259.58	0.00	0.00	0.00
8,500.00	89.93	0.04	7,200.14	1,335.20	-360.34	1,359.27	0.00	0.00	0.00
8,600.00	89.93	0.04	7,200.26	1,435.20	-360.27	1,458.96	0.00	0.00	0.00

# Anadarko Petroleum Corp

## Planning Report

<b>Database:</b>	edmp	<b>Local Co-ordinate Reference:</b>	Well Niles 3N-28HZ
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	GL + RKB @ 4984.00ft
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	GL + RKB @ 4984.00ft
<b>Site:</b>	WELD_NILES 14-28HZ PAD	<b>North Reference:</b>	True
<b>Well:</b>	Niles 3N-28HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Niles 3N-28HZ		
<b>Design:</b>	Niles 3N-28HZ (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	89.93	0.04	7,200.38	1,535.20	-360.20	1,558.65	0.00	0.00	0.00
8,800.00	89.93	0.04	7,200.50	1,635.20	-360.13	1,658.33	0.00	0.00	0.00
8,900.00	89.93	0.04	7,200.62	1,735.20	-360.06	1,758.02	0.00	0.00	0.00
9,000.00	89.93	0.04	7,200.74	1,835.20	-359.99	1,857.71	0.00	0.00	0.00
9,100.00	89.93	0.04	7,200.86	1,935.20	-359.92	1,957.40	0.00	0.00	0.00
9,200.00	89.93	0.04	7,200.98	2,035.20	-359.85	2,057.09	0.00	0.00	0.00
9,300.00	89.93	0.04	7,201.10	2,135.20	-359.78	2,156.78	0.00	0.00	0.00
9,400.00	89.93	0.04	7,201.22	2,235.20	-359.71	2,256.47	0.00	0.00	0.00
9,500.00	89.93	0.04	7,201.34	2,335.20	-359.64	2,356.16	0.00	0.00	0.00
9,600.00	89.93	0.04	7,201.46	2,435.20	-359.57	2,455.85	0.00	0.00	0.00
9,700.00	89.93	0.04	7,201.57	2,535.20	-359.50	2,555.54	0.00	0.00	0.00
9,800.00	89.93	0.04	7,201.69	2,635.20	-359.43	2,655.22	0.00	0.00	0.00
9,900.00	89.93	0.04	7,201.81	2,735.20	-359.37	2,754.91	0.00	0.00	0.00
10,000.00	89.93	0.04	7,201.93	2,835.20	-359.30	2,854.60	0.00	0.00	0.00
10,100.00	89.93	0.04	7,202.05	2,935.20	-359.23	2,954.29	0.00	0.00	0.00
10,200.00	89.93	0.04	7,202.17	3,035.20	-359.16	3,053.98	0.00	0.00	0.00
10,300.00	89.93	0.04	7,202.29	3,135.20	-359.09	3,153.67	0.00	0.00	0.00
10,400.00	89.93	0.04	7,202.41	3,235.20	-359.02	3,253.36	0.00	0.00	0.00
10,500.00	89.93	0.04	7,202.53	3,335.20	-358.95	3,353.05	0.00	0.00	0.00
10,600.00	89.93	0.04	7,202.65	3,435.20	-358.88	3,452.74	0.00	0.00	0.00
10,700.00	89.93	0.04	7,202.77	3,535.20	-358.81	3,552.43	0.00	0.00	0.00
10,800.00	89.93	0.04	7,202.89	3,635.20	-358.74	3,652.12	0.00	0.00	0.00
10,900.00	89.93	0.04	7,203.00	3,735.20	-358.67	3,751.80	0.00	0.00	0.00
11,000.00	89.93	0.04	7,203.12	3,835.20	-358.60	3,851.49	0.00	0.00	0.00
11,100.00	89.93	0.04	7,203.24	3,935.20	-358.53	3,951.18	0.00	0.00	0.00
11,200.00	89.93	0.04	7,203.36	4,035.20	-358.47	4,050.87	0.00	0.00	0.00
11,300.00	89.93	0.04	7,203.48	4,135.20	-358.40	4,150.56	0.00	0.00	0.00
11,400.00	89.93	0.04	7,203.60	4,235.20	-358.33	4,250.25	0.00	0.00	0.00
11,500.00	89.93	0.04	7,203.72	4,335.20	-358.26	4,349.94	0.00	0.00	0.00
11,600.00	89.93	0.04	7,203.84	4,435.20	-358.19	4,449.63	0.00	0.00	0.00
11,700.00	89.93	0.04	7,203.96	4,535.20	-358.12	4,549.32	0.00	0.00	0.00
11,735.84	89.93	0.04	7,204.00	4,571.04	-358.09	4,585.04	0.00	0.00	0.00
TD at 11735.84 - Niles 3N-28HZ BHL									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
Niles 3N-28HZ BHL	0.00	0.00	7,204.00	4,571.04	-358.09	1,317,214.00	3,199,763.12	40.201938	-104.784826
- plan hits target center									
- Point									

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	
7,539.80	7,199.00	7"	7	8-3/4	

# Anadarko Petroleum Corp

## Planning Report

<b>Database:</b>	edmp	<b>Local Co-ordinate Reference:</b>	Well Niles 3N-28HZ
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	GL + RKB @ 4984.00ft
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	GL + RKB @ 4984.00ft
<b>Site:</b>	WELD_NILES 14-28HZ PAD	<b>North Reference:</b>	True
<b>Well:</b>	Niles 3N-28HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Niles 3N-28HZ		
<b>Design:</b>	Niles 3N-28HZ (wp01)		

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,975.77	3,969.00	PARKMAN		0.00	
4,400.82	4,393.00	SUSSEX		0.00	
7,155.96	7,075.00	SHARON SPRINGS		0.00	
7,289.44	7,145.00	NIOBRARA A		0.00	
7,427.87	7,188.00	NIOBRARA B		0.00	

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
1,100.00	1,100.00	0.00	0.00	Start Build 2.00
1,301.39	1,301.23	-3.66	-6.05	Start 5318.17 hold at 1301.39 MD
6,619.57	6,606.26	-196.98	-325.70	Start DLS 10.00 TFO 121.14
7,539.80	7,199.00	375.00	-361.00	Start DLS 1.00 TFO 149.84
7,540.44	7,199.00	375.65	-361.00	Start 4195.39 hold at 7540.44 MD
11,735.84	7,204.00	4,571.04	-358.09	TD at 11735.84