

# **US ROCKIES REGION PLANNING**

**COLORADO NORTHERN ZONE - 83**

**WELD\_PALYO 29-11HZ Pad**

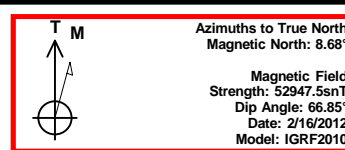
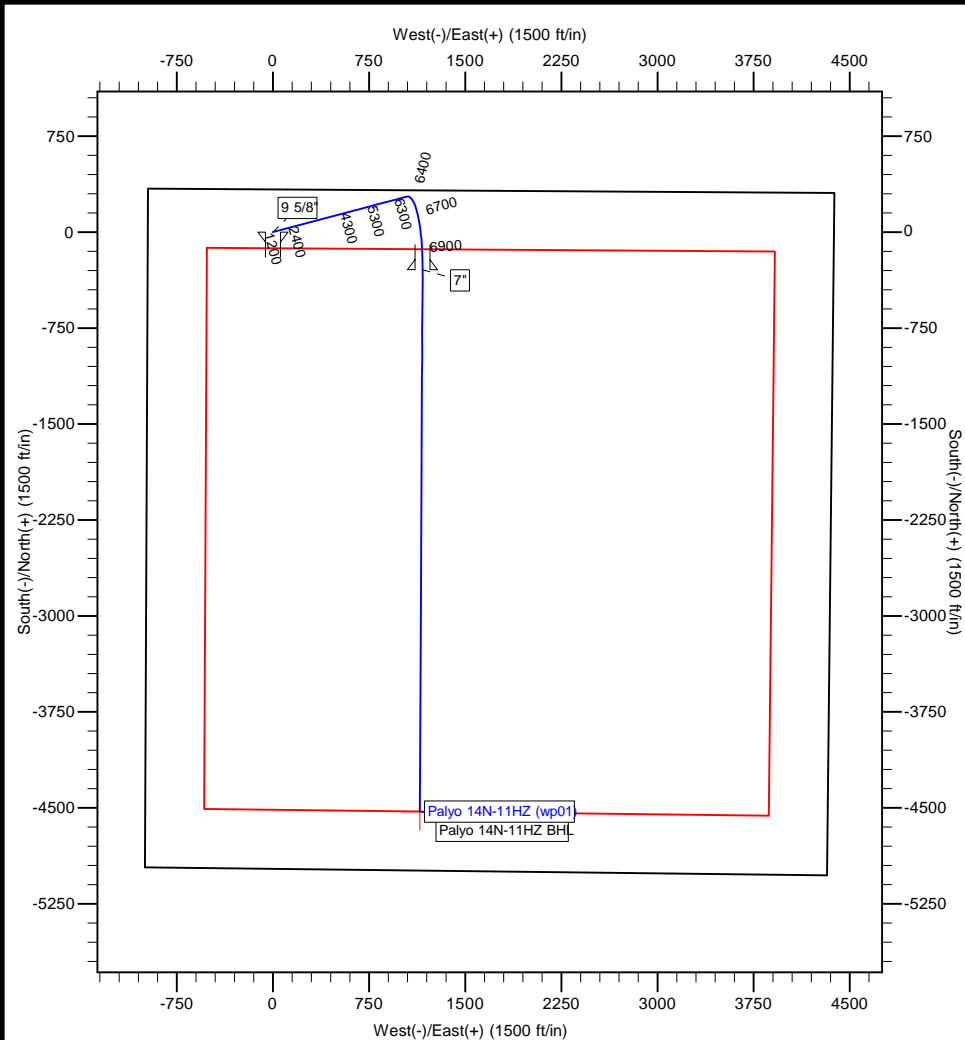
**Palyo 14N-11HZ**

**Palyo 14N-11HZ**

**Plan: Palyo 14N-11HZ (wp01)**

## **Standard Planning Report**

**21 February, 2012**



Project: COLORADO NORTHERN ZONE - 83  
 Site: WELD\_PALYO 29-11HZ Pad  
 Well: Palyo 14N-11HZ  
 Wellbore: Palyo 14N-11HZ  
 Section:  
 SHL:  
 Design: Palyo 14N-11HZ (wp01)  
 Latitude: 40.159566  
 Longitude: -104.636961  
 GL: 4850.00  
 KB: rkb + gl @ 4867.00ft

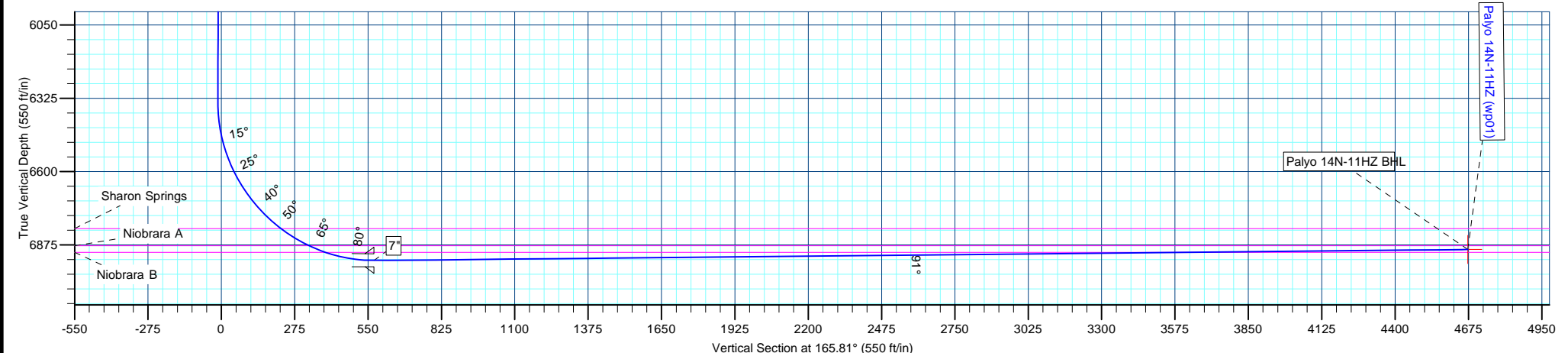
WELL DETAILS: Palyo 14N-11HZ						
+N/-S	+E/-W	Northing	Ground Level: Easting	4850.00 Latitude	Longitude	Slot
0.00	0.00	1302146.89	3241213.95	40.159566	-104.636961	

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
1718.14	12.36	75.11	1713.36	17.07	64.20	2.00	75.11	-0.81
6455.71	12.36	75.11	6341.07	277.65	1044.48	0.00	0.00	-13.10
7387.80	90.00	180.27	6933.00	-295.00	1167.00	10.00	104.82	572.10
7443.67	90.56	180.29	6932.73	-350.86	1166.73	1.00	1.95	626.20
1623.21	90.56	180.29	6892.00	-4530.16	1145.59	0.00	0.00	4672.76

WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)						
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
Palyo 14N-11HZ BHL	6892.00	-4530.16	1145.59	40.147130	-104.632863	Point

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
3819.00	3873.77	Parkman
4368.00	4435.80	Sussex
6814.00	7007.52	Sharon Springs
6878.00	7131.87	Niobrara A
6903.00	7199.50	Niobrara B

CASING DETAILS			
TVD	MD	Name	Size
850.00	850.00	9 5/8"	9-5/8
6933.00	7387.80	7"	7



# Anadarko Petroleum Corp

## Planning Report

<b>Database:</b>	edmp	<b>Local Co-ordinate Reference:</b>	Well Palyo 14N-11HZ
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	rkb + gl @ 4867.00ft
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	rkb + gl @ 4867.00ft
<b>Site:</b>	WELD_PALYO 29-11HZ Pad	<b>North Reference:</b>	True
<b>Well:</b>	Palyo 14N-11HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Palyo 14N-11HZ		
<b>Design:</b>	Palyo 14N-11HZ (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_PALYO 29-11HZ Pad			
Site Position:		Northing:	1,302,146.62 usft	Latitude:	40.159566
From:	Lat/Long	Easting:	3,241,184.04 usft	Longitude:	-104.637068
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence:	0.56 °

Well	Palyo 14N-11HZ					
Well Position	+N/-S	-0.02 ft	Northing:	1,302,146.89 usft	Latitude:	40.159566
	+E/-W	29.91 ft	Easting:	3,241,213.95 usft	Longitude:	-104.636961
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	4,850.00 ft

<b>Wellbore</b>	Palyo 14N-11HZ				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	2/16/2012	8.68	66.85	52,948

<b>Design</b>	Palyo 14N-11HZ (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	165.81

<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	
1,718.14	12.36	75.11	1,713.36	17.07	64.20	2.00	2.00	0.00	75.11	
6,455.71	12.36	75.11	6,341.07	277.65	1,044.48	0.00	0.00	0.00	0.00	
7,387.80	90.00	180.27	6,933.00	-295.00	1,167.00	10.00	8.33	11.28	104.82	
7,443.67	90.56	180.29	6,932.73	-350.86	1,166.73	1.00	1.00	0.03	1.95	
11,623.21	90.56	180.29	6,892.00	-4,530.16	1,145.59	0.00	0.00	0.00	0.00	Palyo 14N-11HZ BHL

# Anadarko Petroleum Corp

## Planning Report

<b>Database:</b>	edmp	<b>Local Co-ordinate Reference:</b>	Well Palyo 14N-11HZ
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	rkb + gl @ 4867.00ft
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	rkb + gl @ 4867.00ft
<b>Site:</b>	WELD_PALYO 29-11HZ Pad	<b>North Reference:</b>	True
<b>Well:</b>	Palyo 14N-11HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Palyo 14N-11HZ		
<b>Design:</b>	Palyo 14N-11HZ (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
850.00	0.00	0.00	850.00	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	2.00	75.11	1,199.98	0.45	1.69	-0.02	2.00	2.00	0.00
1,300.00	4.00	75.11	1,299.84	1.79	6.74	-0.08	2.00	2.00	0.00
1,400.00	6.00	75.11	1,399.45	4.03	15.17	-0.19	2.00	2.00	0.00
1,500.00	8.00	75.11	1,498.70	7.16	26.94	-0.34	2.00	2.00	0.00
1,600.00	10.00	75.11	1,597.47	11.18	42.06	-0.53	2.00	2.00	0.00
1,700.00	12.00	75.11	1,695.62	16.08	60.50	-0.76	2.00	2.00	0.00
1,718.14	12.36	75.11	1,713.36	17.07	64.20	-0.81	2.00	2.00	0.00
1,800.00	12.36	75.11	1,793.32	21.57	81.14	-1.02	0.00	0.00	0.00
1,900.00	12.36	75.11	1,891.00	27.07	101.83	-1.28	0.00	0.00	0.00
2,000.00	12.36	75.11	1,988.68	32.57	122.52	-1.54	0.00	0.00	0.00
2,100.00	12.36	75.11	2,086.36	38.07	143.21	-1.80	0.00	0.00	0.00
2,200.00	12.36	75.11	2,184.04	43.57	163.90	-2.06	0.00	0.00	0.00
2,300.00	12.36	75.11	2,281.72	49.07	184.60	-2.32	0.00	0.00	0.00
2,400.00	12.36	75.11	2,379.40	54.57	205.29	-2.58	0.00	0.00	0.00
2,500.00	12.36	75.11	2,477.08	60.07	225.98	-2.84	0.00	0.00	0.00
2,600.00	12.36	75.11	2,574.77	65.57	246.67	-3.09	0.00	0.00	0.00
2,700.00	12.36	75.11	2,672.45	71.07	267.36	-3.35	0.00	0.00	0.00
2,800.00	12.36	75.11	2,770.13	76.57	288.05	-3.61	0.00	0.00	0.00
2,900.00	12.36	75.11	2,867.81	82.07	308.75	-3.87	0.00	0.00	0.00
3,000.00	12.36	75.11	2,965.49	87.57	329.44	-4.13	0.00	0.00	0.00
3,100.00	12.36	75.11	3,063.17	93.07	350.13	-4.39	0.00	0.00	0.00
3,200.00	12.36	75.11	3,160.85	98.57	370.82	-4.65	0.00	0.00	0.00
3,300.00	12.36	75.11	3,258.53	104.07	391.51	-4.91	0.00	0.00	0.00
3,400.00	12.36	75.11	3,356.21	109.57	412.20	-5.17	0.00	0.00	0.00
3,500.00	12.36	75.11	3,453.90	115.07	432.89	-5.43	0.00	0.00	0.00
3,600.00	12.36	75.11	3,551.58	120.57	453.59	-5.69	0.00	0.00	0.00
3,700.00	12.36	75.11	3,649.26	126.07	474.28	-5.95	0.00	0.00	0.00
3,800.00	12.36	75.11	3,746.94	131.57	494.97	-6.21	0.00	0.00	0.00
3,873.77	12.36	75.11	3,819.00	135.63	510.23	-6.40	0.00	0.00	0.00
Parkman									
3,900.00	12.36	75.11	3,844.62	137.07	515.66	-6.47	0.00	0.00	0.00
4,000.00	12.36	75.11	3,942.30	142.57	536.35	-6.73	0.00	0.00	0.00
4,100.00	12.36	75.11	4,039.98	148.08	557.04	-6.99	0.00	0.00	0.00
4,200.00	12.36	75.11	4,137.66	153.58	577.74	-7.25	0.00	0.00	0.00
4,300.00	12.36	75.11	4,235.35	159.08	598.43	-7.51	0.00	0.00	0.00
4,400.00	12.36	75.11	4,333.03	164.58	619.12	-7.77	0.00	0.00	0.00
4,435.80	12.36	75.11	4,368.00	166.55	626.53	-7.86	0.00	0.00	0.00
Sussex									
4,500.00	12.36	75.11	4,430.71	170.08	639.81	-8.03	0.00	0.00	0.00

# Anadarko Petroleum Corp

## Planning Report

<b>Database:</b>	edmp	<b>Local Co-ordinate Reference:</b>	Well Palyo 14N-11HZ
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	rkb + gl @ 4867.00ft
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	rkb + gl @ 4867.00ft
<b>Site:</b>	WELD_PALYO 29-11HZ Pad	<b>North Reference:</b>	True
<b>Well:</b>	Palyo 14N-11HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Palyo 14N-11HZ		
<b>Design:</b>	Palyo 14N-11HZ (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	12.36	75.11	4,528.39	175.58	660.50	-8.29	0.00	0.00	0.00
4,700.00	12.36	75.11	4,626.07	181.08	681.19	-8.55	0.00	0.00	0.00
4,800.00	12.36	75.11	4,723.75	186.58	701.88	-8.81	0.00	0.00	0.00
4,900.00	12.36	75.11	4,821.43	192.08	722.58	-9.07	0.00	0.00	0.00
5,000.00	12.36	75.11	4,919.11	197.58	743.27	-9.33	0.00	0.00	0.00
5,100.00	12.36	75.11	5,016.79	203.08	763.96	-9.58	0.00	0.00	0.00
5,200.00	12.36	75.11	5,114.48	208.58	784.65	-9.84	0.00	0.00	0.00
5,300.00	12.36	75.11	5,212.16	214.08	805.34	-10.10	0.00	0.00	0.00
5,400.00	12.36	75.11	5,309.84	219.58	826.03	-10.36	0.00	0.00	0.00
5,500.00	12.36	75.11	5,407.52	225.08	846.72	-10.62	0.00	0.00	0.00
5,600.00	12.36	75.11	5,505.20	230.58	867.42	-10.88	0.00	0.00	0.00
5,700.00	12.36	75.11	5,602.88	236.08	888.11	-11.14	0.00	0.00	0.00
5,800.00	12.36	75.11	5,700.56	241.58	908.80	-11.40	0.00	0.00	0.00
5,900.00	12.36	75.11	5,798.24	247.08	929.49	-11.66	0.00	0.00	0.00
6,000.00	12.36	75.11	5,895.93	252.58	950.18	-11.92	0.00	0.00	0.00
6,100.00	12.36	75.11	5,993.61	258.08	970.87	-12.18	0.00	0.00	0.00
6,200.00	12.36	75.11	6,091.29	263.58	991.57	-12.44	0.00	0.00	0.00
6,300.00	12.36	75.11	6,188.97	269.08	1,012.26	-12.70	0.00	0.00	0.00
6,400.00	12.36	75.11	6,286.65	274.58	1,032.95	-12.96	0.00	0.00	0.00
6,455.71	12.36	75.11	6,341.07	277.65	1,044.48	-13.10	0.00	0.00	0.00
6,500.00	12.01	96.14	6,384.38	278.37	1,053.64	-11.56	10.00	-0.80	47.49
6,600.00	16.33	134.05	6,481.52	267.45	1,074.14	4.05	10.00	4.33	37.91
6,700.00	24.22	152.21	6,575.34	239.46	1,093.86	36.02	10.00	7.88	18.16
6,800.00	33.21	161.42	6,662.99	195.25	1,112.19	83.38	10.00	9.00	9.21
6,900.00	42.62	166.98	6,741.82	136.16	1,128.59	144.69	10.00	9.41	5.56
7,000.00	52.21	170.83	6,809.43	63.98	1,142.55	218.08	10.00	9.59	3.85
7,007.52	52.94	171.08	6,814.00	58.08	1,143.49	224.03	10.00	9.65	3.28
Sharon Springs									
7,100.00	61.90	173.78	6,863.76	-19.08	1,153.65	301.33	10.00	9.69	2.93
7,131.87	65.00	174.61	6,878.00	-47.44	1,156.53	329.53	10.00	9.73	2.59
Niobrara A									
7,199.50	71.59	176.23	6,903.00	-110.04	1,161.53	391.45	10.00	9.75	2.40
Niobrara B									
7,200.00	71.64	176.24	6,903.16	-110.51	1,161.56	391.91	10.00	9.76	2.30
7,300.00	81.41	178.44	6,926.43	-207.53	1,166.02	487.07	10.00	9.77	2.19
7,387.80	90.00	180.27	6,933.00	-295.00	1,167.00	572.10	10.00	9.78	2.09
7"									
7,400.00	90.12	180.27	6,932.99	-307.20	1,166.94	583.91	1.00	1.00	0.03
7,443.67	90.56	180.29	6,932.73	-350.86	1,166.73	626.20	1.00	1.00	0.03
7,500.00	90.56	180.29	6,932.18	-407.19	1,166.44	680.73	0.00	0.00	0.00
7,600.00	90.56	180.29	6,931.20	-507.19	1,165.94	777.55	0.00	0.00	0.00
7,700.00	90.56	180.29	6,930.23	-607.18	1,165.43	874.37	0.00	0.00	0.00
7,800.00	90.56	180.29	6,929.26	-707.17	1,164.93	971.19	0.00	0.00	0.00
7,900.00	90.56	180.29	6,928.28	-807.17	1,164.42	1,068.01	0.00	0.00	0.00
8,000.00	90.56	180.29	6,927.31	-907.16	1,163.91	1,164.83	0.00	0.00	0.00
8,100.00	90.56	180.29	6,926.33	-1,007.16	1,163.41	1,261.64	0.00	0.00	0.00
8,200.00	90.56	180.29	6,925.36	-1,107.15	1,162.90	1,358.46	0.00	0.00	0.00
8,300.00	90.56	180.29	6,924.38	-1,207.14	1,162.40	1,455.28	0.00	0.00	0.00
8,400.00	90.56	180.29	6,923.41	-1,307.14	1,161.89	1,552.10	0.00	0.00	0.00
8,500.00	90.56	180.29	6,922.43	-1,407.13	1,161.39	1,648.92	0.00	0.00	0.00
8,600.00	90.56	180.29	6,921.46	-1,507.13	1,160.88	1,745.74	0.00	0.00	0.00
8,700.00	90.56	180.29	6,920.49	-1,607.12	1,160.37	1,842.56	0.00	0.00	0.00
8,800.00	90.56	180.29	6,919.51	-1,707.11	1,159.87	1,939.37	0.00	0.00	0.00
8,900.00	90.56	180.29	6,918.54	-1,807.11	1,159.36	2,036.19	0.00	0.00	0.00

# Anadarko Petroleum Corp

## Planning Report

<b>Database:</b>	edmp	<b>Local Co-ordinate Reference:</b>	Well Palyo 14N-11HZ
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	rkb + gl @ 4867.00ft
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	rkb + gl @ 4867.00ft
<b>Site:</b>	WELD_PALYO 29-11HZ Pad	<b>North Reference:</b>	True
<b>Well:</b>	Palyo 14N-11HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Palyo 14N-11HZ		
<b>Design:</b>	Palyo 14N-11HZ (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)	
9,000.00	90.56	180.29	6,917.56	-1,907.10	1,158.86	2,133.01	0.00	0.00	0.00	
9,100.00	90.56	180.29	6,916.59	-2,007.10	1,158.35	2,229.83	0.00	0.00	0.00	
9,200.00	90.56	180.29	6,915.61	-2,107.09	1,157.85	2,326.65	0.00	0.00	0.00	
9,300.00	90.56	180.29	6,914.64	-2,207.08	1,157.34	2,423.47	0.00	0.00	0.00	
9,400.00	90.56	180.29	6,913.66	-2,307.08	1,156.84	2,520.28	0.00	0.00	0.00	
9,500.00	90.56	180.29	6,912.69	-2,407.07	1,156.33	2,617.10	0.00	0.00	0.00	
9,600.00	90.56	180.29	6,911.72	-2,507.07	1,155.82	2,713.92	0.00	0.00	0.00	
9,700.00	90.56	180.29	6,910.74	-2,607.06	1,155.32	2,810.74	0.00	0.00	0.00	
9,800.00	90.56	180.29	6,909.77	-2,707.05	1,154.81	2,907.56	0.00	0.00	0.00	
9,900.00	90.56	180.29	6,908.79	-2,807.05	1,154.31	3,004.38	0.00	0.00	0.00	
10,000.00	90.56	180.29	6,907.82	-2,907.04	1,153.80	3,101.19	0.00	0.00	0.00	
10,100.00	90.56	180.29	6,906.84	-3,007.03	1,153.30	3,198.01	0.00	0.00	0.00	
10,200.00	90.56	180.29	6,905.87	-3,107.03	1,152.79	3,294.83	0.00	0.00	0.00	
10,300.00	90.56	180.29	6,904.89	-3,207.02	1,152.29	3,391.65	0.00	0.00	0.00	
10,400.00	90.56	180.29	6,903.92	-3,307.02	1,151.78	3,488.47	0.00	0.00	0.00	
10,500.00	90.56	180.29	6,902.95	-3,407.01	1,151.27	3,585.29	0.00	0.00	0.00	
10,600.00	90.56	180.29	6,901.97	-3,507.00	1,150.77	3,682.10	0.00	0.00	0.00	
10,700.00	90.56	180.29	6,901.00	-3,607.00	1,150.26	3,778.92	0.00	0.00	0.00	
10,800.00	90.56	180.29	6,900.02	-3,706.99	1,149.76	3,875.74	0.00	0.00	0.00	
10,900.00	90.56	180.29	6,899.05	-3,806.99	1,149.25	3,972.56	0.00	0.00	0.00	
11,000.00	90.56	180.29	6,898.07	-3,906.98	1,148.75	4,069.38	0.00	0.00	0.00	
11,100.00	90.56	180.29	6,897.10	-4,006.97	1,148.24	4,166.20	0.00	0.00	0.00	
11,200.00	90.56	180.29	6,896.12	-4,106.97	1,147.73	4,263.01	0.00	0.00	0.00	
11,300.00	90.56	180.29	6,895.15	-4,206.96	1,147.23	4,359.83	0.00	0.00	0.00	
11,400.00	90.56	180.29	6,894.18	-4,306.96	1,146.72	4,456.65	0.00	0.00	0.00	
11,500.00	90.56	180.29	6,893.20	-4,406.95	1,146.22	4,553.47	0.00	0.00	0.00	
11,600.00	90.56	180.29	6,892.23	-4,506.94	1,145.71	4,650.29	0.00	0.00	0.00	
11,623.21	90.56	180.29	6,892.00	-4,530.16	1,145.59	4,672.76	0.00	0.00	0.00	
Palyo 14N-11HZ 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									
Palyo 14N-11HZ BHL	0.00	0.00	6,892.00	-4,530.16	1,145.59	1,297,628.11	3,242,403.58	40.147130	-104.632863
- plan hits target center									
- Point									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
850.00	850.00	9 5/8"	9-5/8	12-1/4	
7,387.80	6,933.00	7"	7	8-3/4	

# Anadarko Petroleum Corp

## Planning Report

<b>Database:</b>	edmp	<b>Local Co-ordinate Reference:</b>	Well Palyo 14N-11HZ
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	rkb + gl @ 4867.00ft
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	rkb + gl @ 4867.00ft
<b>Site:</b>	WELD_PALYO 29-11HZ Pad	<b>North Reference:</b>	True
<b>Well:</b>	Palyo 14N-11HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Palyo 14N-11HZ		
<b>Design:</b>	Palyo 14N-11HZ (wp01)		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,873.77	3,819.00	Parkman				
4,435.80	4,368.00	Sussex				
7,007.52	6,814.00	Sharon Springs				
7,131.87	6,878.00	Niobrara A				
7,199.50	6,903.00	Niobrara B				