

US ROCKIES REGION PLANNING

COLORADO NORTHERN ZONE - 83

WELD_PALYO 4-11HZ Pad

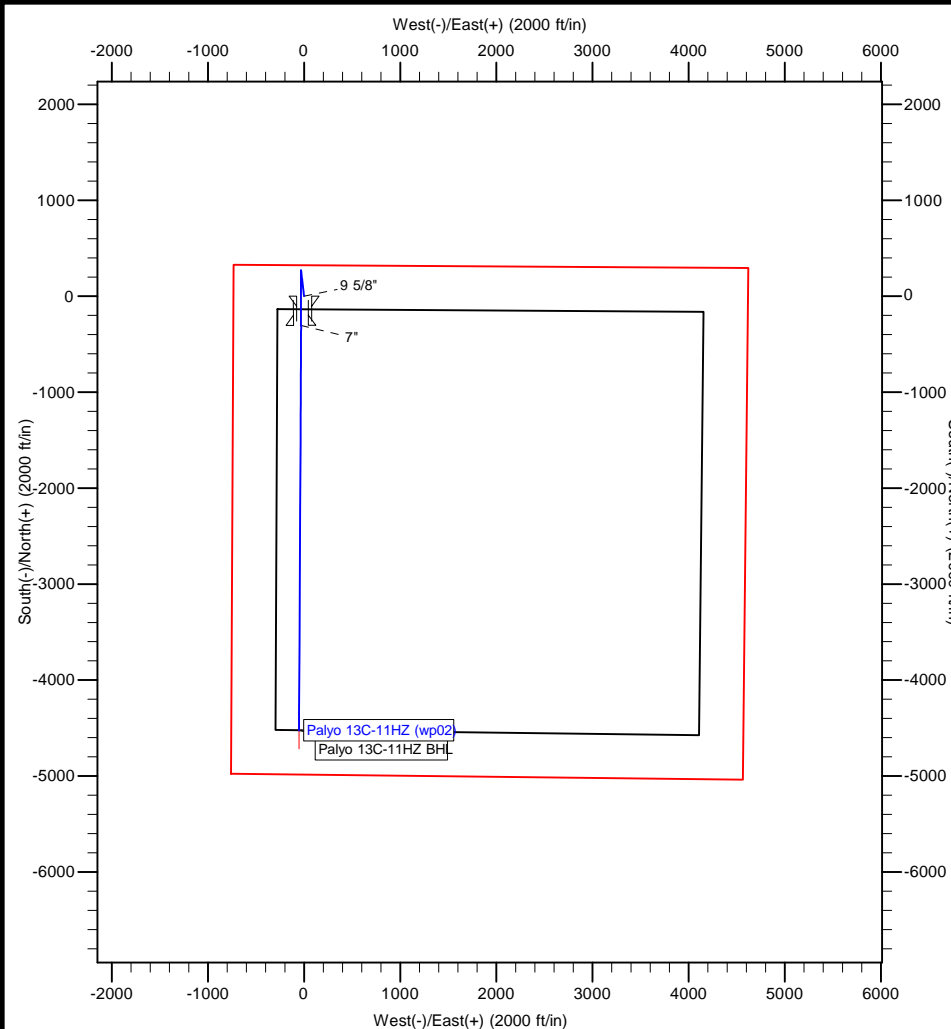
Palyo 13C-11HZ

Palyo 13C-11HZ

Plan: Palyo 13C-11HZ (wp02)

Standard Planning Report

22 February, 2012



Azimuths to True North
 Magnetic North: 8.69°
 Magnetic Field Strength: 52947.4snT
 Dip Angle: 66.85°
 Date: 2/16/2012
 Model: IGRF2010

Project: COLORADO NORTHERN ZONE - 83
Site: WELD_PALYO 4-11HZ Pad
Well: Palyo 13C-11HZ
Wellbore: Palyo 13C-11HZ
Section:
SHL:
Design: Palyo 13C-11HZ (wp02)
Latitude: 40.159596
Longitude: -104.637819
GL: 4855.00
KB: rkb + gl @ 4872.00ft



WELL DETAILS: Palyo 13C-11HZ

+N/-S	+E/-W	Northing	Ground Level: Easting	4855.00 Latitude	Longitude	Slot
0.00	0.00	1302155.48	3240974.04	40.159596	-104.637819	

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
1244.36	2.89	353.31	1244.30	3.61	-0.42	2.00	353.31	-3.61
6552.17	2.89	353.31	6545.37	269.15	-31.59	0.00	0.00	-268.76
7482.77	90.19	179.61	7147.00	-305.00	-31.00	10.00	-173.69	305.34
7551.88	90.20	180.30	7146.76	-374.11	-30.94	1.00	88.85	374.45
1701.83	90.20	180.30	7132.00	-4523.98	-52.56	0.00	0.00	4524.29

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

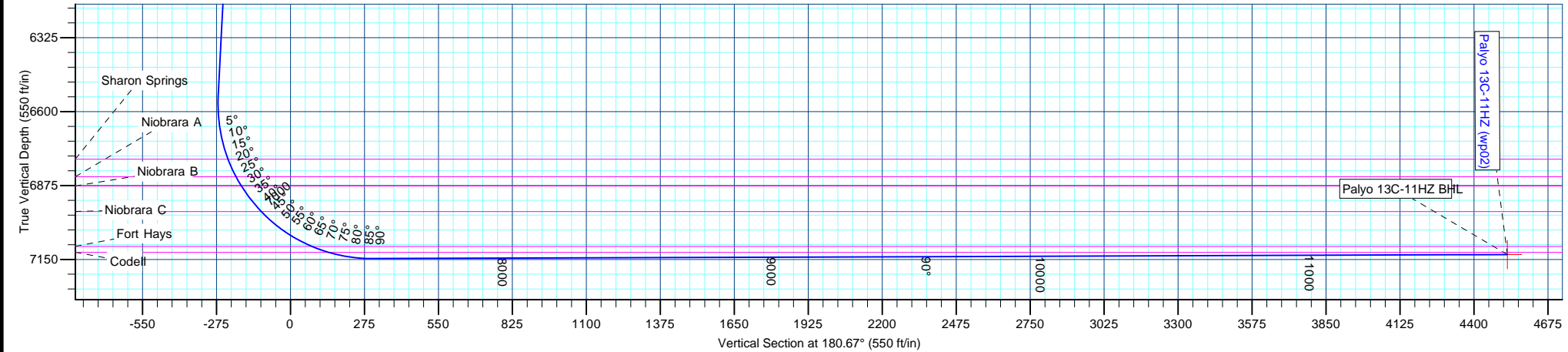
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
Palyo 13C-11HZ BHL	7132.00	-4523.98	-52.56	40.147177	-104.638007	Point

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3950.00	3953.50	Parkman
4433.00	4437.11	Sussex
6777.00	6788.32	Sharon Springs
6842.00	6859.69	Niobrara A
6877.00	6900.08	Niobrara B
6972.00	7020.79	Niobrara C
7102.00	7252.26	Fort Hays
7124.00	7317.96	Codell

CASING DETAILS

TVD	MD	Name	Size
850.00	850.00	9 5/8"	9-5/8
7147.00	7482.77	7"	7



Anadarko Petroleum Corp

Planning Report

Database:	edmp	Local Co-ordinate Reference:	Well Palyo 13C-11HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	rkb + gl @ 4872.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	rkb + gl @ 4872.00ft
Site:	WELD_PALYO 4-11HZ Pad	North Reference:	True
Well:	Palyo 13C-11HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Palyo 13C-11HZ		
Design:	Palyo 13C-11HZ (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	WELD_PALYO 4-11HZ Pad				
Site Position:		Northing:	1,302,155.51 usft	Latitude:	40.159596
From:	Lat/Long	Easting:	3,240,974.04 usft	Longitude:	-104.637819
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence:	0.56 °

Well	Palyo 13C-11HZ					
Well Position	+N/-S	-0.03 ft	Northing:	1,302,155.48 usft	Latitude:	40.159596
	+E/-W	0.00 ft	Easting:	3,240,974.04 usft	Longitude:	-104.637819
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	4,855.00 ft

Wellbore	Palyo 13C-11HZ				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2/16/2012	8.68	66.85	52,947

Design	Palyo 13C-11HZ (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	0.00	0.00	180.67

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	
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,244.36	2.89	353.31	1,244.30	3.61	-0.42	2.00	2.00	0.00	353.31	
6,552.17	2.89	353.31	6,545.37	269.15	-31.59	0.00	0.00	0.00	0.00	
7,482.77	90.19	179.61	7,147.00	-305.00	-31.00	10.00	9.38	-18.67	-173.69	
7,551.88	90.20	180.30	7,146.76	-374.11	-30.94	1.00	0.02	1.00	88.85	
11,701.83	90.20	180.30	7,132.00	-4,523.98	-52.56	0.00	0.00	0.00	0.00	Palyo 13C-11HZ BHL

Anadarko Petroleum Corp

Planning Report

Database:	edmp	Local Co-ordinate Reference:	Well Palyo 13C-11HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	rkb + gl @ 4872.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	rkb + gl @ 4872.00ft
Site:	WELD_PALYO 4-11HZ Pad	North Reference:	True
Well:	Palyo 13C-11HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Palyo 13C-11HZ		
Design:	Palyo 13C-11HZ (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
800.00	0.00	0.00	800.00	0.00	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	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	0.00
1,000.00	0.00	0.00	1,000.00	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	0.00
1,200.00	2.00	353.31	1,199.98	1.73	-0.20	-1.73	2.00	2.00	0.00	0.00
1,244.36	2.89	353.31	1,244.30	3.61	-0.42	-3.61	2.00	2.00	0.00	0.00
1,300.00	2.89	353.31	1,299.87	6.40	-0.75	-6.39	0.00	0.00	0.00	0.00
1,400.00	2.89	353.31	1,399.74	11.40	-1.34	-11.38	0.00	0.00	0.00	0.00
1,500.00	2.89	353.31	1,499.61	16.40	-1.93	-16.38	0.00	0.00	0.00	0.00
1,600.00	2.89	353.31	1,599.49	21.40	-2.51	-21.37	0.00	0.00	0.00	0.00
1,700.00	2.89	353.31	1,699.36	26.41	-3.10	-26.37	0.00	0.00	0.00	0.00
1,800.00	2.89	353.31	1,799.23	31.41	-3.69	-31.36	0.00	0.00	0.00	0.00
1,900.00	2.89	353.31	1,899.11	36.41	-4.27	-36.36	0.00	0.00	0.00	0.00
2,000.00	2.89	353.31	1,998.98	41.41	-4.86	-41.36	0.00	0.00	0.00	0.00
2,100.00	2.89	353.31	2,098.85	46.42	-5.45	-46.35	0.00	0.00	0.00	0.00
2,200.00	2.89	353.31	2,198.73	51.42	-6.04	-51.35	0.00	0.00	0.00	0.00
2,300.00	2.89	353.31	2,298.60	56.42	-6.62	-56.34	0.00	0.00	0.00	0.00
2,400.00	2.89	353.31	2,398.47	61.43	-7.21	-61.34	0.00	0.00	0.00	0.00
2,500.00	2.89	353.31	2,498.35	66.43	-7.80	-66.33	0.00	0.00	0.00	0.00
2,600.00	2.89	353.31	2,598.22	71.43	-8.38	-71.33	0.00	0.00	0.00	0.00
2,700.00	2.89	353.31	2,698.09	76.43	-8.97	-76.32	0.00	0.00	0.00	0.00
2,800.00	2.89	353.31	2,797.96	81.44	-9.56	-81.32	0.00	0.00	0.00	0.00
2,900.00	2.89	353.31	2,897.84	86.44	-10.15	-86.32	0.00	0.00	0.00	0.00
3,000.00	2.89	353.31	2,997.71	91.44	-10.73	-91.31	0.00	0.00	0.00	0.00
3,100.00	2.89	353.31	3,097.58	96.45	-11.32	-96.31	0.00	0.00	0.00	0.00
3,200.00	2.89	353.31	3,197.46	101.45	-11.91	-101.30	0.00	0.00	0.00	0.00
3,300.00	2.89	353.31	3,297.33	106.45	-12.50	-106.30	0.00	0.00	0.00	0.00
3,400.00	2.89	353.31	3,397.20	111.45	-13.08	-111.29	0.00	0.00	0.00	0.00
3,500.00	2.89	353.31	3,497.08	116.46	-13.67	-116.29	0.00	0.00	0.00	0.00
3,600.00	2.89	353.31	3,596.95	121.46	-14.26	-121.29	0.00	0.00	0.00	0.00
3,700.00	2.89	353.31	3,696.82	126.46	-14.84	-126.28	0.00	0.00	0.00	0.00
3,800.00	2.89	353.31	3,796.69	131.46	-15.43	-131.28	0.00	0.00	0.00	0.00
3,900.00	2.89	353.31	3,896.57	136.47	-16.02	-136.27	0.00	0.00	0.00	0.00
3,953.50	2.89	353.31	3,950.00	139.14	-16.33	-138.94	0.00	0.00	0.00	0.00
Parkman										
4,000.00	2.89	353.31	3,996.44	141.47	-16.61	-141.27	0.00	0.00	0.00	0.00
4,100.00	2.89	353.31	4,096.31	146.47	-17.19	-146.26	0.00	0.00	0.00	0.00
4,200.00	2.89	353.31	4,196.19	151.48	-17.78	-151.26	0.00	0.00	0.00	0.00
4,300.00	2.89	353.31	4,296.06	156.48	-18.37	-156.25	0.00	0.00	0.00	0.00
4,400.00	2.89	353.31	4,395.93	161.48	-18.95	-161.25	0.00	0.00	0.00	0.00
4,437.11	2.89	353.31	4,433.00	163.34	-19.17	-163.10	0.00	0.00	0.00	0.00
Sussex										
4,500.00	2.89	353.31	4,495.81	166.48	-19.54	-166.25	0.00	0.00	0.00	0.00

Anadarko Petroleum Corp

Planning Report

Database:	edmp	Local Co-ordinate Reference:	Well Palyo 13C-11HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	rkb + gl @ 4872.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	rkb + gl @ 4872.00ft
Site:	WELD_PALYO 4-11HZ Pad	North Reference:	True
Well:	Palyo 13C-11HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Palyo 13C-11HZ		
Design:	Palyo 13C-11HZ (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	2.89	353.31	4,595.68	171.49	-20.13	-171.24	0.00	0.00	0.00	
4,700.00	2.89	353.31	4,695.55	176.49	-20.72	-176.24	0.00	0.00	0.00	
4,800.00	2.89	353.31	4,795.43	181.49	-21.30	-181.23	0.00	0.00	0.00	
4,900.00	2.89	353.31	4,895.30	186.50	-21.89	-186.23	0.00	0.00	0.00	
5,000.00	2.89	353.31	4,995.17	191.50	-22.48	-191.22	0.00	0.00	0.00	
5,100.00	2.89	353.31	5,095.04	196.50	-23.06	-196.22	0.00	0.00	0.00	
5,200.00	2.89	353.31	5,194.92	201.50	-23.65	-201.22	0.00	0.00	0.00	
5,300.00	2.89	353.31	5,294.79	206.51	-24.24	-206.21	0.00	0.00	0.00	
5,400.00	2.89	353.31	5,394.66	211.51	-24.83	-211.21	0.00	0.00	0.00	
5,500.00	2.89	353.31	5,494.54	216.51	-25.41	-216.20	0.00	0.00	0.00	
5,600.00	2.89	353.31	5,594.41	221.51	-26.00	-221.20	0.00	0.00	0.00	
5,700.00	2.89	353.31	5,694.28	226.52	-26.59	-226.19	0.00	0.00	0.00	
5,800.00	2.89	353.31	5,794.16	231.52	-27.18	-231.19	0.00	0.00	0.00	
5,900.00	2.89	353.31	5,894.03	236.52	-27.76	-236.18	0.00	0.00	0.00	
6,000.00	2.89	353.31	5,993.90	241.53	-28.35	-241.18	0.00	0.00	0.00	
6,100.00	2.89	353.31	6,093.78	246.53	-28.94	-246.18	0.00	0.00	0.00	
6,200.00	2.89	353.31	6,193.65	251.53	-29.52	-251.17	0.00	0.00	0.00	
6,300.00	2.89	353.31	6,293.52	256.53	-30.11	-256.17	0.00	0.00	0.00	
6,400.00	2.89	353.31	6,393.39	261.54	-30.70	-261.16	0.00	0.00	0.00	
6,500.00	2.89	353.31	6,493.27	266.54	-31.29	-266.16	0.00	0.00	0.00	
6,552.17	2.89	353.31	6,545.37	269.15	-31.59	-268.76	0.00	0.00	0.00	
6,600.00	1.94	189.02	6,593.18	269.55	-31.86	-269.16	10.00	-1.98	-343.45	
6,700.00	11.92	181.11	6,692.33	257.52	-32.33	-257.13	10.00	9.98	-7.91	
6,788.32	20.75	180.45	6,777.00	232.71	-32.63	-232.32	10.00	10.00	-0.75	
Sharon Springs										
6,800.00	21.92	180.40	6,787.88	228.46	-32.66	-228.07	10.00	10.00	-0.42	
6,859.69	27.88	180.21	6,842.00	203.34	-32.79	-202.95	10.00	10.00	-0.32	
Niobrara A										
6,900.00	31.91	180.12	6,876.94	183.25	-32.84	-182.86	10.00	10.00	-0.22	
6,900.08	31.91	180.12	6,877.00	183.21	-32.84	-182.82	0.00	0.00	0.00	
Niobrara B										
7,000.00	41.91	179.96	6,956.79	123.27	-32.87	-122.88	10.01	10.01	-0.16	
7,020.79	43.99	179.94	6,972.00	109.10	-32.86	-108.72	10.00	10.00	-0.12	
Niobrara C										
7,100.00	51.91	179.86	7,025.01	50.33	-32.75	-49.94	10.00	10.00	-0.10	
7,200.00	61.91	179.78	7,079.53	-33.35	-32.48	33.73	10.00	10.00	-0.08	
7,252.26	67.14	179.74	7,102.00	-80.52	-32.28	80.89	10.00	10.00	-0.07	
Fort Hays										
7,300.00	71.91	179.71	7,118.69	-125.23	-32.07	125.59	10.00	10.00	-0.06	
7,317.96	73.71	179.70	7,124.00	-142.38	-31.98	142.75	10.00	10.00	-0.06	
Codell										
7,400.00	81.91	179.65	7,141.31	-222.50	-31.53	222.86	10.00	10.00	-0.06	
7,482.77	90.19	179.61	7,147.00	-305.00	-31.00	305.34	10.00	10.00	-0.06	
7"										
7,500.00	90.19	179.78	7,146.94	-322.23	-30.91	322.57	1.00	0.02	1.00	
7,551.88	90.20	180.30	7,146.76	-374.11	-30.94	374.45	1.00	0.02	1.00	
7,600.00	90.20	180.30	7,146.59	-422.23	-31.19	422.57	0.00	0.00	0.00	
7,700.00	90.20	180.30	7,146.24	-522.23	-31.71	522.56	0.00	0.00	0.00	
7,800.00	90.20	180.30	7,145.88	-622.23	-32.24	622.56	0.00	0.00	0.00	
7,900.00	90.20	180.30	7,145.52	-722.23	-32.76	722.56	0.00	0.00	0.00	
8,000.00	90.20	180.30	7,145.17	-822.22	-33.28	822.56	0.00	0.00	0.00	
8,100.00	90.20	180.30	7,144.81	-922.22	-33.80	922.55	0.00	0.00	0.00	
8,200.00	90.20	180.30	7,144.46	-1,022.22	-34.32	1,022.55	0.00	0.00	0.00	

Anadarko Petroleum Corp

Planning Report

Database:	edmp	Local Co-ordinate Reference:	Well Palyo 13C-11HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	rkb + gl @ 4872.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	rkb + gl @ 4872.00ft
Site:	WELD_PALYO 4-11HZ Pad	North Reference:	True
Well:	Palyo 13C-11HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Palyo 13C-11HZ		
Design:	Palyo 13C-11HZ (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)	
8,300.00	90.20	180.30	7,144.10	-1,122.22	-34.84	1,122.55	0.00	0.00	0.00	
8,400.00	90.20	180.30	7,143.75	-1,222.22	-35.36	1,222.54	0.00	0.00	0.00	
8,500.00	90.20	180.30	7,143.39	-1,322.21	-35.88	1,322.54	0.00	0.00	0.00	
8,600.00	90.20	180.30	7,143.03	-1,422.21	-36.40	1,422.54	0.00	0.00	0.00	
8,700.00	90.20	180.30	7,142.68	-1,522.21	-36.92	1,522.54	0.00	0.00	0.00	
8,800.00	90.20	180.30	7,142.32	-1,622.21	-37.44	1,622.53	0.00	0.00	0.00	
8,900.00	90.20	180.30	7,141.97	-1,722.21	-37.96	1,722.53	0.00	0.00	0.00	
9,000.00	90.20	180.30	7,141.61	-1,822.20	-38.48	1,822.53	0.00	0.00	0.00	
9,100.00	90.20	180.30	7,141.26	-1,922.20	-39.01	1,922.53	0.00	0.00	0.00	
9,200.00	90.20	180.30	7,140.90	-2,022.20	-39.53	2,022.52	0.00	0.00	0.00	
9,300.00	90.20	180.30	7,140.54	-2,122.20	-40.05	2,122.52	0.00	0.00	0.00	
9,400.00	90.20	180.30	7,140.19	-2,222.20	-40.57	2,222.52	0.00	0.00	0.00	
9,500.00	90.20	180.30	7,139.83	-2,322.19	-41.09	2,322.52	0.00	0.00	0.00	
9,600.00	90.20	180.30	7,139.48	-2,422.19	-41.61	2,422.51	0.00	0.00	0.00	
9,700.00	90.20	180.30	7,139.12	-2,522.19	-42.13	2,522.51	0.00	0.00	0.00	
9,800.00	90.20	180.30	7,138.77	-2,622.19	-42.65	2,622.51	0.00	0.00	0.00	
9,900.00	90.20	180.30	7,138.41	-2,722.19	-43.17	2,722.50	0.00	0.00	0.00	
10,000.00	90.20	180.30	7,138.05	-2,822.18	-43.69	2,822.50	0.00	0.00	0.00	
10,100.00	90.20	180.30	7,137.70	-2,922.18	-44.21	2,922.50	0.00	0.00	0.00	
10,200.00	90.20	180.30	7,137.34	-3,022.18	-44.73	3,022.50	0.00	0.00	0.00	
10,300.00	90.20	180.30	7,136.99	-3,122.18	-45.25	3,122.49	0.00	0.00	0.00	
10,400.00	90.20	180.30	7,136.63	-3,222.18	-45.78	3,222.49	0.00	0.00	0.00	
10,500.00	90.20	180.30	7,136.28	-3,322.17	-46.30	3,322.49	0.00	0.00	0.00	
10,600.00	90.20	180.30	7,135.92	-3,422.17	-46.82	3,422.49	0.00	0.00	0.00	
10,700.00	90.20	180.30	7,135.56	-3,522.17	-47.34	3,522.48	0.00	0.00	0.00	
10,800.00	90.20	180.30	7,135.21	-3,622.17	-47.86	3,622.48	0.00	0.00	0.00	
10,900.00	90.20	180.30	7,134.85	-3,722.17	-48.38	3,722.48	0.00	0.00	0.00	
11,000.00	90.20	180.30	7,134.50	-3,822.16	-48.90	3,822.47	0.00	0.00	0.00	
11,100.00	90.20	180.30	7,134.14	-3,922.16	-49.42	3,922.47	0.00	0.00	0.00	
11,200.00	90.20	180.30	7,133.79	-4,022.16	-49.94	4,022.47	0.00	0.00	0.00	
11,300.00	90.20	180.30	7,133.43	-4,122.16	-50.46	4,122.47	0.00	0.00	0.00	
11,400.00	90.20	180.30	7,133.07	-4,222.16	-50.98	4,222.46	0.00	0.00	0.00	
11,500.00	90.20	180.30	7,132.72	-4,322.15	-51.50	4,322.46	0.00	0.00	0.00	
11,600.00	90.20	180.30	7,132.36	-4,422.15	-52.02	4,422.46	0.00	0.00	0.00	
11,700.00	90.20	180.30	7,132.01	-4,522.15	-52.55	4,522.46	0.00	0.00	0.00	
11,701.83	90.20	180.30	7,132.00	-4,523.98	-52.56	4,524.29	0.00	0.00	0.00	
Palyo 13C-11HZ BHL										

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Palyo 13C-11HZ BHL - hit/miss target - Shape - Point	0.00	0.00	7,132.00	-4,523.98	-52.56	1,297,631.20	3,240,965.48	40.147177	-104.638007

Anadarko Petroleum Corp

Planning Report

Database:	edmp	Local Co-ordinate Reference:	Well Palyo 13C-11HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	rkb + gl @ 4872.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	rkb + gl @ 4872.00ft
Site:	WELD_PALYO 4-11HZ Pad	North Reference:	True
Well:	Palyo 13C-11HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Palyo 13C-11HZ		
Design:	Palyo 13C-11HZ (wp02)		

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		
7,482.77	7,147.00	7"	7	8-3/4		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,953.50	3,950.00	Parkman				
4,437.11	4,433.00	Sussex				
6,788.32	6,777.00	Sharon Springs				
6,859.69	6,842.00	Niobrara A				
6,900.08	6,877.00	Niobrara B				
7,020.79	6,972.00	Niobrara C				
7,252.26	7,102.00	Fort Hays				
7,317.96	7,124.00	Codell				