

US ROCKIES REGION PLANNING

COLORADO NORTHERN ZONE - 83

WELD_Hudson 4E-26HZ Pad

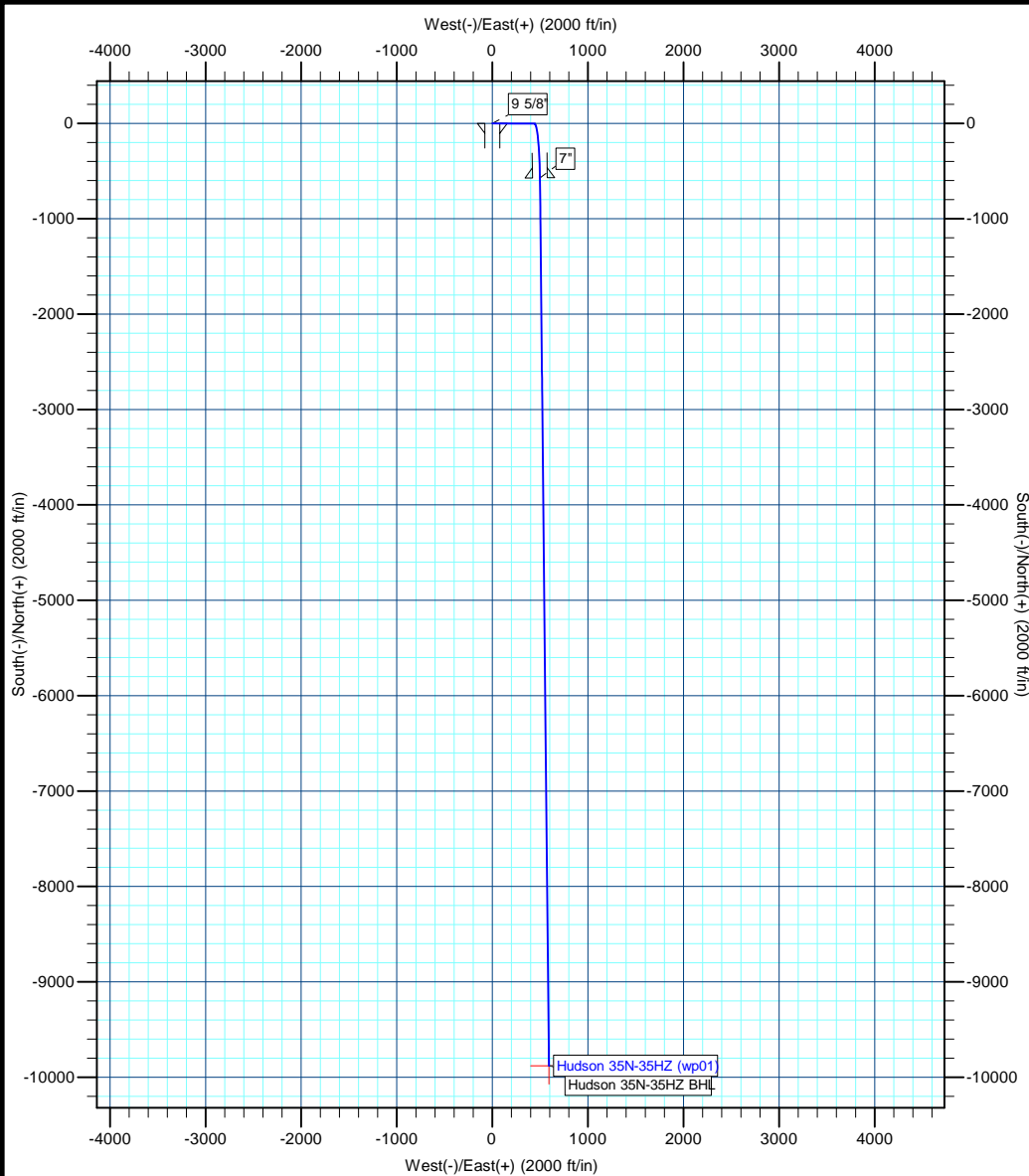
Hudson 35N-35HZ

Hudson 35N-35HZ

Plan: Hudson 35N-35HZ (wp01)

Standard Planning Report

26 April, 2012



Azimuths to True North
Magnetic North: 8.66°

Magnetic Field
Strength: 52904.0snT
Dip Angle: 66.81°
Date: 4/25/2012
Model: IGRF2010



Project: COLORADO NORTHERN ZONE - 83
Site: WELD_Hudson 4E-26HZ Pad
Well: Hudson 35N-35HZ
Wellbore: Hudson 35N-35HZ
Section:
SHL:
Design: Hudson 35N-35HZ (wp01)
Latitude: 40.115876
Longitude: -104.637772
GL: 4909.00
KB: gl + rkb @ 4926.00ft

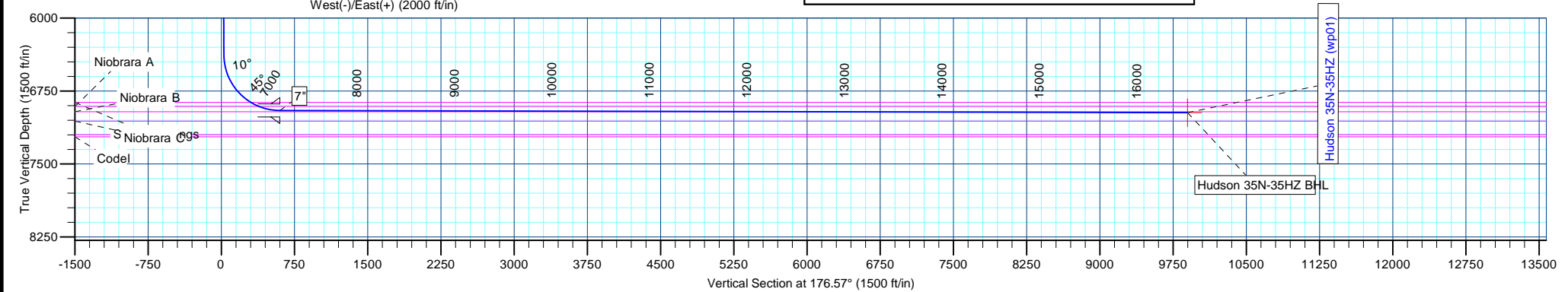
WELL DETAILS: Hudson 35N-35HZ						
+N/-S	+E/-W	Northing	Ground Level: Easting	4909.00 Latitude	Longitude	Slot
0.00	0.00	1286230.06	3241142.03	40.115876	-104.637772	

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
1500.00	0.00	0.00	1500.00	0.00	0.00	0.00	0.00	0.00
1765.18	5.30	90.11	1764.80	-0.02	12.26	2.00	90.11	0.76
6401.31	5.30	90.11	6381.09	-0.84	440.79	0.00	0.00	27.24
7299.44	89.87	179.46	6951.00	-572.00	499.00	10.00	89.36	600.86
7302.88	89.86	179.42	6951.01	-575.44	499.03	1.00	-103.19	604.30
16607.52	89.86	179.42	6973.00	-9879.59	592.87	0.00	0.00	9897.36

WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)						
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
Hudson 35N-35HZ BHL	6973.00	-9879.59	592.87	40.088755	-104.635653	Point

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
767.00	767.00	Fox Hills
2858.00	2863.08	Parkman
4552.00	4564.36	Sussex
6867.00	6985.85	Sharon Springs
6909.00	7079.49	Niobrara A
6963.00	12376.62	Niobrara B

CASING DETAILS			
TVD	MD	Name	Size
1317.00	1317.00	9 5/8"	9-5/8
6951.00	7299.44	7"	7



Anadarko Petroleum Corp

Planning Report

Database:	edmp	Local Co-ordinate Reference:	Well Hudson 35N-35HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	gl + rkb @ 4926.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	gl + rkb @ 4926.00ft
Site:	WELD_Hudson 4E-26HZ Pad	North Reference:	True
Well:	Hudson 35N-35HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hudson 35N-35HZ		
Design:	Hudson 35N-35HZ (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_Hudson 4E-26HZ Pad			
Site Position:		Northing:	1,286,229.78 usft	Latitude: 40.115876
From:	Lat/Long	Easting:	3,241,111.83 usft	Longitude: -104.637880
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence: 0.56 °

Well	Hudson 35N-35HZ			
Well Position	+N/-S	-0.01 ft	Northing:	1,286,230.06 usft
	+E/-W	30.21 ft	Easting:	3,241,142.04 usft
Position Uncertainty		0.00 ft	Wellhead Elevation:	Ground Level: 4,909.00 ft

Wellbore	Hudson 35N-35HZ				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	4/25/2012	8.66	66.81	52,904

Design	Hudson 35N-35HZ (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	176.57

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	
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,765.18	5.30	90.11	1,764.80	-0.02	12.26	2.00	2.00	0.00	90.11	
6,401.31	5.30	90.11	6,381.09	-0.84	440.79	0.00	0.00	0.00	0.00	
7,299.44	89.87	179.46	6,951.00	-572.00	499.00	10.00	9.42	9.95	89.36	
7,302.88	89.86	179.42	6,951.01	-575.44	499.03	1.00	-0.23	-0.97	-103.19	
16,607.52	89.86	179.42	6,973.00	-9,879.59	592.87	0.00	0.00	0.00	0.00	Hudson 35N-35HZ Bt

Anadarko Petroleum Corp

Planning Report

Database:	edmp	Local Co-ordinate Reference:	Well Hudson 35N-35HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	gl + rkb @ 4926.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	gl + rkb @ 4926.00ft
Site:	WELD_Hudson 4E-26HZ Pad	North Reference:	True
Well:	Hudson 35N-35HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hudson 35N-35HZ		
Design:	Hudson 35N-35HZ (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
767.00	0.00	0.00	767.00	0.00	0.00	0.00	0.00	0.00	0.00
Fox Hills									
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
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
1,317.00	0.00	0.00	1,317.00	0.00	0.00	0.00	0.00	0.00	0.00
9 5/8"									
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	2.00	90.11	1,599.98	0.00	1.75	0.11	2.00	2.00	0.00
1,700.00	4.00	90.11	1,699.84	-0.01	6.98	0.43	2.00	2.00	0.00
1,765.18	5.30	90.11	1,764.80	-0.02	12.26	0.76	2.00	2.00	0.00
1,800.00	5.30	90.11	1,799.47	-0.03	15.48	0.96	0.00	0.00	0.00
1,900.00	5.30	90.11	1,899.04	-0.05	24.73	1.53	0.00	0.00	0.00
2,000.00	5.30	90.11	1,998.62	-0.06	33.97	2.10	0.00	0.00	0.00
2,100.00	5.30	90.11	2,098.19	-0.08	43.21	2.67	0.00	0.00	0.00
2,200.00	5.30	90.11	2,197.76	-0.10	52.46	3.24	0.00	0.00	0.00
2,300.00	5.30	90.11	2,297.33	-0.12	61.70	3.81	0.00	0.00	0.00
2,400.00	5.30	90.11	2,396.90	-0.14	70.94	4.38	0.00	0.00	0.00
2,500.00	5.30	90.11	2,496.48	-0.15	80.18	4.96	0.00	0.00	0.00
2,600.00	5.30	90.11	2,596.05	-0.17	89.43	5.53	0.00	0.00	0.00
2,700.00	5.30	90.11	2,695.62	-0.19	98.67	6.10	0.00	0.00	0.00
2,800.00	5.30	90.11	2,795.19	-0.21	107.91	6.67	0.00	0.00	0.00
2,863.08	5.30	90.11	2,858.00	-0.22	113.74	7.03	0.00	0.00	0.00
Parkman									
2,900.00	5.30	90.11	2,894.76	-0.22	117.16	7.24	0.00	0.00	0.00
3,000.00	5.30	90.11	2,994.34	-0.24	126.40	7.81	0.00	0.00	0.00
3,100.00	5.30	90.11	3,093.91	-0.26	135.64	8.38	0.00	0.00	0.00
3,200.00	5.30	90.11	3,193.48	-0.28	144.89	8.95	0.00	0.00	0.00
3,300.00	5.30	90.11	3,293.05	-0.29	154.13	9.53	0.00	0.00	0.00
3,400.00	5.30	90.11	3,392.62	-0.31	163.37	10.10	0.00	0.00	0.00
3,500.00	5.30	90.11	3,492.19	-0.33	172.62	10.67	0.00	0.00	0.00
3,600.00	5.30	90.11	3,591.77	-0.35	181.86	11.24	0.00	0.00	0.00
3,700.00	5.30	90.11	3,691.34	-0.36	191.10	11.81	0.00	0.00	0.00
3,800.00	5.30	90.11	3,790.91	-0.38	200.35	12.38	0.00	0.00	0.00
3,900.00	5.30	90.11	3,890.48	-0.40	209.59	12.95	0.00	0.00	0.00
4,000.00	5.30	90.11	3,990.05	-0.42	218.83	13.52	0.00	0.00	0.00
4,100.00	5.30	90.11	4,089.63	-0.43	228.07	14.10	0.00	0.00	0.00
4,200.00	5.30	90.11	4,189.20	-0.45	237.32	14.67	0.00	0.00	0.00
4,300.00	5.30	90.11	4,288.77	-0.47	246.56	15.24	0.00	0.00	0.00
4,400.00	5.30	90.11	4,388.34	-0.49	255.80	15.81	0.00	0.00	0.00
4,500.00	5.30	90.11	4,487.91	-0.50	265.05	16.38	0.00	0.00	0.00

Anadarko Petroleum Corp

Planning Report

Database:	edmp	Local Co-ordinate Reference:	Well Hudson 35N-35HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	gl + rkb @ 4926.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	gl + rkb @ 4926.00ft
Site:	WELD_Hudson 4E-26HZ Pad	North Reference:	True
Well:	Hudson 35N-35HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hudson 35N-35HZ		
Design:	Hudson 35N-35HZ (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)
4,564.36	5.30	90.11	4,552.00	-0.52	271.00	16.75	0.00	0.00	0.00
Sussex									
4,600.00	5.30	90.11	4,587.49	-0.52	274.29	16.95	0.00	0.00	0.00
4,700.00	5.30	90.11	4,687.06	-0.54	283.53	17.52	0.00	0.00	0.00
4,800.00	5.30	90.11	4,786.63	-0.56	292.78	18.09	0.00	0.00	0.00
4,900.00	5.30	90.11	4,886.20	-0.57	302.02	18.67	0.00	0.00	0.00
5,000.00	5.30	90.11	4,985.77	-0.59	311.26	19.24	0.00	0.00	0.00
5,100.00	5.30	90.11	5,085.35	-0.61	320.51	19.81	0.00	0.00	0.00
5,200.00	5.30	90.11	5,184.92	-0.63	329.75	20.38	0.00	0.00	0.00
5,300.00	5.30	90.11	5,284.49	-0.65	338.99	20.95	0.00	0.00	0.00
5,400.00	5.30	90.11	5,384.06	-0.66	348.24	21.52	0.00	0.00	0.00
5,500.00	5.30	90.11	5,483.63	-0.68	357.48	22.09	0.00	0.00	0.00
5,600.00	5.30	90.11	5,583.20	-0.70	366.72	22.66	0.00	0.00	0.00
5,700.00	5.30	90.11	5,682.78	-0.72	375.96	23.24	0.00	0.00	0.00
5,800.00	5.30	90.11	5,782.35	-0.73	385.21	23.81	0.00	0.00	0.00
5,900.00	5.30	90.11	5,881.92	-0.75	394.45	24.38	0.00	0.00	0.00
6,000.00	5.30	90.11	5,981.49	-0.77	403.69	24.95	0.00	0.00	0.00
6,100.00	5.30	90.11	6,081.06	-0.79	412.94	25.52	0.00	0.00	0.00
6,200.00	5.30	90.11	6,180.64	-0.80	422.18	26.09	0.00	0.00	0.00
6,300.00	5.30	90.11	6,280.21	-0.82	431.42	26.66	0.00	0.00	0.00
6,400.00	5.30	90.11	6,379.78	-0.84	440.67	27.23	0.00	0.00	0.00
6,401.31	5.30	90.11	6,381.09	-0.84	440.79	27.24	0.00	0.00	0.00
6,500.00	11.24	151.63	6,478.86	-9.33	449.94	36.27	10.00	6.02	62.34
6,600.00	20.59	165.17	6,574.95	-34.98	459.10	62.42	10.00	9.35	13.53
6,700.00	30.35	170.35	6,665.13	-76.99	467.86	104.88	10.00	9.76	5.18
6,800.00	40.22	173.17	6,746.66	-134.10	475.96	162.37	10.00	9.87	2.82
6,900.00	50.13	175.02	6,817.07	-204.57	483.15	233.15	10.00	9.91	1.86
6,985.85	58.66	176.23	6,867.00	-274.11	488.43	302.87	10.00	9.93	1.40
Sharon Springs									
7,000.00	60.07	176.40	6,874.21	-286.26	489.22	315.05	10.00	9.94	1.25
7,079.49	67.98	177.32	6,909.00	-357.55	493.11	386.45	10.00	9.95	1.15
Niobrara A									
7,100.00	70.02	177.53	6,916.35	-376.68	493.97	405.59	10.00	9.95	1.06
7,200.00	79.97	178.53	6,942.21	-473.09	497.26	502.03	10.00	9.95	0.99
7,299.44	89.87	179.46	6,951.00	-572.00	499.00	600.87	10.00	9.96	0.93
7"									
7,300.00	89.87	179.45	6,951.00	-572.56	499.01	601.42	1.00	-0.23	-0.98
7,302.88	89.86	179.42	6,951.01	-575.44	499.03	604.30	1.00	-0.23	-0.97
7,400.00	89.86	179.42	6,951.24	-672.56	500.01	701.30	0.00	0.00	0.00
7,500.00	89.86	179.42	6,951.47	-772.55	501.02	801.18	0.00	0.00	0.00
7,600.00	89.86	179.42	6,951.71	-872.55	502.03	901.05	0.00	0.00	0.00
7,700.00	89.86	179.42	6,951.95	-972.54	503.04	1,000.93	0.00	0.00	0.00
7,800.00	89.86	179.42	6,952.18	-1,072.53	504.05	1,100.80	0.00	0.00	0.00
7,900.00	89.86	179.42	6,952.42	-1,172.53	505.06	1,200.68	0.00	0.00	0.00
8,000.00	89.86	179.42	6,952.66	-1,272.52	506.06	1,300.55	0.00	0.00	0.00
8,100.00	89.86	179.42	6,952.89	-1,372.52	507.07	1,400.43	0.00	0.00	0.00
8,200.00	89.86	179.42	6,953.13	-1,472.51	508.08	1,500.30	0.00	0.00	0.00
8,300.00	89.86	179.42	6,953.36	-1,572.51	509.09	1,600.18	0.00	0.00	0.00
8,400.00	89.86	179.42	6,953.60	-1,672.50	510.10	1,700.06	0.00	0.00	0.00
8,500.00	89.86	179.42	6,953.84	-1,772.50	511.11	1,799.93	0.00	0.00	0.00
8,600.00	89.86	179.42	6,954.07	-1,872.49	512.12	1,899.81	0.00	0.00	0.00
8,700.00	89.86	179.42	6,954.31	-1,972.49	513.12	1,999.68	0.00	0.00	0.00
8,800.00	89.86	179.42	6,954.55	-2,072.48	514.13	2,099.56	0.00	0.00	0.00
8,900.00	89.86	179.42	6,954.78	-2,172.48	515.14	2,199.43	0.00	0.00	0.00

Anadarko Petroleum Corp

Planning Report

Database:	edmp	Local Co-ordinate Reference:	Well Hudson 35N-35HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	gl + rkb @ 4926.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	gl + rkb @ 4926.00ft
Site:	WELD_Hudson 4E-26HZ Pad	North Reference:	True
Well:	Hudson 35N-35HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hudson 35N-35HZ		
Design:	Hudson 35N-35HZ (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	89.86	179.42	6,955.02	-2,272.47	516.15	2,299.31	0.00	0.00	0.00
9,100.00	89.86	179.42	6,955.26	-2,372.47	517.16	2,399.18	0.00	0.00	0.00
9,200.00	89.86	179.42	6,955.49	-2,472.46	518.17	2,499.06	0.00	0.00	0.00
9,300.00	89.86	179.42	6,955.73	-2,572.45	519.18	2,598.93	0.00	0.00	0.00
9,400.00	89.86	179.42	6,955.96	-2,672.45	520.18	2,698.81	0.00	0.00	0.00
9,500.00	89.86	179.42	6,956.20	-2,772.44	521.19	2,798.69	0.00	0.00	0.00
9,600.00	89.86	179.42	6,956.44	-2,872.44	522.20	2,898.56	0.00	0.00	0.00
9,700.00	89.86	179.42	6,956.67	-2,972.43	523.21	2,998.44	0.00	0.00	0.00
9,800.00	89.86	179.42	6,956.91	-3,072.43	524.22	3,098.31	0.00	0.00	0.00
9,900.00	89.86	179.42	6,957.15	-3,172.42	525.23	3,198.19	0.00	0.00	0.00
10,000.00	89.86	179.42	6,957.38	-3,272.42	526.24	3,298.06	0.00	0.00	0.00
10,100.00	89.86	179.42	6,957.62	-3,372.41	527.24	3,397.94	0.00	0.00	0.00
10,200.00	89.86	179.42	6,957.86	-3,472.41	528.25	3,497.81	0.00	0.00	0.00
10,300.00	89.86	179.42	6,958.09	-3,572.40	529.26	3,597.69	0.00	0.00	0.00
10,400.00	89.86	179.42	6,958.33	-3,672.40	530.27	3,697.56	0.00	0.00	0.00
10,500.00	89.86	179.42	6,958.56	-3,772.39	531.28	3,797.44	0.00	0.00	0.00
10,600.00	89.86	179.42	6,958.80	-3,872.38	532.29	3,897.32	0.00	0.00	0.00
10,700.00	89.86	179.42	6,959.04	-3,972.38	533.29	3,997.19	0.00	0.00	0.00
10,800.00	89.86	179.42	6,959.27	-4,072.37	534.30	4,097.07	0.00	0.00	0.00
10,900.00	89.86	179.42	6,959.51	-4,172.37	535.31	4,196.94	0.00	0.00	0.00
11,000.00	89.86	179.42	6,959.75	-4,272.36	536.32	4,296.82	0.00	0.00	0.00
11,100.00	89.86	179.42	6,959.98	-4,372.36	537.33	4,396.69	0.00	0.00	0.00
11,200.00	89.86	179.42	6,960.22	-4,472.35	538.34	4,496.57	0.00	0.00	0.00
11,300.00	89.86	179.42	6,960.46	-4,572.35	539.35	4,596.44	0.00	0.00	0.00
11,400.00	89.86	179.42	6,960.69	-4,672.34	540.35	4,696.32	0.00	0.00	0.00
11,500.00	89.86	179.42	6,960.93	-4,772.34	541.36	4,796.20	0.00	0.00	0.00
11,600.00	89.86	179.42	6,961.16	-4,872.33	542.37	4,896.07	0.00	0.00	0.00
11,700.00	89.86	179.42	6,961.40	-4,972.33	543.38	4,995.95	0.00	0.00	0.00
11,800.00	89.86	179.42	6,961.64	-5,072.32	544.39	5,095.82	0.00	0.00	0.00
11,900.00	89.86	179.42	6,961.87	-5,172.31	545.40	5,195.70	0.00	0.00	0.00
12,000.00	89.86	179.42	6,962.11	-5,272.31	546.41	5,295.57	0.00	0.00	0.00
12,100.00	89.86	179.42	6,962.35	-5,372.30	547.41	5,395.45	0.00	0.00	0.00
12,200.00	89.86	179.42	6,962.58	-5,472.30	548.42	5,495.32	0.00	0.00	0.00
12,300.00	89.86	179.42	6,962.82	-5,572.29	549.43	5,595.20	0.00	0.00	0.00
12,376.62	89.86	179.42	6,963.00	-5,648.91	550.20	5,671.72	0.00	0.00	0.00
Niobrara B									
12,400.00	89.86	179.42	6,963.06	-5,672.29	550.44	5,695.07	0.00	0.00	0.00
12,500.00	89.86	179.42	6,963.29	-5,772.28	551.45	5,794.95	0.00	0.00	0.00
12,600.00	89.86	179.42	6,963.53	-5,872.28	552.46	5,894.83	0.00	0.00	0.00
12,700.00	89.86	179.42	6,963.76	-5,972.27	553.47	5,994.70	0.00	0.00	0.00
12,800.00	89.86	179.42	6,964.00	-6,072.27	554.47	6,094.58	0.00	0.00	0.00
12,900.00	89.86	179.42	6,964.24	-6,172.26	555.48	6,194.45	0.00	0.00	0.00
13,000.00	89.86	179.42	6,964.47	-6,272.26	556.49	6,294.33	0.00	0.00	0.00
13,100.00	89.86	179.42	6,964.71	-6,372.25	557.50	6,394.20	0.00	0.00	0.00
13,200.00	89.86	179.42	6,964.95	-6,472.25	558.51	6,494.08	0.00	0.00	0.00
13,300.00	89.86	179.42	6,965.18	-6,572.24	559.52	6,593.95	0.00	0.00	0.00
13,400.00	89.86	179.42	6,965.42	-6,672.23	560.53	6,693.83	0.00	0.00	0.00
13,500.00	89.86	179.42	6,965.66	-6,772.23	561.53	6,793.70	0.00	0.00	0.00
13,600.00	89.86	179.42	6,965.89	-6,872.22	562.54	6,893.58	0.00	0.00	0.00
13,700.00	89.86	179.42	6,966.13	-6,972.22	563.55	6,993.46	0.00	0.00	0.00
13,800.00	89.86	179.42	6,966.36	-7,072.21	564.56	7,093.33	0.00	0.00	0.00
13,900.00	89.86	179.42	6,966.60	-7,172.21	565.57	7,193.21	0.00	0.00	0.00
14,000.00	89.86	179.42	6,966.84	-7,272.20	566.58	7,293.08	0.00	0.00	0.00

Anadarko Petroleum Corp

Planning Report

Database:	edmp	Local Co-ordinate Reference:	Well Hudson 35N-35HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	gl + rkb @ 4926.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	gl + rkb @ 4926.00ft
Site:	WELD_Hudson 4E-26HZ Pad	North Reference:	True
Well:	Hudson 35N-35HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hudson 35N-35HZ		
Design:	Hudson 35N-35HZ (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)	
14,100.00	89.86	179.42	6,967.07	-7,372.20	567.58	7,392.96	0.00	0.00	0.00	
14,200.00	89.86	179.42	6,967.31	-7,472.19	568.59	7,492.83	0.00	0.00	0.00	
14,300.00	89.86	179.42	6,967.55	-7,572.19	569.60	7,592.71	0.00	0.00	0.00	
14,400.00	89.86	179.42	6,967.78	-7,672.18	570.61	7,692.58	0.00	0.00	0.00	
14,500.00	89.86	179.42	6,968.02	-7,772.18	571.62	7,792.46	0.00	0.00	0.00	
14,600.00	89.86	179.42	6,968.26	-7,872.17	572.63	7,892.34	0.00	0.00	0.00	
14,700.00	89.86	179.42	6,968.49	-7,972.16	573.64	7,992.21	0.00	0.00	0.00	
14,800.00	89.86	179.42	6,968.73	-8,072.16	574.64	8,092.09	0.00	0.00	0.00	
14,900.00	89.86	179.42	6,968.96	-8,172.15	575.65	8,191.96	0.00	0.00	0.00	
15,000.00	89.86	179.42	6,969.20	-8,272.15	576.66	8,291.84	0.00	0.00	0.00	
15,100.00	89.86	179.42	6,969.44	-8,372.14	577.67	8,391.71	0.00	0.00	0.00	
15,200.00	89.86	179.42	6,969.67	-8,472.14	578.68	8,491.59	0.00	0.00	0.00	
15,300.00	89.86	179.42	6,969.91	-8,572.13	579.69	8,591.46	0.00	0.00	0.00	
15,400.00	89.86	179.42	6,970.15	-8,672.13	580.70	8,691.34	0.00	0.00	0.00	
15,500.00	89.86	179.42	6,970.38	-8,772.12	581.70	8,791.21	0.00	0.00	0.00	
15,600.00	89.86	179.42	6,970.62	-8,872.12	582.71	8,891.09	0.00	0.00	0.00	
15,700.00	89.86	179.42	6,970.86	-8,972.11	583.72	8,990.97	0.00	0.00	0.00	
15,800.00	89.86	179.42	6,971.09	-9,072.11	584.73	9,090.84	0.00	0.00	0.00	
15,900.00	89.86	179.42	6,971.33	-9,172.10	585.74	9,190.72	0.00	0.00	0.00	
16,000.00	89.86	179.42	6,971.56	-9,272.09	586.75	9,290.59	0.00	0.00	0.00	
16,100.00	89.86	179.42	6,971.80	-9,372.09	587.76	9,390.47	0.00	0.00	0.00	
16,200.00	89.86	179.42	6,972.04	-9,472.08	588.76	9,490.34	0.00	0.00	0.00	
16,300.00	89.86	179.42	6,972.27	-9,572.08	589.77	9,590.22	0.00	0.00	0.00	
16,400.00	89.86	179.42	6,972.51	-9,672.07	590.78	9,690.09	0.00	0.00	0.00	
16,500.00	89.86	179.42	6,972.75	-9,772.07	591.79	9,789.97	0.00	0.00	0.00	
16,600.00	89.86	179.42	6,972.98	-9,872.06	592.80	9,889.84	0.00	0.00	0.00	
16,607.52	89.86	179.42	6,973.00	-9,879.59	592.87	9,897.36	0.00	0.00	0.00	
Hudson 35N-35HZ 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									
Hudson 35N-35HZ BHL	0.00	0.00	6,973.00	-9,879.59	592.87	1,276,356.73	3,241,830.94	40.088755	-104.635653
- plan hits target center									
- Point									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
1,317.00	1,317.00	9 5/8"	9-5/8	12-1/4	
7,299.44	6,951.00	7"	7	8-3/4	

Anadarko Petroleum Corp

Planning Report

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Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	gl + rkb @ 4926.00ft
Site:	WELD_Hudson 4E-26HZ Pad	North Reference:	True
Well:	Hudson 35N-35HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hudson 35N-35HZ		
Design:	Hudson 35N-35HZ (wp01)		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
767.00	767.00	Fox Hills				
2,863.08	2,858.00	Parkman				
4,564.36	4,552.00	Sussex				
6,985.85	6,867.00	Sharon Springs				
7,079.49	6,909.00	Niobrara A				
12,376.62	6,963.00	Niobrara B				