

US ROCKIES REGION PLANNING

COLORADO NORTHERN ZONE - 83

WELD_USA Fed 16-36HZ PAD

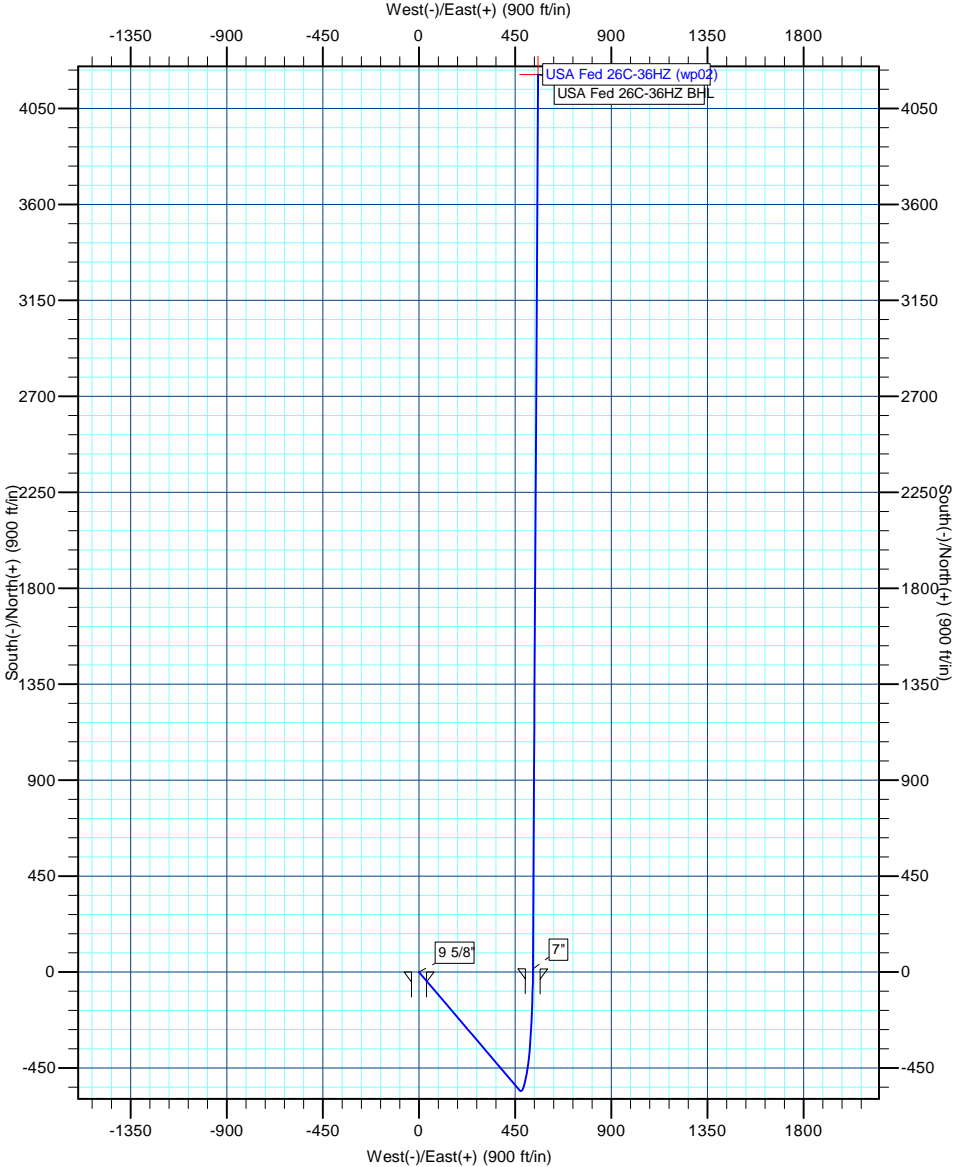
USA Fed 26C-36HZ

USA Fed 26C-36HZ

Plan: USA Fed 26C-36HZ (wp02)

Standard Planning Report

02 April, 2012



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Azimuths to True North

Magnetic North: 8.71°

Magnetic Field

Strength: 52934.4snT

Dip Angle: 66.85°

Date: 3/29/2012

Model: IGRF2010



Project: COLORADO NORTHERN ZONE - 83

Site: WELD_USA Fed 16-36HZ PAD

Well: USA Fed 26C-36HZ

Wellbore: USA Fed 26C-36HZ

Section:

SHL:

Design: USA Fed 26C-36HZ (wp02)

Latitude: 40.176368

Longitude: -104.718169

GL: 4985.00

KB: gl + rkb @ 5002.00ft

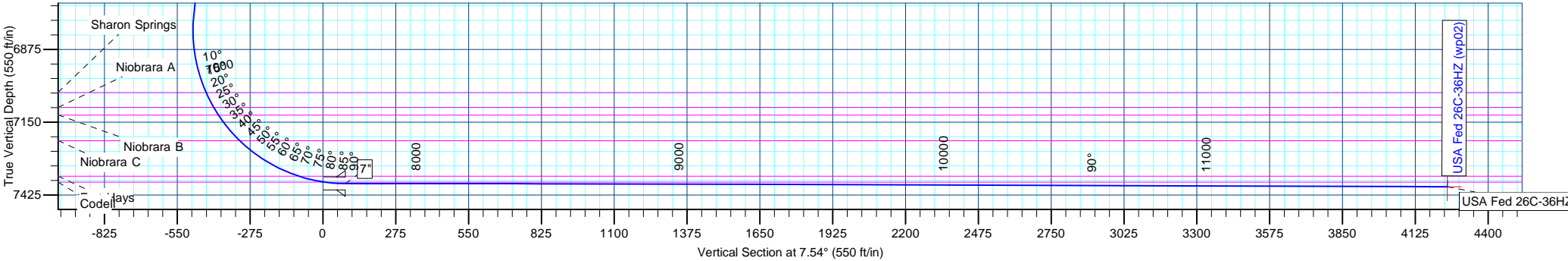
WELL DETAILS: USA Fed 26C-36HZ						
+N/-S	+E/-W	Northing	Ground Level: Easting	4985.00 Latitude	Longitude	Slot
0.00	0.00	1308056.81	3218463.48	40.176368	-104.718169	

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
1910.02	8.20	139.68	1908.62	-22.33	18.95	2.00	139.68	-19.65
6801.23	8.20	139.68	6749.82	-554.25	470.39	0.00	0.00	-487.74
7763.35	90.00	0.33	7382.00	15.00	533.00	10.00	-139.06	84.80
9229.87	89.80	0.33	7384.54	1481.49	541.41	0.01	179.59	1539.72
11957.75	89.80	0.33	7394.00	4209.31	557.09	0.00	0.00	4246.01

WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)						
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
USA Fed 26C-36HZ BHL	7394.00	4209.31	557.09	40.187923	-104.716175	Point

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
3441.00	3458.23	Parkman
4383.00	4409.96	Sussex
7038.00	7097.24	Sharon Springs
7094.00	7160.14	Niobrara A
7123.00	7194.26	Niobrara B
7220.00	7320.62	Niobrara C
7354.00	7583.09	Fort Hays
7377.00	7687.44	Codell

CASING DETAILS			
TVD	MD	Name	Size
800.00	800.00	9 5/8"	9-5/8
7382.00	7763.35	7"	7



Anadarko Petroleum Corp

Planning Report

Database:	edmp	Local Co-ordinate Reference:	Well USA Fed 26C-36HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	gl + rkb @ 5002.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	gl + rkb @ 5002.00ft
Site:	WELD_USA Fed 16-36HZ PAD	North Reference:	True
Well:	USA Fed 26C-36HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	USA Fed 26C-36HZ		
Design:	USA Fed 26C-36HZ (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_USA Fed 16-36HZ PAD			
Site Position:		Northing:	1,308,038.47 usft	Latitude:	40.176319
From:	Lat/Long	Easting:	3,218,406.36 usft	Longitude:	-104.718374
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence:	0.51 °

Well		USA Fed 26C-36HZ				
Well Position	+N/-S	17.84 ft	Northing:	1,308,056.81 usft	Latitude:	40.176368
	+E/-W	57.28 ft	Easting:	3,218,463.48 usft	Longitude:	-104.718169
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	4,985.00 ft

Wellbore	USA Fed 26C-36HZ				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	3/29/2012	8.71	66.85	52,934

Design	USA Fed 26C-36HZ (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	7.54

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	
1,910.02	8.20	139.68	1,908.62	-22.33	18.95	2.00	2.00	0.00	139.68	
6,801.23	8.20	139.68	6,749.82	-554.25	470.39	0.00	0.00	0.00	0.00	
7,763.35	90.00	0.33	7,382.00	15.00	533.00	10.00	8.50	-14.48	-139.06	
9,229.87	89.80	0.33	7,384.54	1,481.49	541.41	0.01	-0.01	0.00	179.59	
11,957.75	89.80	0.33	7,394.00	4,209.31	557.09	0.00	0.00	0.00	0.00	USA Fed 26C-36HZ E

Anadarko Petroleum Corp

Planning Report

Database:	edmp	Local Co-ordinate Reference:	Well USA Fed 26C-36HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	gl + rkb @ 5002.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	gl + rkb @ 5002.00ft
Site:	WELD_USA Fed 16-36HZ PAD	North Reference:	True
Well:	USA Fed 26C-36HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	USA Fed 26C-36HZ		
Design:	USA Fed 26C-36HZ (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
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
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	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
1,400.00	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
Start Build 2.00									
1,600.00	2.00	139.68	1,599.98	-1.33	1.13	-1.17	2.00	2.00	0.00
1,700.00	4.00	139.68	1,699.84	-5.32	4.52	-4.68	2.00	2.00	0.00
1,800.00	6.00	139.68	1,799.45	-11.97	10.15	-10.53	2.00	2.00	0.00
1,900.00	8.00	139.68	1,898.70	-21.26	18.04	-18.71	2.00	2.00	0.00
1,910.02	8.20	139.68	1,908.62	-22.33	18.95	-19.65	2.00	2.00	0.00
Start 4891.21 hold at 1910.02 MD									
2,000.00	8.20	139.68	1,997.68	-32.12	27.26	-28.26	0.00	0.00	0.00
2,100.00	8.20	139.68	2,096.66	-42.99	36.49	-37.83	0.00	0.00	0.00
2,200.00	8.20	139.68	2,195.64	-53.87	45.72	-47.40	0.00	0.00	0.00
2,300.00	8.20	139.68	2,294.61	-64.74	54.95	-56.97	0.00	0.00	0.00
2,400.00	8.20	139.68	2,393.59	-75.62	64.18	-66.54	0.00	0.00	0.00
2,500.00	8.20	139.68	2,492.57	-86.49	73.41	-76.11	0.00	0.00	0.00
2,600.00	8.20	139.68	2,591.55	-97.37	82.64	-85.68	0.00	0.00	0.00
2,700.00	8.20	139.68	2,690.52	-108.24	91.87	-95.25	0.00	0.00	0.00
2,800.00	8.20	139.68	2,789.50	-119.12	101.10	-104.82	0.00	0.00	0.00
2,900.00	8.20	139.68	2,888.48	-129.99	110.33	-114.39	0.00	0.00	0.00
3,000.00	8.20	139.68	2,987.46	-140.87	119.56	-123.96	0.00	0.00	0.00
3,100.00	8.20	139.68	3,086.43	-151.74	128.78	-133.53	0.00	0.00	0.00
3,200.00	8.20	139.68	3,185.41	-162.62	138.01	-143.10	0.00	0.00	0.00
3,300.00	8.20	139.68	3,284.39	-173.49	147.24	-152.67	0.00	0.00	0.00
3,400.00	8.20	139.68	3,383.37	-184.37	156.47	-162.24	0.00	0.00	0.00
3,458.23	8.20	139.68	3,441.00	-190.70	161.85	-167.82	0.00	0.00	0.00
Parkman									
3,500.00	8.20	139.68	3,482.34	-195.24	165.70	-171.81	0.00	0.00	0.00
3,600.00	8.20	139.68	3,581.32	-206.12	174.93	-181.38	0.00	0.00	0.00
3,700.00	8.20	139.68	3,680.30	-216.99	184.16	-190.95	0.00	0.00	0.00
3,800.00	8.20	139.68	3,779.28	-227.87	193.39	-200.52	0.00	0.00	0.00
3,900.00	8.20	139.68	3,878.25	-238.74	202.62	-210.09	0.00	0.00	0.00
4,000.00	8.20	139.68	3,977.23	-249.62	211.85	-219.66	0.00	0.00	0.00
4,100.00	8.20	139.68	4,076.21	-260.49	221.08	-229.23	0.00	0.00	0.00
4,200.00	8.20	139.68	4,175.19	-271.37	230.31	-238.80	0.00	0.00	0.00
4,300.00	8.20	139.68	4,274.16	-282.24	239.54	-248.37	0.00	0.00	0.00
4,400.00	8.20	139.68	4,373.14	-293.11	248.77	-257.94	0.00	0.00	0.00
4,409.96	8.20	139.68	4,383.00	-294.20	249.69	-258.89	0.00	0.00	0.00
Sussex									
4,500.00	8.20	139.68	4,472.12	-303.99	258.00	-267.51	0.00	0.00	0.00

Anadarko Petroleum Corp

Planning Report

Database:	edmp	Local Co-ordinate Reference:	Well USA Fed 26C-36HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	gl + rkb @ 5002.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	gl + rkb @ 5002.00ft
Site:	WELD_USA Fed 16-36HZ PAD	North Reference:	True
Well:	USA Fed 26C-36HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	USA Fed 26C-36HZ		
Design:	USA Fed 26C-36HZ (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	8.20	139.68	4,571.10	-314.86	267.23	-277.08	0.00	0.00	0.00
4,700.00	8.20	139.68	4,670.07	-325.74	276.46	-286.65	0.00	0.00	0.00
4,800.00	8.20	139.68	4,769.05	-336.61	285.69	-296.22	0.00	0.00	0.00
4,900.00	8.20	139.68	4,868.03	-347.49	294.92	-305.79	0.00	0.00	0.00
5,000.00	8.20	139.68	4,967.01	-358.36	304.15	-315.36	0.00	0.00	0.00
5,100.00	8.20	139.68	5,065.99	-369.24	313.38	-324.93	0.00	0.00	0.00
5,200.00	8.20	139.68	5,164.96	-380.11	322.61	-334.50	0.00	0.00	0.00
5,300.00	8.20	139.68	5,263.94	-390.99	331.84	-344.07	0.00	0.00	0.00
5,400.00	8.20	139.68	5,362.92	-401.86	341.07	-353.64	0.00	0.00	0.00
5,500.00	8.20	139.68	5,461.90	-412.74	350.30	-363.21	0.00	0.00	0.00
5,600.00	8.20	139.68	5,560.87	-423.61	359.53	-372.78	0.00	0.00	0.00
5,700.00	8.20	139.68	5,659.85	-434.49	368.76	-382.35	0.00	0.00	0.00
5,800.00	8.20	139.68	5,758.83	-445.36	377.98	-391.92	0.00	0.00	0.00
5,900.00	8.20	139.68	5,857.81	-456.24	387.21	-401.49	0.00	0.00	0.00
6,000.00	8.20	139.68	5,956.78	-467.11	396.44	-411.06	0.00	0.00	0.00
6,100.00	8.20	139.68	6,055.76	-477.99	405.67	-420.63	0.00	0.00	0.00
6,200.00	8.20	139.68	6,154.74	-488.86	414.90	-430.20	0.00	0.00	0.00
6,300.00	8.20	139.68	6,253.72	-499.74	424.13	-439.77	0.00	0.00	0.00
6,400.00	8.20	139.68	6,352.69	-510.61	433.36	-449.34	0.00	0.00	0.00
6,500.00	8.20	139.68	6,451.67	-521.49	442.59	-458.91	0.00	0.00	0.00
6,600.00	8.20	139.68	6,550.65	-532.36	451.82	-468.48	0.00	0.00	0.00
6,700.00	8.20	139.68	6,649.63	-543.24	461.05	-478.05	0.00	0.00	0.00
6,800.00	8.20	139.68	6,748.60	-554.11	470.28	-487.62	0.00	0.00	0.00
6,801.23	8.20	139.68	6,749.82	-554.25	470.39	-487.74	0.00	0.00	0.00
Start DLS 10.00 TFO -139.06									
6,900.00	6.49	55.91	6,848.01	-556.49	479.60	-488.76	10.00	-1.73	-84.81
7,000.00	14.66	21.36	6,946.31	-541.50	488.91	-472.67	10.00	8.17	-34.55
7,097.24	23.96	12.52	7,038.00	-510.69	497.70	-440.97	10.00	9.57	-9.09
Sharon Springs									
7,100.00	24.23	12.37	7,040.52	-509.59	497.94	-439.85	10.00	9.73	-5.61
7,160.14	30.12	9.64	7,094.00	-482.63	503.12	-412.45	10.00	9.79	-4.53
Niobrara A									
7,194.26	33.47	8.49	7,123.00	-464.88	505.94	-394.48	10.00	9.84	-3.38
Niobrara B									
7,200.00	34.04	8.32	7,127.77	-461.73	506.41	-391.29	10.00	9.86	-3.03
7,300.00	43.93	5.92	7,205.41	-399.37	514.05	-328.48	10.00	9.89	-2.40
7,320.62	45.97	5.53	7,220.00	-384.88	515.50	-313.92	10.00	9.91	-1.87
Niobrara C									
7,400.00	53.85	4.26	7,271.08	-324.42	520.64	-253.30	10.00	9.92	-1.60
7,500.00	63.79	2.98	7,322.79	-239.14	525.99	-168.06	10.00	9.94	-1.28
7,583.09	72.06	2.07	7,354.00	-162.28	529.36	-91.43	10.00	9.95	-1.09
Fort Hays									
7,600.00	73.74	1.90	7,358.97	-146.13	529.92	-75.35	10.00	9.95	-1.02
7,687.44	82.44	1.04	7,377.00	-60.69	532.10	9.65	10.00	9.95	-0.98
Codell									
7,700.00	83.69	0.92	7,378.52	-48.22	532.31	22.04	10.00	9.96	-0.95
7,763.35	90.00	0.33	7,382.00	15.00	533.00	84.80	10.00	9.96	-0.94
Start DLS 0.01 TFO 179.59 - 7"									
7,800.00	90.00	0.33	7,382.00	51.65	533.21	121.16	0.01	-0.01	0.00
7,900.00	89.98	0.33	7,382.02	151.64	533.78	220.37	0.01	-0.01	0.00
8,000.00	89.97	0.33	7,382.07	251.64	534.35	319.58	0.01	-0.01	0.00
8,100.00	89.95	0.33	7,382.13	351.64	534.93	418.78	0.01	-0.01	0.00
8,200.00	89.94	0.33	7,382.23	451.64	535.50	517.99	0.01	-0.01	0.00

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Planning Report

Database:	edmp	Local Co-ordinate Reference:	Well USA Fed 26C-36HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	gl + rkb @ 5002.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	gl + rkb @ 5002.00ft
Site:	WELD_USA Fed 16-36HZ PAD	North Reference:	True
Well:	USA Fed 26C-36HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	USA Fed 26C-36HZ		
Design:	USA Fed 26C-36HZ (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	89.93	0.33	7,382.34	551.64	536.07	617.20	0.01	-0.01	0.00
8,400.00	89.91	0.33	7,382.48	651.64	536.65	716.41	0.01	-0.01	0.00
8,500.00	89.90	0.33	7,382.64	751.63	537.22	815.62	0.01	-0.01	0.00
8,600.00	89.89	0.33	7,382.83	851.63	537.79	914.83	0.01	-0.01	0.00
8,700.00	89.87	0.33	7,383.04	951.63	538.37	1,014.04	0.01	-0.01	0.00
8,800.00	89.86	0.33	7,383.27	1,051.63	538.94	1,113.25	0.01	-0.01	0.00
8,900.00	89.85	0.33	7,383.53	1,151.63	539.52	1,212.46	0.01	-0.01	0.00
9,000.00	89.83	0.33	7,383.81	1,251.62	540.09	1,311.67	0.01	-0.01	0.00
9,100.00	89.82	0.33	7,384.11	1,351.62	540.66	1,410.87	0.01	-0.01	0.00
9,200.00	89.81	0.33	7,384.44	1,451.62	541.24	1,510.08	0.01	-0.01	0.00
9,229.87	89.80	0.33	7,384.54	1,481.49	541.41	1,539.72	0.01	-0.01	0.00
Start 2727.88 hold at 9229.87 MD									
9,300.00	89.80	0.33	7,384.79	1,551.62	541.81	1,609.29	0.00	0.00	0.00
9,400.00	89.80	0.33	7,385.13	1,651.62	542.39	1,708.50	0.00	0.00	0.00
9,500.00	89.80	0.33	7,385.48	1,751.61	542.96	1,807.71	0.00	0.00	0.00
9,600.00	89.80	0.33	7,385.83	1,851.61	543.54	1,906.92	0.00	0.00	0.00
9,700.00	89.80	0.33	7,386.17	1,951.61	544.11	2,006.13	0.00	0.00	0.00
9,800.00	89.80	0.33	7,386.52	2,051.61	544.69	2,105.34	0.00	0.00	0.00
9,900.00	89.80	0.33	7,386.87	2,151.60	545.26	2,204.54	0.00	0.00	0.00
10,000.00	89.80	0.33	7,387.21	2,251.60	545.84	2,303.75	0.00	0.00	0.00
10,100.00	89.80	0.33	7,387.56	2,351.60	546.41	2,402.96	0.00	0.00	0.00
10,200.00	89.80	0.33	7,387.91	2,451.60	546.99	2,502.17	0.00	0.00	0.00
10,300.00	89.80	0.33	7,388.25	2,551.60	547.56	2,601.38	0.00	0.00	0.00
10,400.00	89.80	0.33	7,388.60	2,651.59	548.14	2,700.59	0.00	0.00	0.00
10,500.00	89.80	0.33	7,388.95	2,751.59	548.71	2,799.80	0.00	0.00	0.00
10,600.00	89.80	0.33	7,389.29	2,851.59	549.28	2,899.01	0.00	0.00	0.00
10,700.00	89.80	0.33	7,389.64	2,951.59	549.86	2,998.21	0.00	0.00	0.00
10,800.00	89.80	0.33	7,389.99	3,051.58	550.43	3,097.42	0.00	0.00	0.00
10,900.00	89.80	0.33	7,390.33	3,151.58	551.01	3,196.63	0.00	0.00	0.00
11,000.00	89.80	0.33	7,390.68	3,251.58	551.58	3,295.84	0.00	0.00	0.00
11,100.00	89.80	0.33	7,391.03	3,351.58	552.16	3,395.05	0.00	0.00	0.00
11,200.00	89.80	0.33	7,391.37	3,451.57	552.73	3,494.26	0.00	0.00	0.00
11,300.00	89.80	0.33	7,391.72	3,551.57	553.31	3,593.47	0.00	0.00	0.00
11,400.00	89.80	0.33	7,392.07	3,651.57	553.88	3,692.68	0.00	0.00	0.00
11,500.00	89.80	0.33	7,392.41	3,751.57	554.46	3,791.88	0.00	0.00	0.00
11,600.00	89.80	0.33	7,392.76	3,851.57	555.03	3,891.09	0.00	0.00	0.00
11,700.00	89.80	0.33	7,393.11	3,951.56	555.61	3,990.30	0.00	0.00	0.00
11,800.00	89.80	0.33	7,393.45	4,051.56	556.18	4,089.51	0.00	0.00	0.00
11,900.00	89.80	0.33	7,393.80	4,151.56	556.76	4,188.72	0.00	0.00	0.00
11,957.75	89.80	0.33	7,394.00	4,209.31	557.09	4,246.01	0.00	0.00	0.00
TD at 11957.75 - USA Fed 26C-36HZ BHL									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
USA Fed 26C-36HZ BHI	0.00	0.00	7,394.00	4,209.31	557.09	1,312,270.85	3,218,983.43	40.187923	-104.716175
- hit/miss target									
- Shape									
- plan hits target center									
- Point									

Anadarko Petroleum Corp

Planning Report

Database:	edmp	Local Co-ordinate Reference:	Well USA Fed 26C-36HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	gl + rkb @ 5002.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	gl + rkb @ 5002.00ft
Site:	WELD_USA Fed 16-36HZ PAD	North Reference:	True
Well:	USA Fed 26C-36HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	USA Fed 26C-36HZ		
Design:	USA Fed 26C-36HZ (wp02)		

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
800.00	800.00	9 5/8"	9-5/8	12-1/4	
7,763.35	7,382.00	7"	7	8-3/4	

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,458.23	3,441.00	Parkman			
4,409.96	4,383.00	Sussex			
7,097.24	7,038.00	Sharon Springs			
7,160.14	7,094.00	Niobrara A			
7,194.26	7,123.00	Niobrara B			
7,320.62	7,220.00	Niobrara C			
7,583.09	7,354.00	Fort Hays			
7,687.44	7,377.00	Codell			

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
1,500.00	1,500.00	0.00	0.00	Start Build 2.00
1,910.02	1,908.62	-22.33	18.95	Start 4891.21 hold at 1910.02 MD
6,801.23	6,749.82	-554.25	470.39	Start DLS 10.00 TFO -139.06
7,763.35	7,382.00	15.00	533.00	Start DLS 0.01 TFO 179.59
9,229.87	7,384.54	1,481.49	541.41	Start 2727.88 hold at 9229.87 MD
11,957.75	7,394.00	4,209.31	557.09	TD at 11957.75