



Well Name: RESOLUTION 12-65-25-25-7NH  
Surface Location: RESOLUTION 12-65-25-25-6NH PAD  
North American Datum 1983  
US State Plane 1983 Colorado Northern Zone  
Ground Elevation: 5845.00  
WELL @ 5871.00usft (Original Well Elev)  
Easting 3247677.25 Latitude 40.972535 Longitude -104.603117

T

M

Azimuths to True North

Magnetic North: 8.98°

Magnetic Field

Strength: 53610.2snT

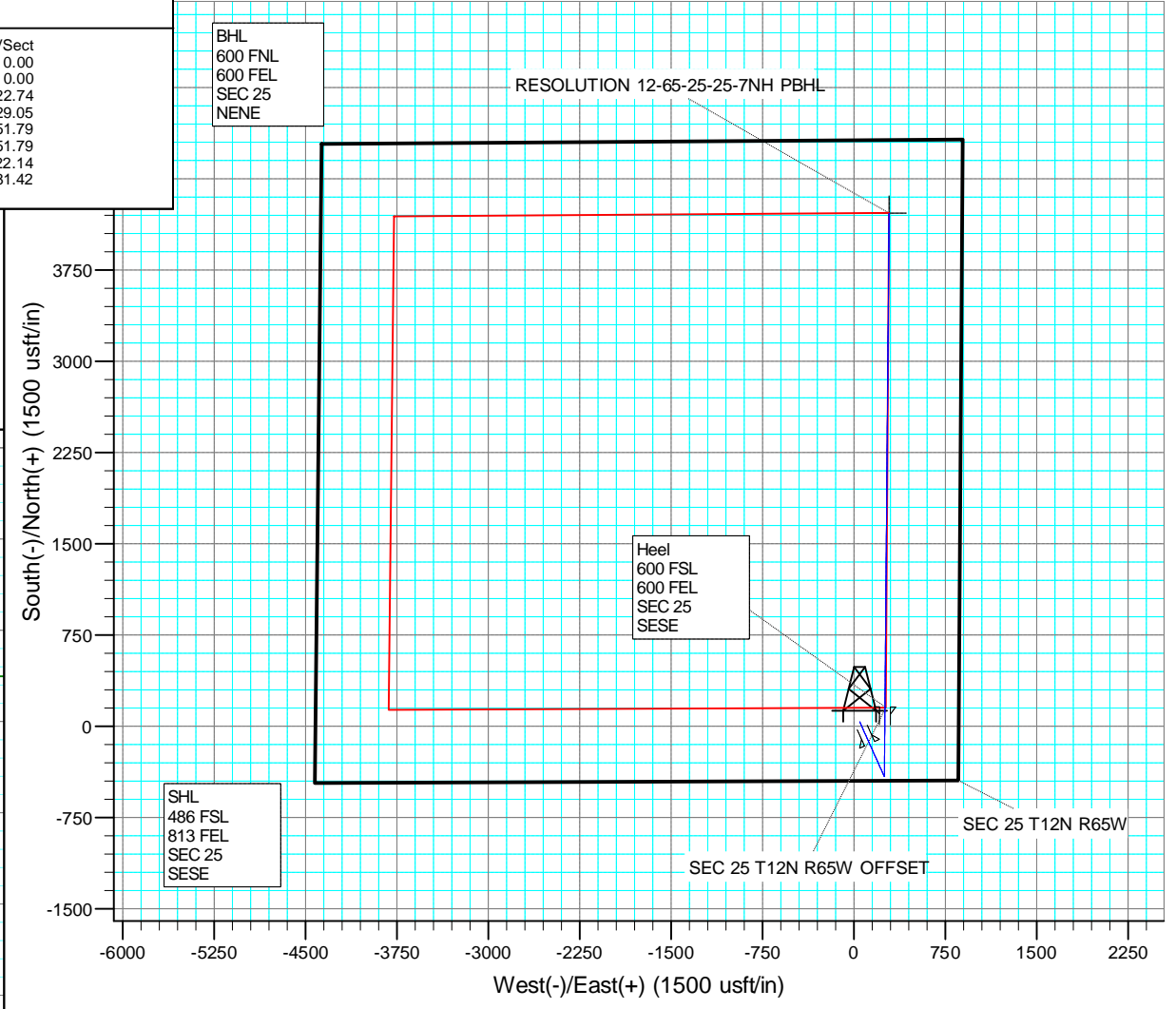
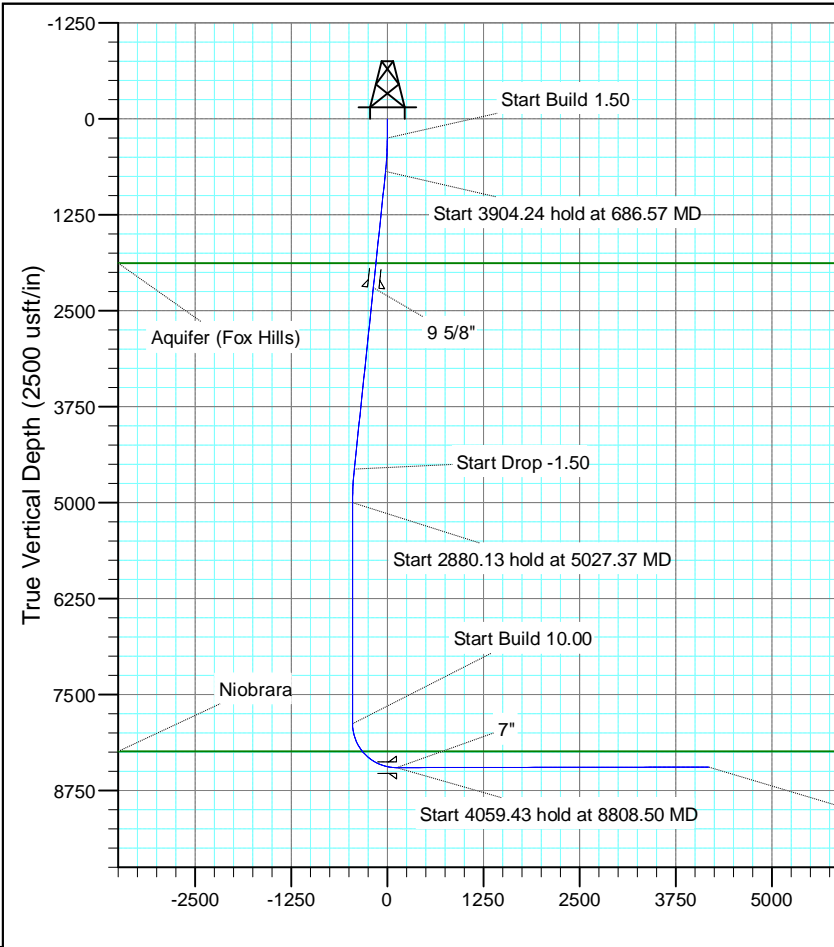
Dip Angle: 67.60°

Date: 12/31/2009

Model: IGRF200510

SECTION DETAILS								
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
0.00	0.00	0.00	0.00	36.79	47.50	0.00	0.00	0.00
250.00	0.00	0.00	250.00	36.79	47.50	0.00	0.00	0.00
686.57	6.55	155.86	686.62	14.05	57.69	1.50	155.86	-22.74
4590.80	6.55	155.86	4564.38	-392.26	239.81	0.00	0.00	-429.05
5027.37	0.00	0.00	5000.00	-415.00	250.00	1.50	180.00	-451.79
7907.50	0.00	0.00	7880.13	-415.00	250.00	0.00	0.00	-451.79
8808.50	90.10	0.48	8453.09	158.94	254.81	10.00	0.48	122.14
12867.93	90.10	0.48	8446.00	4218.22	288.81	0.00	0.00	4181.42

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
1881.00	1889.80	Aquifer (Fox Hills)
8241.00	8297.88	Niobrara



# **US ROCKIES REGION PLANNING**

**COLORADO NORTHERN ZONE - 83**

**RESOLUTION 12-65-25-25-6NH PAD**

**RESOLUTION 12-65-25-25-7NH**

**Wellbore #1**

**Plan: PLAN #1**

## **Standard Planning Report**

**31 December, 2015**

# Anadarko

## Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Site RESOLUTION 12-65-25-25-6NH PAD
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	WELL @ 5871.00usft (Original Well Elev)
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	WELL @ 5871.00usft (Original Well Elev)
<b>Site:</b>	RESOLUTION 12-65-25-25-6NH PAD	<b>North Reference:</b>	True
<b>Well:</b>	RESOLUTION 12-65-25-25-7NH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	PLAN #1		

<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		

<b>Site</b>	RESOLUTION 12-65-25-25-6NH PAD			
<b>Site Position:</b>		<b>Northing:</b>	1,598,364.93 usft	<b>Latitude:</b> 40.972434
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,247,630.13 usft	<b>Longitude:</b> -104.603289
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13-3/16 "	<b>Grid Convergence:</b> 0.58 °

<b>Well</b>	RESOLUTION 12-65-25-25-7NH			
<b>Well Position</b>	<b>+N/-S</b>	36.79 usft	<b>Northing:</b>	1,598,402.20 usft
	<b>+E/-W</b>	47.50 usft	<b>Easting:</b>	3,247,677.25 usft
<b>Position Uncertainty</b>	0.00 usft	<b>Wellhead Elevation:</b>	0.00 usft	<b>Ground Level:</b> 5,845.00 usft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF200510	12/31/2009	8.98	67.60	53,610

<b>Design</b>	PLAN #1			
<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) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	0.00	36.79	47.50	0.00

<b>Plan Sections</b>										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	36.79	47.50	0.00	0.00	0.00	0.00	
250.00	0.00	0.00	250.00	36.79	47.50	0.00	0.00	0.00	0.00	
686.57	6.55	155.86	685.62	14.05	57.69	1.50	1.50	0.00	155.86	
4,590.80	6.55	155.86	4,564.38	-392.26	239.81	0.00	0.00	0.00	0.00	
5,027.37	0.00	0.00	5,000.00	-415.00	250.00	1.50	-1.50	0.00	180.00	
7,907.50	0.00	0.00	7,880.13	-415.00	250.00	0.00	0.00	0.00	0.00	
8,808.50	90.10	0.48	8,453.09	158.94	254.81	10.00	10.00	0.00	0.48	
12,867.93	90.10	0.48	8,446.00	4,218.22	288.81	0.00	0.00	0.00	0.00	RESOLUTION 12-65-

# Anadarko

## Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Site RESOLUTION 12-65-25-25-6NH PAD
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	WELL @ 5871.00usft (Original Well Elev)
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	WELL @ 5871.00usft (Original Well Elev)
<b>Site:</b>	RESOLUTION 12-65-25-25-6NH PAD	<b>North Reference:</b>	True
<b>Well:</b>	RESOLUTION 12-65-25-25-7NH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	PLAN #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	36.79	47.50	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	36.79	47.50	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	36.79	47.50	0.00	0.00	0.00	0.00
250.00	0.00	0.00	250.00	36.79	47.50	0.00	0.00	0.00	0.00
<b>Start Build 1.50</b>									
300.00	0.75	155.86	300.00	36.49	47.63	-0.30	1.50	1.50	0.00
400.00	2.25	155.86	399.96	34.11	48.70	-2.69	1.50	1.50	0.00
500.00	3.75	155.86	499.82	29.33	50.84	-7.46	1.50	1.50	0.00
600.00	5.25	155.86	599.51	22.17	54.05	-14.62	1.50	1.50	0.00
686.57	6.55	155.86	686.62	14.05	57.69	-22.74	1.50	1.50	0.00
<b>Start 3904.24 hold at 686.57 MD</b>									
700.00	6.55	155.86	698.96	12.65	58.32	-24.14	0.00	0.00	0.00
800.00	6.55	155.86	798.31	2.25	62.98	-34.55	0.00	0.00	0.00
900.00	6.55	155.86	897.66	-8.16	67.65	-44.95	0.00	0.00	0.00
1,000.00	6.55	155.86	997.00	-18.57	72.31	-55.36	0.00	0.00	0.00
1,100.00	6.55	155.86	1,096.35	-28.97	76.98	-65.77	0.00	0.00	0.00
1,200.00	6.55	155.86	1,195.70	-39.38	81.64	-76.17	0.00	0.00	0.00
1,300.00	6.55	155.86	1,295.05	-49.79	86.31	-86.58	0.00	0.00	0.00
1,400.00	6.55	155.86	1,394.39	-60.19	90.97	-96.99	0.00	0.00	0.00
1,500.00	6.55	155.86	1,493.74	-70.60	95.63	-107.39	0.00	0.00	0.00
1,600.00	6.55	155.86	1,593.09	-81.01	100.30	-117.80	0.00	0.00	0.00
1,700.00	6.55	155.86	1,692.43	-91.42	104.96	-128.21	0.00	0.00	0.00
1,800.00	6.55	155.86	1,791.78	-101.82	109.63	-138.61	0.00	0.00	0.00
1,889.80	6.55	155.86	1,881.00	-111.17	113.82	-147.96	0.00	0.00	0.00
<b>Aquifer (Fox Hills)</b>									
1,900.00	6.55	155.86	1,891.13	-112.23	114.29	-149.02	0.00	0.00	0.00
2,000.00	6.55	155.86	1,990.48	-122.64	118.96	-159.43	0.00	0.00	0.00
2,100.00	6.55	155.86	2,089.82	-133.04	123.62	-169.84	0.00	0.00	0.00
2,200.00	6.55	155.86	2,189.17	-143.45	128.29	-180.24	0.00	0.00	0.00
2,210.90	6.55	155.86	2,200.00	-144.58	128.80	-181.38	0.00	0.00	0.00
<b>9 5/8"</b>									
2,300.00	6.55	155.86	2,288.52	-153.86	132.95	-190.65	0.00	0.00	0.00
2,400.00	6.55	155.86	2,387.87	-164.26	137.62	-201.06	0.00	0.00	0.00
2,500.00	6.55	155.86	2,487.21	-174.67	142.28	-211.46	0.00	0.00	0.00
2,599.99	6.55	155.86	2,586.56	-185.08	146.94	-221.87	0.00	0.00	0.00
2,699.99	6.55	155.86	2,685.91	-195.48	151.61	-232.28	0.00	0.00	0.00
2,799.99	6.55	155.86	2,785.26	-205.89	156.27	-242.68	0.00	0.00	0.00
2,899.99	6.55	155.86	2,884.60	-216.30	160.94	-253.09	0.00	0.00	0.00
2,999.99	6.55	155.86	2,983.95	-226.70	165.60	-263.50	0.00	0.00	0.00
3,099.99	6.55	155.86	3,083.30	-237.11	170.27	-273.90	0.00	0.00	0.00
3,199.99	6.55	155.86	3,182.65	-247.52	174.93	-284.31	0.00	0.00	0.00
3,299.99	6.55	155.86	3,281.99	-257.93	179.60	-294.72	0.00	0.00	0.00
3,399.99	6.55	155.86	3,381.34	-268.33	184.26	-305.12	0.00	0.00	0.00
3,499.99	6.55	155.86	3,480.69	-278.74	188.93	-315.53	0.00	0.00	0.00
3,599.99	6.55	155.86	3,580.03	-289.15	193.59	-325.94	0.00	0.00	0.00
3,699.99	6.55	155.86	3,679.38	-299.55	198.25	-336.35	0.00	0.00	0.00
3,799.99	6.55	155.86	3,778.73	-309.96	202.92	-346.75	0.00	0.00	0.00
3,899.99	6.55	155.86	3,878.08	-320.37	207.58	-357.16	0.00	0.00	0.00
3,999.99	6.55	155.86	3,977.42	-330.77	212.25	-367.57	0.00	0.00	0.00
4,099.99	6.55	155.86	4,076.77	-341.18	216.91	-377.97	0.00	0.00	0.00
4,199.99	6.55	155.86	4,176.12	-351.59	221.58	-388.38	0.00	0.00	0.00
4,299.99	6.55	155.86	4,275.47	-361.99	226.24	-398.79	0.00	0.00	0.00
4,399.99	6.55	155.86	4,374.81	-372.40	230.91	-409.19	0.00	0.00	0.00
4,499.99	6.55	155.86	4,474.16	-382.81	235.57	-419.60	0.00	0.00	0.00

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## Planning Report

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<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	WELL @ 5871.00usft (Original Well Elev)
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	WELL @ 5871.00usft (Original Well Elev)
<b>Site:</b>	RESOLUTION 12-65-25-25-6NH PAD	<b>North Reference:</b>	True
<b>Well:</b>	RESOLUTION 12-65-25-25-7NH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	PLAN #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,590.80	6.55	155.86	4,564.38	-392.26	239.81	-429.05	0.00	0.00	0.00
<b>Start Drop -1.50</b>									
4,599.99	6.41	155.86	4,573.51	-393.20	240.23	-430.00	1.50	-1.50	0.00
4,699.99	4.91	155.86	4,673.02	-402.21	244.27	-439.00	1.50	-1.50	0.00
4,799.99	3.41	155.86	4,772.75	-408.83	247.23	-445.62	1.50	-1.50	0.00
4,899.99	1.91	155.86	4,872.64	-413.06	249.13	-449.85	1.50	-1.50	0.00
4,999.99	0.41	155.86	4,972.62	-414.91	249.96	-451.70	1.50	-1.50	0.00
5,027.37	0.00	0.00	5,000.00	-415.00	250.00	-451.79	1.50	-1.50	0.00
<b>Start 2880.13 hold at 5027.37 MD</b>									
5,099.99	0.00	0.00	5,072.62	-415.00	250.00	-451.79	0.00	0.00	0.00
5,199.99	0.00	0.00	5,172.62	-415.00	250.00	-451.79	0.00	0.00	0.00
5,299.99	0.00	0.00	5,272.62	-415.00	250.00	-451.79	0.00	0.00	0.00
5,399.99	0.00	0.00	5,372.62	-415.00	250.00	-451.79	0.00	0.00	0.00
5,499.99	0.00	0.00	5,472.62	-415.00	250.00	-451.79	0.00	0.00	0.00
5,599.99	0.00	0.00	5,572.62	-415.00	250.00	-451.79	0.00	0.00	0.00
5,699.99	0.00	0.00	5,672.62	-415.00	250.00	-451.79	0.00	0.00	0.00
5,799.99	0.00	0.00	5,772.62	-415.00	250.00	-451.79	0.00	0.00	0.00
5,899.99	0.00	0.00	5,872.62	-415.00	250.00	-451.79	0.00	0.00	0.00
5,999.99	0.00	0.00	5,972.62	-415.00	250.00	-451.79	0.00	0.00	0.00
6,099.99	0.00	0.00	6,072.62	-415.00	250.00	-451.79	0.00	0.00	0.00
6,199.99	0.00	0.00	6,172.62	-415.00	250.00	-451.79	0.00	0.00	0.00
6,299.99	0.00	0.00	6,272.62	-415.00	250.00	-451.79	0.00	0.00	0.00
6,399.99	0.00	0.00	6,372.61	-415.00	250.00	-451.79	0.00	0.00	0.00
6,499.99	0.00	0.00	6,472.61	-415.00	250.00	-451.79	0.00	0.00	0.00
6,599.99	0.00	0.00	6,572.61	-415.00	250.00	-451.79	0.00	0.00	0.00
6,699.99	0.00	0.00	6,672.61	-415.00	250.00	-451.79	0.00	0.00	0.00
6,799.99	0.00	0.00	6,772.61	-415.00	250.00	-451.79	0.00	0.00	0.00
6,899.99	0.00	0.00	6,872.61	-415.00	250.00	-451.79	0.00	0.00	0.00
6,999.99	0.00	0.00	6,972.61	-415.00	250.00	-451.79	0.00	0.00	0.00
7,099.99	0.00	0.00	7,072.61	-415.00	250.00	-451.79	0.00	0.00	0.00
7,199.99	0.00	0.00	7,172.61	-415.00	250.00	-451.79	0.00	0.00	0.00
7,299.99	0.00	0.00	7,272.61	-415.00	250.00	-451.79	0.00	0.00	0.00
7,399.99	0.00	0.00	7,372.61	-415.00	250.00	-451.79	0.00	0.00	0.00
7,499.99	0.00	0.00	7,472.61	-415.00	250.00	-451.79	0.00	0.00	0.00
7,599.98	0.00	0.00	7,572.61	-415.00	250.00	-451.79	0.00	0.00	0.00
7,699.98	0.00	0.00	7,672.61	-415.00	250.00	-451.79	0.00	0.00	0.00
7,799.98	0.00	0.00	7,772.61	-415.00	250.00	-451.79	0.00	0.00	0.00
7,899.98	0.00	0.00	7,872.61	-415.00	250.00	-451.79	0.00	0.00	0.00
7,907.50	0.00	0.00	7,880.13	-415.00	250.00	-451.79	0.00	0.00	0.00
<b>Start Build 10.00</b>									
7,999.98	9.25	0.48	7,972.21	-407.55	250.06	-444.35	10.00	10.00	0.00
8,099.98	19.25	0.48	8,069.01	-382.97	250.27	-419.76	10.00	10.00	0.00
8,199.98	29.25	0.48	8,160.07	-341.96	250.61	-378.75	10.00	10.00	0.00
8,297.88	39.04	0.48	8,241.00	-287.08	251.07	-323.87	10.00	10.00	0.00
<b>Niobrara</b>									
8,299.98	39.25	0.48	8,242.63	-285.75	251.08	-322.54	10.00	10.00	0.00
8,399.98	49.25	0.48	8,314.17	-216.07	251.67	-252.86	10.00	10.00	0.00
8,499.98	59.25	0.48	8,372.52	-135.02	252.35	-171.81	10.00	10.00	0.00
8,599.98	69.25	0.48	8,415.92	-45.07	253.10	-81.86	10.00	10.00	0.00
8,699.98	79.25	0.48	8,443.03	51.05	253.90	14.26	10.00	10.00	0.00
8,799.98	89.25	0.48	8,453.04	150.42	254.74	113.63	10.00	10.00	0.00
8,808.50	90.10	0.48	8,453.09	158.94	254.81	122.14	10.00	10.00	0.00
<b>Start 4059.43 hold at 8808.50 MD - 7"</b>									

# Anadarko

## Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Site RESOLUTION 12-65-25-25-6NH PAD
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	WELL @ 5871.00usft (Original Well Elev)
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	WELL @ 5871.00usft (Original Well Elev)
<b>Site:</b>	RESOLUTION 12-65-25-25-6NH PAD	<b>North Reference:</b>	True
<b>Well:</b>	RESOLUTION 12-65-25-25-7NH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	PLAN #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
8,899.98	90.10	0.48	8,452.93	250.42	255.57	213.62	0.00	0.00	0.00	
8,999.98	90.10	0.48	8,452.75	350.41	256.41	313.62	0.00	0.00	0.00	
9,099.98	90.10	0.48	8,452.58	450.41	257.25	413.62	0.00	0.00	0.00	
9,199.98	90.10	0.48	8,452.40	550.40	258.09	513.61	0.00	0.00	0.00	
9,299.98	90.10	0.48	8,452.23	650.40	258.92	613.61	0.00	0.00	0.00	
9,399.98	90.10	0.48	8,452.05	750.40	259.76	713.60	0.00	0.00	0.00	
9,499.98	90.10	0.48	8,451.88	850.39	260.60	813.60	0.00	0.00	0.00	
9,599.98	90.10	0.48	8,451.70	950.39	261.44	913.60	0.00	0.00	0.00	
9,699.98	90.10	0.48	8,451.53	1,050.39	262.28	1,013.59	0.00	0.00	0.00	
9,799.98	90.10	0.48	8,451.35	1,150.38	263.11	1,113.59	0.00	0.00	0.00	
9,899.98	90.10	0.48	8,451.18	1,250.38	263.95	1,213.58	0.00	0.00	0.00	
9,999.98	90.10	0.48	8,451.01	1,350.37	264.79	1,313.58	0.00	0.00	0.00	
10,099.98	90.10	0.48	8,450.83	1,450.37	265.63	1,413.58	0.00	0.00	0.00	
10,199.98	90.10	0.48	8,450.66	1,550.37	266.46	1,513.57	0.00	0.00	0.00	
10,299.98	90.10	0.48	8,450.48	1,650.36	267.30	1,613.57	0.00	0.00	0.00	
10,399.98	90.10	0.48	8,450.31	1,750.36	268.14	1,713.57	0.00	0.00	0.00	
10,499.98	90.10	0.48	8,450.13	1,850.35	268.98	1,813.56	0.00	0.00	0.00	
10,599.98	90.10	0.48	8,449.96	1,950.35	269.81	1,913.56	0.00	0.00	0.00	
10,699.98	90.10	0.48	8,449.78	2,050.35	270.65	2,013.55	0.00	0.00	0.00	
10,799.98	90.10	0.48	8,449.61	2,150.34	271.49	2,113.55	0.00	0.00	0.00	
10,899.98	90.10	0.48	8,449.43	2,250.34	272.33	2,213.55	0.00	0.00	0.00	
10,999.98	90.10	0.48	8,449.26	2,350.34	273.16	2,313.54	0.00	0.00	0.00	
11,099.98	90.10	0.48	8,449.09	2,450.33	274.00	2,413.54	0.00	0.00	0.00	
11,199.98	90.10	0.48	8,448.91	2,550.33	274.84	2,513.53	0.00	0.00	0.00	
11,299.98	90.10	0.48	8,448.74	2,650.32	275.68	2,613.53	0.00	0.00	0.00	
11,399.98	90.10	0.48	8,448.56	2,750.32	276.52	2,713.53	0.00	0.00	0.00	
11,499.98	90.10	0.48	8,448.39	2,850.32	277.35	2,813.52	0.00	0.00	0.00	
11,599.98	90.10	0.48	8,448.21	2,950.31	278.19	2,913.52	0.00	0.00	0.00	
11,699.98	90.10	0.48	8,448.04	3,050.31	279.03	3,013.52	0.00	0.00	0.00	
11,799.98	90.10	0.48	8,447.86	3,150.30	279.87	3,113.51	0.00	0.00	0.00	
11,899.98	90.10	0.48	8,447.69	3,250.30	280.70	3,213.51	0.00	0.00	0.00	
11,999.98	90.10	0.48	8,447.52	3,350.30	281.54	3,313.50	0.00	0.00	0.00	
12,099.98	90.10	0.48	8,447.34	3,450.29	282.38	3,413.50	0.00	0.00	0.00	
12,199.98	90.10	0.48	8,447.17	3,550.29	283.22	3,513.50	0.00	0.00	0.00	
12,299.98	90.10	0.48	8,446.99	3,650.28	284.05	3,613.49	0.00	0.00	0.00	
12,399.98	90.10	0.48	8,446.82	3,750.28	284.89	3,713.49	0.00	0.00	0.00	
12,499.98	90.10	0.48	8,446.64	3,850.28	285.73	3,813.48	0.00	0.00	0.00	
12,599.98	90.10	0.48	8,446.47	3,950.27	286.57	3,913.48	0.00	0.00	0.00	
12,699.97	90.10	0.48	8,446.29	4,050.27	287.41	4,013.48	0.00	0.00	0.00	
12,799.97	90.10	0.48	8,446.12	4,150.27	288.24	4,113.47	0.00	0.00	0.00	
12,867.93	90.10	0.48	8,446.00	4,218.22	288.81	4,181.42	0.00	0.00	0.00	
TD at 12867.93										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude		
RESOLUTION 12-65-25	0.00	0.00	8,446.00	4,218.22	288.81	1,602,585.85	3,247,876.27	40.984011		
- hit/miss target										
- Shape										
- plan hits target center										
- Point										

**Anadarko**  
Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Site RESOLUTION 12-65-25-25-6NH PAD
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	WELL @ 5871.00usft (Original Well Elev)
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	WELL @ 5871.00usft (Original Well Elev)
<b>Site:</b>	RESOLUTION 12-65-25-25-6NH PAD	<b>North Reference:</b>	True
<b>Well:</b>	RESOLUTION 12-65-25-25-7NH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	PLAN #1		

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
2,210.90	2,200.00	9 5/8"	9-5/8	12-1/4	
8,808.50	8,453.09	7"	7	7-1/2	

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,889.80	1,881.00	Aquifer (Fox Hills)			
8,297.88	8,241.00	Niobrara			

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
250.00	250.00	36.79	47.50	Start Build 1.50	
686.57	685.62	14.05	57.69	Start 3904.24 hold at 686.57 MD	
4,590.80	4,564.38	-392.26	239.81	Start Drop -1.50	
5,027.37	5,000.00	-415.00	250.00	Start 2880.13 hold at 5027.37 MD	
7,907.50	7,880.13	-415.00	250.00	Start Build 10.00	
8,808.50	8,453.09	158.94	254.81	Start 4059.43 hold at 8808.50 MD	
12,867.93	8,446.00	4,218.22	288.81	TD at 12867.93	