

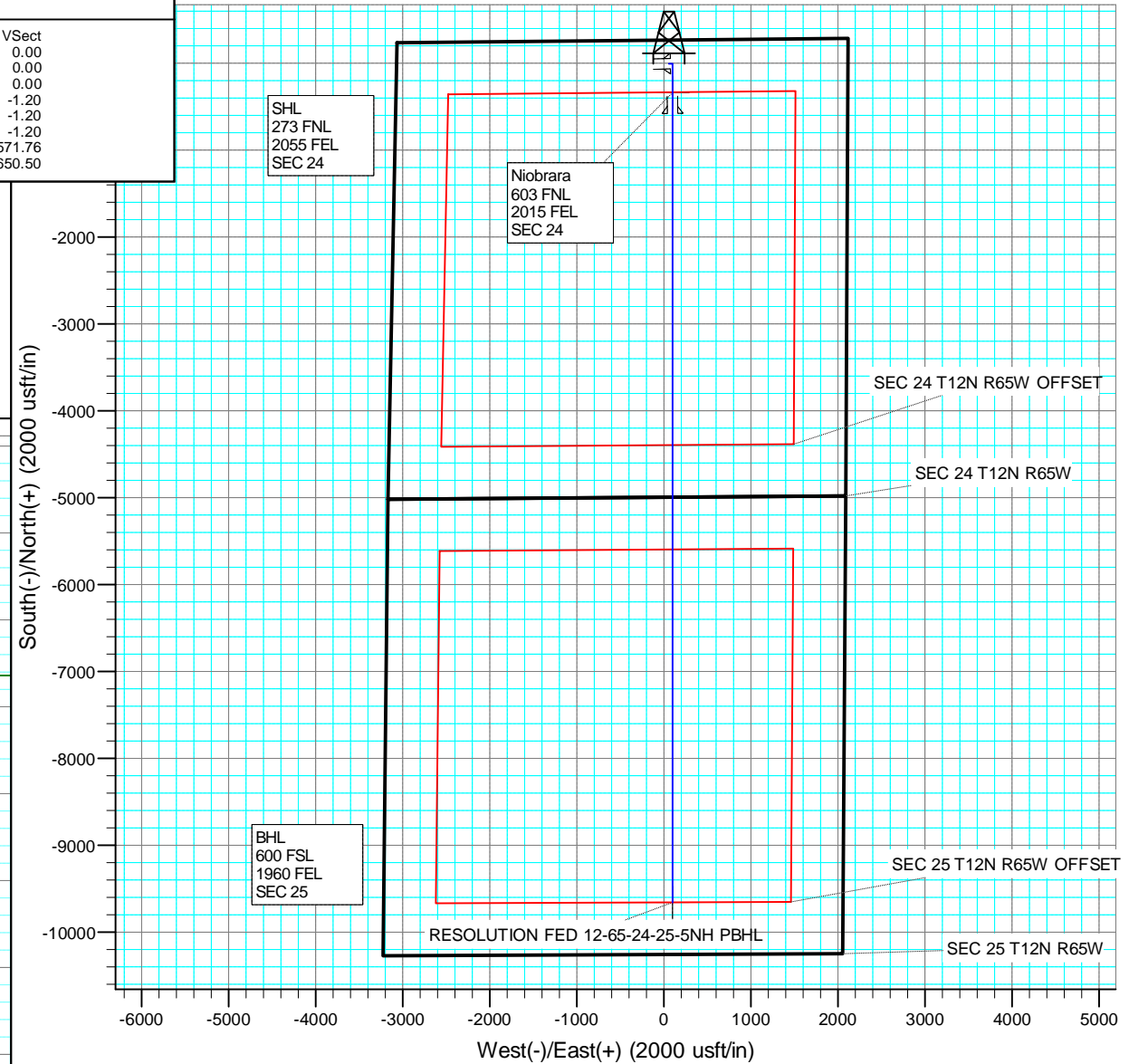
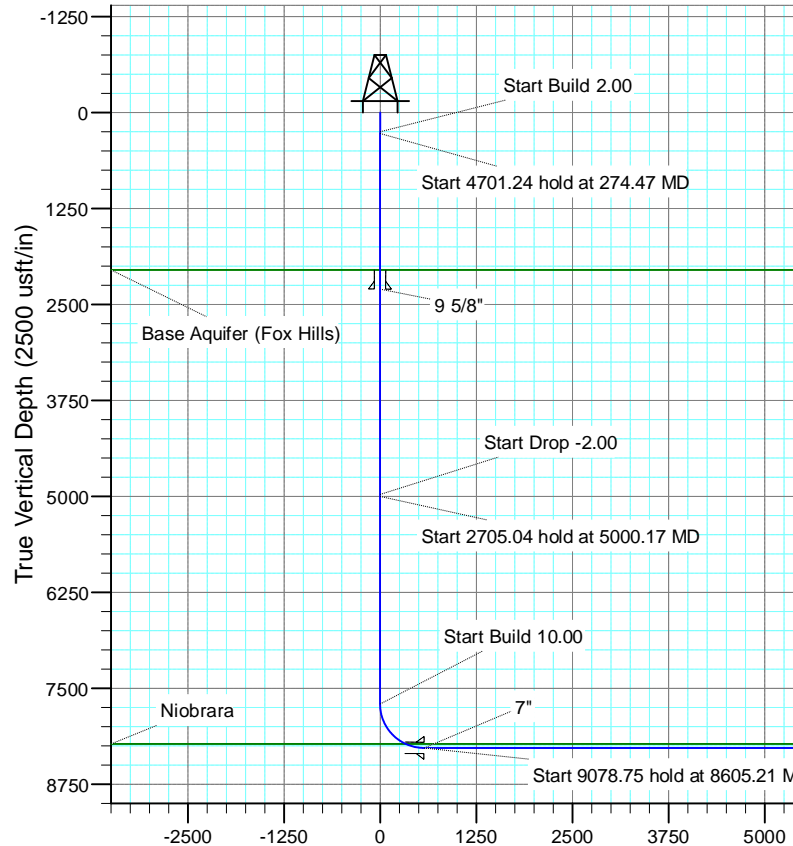
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
-6.20	59.63	1608149.56	3246392.70	40.999321	-104.607413

### SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
0.00	0.00	0.00	0.00	-6.20	59.63	0.00	0.00	0.00
250.00	0.00	0.00	250.00	-6.20	59.63	0.00	0.00	0.00
274.47	0.49	88.29	274.47	-6.20	59.73	2.00	88.29	0.00
4975.70	0.49	88.29	4975.53	-5.00	99.86	0.00	0.00	-1.20
5000.17	0.00	0.00	5000.00	-5.00	99.97	2.00	180.00	-1.20
7705.21	0.00	0.00	7705.04	-5.00	99.97	0.00	0.00	-1.20
8605.21	90.00	180.00	8278.00	-577.96	99.97	10.00	180.00	571.76
17683.96	90.00	180.00	8278.00	-9656.71	99.97	0.00	0.00	9650.50

### FORMATION TOP DETAILS

TVDPath	MDPath	Formation
2052.00	2052.07	Base Aquifer (Fox Hills)
8225.00	8356.83	Niobrara



Vertical Section at 180.00° (2500 usft/in)

# **US ROCKIES REGION PLANNING**

**COLORADO NORTHERN ZONE - 83**

**RESOLUTION FED 12-65-24-25-5CH PAD**

**RESOLUTION FED 12-65-24-25-5NH**

**Wellbore #1**

**Plan: PLAN #1**

## **Standard Planning Report**

**14 January, 2015**

# Anadarko

## Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Site RESOLUTION FED 12-65-24-25-5CH PAD
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	WELL @ 5873.00usft (Original Well Elev)
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	WELL @ 5873.00usft (Original Well Elev)
<b>Site:</b>	RESOLUTION FED 12-65-24-25-5CH PAD	<b>North Reference:</b>	True
<b>Well:</b>	RESOLUTION FED 12-65-24-25-5NH	<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		

Site		RESOLUTION FED 12-65-24-25-5CH PAD			
Site Position:		Northing:	1,608,155.16 usft	Latitude:	40.999338
From:	Lat/Long	Easting:	3,246,333.01 usft	Longitude:	-104.607629
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.58 °

Well		RESOLUTION FED 12-65-24-25-5NH				
Well Position	+N/-S	-6.20 usft	Northing:	1,608,149.55 usft	Latitude:	40.999321
	+E/-W	59.63 usft	Easting:	3,246,392.70 usft	Longitude:	-104.607413
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	5,847.00 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	8.99	67.62	53,624

<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	-6.20	59.63	180.00

<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	-6.20	59.63	0.00	0.00	0.00	0.00	
250.00	0.00	0.00	250.00	-6.20	59.63	0.00	0.00	0.00	0.00	
274.47	0.49	88.29	274.47	-6.20	59.73	2.00	2.00	0.00	88.29	
4,975.70	0.49	88.29	4,975.53	-5.00	99.86	0.00	0.00	0.00	0.00	
5,000.17	0.00	0.00	5,000.00	-5.00	99.97	2.00	-2.00	0.00	180.00	
7,705.21	0.00	0.00	7,705.04	-5.00	99.97	0.00	0.00	0.00	0.00	
8,605.21	90.00	180.00	8,278.00	-577.96	99.97	10.00	10.00	0.00	180.00	
17,683.96	90.00	180.00	8,278.00	-9,656.71	99.97	0.00	0.00	0.00	0.00	RESOLUTION FED 1

# Anadarko

## Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Site RESOLUTION FED 12-65-24-25-5CH PAD
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	WELL @ 5873.00usft (Original Well Elev)
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	WELL @ 5873.00usft (Original Well Elev)
<b>Site:</b>	RESOLUTION FED 12-65-24-25-5CH PAD	<b>North Reference:</b>	True
<b>Well:</b>	RESOLUTION FED 12-65-24-25-5NH	<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	-6.20	59.63	0.00	0.00	0.00	0.00	
100.00	0.00	0.00	100.00	-6.20	59.63	0.00	0.00	0.00	0.00	
200.00	0.00	0.00	200.00	-6.20	59.63	0.00	0.00	0.00	0.00	
250.00	0.00	0.00	250.00	-6.20	59.63	0.00	0.00	0.00	0.00	
Start Build 2.00										
274.47	0.49	88.29	274.47	-6.20	59.73	0.00	2.00	2.00	0.00	
Start 4701.24 hold at 274.47 MD										
300.00	0.49	88.29	300.00	-6.19	59.95	-0.01	0.00	0.00	0.00	
400.00	0.49	88.29	400.00	-6.17	60.80	-0.04	0.00	0.00	0.00	
500.00	0.49	88.29	499.99	-6.14	61.66	-0.06	0.00	0.00	0.00	
600.00	0.49	88.29	599.99	-6.12	62.51	-0.09	0.00	0.00	0.00	
700.00	0.49	88.29	699.98	-6.09	63.36	-0.11	0.00	0.00	0.00	
800.00	0.49	88.29	799.98	-6.07	64.22	-0.14	0.00	0.00	0.00	
900.00	0.49	88.29	899.98	-6.04	65.07	-0.16	0.00	0.00	0.00	
1,000.00	0.49	88.29	999.97	-6.01	65.92	-0.19	0.00	0.00	0.00	
1,100.00	0.49	88.29	1,099.97	-5.99	66.78	-0.21	0.00	0.00	0.00	
1,200.00	0.49	88.29	1,199.97	-5.96	67.63	-0.24	0.00	0.00	0.00	
1,300.00	0.49	88.29	1,299.96	-5.94	68.49	-0.26	0.00	0.00	0.00	
1,400.00	0.49	88.29	1,399.96	-5.91	69.34	-0.29	0.00	0.00	0.00	
1,500.00	0.49	88.29	1,499.96	-5.89	70.19	-0.31	0.00	0.00	0.00	
1,600.00	0.49	88.29	1,599.95	-5.86	71.05	-0.34	0.00	0.00	0.00	
1,700.00	0.49	88.29	1,699.95	-5.84	71.90	-0.37	0.00	0.00	0.00	
1,800.00	0.49	88.29	1,799.94	-5.81	72.75	-0.39	0.00	0.00	0.00	
1,900.00	0.49	88.29	1,899.94	-5.79	73.61	-0.42	0.00	0.00	0.00	
2,000.00	0.49	88.29	1,999.94	-5.76	74.46	-0.44	0.00	0.00	0.00	
2,052.07	0.49	88.29	2,052.00	-5.75	74.91	-0.46	0.00	0.00	0.00	
Base Aquifer (Fox Hills)										
2,100.00	0.49	88.29	2,099.93	-5.73	75.32	-0.47	0.00	0.00	0.00	
2,200.00	0.49	88.29	2,199.93	-5.71	76.17	-0.49	0.00	0.00	0.00	
2,300.00	0.49	88.29	2,299.93	-5.68	77.02	-0.52	0.00	0.00	0.00	
2,300.07	0.49	88.29	2,300.00	-5.68	77.02	-0.52	0.00	0.00	0.00	
9 5/8"										
2,400.00	0.49	88.29	2,399.92	-5.66	77.88	-0.54	0.00	0.00	0.00	
2,500.00	0.49	88.29	2,499.92	-5.63	78.73	-0.57	0.00	0.00	0.00	
2,600.00	0.49	88.29	2,599.91	-5.61	79.58	-0.59	0.00	0.00	0.00	
2,700.00	0.49	88.29	2,699.91	-5.58	80.44	-0.62	0.00	0.00	0.00	
2,800.00	0.49	88.29	2,799.91	-5.56	81.29	-0.65	0.00	0.00	0.00	
2,900.00	0.49	88.29	2,899.90	-5.53	82.14	-0.67	0.00	0.00	0.00	
3,000.00	0.49	88.29	2,999.90	-5.51	83.00	-0.70	0.00	0.00	0.00	
3,100.00	0.49	88.29	3,099.90	-5.48	83.85	-0.72	0.00	0.00	0.00	
3,200.00	0.49	88.29	3,199.89	-5.45	84.71	-0.75	0.00	0.00	0.00	
3,300.00	0.49	88.29	3,299.89	-5.43	85.56	-0.77	0.00	0.00	0.00	
3,400.00	0.49	88.29	3,399.89	-5.40	86.41	-0.80	0.00	0.00	0.00	
3,500.00	0.49	88.29	3,499.88	-5.38	87.27	-0.82	0.00	0.00	0.00	
3,600.00	0.49	88.29	3,599.88	-5.35	88.12	-0.85	0.00	0.00	0.00	
3,700.00	0.49	88.29	3,699.87	-5.33	88.97	-0.87	0.00	0.00	0.00	
3,800.00	0.49	88.29	3,799.87	-5.30	89.83	-0.90	0.00	0.00	0.00	
3,900.00	0.49	88.29	3,899.87	-5.28	90.68	-0.93	0.00	0.00	0.00	
4,000.00	0.49	88.29	3,999.86	-5.25	91.53	-0.95	0.00	0.00	0.00	
4,100.00	0.49	88.29	4,099.86	-5.23	92.39	-0.98	0.00	0.00	0.00	
4,200.00	0.49	88.29	4,199.86	-5.20	93.24	-1.00	0.00	0.00	0.00	
4,300.00	0.49	88.29	4,299.85	-5.17	94.10	-1.03	0.00	0.00	0.00	
4,400.00	0.49	88.29	4,399.85	-5.15	94.95	-1.05	0.00	0.00	0.00	

# Anadarko

## Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Site RESOLUTION FED 12-65-24-25-5CH PAD
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	WELL @ 5873.00usft (Original Well Elev)
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	WELL @ 5873.00usft (Original Well Elev)
<b>Site:</b>	RESOLUTION FED 12-65-24-25-5CH PAD	<b>North Reference:</b>	True
<b>Well:</b>	RESOLUTION FED 12-65-24-25-5NH	<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)
4,500.00	0.49	88.29	4,499.85	-5.12	95.80	-1.08	0.00	0.00	0.00
4,600.00	0.49	88.29	4,599.84	-5.10	96.66	-1.10	0.00	0.00	0.00
4,700.00	0.49	88.29	4,699.84	-5.07	97.51	-1.13	0.00	0.00	0.00
4,800.00	0.49	88.29	4,799.83	-5.05	98.36	-1.15	0.00	0.00	0.00
4,900.00	0.49	88.29	4,899.83	-5.02	99.22	-1.18	0.00	0.00	0.00
4,975.70	0.49	88.29	4,975.53	-5.00	99.86	-1.20	0.00	0.00	0.00
Start Drop -2.00									
5,000.00	0.00	88.29	4,999.83	-5.00	99.97	-1.20	2.00	-2.00	0.00
5,000.17	0.00	0.00	5,000.00	-5.00	99.97	-1.20	2.00	-2.00	0.00
Start 2705.04 hold at 5000.17 MD									
5,100.00	0.00	0.00	5,099.83	-5.00	99.97	-1.20	0.00	0.00	0.00
5,200.00	0.00	0.00	5,199.83	-5.00	99.97	-1.20	0.00	0.00	0.00
5,300.00	0.00	0.00	5,299.83	-5.00	99.97	-1.20	0.00	0.00	0.00
5,400.00	0.00	0.00	5,399.83	-5.00	99.97	-1.20	0.00	0.00	0.00
5,500.00	0.00	0.00	5,499.83	-5.00	99.97	-1.20	0.00	0.00	0.00
5,600.00	0.00	0.00	5,599.83	-5.00	99.97	-1.20	0.00	0.00	0.00
5,700.00	0.00	0.00	5,699.83	-5.00	99.97	-1.20	0.00	0.00	0.00
5,800.00	0.00	0.00	5,799.83	-5.00	99.97	-1.20	0.00	0.00	0.00
5,900.00	0.00	0.00	5,899.83	-5.00	99.97	-1.20	0.00	0.00	0.00
6,000.00	0.00	0.00	5,999.83	-5.00	99.97	-1.20	0.00	0.00	0.00
6,100.00	0.00	0.00	6,099.83	-5.00	99.97	-1.20	0.00	0.00	0.00
6,200.00	0.00	0.00	6,199.83	-5.00	99.97	-1.20	0.00	0.00	0.00
6,300.00	0.00	0.00	6,299.83	-5.00	99.97	-1.20	0.00	0.00	0.00
6,400.00	0.00	0.00	6,399.83	-5.00	99.97	-1.20	0.00	0.00	0.00
6,500.00	0.00	0.00	6,499.83	-5.00	99.97	-1.20	0.00	0.00	0.00
6,600.00	0.00	0.00	6,599.83	-5.00	99.97	-1.20	0.00	0.00	0.00
6,700.00	0.00	0.00	6,699.83	-5.00	99.97	-1.20	0.00	0.00	0.00
6,800.00	0.00	0.00	6,799.83	-5.00	99.97	-1.20	0.00	0.00	0.00
6,900.00	0.00	0.00	6,899.83	-5.00	99.97	-1.20	0.00	0.00	0.00
7,000.00	0.00	0.00	6,999.83	-5.00	99.97	-1.20	0.00	0.00	0.00
7,100.00	0.00	0.00	7,099.83	-5.00	99.97	-1.20	0.00	0.00	0.00
7,200.00	0.00	0.00	7,199.83	-5.00	99.97	-1.20	0.00	0.00	0.00
7,300.00	0.00	0.00	7,299.83	-5.00	99.97	-1.20	0.00	0.00	0.00
7,400.00	0.00	0.00	7,399.83	-5.00	99.97	-1.20	0.00	0.00	0.00
7,500.00	0.00	0.00	7,499.83	-5.00	99.97	-1.20	0.00	0.00	0.00
7,600.00	0.00	0.00	7,599.83	-5.00	99.97	-1.20	0.00	0.00	0.00
7,700.00	0.00	0.00	7,699.83	-5.00	99.97	-1.20	0.00	0.00	0.00
7,705.21	0.00	0.00	7,705.04	-5.00	99.97	-1.20	0.00	0.00	0.00
Start Build 10.00									
7,800.00	9.48	180.00	7,799.40	-12.82	99.97	6.62	10.00	10.00	0.00
7,900.00	19.48	180.00	7,896.10	-37.79	99.97	31.59	10.00	10.00	0.00
8,000.00	29.48	180.00	7,986.99	-79.18	99.97	72.97	10.00	10.00	0.00
8,100.00	39.48	180.00	8,069.32	-135.71	99.97	129.51	10.00	10.00	0.00
8,200.00	49.48	180.00	8,140.58	-205.69	99.97	199.49	10.00	10.00	0.00
8,300.00	59.48	180.00	8,198.61	-286.98	99.97	280.77	10.00	10.00	0.00
8,356.83	65.16	180.00	8,225.00	-337.28	99.97	331.08	10.00	10.00	0.00
Niobrara									
8,400.00	69.48	180.00	8,241.64	-377.10	99.97	370.90	10.00	10.00	0.00
8,500.00	79.48	180.00	8,268.37	-473.33	99.97	467.13	10.00	10.00	0.00
8,600.00	89.48	180.00	8,277.98	-572.74	99.97	566.54	10.00	10.00	0.00
8,605.21	90.00	180.00	8,278.00	-577.95	99.97	571.75	10.00	10.00	0.00
Start 9078.75 hold at 8605.21 MD - 7"									

# Anadarko

## Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Site RESOLUTION FED 12-65-24-25-5CH PAD
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	WELL @ 5873.00usft (Original Well Elev)
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	WELL @ 5873.00usft (Original Well Elev)
<b>Site:</b>	RESOLUTION FED 12-65-24-25-5CH PAD	<b>North Reference:</b>	True
<b>Well:</b>	RESOLUTION FED 12-65-24-25-5NH	<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)
8,700.00	90.00	180.00	8,278.00	-672.74	99.97	666.54	0.00	0.00	0.00
8,800.00	90.00	180.00	8,278.00	-772.74	99.97	766.54	0.00	0.00	0.00
8,900.00	90.00	180.00	8,278.00	-872.74	99.97	866.54	0.00	0.00	0.00
9,000.00	90.00	180.00	8,278.00	-972.74	99.97	966.54	0.00	0.00	0.00
9,100.00	90.00	180.00	8,278.00	-1,072.74	99.97	1,066.54	0.00	0.00	0.00
9,200.00	90.00	180.00	8,278.00	-1,172.74	99.97	1,166.54	0.00	0.00	0.00
9,300.00	90.00	180.00	8,278.00	-1,272.74	99.97	1,266.54	0.00	0.00	0.00
9,400.00	90.00	180.00	8,278.00	-1,372.74	99.97	1,366.54	0.00	0.00	0.00
9,500.00	90.00	180.00	8,278.00	-1,472.74	99.97	1,466.54	0.00	0.00	0.00
9,600.00	90.00	180.00	8,278.00	-1,572.74	99.97	1,566.54	0.00	0.00	0.00
9,700.00	90.00	180.00	8,278.00	-1,672.74	99.97	1,666.54	0.00	0.00	0.00
9,800.00	90.00	180.00	8,278.00	-1,772.74	99.97	1,766.54	0.00	0.00	0.00
9,900.00	90.00	180.00	8,278.00	-1,872.74	99.97	1,866.54	0.00	0.00	0.00
10,000.00	90.00	180.00	8,278.00	-1,972.74	99.97	1,966.54	0.00	0.00	0.00
10,100.00	90.00	180.00	8,278.00	-2,072.74	99.97	2,066.54	0.00	0.00	0.00
10,200.00	90.00	180.00	8,278.00	-2,172.74	99.97	2,166.54	0.00	0.00	0.00
10,300.00	90.00	180.00	8,278.00	-2,272.74	99.97	2,266.54	0.00	0.00	0.00
10,400.00	90.00	180.00	8,278.00	-2,372.74	99.97	2,366.54	0.00	0.00	0.00
10,500.00	90.00	180.00	8,278.00	-2,472.74	99.97	2,466.54	0.00	0.00	0.00
10,600.00	90.00	180.00	8,278.00	-2,572.74	99.97	2,566.54	0.00	0.00	0.00
10,700.00	90.00	180.00	8,278.00	-2,672.74	99.97	2,666.54	0.00	0.00	0.00
10,800.00	90.00	180.00	8,278.00	-2,772.74	99.97	2,766.54	0.00	0.00	0.00
10,900.00	90.00	180.00	8,278.00	-2,872.74	99.97	2,866.54	0.00	0.00	0.00
11,000.00	90.00	180.00	8,278.00	-2,972.74	99.97	2,966.54	0.00	0.00	0.00
11,100.00	90.00	180.00	8,278.00	-3,072.74	99.97	3,066.54	0.00	0.00	0.00
11,200.00	90.00	180.00	8,278.00	-3,172.74	99.97	3,166.54	0.00	0.00	0.00
11,300.00	90.00	180.00	8,278.00	-3,272.74	99.97	3,266.54	0.00	0.00	0.00
11,400.00	90.00	180.00	8,278.00	-3,372.74	99.97	3,366.54	0.00	0.00	0.00
11,500.00	90.00	180.00	8,278.00	-3,472.74	99.97	3,466.54	0.00	0.00	0.00
11,600.00	90.00	180.00	8,278.00	-3,572.74	99.97	3,566.54	0.00	0.00	0.00
11,700.00	90.00	180.00	8,278.00	-3,672.74	99.97	3,666.54	0.00	0.00	0.00
11,800.00	90.00	180.00	8,278.00	-3,772.74	99.97	3,766.54	0.00	0.00	0.00
11,900.00	90.00	180.00	8,278.00	-3,872.74	99.97	3,866.54	0.00	0.00	0.00
12,000.00	90.00	180.00	8,278.00	-3,972.74	99.97	3,966.54	0.00	0.00	0.00
12,100.00	90.00	180.00	8,278.00	-4,072.74	99.97	4,066.54	0.00	0.00	0.00
12,200.00	90.00	180.00	8,278.00	-4,172.74	99.97	4,166.54	0.00	0.00	0.00
12,300.00	90.00	180.00	8,278.00	-4,272.74	99.97	4,266.54	0.00	0.00	0.00
12,400.00	90.00	180.00	8,278.00	-4,372.74	99.97	4,366.54	0.00	0.00	0.00
12,500.00	90.00	180.00	8,278.00	-4,472.74	99.97	4,466.54	0.00	0.00	0.00
12,600.00	90.00	180.00	8,278.00	-4,572.74	99.97	4,566.54	0.00	0.00	0.00
12,700.00	90.00	180.00	8,278.00	-4,672.74	99.97	4,666.54	0.00	0.00	0.00
12,800.00	90.00	180.00	8,278.00	-4,772.74	99.97	4,766.54	0.00	0.00	0.00
12,900.00	90.00	180.00	8,278.00	-4,872.74	99.97	4,866.54	0.00	0.00	0.00
13,000.00	90.00	180.00	8,278.00	-4,972.74	99.97	4,966.54	0.00	0.00	0.00
13,100.00	90.00	180.00	8,278.00	-5,072.74	99.97	5,066.54	0.00	0.00	0.00
13,200.00	90.00	180.00	8,278.00	-5,172.74	99.97	5,166.54	0.00	0.00	0.00
13,300.00	90.00	180.00	8,278.00	-5,272.74	99.97	5,266.54	0.00	0.00	0.00
13,400.00	90.00	180.00	8,278.00	-5,372.74	99.97	5,366.54	0.00	0.00	0.00
13,500.00	90.00	180.00	8,278.00	-5,472.74	99.97	5,466.54	0.00	0.00	0.00
13,600.00	90.00	180.00	8,278.00	-5,572.74	99.97	5,566.54	0.00	0.00	0.00
13,700.00	90.00	180.00	8,278.00	-5,672.74	99.97	5,666.54	0.00	0.00	0.00
13,800.00	90.00	180.00	8,278.00	-5,772.74	99.97	5,766.54	0.00	0.00	0.00
13,900.00	90.00	180.00	8,278.00	-5,872.74	99.97	5,866.54	0.00	0.00	0.00

# Anadarko

## Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Site RESOLUTION FED 12-65-24-25-5CH PAD
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	WELL @ 5873.00usft (Original Well Elev)
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	WELL @ 5873.00usft (Original Well Elev)
<b>Site:</b>	RESOLUTION FED 12-65-24-25-5CH PAD	<b>North Reference:</b>	True
<b>Well:</b>	RESOLUTION FED 12-65-24-25-5NH	<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)
14,000.00	90.00	180.00	8,278.00	-5,972.74	99.97	5,966.54	0.00	0.00	0.00
14,100.00	90.00	180.00	8,278.00	-6,072.74	99.97	6,066.54	0.00	0.00	0.00
14,200.00	90.00	180.00	8,278.00	-6,172.74	99.97	6,166.54	0.00	0.00	0.00
14,300.00	90.00	180.00	8,278.00	-6,272.74	99.97	6,266.54	0.00	0.00	0.00
14,400.00	90.00	180.00	8,278.00	-6,372.74	99.97	6,366.54	0.00	0.00	0.00
14,500.00	90.00	180.00	8,278.00	-6,472.74	99.97	6,466.54	0.00	0.00	0.00
14,600.00	90.00	180.00	8,278.00	-6,572.74	99.97	6,566.54	0.00	0.00	0.00
14,700.00	90.00	180.00	8,278.00	-6,672.74	99.97	6,666.54	0.00	0.00	0.00
14,800.00	90.00	180.00	8,278.00	-6,772.74	99.97	6,766.54	0.00	0.00	0.00
14,900.00	90.00	180.00	8,278.00	-6,872.74	99.97	6,866.54	0.00	0.00	0.00
15,000.00	90.00	180.00	8,278.00	-6,972.74	99.97	6,966.54	0.00	0.00	0.00
15,100.00	90.00	180.00	8,278.00	-7,072.74	99.97	7,066.54	0.00	0.00	0.00
15,200.00	90.00	180.00	8,278.00	-7,172.74	99.97	7,166.54	0.00	0.00	0.00
15,300.00	90.00	180.00	8,278.00	-7,272.74	99.97	7,266.54	0.00	0.00	0.00
15,400.00	90.00	180.00	8,278.00	-7,372.74	99.97	7,366.54	0.00	0.00	0.00
15,500.00	90.00	180.00	8,278.00	-7,472.74	99.97	7,466.54	0.00	0.00	0.00
15,600.00	90.00	180.00	8,278.00	-7,572.74	99.97	7,566.54	0.00	0.00	0.00
15,700.00	90.00	180.00	8,278.00	-7,672.74	99.97	7,666.54	0.00	0.00	0.00
15,800.00	90.00	180.00	8,278.00	-7,772.74	99.97	7,766.54	0.00	0.00	0.00
15,900.00	90.00	180.00	8,278.00	-7,872.74	99.97	7,866.54	0.00	0.00	0.00
16,000.00	90.00	180.00	8,278.00	-7,972.74	99.97	7,966.54	0.00	0.00	0.00
16,100.00	90.00	180.00	8,278.00	-8,072.74	99.97	8,066.54	0.00	0.00	0.00
16,200.00	90.00	180.00	8,278.00	-8,172.74	99.97	8,166.54	0.00	0.00	0.00
16,300.00	90.00	180.00	8,278.00	-8,272.74	99.97	8,266.54	0.00	0.00	0.00
16,400.00	90.00	180.00	8,278.00	-8,372.74	99.97	8,366.54	0.00	0.00	0.00
16,500.00	90.00	180.00	8,278.00	-8,472.74	99.97	8,466.54	0.00	0.00	0.00
16,600.00	90.00	180.00	8,278.00	-8,572.74	99.97	8,566.54	0.00	0.00	0.00
16,700.00	90.00	180.00	8,278.00	-8,672.74	99.97	8,666.54	0.00	0.00	0.00
16,800.00	90.00	180.00	8,278.00	-8,772.74	99.97	8,766.54	0.00	0.00	0.00
16,900.00	90.00	180.00	8,278.00	-8,872.74	99.97	8,866.54	0.00	0.00	0.00
17,000.00	90.00	180.00	8,278.00	-8,972.74	99.97	8,966.54	0.00	0.00	0.00
17,100.00	90.00	180.00	8,278.00	-9,072.74	99.97	9,066.54	0.00	0.00	0.00
17,200.00	90.00	180.00	8,278.00	-9,172.74	99.97	9,166.54	0.00	0.00	0.00
17,300.00	90.00	180.00	8,278.00	-9,272.74	99.97	9,266.54	0.00	0.00	0.00
17,400.00	90.00	180.00	8,278.00	-9,372.74	99.97	9,366.54	0.00	0.00	0.00
17,500.00	90.00	180.00	8,278.00	-9,472.74	99.97	9,466.54	0.00	0.00	0.00
17,600.00	90.00	180.00	8,278.00	-9,572.74	99.97	9,566.54	0.00	0.00	0.00
17,683.96	90.00	180.00	8,278.00	-9,656.71	99.97	9,650.50	0.00	0.00	0.00
TD at 17683.96									

**Anadarko**  
Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Site RESOLUTION FED 12-65-24-25-5CH PAD
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	WELL @ 5873.00usft (Original Well Elev)
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	WELL @ 5873.00usft (Original Well Elev)
<b>Site:</b>	RESOLUTION FED 12-65-24-25-5CH PAD	<b>North Reference:</b>	True
<b>Well:</b>	RESOLUTION FED 12-65-24-25-5NH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	PLAN #1		

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Interp @ 8225.00 (RESOL - plan hits target center - Point	0.00	0.00	8,225.00	-337.28	99.97	1,607,818.90	3,246,436.37	40.998412	-104.607267
RESOLUTION FED 12-65-24-25-5CH PAD - plan hits target center - Point	0.00	0.00	8,278.00	-9,656.71	99.97	1,598,499.94	3,246,530.15	40.972835	-104.607267

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
2,300.07	2,300.00	9 5/8"	9-5/8	12-1/4	
8,605.21	8,278.00	7"	7	7-1/2	

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
2,052.07	2,052.00	Base Aquifer (Fox Hills)			
8,356.83	8,225.00	Niobrara			

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
250.00	250.00	-6.20	59.63	Start Build 2.00	
274.47	274.47	-6.20	59.73	Start 4701.24 hold at 274.47 MD	
4,975.70	4,975.53	-5.00	99.86	Start Drop -2.00	
5,000.17	5,000.00	-5.00	99.97	Start 2705.04 hold at 5000.17 MD	
7,705.21	7,705.04	-5.00	99.97	Start Build 10.00	
8,605.21	8,278.00	-577.96	99.97	Start 9078.75 hold at 8605.21 MD	
17,683.96	8,278.00	-9,656.71	99.97	TD at 17683.96	