

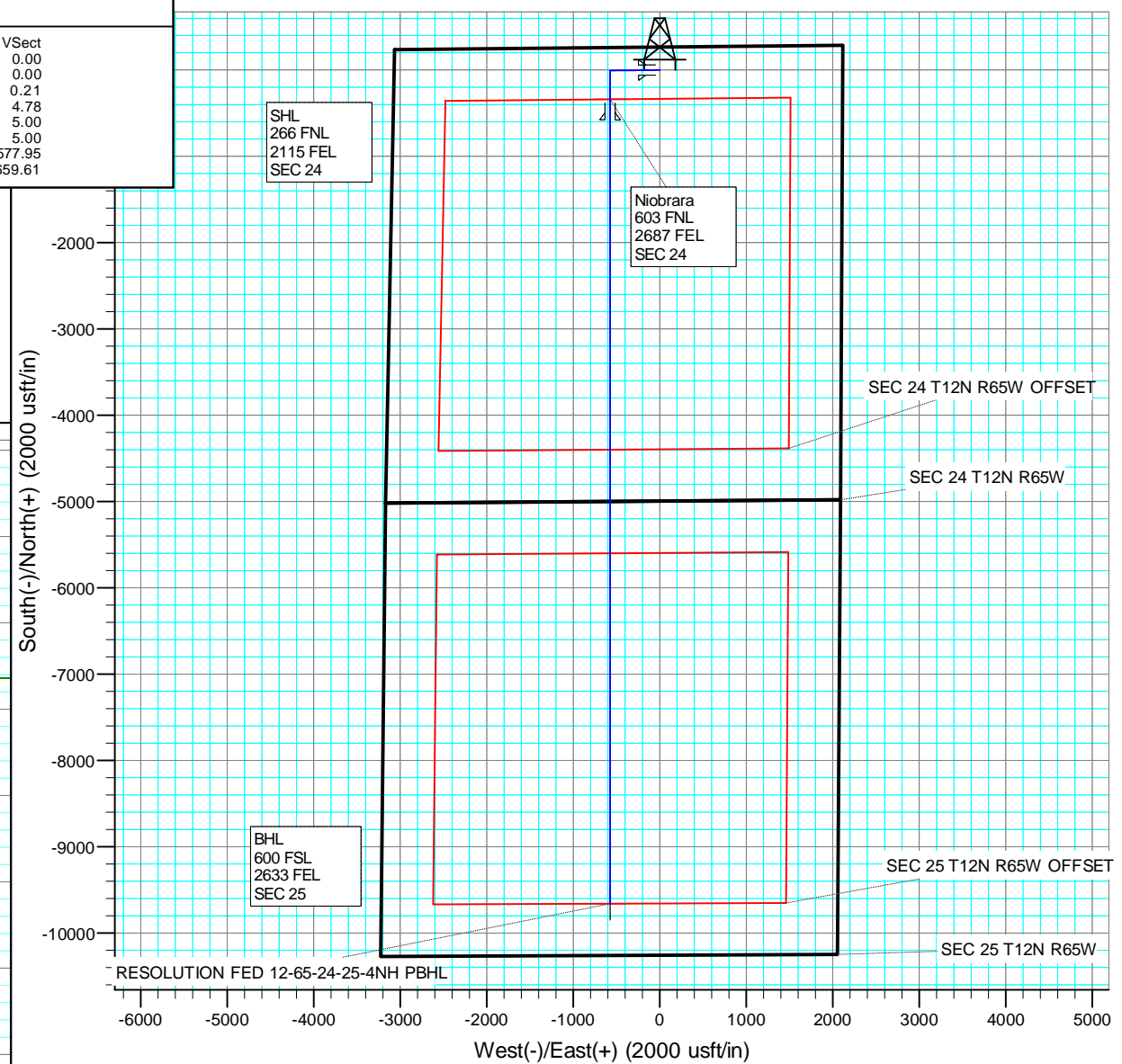
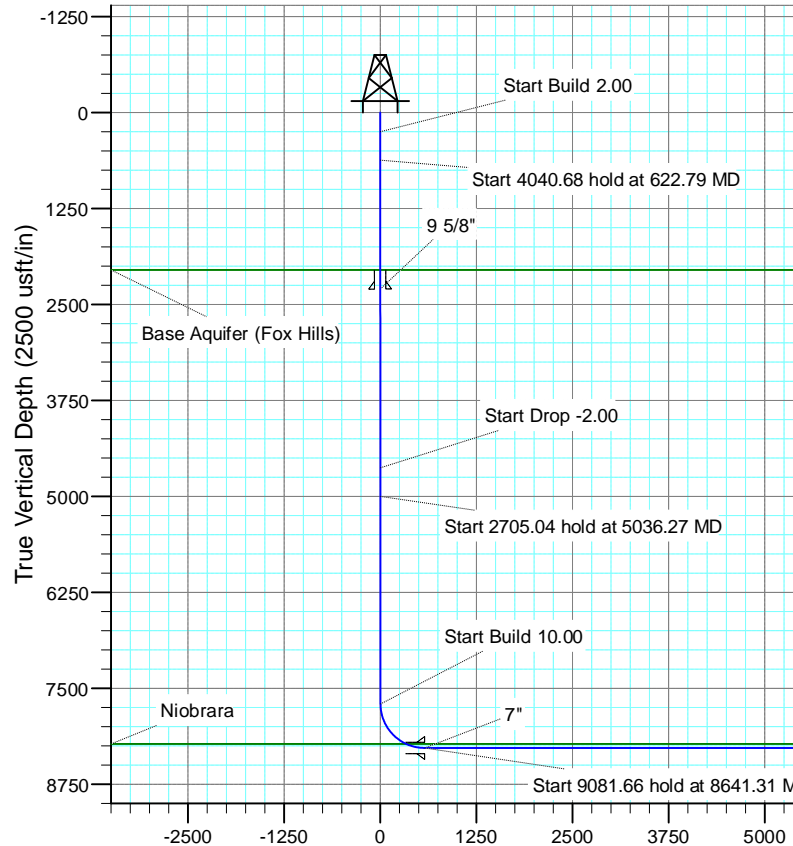
+N/-S +E/-W Northing Easting Latitude Longitude
 0.00 0.00 1608155.16 3246333.01 40.999338 -104.607629

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
250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00
622.79	7.46	269.50	621.74	-0.22	-24.22	2.00	269.50	0.21
4663.47	7.46	269.50	4628.26	-4.79	-548.53	0.00	0.00	4.78
5036.27	0.00	0.00	5000.00	-5.00	-572.75	2.00	180.00	5.00
7741.31	0.00	0.00	7705.04	-5.00	-572.75	0.00	0.00	5.00
8641.31	90.00	180.00	8278.00	-577.96	-572.75	10.00	180.00	577.95
17722.96	90.00	180.00	8278.00	-9659.61	-572.75	0.00	0.00	9659.61

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
2052.00	2065.25	Base Aquifer (Fox Hills)
8225.00	8392.93	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 12-65-24-25-4NH

Wellbore #1

Plan: PLAN #1

Standard Planning Report

14 January, 2015

Anadarko

Planning Report

Database:	PLANNING	Local Co-ordinate Reference:	Site RESOLUTION FED 12-65-24-25-5CH PAD
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 5873.00usft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 5873.00usft (Original Well Elev)
Site:	RESOLUTION FED 12-65-24-25-5CH PAD	North Reference:	True
Well:	RESOLUTION FED 12-65-24-25-4NH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	PLAN #1		

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	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 12-65-24-25-4NH			
Well Position	+N/-S	0.00 usft	Northing:	1,608,155.15 usft
	+E/-W	0.00 usft	Easting:	3,246,333.01 usft
Position Uncertainty	0.00 usft		Wellhead Elevation:	0.00 usft
			Ground Level:	5,847.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/31/2009	8.99	67.62	53,624

Design	PLAN #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	180.00

Plan Sections										
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	0.00	0.00	0.00	0.00	0.00	0.00	
250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	0.00	
622.79	7.46	269.50	621.74	-0.22	-24.22	2.00	2.00	0.00	269.50	
4,663.47	7.46	269.50	4,628.26	-4.79	-548.53	0.00	0.00	0.00	0.00	
5,036.27	0.00	0.00	5,000.00	-5.00	-572.75	2.00	-2.00	0.00	180.00	
7,741.31	0.00	0.00	7,705.04	-5.00	-572.75	0.00	0.00	0.00	0.00	
8,641.31	90.00	180.00	8,278.00	-577.96	-572.75	10.00	10.00	0.00	180.00	
17,722.97	90.00	180.00	8,278.00	-9,659.61	-572.75	0.00	0.00	0.00	0.00	RESOLUTION FED 1

Anadarko

Planning Report

Database:	PLANNING	Local Co-ordinate Reference:	Site RESOLUTION FED 12-65-24-25-5CH PAD
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 5873.00usft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 5873.00usft (Original Well Elev)
Site:	RESOLUTION FED 12-65-24-25-5CH PAD	North Reference:	True
Well:	RESOLUTION FED 12-65-24-25-4NH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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	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
250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00									
300.00	1.00	269.50	300.00	-0.01	-0.44	0.00	2.00	2.00	0.00
400.00	3.00	269.50	399.93	-0.04	-3.93	0.03	2.00	2.00	0.00
500.00	5.00	269.50	499.68	-0.10	-10.90	0.10	2.00	2.00	0.00
600.00	7.00	269.50	599.13	-0.19	-21.35	0.19	2.00	2.00	0.00
622.79	7.46	269.50	621.74	-0.22	-24.22	0.21	2.00	2.00	0.00
Start 4040.68 hold at 622.79 MD									
700.00	7.46	269.50	698.30	-0.30	-34.24	0.30	0.00	0.00	0.00
800.00	7.46	269.50	797.45	-0.42	-47.21	0.41	0.00	0.00	0.00
900.00	7.46	269.50	896.61	-0.53	-60.19	0.53	0.00	0.00	0.00
1,000.00	7.46	269.50	995.76	-0.64	-73.17	0.64	0.00	0.00	0.00
1,100.00	7.46	269.50	1,094.91	-0.76	-86.14	0.75	0.00	0.00	0.00
1,200.00	7.46	269.50	1,194.07	-0.87	-99.12	0.86	0.00	0.00	0.00
1,300.00	7.46	269.50	1,293.22	-0.98	-112.09	0.98	0.00	0.00	0.00
1,400.00	7.46	269.50	1,392.38	-1.09	-125.07	1.09	0.00	0.00	0.00
1,500.00	7.46	269.50	1,491.53	-1.21	-138.04	1.20	0.00	0.00	0.00
1,600.00	7.46	269.50	1,590.69	-1.32	-151.02	1.32	0.00	0.00	0.00
1,700.00	7.46	269.50	1,689.84	-1.43	-164.00	1.43	0.00	0.00	0.00
1,800.00	7.46	269.50	1,789.00	-1.55	-176.97	1.54	0.00	0.00	0.00
1,900.00	7.46	269.50	1,888.15	-1.66	-189.95	1.66	0.00	0.00	0.00
2,000.00	7.46	269.50	1,987.30	-1.77	-202.92	1.77	0.00	0.00	0.00
2,065.25	7.46	269.50	2,052.00	-1.85	-211.39	1.84	0.00	0.00	0.00
Base Aquifer (Fox Hills)									
2,100.00	7.46	269.50	2,086.46	-1.89	-215.90	1.88	0.00	0.00	0.00
2,200.00	7.46	269.50	2,185.61	-2.00	-228.87	2.00	0.00	0.00	0.00
2,300.00	7.46	269.50	2,284.77	-2.11	-241.85	2.11	0.00	0.00	0.00
2,315.36	7.46	269.50	2,300.00	-2.13	-243.84	2.13	0.00	0.00	0.00
9 5/8"									
2,400.00	7.46	269.50	2,383.92	-2.23	-254.83	2.22	0.00	0.00	0.00
2,500.00	7.46	269.50	2,483.08	-2.34	-267.80	2.34	0.00	0.00	0.00
2,600.00	7.46	269.50	2,582.23	-2.45	-280.78	2.45	0.00	0.00	0.00
2,700.00	7.46	269.50	2,681.39	-2.57	-293.75	2.56	0.00	0.00	0.00
2,800.00	7.46	269.50	2,780.54	-2.68	-306.73	2.68	0.00	0.00	0.00
2,900.00	7.46	269.50	2,879.70	-2.79	-319.71	2.79	0.00	0.00	0.00
3,000.00	7.46	269.50	2,978.85	-2.91	-332.68	2.90	0.00	0.00	0.00
3,100.00	7.46	269.50	3,078.00	-3.02	-345.66	3.02	0.00	0.00	0.00
3,200.00	7.46	269.50	3,177.16	-3.13	-358.63	3.13	0.00	0.00	0.00
3,300.00	7.46	269.50	3,276.31	-3.25	-371.61	3.24	0.00	0.00	0.00
3,400.00	7.46	269.50	3,375.47	-3.36	-384.58	3.35	0.00	0.00	0.00
3,500.00	7.46	269.50	3,474.62	-3.47	-397.56	3.47	0.00	0.00	0.00
3,600.00	7.46	269.50	3,573.78	-3.59	-410.54	3.58	0.00	0.00	0.00
3,700.00	7.46	269.50	3,672.93	-3.70	-423.51	3.69	0.00	0.00	0.00
3,800.00	7.46	269.50	3,772.09	-3.81	-436.49	3.81	0.00	0.00	0.00
3,900.00	7.46	269.50	3,871.24	-3.92	-449.46	3.92	0.00	0.00	0.00
4,000.00	7.46	269.50	3,970.39	-4.04	-462.44	4.03	0.00	0.00	0.00
4,100.00	7.46	269.50	4,069.55	-4.15	-475.41	4.15	0.00	0.00	0.00
4,200.00	7.46	269.50	4,168.70	-4.26	-488.39	4.26	0.00	0.00	0.00
4,300.00	7.46	269.50	4,267.86	-4.38	-501.37	4.37	0.00	0.00	0.00
4,400.00	7.46	269.50	4,367.01	-4.49	-514.34	4.49	0.00	0.00	0.00

Anadarko

Planning Report

Database:	PLANNING	Local Co-ordinate Reference:	Site RESOLUTION FED 12-65-24-25-5CH PAD
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 5873.00usft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 5873.00usft (Original Well Elev)
Site:	RESOLUTION FED 12-65-24-25-5CH PAD	North Reference:	True
Well:	RESOLUTION FED 12-65-24-25-4NH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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	7.46	269.50	4,466.17	-4.60	-527.32	4.60	0.00	0.00	0.00
4,600.00	7.46	269.50	4,565.32	-4.72	-540.29	4.71	0.00	0.00	0.00
4,663.47	7.46	269.50	4,628.26	-4.79	-548.53	4.78	0.00	0.00	0.00
Start Drop -2.00									
4,700.00	6.73	269.50	4,664.51	-4.83	-553.04	4.82	2.00	-2.00	0.00
4,800.00	4.73	269.50	4,764.00	-4.92	-563.01	4.91	2.00	-2.00	0.00
4,900.00	2.73	269.50	4,863.79	-4.97	-569.51	4.97	2.00	-2.00	0.00
5,000.00	0.73	269.50	4,963.74	-5.00	-572.52	4.99	2.00	-2.00	0.00
5,036.27	0.00	0.00	5,000.00	-5.00	-572.75	5.00	2.00	-2.00	0.00
Start 2705.04 hold at 5036.27 MD									
5,100.00	0.00	0.00	5,063.73	-5.00	-572.75	5.00	0.00	0.00	0.00
5,200.00	0.00	0.00	5,163.73	-5.00	-572.75	5.00	0.00	0.00	0.00
5,300.00	0.00	0.00	5,263.73	-5.00	-572.75	5.00	0.00	0.00	0.00
5,400.00	0.00	0.00	5,363.73	-5.00	-572.75	5.00	0.00	0.00	0.00
5,500.00	0.00	0.00	5,463.73	-5.00	-572.75	5.00	0.00	0.00	0.00
5,600.00	0.00	0.00	5,563.73	-5.00	-572.75	5.00	0.00	0.00	0.00
5,700.00	0.00	0.00	5,663.73	-5.00	-572.75	5.00	0.00	0.00	0.00
5,800.00	0.00	0.00	5,763.73	-5.00	-572.75	5.00	0.00	0.00	0.00
5,900.00	0.00	0.00	5,863.73	-5.00	-572.75	5.00	0.00	0.00	0.00
6,000.00	0.00	0.00	5,963.73	-5.00	-572.75	5.00	0.00	0.00	0.00
6,100.00	0.00	0.00	6,063.73	-5.00	-572.75	5.00	0.00	0.00	0.00
6,200.00	0.00	0.00	6,163.73	-5.00	-572.75	5.00	0.00	0.00	0.00
6,300.00	0.00	0.00	6,263.73	-5.00	-572.75	5.00	0.00	0.00	0.00
6,400.00	0.00	0.00	6,363.73	-5.00	-572.75	5.00	0.00	0.00	0.00
6,500.00	0.00	0.00	6,463.73	-5.00	-572.75	5.00	0.00	0.00	0.00
6,600.00	0.00	0.00	6,563.73	-5.00	-572.75	5.00	0.00	0.00	0.00
6,700.00	0.00	0.00	6,663.73	-5.00	-572.75	5.00	0.00	0.00	0.00
6,800.00	0.00	0.00	6,763.73	-5.00	-572.75	5.00	0.00	0.00	0.00
6,900.00	0.00	0.00	6,863.73	-5.00	-572.75	5.00	0.00	0.00	0.00
7,000.00	0.00	0.00	6,963.73	-5.00	-572.75	5.00	0.00	0.00	0.00
7,100.00	0.00	0.00	7,063.73	-5.00	-572.75	5.00	0.00	0.00	0.00
7,200.00	0.00	0.00	7,163.73	-5.00	-572.75	5.00	0.00	0.00	0.00
7,300.00	0.00	0.00	7,263.73	-5.00	-572.75	5.00	0.00	0.00	0.00
7,400.00	0.00	0.00	7,363.73	-5.00	-572.75	5.00	0.00	0.00	0.00
7,500.00	0.00	0.00	7,463.73	-5.00	-572.75	5.00	0.00	0.00	0.00
7,600.00	0.00	0.00	7,563.73	-5.00	-572.75	5.00	0.00	0.00	0.00
7,700.00	0.00	0.00	7,663.73	-5.00	-572.75	5.00	0.00	0.00	0.00
7,741.31	0.00	0.00	7,705.04	-5.00	-572.75	5.00	0.00	0.00	0.00
Start Build 10.00									
7,800.00	5.87	180.00	7,763.63	-8.00	-572.75	8.00	10.00	10.00	0.00
7,900.00	15.87	180.00	7,861.71	-26.84	-572.75	26.83	10.00	10.00	0.00
8,000.00	25.87	180.00	7,955.03	-62.41	-572.75	62.41	10.00	10.00	0.00
8,100.00	35.87	180.00	8,040.76	-113.66	-572.75	113.65	10.00	10.00	0.00
8,200.00	45.87	180.00	8,116.28	-179.01	-572.75	179.00	10.00	10.00	0.00
8,300.00	55.87	180.00	8,179.31	-256.48	-572.75	256.48	10.00	10.00	0.00
8,392.93	65.16	180.00	8,225.00	-337.28	-572.75	337.28	10.00	10.00	0.00
Niobrara									
8,400.00	65.87	180.00	8,227.93	-343.72	-572.75	343.72	10.00	10.00	0.00
8,500.00	75.87	180.00	8,260.66	-438.08	-572.75	438.07	10.00	10.00	0.00
8,600.00	85.87	180.00	8,276.51	-536.69	-572.75	536.68	10.00	10.00	0.00
8,641.31	90.00	180.00	8,278.00	-577.96	-572.75	577.96	10.00	10.00	0.00
Start 9081.66 hold at 8641.31 MD - 7"									

Anadarko

Planning Report

Database:	PLANNING	Local Co-ordinate Reference:	Site RESOLUTION FED 12-65-24-25-5CH PAD
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 5873.00usft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 5873.00usft (Original Well Elev)
Site:	RESOLUTION FED 12-65-24-25-5CH PAD	North Reference:	True
Well:	RESOLUTION FED 12-65-24-25-4NH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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	-636.65	-572.75	636.65	0.00	0.00	0.00	
8,800.00	90.00	180.00	8,278.00	-736.65	-572.75	736.65	0.00	0.00	0.00	
8,900.00	90.00	180.00	8,278.00	-836.65	-572.75	836.65	0.00	0.00	0.00	
9,000.00	90.00	180.00	8,278.00	-936.65	-572.75	936.65	0.00	0.00	0.00	
9,100.00	90.00	180.00	8,278.00	-1,036.65	-572.75	1,036.65	0.00	0.00	0.00	
9,200.00	90.00	180.00	8,278.00	-1,136.65	-572.75	1,136.65	0.00	0.00	0.00	
9,300.00	90.00	180.00	8,278.00	-1,236.65	-572.75	1,236.65	0.00	0.00	0.00	
9,400.00	90.00	180.00	8,278.00	-1,336.65	-572.75	1,336.65	0.00	0.00	0.00	
9,500.00	90.00	180.00	8,278.00	-1,436.65	-572.75	1,436.65	0.00	0.00	0.00	
9,600.00	90.00	180.00	8,278.00	-1,536.65	-572.75	1,536.65	0.00	0.00	0.00	
9,700.00	90.00	180.00	8,278.00	-1,636.65	-572.75	1,636.65	0.00	0.00	0.00	
9,800.00	90.00	180.00	8,278.00	-1,736.65	-572.75	1,736.65	0.00	0.00	0.00	
9,900.00	90.00	180.00	8,278.00	-1,836.65	-572.75	1,836.65	0.00	0.00	0.00	
10,000.00	90.00	180.00	8,278.00	-1,936.65	-572.75	1,936.65	0.00	0.00	0.00	
10,100.00	90.00	180.00	8,278.00	-2,036.65	-572.75	2,036.65	0.00	0.00	0.00	
10,200.00	90.00	180.00	8,278.00	-2,136.65	-572.75	2,136.65	0.00	0.00	0.00	
10,300.00	90.00	180.00	8,278.00	-2,236.65	-572.75	2,236.65	0.00	0.00	0.00	
10,400.00	90.00	180.00	8,278.00	-2,336.65	-572.75	2,336.65	0.00	0.00	0.00	
10,500.00	90.00	180.00	8,278.00	-2,436.65	-572.75	2,436.65	0.00	0.00	0.00	
10,600.00	90.00	180.00	8,278.00	-2,536.65	-572.75	2,536.65	0.00	0.00	0.00	
10,700.00	90.00	180.00	8,278.00	-2,636.65	-572.75	2,636.65	0.00	0.00	0.00	
10,800.00	90.00	180.00	8,278.00	-2,736.65	-572.75	2,736.65	0.00	0.00	0.00	
10,900.00	90.00	180.00	8,278.00	-2,836.65	-572.75	2,836.65	0.00	0.00	0.00	
11,000.00	90.00	180.00	8,278.00	-2,936.65	-572.75	2,936.65	0.00	0.00	0.00	
11,100.00	90.00	180.00	8,278.00	-3,036.65	-572.75	3,036.65	0.00	0.00	0.00	
11,200.00	90.00	180.00	8,278.00	-3,136.65	-572.75	3,136.65	0.00	0.00	0.00	
11,300.00	90.00	180.00	8,278.00	-3,236.65	-572.75	3,236.65	0.00	0.00	0.00	
11,400.00	90.00	180.00	8,278.00	-3,336.65	-572.75	3,336.65	0.00	0.00	0.00	
11,500.00	90.00	180.00	8,278.00	-3,436.65	-572.75	3,436.65	0.00	0.00	0.00	
11,600.00	90.00	180.00	8,278.00	-3,536.65	-572.75	3,536.65	0.00	0.00	0.00	
11,700.00	90.00	180.00	8,278.00	-3,636.65	-572.75	3,636.65	0.00	0.00	0.00	
11,800.00	90.00	180.00	8,278.00	-3,736.65	-572.75	3,736.65	0.00	0.00	0.00	
11,900.00	90.00	180.00	8,278.00	-3,836.65	-572.75	3,836.65	0.00	0.00	0.00	
12,000.00	90.00	180.00	8,278.00	-3,936.65	-572.75	3,936.65	0.00	0.00	0.00	
12,100.00	90.00	180.00	8,278.00	-4,036.65	-572.75	4,036.65	0.00	0.00	0.00	
12,200.00	90.00	180.00	8,278.00	-4,136.65	-572.75	4,136.65	0.00	0.00	0.00	
12,300.00	90.00	180.00	8,278.00	-4,236.65	-572.75	4,236.65	0.00	0.00	0.00	
12,400.00	90.00	180.00	8,278.00	-4,336.65	-572.75	4,336.65	0.00	0.00	0.00	
12,500.00	90.00	180.00	8,278.00	-4,436.65	-572.75	4,436.65	0.00	0.00	0.00	
12,600.00	90.00	180.00	8,278.00	-4,536.65	-572.75	4,536.65	0.00	0.00	0.00	
12,700.00	90.00	180.00	8,278.00	-4,636.65	-572.75	4,636.65	0.00	0.00	0.00	
12,800.00	90.00	180.00	8,278.00	-4,736.65	-572.75	4,736.65	0.00	0.00	0.00	
12,900.00	90.00	180.00	8,278.00	-4,836.65	-572.75	4,836.65	0.00	0.00	0.00	
13,000.00	90.00	180.00	8,278.00	-4,936.65	-572.75	4,936.65	0.00	0.00	0.00	
13,100.00	90.00	180.00	8,278.00	-5,036.65	-572.75	5,036.65	0.00	0.00	0.00	
13,200.00	90.00	180.00	8,278.00	-5,136.65	-572.75	5,136.65	0.00	0.00	0.00	
13,300.00	90.00	180.00	8,278.00	-5,236.65	-572.75	5,236.65	0.00	0.00	0.00	
13,400.00	90.00	180.00	8,278.00	-5,336.65	-572.75	5,336.65	0.00	0.00	0.00	
13,500.00	90.00	180.00	8,278.00	-5,436.65	-572.75	5,436.65	0.00	0.00	0.00	
13,600.00	90.00	180.00	8,278.00	-5,536.65	-572.75	5,536.65	0.00	0.00	0.00	
13,700.00	90.00	180.00	8,278.00	-5,636.65	-572.75	5,636.65	0.00	0.00	0.00	
13,800.00	90.00	180.00	8,278.00	-5,736.65	-572.75	5,736.65	0.00	0.00	0.00	
13,900.00	90.00	180.00	8,278.00	-5,836.65	-572.75	5,836.65	0.00	0.00	0.00	

Anadarko

Planning Report

Database:	PLANNING	Local Co-ordinate Reference:	Site RESOLUTION FED 12-65-24-25-5CH PAD
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 5873.00usft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 5873.00usft (Original Well Elev)
Site:	RESOLUTION FED 12-65-24-25-5CH PAD	North Reference:	True
Well:	RESOLUTION FED 12-65-24-25-4NH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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	-5,936.65	-572.75	5,936.65	0.00	0.00	0.00
14,100.00	90.00	180.00	8,278.00	-6,036.65	-572.75	6,036.65	0.00	0.00	0.00
14,200.00	90.00	180.00	8,278.00	-6,136.65	-572.75	6,136.65	0.00	0.00	0.00
14,300.00	90.00	180.00	8,278.00	-6,236.65	-572.75	6,236.65	0.00	0.00	0.00
14,400.00	90.00	180.00	8,278.00	-6,336.65	-572.75	6,336.65	0.00	0.00	0.00
14,500.00	90.00	180.00	8,278.00	-6,436.65	-572.75	6,436.65	0.00	0.00	0.00
14,600.00	90.00	180.00	8,278.00	-6,536.65	-572.75	6,536.65	0.00	0.00	0.00
14,700.00	90.00	180.00	8,278.00	-6,636.65	-572.75	6,636.65	0.00	0.00	0.00
14,800.00	90.00	180.00	8,278.00	-6,736.65	-572.75	6,736.65	0.00	0.00	0.00
14,900.00	90.00	180.00	8,278.00	-6,836.65	-572.75	6,836.65	0.00	0.00	0.00
15,000.00	90.00	180.00	8,278.00	-6,936.65	-572.75	6,936.65	0.00	0.00	0.00
15,100.00	90.00	180.00	8,278.00	-7,036.65	-572.75	7,036.65	0.00	0.00	0.00
15,200.00	90.00	180.00	8,278.00	-7,136.65	-572.75	7,136.65	0.00	0.00	0.00
15,300.00	90.00	180.00	8,278.00	-7,236.65	-572.75	7,236.65	0.00	0.00	0.00
15,400.00	90.00	180.00	8,278.00	-7,336.65	-572.75	7,336.65	0.00	0.00	0.00
15,500.00	90.00	180.00	8,278.00	-7,436.65	-572.75	7,436.65	0.00	0.00	0.00
15,600.00	90.00	180.00	8,278.00	-7,536.65	-572.75	7,536.65	0.00	0.00	0.00
15,700.00	90.00	180.00	8,278.00	-7,636.65	-572.75	7,636.65	0.00	0.00	0.00
15,800.00	90.00	180.00	8,278.00	-7,736.65	-572.75	7,736.65	0.00	0.00	0.00
15,900.00	90.00	180.00	8,278.00	-7,836.65	-572.75	7,836.65	0.00	0.00	0.00
16,000.00	90.00	180.00	8,278.00	-7,936.65	-572.75	7,936.65	0.00	0.00	0.00
16,100.00	90.00	180.00	8,278.00	-8,036.65	-572.75	8,036.65	0.00	0.00	0.00
16,200.00	90.00	180.00	8,278.00	-8,136.65	-572.75	8,136.65	0.00	0.00	0.00
16,300.00	90.00	180.00	8,278.00	-8,236.65	-572.75	8,236.65	0.00	0.00	0.00
16,400.00	90.00	180.00	8,278.00	-8,336.65	-572.75	8,336.65	0.00	0.00	0.00
16,500.00	90.00	180.00	8,278.00	-8,436.65	-572.75	8,436.65	0.00	0.00	0.00
16,600.00	90.00	180.00	8,278.00	-8,536.65	-572.75	8,536.65	0.00	0.00	0.00
16,700.00	90.00	180.00	8,278.00	-8,636.65	-572.75	8,636.65	0.00	0.00	0.00
16,800.00	90.00	180.00	8,278.00	-8,736.65	-572.75	8,736.65	0.00	0.00	0.00
16,900.00	90.00	180.00	8,278.00	-8,836.65	-572.75	8,836.65	0.00	0.00	0.00
17,000.00	90.00	180.00	8,278.00	-8,936.65	-572.75	8,936.65	0.00	0.00	0.00
17,100.00	90.00	180.00	8,278.00	-9,036.65	-572.75	9,036.65	0.00	0.00	0.00
17,200.00	90.00	180.00	8,278.00	-9,136.65	-572.75	9,136.65	0.00	0.00	0.00
17,300.00	90.00	180.00	8,278.00	-9,236.65	-572.75	9,236.65	0.00	0.00	0.00
17,400.00	90.00	180.00	8,278.00	-9,336.65	-572.75	9,336.65	0.00	0.00	0.00
17,500.00	90.00	180.00	8,278.00	-9,436.65	-572.75	9,436.65	0.00	0.00	0.00
17,600.00	90.00	180.00	8,278.00	-9,536.65	-572.75	9,536.65	0.00	0.00	0.00
17,700.00	90.00	180.00	8,278.00	-9,636.65	-572.75	9,636.65	0.00	0.00	0.00
17,722.97	90.00	180.00	8,278.00	-9,659.61	-572.75	9,659.61	0.00	0.00	0.00
TD at 17722.96									

Anadarko

Planning Report

Database:	PLANNING	Local Co-ordinate Reference:	Site RESOLUTION FED 12-65-24-25-5CH PAD
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 5873.00usft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 5873.00usft (Original Well Elev)
Site:	RESOLUTION FED 12-65-24-25-5CH PAD	North Reference:	True
Well:	RESOLUTION FED 12-65-24-25-4NH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	PLAN #1		

Design Targets									
Target Name	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	-572.75	1,607,812.13	3,245,763.69	40.998412	-104.609704
RESOLUTION FED 12-65-24-25-5CH PAD - plan hits target center - Point	0.00	0.00	8,278.00	-9,659.61	-572.75	1,598,490.27	3,245,857.50	40.972827	-104.609703

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
2,315.36	2,300.00	9 5/8"	9-5/8	12-1/4	
8,641.31	8,278.00	7"	7	7-1/2	

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
2,065.25	2,052.00	Base Aquifer (Fox Hills)			
8,392.93	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	0.00	0.00	Start Build 2.00	
622.79	621.74	-0.22	-24.22	Start 4040.68 hold at 622.79 MD	
4,663.47	4,628.26	-4.79	-548.53	Start Drop -2.00	
5,036.27	5,000.00	-5.00	-572.75	Start 2705.04 hold at 5036.27 MD	
7,741.31	7,705.04	-5.00	-572.75	Start Build 10.00	
8,641.31	8,278.00	-577.96	-572.75	Start 9081.66 hold at 8641.31 MD	
17,722.97	8,278.00	-9,659.61	-572.75	TD at 17722.96	