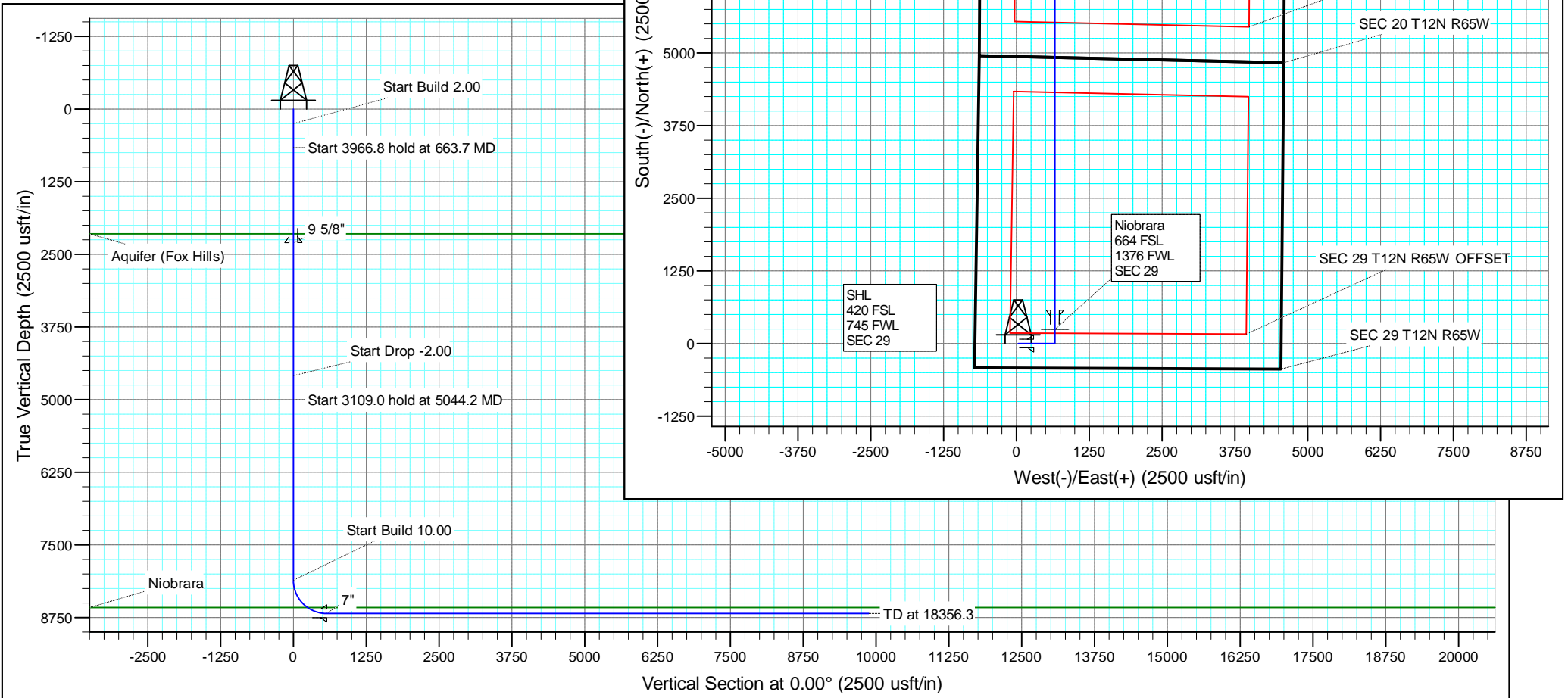


| | | | | | |
|-------|-------|------------|------------|-----------|-------------|
| +N/-S | +E/-W | Northing | Easting | Latitude | Longitude |
| 0.0 | 30.1 | 1597974.57 | 3222971.16 | 40.972013 | -104.692591 |

| SECTION DETAILS | | | | | | | | |
|-----------------|-------|-------|--------|--------|-------|-------|--------|--------|
| MD | Inc | Azi | TVD | +N/-S | +E/-W | Dleg | TFace | VSect |
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 30.1 | 0.00 | 0.00 | 0.0 |
| 250.0 | 0.00 | 0.00 | 250.0 | 0.0 | 30.1 | 0.00 | 0.00 | 0.0 |
| 663.7 | 8.27 | 90.00 | 662.3 | 0.0 | 59.9 | 2.00 | 90.00 | 0.0 |
| 4630.5 | 8.27 | 90.00 | 4587.7 | 0.0 | 630.8 | 0.00 | 0.00 | 0.0 |
| 5044.2 | 0.00 | 0.00 | 5000.0 | 0.0 | 660.6 | 2.00 | 180.00 | 0.0 |
| 8153.2 | 0.00 | 0.00 | 8109.0 | 0.0 | 660.6 | 0.00 | 0.00 | 0.0 |
| 9053.2 | 90.00 | 0.00 | 8682.0 | 573.0 | 660.6 | 10.00 | 0.00 | 573.0 |
| 18356.3 | 90.00 | 0.00 | 8682.0 | 9876.1 | 660.6 | 0.00 | 0.00 | 9876.1 |

| FORMATION TOP DETAILS | | |
|-----------------------|--------|---------------------|
| TVDPath | MDPath | Formation |
| 2149.0 | 2166.1 | Aquifer (Fox Hills) |
| 8578.0 | 8702.5 | Niobrara |



US ROCKIES REGION PLANNING

COLORADO NORTHERN ZONE - 83

RESOLUTION FED 12-65-29-20NH PAD

RESOLUTION FED 12-65-29-20-2NH

Wellbore #1

Plan: PLAN #1

Standard Planning Report

08 February, 2015

Anadarko

Planning Report

| | | | |
|------------------|----------------------------------|-------------------------------------|--|
| Database: | PLANNING | Local Co-ordinate Reference: | Site RESOLUTION FED 12-65-29-20NH PAD |
| Company: | US ROCKIES REGION PLANNING | TVD Reference: | WELL @ 5974.0usft (Original Well Elev) |
| Project: | COLORADO NORTHERN ZONE - 83 | MD Reference: | WELL @ 5974.0usft (Original Well Elev) |
| Site: | RESOLUTION FED 12-65-29-20NH PAD | North Reference: | True |
| Well: | RESOLUTION FED 12-65-29-20-2NH | 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 12-65-29-20NH PAD | | | |
| Site Position: | | Northing: | 1,597,974.30 usft | Latitude: 40.972013 |
| From: | Lat/Long | Easting: | 3,222,941.06 usft | Longitude: -104.692700 |
| Position Uncertainty: | 0.0 usft | Slot Radius: | 13.200 in | Grid Convergence: 0.52 ° |

| | | | | |
|-----------------------------|--------------------------------|----------------------------|------------------|-----------------------------------|
| Well | RESOLUTION FED 12-65-29-20-2NH | | | |
| Well Position | +N/-S | 0.0 usft | Northing: | 1,597,974.56 usft |
| | +E/-W | 30.1 usft | Easting: | 3,222,971.16 usft |
| Position Uncertainty | 0.0 usft | Wellhead Elevation: | 0.0 usft | Ground Level: 5,948.0 usft |

| | | | | | |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | Wellbore #1 | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF200510 | 12/31/2009 | 9.03 | 67.58 | 53,600 |

| | | | | |
|--------------------------|--------------------------------|---------------------|----------------------|----------------------|
| Design | PLAN #1 | | | |
| Audit Notes: | | | | |
| Version: | Phase: | PLAN | Tie On Depth: | 0.0 |
| Vertical Section: | Depth From (TVD) (usft) | +N/-S (usft) | +E/-W (usft) | Direction (°) |
| | 0.0 | 0.0 | 30.1 | 0.00 |

| 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 |
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 30.1 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 250.0 | 0.00 | 0.00 | 250.0 | 0.0 | 30.1 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 663.7 | 8.27 | 90.00 | 662.3 | 0.0 | 59.9 | 2.00 | 2.00 | 0.00 | 90.00 | |
| 4,630.5 | 8.27 | 90.00 | 4,587.7 | 0.0 | 630.8 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 5,044.2 | 0.00 | 0.00 | 5,000.0 | 0.0 | 660.6 | 2.00 | -2.00 | 0.00 | 180.00 | |
| 8,153.2 | 0.00 | 0.00 | 8,109.0 | 0.0 | 660.6 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 9,053.2 | 90.00 | 0.00 | 8,682.0 | 573.0 | 660.6 | 10.00 | 10.00 | 0.00 | 0.00 | |
| 18,356.3 | 90.00 | 0.00 | 8,682.0 | 9,876.1 | 660.6 | 0.00 | 0.00 | 0.00 | 0.00 | RESOLUTION 12-65- |

Anadarko

Planning Report

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|------------------|----------------------------------|-------------------------------------|--|
| Database: | PLANNING | Local Co-ordinate Reference: | Site RESOLUTION FED 12-65-29-20NH PAD |
| Company: | US ROCKIES REGION PLANNING | TVD Reference: | WELL @ 5974.0usft (Original Well Elev) |
| Project: | COLORADO NORTHERN ZONE - 83 | MD Reference: | WELL @ 5974.0usft (Original Well Elev) |
| Site: | RESOLUTION FED 12-65-29-20NH PAD | North Reference: | True |
| Well: | RESOLUTION FED 12-65-29-20-2NH | 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) |
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 30.1 | 0.0 | 0.00 | 0.00 | 0.00 |
| 100.0 | 0.00 | 0.00 | 100.0 | 0.0 | 30.1 | 0.0 | 0.00 | 0.00 | 0.00 |
| 200.0 | 0.00 | 0.00 | 200.0 | 0.0 | 30.1 | 0.0 | 0.00 | 0.00 | 0.00 |
| 250.0 | 0.00 | 0.00 | 250.0 | 0.0 | 30.1 | 0.0 | 0.00 | 0.00 | 0.00 |
| Start Build 2.00 | | | | | | | | | |
| 300.0 | 1.00 | 90.00 | 300.0 | 0.0 | 30.5 | 0.0 | 2.00 | 2.00 | 0.00 |
| 400.0 | 3.00 | 90.00 | 399.9 | 0.0 | 34.0 | 0.0 | 2.00 | 2.00 | 0.00 |
| 500.0 | 5.00 | 90.00 | 499.7 | 0.0 | 41.0 | 0.0 | 2.00 | 2.00 | 0.00 |
| 600.0 | 7.00 | 90.00 | 599.1 | 0.0 | 51.5 | 0.0 | 2.00 | 2.00 | 0.00 |
| 663.7 | 8.27 | 90.00 | 662.3 | 0.0 | 59.9 | 0.0 | 2.00 | 2.00 | 0.00 |
| Start 3966.8 hold at 663.7 MD | | | | | | | | | |
| 700.0 | 8.27 | 90.00 | 698.2 | 0.0 | 65.1 | 0.0 | 0.00 | 0.00 | 0.00 |
| 800.0 | 8.27 | 90.00 | 797.1 | 0.0 | 79.5 | 0.0 | 0.00 | 0.00 | 0.00 |
| 900.0 | 8.27 | 90.00 | 896.1 | 0.0 | 93.9 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,000.0 | 8.27 | 90.00 | 995.1 | 0.0 | 108.3 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,100.0 | 8.27 | 90.00 | 1,094.0 | 0.0 | 122.7 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,200.0 | 8.27 | 90.00 | 1,193.0 | 0.0 | 137.1 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,300.0 | 8.27 | 90.00 | 1,291.9 | 0.0 | 151.5 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,400.0 | 8.27 | 90.00 | 1,390.9 | 0.0 | 165.9 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,500.0 | 8.27 | 90.00 | 1,489.9 | 0.0 | 180.3 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,600.0 | 8.27 | 90.00 | 1,588.8 | 0.0 | 194.7 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,700.0 | 8.27 | 90.00 | 1,687.8 | 0.0 | 209.1 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,800.0 | 8.27 | 90.00 | 1,786.7 | 0.0 | 223.4 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,900.0 | 8.27 | 90.00 | 1,885.7 | 0.0 | 237.8 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,000.0 | 8.27 | 90.00 | 1,984.7 | 0.0 | 252.2 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,100.0 | 8.27 | 90.00 | 2,083.6 | 0.0 | 266.6 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,166.1 | 8.27 | 90.00 | 2,149.0 | 0.0 | 276.1 | 0.0 | 0.00 | 0.00 | 0.00 |
| Aquifer (Fox Hills) | | | | | | | | | |
| 2,200.0 | 8.27 | 90.00 | 2,182.6 | 0.0 | 281.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,300.0 | 8.27 | 90.00 | 2,281.5 | 0.0 | 295.4 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,318.7 | 8.27 | 90.00 | 2,300.0 | 0.0 | 298.1 | 0.0 | 0.00 | 0.00 | 0.00 |
| 9 5/8" | | | | | | | | | |
| 2,400.0 | 8.27 | 90.00 | 2,380.5 | 0.0 | 309.8 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,500.0 | 8.27 | 90.00 | 2,479.4 | 0.0 | 324.2 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,600.0 | 8.27 | 90.00 | 2,578.4 | 0.0 | 338.6 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,700.0 | 8.27 | 90.00 | 2,677.4 | 0.0 | 353.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,800.0 | 8.27 | 90.00 | 2,776.3 | 0.0 | 367.3 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,900.0 | 8.27 | 90.00 | 2,875.3 | 0.0 | 381.7 | 0.0 | 0.00 | 0.00 | 0.00 |
| 3,000.0 | 8.27 | 90.00 | 2,974.2 | 0.0 | 396.1 | 0.0 | 0.00 | 0.00 | 0.00 |
| 3,100.0 | 8.27 | 90.00 | 3,073.2 | 0.0 | 410.5 | 0.0 | 0.00 | 0.00 | 0.00 |
| 3,200.0 | 8.27 | 90.00 | 3,172.2 | 0.0 | 424.9 | 0.0 | 0.00 | 0.00 | 0.00 |
| 3,300.0 | 8.27 | 90.00 | 3,271.1 | 0.0 | 439.3 | 0.0 | 0.00 | 0.00 | 0.00 |
| 3,400.0 | 8.27 | 90.00 | 3,370.1 | 0.0 | 453.7 | 0.0 | 0.00 | 0.00 | 0.00 |
| 3,500.0 | 8.27 | 90.00 | 3,469.0 | 0.0 | 468.1 | 0.0 | 0.00 | 0.00 | 0.00 |
| 3,600.0 | 8.27 | 90.00 | 3,568.0 | 0.0 | 482.5 | 0.0 | 0.00 | 0.00 | 0.00 |
| 3,700.0 | 8.27 | 90.00 | 3,667.0 | 0.0 | 496.9 | 0.0 | 0.00 | 0.00 | 0.00 |
| 3,800.0 | 8.27 | 90.00 | 3,765.9 | 0.0 | 511.3 | 0.0 | 0.00 | 0.00 | 0.00 |
| 3,900.0 | 8.27 | 90.00 | 3,864.9 | 0.0 | 525.6 | 0.0 | 0.00 | 0.00 | 0.00 |
| 4,000.0 | 8.27 | 90.00 | 3,963.8 | 0.0 | 540.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 4,100.0 | 8.27 | 90.00 | 4,062.8 | 0.0 | 554.4 | 0.0 | 0.00 | 0.00 | 0.00 |
| 4,200.0 | 8.27 | 90.00 | 4,161.8 | 0.0 | 568.8 | 0.0 | 0.00 | 0.00 | 0.00 |
| 4,300.0 | 8.27 | 90.00 | 4,260.7 | 0.0 | 583.2 | 0.0 | 0.00 | 0.00 | 0.00 |
| 4,400.0 | 8.27 | 90.00 | 4,359.7 | 0.0 | 597.6 | 0.0 | 0.00 | 0.00 | 0.00 |
| 4,500.0 | 8.27 | 90.00 | 4,458.6 | 0.0 | 612.0 | 0.0 | 0.00 | 0.00 | 0.00 |

Anadarko
Planning Report

| | | | |
|------------------|----------------------------------|-------------------------------------|--|
| Database: | PLANNING | Local Co-ordinate Reference: | Site RESOLUTION FED 12-65-29-20NH PAD |
| Company: | US ROCKIES REGION PLANNING | TVD Reference: | WELL @ 5974.0usft (Original Well Elev) |
| Project: | COLORADO NORTHERN ZONE - 83 | MD Reference: | WELL @ 5974.0usft (Original Well Elev) |
| Site: | RESOLUTION FED 12-65-29-20NH PAD | North Reference: | True |
| Well: | RESOLUTION FED 12-65-29-20-2NH | 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) |
| 4,600.0 | 8.27 | 90.00 | 4,557.6 | 0.0 | 626.4 | 0.0 | 0.00 | 0.00 | 0.00 |
| 4,630.5 | 8.27 | 90.00 | 4,587.7 | 0.0 | 630.8 | 0.0 | 0.00 | 0.00 | 0.00 |
| Start Drop -2.00 | | | | | | | | | |
| 4,700.0 | 6.88 | 90.00 | 4,656.7 | 0.0 | 639.9 | 0.0 | 2.00 | -2.00 | 0.00 |
| 4,800.0 | 4.88 | 90.00 | 4,756.1 | 0.0 | 650.2 | 0.0 | 2.00 | -2.00 | 0.00 |
| 4,900.0 | 2.88 | 90.00 | 4,855.9 | 0.0 | 657.0 | 0.0 | 2.00 | -2.00 | 0.00 |
| 5,000.0 | 0.88 | 90.00 | 4,955.8 | 0.0 | 660.2 | 0.0 | 2.00 | -2.00 | 0.00 |
| 5,044.2 | 0.00 | 0.00 | 5,000.0 | 0.0 | 660.6 | 0.0 | 2.00 | -2.00 | 0.00 |
| Start 3109.0 hold at 5044.2 MD | | | | | | | | | |
| 5,100.0 | 0.00 | 0.00 | 5,055.8 | 0.0 | 660.6 | 0.0 | 0.00 | 0.00 | 0.00 |
| 5,200.0 | 0.00 | 0.00 | 5,155.8 | 0.0 | 660.6 | 0.0 | 0.00 | 0.00 | 0.00 |
| 5,300.0 | 0.00 | 0.00 | 5,255.8 | 0.0 | 660.6 | 0.0 | 0.00 | 0.00 | 0.00 |
| 5,400.0 | 0.00 | 0.00 | 5,355.8 | 0.0 | 660.6 | 0.0 | 0.00 | 0.00 | 0.00 |
| 5,500.0 | 0.00 | 0.00 | 5,455.8 | 0.0 | 660.6 | 0.0 | 0.00 | 0.00 | 0.00 |
| 5,600.0 | 0.00 | 0.00 | 5,555.8 | 0.0 | 660.6 | 0.0 | 0.00 | 0.00 | 0.00 |
| 5,700.0 | 0.00 | 0.00 | 5,655.8 | 0.0 | 660.6 | 0.0 | 0.00 | 0.00 | 0.00 |
| 5,800.0 | 0.00 | 0.00 | 5,755.8 | 0.0 | 660.6 | 0.0 | 0.00 | 0.00 | 0.00 |
| 5,900.0 | 0.00 | 0.00 | 5,855.8 | 0.0 | 660.6 | 0.0 | 0.00 | 0.00 | 0.00 |
| 6,000.0 | 0.00 | 0.00 | 5,955.8 | 0.0 | 660.6 | 0.0 | 0.00 | 0.00 | 0.00 |
| 6,100.0 | 0.00 | 0.00 | 6,055.8 | 0.0 | 660.6 | 0.0 | 0.00 | 0.00 | 0.00 |
| 6,200.0 | 0.00 | 0.00 | 6,155.8 | 0.0 | 660.6 | 0.0 | 0.00 | 0.00 | 0.00 |
| 6,300.0 | 0.00 | 0.00 | 6,255.8 | 0.0 | 660.6 | 0.0 | 0.00 | 0.00 | 0.00 |
| 6,400.0 | 0.00 | 0.00 | 6,355.8 | 0.0 | 660.6 | 0.0 | 0.00 | 0.00 | 0.00 |
| 6,500.0 | 0.00 | 0.00 | 6,455.8 | 0.0 | 660.6 | 0.0 | 0.00 | 0.00 | 0.00 |
| 6,600.0 | 0.00 | 0.00 | 6,555.8 | 0.0 | 660.6 | 0.0 | 0.00 | 0.00 | 0.00 |
| 6,700.0 | 0.00 | 0.00 | 6,655.8 | 0.0 | 660.6 | 0.0 | 0.00 | 0.00 | 0.00 |
| 6,800.0 | 0.00 | 0.00 | 6,755.8 | 0.0 | 660.6 | 0.0 | 0.00 | 0.00 | 0.00 |
| 6,900.0 | 0.00 | 0.00 | 6,855.8 | 0.0 | 660.6 | 0.0 | 0.00 | 0.00 | 0.00 |
| 7,000.0 | 0.00 | 0.00 | 6,955.8 | 0.0 | 660.6 | 0.0 | 0.00 | 0.00 | 0.00 |
| 7,100.0 | 0.00 | 0.00 | 7,055.8 | 0.0 | 660.6 | 0.0 | 0.00 | 0.00 | 0.00 |
| 7,200.0 | 0.00 | 0.00 | 7,155.8 | 0.0 | 660.6 | 0.0 | 0.00 | 0.00 | 0.00 |
| 7,300.0 | 0.00 | 0.00 | 7,255.8 | 0.0 | 660.6 | 0.0 | 0.00 | 0.00 | 0.00 |
| 7,400.0 | 0.00 | 0.00 | 7,355.8 | 0.0 | 660.6 | 0.0 | 0.00 | 0.00 | 0.00 |
| 7,500.0 | 0.00 | 0.00 | 7,455.8 | 0.0 | 660.6 | 0.0 | 0.00 | 0.00 | 0.00 |
| 7,600.0 | 0.00 | 0.00 | 7,555.8 | 0.0 | 660.6 | 0.0 | 0.00 | 0.00 | 0.00 |
| 7,700.0 | 0.00 | 0.00 | 7,655.8 | 0.0 | 660.6 | 0.0 | 0.00 | 0.00 | 0.00 |
| 7,800.0 | 0.00 | 0.00 | 7,755.8 | 0.0 | 660.6 | 0.0 | 0.00 | 0.00 | 0.00 |
| 7,900.0 | 0.00 | 0.00 | 7,855.8 | 0.0 | 660.6 | 0.0 | 0.00 | 0.00 | 0.00 |
| 8,000.0 | 0.00 | 0.00 | 7,955.8 | 0.0 | 660.6 | 0.0 | 0.00 | 0.00 | 0.00 |
| 8,100.0 | 0.00 | 0.00 | 8,055.8 | 0.0 | 660.6 | 0.0 | 0.00 | 0.00 | 0.00 |
| 8,153.2 | 0.00 | 0.00 | 8,109.0 | 0.0 | 660.6 | 0.0 | 0.00 | 0.00 | 0.00 |
| Start Build 10.00 | | | | | | | | | |
| 8,200.0 | 4.68 | 0.00 | 8,155.8 | 1.9 | 660.6 | 1.9 | 10.00 | 10.00 | 0.00 |
| 8,300.0 | 14.68 | 0.00 | 8,254.2 | 18.7 | 660.6 | 18.7 | 10.00 | 10.00 | 0.00 |
| 8,400.0 | 24.68 | 0.00 | 8,348.3 | 52.3 | 660.6 | 52.3 | 10.00 | 10.00 | 0.00 |
| 8,500.0 | 34.68 | 0.00 | 8,435.0 | 101.8 | 660.6 | 101.8 | 10.00 | 10.00 | 0.00 |
| 8,600.0 | 44.68 | 0.00 | 8,511.9 | 165.6 | 660.6 | 165.6 | 10.00 | 10.00 | 0.00 |
| 8,700.0 | 54.68 | 0.00 | 8,576.5 | 241.7 | 660.6 | 241.7 | 10.00 | 10.00 | 0.00 |
| 8,702.5 | 54.93 | 0.00 | 8,578.0 | 243.8 | 660.6 | 243.8 | 10.00 | 10.00 | 0.00 |
| Niobrara | | | | | | | | | |
| 8,800.0 | 64.68 | 0.00 | 8,627.0 | 327.9 | 660.6 | 327.9 | 10.00 | 10.00 | 0.00 |
| 8,900.0 | 74.68 | 0.00 | 8,661.6 | 421.6 | 660.6 | 421.6 | 10.00 | 10.00 | 0.00 |
| 9,000.0 | 84.68 | 0.00 | 8,679.5 | 519.8 | 660.6 | 519.8 | 10.00 | 10.00 | 0.00 |

Anadarko

Planning Report

| | | | |
|------------------|----------------------------------|-------------------------------------|--|
| Database: | PLANNING | Local Co-ordinate Reference: | Site RESOLUTION FED 12-65-29-20NH PAD |
| Company: | US ROCKIES REGION PLANNING | TVD Reference: | WELL @ 5974.0usft (Original Well Elev) |
| Project: | COLORADO NORTHERN ZONE - 83 | MD Reference: | WELL @ 5974.0usft (Original Well Elev) |
| Site: | RESOLUTION FED 12-65-29-20NH PAD | North Reference: | True |
| Well: | RESOLUTION FED 12-65-29-20-2NH | 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) |
| 9,053.2 | 90.00 | 0.00 | 8,682.0 | 572.9 | 660.6 | 573.0 | 10.00 | 10.00 | 0.00 |
| Start 9303.1 hold at 9053.2 MD - 7" | | | | | | | | | |
| 9,100.0 | 90.00 | 0.00 | 8,682.0 | 619.7 | 660.6 | 619.8 | 0.00 | 0.00 | 0.00 |
| 9,200.0 | 90.00 | 0.00 | 8,682.0 | 719.7 | 660.6 | 719.8 | 0.00 | 0.00 | 0.00 |
| 9,300.0 | 90.00 | 0.00 | 8,682.0 | 819.7 | 660.6 | 819.8 | 0.00 | 0.00 | 0.00 |
| 9,400.0 | 90.00 | 0.00 | 8,682.0 | 919.7 | 660.6 | 919.8 | 0.00 | 0.00 | 0.00 |
| 9,500.0 | 90.00 | 0.00 | 8,682.0 | 1,019.7 | 660.6 | 1,019.8 | 0.00 | 0.00 | 0.00 |
| 9,600.0 | 90.00 | 0.00 | 8,682.0 | 1,119.7 | 660.6 | 1,119.8 | 0.00 | 0.00 | 0.00 |
| 9,700.0 | 90.00 | 0.00 | 8,682.0 | 1,219.7 | 660.6 | 1,219.8 | 0.00 | 0.00 | 0.00 |
| 9,800.0 | 90.00 | 0.00 | 8,682.0 | 1,319.7 | 660.6 | 1,319.8 | 0.00 | 0.00 | 0.00 |
| 9,900.0 | 90.00 | 0.00 | 8,682.0 | 1,419.7 | 660.6 | 1,419.8 | 0.00 | 0.00 | 0.00 |
| 10,000.0 | 90.00 | 0.00 | 8,682.0 | 1,519.7 | 660.6 | 1,519.8 | 0.00 | 0.00 | 0.00 |
| 10,100.0 | 90.00 | 0.00 | 8,682.0 | 1,619.7 | 660.6 | 1,619.8 | 0.00 | 0.00 | 0.00 |
| 10,200.0 | 90.00 | 0.00 | 8,682.0 | 1,719.7 | 660.6 | 1,719.8 | 0.00 | 0.00 | 0.00 |
| 10,300.0 | 90.00 | 0.00 | 8,682.0 | 1,819.7 | 660.6 | 1,819.8 | 0.00 | 0.00 | 0.00 |
| 10,400.0 | 90.00 | 0.00 | 8,682.0 | 1,919.7 | 660.6 | 1,919.8 | 0.00 | 0.00 | 0.00 |
| 10,500.0 | 90.00 | 0.00 | 8,682.0 | 2,019.7 | 660.6 | 2,019.8 | 0.00 | 0.00 | 0.00 |
| 10,600.0 | 90.00 | 0.00 | 8,682.0 | 2,119.7 | 660.6 | 2,119.8 | 0.00 | 0.00 | 0.00 |
| 10,700.0 | 90.00 | 0.00 | 8,682.0 | 2,219.7 | 660.6 | 2,219.8 | 0.00 | 0.00 | 0.00 |
| 10,800.0 | 90.00 | 0.00 | 8,682.0 | 2,319.7 | 660.6 | 2,319.8 | 0.00 | 0.00 | 0.00 |
| 10,900.0 | 90.00 | 0.00 | 8,682.0 | 2,419.7 | 660.6 | 2,419.8 | 0.00 | 0.00 | 0.00 |
| 11,000.0 | 90.00 | 0.00 | 8,682.0 | 2,519.7 | 660.6 | 2,519.8 | 0.00 | 0.00 | 0.00 |
| 11,100.0 | 90.00 | 0.00 | 8,682.0 | 2,619.7 | 660.6 | 2,619.8 | 0.00 | 0.00 | 0.00 |
| 11,200.0 | 90.00 | 0.00 | 8,682.0 | 2,719.7 | 660.6 | 2,719.8 | 0.00 | 0.00 | 0.00 |
| 11,300.0 | 90.00 | 0.00 | 8,682.0 | 2,819.7 | 660.6 | 2,819.8 | 0.00 | 0.00 | 0.00 |
| 11,400.0 | 90.00 | 0.00 | 8,682.0 | 2,919.7 | 660.6 | 2,919.8 | 0.00 | 0.00 | 0.00 |
| 11,500.0 | 90.00 | 0.00 | 8,682.0 | 3,019.7 | 660.6 | 3,019.8 | 0.00 | 0.00 | 0.00 |
| 11,600.0 | 90.00 | 0.00 | 8,682.0 | 3,119.7 | 660.6 | 3,119.8 | 0.00 | 0.00 | 0.00 |
| 11,700.0 | 90.00 | 0.00 | 8,682.0 | 3,219.7 | 660.6 | 3,219.8 | 0.00 | 0.00 | 0.00 |
| 11,800.0 | 90.00 | 0.00 | 8,682.0 | 3,319.7 | 660.6 | 3,319.8 | 0.00 | 0.00 | 0.00 |
| 11,900.0 | 90.00 | 0.00 | 8,682.0 | 3,419.7 | 660.6 | 3,419.8 | 0.00 | 0.00 | 0.00 |
| 12,000.0 | 90.00 | 0.00 | 8,682.0 | 3,519.7 | 660.6 | 3,519.8 | 0.00 | 0.00 | 0.00 |
| 12,100.0 | 90.00 | 0.00 | 8,682.0 | 3,619.7 | 660.6 | 3,619.8 | 0.00 | 0.00 | 0.00 |
| 12,200.0 | 90.00 | 0.00 | 8,682.0 | 3,719.7 | 660.6 | 3,719.8 | 0.00 | 0.00 | 0.00 |
| 12,300.0 | 90.00 | 0.00 | 8,682.0 | 3,819.7 | 660.6 | 3,819.8 | 0.00 | 0.00 | 0.00 |
| 12,400.0 | 90.00 | 0.00 | 8,682.0 | 3,919.7 | 660.6 | 3,919.8 | 0.00 | 0.00 | 0.00 |
| 12,500.0 | 90.00 | 0.00 | 8,682.0 | 4,019.7 | 660.6 | 4,019.8 | 0.00 | 0.00 | 0.00 |
| 12,600.0 | 90.00 | 0.00 | 8,682.0 | 4,119.7 | 660.6 | 4,119.8 | 0.00 | 0.00 | 0.00 |
| 12,700.0 | 90.00 | 0.00 | 8,682.0 | 4,219.7 | 660.6 | 4,219.8 | 0.00 | 0.00 | 0.00 |
| 12,800.0 | 90.00 | 0.00 | 8,682.0 | 4,319.7 | 660.6 | 4,319.8 | 0.00 | 0.00 | 0.00 |
| 12,900.0 | 90.00 | 0.00 | 8,682.0 | 4,419.7 | 660.6 | 4,419.8 | 0.00 | 0.00 | 0.00 |
| 13,000.0 | 90.00 | 0.00 | 8,682.0 | 4,519.7 | 660.6 | 4,519.8 | 0.00 | 0.00 | 0.00 |
| 13,100.0 | 90.00 | 0.00 | 8,682.0 | 4,619.7 | 660.6 | 4,619.8 | 0.00 | 0.00 | 0.00 |
| 13,200.0 | 90.00 | 0.00 | 8,682.0 | 4,719.7 | 660.6 | 4,719.8 | 0.00 | 0.00 | 0.00 |
| 13,300.0 | 90.00 | 0.00 | 8,682.0 | 4,819.7 | 660.6 | 4,819.8 | 0.00 | 0.00 | 0.00 |
| 13,400.0 | 90.00 | 0.00 | 8,682.0 | 4,919.7 | 660.6 | 4,919.8 | 0.00 | 0.00 | 0.00 |
| 13,500.0 | 90.00 | 0.00 | 8,682.0 | 5,019.7 | 660.6 | 5,019.8 | 0.00 | 0.00 | 0.00 |
| 13,600.0 | 90.00 | 0.00 | 8,682.0 | 5,119.7 | 660.6 | 5,119.8 | 0.00 | 0.00 | 0.00 |
| 13,700.0 | 90.00 | 0.00 | 8,682.0 | 5,219.7 | 660.6 | 5,219.8 | 0.00 | 0.00 | 0.00 |
| 13,800.0 | 90.00 | 0.00 | 8,682.0 | 5,319.7 | 660.6 | 5,319.8 | 0.00 | 0.00 | 0.00 |
| 13,900.0 | 90.00 | 0.00 | 8,682.0 | 5,419.7 | 660.6 | 5,419.8 | 0.00 | 0.00 | 0.00 |
| 14,000.0 | 90.00 | 0.00 | 8,682.0 | 5,519.7 | 660.6 | 5,519.8 | 0.00 | 0.00 | 0.00 |
| 14,100.0 | 90.00 | 0.00 | 8,682.0 | 5,619.7 | 660.6 | 5,619.8 | 0.00 | 0.00 | 0.00 |

Anadarko

Planning Report

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|------------------|----------------------------------|-------------------------------------|--|
| Database: | PLANNING | Local Co-ordinate Reference: | Site RESOLUTION FED 12-65-29-20NH PAD |
| Company: | US ROCKIES REGION PLANNING | TVD Reference: | WELL @ 5974.0usft (Original Well Elev) |
| Project: | COLORADO NORTHERN ZONE - 83 | MD Reference: | WELL @ 5974.0usft (Original Well Elev) |
| Site: | RESOLUTION FED 12-65-29-20NH PAD | North Reference: | True |
| Well: | RESOLUTION FED 12-65-29-20-2NH | 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) |
| 14,200.0 | 90.00 | 0.00 | 8,682.0 | 5,719.7 | 660.6 | 5,719.8 | 0.00 | 0.00 | 0.00 |
| 14,300.0 | 90.00 | 0.00 | 8,682.0 | 5,819.7 | 660.6 | 5,819.8 | 0.00 | 0.00 | 0.00 |
| 14,400.0 | 90.00 | 0.00 | 8,682.0 | 5,919.7 | 660.6 | 5,919.8 | 0.00 | 0.00 | 0.00 |
| 14,500.0 | 90.00 | 0.00 | 8,682.0 | 6,019.7 | 660.6 | 6,019.8 | 0.00 | 0.00 | 0.00 |
| 14,600.0 | 90.00 | 0.00 | 8,682.0 | 6,119.7 | 660.6 | 6,119.8 | 0.00 | 0.00 | 0.00 |
| 14,700.0 | 90.00 | 0.00 | 8,682.0 | 6,219.7 | 660.6 | 6,219.8 | 0.00 | 0.00 | 0.00 |
| 14,800.0 | 90.00 | 0.00 | 8,682.0 | 6,319.7 | 660.6 | 6,319.8 | 0.00 | 0.00 | 0.00 |
| 14,900.0 | 90.00 | 0.00 | 8,682.0 | 6,419.7 | 660.6 | 6,419.8 | 0.00 | 0.00 | 0.00 |
| 15,000.0 | 90.00 | 0.00 | 8,682.0 | 6,519.7 | 660.6 | 6,519.8 | 0.00 | 0.00 | 0.00 |
| 15,100.0 | 90.00 | 0.00 | 8,682.0 | 6,619.7 | 660.6 | 6,619.8 | 0.00 | 0.00 | 0.00 |
| 15,200.0 | 90.00 | 0.00 | 8,682.0 | 6,719.7 | 660.6 | 6,719.8 | 0.00 | 0.00 | 0.00 |
| 15,300.0 | 90.00 | 0.00 | 8,682.0 | 6,819.7 | 660.6 | 6,819.8 | 0.00 | 0.00 | 0.00 |
| 15,400.0 | 90.00 | 0.00 | 8,682.0 | 6,919.7 | 660.6 | 6,919.8 | 0.00 | 0.00 | 0.00 |
| 15,500.0 | 90.00 | 0.00 | 8,682.0 | 7,019.7 | 660.6 | 7,019.8 | 0.00 | 0.00 | 0.00 |
| 15,600.0 | 90.00 | 0.00 | 8,682.0 | 7,119.7 | 660.6 | 7,119.8 | 0.00 | 0.00 | 0.00 |
| 15,700.0 | 90.00 | 0.00 | 8,682.0 | 7,219.7 | 660.6 | 7,219.8 | 0.00 | 0.00 | 0.00 |
| 15,800.0 | 90.00 | 0.00 | 8,682.0 | 7,319.7 | 660.6 | 7,319.8 | 0.00 | 0.00 | 0.00 |
| 15,900.0 | 90.00 | 0.00 | 8,682.0 | 7,419.7 | 660.6 | 7,419.8 | 0.00 | 0.00 | 0.00 |
| 16,000.0 | 90.00 | 0.00 | 8,682.0 | 7,519.7 | 660.6 | 7,519.8 | 0.00 | 0.00 | 0.00 |
| 16,100.0 | 90.00 | 0.00 | 8,682.0 | 7,619.7 | 660.6 | 7,619.8 | 0.00 | 0.00 | 0.00 |
| 16,200.0 | 90.00 | 0.00 | 8,682.0 | 7,719.7 | 660.6 | 7,719.8 | 0.00 | 0.00 | 0.00 |
| 16,300.0 | 90.00 | 0.00 | 8,682.0 | 7,819.7 | 660.6 | 7,819.8 | 0.00 | 0.00 | 0.00 |
| 16,400.0 | 90.00 | 0.00 | 8,682.0 | 7,919.7 | 660.6 | 7,919.8 | 0.00 | 0.00 | 0.00 |
| 16,500.0 | 90.00 | 0.00 | 8,682.0 | 8,019.7 | 660.6 | 8,019.8 | 0.00 | 0.00 | 0.00 |
| 16,600.0 | 90.00 | 0.00 | 8,682.0 | 8,119.7 | 660.6 | 8,119.8 | 0.00 | 0.00 | 0.00 |
| 16,700.0 | 90.00 | 0.00 | 8,682.0 | 8,219.7 | 660.6 | 8,219.8 | 0.00 | 0.00 | 0.00 |
| 16,800.0 | 90.00 | 0.00 | 8,682.0 | 8,319.7 | 660.6 | 8,319.8 | 0.00 | 0.00 | 0.00 |
| 16,900.0 | 90.00 | 0.00 | 8,682.0 | 8,419.7 | 660.6 | 8,419.8 | 0.00 | 0.00 | 0.00 |
| 17,000.0 | 90.00 | 0.00 | 8,682.0 | 8,519.7 | 660.6 | 8,519.8 | 0.00 | 0.00 | 0.00 |
| 17,100.0 | 90.00 | 0.00 | 8,682.0 | 8,619.7 | 660.6 | 8,619.8 | 0.00 | 0.00 | 0.00 |
| 17,200.0 | 90.00 | 0.00 | 8,682.0 | 8,719.7 | 660.6 | 8,719.8 | 0.00 | 0.00 | 0.00 |
| 17,300.0 | 90.00 | 0.00 | 8,682.0 | 8,819.7 | 660.6 | 8,819.8 | 0.00 | 0.00 | 0.00 |
| 17,400.0 | 90.00 | 0.00 | 8,682.0 | 8,919.7 | 660.6 | 8,919.8 | 0.00 | 0.00 | 0.00 |
| 17,500.0 | 90.00 | 0.00 | 8,682.0 | 9,019.7 | 660.6 | 9,019.8 | 0.00 | 0.00 | 0.00 |
| 17,600.0 | 90.00 | 0.00 | 8,682.0 | 9,119.7 | 660.6 | 9,119.8 | 0.00 | 0.00 | 0.00 |
| 17,700.0 | 90.00 | 0.00 | 8,682.0 | 9,219.7 | 660.6 | 9,219.8 | 0.00 | 0.00 | 0.00 |
| 17,800.0 | 90.00 | 0.00 | 8,682.0 | 9,319.7 | 660.6 | 9,319.8 | 0.00 | 0.00 | 0.00 |
| 17,900.0 | 90.00 | 0.00 | 8,682.0 | 9,419.7 | 660.6 | 9,419.8 | 0.00 | 0.00 | 0.00 |
| 18,000.0 | 90.00 | 0.00 | 8,682.0 | 9,519.7 | 660.6 | 9,519.8 | 0.00 | 0.00 | 0.00 |
| 18,100.0 | 90.00 | 0.00 | 8,682.0 | 9,619.7 | 660.6 | 9,619.8 | 0.00 | 0.00 | 0.00 |
| 18,200.0 | 90.00 | 0.00 | 8,682.0 | 9,719.7 | 660.6 | 9,719.8 | 0.00 | 0.00 | 0.00 |
| 18,300.0 | 90.00 | 0.00 | 8,682.0 | 9,819.7 | 660.6 | 9,819.8 | 0.00 | 0.00 | 0.00 |
| 18,356.3 | 90.00 | 0.00 | 8,682.0 | 9,876.1 | 660.6 | 9,876.1 | 0.00 | 0.00 | 0.00 |
| TD at 18356.3 | | | | | | | | | |

Anadarko

Planning Report

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| Database: | PLANNING | Local Co-ordinate Reference: | Site RESOLUTION FED 12-65-29-20NH PAD |
| Company: | US ROCKIES REGION PLANNING | TVD Reference: | WELL @ 5974.0usft (Original Well Elev) |
| Project: | COLORADO NORTHERN ZONE - 83 | MD Reference: | WELL @ 5974.0usft (Original Well Elev) |
| Site: | RESOLUTION FED 12-65-29-20NH PAD | North Reference: | True |
| Well: | RESOLUTION FED 12-65-29-20-2NH | 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 @ 8578.0 (RESOL - hit/miss target - Shape | 0.00 | 0.00 | 8,578.0 | 243.8 | 660.6 | 1,598,224.08 | 3,223,599.40 | 40.972682 | -104.690308 |
| RESOLUTION 12-65-29 - plan hits target center - Point | 0.00 | 0.00 | 8,682.0 | 9,876.1 | 660.6 | 1,607,855.96 | 3,223,511.70 | 40.999118 | -104.690307 |

| Casing Points | | | | | |
|-----------------------------|-----------------------------|--------|----------------------------|--------------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Name | Casing Diameter (in) | Hole Diameter (in) | |
| 2,318.7 | 2,300.0 | 9 5/8" | 9.625 | 12.250 | |
| 9,053.2 | 8,682.0 | 7" | 7.000 | 7.500 | |

| Formations | | | | | |
|-----------------------------|-----------------------------|---------------------|-----------|------------|-------------------------|
| Measured Depth (usft) | Vertical Depth (usft) | Name | Lithology | Dip (°) | Dip Direction (°) |
| 2,166.1 | 2,155.0 | Aquifer (Fox Hills) | | | |
| 8,702.5 | 8,584.0 | Niobrara | | | |

| Plan Annotations | | | | | |
|-----------------------------|-----------------------------|-------------------|-----------------|--------------------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates | | | |
| | | +N/-S (usft) | +E/-W (usft) | Comment | |
| 250.0 | 250.0 | 0.0 | 30.1 | Start Build 2.00 | |
| 663.7 | 662.3 | 0.0 | 59.9 | Start 3966.8 hold at 663.7 MD | |
| 4,630.5 | 4,587.7 | 0.0 | 630.8 | Start Drop -2.00 | |
| 5,044.2 | 5,000.0 | 0.0 | 660.6 | Start 3109.0 hold at 5044.2 MD | |
| 8,153.2 | 8,109.0 | 0.0 | 660.6 | Start Build 10.00 | |
| 9,053.2 | 8,682.0 | 573.0 | 660.6 | Start 9303.1 hold at 9053.2 MD | |
| 18,356.3 | 8,682.0 | 9,876.1 | 660.6 | TD at 18356.3 | |