

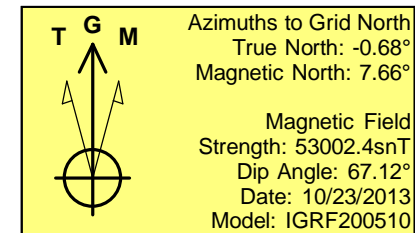
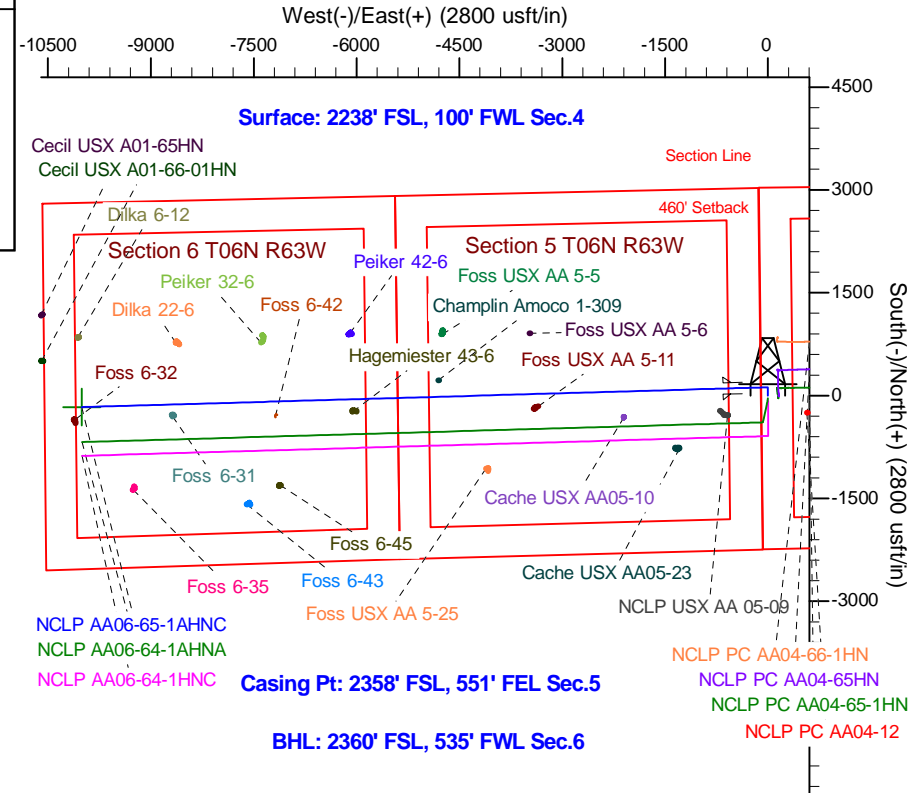
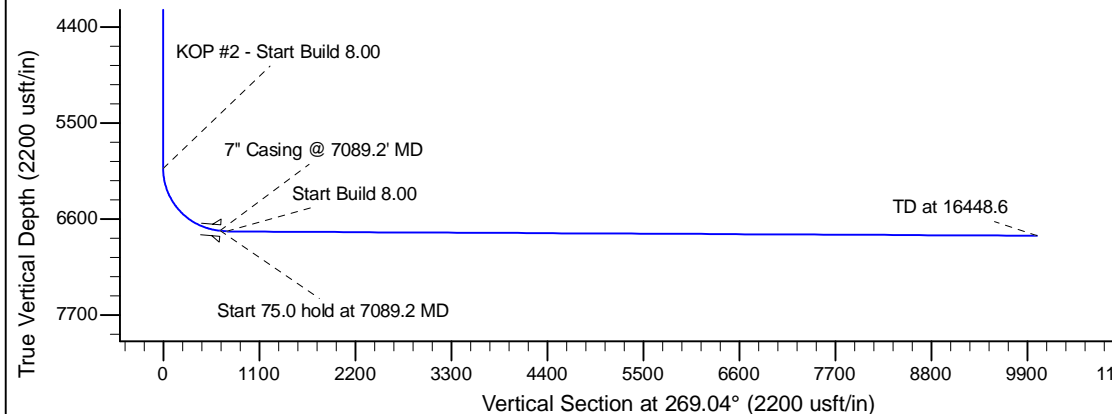
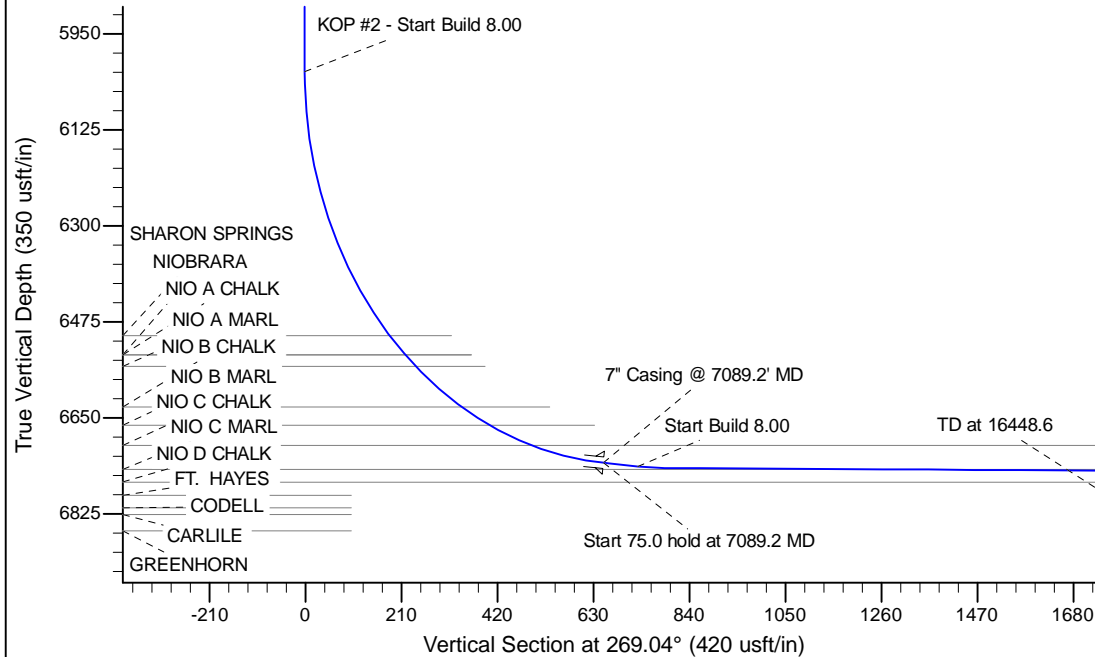
Project: Wattenberg Field
Site: AA (Sec.4-T06N-R63W) Weld County, CO
Well: NCLP AA06-65-1AHNC
Wellbore: Original Drilling
Design: APD - Rev 0

Northern Region Drilling - Working

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone
System Datum: Mean Sea Level

SECTION DETAILS

| Sec | MD | Inc | Azi | TVD | +N/-S | +E/-W | Dleg | TFace | VSec | Target |
|-----|---------|-------|--------|--------|--------|----------|------|--------|---------|--|
| 1 | 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | |
| 2 | 1500.0 | 0.00 | 0.00 | 1500.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | |
| 3 | 2052.1 | 11.04 | 360.00 | 2048.7 | 53.0 | 0.0 | 2.00 | 360.00 | -0.9 | |
| 4 | 2135.2 | 11.04 | 360.00 | 2130.3 | 69.0 | 0.0 | 0.00 | 0.00 | -1.2 | |
| 5 | 2687.4 | 0.00 | 0.00 | 2679.0 | 122.0 | 0.0 | 2.00 | 180.00 | -2.0 | |
| 6 | 6026.7 | 0.00 | 0.00 | 6018.4 | 122.0 | 0.0 | 0.00 | 0.00 | -2.0 | |
| 7 | 7089.2 | 85.00 | 268.34 | 6731.8 | 103.1 | -653.5 | 8.00 | 268.34 | 651.7 | |
| 8 | 7164.2 | 85.00 | 268.34 | 6738.4 | 100.9 | -728.2 | 0.00 | 0.00 | 726.4 | |
| 9 | 7223.0 | 89.70 | 268.34 | 6741.1 | 99.2 | -786.8 | 8.00 | 0.00 | 785.1 | |
| 10 | 16448.6 | 89.70 | 268.34 | 6789.4 | -167.4 | -10008.5 | 0.00 | 0.00 | 10009.9 | NCLP AA06-65-1AHNC BHL 2360'FSL, 535'FWL |



| WELL DETAILS: NCLP AA06-65-1AHNC | | | | | |
|--|-----|------------------------|-------------------------------|-----------------------|--------------------------|
| Ground Level: 4711.0 | | | | | |
| 0.0 | 0.0 | Northing 1432060.45 | Easting 3291695.30 | Latitude 40.514670 | Longitude -104.450860 |
| Plan: APD - Rev 0 (NCLP AA06-65-1AHNC/Original Drilling) | | | | | |
| Created By: Shailey Jewell | | | Date: 12:47, December 04 2013 | | |
| Checked: _____ | | | Date: _____ | | |
| Reviewed: _____ | | | Date: _____ | | |
| Approved: _____ | | | Date: _____ | | |

Northern Region Drilling - Working

Wattenberg Field

AA (06N-63W)

NCLP AA06-65-1AHNC

Original Drilling

Plan: APD - Rev 0

Standard Planning Report

04 December, 2013

Noble Energy Inc

Planning Report

| | | | |
|------------------|------------------------------------|-------------------------------------|--|
| Database: | EDM Production | Local Co-ordinate Reference: | Well NCLP AA06-65-1AHNC |
| Company: | Northern Region Drilling - Working | TVD Reference: | WELL @ 4735.0usft (Original Well Elev) |
| Project: | Wattenberg Field | MD Reference: | WELL @ 4735.0usft (Original Well Elev) |
| Site: | AA (06N-63W) | North Reference: | Grid |
| Well: | NCLP AA06-65-1AHNC | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Original Drilling | | |
| Design: | APD - Rev 0 | | |

| | | | |
|--------------------|----------------------------------|----------------------|-----------------------------|
| Project | Wattenberg Field, Weld County CO | | |
| Map System: | US State Plane 1983 | System Datum: | Mean Sea Level |
| Geo Datum: | North American Datum 1983 | | |
| Map Zone: | Colorado Northern Zone | | Using geodetic scale factor |

| | | | | | |
|-----------------------|----------|--------------|-------------------|-------------------|-------------|
| Site | | AA (06N-63W) | | | |
| Site Position: | | Northing: | 1,427,844.88 usft | Latitude: | 40.502740 |
| From: | Lat/Long | Easting: | 3,302,558.01 usft | Longitude: | -104.411980 |
| Position Uncertainty: | 0.0 usft | Slot Radius: | 13-3/16 " | Grid Convergence: | 0.70 ° |

| | | | | | | |
|----------------------|--------------------|----------------|---------------------|-------------------|---------------|--------------|
| Well | NCLP AA06-65-1AHNC | | | | | |
| Well Position | +N/-S | 4,215.7 usft | Northing: | 1,432,060.45 usft | Latitude: | 40.514670 |
| | +E/-W | -10,863.1 usft | Easting: | 3,291,695.31 usft | Longitude: | -104.450860 |
| Position Uncertainty | | 0.0 usft | Wellhead Elevation: | | Ground Level: | 4,711.0 usft |

| | | | | | |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | Original Drilling | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF200510 | 10/23/2013 | 8.33 | 67.12 | 53,002 |

| | | | | |
|--------------------------|--------------------------------|---------------------|----------------------|----------------------|
| Design | APD - Rev 0 | | | |
| Audit Notes: | | | | |
| Version: | Phase: | PROTOTYPE | Tie On Depth: | 0.0 |
| Vertical Section: | Depth From (TVD) (usft) | +N/-S (usft) | +E/-W (usft) | Direction (°) |
| | 0.0 | 0.0 | 0.0 | 269.04 |

| 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 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,500.0 | 0.00 | 0.00 | 1,500.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 2,052.1 | 11.04 | 360.00 | 2,048.7 | 53.0 | 0.0 | 2.00 | 2.00 | 0.00 | 360.00 | |
| 2,135.2 | 11.04 | 360.00 | 2,130.3 | 69.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 2,687.4 | 0.00 | 0.00 | 2,679.0 | 122.0 | 0.0 | 2.00 | -2.00 | 0.00 | 180.00 | |
| 6,026.7 | 0.00 | 0.00 | 6,018.4 | 122.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 7,089.2 | 85.00 | 268.34 | 6,731.8 | 103.1 | -653.5 | 8.00 | 8.00 | 0.00 | 268.34 | |
| 7,164.2 | 85.00 | 268.34 | 6,738.4 | 100.9 | -728.2 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 7,223.0 | 89.70 | 268.34 | 6,741.1 | 99.2 | -786.8 | 8.00 | 8.00 | 0.00 | 0.00 | |
| 16,448.6 | 89.70 | 268.34 | 6,789.4 | -167.4 | -10,008.5 | 0.00 | 0.00 | 0.00 | 0.00 | NCLP AA06-65-1AHN |

Noble Energy Inc

Planning Report

| | | | |
|------------------|------------------------------------|-------------------------------------|--|
| Database: | EDM Production | Local Co-ordinate Reference: | Well NCLP AA06-65-1AHNC |
| Company: | Northern Region Drilling - Working | TVD Reference: | WELL @ 4735.0usft (Original Well Elev) |
| Project: | Wattenberg Field | MD Reference: | WELL @ 4735.0usft (Original Well Elev) |
| Site: | AA (06N-63W) | North Reference: | Grid |
| Well: | NCLP AA06-65-1AHNC | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Original Drilling | | |
| Design: | APD - Rev 0 | | |

| 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 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 50.0 | 0.00 | 0.00 | 50.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 100.0 | 0.00 | 0.00 | 100.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 150.0 | 0.00 | 0.00 | 150.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 200.0 | 0.00 | 0.00 | 200.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 250.0 | 0.00 | 0.00 | 250.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 300.0 | 0.00 | 0.00 | 300.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 350.0 | 0.00 | 0.00 | 350.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 400.0 | 0.00 | 0.00 | 400.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 450.0 | 0.00 | 0.00 | 450.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 500.0 | 0.00 | 0.00 | 500.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 550.0 | 0.00 | 0.00 | 550.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 600.0 | 0.00 | 0.00 | 600.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 650.0 | 0.00 | 0.00 | 650.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 700.0 | 0.00 | 0.00 | 700.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 750.0 | 0.00 | 0.00 | 750.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 800.0 | 0.00 | 0.00 | 800.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 850.0 | 0.00 | 0.00 | 850.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 900.0 | 0.00 | 0.00 | 900.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 950.0 | 0.00 | 0.00 | 950.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,000.0 | 0.00 | 0.00 | 1,000.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,033.0 | 0.00 | 0.00 | 1,033.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| PIERRE | | | | | | | | | |
| 1,050.0 | 0.00 | 0.00 | 1,050.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,100.0 | 0.00 | 0.00 | 1,100.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,150.0 | 0.00 | 0.00 | 1,150.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,200.0 | 0.00 | 0.00 | 1,200.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,250.0 | 0.00 | 0.00 | 1,250.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,300.0 | 0.00 | 0.00 | 1,300.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,350.0 | 0.00 | 0.00 | 1,350.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,400.0 | 0.00 | 0.00 | 1,400.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,450.0 | 0.00 | 0.00 | 1,450.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,500.0 | 0.00 | 0.00 | 1,500.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| KOP - Start Build 2.00 | | | | | | | | | |
| 1,550.0 | 1.00 | 360.00 | 1,550.0 | 0.4 | 0.0 | 0.0 | 2.00 | 2.00 | 0.00 |
| 1,600.0 | 2.00 | 360.00 | 1,600.0 | 1.7 | 0.0 | 0.0 | 2.00 | 2.00 | 0.00 |
| 1,650.0 | 3.00 | 360.00 | 1,649.9 | 3.9 | 0.0 | -0.1 | 2.00 | 2.00 | 0.00 |
| 1,700.0 | 4.00 | 360.00 | 1,699.8 | 7.0 | 0.0 | -0.1 | 2.00 | 2.00 | 0.00 |
| 1,750.0 | 5.00 | 360.00 | 1,749.7 | 10.9 | 0.0 | -0.2 | 2.00 | 2.00 | 0.00 |
| 1,800.0 | 6.00 | 360.00 | 1,799.5 | 15.7 | 0.0 | -0.3 | 2.00 | 2.00 | 0.00 |
| 1,850.0 | 7.00 | 360.00 | 1,849.1 | 21.4 | 0.0 | -0.4 | 2.00 | 2.00 | 0.00 |
| 1,900.0 | 8.00 | 360.00 | 1,898.7 | 27.9 | 0.0 | -0.5 | 2.00 | 2.00 | 0.00 |
| 1,950.0 | 9.00 | 360.00 | 1,948.2 | 35.3 | 0.0 | -0.6 | 2.00 | 2.00 | 0.00 |
| 2,000.0 | 10.00 | 360.00 | 1,997.5 | 43.5 | 0.0 | -0.7 | 2.00 | 2.00 | 0.00 |
| 2,050.0 | 11.00 | 360.00 | 2,046.6 | 52.6 | 0.0 | -0.9 | 2.00 | 2.00 | 0.00 |
| 2,052.1 | 11.04 | 360.00 | 2,048.7 | 53.0 | 0.0 | -0.9 | 2.00 | 2.00 | 0.00 |
| 2,100.0 | 11.04 | 360.00 | 2,095.7 | 62.2 | 0.0 | -1.0 | 0.00 | 0.00 | 0.00 |
| 2,135.2 | 11.04 | 360.00 | 2,130.3 | 69.0 | 0.0 | -1.2 | 0.00 | 0.00 | 0.00 |
| Start Drop -2.00 | | | | | | | | | |
| 2,150.0 | 10.75 | 360.00 | 2,144.8 | 71.7 | 0.0 | -1.2 | 1.99 | -1.99 | 0.00 |
| 2,200.0 | 9.75 | 360.00 | 2,194.0 | 80.6 | 0.0 | -1.3 | 2.00 | -2.00 | 0.00 |
| 2,250.0 | 8.75 | 360.00 | 2,243.3 | 88.7 | 0.0 | -1.5 | 2.00 | -2.00 | 0.00 |
| 2,300.0 | 7.75 | 360.00 | 2,292.8 | 95.9 | 0.0 | -1.6 | 2.00 | -2.00 | 0.00 |

Noble Energy Inc

Planning Report

| | | | |
|------------------|------------------------------------|-------------------------------------|--|
| Database: | EDM Production | Local Co-ordinate Reference: | Well NCLP AA06-65-1AHNC |
| Company: | Northern Region Drilling - Working | TVD Reference: | WELL @ 4735.0usft (Original Well Elev) |
| Project: | Wattenberg Field | MD Reference: | WELL @ 4735.0usft (Original Well Elev) |
| Site: | AA (06N-63W) | North Reference: | Grid |
| Well: | NCLP AA06-65-1AHNC | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Original Drilling | | |
| Design: | APD - Rev 0 | | |

| 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) |
| 2,350.0 | 6.75 | 360.00 | 2,342.4 | 102.2 | 0.0 | -1.7 | 2.00 | -2.00 | 0.00 |
| 2,400.0 | 5.75 | 360.00 | 2,392.1 | 107.6 | 0.0 | -1.8 | 2.00 | -2.00 | 0.00 |
| 2,450.0 | 4.75 | 360.00 | 2,441.9 | 112.2 | 0.0 | -1.9 | 2.00 | -2.00 | 0.00 |
| 2,500.0 | 3.75 | 360.00 | 2,491.8 | 115.9 | 0.0 | -1.9 | 2.00 | -2.00 | 0.00 |
| 2,550.0 | 2.75 | 360.00 | 2,541.7 | 118.7 | 0.0 | -2.0 | 2.00 | -2.00 | 0.00 |
| 2,600.0 | 1.75 | 360.00 | 2,591.7 | 120.7 | 0.0 | -2.0 | 2.00 | -2.00 | 0.00 |
| 2,650.0 | 0.75 | 360.00 | 2,641.6 | 121.8 | 0.0 | -2.0 | 2.00 | -2.00 | 0.00 |
| 2,687.4 | 0.00 | 0.00 | 2,679.0 | 122.0 | 0.0 | -2.0 | 2.00 | -2.00 | 0.00 |
| 2,700.0 | 0.00 | 0.00 | 2,691.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 2,750.0 | 0.00 | 0.00 | 2,741.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 2,800.0 | 0.00 | 0.00 | 2,791.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 2,850.0 | 0.00 | 0.00 | 2,841.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 2,900.0 | 0.00 | 0.00 | 2,891.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 2,950.0 | 0.00 | 0.00 | 2,941.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 3,000.0 | 0.00 | 0.00 | 2,991.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 3,050.0 | 0.00 | 0.00 | 3,041.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 3,100.0 | 0.00 | 0.00 | 3,091.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 3,150.0 | 0.00 | 0.00 | 3,141.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 3,200.0 | 0.00 | 0.00 | 3,191.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 3,250.0 | 0.00 | 0.00 | 3,241.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 3,300.0 | 0.00 | 0.00 | 3,291.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 3,350.0 | 0.00 | 0.00 | 3,341.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 3,400.0 | 0.00 | 0.00 | 3,391.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 3,450.0 | 0.00 | 0.00 | 3,441.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 3,500.0 | 0.00 | 0.00 | 3,491.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 3,526.4 | 0.00 | 0.00 | 3,518.0 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| PARKMAN | | | | | | | | | |
| 3,550.0 | 0.00 | 0.00 | 3,541.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 3,600.0 | 0.00 | 0.00 | 3,591.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 3,650.0 | 0.00 | 0.00 | 3,641.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 3,700.0 | 0.00 | 0.00 | 3,691.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 3,750.0 | 0.00 | 0.00 | 3,741.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 3,800.0 | 0.00 | 0.00 | 3,791.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 3,850.0 | 0.00 | 0.00 | 3,841.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 3,900.0 | 0.00 | 0.00 | 3,891.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 3,950.0 | 0.00 | 0.00 | 3,941.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 4,000.0 | 0.00 | 0.00 | 3,991.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 4,050.0 | 0.00 | 0.00 | 4,041.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 4,100.0 | 0.00 | 0.00 | 4,091.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 4,150.0 | 0.00 | 0.00 | 4,141.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 4,200.0 | 0.00 | 0.00 | 4,191.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 4,250.0 | 0.00 | 0.00 | 4,241.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 4,300.0 | 0.00 | 0.00 | 4,291.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 4,326.4 | 0.00 | 0.00 | 4,318.0 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| SUSSEX | | | | | | | | | |
| 4,350.0 | 0.00 | 0.00 | 4,341.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 4,400.0 | 0.00 | 0.00 | 4,391.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 4,450.0 | 0.00 | 0.00 | 4,441.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 4,500.0 | 0.00 | 0.00 | 4,491.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 4,550.0 | 0.00 | 0.00 | 4,541.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 4,600.0 | 0.00 | 0.00 | 4,591.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 4,650.0 | 0.00 | 0.00 | 4,641.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 4,700.0 | 0.00 | 0.00 | 4,691.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 4,750.0 | 0.00 | 0.00 | 4,741.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |

Noble Energy Inc

Planning Report

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|------------------|------------------------------------|-------------------------------------|--|
| Database: | EDM Production | Local Co-ordinate Reference: | Well NCLP AA06-65-1AHNC |
| Company: | Northern Region Drilling - Working | TVD Reference: | WELL @ 4735.0usft (Original Well Elev) |
| Project: | Wattenberg Field | MD Reference: | WELL @ 4735.0usft (Original Well Elev) |
| Site: | AA (06N-63W) | North Reference: | Grid |
| Well: | NCLP AA06-65-1AHNC | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Original Drilling | | |
| Design: | APD - Rev 0 | | |

| 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) |
| 4,800.0 | 0.00 | 0.00 | 4,791.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 4,850.0 | 0.00 | 0.00 | 4,841.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 4,900.0 | 0.00 | 0.00 | 4,891.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 4,906.4 | 0.00 | 0.00 | 4,898.0 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| SHANNON | | | | | | | | | |
| 4,950.0 | 0.00 | 0.00 | 4,941.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 5,000.0 | 0.00 | 0.00 | 4,991.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 5,050.0 | 0.00 | 0.00 | 5,041.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 5,100.0 | 0.00 | 0.00 | 5,091.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 5,150.0 | 0.00 | 0.00 | 5,141.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 5,200.0 | 0.00 | 0.00 | 5,191.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 5,250.0 | 0.00 | 0.00 | 5,241.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 5,300.0 | 0.00 | 0.00 | 5,291.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 5,350.0 | 0.00 | 0.00 | 5,341.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 5,400.0 | 0.00 | 0.00 | 5,391.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 5,450.0 | 0.00 | 0.00 | 5,441.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 5,500.0 | 0.00 | 0.00 | 5,491.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 5,550.0 | 0.00 | 0.00 | 5,541.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 5,600.0 | 0.00 | 0.00 | 5,591.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 5,650.0 | 0.00 | 0.00 | 5,641.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 5,700.0 | 0.00 | 0.00 | 5,691.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 5,750.0 | 0.00 | 0.00 | 5,741.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 5,770.4 | 0.00 | 0.00 | 5,762.0 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| TEEPEE BUTTES | | | | | | | | | |
| 5,800.0 | 0.00 | 0.00 | 5,791.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 5,850.0 | 0.00 | 0.00 | 5,841.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 5,900.0 | 0.00 | 0.00 | 5,891.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 5,950.0 | 0.00 | 0.00 | 5,941.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 6,000.0 | 0.00 | 0.00 | 5,991.6 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| 6,026.7 | 0.00 | 0.00 | 6,018.3 | 122.0 | 0.0 | -2.0 | 0.00 | 0.00 | 0.00 |
| KOP #2 - Start Build 8.00 | | | | | | | | | |
| 6,050.0 | 1.86 | 268.34 | 6,041.6 | 122.0 | -0.4 | -1.7 | 7.99 | 7.99 | 0.00 |
| 6,100.0 | 5.86 | 268.34 | 6,091.5 | 121.9 | -3.7 | 1.7 | 8.00 | 8.00 | 0.00 |
| 6,150.0 | 9.86 | 268.34 | 6,141.0 | 121.7 | -10.6 | 8.5 | 8.00 | 8.00 | 0.00 |
| 6,200.0 | 13.86 | 268.34 | 6,190.0 | 121.4 | -20.8 | 18.8 | 8.00 | 8.00 | 0.00 |
| 6,250.0 | 17.86 | 268.34 | 6,238.0 | 121.0 | -34.5 | 32.5 | 8.00 | 8.00 | 0.00 |
| 6,300.0 | 21.86 | 268.34 | 6,285.1 | 120.5 | -51.5 | 49.5 | 8.00 | 8.00 | 0.00 |
| 6,350.0 | 25.86 | 268.34 | 6,330.8 | 119.9 | -71.7 | 69.7 | 8.00 | 8.00 | 0.00 |
| 6,400.0 | 29.86 | 268.34 | 6,375.0 | 119.3 | -95.0 | 93.0 | 8.00 | 8.00 | 0.00 |
| 6,450.0 | 33.86 | 268.34 | 6,417.4 | 118.5 | -121.4 | 119.4 | 8.00 | 8.00 | 0.00 |
| 6,500.0 | 37.86 | 268.34 | 6,457.9 | 117.6 | -150.7 | 148.7 | 8.00 | 8.00 | 0.00 |
| 6,550.0 | 41.86 | 268.34 | 6,496.3 | 116.7 | -182.7 | 180.7 | 8.00 | 8.00 | 0.00 |
| 6,555.0 | 42.26 | 268.34 | 6,500.0 | 116.6 | -186.1 | 184.1 | 8.00 | 8.00 | 0.00 |
| SHARON SPRINGS | | | | | | | | | |
| 6,600.0 | 45.86 | 268.34 | 6,532.4 | 115.7 | -217.3 | 215.4 | 8.00 | 8.00 | 0.00 |
| 6,603.8 | 46.17 | 268.34 | 6,535.0 | 115.6 | -220.1 | 218.1 | 8.00 | 8.00 | 0.00 |
| NIOBRARA - NIO A CHALK | | | | | | | | | |
| 6,634.8 | 48.65 | 268.34 | 6,556.0 | 115.0 | -242.9 | 241.0 | 8.00 | 8.00 | 0.00 |
| NIO A MARL | | | | | | | | | |
| 6,650.0 | 49.86 | 268.34 | 6,565.9 | 114.6 | -254.4 | 252.4 | 8.00 | 8.00 | 0.00 |
| 6,700.0 | 53.86 | 268.34 | 6,596.8 | 113.5 | -293.7 | 291.8 | 8.00 | 8.00 | 0.00 |
| 6,750.0 | 57.86 | 268.34 | 6,624.8 | 112.3 | -335.1 | 333.1 | 8.00 | 8.00 | 0.00 |
| 6,759.8 | 58.65 | 268.34 | 6,630.0 | 112.1 | -343.4 | 341.5 | 8.00 | 8.00 | 0.00 |

Noble Energy Inc

Planning Report

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| Database: | EDM Production | Local Co-ordinate Reference: | Well NCLP AA06-65-1AHNC |
| Company: | Northern Region Drilling - Working | TVD Reference: | WELL @ 4735.0usft (Original Well Elev) |
| Project: | Wattenberg Field | MD Reference: | WELL @ 4735.0usft (Original Well Elev) |
| Site: | AA (06N-63W) | North Reference: | Grid |
| Well: | NCLP AA06-65-1AHNC | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Original Drilling | | |
| Design: | APD - Rev 0 | | |

| 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) |
| NIO B CHALK | | | | | | | | | |
| 6,800.0 | 61.86 | 268.34 | 6,649.9 | 111.1 | -378.3 | 376.4 | 8.00 | 8.00 | 0.00 |
| 6,828.8 | 64.17 | 268.34 | 6,663.0 | 110.3 | -404.0 | 402.1 | 8.00 | 8.00 | 0.00 |
| NIO B MARL | | | | | | | | | |
| 6,850.0 | 65.86 | 268.34 | 6,671.9 | 109.8 | -423.1 | 421.2 | 8.00 | 8.00 | 0.00 |
| 6,900.0 | 69.86 | 268.34 | 6,690.8 | 108.4 | -469.4 | 467.5 | 8.00 | 8.00 | 0.00 |
| 6,928.3 | 72.13 | 268.34 | 6,700.0 | 107.7 | -496.2 | 494.3 | 8.00 | 8.00 | 0.00 |
| NIO C CHALK | | | | | | | | | |
| 6,950.0 | 73.86 | 268.34 | 6,706.3 | 107.1 | -516.9 | 515.0 | 8.00 | 8.00 | 0.00 |
| 7,000.0 | 77.86 | 268.34 | 6,718.6 | 105.7 | -565.4 | 563.5 | 8.00 | 8.00 | 0.00 |
| 7,050.0 | 81.86 | 268.34 | 6,727.4 | 104.2 | -614.5 | 612.7 | 8.00 | 8.00 | 0.00 |
| 7,089.2 | 85.00 | 268.34 | 6,731.8 | 103.1 | -653.5 | 651.7 | 8.00 | 8.00 | 0.00 |
| Start 75.0 hold at 7089.2 MD - 7" Casing @ 7089.2' MD | | | | | | | | | |
| 7,100.0 | 85.00 | 268.34 | 6,732.8 | 102.8 | -664.2 | 662.4 | 0.02 | 0.02 | 0.00 |
| 7,150.0 | 85.00 | 268.34 | 6,737.1 | 101.4 | -714.0 | 712.2 | 0.00 | 0.00 | 0.00 |
| 7,164.2 | 85.00 | 268.34 | 6,738.4 | 100.9 | -728.2 | 726.4 | 0.00 | 0.00 | 0.00 |
| Start Build 8.00 | | | | | | | | | |
| 7,200.0 | 87.86 | 268.34 | 6,740.6 | 99.9 | -763.9 | 762.1 | 7.99 | 7.99 | 0.00 |
| 7,223.0 | 89.70 | 268.34 | 6,741.1 | 99.2 | -786.8 | 785.1 | 8.00 | 8.00 | 0.00 |
| 7,250.0 | 89.70 | 268.34 | 6,741.2 | 98.5 | -813.8 | 812.1 | 0.00 | 0.00 | 0.00 |
| 7,300.0 | 89.70 | 268.34 | 6,741.5 | 97.0 | -863.8 | 862.1 | 0.00 | 0.00 | 0.00 |
| 7,350.0 | 89.70 | 268.34 | 6,741.8 | 95.6 | -913.8 | 912.1 | 0.00 | 0.00 | 0.00 |
| 7,400.0 | 89.70 | 268.34 | 6,742.0 | 94.1 | -963.8 | 962.1 | 0.00 | 0.00 | 0.00 |
| 7,450.0 | 89.70 | 268.34 | 6,742.3 | 92.7 | -1,013.8 | 1,012.1 | 0.00 | 0.00 | 0.00 |
| 7,500.0 | 89.70 | 268.34 | 6,742.5 | 91.2 | -1,063.7 | 1,062.1 | 0.00 | 0.00 | 0.00 |
| 7,550.0 | 89.70 | 268.34 | 6,742.8 | 89.8 | -1,113.7 | 1,112.1 | 0.00 | 0.00 | 0.00 |
| 7,600.0 | 89.70 | 268.34 | 6,743.1 | 88.4 | -1,163.7 | 1,162.0 | 0.00 | 0.00 | 0.00 |
| 7,650.0 | 89.70 | 268.34 | 6,743.3 | 86.9 | -1,213.7 | 1,212.0 | 0.00 | 0.00 | 0.00 |
| 7,700.0 | 89.70 | 268.34 | 6,743.6 | 85.5 | -1,263.6 | 1,262.0 | 0.00 | 0.00 | 0.00 |
| 7,750.0 | 89.70 | 268.34 | 6,743.9 | 84.0 | -1,313.6 | 1,312.0 | 0.00 | 0.00 | 0.00 |
| 7,777.8 | 89.70 | 268.34 | 6,744.0 | 83.2 | -1,341.4 | 1,339.8 | 0.00 | 0.00 | 0.00 |
| NIO C MARL | | | | | | | | | |
| 7,800.0 | 89.70 | 268.34 | 6,744.1 | 82.6 | -1,363.6 | 1,362.0 | 0.00 | 0.00 | 0.00 |
| 7,850.0 | 89.70 | 268.34 | 6,744.4 | 81.1 | -1,413.6 | 1,412.0 | 0.00 | 0.00 | 0.00 |
| 7,900.0 | 89.70 | 268.34 | 6,744.6 | 79.7 | -1,463.6 | 1,462.0 | 0.00 | 0.00 | 0.00 |
| 7,950.0 | 89.70 | 268.34 | 6,744.9 | 78.2 | -1,513.5 | 1,512.0 | 0.00 | 0.00 | 0.00 |
| 8,000.0 | 89.70 | 268.34 | 6,745.2 | 76.8 | -1,563.5 | 1,562.0 | 0.00 | 0.00 | 0.00 |
| 8,050.0 | 89.70 | 268.34 | 6,745.4 | 75.3 | -1,613.5 | 1,612.0 | 0.00 | 0.00 | 0.00 |
| 8,100.0 | 89.70 | 268.34 | 6,745.7 | 73.9 | -1,663.5 | 1,662.0 | 0.00 | 0.00 | 0.00 |
| 8,150.0 | 89.70 | 268.34 | 6,745.9 | 72.5 | -1,713.5 | 1,712.0 | 0.00 | 0.00 | 0.00 |
| 8,200.0 | 89.70 | 268.34 | 6,746.2 | 71.0 | -1,763.4 | 1,762.0 | 0.00 | 0.00 | 0.00 |
| 8,250.0 | 89.70 | 268.34 | 6,746.5 | 69.6 | -1,813.4 | 1,812.0 | 0.00 | 0.00 | 0.00 |
| 8,300.0 | 89.70 | 268.34 | 6,746.7 | 68.1 | -1,863.4 | 1,862.0 | 0.00 | 0.00 | 0.00 |
| 8,350.0 | 89.70 | 268.34 | 6,747.0 | 66.7 | -1,913.4 | 1,912.0 | 0.00 | 0.00 | 0.00 |
| 8,400.0 | 89.70 | 268.34 | 6,747.3 | 65.2 | -1,963.3 | 1,962.0 | 0.00 | 0.00 | 0.00 |
| 8,450.0 | 89.70 | 268.34 | 6,747.5 | 63.8 | -2,013.3 | 2,012.0 | 0.00 | 0.00 | 0.00 |
| 8,500.0 | 89.70 | 268.34 | 6,747.8 | 62.3 | -2,063.3 | 2,062.0 | 0.00 | 0.00 | 0.00 |
| 8,550.0 | 89.70 | 268.34 | 6,748.0 | 60.9 | -2,113.3 | 2,112.0 | 0.00 | 0.00 | 0.00 |
| 8,600.0 | 89.70 | 268.34 | 6,748.3 | 59.5 | -2,163.3 | 2,162.0 | 0.00 | 0.00 | 0.00 |
| 8,650.0 | 89.70 | 268.34 | 6,748.6 | 58.0 | -2,213.2 | 2,212.0 | 0.00 | 0.00 | 0.00 |
| 8,700.0 | 89.70 | 268.34 | 6,748.8 | 56.6 | -2,263.2 | 2,262.0 | 0.00 | 0.00 | 0.00 |
| 8,750.0 | 89.70 | 268.34 | 6,749.1 | 55.1 | -2,313.2 | 2,311.9 | 0.00 | 0.00 | 0.00 |
| 8,800.0 | 89.70 | 268.34 | 6,749.4 | 53.7 | -2,363.2 | 2,361.9 | 0.00 | 0.00 | 0.00 |

Noble Energy Inc

Planning Report

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|------------------|------------------------------------|-------------------------------------|--|
| Database: | EDM Production | Local Co-ordinate Reference: | Well NCLP AA06-65-1AHNC |
| Company: | Northern Region Drilling - Working | TVD Reference: | WELL @ 4735.0usft (Original Well Elev) |
| Project: | Wattenberg Field | MD Reference: | WELL @ 4735.0usft (Original Well Elev) |
| Site: | AA (06N-63W) | North Reference: | Grid |
| Well: | NCLP AA06-65-1AHNC | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Original Drilling | | |
| Design: | APD - Rev 0 | | |

| 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) |
| 8,850.0 | 89.70 | 268.34 | 6,749.6 | 52.2 | -2,413.1 | 2,411.9 | 0.00 | 0.00 | 0.00 |
| 8,900.0 | 89.70 | 268.34 | 6,749.9 | 50.8 | -2,463.1 | 2,461.9 | 0.00 | 0.00 | 0.00 |
| 8,950.0 | 89.70 | 268.34 | 6,750.1 | 49.3 | -2,513.1 | 2,511.9 | 0.00 | 0.00 | 0.00 |
| 9,000.0 | 89.70 | 268.34 | 6,750.4 | 47.9 | -2,563.1 | 2,561.9 | 0.00 | 0.00 | 0.00 |
| 9,050.0 | 89.70 | 268.34 | 6,750.7 | 46.4 | -2,613.1 | 2,611.9 | 0.00 | 0.00 | 0.00 |
| 9,100.0 | 89.70 | 268.34 | 6,750.9 | 45.0 | -2,663.0 | 2,661.9 | 0.00 | 0.00 | 0.00 |
| 9,150.0 | 89.70 | 268.34 | 6,751.2 | 43.6 | -2,713.0 | 2,711.9 | 0.00 | 0.00 | 0.00 |
| 9,200.0 | 89.70 | 268.34 | 6,751.4 | 42.1 | -2,763.0 | 2,761.9 | 0.00 | 0.00 | 0.00 |
| 9,250.0 | 89.70 | 268.34 | 6,751.7 | 40.7 | -2,813.0 | 2,811.9 | 0.00 | 0.00 | 0.00 |
| 9,300.0 | 89.70 | 268.34 | 6,752.0 | 39.2 | -2,863.0 | 2,861.9 | 0.00 | 0.00 | 0.00 |
| 9,350.0 | 89.70 | 268.34 | 6,752.2 | 37.8 | -2,912.9 | 2,911.9 | 0.00 | 0.00 | 0.00 |
| 9,400.0 | 89.70 | 268.34 | 6,752.5 | 36.3 | -2,962.9 | 2,961.9 | 0.00 | 0.00 | 0.00 |
| 9,450.0 | 89.70 | 268.34 | 6,752.8 | 34.9 | -3,012.9 | 3,011.9 | 0.00 | 0.00 | 0.00 |
| 9,500.0 | 89.70 | 268.34 | 6,753.0 | 33.4 | -3,062.9 | 3,061.9 | 0.00 | 0.00 | 0.00 |
| 9,550.0 | 89.70 | 268.34 | 6,753.3 | 32.0 | -3,112.8 | 3,111.9 | 0.00 | 0.00 | 0.00 |
| 9,600.0 | 89.70 | 268.34 | 6,753.5 | 30.5 | -3,162.8 | 3,161.9 | 0.00 | 0.00 | 0.00 |
| 9,650.0 | 89.70 | 268.34 | 6,753.8 | 29.1 | -3,212.8 | 3,211.9 | 0.00 | 0.00 | 0.00 |
| 9,700.0 | 89.70 | 268.34 | 6,754.1 | 27.7 | -3,262.8 | 3,261.9 | 0.00 | 0.00 | 0.00 |
| 9,750.0 | 89.70 | 268.34 | 6,754.3 | 26.2 | -3,312.8 | 3,311.9 | 0.00 | 0.00 | 0.00 |
| 9,800.0 | 89.70 | 268.34 | 6,754.6 | 24.8 | -3,362.7 | 3,361.9 | 0.00 | 0.00 | 0.00 |
| 9,850.0 | 89.70 | 268.34 | 6,754.8 | 23.3 | -3,412.7 | 3,411.8 | 0.00 | 0.00 | 0.00 |
| 9,900.0 | 89.70 | 268.34 | 6,755.1 | 21.9 | -3,462.7 | 3,461.8 | 0.00 | 0.00 | 0.00 |
| 9,950.0 | 89.70 | 268.34 | 6,755.4 | 20.4 | -3,512.7 | 3,511.8 | 0.00 | 0.00 | 0.00 |
| 10,000.0 | 89.70 | 268.34 | 6,755.6 | 19.0 | -3,562.7 | 3,561.8 | 0.00 | 0.00 | 0.00 |
| 10,050.0 | 89.70 | 268.34 | 6,755.9 | 17.5 | -3,612.6 | 3,611.8 | 0.00 | 0.00 | 0.00 |
| 10,100.0 | 89.70 | 268.34 | 6,756.2 | 16.1 | -3,662.6 | 3,661.8 | 0.00 | 0.00 | 0.00 |
| 10,150.0 | 89.70 | 268.34 | 6,756.4 | 14.7 | -3,712.6 | 3,711.8 | 0.00 | 0.00 | 0.00 |
| 10,200.0 | 89.70 | 268.34 | 6,756.7 | 13.2 | -3,762.6 | 3,761.8 | 0.00 | 0.00 | 0.00 |
| 10,250.0 | 89.70 | 268.34 | 6,756.9 | 11.8 | -3,812.5 | 3,811.8 | 0.00 | 0.00 | 0.00 |
| 10,300.0 | 89.70 | 268.34 | 6,757.2 | 10.3 | -3,862.5 | 3,861.8 | 0.00 | 0.00 | 0.00 |
| 10,350.0 | 89.70 | 268.34 | 6,757.5 | 8.9 | -3,912.5 | 3,911.8 | 0.00 | 0.00 | 0.00 |
| 10,400.0 | 89.70 | 268.34 | 6,757.7 | 7.4 | -3,962.5 | 3,961.8 | 0.00 | 0.00 | 0.00 |
| 10,450.0 | 89.70 | 268.34 | 6,758.0 | 6.0 | -4,012.5 | 4,011.8 | 0.00 | 0.00 | 0.00 |
| 10,500.0 | 89.70 | 268.34 | 6,758.3 | 4.5 | -4,062.4 | 4,061.8 | 0.00 | 0.00 | 0.00 |
| 10,550.0 | 89.70 | 268.34 | 6,758.5 | 3.1 | -4,112.4 | 4,111.8 | 0.00 | 0.00 | 0.00 |
| 10,600.0 | 89.70 | 268.34 | 6,758.8 | 1.6 | -4,162.4 | 4,161.8 | 0.00 | 0.00 | 0.00 |
| 10,650.0 | 89.70 | 268.34 | 6,759.0 | 0.2 | -4,212.4 | 4,211.8 | 0.00 | 0.00 | 0.00 |
| 10,700.0 | 89.70 | 268.34 | 6,759.3 | -1.2 | -4,262.3 | 4,261.8 | 0.00 | 0.00 | 0.00 |
| 10,750.0 | 89.70 | 268.34 | 6,759.6 | -2.7 | -4,312.3 | 4,311.8 | 0.00 | 0.00 | 0.00 |
| 10,800.0 | 89.70 | 268.34 | 6,759.8 | -4.1 | -4,362.3 | 4,361.8 | 0.00 | 0.00 | 0.00 |
| 10,850.0 | 89.70 | 268.34 | 6,760.1 | -5.6 | -4,412.3 | 4,411.8 | 0.00 | 0.00 | 0.00 |
| 10,900.0 | 89.70 | 268.34 | 6,760.3 | -7.0 | -4,462.3 | 4,461.8 | 0.00 | 0.00 | 0.00 |
| 10,950.0 | 89.70 | 268.34 | 6,760.6 | -8.5 | -4,512.2 | 4,511.8 | 0.00 | 0.00 | 0.00 |
| 11,000.0 | 89.70 | 268.34 | 6,760.9 | -9.9 | -4,562.2 | 4,561.7 | 0.00 | 0.00 | 0.00 |
| 11,050.0 | 89.70 | 268.34 | 6,761.1 | -11.4 | -4,612.2 | 4,611.7 | 0.00 | 0.00 | 0.00 |
| 11,100.0 | 89.70 | 268.34 | 6,761.4 | -12.8 | -4,662.2 | 4,661.7 | 0.00 | 0.00 | 0.00 |
| 11,150.0 | 89.70 | 268.34 | 6,761.7 | -14.2 | -4,712.2 | 4,711.7 | 0.00 | 0.00 | 0.00 |
| 11,200.0 | 89.70 | 268.34 | 6,761.9 | -15.7 | -4,762.1 | 4,761.7 | 0.00 | 0.00 | 0.00 |
| 11,250.0 | 89.70 | 268.34 | 6,762.2 | -17.1 | -4,812.1 | 4,811.7 | 0.00 | 0.00 | 0.00 |
| 11,300.0 | 89.70 | 268.34 | 6,762.4 | -18.6 | -4,862.1 | 4,861.7 | 0.00 | 0.00 | 0.00 |
| 11,350.0 | 89.70 | 268.34 | 6,762.7 | -20.0 | -4,912.1 | 4,911.7 | 0.00 | 0.00 | 0.00 |
| 11,400.0 | 89.70 | 268.34 | 6,763.0 | -21.5 | -4,962.0 | 4,961.7 | 0.00 | 0.00 | 0.00 |
| 11,450.0 | 89.70 | 268.34 | 6,763.2 | -22.9 | -5,012.0 | 5,011.7 | 0.00 | 0.00 | 0.00 |
| 11,500.0 | 89.70 | 268.34 | 6,763.5 | -24.4 | -5,062.0 | 5,061.7 | 0.00 | 0.00 | 0.00 |

Noble Energy Inc

Planning Report

| | | | |
|------------------|------------------------------------|-------------------------------------|--|
| Database: | EDM Production | Local Co-ordinate Reference: | Well NCLP AA06-65-1AHNC |
| Company: | Northern Region Drilling - Working | TVD Reference: | WELL @ 4735.0usft (Original Well Elev) |
| Project: | Wattenberg Field | MD Reference: | WELL @ 4735.0usft (Original Well Elev) |
| Site: | AA (06N-63W) | North Reference: | Grid |
| Well: | NCLP AA06-65-1AHNC | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Original Drilling | | |
| Design: | APD - Rev 0 | | |

| 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) |
| 11,550.0 | 89.70 | 268.34 | 6,763.8 | -25.8 | -5,112.0 | 5,111.7 | 0.00 | 0.00 | 0.00 |
| 11,600.0 | 89.70 | 268.34 | 6,764.0 | -27.3 | -5,162.0 | 5,161.7 | 0.00 | 0.00 | 0.00 |
| 11,650.0 | 89.70 | 268.34 | 6,764.3 | -28.7 | -5,211.9 | 5,211.7 | 0.00 | 0.00 | 0.00 |
| 11,700.0 | 89.70 | 268.34 | 6,764.5 | -30.1 | -5,261.9 | 5,261.7 | 0.00 | 0.00 | 0.00 |
| 11,750.0 | 89.70 | 268.34 | 6,764.8 | -31.6 | -5,311.9 | 5,311.7 | 0.00 | 0.00 | 0.00 |
| 11,800.0 | 89.70 | 268.34 | 6,765.1 | -33.0 | -5,361.9 | 5,361.7 | 0.00 | 0.00 | 0.00 |
| 11,850.0 | 89.70 | 268.34 | 6,765.3 | -34.5 | -5,411.9 | 5,411.7 | 0.00 | 0.00 | 0.00 |
| 11,900.0 | 89.70 | 268.34 | 6,765.6 | -35.9 | -5,461.8 | 5,461.7 | 0.00 | 0.00 | 0.00 |
| 11,950.0 | 89.70 | 268.34 | 6,765.8 | -37.4 | -5,511.8 | 5,511.7 | 0.00 | 0.00 | 0.00 |
| 12,000.0 | 89.70 | 268.34 | 6,766.1 | -38.8 | -5,561.8 | 5,561.7 | 0.00 | 0.00 | 0.00 |
| 12,050.0 | 89.70 | 268.34 | 6,766.4 | -40.3 | -5,611.8 | 5,611.7 | 0.00 | 0.00 | 0.00 |
| 12,100.0 | 89.70 | 268.34 | 6,766.6 | -41.7 | -5,661.7 | 5,661.7 | 0.00 | 0.00 | 0.00 |
| 12,150.0 | 89.70 | 268.34 | 6,766.9 | -43.1 | -5,711.7 | 5,711.6 | 0.00 | 0.00 | 0.00 |
| 12,170.5 | 89.70 | 268.34 | 6,767.0 | -43.7 | -5,732.2 | 5,732.2 | 0.00 | 0.00 | 0.00 |
| NIO D CHALK | | | | | | | | | |
| 12,200.0 | 89.70 | 268.34 | 6,767.2 | -44.6 | -5,761.7 | 5,761.6 | 0.00 | 0.00 | 0.00 |
| 12,250.0 | 89.70 | 268.34 | 6,767.4 | -46.0 | -5,811.7 | 5,811.6 | 0.00 | 0.00 | 0.00 |
| 12,300.0 | 89.70 | 268.34 | 6,767.7 | -47.5 | -5,861.7 | 5,861.6 | 0.00 | 0.00 | 0.00 |
| 12,350.0 | 89.70 | 268.34 | 6,767.9 | -48.9 | -5,911.6 | 5,911.6 | 0.00 | 0.00 | 0.00 |
| 12,400.0 | 89.70 | 268.34 | 6,768.2 | -50.4 | -5,961.6 | 5,961.6 | 0.00 | 0.00 | 0.00 |
| 12,450.0 | 89.70 | 268.34 | 6,768.5 | -51.8 | -6,011.6 | 6,011.6 | 0.00 | 0.00 | 0.00 |
| 12,500.0 | 89.70 | 268.34 | 6,768.7 | -53.3 | -6,061.6 | 6,061.6 | 0.00 | 0.00 | 0.00 |
| 12,550.0 | 89.70 | 268.34 | 6,769.0 | -54.7 | -6,111.6 | 6,111.6 | 0.00 | 0.00 | 0.00 |
| 12,600.0 | 89.70 | 268.34 | 6,769.2 | -56.2 | -6,161.5 | 6,161.6 | 0.00 | 0.00 | 0.00 |
| 12,650.0 | 89.70 | 268.34 | 6,769.5 | -57.6 | -6,211.5 | 6,211.6 | 0.00 | 0.00 | 0.00 |
| 12,700.0 | 89.70 | 268.34 | 6,769.8 | -59.0 | -6,261.5 | 6,261.6 | 0.00 | 0.00 | 0.00 |
| 12,750.0 | 89.70 | 268.34 | 6,770.0 | -60.5 | -6,311.5 | 6,311.6 | 0.00 | 0.00 | 0.00 |
| 12,800.0 | 89.70 | 268.34 | 6,770.3 | -61.9 | -6,361.4 | 6,361.6 | 0.00 | 0.00 | 0.00 |
| 12,850.0 | 89.70 | 268.34 | 6,770.6 | -63.4 | -6,411.4 | 6,411.6 | 0.00 | 0.00 | 0.00 |
| 12,900.0 | 89.70 | 268.34 | 6,770.8 | -64.8 | -6,461.4 | 6,461.6 | 0.00 | 0.00 | 0.00 |
| 12,950.0 | 89.70 | 268.34 | 6,771.1 | -66.3 | -6,511.4 | 6,511.6 | 0.00 | 0.00 | 0.00 |
| 13,000.0 | 89.70 | 268.34 | 6,771.3 | -67.7 | -6,561.4 | 6,561.6 | 0.00 | 0.00 | 0.00 |
| 13,050.0 | 89.70 | 268.34 | 6,771.6 | -69.2 | -6,611.3 | 6,611.6 | 0.00 | 0.00 | 0.00 |
| 13,100.0 | 89.70 | 268.34 | 6,771.9 | -70.6 | -6,661.3 | 6,661.6 | 0.00 | 0.00 | 0.00 |
| 13,150.0 | 89.70 | 268.34 | 6,772.1 | -72.1 | -6,711.3 | 6,711.6 | 0.00 | 0.00 | 0.00 |
| 13,200.0 | 89.70 | 268.34 | 6,772.4 | -73.5 | -6,761.3 | 6,761.6 | 0.00 | 0.00 | 0.00 |
| 13,250.0 | 89.70 | 268.34 | 6,772.7 | -74.9 | -6,811.2 | 6,811.6 | 0.00 | 0.00 | 0.00 |
| 13,300.0 | 89.70 | 268.34 | 6,772.9 | -76.4 | -6,861.2 | 6,861.5 | 0.00 | 0.00 | 0.00 |
| 13,350.0 | 89.70 | 268.34 | 6,773.2 | -77.8 | -6,911.2 | 6,911.5 | 0.00 | 0.00 | 0.00 |
| 13,400.0 | 89.70 | 268.34 | 6,773.4 | -79.3 | -6,961.2 | 6,961.5 | 0.00 | 0.00 | 0.00 |
| 13,450.0 | 89.70 | 268.34 | 6,773.7 | -80.7 | -7,011.2 | 7,011.5 | 0.00 | 0.00 | 0.00 |
| 13,500.0 | 89.70 | 268.34 | 6,774.0 | -82.2 | -7,061.1 | 7,061.5 | 0.00 | 0.00 | 0.00 |
| 13,550.0 | 89.70 | 268.34 | 6,774.2 | -83.6 | -7,111.1 | 7,111.5 | 0.00 | 0.00 | 0.00 |
| 13,600.0 | 89.70 | 268.34 | 6,774.5 | -85.1 | -7,161.1 | 7,161.5 | 0.00 | 0.00 | 0.00 |
| 13,650.0 | 89.70 | 268.34 | 6,774.7 | -86.5 | -7,211.1 | 7,211.5 | 0.00 | 0.00 | 0.00 |
| 13,700.0 | 89.70 | 268.34 | 6,775.0 | -87.9 | -7,261.1 | 7,261.5 | 0.00 | 0.00 | 0.00 |
| 13,750.0 | 89.70 | 268.34 | 6,775.3 | -89.4 | -7,311.0 | 7,311.5 | 0.00 | 0.00 | 0.00 |
| 13,800.0 | 89.70 | 268.34 | 6,775.5 | -90.8 | -7,361.0 | 7,361.5 | 0.00 | 0.00 | 0.00 |
| 13,850.0 | 89.70 | 268.34 | 6,775.8 | -92.3 | -7,411.0 | 7,411.5 | 0.00 | 0.00 | 0.00 |
| 13,900.0 | 89.70 | 268.34 | 6,776.1 | -93.7 | -7,461.0 | 7,461.5 | 0.00 | 0.00 | 0.00 |
| 13,950.0 | 89.70 | 268.34 | 6,776.3 | -95.2 | -7,510.9 | 7,511.5 | 0.00 | 0.00 | 0.00 |
| 14,000.0 | 89.70 | 268.34 | 6,776.6 | -96.6 | -7,560.9 | 7,561.5 | 0.00 | 0.00 | 0.00 |
| 14,050.0 | 89.70 | 268.34 | 6,776.8 | -98.1 | -7,610.9 | 7,611.5 | 0.00 | 0.00 | 0.00 |
| 14,100.0 | 89.70 | 268.34 | 6,777.1 | -99.5 | -7,660.9 | 7,661.5 | 0.00 | 0.00 | 0.00 |

Noble Energy Inc

Planning Report

| | | | |
|------------------|------------------------------------|-------------------------------------|--|
| Database: | EDM Production | Local Co-ordinate Reference: | Well NCLP AA06-65-1AHNC |
| Company: | Northern Region Drilling - Working | TVD Reference: | WELL @ 4735.0usft (Original Well Elev) |
| Project: | Wattenberg Field | MD Reference: | WELL @ 4735.0usft (Original Well Elev) |
| Site: | AA (06N-63W) | North Reference: | Grid |
| Well: | NCLP AA06-65-1AHNC | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Original Drilling | | |
| Design: | APD - Rev 0 | | |

| 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) | |
| 14,150.0 | 89.70 | 268.34 | 6,777.4 | -101.0 | -7,710.9 | 7,711.5 | 0.00 | 0.00 | 0.00 | |
| 14,200.0 | 89.70 | 268.34 | 6,777.6 | -102.4 | -7,760.8 | 7,761.5 | 0.00 | 0.00 | 0.00 | |
| 14,250.0 | 89.70 | 268.34 | 6,777.9 | -103.8 | -7,810.8 | 7,811.5 | 0.00 | 0.00 | 0.00 | |
| 14,300.0 | 89.70 | 268.34 | 6,778.1 | -105.3 | -7,860.8 | 7,861.5 | 0.00 | 0.00 | 0.00 | |
| 14,350.0 | 89.70 | 268.34 | 6,778.4 | -106.7 | -7,910.8 | 7,911.5 | 0.00 | 0.00 | 0.00 | |
| 14,400.0 | 89.70 | 268.34 | 6,778.7 | -108.2 | -7,960.8 | 7,961.4 | 0.00 | 0.00 | 0.00 | |
| 14,450.0 | 89.70 | 268.34 | 6,778.9 | -109.6 | -8,010.7 | 8,011.4 | 0.00 | 0.00 | 0.00 | |
| 14,500.0 | 89.70 | 268.34 | 6,779.2 | -111.1 | -8,060.7 | 8,061.4 | 0.00 | 0.00 | 0.00 | |
| 14,550.0 | 89.70 | 268.34 | 6,779.5 | -112.5 | -8,110.7 | 8,111.4 | 0.00 | 0.00 | 0.00 | |
| 14,600.0 | 89.70 | 268.34 | 6,779.7 | -114.0 | -8,160.7 | 8,161.4 | 0.00 | 0.00 | 0.00 | |
| 14,650.0 | 89.70 | 268.34 | 6,780.0 | -115.4 | -8,210.6 | 8,211.4 | 0.00 | 0.00 | 0.00 | |
| 14,700.0 | 89.70 | 268.34 | 6,780.2 | -116.8 | -8,260.6 | 8,261.4 | 0.00 | 0.00 | 0.00 | |
| 14,750.0 | 89.70 | 268.34 | 6,780.5 | -118.3 | -8,310.6 | 8,311.4 | 0.00 | 0.00 | 0.00 | |
| 14,800.0 | 89.70 | 268.34 | 6,780.8 | -119.7 | -8,360.6 | 8,361.4 | 0.00 | 0.00 | 0.00 | |
| 14,850.0 | 89.70 | 268.34 | 6,781.0 | -121.2 | -8,410.6 | 8,411.4 | 0.00 | 0.00 | 0.00 | |
| 14,900.0 | 89.70 | 268.34 | 6,781.3 | -122.6 | -8,460.5 | 8,461.4 | 0.00 | 0.00 | 0.00 | |
| 14,950.0 | 89.70 | 268.34 | 6,781.6 | -124.1 | -8,510.5 | 8,511.4 | 0.00 | 0.00 | 0.00 | |
| 15,000.0 | 89.70 | 268.34 | 6,781.8 | -125.5 | -8,560.5 | 8,561.4 | 0.00 | 0.00 | 0.00 | |
| 15,050.0 | 89.70 | 268.34 | 6,782.1 | -127.0 | -8,610.5 | 8,611.4 | 0.00 | 0.00 | 0.00 | |
| 15,100.0 | 89.70 | 268.34 | 6,782.3 | -128.4 | -8,660.5 | 8,661.4 | 0.00 | 0.00 | 0.00 | |
| 15,150.0 | 89.70 | 268.34 | 6,782.6 | -129.9 | -8,710.4 | 8,711.4 | 0.00 | 0.00 | 0.00 | |
| 15,200.0 | 89.70 | 268.34 | 6,782.9 | -131.3 | -8,760.4 | 8,761.4 | 0.00 | 0.00 | 0.00 | |
| 15,250.0 | 89.70 | 268.34 | 6,783.1 | -132.7 | -8,810.4 | 8,811.4 | 0.00 | 0.00 | 0.00 | |
| 15,300.0 | 89.70 | 268.34 | 6,783.4 | -134.2 | -8,860.4 | 8,861.4 | 0.00 | 0.00 | 0.00 | |
| 15,350.0 | 89.70 | 268.34 | 6,783.6 | -135.6 | -8,910.3 | 8,911.4 | 0.00 | 0.00 | 0.00 | |
| 15,400.0 | 89.70 | 268.34 | 6,783.9 | -137.1 | -8,960.3 | 8,961.4 | 0.00 | 0.00 | 0.00 | |
| 15,450.0 | 89.70 | 268.34 | 6,784.2 | -138.5 | -9,010.3 | 9,011.4 | 0.00 | 0.00 | 0.00 | |
| 15,500.0 | 89.70 | 268.34 | 6,784.4 | -140.0 | -9,060.3 | 9,061.4 | 0.00 | 0.00 | 0.00 | |
| 15,550.0 | 89.70 | 268.34 | 6,784.7 | -141.4 | -9,110.3 | 9,111.3 | 0.00 | 0.00 | 0.00 | |
| 15,600.0 | 89.70 | 268.34 | 6,785.0 | -142.9 | -9,160.2 | 9,161.3 | 0.00 | 0.00 | 0.00 | |
| 15,650.0 | 89.70 | 268.34 | 6,785.2 | -144.3 | -9,210.2 | 9,211.3 | 0.00 | 0.00 | 0.00 | |
| 15,700.0 | 89.70 | 268.34 | 6,785.5 | -145.8 | -9,260.2 | 9,261.3 | 0.00 | 0.00 | 0.00 | |
| 15,750.0 | 89.70 | 268.34 | 6,785.7 | -147.2 | -9,310.2 | 9,311.3 | 0.00 | 0.00 | 0.00 | |
| 15,800.0 | 89.70 | 268.34 | 6,786.0 | -148.6 | -9,360.1 | 9,361.3 | 0.00 | 0.00 | 0.00 | |
| 15,850.0 | 89.70 | 268.34 | 6,786.3 | -150.1 | -9,410.1 | 9,411.3 | 0.00 | 0.00 | 0.00 | |
| 15,900.0 | 89.70 | 268.34 | 6,786.5 | -151.5 | -9,460.1 | 9,461.3 | 0.00 | 0.00 | 0.00 | |
| 15,950.0 | 89.70 | 268.34 | 6,786.8 | -153.0 | -9,510.1 | 9,511.3 | 0.00 | 0.00 | 0.00 | |
| 16,000.0 | 89.70 | 268.34 | 6,787.1 | -154.4 | -9,560.1 | 9,561.3 | 0.00 | 0.00 | 0.00 | |
| 16,050.0 | 89.70 | 268.34 | 6,787.3 | -155.9 | -9,610.0 | 9,611.3 | 0.00 | 0.00 | 0.00 | |
| 16,100.0 | 89.70 | 268.34 | 6,787.6 | -157.3 | -9,660.0 | 9,661.3 | 0.00 | 0.00 | 0.00 | |
| 16,150.0 | 89.70 | 268.34 | 6,787.8 | -158.8 | -9,710.0 | 9,711.3 | 0.00 | 0.00 | 0.00 | |
| 16,200.0 | 89.70 | 268.34 | 6,788.1 | -160.2 | -9,760.0 | 9,761.3 | 0.00 | 0.00 | 0.00 | |
| 16,250.0 | 89.70 | 268.34 | 6,788.4 | -161.6 | -9,810.0 | 9,811.3 | 0.00 | 0.00 | 0.00 | |
| 16,300.0 | 89.70 | 268.34 | 6,788.6 | -163.1 | -9,859.9 | 9,861.3 | 0.00 | 0.00 | 0.00 | |
| 16,350.0 | 89.70 | 268.34 | 6,788.9 | -164.5 | -9,909.9 | 9,911.3 | 0.00 | 0.00 | 0.00 | |
| 16,400.0 | 89.70 | 268.34 | 6,789.1 | -166.0 | -9,959.9 | 9,961.3 | 0.00 | 0.00 | 0.00 | |
| 16,448.6 | 89.70 | 268.34 | 6,789.4 | -167.4 | -10,008.5 | 10,009.9 | 0.00 | 0.00 | 0.00 | |
| TD at 16448.6 - NCLP AA06-65-1AHNC BHL 2360'FSL, 535'FWL | | | | | | | | | | |

Noble Energy Inc

Planning Report

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|------------------|------------------------------------|-------------------------------------|--|
| Database: | EDM Production | Local Co-ordinate Reference: | Well NCLP AA06-65-1AHNC |
| Company: | Northern Region Drilling - Working | TVD Reference: | WELL @ 4735.0usft (Original Well Elev) |
| Project: | Wattenberg Field | MD Reference: | WELL @ 4735.0usft (Original Well Elev) |
| Site: | AA (06N-63W) | North Reference: | Grid |
| Well: | NCLP AA06-65-1AHNC | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Original Drilling | | |
| Design: | APD - Rev 0 | | |

| Design Targets | | | | | | | | | |
|---------------------------|-----------|----------|---------|--------|-----------|--------------|--------------|-----------|-------------|
| Target Name | Dip Angle | Dip Dir. | TVD | +N/-S | +E/-W | Northing | Easting | Latitude | Longitude |
| - hit/miss target | (°) | (°) | (usft) | (usft) | (usft) | (usft) | (usft) | | |
| - Shape | | | | | | | | | |
| NCLP AA06-65-1AHNC | 0.00 | 0.01 | 6,789.4 | -167.4 | -10,008.5 | 1,431,893.07 | 3,281,687.15 | 40.514530 | -104.486860 |
| - plan hits target center | | | | | | | | | |
| - Point | | | | | | | | | |

| Casing Points | | | | | |
|----------------|----------------|------------------------|--|-----------------|---------------|
| Measured Depth | Vertical Depth | Name | | Casing Diameter | Hole Diameter |
| (usft) | (usft) | | | (") | (") |
| 7,089.2 | 6,731.8 | 7" Casing @ 7089.2' MD | | 7 | 8-3/4 |

| Formations | | | | | | |
|----------------|----------------|----------------|-----------|------|---------------|--|
| Measured Depth | Vertical Depth | Name | Lithology | Dip | Dip Direction | |
| (usft) | (usft) | | | (°) | (°) | |
| 1,033.0 | 1,033.0 | PIERRE | | 0.00 | | |
| 3,526.4 | 3,518.0 | PARKMAN | | 0.00 | | |
| 4,326.4 | 4,318.0 | SUSSEX | | 0.00 | | |
| 4,906.4 | 4,898.0 | SHANNON | | 0.00 | | |
| 5,770.4 | 5,762.0 | TEEPEE BUTTES | | 0.00 | | |
| 6,555.0 | 6,500.0 | SHARON SPRINGS | | 0.00 | | |
| 6,603.8 | 6,535.0 | NIOBRARA | | 0.00 | | |
| 6,603.8 | 6,535.0 | NIO A CHALK | | 0.00 | | |
| 6,634.8 | 6,556.0 | NIO A MARL | | 0.00 | | |
| 6,759.8 | 6,630.0 | NIO B CHALK | | 0.00 | | |
| 6,828.8 | 6,663.0 | NIO B MARL | | 0.00 | | |
| 6,928.3 | 6,700.0 | NIO C CHALK | | 0.00 | | |
| 7,777.8 | 6,744.0 | NIO C MARL | | 0.00 | | |
| 12,170.5 | 6,767.0 | NIO D CHALK | | 0.00 | | |

| Plan Annotations | | | | | |
|------------------|----------------|-------------------|--------------|------------------------------|--|
| Measured Depth | Vertical Depth | Local Coordinates | | Comment | |
| (usft) | (usft) | +N/-S (usft) | +E/-W (usft) | | |
| 1,500.0 | 1,500.0 | 0.0 | 0.0 | KOP - Start Build 2.00 | |
| 2,135.2 | 2,130.3 | 69.0 | 0.0 | Start Drop -2.00 | |
| 6,026.7 | 6,018.3 | 122.0 | 0.0 | KOP #2 - Start Build 8.00 | |
| 7,089.2 | 6,731.8 | 103.1 | -653.5 | Start 75.0 hold at 7089.2 MD | |
| 7,164.2 | 6,738.4 | 100.9 | -728.2 | Start Build 8.00 | |
| 16,448.6 | 6,789.4 | -167.4 | -10,008.5 | TD at 16448.6 | |

Northern Region Drilling - Working

Wattenberg Field

AA (06N-63W)

NCLP AA06-65-1AHNC

Original Drilling

APD - Rev 0

Anticollision Summary Report

04 December, 2013

Noble Energy Inc

Anticollision Summary Report

| | | | |
|---------------------------|------------------------------------|-------------------------------------|--|
| Company: | Northern Region Drilling - Working | Local Co-ordinate Reference: | Well NCLP AA06-65-1AHNC |
| Project: | Wattenberg Field | TVD Reference: | WELL @ 4735.0usft (Original Well Elev) |
| Reference Site: | AA (06N-63W) | MD Reference: | WELL @ 4735.0usft (Original Well Elev) |
| Site Error: | 0.0 usft | North Reference: | Grid |
| Reference Well: | NCLP AA06-65-1AHNC | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Original Drilling | Database: | EDM Production |
| Reference Design: | APD - Rev 0 | Offset TVD Reference: | Offset Datum |

| | | | |
|-------------------------------------|---|-----------------------|---------------------|
| Reference | APD - Rev 0 | | |
| Filter type: | NO GLOBAL FILTER: Using user defined selection & filtering criteria | | |
| Interpolation Method: | Stations | Error Model: | ISCWSA |
| Depth Range: | Unlimited | Scan Method: | Closest Approach 3D |
| Results Limited by: | Maximum center-center distance of 10,000.0 usft | Error Surface: | Elliptical Conic |
| Warning Levels Evaluated at: | 2.00 Sigma | Casing Method: | Not applied |

| | | | | |
|----------------------------|------------------|---------------------------------|------------------|---|
| Survey Tool Program | Date | 12/4/2013 | | |
| From (usft) | To (usft) | Survey (Wellbore) | Tool Name | Description |
| 0.0 | 16,448.6 | APD - Rev 0 (Original Drilling) | MWD+IFR1+MS_WY | Fixed:v2:Rockies, crustal dec + 3-axis correction |

| Summary | | | | | | |
|---|---------------------------------|------------------------------|---------------------------------|----------------------------------|-------------------|---------------------|
| Site Name | Reference Measured Depth (usft) | Offset Measured Depth (usft) | Distance Between Centres (usft) | Distance Between Ellipses (usft) | Separation Factor | Warning |
| Offset Well - Wellbore - Design | | | | | | |
| A (06N-64W) | | | | | | |
| Cecil USX A01-09 - Wellbore #1 - Wellbore #1-As Drilled | 16,448.6 | 6,833.1 | 1,236.6 | 1,088.5 | 8.347 | CC, ES, SF |
| Cecil USX A01-63HN - Original Drilling - Original Drilling | 16,448.6 | 11,181.0 | 1,528.1 | 1,234.4 | 5.203 | CC, ES, SF |
| Cecil USX A01-64-1HN - Original Drilling - Original Drilling | 16,448.6 | 11,185.0 | 1,298.6 | 1,005.8 | 4.436 | CC, ES, SF |
| Cecil USX A01-65-1HN - Original Drilling - Original Drilling | 16,448.6 | 6,536.0 | 818.5 | 738.1 | 10.176 | CC, ES, SF |
| Cecil USX A01-65HN - Original Drilling - Original Drilling | 16,448.6 | 6,612.0 | 1,516.5 | 1,369.3 | 10.301 | CC, ES, SF |
| Cecil USX A01-66-01HN - Original Drilling - Original Drilling | 16,448.6 | 6,509.0 | 995.7 | 857.7 | 7.215 | CC, ES, SF |
| AA (06N-63W) | | | | | | |
| Cache USX AA05-10 - Wellbore #1 - Wellbore #1 - As Drilled | 8,551.2 | 6,736.7 | 377.4 | 334.2 | 8.740 | CC, ES |
| Cache USX AA05-10 - Wellbore #1 - Wellbore #1 - As Drilled | 8,600.0 | 6,736.7 | 380.5 | 336.7 | 8.695 | SF |
| Cache USX AA05-23 - Wellbore #1 - Wellbore #1 - As Drilled | 7,750.0 | 6,693.5 | 853.3 | 819.3 | 25.038 | CC, ES |
| Cache USX AA05-23 - Wellbore #1 - Wellbore #1 - As Drilled | 8,000.0 | 6,693.0 | 889.2 | 852.5 | 24.212 | SF |
| Champlin Amoco 1-309 - Wellbore #1 - Wellbore #1 - As Drilled | 11,239.3 | 6,727.1 | 242.5 | 41.9 | 1.209 | Level 2, CC, ES, SF |
| Dilka 22-6 - Wellbore #1 - Wellbore #1 - As Drilled | 15,048.5 | 6,779.7 | 898.1 | 769.2 | 6.968 | CC, ES |
| Dilka 22-6 - Wellbore #1 - Wellbore #1 - As Drilled | 15,100.0 | 6,779.6 | 899.5 | 770.0 | 6.942 | SF |
| Dilka 6-12 - Wellbore #1 - Wellbore #1 - As Drilled | 16,448.6 | 6,766.3 | 1,021.6 | 873.8 | 6.909 | CC, ES, SF |
| Foss 6-31 - Wellbore #1 - Wellbore #1 - As Drilled | 15,125.3 | 6,750.0 | 176.1 | 46.2 | 1.355 | Level 2, CC, ES, SF |
| Foss 6-32 - Wellbore #1 - Wellbore #1 - As Drilled | 16,448.6 | 6,750.0 | 202.9 | 56.2 | 1.383 | Level 2, CC, ES, SF |
| Foss 6-35 - Wellbore #1 - Wellbore #1 - As Drilled | 15,729.9 | 6,750.0 | 1,227.0 | 1,088.8 | 8.873 | CC, ES |
| Foss 6-35 - Wellbore #1 - Wellbore #1 - As Drilled | 15,900.0 | 6,750.0 | 1,238.8 | 1,098.2 | 8.811 | SF |
| Foss 6-42 - Wellbore #1 - Wellbore #1 - As Drilled | 13,630.3 | 6,600.0 | 256.2 | 155.4 | 2.542 | CC, ES, SF |
| Foss 6-43 - Wellbore #1 - Wellbore #1 - As Drilled | 14,083.5 | 6,600.0 | 1,492.7 | 1,377.4 | 12.948 | CC |
| Foss 6-43 - Wellbore #1 - Wellbore #1 - As Drilled | 14,100.0 | 6,600.0 | 1,492.8 | 1,377.3 | 12.924 | ES |
| Foss 6-43 - Wellbore #1 - Wellbore #1 - As Drilled | 14,300.0 | 6,600.0 | 1,508.3 | 1,390.1 | 12.762 | SF |
| Foss 6-45 - Wellbore #1 - Wellbore #1 - As Drilled | 13,595.3 | 6,600.0 | 1,227.5 | 1,118.9 | 11.302 | CC |
| Foss 6-45 - Wellbore #1 - Wellbore #1 - As Drilled | 13,600.0 | 6,600.0 | 1,227.5 | 1,118.8 | 11.296 | ES |
| Foss 6-45 - Wellbore #1 - Wellbore #1 - As Drilled | 13,800.0 | 6,600.0 | 1,244.4 | 1,133.1 | 11.176 | SF |
| Foss USX AA 5-11 - Wellbore #1 - Wellbore #1 - As Drilled | 9,802.1 | 6,758.1 | 182.7 | 123.8 | 3.102 | CC, ES, SF |
| Foss USX AA 5-25 - Wellbore #1 - Wellbore #1 - As Drilled | 10,574.0 | 6,734.9 | 1,071.7 | 1,002.7 | 15.528 | CC |
| Foss USX AA 5-25 - Wellbore #1 - Wellbore #1 - As Drilled | 10,600.0 | 6,736.1 | 1,072.0 | 1,002.6 | 15.456 | ES |
| Foss USX AA 5-25 - Wellbore #1 - Wellbore #1 - As Drilled | 10,800.0 | 6,744.8 | 1,095.2 | 1,023.2 | 15.208 | SF |
| Foss USX AA 5-5 - Wellbore #1 - Wellbore #1 - As Drilled | 11,167.1 | 6,739.7 | 914.0 | 837.2 | 11.902 | CC, ES |
| Foss USX AA 5-5 - Wellbore #1 - Wellbore #1 - As Drilled | 11,300.0 | 6,738.1 | 923.6 | 845.1 | 11.757 | SF |
| Foss USX AA 5-6 - Wellbore #1 - Wellbore #1 - As Drilled | 9,892.5 | 6,730.1 | 888.3 | 705.3 | 4.855 | CC |
| Foss USX AA 5-6 - Wellbore #1 - Wellbore #1 - As Drilled | 9,900.0 | 6,730.1 | 888.3 | 705.2 | 4.852 | ES, SF |
| Hagemiester 43-6 - Wellbore #1 - Wellbore #1 - As Drilled | 12,496.3 | 5,885.0 | 878.5 | 816.3 | 14.122 | CC |
| Hagemiester 43-6 - Wellbore #1 - Wellbore #1 - As Drilled | 12,500.0 | 5,885.0 | 878.5 | 816.3 | 14.116 | ES |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Noble Energy Inc
Anticollision Summary Report

| | | | |
|---------------------------|------------------------------------|-------------------------------------|--|
| Company: | Northern Region Drilling - Working | Local Co-ordinate Reference: | Well NCLP AA06-65-1AHNC |
| Project: | Wattenberg Field | TVD Reference: | WELL @ 4735.0usft (Original Well Elev) |
| Reference Site: | AA (06N-63W) | MD Reference: | WELL @ 4735.0usft (Original Well Elev) |
| Site Error: | 0.0 usft | North Reference: | Grid |
| Reference Well: | NCLP AA06-65-1AHNC | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Original Drilling | Database: | EDM Production |
| Reference Design: | APD - Rev 0 | Offset TVD Reference: | Offset Datum |

| Summary | | | | | | |
|---|---------------------------------|------------------------------|---------------------------------|----------------------------------|-------------------|---------|
| Site Name | Reference Measured Depth (usft) | Offset Measured Depth (usft) | Distance Between Centres (usft) | Distance Between Ellipses (usft) | Separation Factor | Warning |
| Offset Well - Wellbore - Design | | | | | | |
| AA (06N-63W) | | | | | | |
| Hagemiester 43-6 - Wellbore #1 - Wellbore #1 - As Drille | 12,600.0 | 5,885.0 | 884.6 | 821.6 | 14.045 | SF |
| NCLP AA06-64-1AHNA - Original Drilling - APD - Rev 0 | 1,500.0 | 1,500.0 | 40.1 | 33.6 | 6.199 | CC, ES |
| NCLP AA06-64-1AHNA - Original Drilling - APD - Rev 0 | 16,448.6 | 16,261.8 | 533.5 | 270.8 | 2.031 | SF |
| NCLP AA06-64-1HNC - Original Drilling - APD - Rev 0 | 1,500.0 | 1,500.0 | 76.5 | 70.0 | 11.835 | CC, ES |
| NCLP AA06-64-1HNC - Original Drilling - APD - Rev 0 | 16,448.6 | 16,475.9 | 710.3 | 438.2 | 2.610 | SF |
| NCLP PC AA04-12 - Original Drilling - As Drilled | 1,500.0 | 1,476.0 | 619.4 | 586.6 | 18.911 | CC |
| NCLP PC AA04-12 - Original Drilling - As Drilled | 6,050.0 | 6,017.6 | 677.9 | 544.4 | 5.078 | ES |
| NCLP PC AA04-12 - Original Drilling - As Drilled | 6,100.0 | 6,067.5 | 680.7 | 546.5 | 5.073 | SF |
| NCLP PC AA04-65-1HN - Original Drilling - Original Drilli | 4,168.6 | 4,169.0 | 131.0 | 114.9 | 8.103 | CC |
| NCLP PC AA04-65-1HN - Original Drilling - Original Drilli | 4,200.0 | 4,199.9 | 131.1 | 114.8 | 8.041 | ES |
| NCLP PC AA04-65-1HN - Original Drilling - Original Drilli | 5,900.0 | 5,896.7 | 146.9 | 123.3 | 6.230 | SF |
| NCLP PC AA04-65HN - Original Drilling - Original Drilling | 2,559.7 | 2,561.6 | 149.7 | 140.2 | 15.663 | CC, ES |
| NCLP PC AA04-65HN - Original Drilling - Original Drilling | 6,000.0 | 6,015.8 | 281.1 | 256.8 | 11.538 | SF |
| NCLP PC AA04-66-1HN - Original Drilling - Original Drilli | 3,391.9 | 3,377.6 | 677.9 | 670.7 | 93.272 | CC |
| NCLP PC AA04-66-1HN - Original Drilling - Original Drilli | 5,861.8 | 5,847.7 | 678.3 | 665.6 | 53.153 | ES |
| NCLP PC AA04-66-1HN - Original Drilling - Original Drilli | 6,150.0 | 6,108.7 | 691.4 | 678.0 | 51.759 | SF |
| NCLP USX AA 05-09 - Wellbore #1 - Wellbore #1 - As Dr | 7,036.7 | 6,714.7 | 392.2 | 364.0 | 13.930 | CC, ES |
| NCLP USX AA 05-09 - Wellbore #1 - Wellbore #1 - As Dr | 7,089.2 | 6,721.6 | 395.7 | 367.1 | 13.879 | SF |
| Peiker 32-6 - Wellbore #1 - Wellbore #1 - As Drilled | 13,808.7 | 6,745.7 | 867.1 | 754.5 | 7.698 | CC, ES |
| Peiker 32-6 - Wellbore #1 - Wellbore #1 - As Drilled | 13,900.0 | 6,746.7 | 871.9 | 758.0 | 7.657 | SF |
| Peiker 42-6 - Wellbore #1 - Wellbore #1 - As Drilled | 12,509.9 | 6,736.7 | 962.6 | 867.9 | 10.163 | CC, ES |
| Peiker 42-6 - Wellbore #1 - Wellbore #1 - As Drilled | 12,600.0 | 6,734.4 | 966.8 | 870.9 | 10.080 | SF |

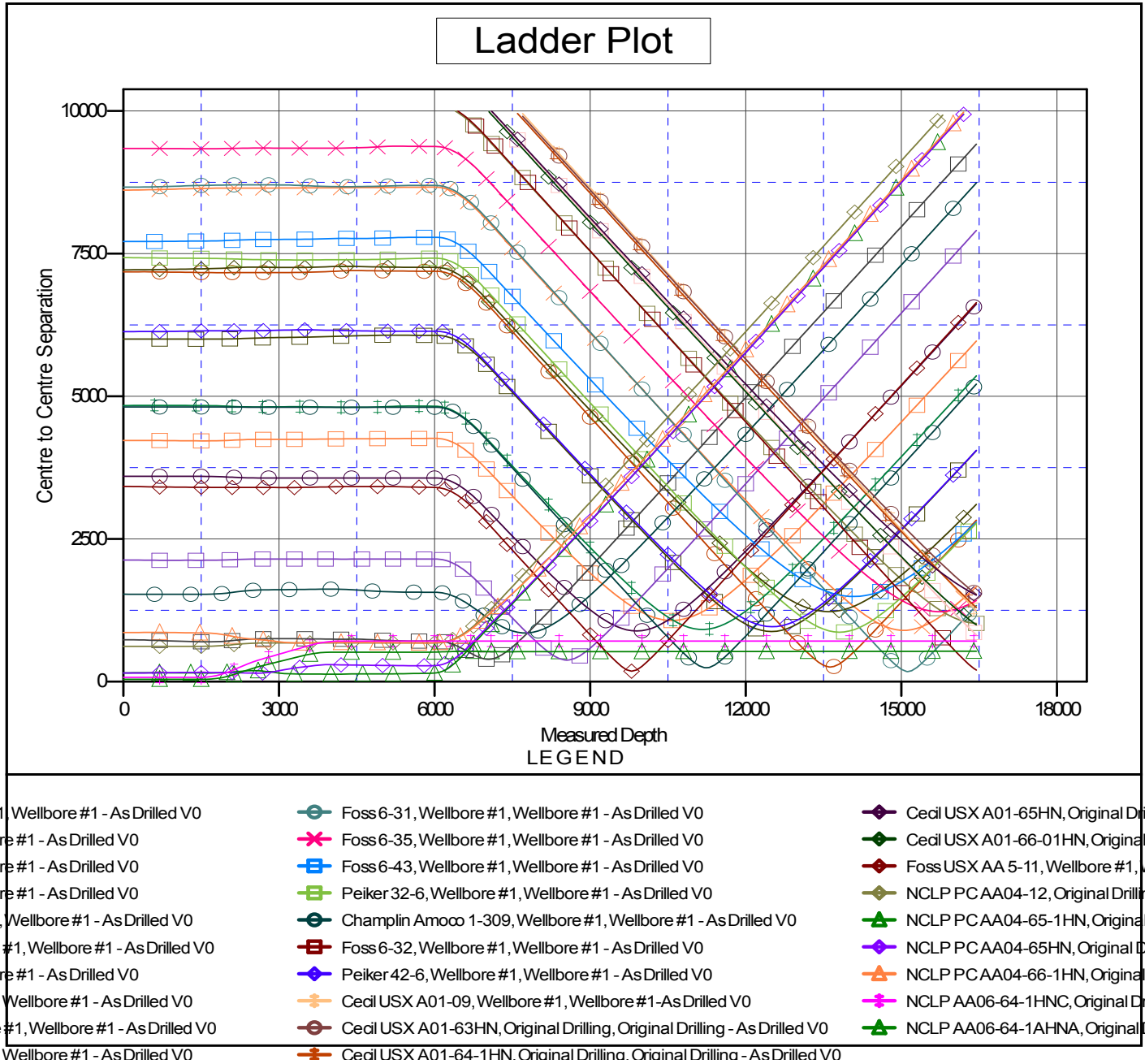
Noble Energy Inc

Anticollision Summary Report

| | | | |
|---------------------------|------------------------------------|-------------------------------------|--|
| Company: | Northern Region Drilling - Working | Local Co-ordinate Reference: | Well NCLP AA06-65-1AHNC |
| Project: | Wattenberg Field | TVD Reference: | WELL @ 4735.0usft (Original Well Elev) |
| Reference Site: | AA (06N-63W) | MD Reference: | WELL @ 4735.0usft (Original Well Elev) |
| Site Error: | 0.0 usft | North Reference: | Grid |
| Reference Well: | NCLP AA06-65-1AHNC | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Original Drilling | Database: | EDM Production |
| Reference Design: | APD - Rev 0 | Offset TVD Reference: | Offset Datum |

Reference Depths are relative to WELL @ 4735.0usft (Original Well Ele
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000

Coordinates are relative to: NCLP AA06-65-1AHNC
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.68°



CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

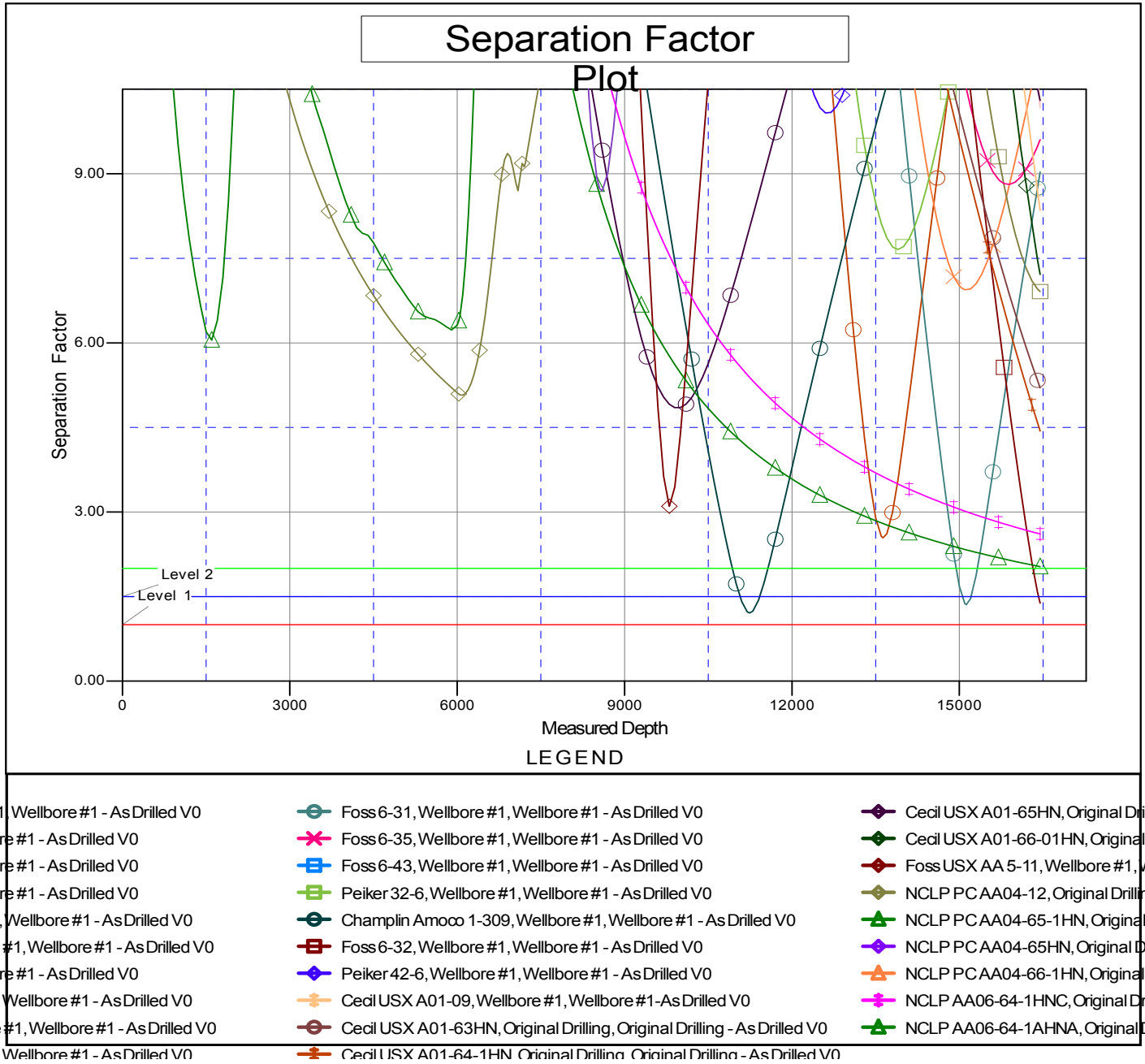
Noble Energy Inc

Anticollision Summary Report

| | | | |
|---------------------------|------------------------------------|-------------------------------------|--|
| Company: | Northern Region Drilling - Working | Local Co-ordinate Reference: | Well NCLP AA06-65-1AHNC |
| Project: | Wattenberg Field | TVD Reference: | WELL @ 4735.0usft (Original Well Elev) |
| Reference Site: | AA (06N-63W) | MD Reference: | WELL @ 4735.0usft (Original Well Elev) |
| Site Error: | 0.0 usft | North Reference: | Grid |
| Reference Well: | NCLP AA06-65-1AHNC | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Original Drilling | Database: | EDM Production |
| Reference Design: | APD - Rev 0 | Offset TVD Reference: | Offset Datum |

Reference Depths are relative to WELL @ 4735.0usft (Original Well Ele
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000

Coordinates are relative to: NCLP AA06-65-1AHNC
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.68°



CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation