

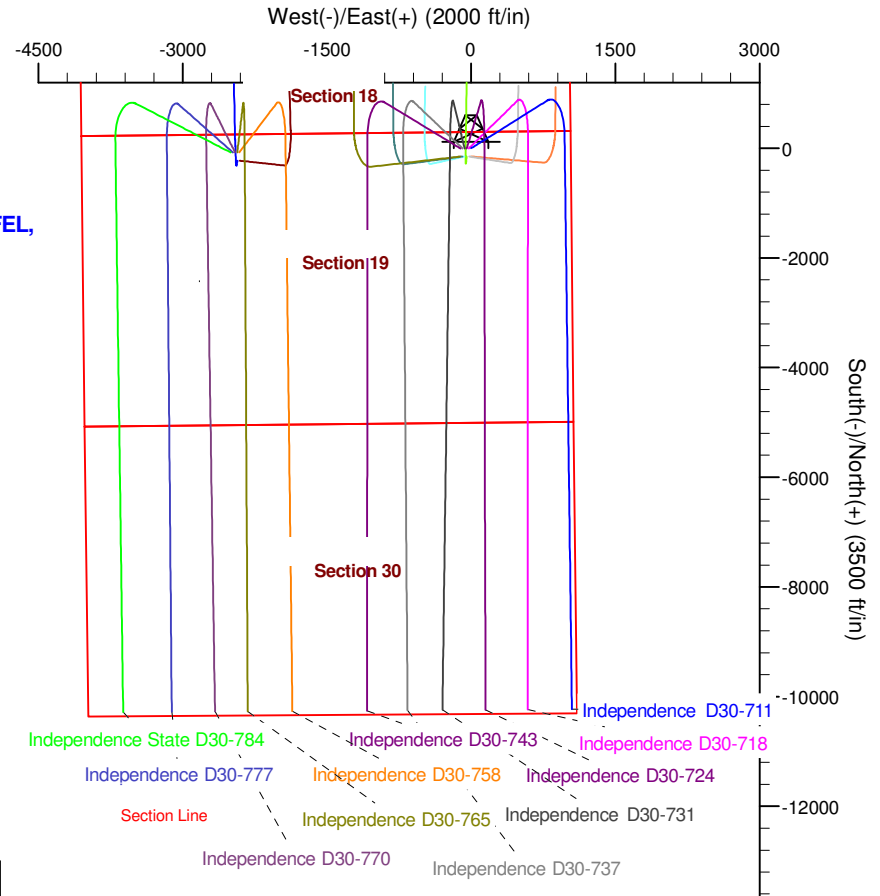
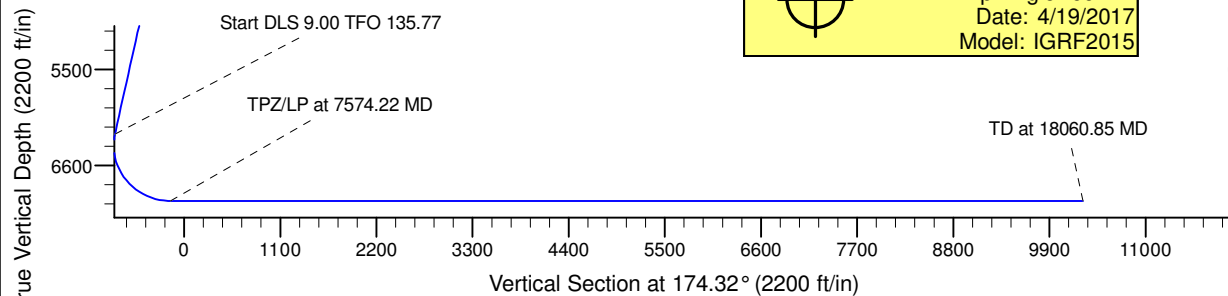
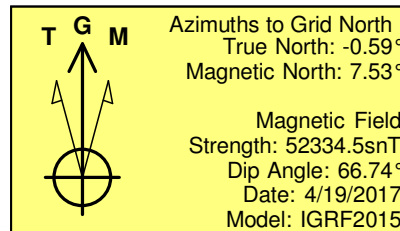
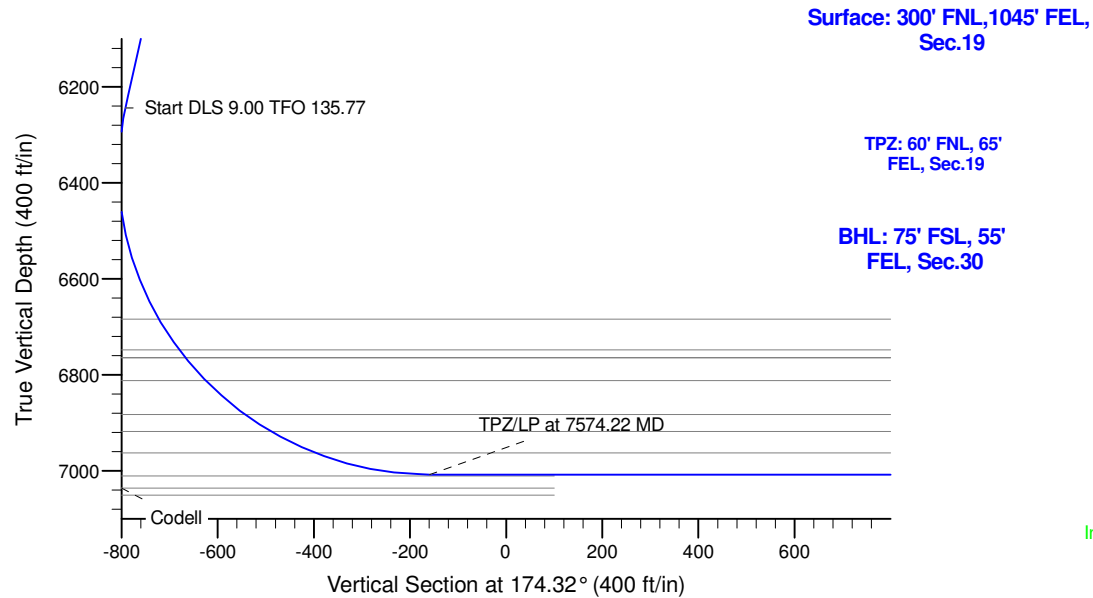
Project: Mustang
Site: D Section 19
Well: Independence D30-711
Wellbore: Independence D30-711
Design: Plan 1

Northern Region - DJ Basin

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 | VSect | Target |
|-----|----------|-------|--------|---------|-----------|---------|------|--------|----------|--------------------------|
| 1 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 2 | 2200.00 | 0.00 | 0.00 | 2200.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 3 | 3113.88 | 18.28 | 42.33 | 3098.46 | 106.85 | 97.33 | 2.00 | 42.33 | -96.70 | |
| 4 | 6426.28 | 18.28 | 42.33 | 6243.74 | 874.83 | 796.90 | 0.00 | 0.00 | -791.72 | |
| 5 | 7574.22 | 90.00 | 179.58 | 7008.00 | 256.60 | 972.77 | 9.00 | 135.77 | -159.12 | Independence D30-711 TPZ |
| 6 | 18060.85 | 90.00 | 179.58 | 7008.00 | -10229.75 | 1049.54 | 0.00 | 0.00 | 10283.40 | Independence D30-711 BHL |



WELL DETAILS: Independence D30-711

| | North | East | Latitude | Longitude |
|------|-------|------------|------------|--------------|
| 0.00 | 0.00 | 1323280.94 | 40.2172100 | -104.5881800 |

Plan: Plan 1 (Independence D30-711/Independence D30-711)

Created By: Colby Baxter Date: 14:00, February 20 2018

Checked: _____ Date: _____

Reviewed: _____ Date: _____

Approved: _____ Date: _____

Northern Region - DJ Basin

Mustang

D Section 19

Independence D30-711

Independence D30-711

Plan: Plan 1

Standard Survey Report

20 February, 2018

Noble Energy, Inc.

Survey Report

| | | | |
|------------------|----------------------------|-------------------------------------|----------------------------------|
| Company: | Northern Region - DJ Basin | Local Co-ordinate Reference: | Well Independence D30-711 |
| Project: | Mustang | TVD Reference: | WELL @ 4798.00ft (Original Well) |
| Site: | D Section 19 | MD Reference: | WELL @ 4798.00ft (Original Well) |
| Well: | Independence D30-711 | North Reference: | Grid |
| Wellbore: | Independence D30-711 | Survey Calculation Method: | Minimum Curvature |
| Design: | Plan 1 | Database: | EDMP |

| | | | |
|--------------------|-------------------------------|----------------------|----------------|
| Project | Mustang, Weld County Colorado | | |
| Map System: | US State Plane 1983 | System Datum: | Mean Sea Level |
| Geo Datum: | North American Datum 1983 | | |
| Map Zone: | Colorado Northern Zone | | |

| Site | | D Section 19 | | | | | |
|-----------------------|------|--------------|--------------|--------|------------|-------------------|--------|
| Site Position: | | Northing: | 1,318,926.35 | usft | Latitude: | 40.2052853 | |
| From: | Map | Easting: | 3,253,617.62 | usft | Longitude: | -104.5919702 | |
| Position Uncertainty: | 0.00 | ft | Slot Radius: | 13.200 | in | Grid Convergence: | 0.59 ° |

| Well | Independence D30-711 | | | | | |
|----------------------|----------------------|---------|---------------------|-------------------|---------------|--------------|
| Well Position | +N/-S | 0.00 ft | Northing: | 1,323,280.94 usft | Latitude: | 40.2172100 |
| | +E/-W | 0.00 ft | Easting: | 3,254,631.54 usft | Longitude: | -104.5881800 |
| Position Uncertainty | | 0.00 ft | Wellhead Elevation: | ft | Ground Level: | 4,768.00 ft |

| | | | | | |
|------------------|----------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | Independence D30-711 | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2015 | 4/19/2017 | 8.12 | 66.74 | 52,334.52489224 |

| | | | | | |
|--------------------------|------------------------------|-------------------|----------------------|----------------------|--|
| Design | Plan 1 | | | | |
| Audit Notes: | | | | | |
| Version: | Phase: | PLAN | Tie On Depth: | 0.00 | |
| Vertical Section: | Depth From (TVD) (ft) | +N/-S (ft) | +E/-W (ft) | Direction (°) | |
| | 0.00 | 0.00 | 0.00 | 174.32 | |

| | | | | | |
|----------------------------|----------------|-------------------------------|------------------|--|--|
| Survey Tool Program | Date | 2/20/2018 | | | |
| From (ft) | To (ft) | Survey (Wellbore) | Tool Name | Description | |
| 0.00 | 18,060.85 | Plan 1 (Independence D30-711) | 2_MWD+IFR1+MS | A008Mb: IFR dec & multi-station analysis | |

| | | | | | | | | | | |
|----------------------------|------------------------|--------------------|----------------------------|-------------------|-------------------|------------------------------|------------------------------|-----------------------------|----------------------------|--|
| Planned Survey | | | | | | | | | | |
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) | |
| 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 | |
| 300.00 | 0.00 | 0.00 | 300.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 400.00 | 0.00 | 0.00 | 400.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 500.00 | 0.00 | 0.00 | 500.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 600.00 | 0.00 | 0.00 | 600.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 700.00 | 0.00 | 0.00 | 700.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 800.00 | 0.00 | 0.00 | 800.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 900.00 | 0.00 | 0.00 | 900.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |

Noble Energy, Inc.

Survey Report

| | | | |
|------------------|----------------------------|-------------------------------------|----------------------------------|
| Company: | Northern Region - DJ Basin | Local Co-ordinate Reference: | Well Independence D30-711 |
| Project: | Mustang | TVD Reference: | WELL @ 4798.00ft (Original Well) |
| Site: | D Section 19 | MD Reference: | WELL @ 4798.00ft (Original Well) |
| Well: | Independence D30-711 | North Reference: | Grid |
| Wellbore: | Independence D30-711 | Survey Calculation Method: | Minimum Curvature |
| Design: | Plan 1 | Database: | EDMP |

| Planned Survey | | | | | | | | | | |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|--|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) | |
| 1,000.00 | 0.00 | 0.00 | 1,000.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,100.00 | 0.00 | 0.00 | 1,100.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,200.00 | 0.00 | 0.00 | 1,200.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,300.00 | 0.00 | 0.00 | 1,300.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,400.00 | 0.00 | 0.00 | 1,400.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,500.00 | 0.00 | 0.00 | 1,500.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,600.00 | 0.00 | 0.00 | 1,600.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,700.00 | 0.00 | 0.00 | 1,700.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,800.00 | 0.00 | 0.00 | 1,800.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,900.00 | 0.00 | 0.00 | 1,900.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 2,000.00 | 0.00 | 0.00 | 2,000.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 2,100.00 | 0.00 | 0.00 | 2,100.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 2,200.00 | 0.00 | 0.00 | 2,200.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 2,300.00 | 2.00 | 42.33 | 2,299.98 | 1.29 | 1.18 | -1.17 | 2.00 | 2.00 | 0.00 | |
| 2,400.00 | 4.00 | 42.33 | 2,399.84 | 5.16 | 4.70 | -4.67 | 2.00 | 2.00 | 0.00 | |
| 2,500.00 | 6.00 | 42.33 | 2,499.45 | 11.60 | 10.57 | -10.50 | 2.00 | 2.00 | 0.00 | |
| 2,600.00 | 8.00 | 42.33 | 2,598.70 | 20.61 | 18.77 | -18.65 | 2.00 | 2.00 | 0.00 | |
| 2,700.00 | 10.00 | 42.33 | 2,697.47 | 32.17 | 29.31 | -29.12 | 2.00 | 2.00 | 0.00 | |
| 2,800.00 | 12.00 | 42.33 | 2,795.62 | 46.28 | 42.16 | -41.88 | 2.00 | 2.00 | 0.00 | |
| 2,900.00 | 14.00 | 42.33 | 2,893.06 | 62.91 | 57.30 | -56.93 | 2.00 | 2.00 | 0.00 | |
| 3,000.00 | 16.00 | 42.33 | 2,989.64 | 82.04 | 74.73 | -74.25 | 2.00 | 2.00 | 0.00 | |
| 3,100.00 | 18.00 | 42.33 | 3,085.27 | 103.66 | 94.42 | -93.81 | 2.00 | 2.00 | 0.00 | |
| 3,113.88 | 18.28 | 42.33 | 3,098.46 | 106.85 | 97.33 | -96.70 | 2.00 | 2.00 | 0.00 | |
| 3,200.00 | 18.28 | 42.33 | 3,180.23 | 126.82 | 115.52 | -114.77 | 0.00 | 0.00 | 0.00 | |
| 3,300.00 | 18.28 | 42.33 | 3,275.19 | 150.00 | 136.64 | -135.75 | 0.00 | 0.00 | 0.00 | |
| 3,400.00 | 18.28 | 42.33 | 3,370.14 | 173.19 | 157.76 | -156.73 | 0.00 | 0.00 | 0.00 | |
| 3,500.00 | 18.28 | 42.33 | 3,465.10 | 196.37 | 178.88 | -177.72 | 0.00 | 0.00 | 0.00 | |
| 3,600.00 | 18.28 | 42.33 | 3,560.05 | 219.56 | 200.00 | -198.70 | 0.00 | 0.00 | 0.00 | |
| 3,700.00 | 18.28 | 42.33 | 3,655.01 | 242.74 | 221.12 | -219.68 | 0.00 | 0.00 | 0.00 | |
| 3,800.00 | 18.28 | 42.33 | 3,749.96 | 265.93 | 242.24 | -240.66 | 0.00 | 0.00 | 0.00 | |
| 3,900.00 | 18.28 | 42.33 | 3,844.92 | 289.11 | 263.36 | -261.64 | 0.00 | 0.00 | 0.00 | |
| 4,000.00 | 18.28 | 42.33 | 3,939.87 | 312.30 | 284.48 | -282.63 | 0.00 | 0.00 | 0.00 | |
| 4,100.00 | 18.28 | 42.33 | 4,034.83 | 335.48 | 305.60 | -303.61 | 0.00 | 0.00 | 0.00 | |
| 4,200.00 | 18.28 | 42.33 | 4,129.78 | 358.67 | 326.71 | -324.59 | 0.00 | 0.00 | 0.00 | |
| 4,300.00 | 18.28 | 42.33 | 4,224.74 | 381.85 | 347.83 | -345.57 | 0.00 | 0.00 | 0.00 | |
| 4,400.00 | 18.28 | 42.33 | 4,319.69 | 405.04 | 368.95 | -366.56 | 0.00 | 0.00 | 0.00 | |
| 4,500.00 | 18.28 | 42.33 | 4,414.65 | 428.22 | 390.07 | -387.54 | 0.00 | 0.00 | 0.00 | |
| 4,600.00 | 18.28 | 42.33 | 4,509.60 | 451.41 | 411.19 | -408.52 | 0.00 | 0.00 | 0.00 | |
| 4,700.00 | 18.28 | 42.33 | 4,604.56 | 474.59 | 432.31 | -429.50 | 0.00 | 0.00 | 0.00 | |
| 4,800.00 | 18.28 | 42.33 | 4,699.51 | 497.78 | 453.43 | -450.49 | 0.00 | 0.00 | 0.00 | |
| 4,900.00 | 18.28 | 42.33 | 4,794.47 | 520.96 | 474.55 | -471.47 | 0.00 | 0.00 | 0.00 | |
| 5,000.00 | 18.28 | 42.33 | 4,889.42 | 544.15 | 495.67 | -492.45 | 0.00 | 0.00 | 0.00 | |
| 5,100.00 | 18.28 | 42.33 | 4,984.37 | 567.33 | 516.79 | -513.43 | 0.00 | 0.00 | 0.00 | |
| 5,200.00 | 18.28 | 42.33 | 5,079.33 | 590.52 | 537.91 | -534.42 | 0.00 | 0.00 | 0.00 | |

Noble Energy, Inc.

Survey Report

| | | | |
|------------------|----------------------------|-------------------------------------|----------------------------------|
| Company: | Northern Region - DJ Basin | Local Co-ordinate Reference: | Well Independence D30-711 |
| Project: | Mustang | TVD Reference: | WELL @ 4798.00ft (Original Well) |
| Site: | D Section 19 | MD Reference: | WELL @ 4798.00ft (Original Well) |
| Well: | Independence D30-711 | North Reference: | Grid |
| Wellbore: | Independence D30-711 | Survey Calculation Method: | Minimum Curvature |
| Design: | Plan 1 | Database: | EDMP |

Planned Survey

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| 5,300.00 | 18.28 | 42.33 | 5,174.28 | 613.70 | 559.03 | -555.40 | 0.00 | 0.00 | 0.00 |
| 5,400.00 | 18.28 | 42.33 | 5,269.24 | 636.89 | 580.15 | -576.38 | 0.00 | 0.00 | 0.00 |
| 5,500.00 | 18.28 | 42.33 | 5,364.19 | 660.07 | 601.27 | -597.36 | 0.00 | 0.00 | 0.00 |
| 5,600.00 | 18.28 | 42.33 | 5,459.15 | 683.26 | 622.39 | -618.34 | 0.00 | 0.00 | 0.00 |
| 5,700.00 | 18.28 | 42.33 | 5,554.10 | 706.44 | 643.51 | -639.33 | 0.00 | 0.00 | 0.00 |
| 5,800.00 | 18.28 | 42.33 | 5,649.06 | 729.63 | 664.63 | -660.31 | 0.00 | 0.00 | 0.00 |
| 5,900.00 | 18.28 | 42.33 | 5,744.01 | 752.81 | 685.75 | -681.29 | 0.00 | 0.00 | 0.00 |
| 6,000.00 | 18.28 | 42.33 | 5,838.97 | 776.00 | 706.87 | -702.27 | 0.00 | 0.00 | 0.00 |
| 6,100.00 | 18.28 | 42.33 | 5,933.92 | 799.18 | 727.99 | -723.26 | 0.00 | 0.00 | 0.00 |
| 6,200.00 | 18.28 | 42.33 | 6,028.88 | 822.37 | 749.11 | -744.24 | 0.00 | 0.00 | 0.00 |
| 6,300.00 | 18.28 | 42.33 | 6,123.83 | 845.55 | 770.23 | -765.22 | 0.00 | 0.00 | 0.00 |
| 6,400.00 | 18.28 | 42.33 | 6,218.79 | 868.74 | 791.35 | -786.20 | 0.00 | 0.00 | 0.00 |
| 6,426.28 | 18.28 | 42.33 | 6,243.74 | 874.83 | 796.90 | -791.72 | 0.00 | 0.00 | 0.00 |
| 6,500.00 | 14.27 | 61.42 | 6,314.54 | 887.74 | 812.68 | -803.00 | 9.00 | -5.44 | 25.89 |
| 6,600.00 | 12.84 | 100.07 | 6,411.95 | 891.70 | 834.49 | -804.78 | 9.00 | -1.42 | 38.65 |
| 6,700.00 | 16.90 | 132.04 | 6,508.74 | 879.99 | 856.27 | -790.98 | 9.00 | 4.06 | 31.97 |
| 6,800.00 | 23.79 | 149.01 | 6,602.52 | 852.92 | 877.50 | -761.93 | 9.00 | 6.88 | 16.97 |
| 6,900.00 | 31.70 | 158.30 | 6,691.00 | 811.13 | 897.64 | -718.36 | 9.00 | 7.92 | 9.29 |
| 7,000.00 | 40.04 | 164.11 | 6,771.98 | 755.66 | 916.20 | -661.33 | 9.00 | 8.34 | 5.81 |
| 7,100.00 | 48.59 | 168.18 | 6,843.48 | 687.88 | 932.73 | -592.24 | 9.00 | 8.54 | 4.07 |
| 7,200.00 | 57.24 | 171.29 | 6,903.73 | 609.45 | 946.81 | -512.81 | 9.00 | 8.65 | 3.11 |
| 7,300.00 | 65.96 | 173.84 | 6,951.26 | 522.31 | 958.11 | -424.98 | 9.00 | 8.72 | 2.55 |
| 7,400.00 | 74.71 | 176.07 | 6,984.88 | 428.61 | 966.33 | -330.92 | 9.00 | 8.75 | 2.23 |
| 7,500.00 | 83.48 | 178.11 | 7,003.78 | 330.64 | 971.29 | -232.94 | 9.00 | 8.77 | 2.05 |
| 7,574.22 | 90.00 | 179.58 | 7,008.00 | 256.60 | 972.77 | -159.12 | 9.00 | 8.78 | 1.98 |
| 7,600.00 | 90.00 | 179.58 | 7,008.00 | 230.82 | 972.96 | -133.44 | 0.00 | 0.00 | 0.00 |
| 7,700.00 | 90.00 | 179.58 | 7,008.00 | 130.82 | 973.69 | -33.86 | 0.00 | 0.00 | 0.00 |
| 7,800.00 | 90.00 | 179.58 | 7,008.00 | 30.82 | 974.43 | 65.72 | 0.00 | 0.00 | 0.00 |
| 7,900.00 | 90.00 | 179.58 | 7,008.00 | -69.18 | 975.16 | 165.29 | 0.00 | 0.00 | 0.00 |
| 8,000.00 | 90.00 | 179.58 | 7,008.00 | -169.17 | 975.89 | 264.87 | 0.00 | 0.00 | 0.00 |
| 8,100.00 | 90.00 | 179.58 | 7,008.00 | -269.17 | 976.62 | 364.45 | 0.00 | 0.00 | 0.00 |
| 8,200.00 | 90.00 | 179.58 | 7,008.00 | -369.17 | 977.35 | 464.03 | 0.00 | 0.00 | 0.00 |
| 8,300.00 | 90.00 | 179.58 | 7,008.00 | -469.17 | 978.09 | 563.61 | 0.00 | 0.00 | 0.00 |
| 8,400.00 | 90.00 | 179.58 | 7,008.00 | -569.16 | 978.82 | 663.19 | 0.00 | 0.00 | 0.00 |
| 8,500.00 | 90.00 | 179.58 | 7,008.00 | -669.16 | 979.55 | 762.77 | 0.00 | 0.00 | 0.00 |
| 8,600.00 | 90.00 | 179.58 | 7,008.00 | -769.16 | 980.28 | 862.35 | 0.00 | 0.00 | 0.00 |
| 8,700.00 | 90.00 | 179.58 | 7,008.00 | -869.15 | 981.01 | 961.93 | 0.00 | 0.00 | 0.00 |
| 8,800.00 | 90.00 | 179.58 | 7,008.00 | -969.15 | 981.75 | 1,061.51 | 0.00 | 0.00 | 0.00 |
| 8,900.00 | 90.00 | 179.58 | 7,008.00 | -1,069.15 | 982.48 | 1,161.09 | 0.00 | 0.00 | 0.00 |
| 9,000.00 | 90.00 | 179.58 | 7,008.00 | -1,169.15 | 983.21 | 1,260.67 | 0.00 | 0.00 | 0.00 |
| 9,100.00 | 90.00 | 179.58 | 7,008.00 | -1,269.14 | 983.94 | 1,360.25 | 0.00 | 0.00 | 0.00 |
| 9,200.00 | 90.00 | 179.58 | 7,008.00 | -1,369.14 | 984.67 | 1,459.83 | 0.00 | 0.00 | 0.00 |
| 9,300.00 | 90.00 | 179.58 | 7,008.00 | -1,469.14 | 985.41 | 1,559.41 | 0.00 | 0.00 | 0.00 |

Noble Energy, Inc.

Survey Report

| | | | |
|------------------|----------------------------|-------------------------------------|----------------------------------|
| Company: | Northern Region - DJ Basin | Local Co-ordinate Reference: | Well Independence D30-711 |
| Project: | Mustang | TVD Reference: | WELL @ 4798.00ft (Original Well) |
| Site: | D Section 19 | MD Reference: | WELL @ 4798.00ft (Original Well) |
| Well: | Independence D30-711 | North Reference: | Grid |
| Wellbore: | Independence D30-711 | Survey Calculation Method: | Minimum Curvature |
| Design: | Plan 1 | Database: | EDMP |

Planned Survey

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| 9,400.00 | 90.00 | 179.58 | 7,008.00 | -1,569.14 | 986.14 | 1,658.98 | 0.00 | 0.00 | 0.00 |
| 9,500.00 | 90.00 | 179.58 | 7,008.00 | -1,669.13 | 986.87 | 1,758.56 | 0.00 | 0.00 | 0.00 |
| 9,600.00 | 90.00 | 179.58 | 7,008.00 | -1,769.13 | 987.60 | 1,858.14 | 0.00 | 0.00 | 0.00 |
| 9,700.00 | 90.00 | 179.58 | 7,008.00 | -1,869.13 | 988.33 | 1,957.72 | 0.00 | 0.00 | 0.00 |
| 9,800.00 | 90.00 | 179.58 | 7,008.00 | -1,969.13 | 989.07 | 2,057.30 | 0.00 | 0.00 | 0.00 |
| 9,900.00 | 90.00 | 179.58 | 7,008.00 | -2,069.12 | 989.80 | 2,156.88 | 0.00 | 0.00 | 0.00 |
| 10,000.00 | 90.00 | 179.58 | 7,008.00 | -2,169.12 | 990.53 | 2,256.46 | 0.00 | 0.00 | 0.00 |
| 10,100.00 | 90.00 | 179.58 | 7,008.00 | -2,269.12 | 991.26 | 2,356.04 | 0.00 | 0.00 | 0.00 |
| 10,200.00 | 90.00 | 179.58 | 7,008.00 | -2,369.11 | 991.99 | 2,455.62 | 0.00 | 0.00 | 0.00 |
| 10,300.00 | 90.00 | 179.58 | 7,008.00 | -2,469.11 | 992.73 | 2,555.20 | 0.00 | 0.00 | 0.00 |
| 10,400.00 | 90.00 | 179.58 | 7,008.00 | -2,569.11 | 993.46 | 2,654.78 | 0.00 | 0.00 | 0.00 |
| 10,500.00 | 90.00 | 179.58 | 7,008.00 | -2,669.11 | 994.19 | 2,754.36 | 0.00 | 0.00 | 0.00 |
| 10,600.00 | 90.00 | 179.58 | 7,008.00 | -2,769.10 | 994.92 | 2,853.94 | 0.00 | 0.00 | 0.00 |
| 10,700.00 | 90.00 | 179.58 | 7,008.00 | -2,869.10 | 995.65 | 2,953.52 | 0.00 | 0.00 | 0.00 |
| 10,800.00 | 90.00 | 179.58 | 7,008.00 | -2,969.10 | 996.39 | 3,053.10 | 0.00 | 0.00 | 0.00 |
| 10,900.00 | 90.00 | 179.58 | 7,008.00 | -3,069.10 | 997.12 | 3,152.67 | 0.00 | 0.00 | 0.00 |
| 11,000.00 | 90.00 | 179.58 | 7,008.00 | -3,169.09 | 997.85 | 3,252.25 | 0.00 | 0.00 | 0.00 |
| 11,100.00 | 90.00 | 179.58 | 7,008.00 | -3,269.09 | 998.58 | 3,351.83 | 0.00 | 0.00 | 0.00 |
| 11,200.00 | 90.00 | 179.58 | 7,008.00 | -3,369.09 | 999.31 | 3,451.41 | 0.00 | 0.00 | 0.00 |
| 11,300.00 | 90.00 | 179.58 | 7,008.00 | -3,469.08 | 1,000.05 | 3,550.99 | 0.00 | 0.00 | 0.00 |
| 11,400.00 | 90.00 | 179.58 | 7,008.00 | -3,569.08 | 1,000.78 | 3,650.57 | 0.00 | 0.00 | 0.00 |
| 11,500.00 | 90.00 | 179.58 | 7,008.00 | -3,669.08 | 1,001.51 | 3,750.15 | 0.00 | 0.00 | 0.00 |
| 11,600.00 | 90.00 | 179.58 | 7,008.00 | -3,769.08 | 1,002.24 | 3,849.73 | 0.00 | 0.00 | 0.00 |
| 11,700.00 | 90.00 | 179.58 | 7,008.00 | -3,869.07 | 1,002.98 | 3,949.31 | 0.00 | 0.00 | 0.00 |
| 11,800.00 | 90.00 | 179.58 | 7,008.00 | -3,969.07 | 1,003.71 | 4,048.89 | 0.00 | 0.00 | 0.00 |
| 11,900.00 | 90.00 | 179.58 | 7,008.00 | -4,069.07 | 1,004.44 | 4,148.47 | 0.00 | 0.00 | 0.00 |
| 12,000.00 | 90.00 | 179.58 | 7,008.00 | -4,169.07 | 1,005.17 | 4,248.05 | 0.00 | 0.00 | 0.00 |
| 12,100.00 | 90.00 | 179.58 | 7,008.00 | -4,269.06 | 1,005.90 | 4,347.63 | 0.00 | 0.00 | 0.00 |
| 12,200.00 | 90.00 | 179.58 | 7,008.00 | -4,369.06 | 1,006.64 | 4,447.21 | 0.00 | 0.00 | 0.00 |
| 12,300.00 | 90.00 | 179.58 | 7,008.00 | -4,469.06 | 1,007.37 | 4,546.79 | 0.00 | 0.00 | 0.00 |
| 12,400.00 | 90.00 | 179.58 | 7,008.00 | -4,569.06 | 1,008.10 | 4,646.36 | 0.00 | 0.00 | 0.00 |
| 12,500.00 | 90.00 | 179.58 | 7,008.00 | -4,669.05 | 1,008.83 | 4,745.94 | 0.00 | 0.00 | 0.00 |
| 12,600.00 | 90.00 | 179.58 | 7,008.00 | -4,769.05 | 1,009.56 | 4,845.52 | 0.00 | 0.00 | 0.00 |
| 12,700.00 | 90.00 | 179.58 | 7,008.00 | -4,869.05 | 1,010.30 | 4,945.10 | 0.00 | 0.00 | 0.00 |
| 12,800.00 | 90.00 | 179.58 | 7,008.00 | -4,969.04 | 1,011.03 | 5,044.68 | 0.00 | 0.00 | 0.00 |
| 12,900.00 | 90.00 | 179.58 | 7,008.00 | -5,069.04 | 1,011.76 | 5,144.26 | 0.00 | 0.00 | 0.00 |
| 13,000.00 | 90.00 | 179.58 | 7,008.00 | -5,169.04 | 1,012.49 | 5,243.84 | 0.00 | 0.00 | 0.00 |
| 13,100.00 | 90.00 | 179.58 | 7,008.00 | -5,269.04 | 1,013.22 | 5,343.42 | 0.00 | 0.00 | 0.00 |
| 13,200.00 | 90.00 | 179.58 | 7,008.00 | -5,369.03 | 1,013.96 | 5,443.00 | 0.00 | 0.00 | 0.00 |
| 13,300.00 | 90.00 | 179.58 | 7,008.00 | -5,469.03 | 1,014.69 | 5,542.58 | 0.00 | 0.00 | 0.00 |
| 13,400.00 | 90.00 | 179.58 | 7,008.00 | -5,569.03 | 1,015.42 | 5,642.16 | 0.00 | 0.00 | 0.00 |
| 13,500.00 | 90.00 | 179.58 | 7,008.00 | -5,669.03 | 1,016.15 | 5,741.74 | 0.00 | 0.00 | 0.00 |
| 13,600.00 | 90.00 | 179.58 | 7,008.00 | -5,769.02 | 1,016.88 | 5,841.32 | 0.00 | 0.00 | 0.00 |

Noble Energy, Inc.

Survey Report

| | | | |
|------------------|----------------------------|-------------------------------------|----------------------------------|
| Company: | Northern Region - DJ Basin | Local Co-ordinate Reference: | Well Independence D30-711 |
| Project: | Mustang | TVD Reference: | WELL @ 4798.00ft (Original Well) |
| Site: | D Section 19 | MD Reference: | WELL @ 4798.00ft (Original Well) |
| Well: | Independence D30-711 | North Reference: | Grid |
| Wellbore: | Independence D30-711 | Survey Calculation Method: | Minimum Curvature |
| Design: | Plan 1 | Database: | EDMP |

Planned Survey

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| 13,700.00 | 90.00 | 179.58 | 7,008.00 | -5,869.02 | 1,017.62 | 5,940.90 | 0.00 | 0.00 | 0.00 |
| 13,800.00 | 90.00 | 179.58 | 7,008.00 | -5,969.02 | 1,018.35 | 6,040.48 | 0.00 | 0.00 | 0.00 |
| 13,900.00 | 90.00 | 179.58 | 7,008.00 | -6,069.02 | 1,019.08 | 6,140.05 | 0.00 | 0.00 | 0.00 |
| 14,000.00 | 90.00 | 179.58 | 7,008.00 | -6,169.01 | 1,019.81 | 6,239.63 | 0.00 | 0.00 | 0.00 |
| 14,100.00 | 90.00 | 179.58 | 7,008.00 | -6,269.01 | 1,020.54 | 6,339.21 | 0.00 | 0.00 | 0.00 |
| 14,200.00 | 90.00 | 179.58 | 7,008.00 | -6,369.01 | 1,021.28 | 6,438.79 | 0.00 | 0.00 | 0.00 |
| 14,300.00 | 90.00 | 179.58 | 7,008.00 | -6,469.00 | 1,022.01 | 6,538.37 | 0.00 | 0.00 | 0.00 |
| 14,400.00 | 90.00 | 179.58 | 7,008.00 | -6,569.00 | 1,022.74 | 6,637.95 | 0.00 | 0.00 | 0.00 |
| 14,500.00 | 90.00 | 179.58 | 7,008.00 | -6,669.00 | 1,023.47 | 6,737.53 | 0.00 | 0.00 | 0.00 |
| 14,600.00 | 90.00 | 179.58 | 7,008.00 | -6,769.00 | 1,024.20 | 6,837.11 | 0.00 | 0.00 | 0.00 |
| 14,700.00 | 90.00 | 179.58 | 7,008.00 | -6,868.99 | 1,024.94 | 6,936.69 | 0.00 | 0.00 | 0.00 |
| 14,800.00 | 90.00 | 179.58 | 7,008.00 | -6,968.99 | 1,025.67 | 7,036.27 | 0.00 | 0.00 | 0.00 |
| 14,900.00 | 90.00 | 179.58 | 7,008.00 | -7,068.99 | 1,026.40 | 7,135.85 | 0.00 | 0.00 | 0.00 |
| 15,000.00 | 90.00 | 179.58 | 7,008.00 | -7,168.99 | 1,027.13 | 7,235.43 | 0.00 | 0.00 | 0.00 |
| 15,100.00 | 90.00 | 179.58 | 7,008.00 | -7,268.98 | 1,027.86 | 7,335.01 | 0.00 | 0.00 | 0.00 |
| 15,200.00 | 90.00 | 179.58 | 7,008.00 | -7,368.98 | 1,028.60 | 7,434.59 | 0.00 | 0.00 | 0.00 |
| 15,300.00 | 90.00 | 179.58 | 7,008.00 | -7,468.98 | 1,029.33 | 7,534.17 | 0.00 | 0.00 | 0.00 |
| 15,400.00 | 90.00 | 179.58 | 7,008.00 | -7,568.98 | 1,030.06 | 7,633.74 | 0.00 | 0.00 | 0.00 |
| 15,500.00 | 90.00 | 179.58 | 7,008.00 | -7,668.97 | 1,030.79 | 7,733.32 | 0.00 | 0.00 | 0.00 |
| 15,600.00 | 90.00 | 179.58 | 7,008.00 | -7,768.97 | 1,031.52 | 7,832.90 | 0.00 | 0.00 | 0.00 |
| 15,700.00 | 90.00 | 179.58 | 7,008.00 | -7,868.97 | 1,032.26 | 7,932.48 | 0.00 | 0.00 | 0.00 |
| 15,800.00 | 90.00 | 179.58 | 7,008.00 | -7,968.96 | 1,032.99 | 8,032.06 | 0.00 | 0.00 | 0.00 |
| 15,900.00 | 90.00 | 179.58 | 7,008.00 | -8,068.96 | 1,033.72 | 8,131.64 | 0.00 | 0.00 | 0.00 |
| 16,000.00 | 90.00 | 179.58 | 7,008.00 | -8,168.96 | 1,034.45 | 8,231.22 | 0.00 | 0.00 | 0.00 |
| 16,100.00 | 90.00 | 179.58 | 7,008.00 | -8,268.96 | 1,035.18 | 8,330.80 | 0.00 | 0.00 | 0.00 |
| 16,200.00 | 90.00 | 179.58 | 7,008.00 | -8,368.95 | 1,035.92 | 8,430.38 | 0.00 | 0.00 | 0.00 |
| 16,300.00 | 90.00 | 179.58 | 7,008.00 | -8,468.95 | 1,036.65 | 8,529.96 | 0.00 | 0.00 | 0.00 |
| 16,400.00 | 90.00 | 179.58 | 7,008.00 | -8,568.95 | 1,037.38 | 8,629.54 | 0.00 | 0.00 | 0.00 |
| 16,500.00 | 90.00 | 179.58 | 7,008.00 | -8,668.95 | 1,038.11 | 8,729.12 | 0.00 | 0.00 | 0.00 |
| 16,600.00 | 90.00 | 179.58 | 7,008.00 | -8,768.94 | 1,038.84 | 8,828.70 | 0.00 | 0.00 | 0.00 |
| 16,700.00 | 90.00 | 179.58 | 7,008.00 | -8,868.94 | 1,039.58 | 8,928.28 | 0.00 | 0.00 | 0.00 |
| 16,800.00 | 90.00 | 179.58 | 7,008.00 | -8,968.94 | 1,040.31 | 9,027.86 | 0.00 | 0.00 | 0.00 |
| 16,900.00 | 90.00 | 179.58 | 7,008.00 | -9,068.94 | 1,041.04 | 9,127.43 | 0.00 | 0.00 | 0.00 |
| 17,000.00 | 90.00 | 179.58 | 7,008.00 | -9,168.93 | 1,041.77 | 9,227.01 | 0.00 | 0.00 | 0.00 |
| 17,100.00 | 90.00 | 179.58 | 7,008.00 | -9,268.93 | 1,042.51 | 9,326.59 | 0.00 | 0.00 | 0.00 |
| 17,200.00 | 90.00 | 179.58 | 7,008.00 | -9,368.93 | 1,043.24 | 9,426.17 | 0.00 | 0.00 | 0.00 |
| 17,300.00 | 90.00 | 179.58 | 7,008.00 | -9,468.92 | 1,043.97 | 9,525.75 | 0.00 | 0.00 | 0.00 |
| 17,400.00 | 90.00 | 179.58 | 7,008.00 | -9,568.92 | 1,044.70 | 9,625.33 | 0.00 | 0.00 | 0.00 |
| 17,500.00 | 90.00 | 179.58 | 7,008.00 | -9,668.92 | 1,045.43 | 9,724.91 | 0.00 | 0.00 | 0.00 |
| 17,600.00 | 90.00 | 179.58 | 7,008.00 | -9,768.92 | 1,046.17 | 9,824.49 | 0.00 | 0.00 | 0.00 |
| 17,700.00 | 90.00 | 179.58 | 7,008.00 | -9,868.91 | 1,046.90 | 9,924.07 | 0.00 | 0.00 | 0.00 |
| 17,800.00 | 90.00 | 179.58 | 7,008.00 | -9,968.91 | 1,047.63 | 10,023.65 | 0.00 | 0.00 | 0.00 |
| 17,900.00 | 90.00 | 179.58 | 7,008.00 | -10,068.91 | 1,048.36 | 10,123.23 | 0.00 | 0.00 | 0.00 |
| 18,000.00 | 90.00 | 179.58 | 7,008.00 | -10,168.91 | 1,049.09 | 10,222.81 | 0.00 | 0.00 | 0.00 |

Noble Energy, Inc.

Survey Report

| | | | |
|------------------|----------------------------|-------------------------------------|----------------------------------|
| Company: | Northern Region - DJ Basin | Local Co-ordinate Reference: | Well Independence D30-711 |
| Project: | Mustang | TVD Reference: | WELL @ 4798.00ft (Original Well) |
| Site: | D Section 19 | MD Reference: | WELL @ 4798.00ft (Original Well) |
| Well: | Independence D30-711 | North Reference: | Grid |
| Wellbore: | Independence D30-711 | Survey Calculation Method: | Minimum Curvature |
| Design: | Plan 1 | Database: | EDMP |

| Planned Survey | | | | | | | | | |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
| 18,060.85 | 90.00 | 179.58 | 7,008.00 | -10,229.75 | 1,049.54 | 10,283.40 | 0.00 | 0.00 | 0.00 |

| Design Targets | | | | | | | | | |
|---------------------------|---------------|--------------|----------|------------|------------|-----------------|----------------|------------|--------------|
| Target Name | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (usft) | Easting (usft) | Latitude | Longitude |
| - hit/miss target | | | | | | | | | |
| - Shape | | | | | | | | | |
| Independence D30-711 | 0.00 | 0.00 | 7,008.00 | 256.60 | 972.77 | 1,323,537.54 | 3,255,604.31 | 40.2178868 | -104.5846873 |
| - plan hits target center | | | | | | | | | |
| - Point | | | | | | | | | |
| Independence D30-711 I | 0.00 | 0.00 | 7,008.00 | -10,229.75 | 1,049.54 | 1,313,051.21 | 3,255,681.08 | 40.1891000 | -104.5848000 |
| - plan hits target center | | | | | | | | | |
| - Point | | | | | | | | | |

| Formations | | | | | | |
|---------------------|---------------------|---------------------------|-----------|---------|-------------------|--|
| Measured Depth (ft) | Vertical Depth (ft) | Name | Lithology | Dip (°) | Dip Direction (°) | |
| 485.00 | 485.00 | Pierre | | | | |
| 649.00 | 649.00 | Upper Pierre Aquifer Top | | | | |
| 1,547.00 | 1,547.00 | Upper Pierre Aquifer Base | | | | |
| 3,728.43 | 3,682.00 | Parkman | | | | |
| 4,151.79 | 4,084.00 | Sussex | | | | |
| 4,977.44 | 4,868.00 | Shannon | | | | |
| 6,207.50 | 6,036.00 | Teepee Buttes | | | | |
| 6,891.81 | 6,684.00 | Sharon Springs | | | | |
| 6,969.25 | 6,748.00 | Top A Chalk | | | | |
| 6,989.64 | 6,764.00 | Top A Marl | | | | |
| 6,990.93 | 6,765.00 | Top B Chalk | | | | |
| 7,054.16 | 6,812.00 | Top B Marl | | | | |
| 7,163.26 | 6,883.00 | Top C Chalk | | | | |
| 7,227.25 | 6,918.00 | Top C Marl | | | | |
| 7,330.41 | 6,963.00 | Top D Chalk | | | | |

| Plan Annotations | | | | |
|---------------------|---------------------|-------------------|------------|---------------------------|
| Measured Depth (ft) | Vertical Depth (ft) | Local Coordinates | | Comment |
| | | +N/-S (ft) | +E/-W (ft) | |
| 2200 | 2200 | 0 | 0 | Start Build 2.00 |
| 6426 | 6244 | 107 | 97 | Start DLS 9.00 TFO 135.77 |
| 7574 | 7008 | 875 | 797 | TPZ/LP at 7574.22 MD |
| 18,061 | 7008 | 257 | 973 | TD at 18060.85 MD |

Checked By: _____ Approved By: _____ Date: _____

Northern Region - DJ Basin

Mustang

D Section 19

Independence D30-711

Independence D30-711

Plan 1

Anticollision Summary Report

20 February, 2018

Noble Energy, Inc.
Anticollision Summary Report

| | | | |
|---------------------------|----------------------------|-------------------------------------|----------------------------------|
| Company: | Northern Region - DJ Basin | Local Co-ordinate Reference: | Well Independence D30-711 |
| Project: | Mustang | TVD Reference: | WELL @ 4798.00ft (Original Well) |
| Reference Site: | D Section 19 | MD Reference: | WELL @ 4798.00ft (Original Well) |
| Site Error: | 0.00 ft | North Reference: | Grid |
| Reference Well: | Independence D30-711 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.00 ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Independence D30-711 | Database: | EDMP |
| Reference Design: | Plan 1 | Offset TVD Reference: | Offset Datum |

| | | | |
|-------------------------------------|---|-----------------------|---------------------|
| Reference | Plan 1 | | |
| 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 10,000.00 ft | Error Surface: | Pedal Curve |
| Warning Levels Evaluated at: | 2.00 Sigma | Casing Method: | Not applied |

| | | | | |
|----------------------------|----------------|-------------------------------|------------------|--|
| Survey Tool Program | Date | 2/20/2018 | | |
| From (ft) | To (ft) | Survey (Wellbore) | Tool Name | Description |
| 0.00 | 18,060.85 | Plan 1 (Independence D30-711) | 2_MWD+IFR1+MS | A008Mb: IFR dec & multi-station analysis |

| Summary | | | | | | |
|---|-------------------------------|----------------------------|-------------------------------|--------------------------------|-------------------|---------|
| Site Name | Reference Measured Depth (ft) | Offset Measured Depth (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Separation Factor | Warning |
| Offset Well - Wellbore - Design | | | | | | |
| D Section 07 | | | | | | |
| Dechant 07-01-17 - Dechant 07-01-17 - Dechant 07-01-1 | 6,570.68 | 6,521.61 | 9,859.08 | 9,812.18 | 210.207 | CC, ES |
| Dechant 07-01-17 - Dechant 07-01-17 - Dechant 07-01-1 | 6,950.00 | 6,700.00 | 9,973.73 | 9,925.16 | 205.357 | SF |
| Dechant 07-11 - Dechant 07-11 - Dechant 07-11 - As Dril | 6,560.01 | 6,270.63 | 9,383.76 | 9,337.64 | 203.503 | CC |
| Dechant 07-11 - Dechant 07-11 - Dechant 07-11 - As Dril | 6,600.00 | 6,600.00 | 9,384.99 | 9,337.58 | 197.933 | ES |
| Dechant 07-11 - Dechant 07-11 - Dechant 07-11 - As Dril | 7,000.00 | 6,539.91 | 9,532.46 | 9,484.26 | 197.795 | SF |
| Dechant 07-13 - Dechant 07-13 - Dechant 07-13 - As Dri | 6,532.90 | 6,200.00 | 8,232.63 | 8,186.77 | 179.518 | CC |
| Dechant 07-13 - Dechant 07-13 - Dechant 07-13 - As Dri | 6,550.00 | 6,252.08 | 8,232.83 | 8,186.73 | 178.594 | ES |
| Dechant 07-13 - Dechant 07-13 - Dechant 07-13 - As Dri | 6,900.00 | 6,556.00 | 8,330.40 | 8,282.26 | 173.040 | SF |
| Dechant 07-14 - Dechant 07-14 - Dechant 07-14 - As Dri | 6,566.53 | 6,363.30 | 7,935.29 | 7,855.46 | 99.397 | CC, ES |
| Dechant 07-14 - Dechant 07-14 - Dechant 07-14 - As Dri | 7,050.00 | 6,793.03 | 8,110.43 | 8,025.70 | 95.716 | SF |
| Dechant 07-15 - Dechant 07-15 - Dechant 07-15 - As Dri | 6,554.57 | 6,363.64 | 8,768.87 | 8,689.05 | 109.848 | CC, ES |
| Dechant 07-15 - Dechant 07-15 - Dechant 07-15 - As Dri | 7,100.00 | 6,839.48 | 8,986.85 | 8,901.64 | 105.464 | SF |
| Dechant 18-07 - Dechant 18-07 - Dechant 18-07 - As Dri | 6,527.86 | 6,521.55 | 9,472.79 | 9,425.92 | 202.137 | CC, ES |
| Dechant 18-07 - Dechant 18-07 - Dechant 18-07 - As Dri | 7,000.00 | 6,890.57 | 9,628.91 | 9,579.53 | 195.004 | SF |
| Dechant D07-09 - Dechant D07-09 - Dechant D07-09 - A | 6,565.53 | 6,381.14 | 6,735.26 | 6,688.81 | 144.973 | CC, ES |
| Dechant D07-09 - Dechant D07-09 - Dechant D07-09 - A | 6,950.00 | 6,765.11 | 6,845.51 | 6,796.70 | 140.250 | SF |
| Dechant D07-10 - Dechant D07-10 - Dechant D07-10 - A | 6,528.03 | 6,209.91 | 6,756.65 | 6,710.84 | 147.478 | CC, ES |
| Dechant D07-10 - Dechant D07-10 - Dechant D07-10 - A | 6,900.00 | 6,543.81 | 6,859.85 | 6,811.82 | 142.810 | SF |
| Dechant D07-11 - Dechant D07-11 - Dechant D07-11 - A | 6,496.53 | 6,195.29 | 7,407.70 | 7,362.03 | 162.215 | CC |
| Dechant D07-11 - Dechant D07-11 - Dechant D07-11 - A | 6,500.00 | 6,198.57 | 7,407.71 | 7,362.02 | 162.126 | ES |
| Dechant D07-11 - Dechant D07-11 - Dechant D07-11 - A | 6,950.00 | 6,547.87 | 7,549.93 | 7,501.77 | 156.772 | SF |
| Dechant D07-12 - Dechant D07-12 - Dechant D07-12 - A | 6,463.07 | 6,100.00 | 7,911.55 | 7,866.33 | 174.970 | CC |
| Dechant D07-12 - Dechant D07-12 - Dechant D07-12 - A | 6,500.00 | 6,500.00 | 7,912.25 | 7,865.49 | 169.235 | ES |
| Dechant D07-12 - Dechant D07-12 - Dechant D07-12 - A | 6,950.00 | 6,628.78 | 8,054.68 | 8,006.23 | 166.251 | SF |
| Dechant D07-13 - Dechant D07-13 - Dechant D07-13 - A | 6,456.00 | 6,182.90 | 6,828.37 | 6,782.91 | 150.183 | CC |
| Dechant D07-13 - Dechant D07-13 - Dechant D07-13 - A | 6,500.00 | 6,500.00 | 6,829.37 | 6,782.63 | 146.103 | ES |
| Dechant D07-13 - Dechant D07-13 - Dechant D07-13 - A | 7,300.00 | 7,300.00 | 7,215.25 | 7,164.18 | 141.296 | SF |
| Dechant D07-14 - Dechant D07-14 - Dechant D07-14 - A | 6,488.08 | 6,265.47 | 6,205.79 | 6,159.87 | 135.149 | CC |
| Dechant D07-14 - Dechant D07-14 - Dechant D07-14 - A | 6,500.00 | 6,283.84 | 6,205.88 | 6,159.85 | 134.820 | ES |
| Dechant D07-14 - Dechant D07-14 - Dechant D07-14 - A | 6,950.00 | 6,726.81 | 6,344.91 | 6,296.04 | 129.815 | SF |
| Dechant D07-15 - Dechant D07-15 - Dechant D07-15 - A | 6,512.18 | 6,252.49 | 5,563.42 | 5,517.50 | 121.155 | CC, ES |
| Dechant D07-15 - Dechant D07-15 - Dechant D07-15 - A | 6,900.00 | 6,645.84 | 5,670.64 | 5,622.25 | 117.174 | SF |
| Dechant D07-16 - Dechant D07-16 - Dechant D07-16 - A | 6,561.69 | 6,329.56 | 5,390.98 | 5,344.65 | 116.350 | CC, ES |
| Dechant D07-16 - Dechant D07-16 - Dechant D07-16 - A | 6,950.00 | 6,753.30 | 5,505.36 | 5,456.56 | 112.802 | SF |
| Dechant D07-20 - Dechant D07-20 - Dechant D07-20 - A | 6,507.28 | 6,400.00 | 8,101.47 | 8,055.11 | 174.731 | CC, ES |
| Dechant D07-20 - Dechant D07-20 - Dechant D07-20 - A | 7,350.00 | 7,350.00 | 8,542.39 | 8,491.23 | 166.943 | SF |
| Dechant D07-21 - Dechant D07-21 - Dechant D07-21 - A | 6,518.46 | 6,223.52 | 7,498.51 | 7,452.69 | 163.650 | CC, 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 - DJ Basin | Local Co-ordinate Reference: | Well Independence D30-711 |
| Project: | Mustang | TVD Reference: | WELL @ 4798.00ft (Original Well) |
| Reference Site: | D Section 19 | MD Reference: | WELL @ 4798.00ft (Original Well) |
| Site Error: | 0.00 ft | North Reference: | Grid |
| Reference Well: | Independence D30-711 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.00 ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Independence D30-711 | Database: | EDMP |
| Reference Design: | Plan 1 | Offset TVD Reference: | Offset Datum |

| Summary | | | | | | |
|---|-------------------------------|----------------------------|-------------------------------|--------------------------------|-------------------|--------------|
| Site Name | Reference Measured Depth (ft) | Offset Measured Depth (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Separation Factor | Warning |
| D Section 07 | | | | | | |
| Dechant D07-21 - Dechant D07-21 - Dechant D07-21 - A | 7,100.00 | 7,100.00 | 7,738.03 | 7,687.82 | 154.090 | SF |
| Dechant D07-22 - Dechant D07-22 - Dechant D07-22 - A | 6,544.03 | 6,251.48 | 7,319.20 | 7,273.17 | 159.017 | CC |
| Dechant D07-22 - Dechant D07-22 - Dechant D07-22 - A | 6,550.00 | 6,256.46 | 7,319.23 | 7,273.16 | 158.879 | ES |
| Dechant D07-22 - Dechant D07-22 - Dechant D07-22 - A | 6,950.00 | 6,533.73 | 7,445.41 | 7,397.30 | 154.759 | SF |
| Dechant D07-23 - Dechant D07-23 - Dechant D07-23 - A | 6,534.61 | 6,233.07 | 5,877.41 | 5,831.44 | 127.856 | CC, ES |
| Dechant D07-23 - Dechant D07-23 - Dechant D07-23 - A | 7,300.00 | 7,300.00 | 6,280.26 | 6,229.19 | 122.975 | SF |
| Dechant D07-24 - Dechant D07-24 - Dechant D07-24 - A | 6,509.93 | 6,259.56 | 6,472.38 | 6,426.35 | 140.604 | CC, ES |
| Dechant D07-24 - Dechant D07-24 - Dechant D07-24 - A | 6,950.00 | 6,574.06 | 6,612.40 | 6,564.06 | 136.791 | SF |
| Dechant D07-25 - Dechant D07-25 - Dechant D07-25 - A | 6,502.71 | 6,454.22 | 7,069.77 | 7,023.15 | 151.636 | CC, ES |
| Dechant D07-25 - Dechant D07-25 - Dechant D07-25 - A | 6,950.00 | 6,722.19 | 7,206.40 | 7,157.58 | 147.600 | SF |
| Dechant D07-32 - Dechant D07-32 - Dechant D07-32 - A | 6,475.20 | 6,235.69 | 8,626.03 | 8,580.26 | 188.459 | CC, ES |
| Dechant D07-32 - Dechant D07-32 - Dechant D07-32 - A | 7,250.00 | 6,882.20 | 8,985.14 | 8,935.52 | 181.082 | SF |
| Dechant D07-33 - Dechant D07-33 - Dechant D07-33 - A | 5,420.62 | 4,823.60 | 7,690.67 | 7,654.17 | 210.706 | CC |
| Dechant D07-33 - Dechant D07-33 - Dechant D07-33 - A | 5,500.00 | 4,868.07 | 7,690.86 | 7,653.89 | 208.031 | ES |
| Dechant D07-33 - Dechant D07-33 - Dechant D07-33 - A | 6,950.00 | 6,412.07 | 7,867.02 | 7,819.28 | 164.769 | SF |
| Dechant D18-27D - Dechant D18-27D - Dechant D18-27 | 6,530.23 | 6,740.74 | 4,797.00 | 4,695.13 | 47.091 | CC, ES |
| Dechant D18-27D - Dechant D18-27D - Dechant D18-27 | 6,600.00 | 6,787.30 | 4,800.88 | 4,698.86 | 47.058 | SF |
| Dechant D18-30D - Wellbore #1 - Wellbore #1- As Drilled | 542.18 | 569.29 | 6,569.41 | 6,565.85 | 1,846.656 | CC |
| Dechant D18-30D - Wellbore #1 - Wellbore #1- As Drilled | 3,500.00 | 3,500.00 | 6,623.42 | 6,562.59 | 108.883 | ES |
| Dechant D18-30D - Wellbore #1 - Wellbore #1- As Drilled | 5,800.00 | 5,800.00 | 6,798.53 | 6,689.80 | 62.524 | SF |
| HSR Barbour 04-07 - HSR Barbour 04-07 - HSR Barbour | | | | | | Out of range |
| HSR Parkman 06-07 - HSR Parkman 06-07 - HSR Parkm | 6,537.09 | 6,628.16 | 8,466.16 | 8,418.84 | 178.906 | CC, ES |
| HSR Parkman 06-07 - HSR Parkman 06-07 - HSR Parkm | 7,050.00 | 6,918.79 | 8,653.35 | 8,603.71 | 174.345 | SF |
| HSR Petrie 03-07 - HSR Petrie 03-07 - HSR Petrie 03-07 | 6,514.18 | 6,154.73 | 9,990.46 | 9,944.80 | 218.791 | CC, ES |
| HSR Petrie 03-07 - HSR Petrie 03-07 - HSR Petrie 03-07 | 6,600.00 | 6,200.00 | 9,996.16 | 9,950.02 | 216.644 | SF |
| HSR Safran 05-07 - HSR Safran 05-07 - HSR Safran 05- | 6,485.66 | 6,218.88 | 9,089.51 | 9,043.69 | 198.388 | CC, ES |
| HSR Safran 05-07 - HSR Safran 05-07 - HSR Safran 05- | 7,150.00 | 7,150.00 | 9,359.11 | 9,308.54 | 185.094 | SF |
| Two E Ranch 07-01 - Two E Ranch 07-01 - Two E Ranch | 6,545.83 | 6,333.06 | 9,444.42 | 9,398.16 | 204.158 | CC |
| Two E Ranch 07-01 - Two E Ranch 07-01 - Two E Ranch | 6,550.00 | 6,335.84 | 9,444.43 | 9,398.15 | 204.045 | ES |
| Two E Ranch 07-01 - Two E Ranch 07-01 - Two E Ranch | 6,750.00 | 6,750.00 | 9,476.80 | 9,428.43 | 195.910 | SF |
| Two E Ranches 1 - Two E Ranches 1 - Two E Ranches 1 | 6,359.20 | 4,625.00 | 8,317.79 | 8,254.41 | 131.248 | CC |
| Two E Ranches 1 - Two E Ranches 1 - Two E Ranches 1 | 6,400.00 | 4,625.00 | 8,317.89 | 8,254.38 | 130.983 | ES |
| Two E Ranches 1 - Two E Ranches 1 - Two E Ranches 1 | 6,600.00 | 4,625.00 | 8,344.46 | 8,280.39 | 130.236 | SF |

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 - DJ Basin | Local Co-ordinate Reference: | Well Independence D30-711 |
| Project: | Mustang | TVD Reference: | WELL @ 4798.00ft (Original Well) |
| Reference Site: | D Section 19 | MD Reference: | WELL @ 4798.00ft (Original Well) |
| Site Error: | 0.00 ft | North Reference: | Grid |
| Reference Well: | Independence D30-711 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.00 ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Independence D30-711 | Database: | EDMP |
| Reference Design: | Plan 1 | Offset TVD Reference: | Offset Datum |

| Summary | | | | | | |
|--|-------------------------------|----------------------------|-------------------------------|--------------------------------|-------------------|---------|
| Site Name | Reference Measured Depth (ft) | Offset Measured Depth (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Separation Factor | Warning |
| Offset Well - Wellbore - Design | | | | | | |
| D Section 17 | | | | | | |
| Butterball D19-27D - Wellbore #1 - Gyro Surveys | 4,200.00 | 4,247.86 | 179.39 | 124.45 | 3.265 | ES, SF |
| Butterball D19-27D - Wellbore #1 - Gyro Surveys | 4,227.45 | 4,270.00 | 178.69 | 124.48 | 3.296 | CC |
| Guttersen State D16-33 (SI) - Wellbore #1 - No Surveys | 7,083.37 | 6,786.32 | 5,503.03 | 5,418.61 | 65.185 | CC |
| Guttersen State D16-33 (SI) - Wellbore #1 - No Surveys | 7,100.00 | 6,797.48 | 5,503.11 | 5,418.57 | 65.090 | ES |
| Guttersen State D16-33 (SI) - Wellbore #1 - No Surveys | 7,400.00 | 6,938.88 | 5,532.77 | 5,446.64 | 64.233 | SF |
| HSR LDS 6-17 (SI) - Wellbore #1 - No Surveys | 6,672.65 | 6,434.47 | 3,393.47 | 3,313.01 | 42.178 | CC, ES |
| HSR LDS 6-17 (SI) - Wellbore #1 - No Surveys | 6,950.00 | 6,684.55 | 3,444.05 | 3,360.69 | 41.314 | SF |
| HSR LDS B5-17 (SI) - Wellbore #1 - No Surveys | 6,616.07 | 6,380.61 | 3,037.89 | 2,957.92 | 37.984 | CC, ES |
| HSR LDS B5-17 (SI) - Wellbore #1 - No Surveys | 6,850.00 | 6,600.56 | 3,079.34 | 2,996.76 | 37.291 | SF |
| HSR Mike Guttersen 16-17X (SI) - Wellbore #1 - No Su | 7,323.12 | 6,919.30 | 4,680.42 | 4,594.50 | 54.479 | CC, ES |
| HSR Mike Guttersen 16-17X (SI) - Wellbore #1 - No Su | 7,500.00 | 6,962.78 | 4,689.29 | 4,602.87 | 54.263 | SF |
| HSR Weeks 10-17 - Wellbore #1 - Gyro Surveys | 6,856.49 | 6,566.52 | 3,718.23 | 3,670.74 | 78.286 | CC, ES |
| HSR Weeks 10-17 - Wellbore #1 - Gyro Surveys | 7,050.00 | 6,700.00 | 3,732.50 | 3,684.11 | 77.128 | SF |
| HSR Weeks 15-17 (SI) - Wellbore #1 - No Surveys | 7,234.07 | 6,878.42 | 3,409.58 | 3,324.12 | 39.899 | CC |
| HSR Weeks 15-17 (SI) - Wellbore #1 - No Surveys | 7,250.00 | 6,886.17 | 3,409.65 | 3,324.11 | 39.859 | ES |
| HSR Weeks 15-17 (SI) - Wellbore #1 - No Surveys | 7,400.00 | 6,941.88 | 3,418.41 | 3,332.24 | 39.672 | SF |
| HSR Weeks 9-17 - Wellbore #1 - Gyro Surveys | 6,933.59 | 6,688.12 | 4,785.77 | 4,737.80 | 99.776 | CC, ES |
| HSR Weeks 9-17 - Wellbore #1 - Gyro Surveys | 7,150.00 | 6,843.92 | 4,802.35 | 4,753.92 | 99.153 | SF |
| HSR-LDS 3-17 (SI) - Wellbore #1 - No Surveys | 6,641.50 | 6,399.33 | 4,538.78 | 4,458.64 | 56.638 | CC |
| HSR-LDS 3-17 (SI) - Wellbore #1 - No Surveys | 6,650.00 | 6,407.57 | 4,538.83 | 4,458.59 | 56.567 | ES |
| HSR-LDS 3-17 (SI) - Wellbore #1 - No Surveys | 7,000.00 | 6,718.98 | 4,629.35 | 4,545.53 | 55.229 | SF |
| HSR-LDS 4-17 (SI) - Wellbore #1 - No Surveys | 6,604.92 | 6,365.74 | 3,996.65 | 3,916.80 | 50.049 | CC, ES |
| HSR-LDS 4-17 (SI) - Wellbore #1 - No Surveys | 6,900.00 | 6,640.00 | 4,063.06 | 3,980.00 | 48.916 | SF |
| LDS 18-17 (SI) - Wellbore #1 - No Surveys | 6,641.45 | 6,404.28 | 3,792.92 | 3,712.74 | 47.305 | CC |
| LDS 18-17 (SI) - Wellbore #1 - No Surveys | 6,650.00 | 6,412.57 | 3,792.97 | 3,712.69 | 47.246 | ES |
| LDS 18-17 (SI) - Wellbore #1 - No Surveys | 6,950.00 | 6,684.55 | 3,860.62 | 3,777.19 | 46.271 | SF |
| LDS D17-13 - Wellbore #1 - Gyro Surveys | 7,186.20 | 6,850.45 | 451.73 | 402.47 | 9.171 | CC, ES |
| LDS D17-13 - Wellbore #1 - Gyro Surveys | 7,200.00 | 6,858.09 | 451.91 | 402.61 | 9.167 | SF |
| LDS D17-18 (SI) - Wellbore #1 - No Surveys | 6,690.84 | 6,449.96 | 4,562.93 | 4,482.32 | 56.603 | CC |
| LDS D17-18 (SI) - Wellbore #1 - No Surveys | 6,700.00 | 6,458.74 | 4,562.99 | 4,482.27 | 56.529 | ES |
| LDS D17-18 (SI) - Wellbore #1 - No Surveys | 7,050.00 | 6,759.03 | 4,642.11 | 4,557.95 | 55.159 | SF |
| LDS D17-20 - Wellbore #1 - No Surveys | 6,681.22 | 6,448.72 | 2,453.44 | 2,372.85 | 30.444 | CC, ES |
| LDS D17-20 - Wellbore #1 - No Surveys | 6,900.00 | 6,649.00 | 2,484.56 | 2,401.63 | 29.958 | SF |
| LDS D17-21 - Wellbore #1 - No Surveys | 6,760.67 | 6,520.15 | 3,251.41 | 3,170.05 | 39.963 | CC, ES |
| LDS D17-21 - Wellbore #1 - No Surveys | 7,050.00 | 6,763.03 | 3,294.34 | 3,210.20 | 39.153 | SF |
| LDS D17-22 (SI) - Wellbore #1 - No Surveys | 6,806.63 | 6,557.58 | 4,644.84 | 4,563.04 | 56.783 | CC, ES |
| LDS D17-22 (SI) - Wellbore #1 - No Surveys | 7,200.00 | 6,852.73 | 4,713.69 | 4,628.54 | 55.363 | SF |
| LDS D17-24D - Wellbore #1 - LDS D17-24D - As Drilled | 6,929.53 | 6,817.77 | 2,849.43 | 2,795.55 | 52.883 | CC, ES |
| LDS D17-24D - Wellbore #1 - LDS D17-24D - As Drilled | 7,100.00 | 6,933.87 | 2,860.73 | 2,806.25 | 52.510 | SF |
| LDS D17-25D - Wellbore #1 - LDS D17-25D - As Drilled | 6,748.71 | 6,746.09 | 1,857.81 | 1,808.83 | 37.927 | CC |
| LDS D17-25D - Wellbore #1 - LDS D17-25D - As Drilled | 6,750.00 | 6,747.22 | 1,857.81 | 1,808.82 | 37.921 | ES |
| LDS D17-25D - Wellbore #1 - LDS D17-25D - As Drilled | 6,950.00 | 6,932.11 | 1,879.53 | 1,829.38 | 37.480 | SF |
| LDS D17-31D - LDS D17-31D - LDS D17-31D - As Drille | 516.80 | 474.80 | 3,208.63 | 3,205.52 | 1,033.653 | CC |
| LDS D17-31D - LDS D17-31D - LDS D17-31D - As Drille | 800.00 | 738.32 | 3,209.71 | 3,204.67 | 637.010 | ES |
| LDS D17-31D - LDS D17-31D - LDS D17-31D - As Drille | 6,800.00 | 6,811.85 | 3,436.51 | 3,386.10 | 68.174 | SF |
| LDS D17-32D - LDS D17-32D - LDS D17-32D - As Drille | 6,582.96 | 6,400.79 | 2,266.18 | 2,218.87 | 47.900 | CC, ES |
| LDS D17-32D - LDS D17-32D - LDS D17-32D - As Drille | 6,750.00 | 6,561.68 | 2,288.02 | 2,239.70 | 47.343 | SF |
| LDS D17-33 - LDS D17-33 - LDS D17-33 - As Drilled | 6,600.31 | 6,334.71 | 921.81 | 875.52 | 19.914 | CC, ES |
| LDS D17-33 - LDS D17-33 - LDS D17-33 - As Drilled | 6,700.00 | 6,442.46 | 928.67 | 881.69 | 19.768 | SF |
| LDS D17-7 - Wellbore #1 - No Surveys | 6,736.58 | 6,491.52 | 4,348.02 | 4,266.96 | 53.642 | CC |
| LDS D17-7 - Wellbore #1 - No Surveys | 6,750.00 | 6,504.15 | 4,348.12 | 4,266.91 | 53.544 | ES |
| LDS D17-7 - Wellbore #1 - No Surveys | 7,100.00 | 6,791.48 | 4,418.93 | 4,334.45 | 52.307 | SF |
| LDS D20-29D - Wellbore #1 - LDS D20-29D - As Drilled | 7,662.19 | 7,143.25 | 1,367.88 | 1,316.61 | 26.681 | CC, 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 - DJ Basin | Local Co-ordinate Reference: | Well Independence D30-711 |
| Project: | Mustang | TVD Reference: | WELL @ 4798.00ft (Original Well) |
| Reference Site: | D Section 19 | MD Reference: | WELL @ 4798.00ft (Original Well) |
| Site Error: | 0.00 ft | North Reference: | Grid |
| Reference Well: | Independence D30-711 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.00 ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Independence D30-711 | Database: | EDMP |
| Reference Design: | Plan 1 | Offset TVD Reference: | Offset Datum |

| Summary | | | | | | |
|--|-------------------------------|----------------------------|-------------------------------|--------------------------------|-------------------|---------------------|
| Site Name | Reference Measured Depth (ft) | Offset Measured Depth (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Separation Factor | Warning |
| Offset Well - Wellbore - Design | | | | | | |
| D Section 17 | | | | | | |
| LDS D20-29D - Wellbore #1 - LDS D20-29D - As Drilled | 7,900.00 | 7,142.71 | 1,388.40 | 1,335.87 | 26.429 | SF |
| LDS D20-30D - Wellbore #1 - LDS D20-30D - As Drilled | 7,633.49 | 7,050.21 | 69.83 | 19.48 | 1.387 | Level 3, CC, ES, SF |
| LDS RED D17-11 (SI) - Wellbore #1 - No Surveys | 6,783.93 | 6,542.75 | 2,720.25 | 2,638.64 | 33.331 | CC |
| LDS RED D17-11 (SI) - Wellbore #1 - No Surveys | 6,800.00 | 6,557.52 | 2,720.38 | 2,638.59 | 33.262 | ES |
| LDS RED D17-11 (SI) - Wellbore #1 - No Surveys | 7,050.00 | 6,764.03 | 2,755.07 | 2,670.93 | 32.743 | SF |
| LDS Red D17-12 - Wellbore #1 - No Surveys | 6,631.40 | 6,400.52 | 1,753.90 | 1,673.75 | 21.883 | CC, ES |
| LDS Red D17-12 - Wellbore #1 - No Surveys | 6,800.00 | 6,560.52 | 1,775.13 | 1,693.08 | 21.633 | SF |
| LDS Red D17-14X (SI) - Wellbore #1 - No Surveys | 7,098.23 | 6,801.31 | 2,322.74 | 2,238.16 | 27.462 | CC |
| LDS Red D17-14X (SI) - Wellbore #1 - No Surveys | 7,100.00 | 6,802.48 | 2,322.74 | 2,238.15 | 27.458 | ES |
| LDS Red D17-14X (SI) - Wellbore #1 - No Surveys | 7,250.00 | 6,888.17 | 2,331.30 | 2,245.76 | 27.254 | SF |
| LDS Red D17-3J - Wellbore #1 - Gyro Surveys | 6,846.41 | 6,619.10 | 1,186.30 | 1,138.68 | 24.911 | CC |
| LDS Red D17-3J - Wellbore #1 - Gyro Surveys | 6,850.00 | 6,622.31 | 1,186.31 | 1,138.67 | 24.901 | ES |
| LDS Red D17-3J - Wellbore #1 - Gyro Surveys | 6,950.00 | 6,707.48 | 1,191.62 | 1,143.45 | 24.739 | SF |
| LDS White D17-1 - Wellbore #1 - Gyro Surveys | 6,722.79 | 6,418.43 | 6,286.54 | 6,239.89 | 134.768 | CC, ES |
| LDS White D17-1 - Wellbore #1 - Gyro Surveys | 7,150.00 | 6,831.61 | 6,383.52 | 6,334.61 | 130.508 | SF |
| LDS White D17-2 - Wellbore #1 - No Surveys | 6,689.95 | 6,444.11 | 5,363.16 | 5,282.60 | 66.573 | CC |
| LDS White D17-2 - Wellbore #1 - No Surveys | 6,700.00 | 6,453.74 | 5,363.22 | 5,282.54 | 66.478 | ES |
| LDS White D17-2 - Wellbore #1 - No Surveys | 7,100.00 | 6,788.48 | 5,465.56 | 5,381.07 | 64.688 | SF |
| LDS White D17-8 - Wellbore #1 - No Surveys | 6,796.94 | 6,542.72 | 5,438.52 | 5,356.88 | 66.611 | CC |
| LDS White D17-8 - Wellbore #1 - No Surveys | 6,800.00 | 6,545.52 | 5,438.53 | 5,356.85 | 66.584 | ES |
| LDS White D17-8 - Wellbore #1 - No Surveys | 7,200.00 | 6,846.73 | 5,511.52 | 5,426.43 | 64.773 | SF |
| Thomson D20-31D - Wellbore #1 - Gyro Surveys | 8,950.49 | 7,270.51 | 95.48 | 27.99 | 1.415 | Level 3, CC, ES, SF |
| Weeks 20-17 (SI) - Wellbore #1 - Gyro Surveys | 7,071.55 | 6,781.25 | 4,007.26 | 3,958.54 | 82.246 | CC, ES |
| Weeks 20-17 (SI) - Wellbore #1 - Gyro Surveys | 7,350.00 | 6,929.06 | 4,032.46 | 3,982.87 | 81.313 | SF |

Noble Energy, Inc.
Anticollision Summary Report

| | | | |
|---------------------------|----------------------------|-------------------------------------|----------------------------------|
| Company: | Northern Region - DJ Basin | Local Co-ordinate Reference: | Well Independence D30-711 |
| Project: | Mustang | TVD Reference: | WELL @ 4798.00ft (Original Well) |
| Reference Site: | D Section 19 | MD Reference: | WELL @ 4798.00ft (Original Well) |
| Site Error: | 0.00 ft | North Reference: | Grid |
| Reference Well: | Independence D30-711 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.00 ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Independence D30-711 | Database: | EDMP |
| Reference Design: | Plan 1 | Offset TVD Reference: | Offset Datum |

| Summary | | | | | | |
|---|-------------------------------|----------------------------|-------------------------------|--------------------------------|-------------------|---------|
| Site Name | Reference Measured Depth (ft) | Offset Measured Depth (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Separation Factor | Warning |
| D Section 18 | | | | | | |
| Horton D18-20D - Horton D18-20D - Horton D18-20D - A | 611.16 | 588.16 | 2,338.99 | 2,335.15 | 609.195 | CC |
| Horton D18-20D - Horton D18-20D - Horton D18-20D - A | 900.00 | 863.44 | 2,340.18 | 2,334.34 | 401.092 | ES |
| Horton D18-20D - Horton D18-20D - Horton D18-20D - A | 7,150.00 | 7,170.54 | 4,291.04 | 4,237.27 | 79.795 | SF |
| Horton D18-22D - Horton D18-22D - Horton D18-22D - A | 6,492.32 | 6,387.92 | 2,197.94 | 2,142.55 | 39.682 | CC |
| Horton D18-22D - Horton D18-22D - Horton D18-22D - A | 6,500.00 | 6,395.08 | 2,197.98 | 2,142.55 | 39.647 | ES |
| Horton D18-22D - Horton D18-22D - Horton D18-22D - A | 6,650.00 | 6,553.98 | 2,214.90 | 2,158.51 | 39.280 | SF |
| LSWD 1 - LSWD 1 - LSWD 1 - As Drilled | 6,484.66 | 6,306.70 | 4,981.62 | 4,902.50 | 62.963 | CC |
| LSWD 1 - LSWD 1 - LSWD 1 - As Drilled | 6,500.00 | 6,321.54 | 4,981.78 | 4,902.47 | 62.815 | ES |
| LSWD 1 - LSWD 1 - LSWD 1 - As Drilled | 6,950.00 | 6,739.55 | 5,119.57 | 5,035.37 | 60.800 | SF |
| Mick D18-03 - Mick D18-03 - Mick D18-03 - As Drilled | 6,500.62 | 6,462.13 | 5,112.60 | 5,066.08 | 109.891 | CC, ES |
| Mick D18-03 - Mick D18-03 - Mick D18-03 - As Drilled | 6,950.00 | 6,805.65 | 5,244.41 | 5,195.41 | 107.036 | SF |
| Mick D18-04 - Wellbore #1 - Wellbore #1 - As Drilled | 6,229.76 | 6,014.52 | 6,048.45 | 6,004.59 | 137.910 | CC |
| Mick D18-04 - Wellbore #1 - Wellbore #1 - As Drilled | 6,300.00 | 6,053.97 | 6,048.67 | 6,004.39 | 136.608 | ES |
| Mick D18-04 - Wellbore #1 - Wellbore #1 - As Drilled | 6,950.00 | 6,715.07 | 6,197.61 | 6,148.97 | 127.419 | SF |
| Mick D18-05 - Wellbore #1 - Wellbore #1 - As Drilled | 0.00 | 0.00 | 5,094.05 | | | |
| Mick D18-05 - Wellbore #1 - Wellbore #1 - As Drilled | 3,700.00 | 3,614.04 | 5,100.84 | 5,075.33 | 200.023 | ES |
| Mick D18-05 - Wellbore #1 - Wellbore #1 - As Drilled | 7,100.00 | 6,670.51 | 5,436.13 | 5,387.53 | 111.839 | SF |
| Mick D18-06 - Mick D18-06 - Mick D18-06 - As Drilled | 6,433.87 | 6,223.40 | 4,074.07 | 4,028.64 | 89.674 | CC, ES |
| Mick D18-06 - Mick D18-06 - Mick D18-06 - As Drilled | 6,800.00 | 6,540.16 | 4,150.48 | 4,102.73 | 86.921 | SF |
| Mick D18-11 - Mick D18-11 - Mick D18-11 - As Drilled | 3,154.74 | 3,174.39 | 3,021.73 | 2,999.80 | 137.772 | CC |
| Mick D18-11 - Mick D18-11 - Mick D18-11 - As Drilled | 3,200.00 | 3,204.37 | 3,021.86 | 2,999.66 | 136.118 | ES |
| Mick D18-11 - Mick D18-11 - Mick D18-11 - As Drilled | 6,850.00 | 6,559.00 | 3,347.57 | 3,299.92 | 70.252 | SF |
| Mick D18-12 - Wellbore #1 - Wellbore #1 - As Drilled | 1,171.19 | 1,181.29 | 3,970.97 | 3,963.04 | 501.057 | CC |
| Mick D18-12 - Wellbore #1 - Wellbore #1 - As Drilled | 1,500.00 | 1,499.14 | 3,971.09 | 3,960.88 | 388.718 | ES |
| Mick D18-12 - Wellbore #1 - Wellbore #1 - As Drilled | 6,900.00 | 6,611.41 | 4,473.83 | 4,425.89 | 93.321 | SF |
| Mick D18-13 - Wellbore #1 - Wellbore #1 - As Drilled | 0.00 | 3.85 | 3,528.60 | | | |
| Mick D18-13 - Wellbore #1 - Wellbore #1 - As Drilled | 2,300.00 | 2,335.87 | 3,539.39 | 3,523.39 | 221.153 | ES |
| Mick D18-13 - Wellbore #1 - Wellbore #1 - As Drilled | 7,350.00 | 7,065.81 | 4,408.47 | 4,358.32 | 87.914 | SF |
| Mick D18-14 - Mick D18-14 - Mick D18-14 - As Drilled | 2,296.94 | 2,322.93 | 2,394.68 | 2,378.71 | 149.941 | CC |
| Mick D18-14 - Mick D18-14 - Mick D18-14 - As Drilled | 2,400.00 | 2,429.87 | 2,395.32 | 2,378.61 | 143.345 | ES |
| Mick D18-14 - Mick D18-14 - Mick D18-14 - As Drilled | 7,250.00 | 6,858.64 | 3,187.93 | 3,138.71 | 64.763 | SF |
| Mick D18-19 - Mick D18-19 - Mick D18-19 - As Drilled | 6,449.96 | 6,295.25 | 5,006.72 | 4,960.97 | 109.434 | CC |
| Mick D18-19 - Mick D18-19 - Mick D18-19 - As Drilled | 6,450.00 | 6,295.29 | 5,006.72 | 4,960.97 | 109.433 | ES |
| Mick D18-19 - Mick D18-19 - Mick D18-19 - As Drilled | 6,900.00 | 6,568.51 | 5,124.30 | 5,076.23 | 106.595 | SF |
| Mick D18-25 - Mick D18-25 - Mick D18-25 - As Drilled | 2,499.45 | 2,533.00 | 3,141.66 | 3,124.10 | 178.886 | CC |
| Mick D18-25 - Mick D18-25 - Mick D18-25 - As Drilled | 2,600.00 | 2,634.32 | 3,142.04 | 3,123.78 | 172.054 | ES |
| Mick D18-25 - Mick D18-25 - Mick D18-25 - As Drilled | 7,100.00 | 7,100.00 | 3,769.07 | 3,719.05 | 75.352 | SF |
| Scooter D18-02 - Scooter D18-02 - Scooter D18-02 - As | 6,513.22 | 6,355.15 | 4,380.54 | 4,334.34 | 94.815 | CC, ES |
| Scooter D18-02 - Scooter D18-02 - Scooter D18-02 - As | 6,850.00 | 6,593.84 | 4,463.10 | 4,415.03 | 92.843 | SF |
| Scooter D18-07 - Scooter D18-07 - Scooter D18-07 - As | 6,510.77 | 6,459.32 | 3,247.32 | 3,200.82 | 69.831 | CC, ES |
| Scooter D18-07 - Scooter D18-07 - Scooter D18-07 - As | 6,800.00 | 6,714.71 | 3,302.64 | 3,254.31 | 68.341 | SF |
| Scooter D18-10 - Scooter D18-10 - Scooter D18-10 - As | 5,361.18 | 5,214.46 | 2,105.81 | 2,068.26 | 56.072 | CC |
| Scooter D18-10 - Scooter D18-10 - Scooter D18-10 - As | 5,500.00 | 5,341.32 | 2,106.32 | 2,067.77 | 54.646 | ES |
| Scooter D18-10 - Scooter D18-10 - Scooter D18-10 - As | 6,700.00 | 6,494.45 | 2,184.21 | 2,137.01 | 46.280 | SF |
| Scooter D18-15 - Scooter D18-15 - Scooter D18-15 - As | 2,414.96 | 2,388.50 | 1,273.18 | 1,256.60 | 76.780 | CC |
| Scooter D18-15 - Scooter D18-15 - Scooter D18-15 - As | 2,800.00 | 2,756.10 | 1,274.99 | 1,255.77 | 66.343 | ES |
| Scooter D18-15 - Scooter D18-15 - Scooter D18-15 - As | 6,900.00 | 6,714.29 | 1,762.05 | 1,713.79 | 36.510 | SF |
| Scooter D18-16 - Scooter D18-16 - Scooter D18-16 - As | 5,785.96 | 5,598.73 | 364.19 | 294.12 | 5.197 | CC |
| Scooter D18-16 - Scooter D18-16 - Scooter D18-16 - As | 5,800.00 | 5,612.06 | 364.21 | 293.98 | 5.185 | ES |
| Scooter D18-16 - Scooter D18-16 - Scooter D18-16 - As | 6,000.00 | 5,801.97 | 370.32 | 297.69 | 5.099 | SF |
| Scooter D18-17 JI - Scooter D18-17 JI - Scooter D18-17 | 6,531.89 | 6,467.49 | 3,441.50 | 3,387.39 | 63.601 | CC, ES |
| Scooter D18-17 JI - Scooter D18-17 JI - Scooter D18-17 | 6,750.00 | 6,689.39 | 3,476.37 | 3,421.04 | 62.829 | SF |
| Scooter D18-1JI - Scooter D18-1JI - Scooter D18-1JI - A | 6,559.77 | 6,672.78 | 3,804.53 | 3,707.80 | 39.331 | CC, 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 - DJ Basin | Local Co-ordinate Reference: | Well Independence D30-711 |
| Project: | Mustang | TVD Reference: | WELL @ 4798.00ft (Original Well) |
| Reference Site: | D Section 19 | MD Reference: | WELL @ 4798.00ft (Original Well) |
| Site Error: | 0.00 ft | North Reference: | Grid |
| Reference Well: | Independence D30-711 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.00 ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Independence D30-711 | Database: | EDMP |
| Reference Design: | Plan 1 | Offset TVD Reference: | Offset Datum |

| Summary | | | | | | |
|--|-------------------------------|----------------------------|-------------------------------|--------------------------------|-------------------|---------|
| Site Name | Reference Measured Depth (ft) | Offset Measured Depth (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Separation Factor | Warning |
| D Section 18 | | | | | | |
| Scooter D18-1JI - Scooter D18-1JI - Scooter D18-1JI - A | 6,650.00 | 6,762.31 | 3,810.91 | 3,713.74 | 39.217 | SF |
| Scooter D18-4J - Scooter D18-4J - Scooter D18-4J - As | 6,465.77 | 6,255.90 | 1,219.36 | 1,173.71 | 26.709 | CC, ES |
| Scooter D18-4J - Scooter D18-4J - Scooter D18-4J - As | 6,600.00 | 6,378.32 | 1,230.93 | 1,184.35 | 26.427 | SF |
| Scooter D18-78-1HN - Original Drilling - Original Drilling - | 6,446.36 | 6,233.19 | 5,974.68 | 5,930.50 | 135.241 | CC |
| Scooter D18-78-1HN - Original Drilling - Original Drilling - | 6,450.00 | 6,235.56 | 5,974.69 | 5,930.50 | 135.196 | ES |
| Scooter D18-78-1HN - Original Drilling - Original Drilling - | 6,800.00 | 6,590.72 | 6,050.90 | 6,005.51 | 133.301 | SF |
| Scooter D18-78-1HN - Original Drilling - ST01 - Original D | 6,239.64 | 11,297.00 | 3,911.75 | 3,811.04 | 38.841 | CC |
| Scooter D18-78-1HN - Original Drilling - ST01 - Original D | 6,300.00 | 11,297.00 | 3,912.21 | 3,811.02 | 38.661 | ES |
| Scooter D18-78-1HN - Original Drilling - ST01 - Original D | 6,850.00 | 11,297.00 | 3,956.08 | 3,851.78 | 37.930 | SF |
| Scooter D18-79-1HN - Original Drilling - Original Drilling - | 5,986.47 | 11,265.00 | 4,527.61 | 4,427.23 | 45.103 | CC |
| Scooter D18-79-1HN - Original Drilling - Original Drilling - | 6,000.00 | 11,265.00 | 4,527.63 | 4,427.15 | 45.059 | ES |
| Scooter D18-79-1HN - Original Drilling - Original Drilling - | 6,850.00 | 11,265.00 | 4,606.50 | 4,501.43 | 43.843 | SF |
| Scooter D18-79HN - Original Drilling - Original Drilling - A | 6,024.76 | 11,410.00 | 4,967.39 | 4,866.85 | 49.406 | CC, ES |
| Scooter D18-79HN - Original Drilling - Original Drilling - A | 7,000.00 | 11,410.00 | 5,055.07 | 4,949.45 | 47.860 | SF |
| Scooter D18-8JI - Scooter D18-8JI - Scooter D18-8JI - A | 464.83 | 383.83 | 1,927.52 | 1,924.92 | 741.370 | CC |
| Scooter D18-8JI - Scooter D18-8JI - Scooter D18-8JI - A | 700.00 | 601.25 | 1,928.33 | 1,924.13 | 458.982 | ES |
| Scooter D18-8JI - Scooter D18-8JI - Scooter D18-8JI - A | 6,750.00 | 6,704.27 | 2,780.53 | 2,728.71 | 53.650 | SF |
| Scooter D18-9JI - Scooter D18-9JI - Scooter D18-9JI - A | 6,544.41 | 6,334.31 | 1,567.81 | 1,519.52 | 32.466 | CC |
| Scooter D18-9JI - Scooter D18-9JI - Scooter D18-9JI - A | 6,550.00 | 6,339.83 | 1,567.83 | 1,519.50 | 32.439 | ES |
| Scooter D18-9JI - Scooter D18-9JI - Scooter D18-9JI - A | 6,700.00 | 6,486.03 | 1,586.63 | 1,537.28 | 32.151 | SF |
| Shianne D18-29D - Shianne D18-29D - Shianne D18-29D | 555.83 | 562.84 | 5,522.01 | 5,518.46 | 1,553.494 | CC |
| Shianne D18-29D - Shianne D18-29D - Shianne D18-29D | 1,700.00 | 1,665.58 | 5,525.08 | 5,513.58 | 480.336 | ES |
| Shianne D18-29D - Shianne D18-29D - Shianne D18-29D | 6,950.00 | 6,824.28 | 5,965.85 | 5,916.15 | 120.025 | SF |

Noble Energy, Inc.
Anticollision Summary Report

| | | | |
|---------------------------|----------------------------|-------------------------------------|----------------------------------|
| Company: | Northern Region - DJ Basin | Local Co-ordinate Reference: | Well Independence D30-711 |
| Project: | Mustang | TVD Reference: | WELL @ 4798.00ft (Original Well) |
| Reference Site: | D Section 19 | MD Reference: | WELL @ 4798.00ft (Original Well) |
| Site Error: | 0.00 ft | North Reference: | Grid |
| Reference Well: | Independence D30-711 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.00 ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Independence D30-711 | Database: | EDMP |
| Reference Design: | Plan 1 | Offset TVD Reference: | Offset Datum |

| Summary | | | | | | |
|---|-------------------------------|----------------------------|-------------------------------|--------------------------------|-------------------|---------|
| Site Name | Reference Measured Depth (ft) | Offset Measured Depth (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Separation Factor | Warning |
| D Section 19 | | | | | | |
| Butterball 13-19 - Butterball 13-19 - Butterball 13-19 - As | 10,814.00 | 7,104.14 | 4,314.23 | 4,252.00 | 69.335 | CC, ES |
| Butterball 13-19 - Butterball 13-19 - Butterball 13-19 - As | 12,000.00 | 7,012.82 | 4,474.32 | 4,406.97 | 66.437 | SF |
| Butterball 14-19 - Butterball 14-19 - Butterball 14-19 - As | 12,163.17 | 7,124.35 | 4,217.75 | 4,146.55 | 59.239 | CC |
| Butterball 14-19 - Butterball 14-19 - Butterball 14-19 - As | 12,200.00 | 7,124.31 | 4,217.91 | 4,146.50 | 59.065 | ES |
| Butterball 14-19 - Butterball 14-19 - Butterball 14-19 - As | 13,100.00 | 7,123.41 | 4,320.54 | 4,244.70 | 56.966 | SF |
| Butterball 23-19 - Butterball 23-19 - Butterball 23-19 - As | 10,868.13 | 7,055.81 | 3,161.18 | 3,098.74 | 50.629 | CC, ES |
| Butterball 23-19 - Butterball 23-19 - Butterball 23-19 - As | 11,500.00 | 7,055.89 | 3,223.71 | 3,158.59 | 49.503 | SF |
| Butterball B04-19 - Butterball B04-19 - Butterball B04-19 | 11,507.21 | 7,050.09 | 4,772.42 | 4,706.00 | 71.860 | CC, ES |
| Butterball B04-19 - Butterball B04-19 - Butterball B04-19 | 12,800.00 | 7,050.57 | 4,944.42 | 4,871.61 | 67.909 | SF |
| Butterball D18-75HN - Original Drilling - Original Drilling - | 0.00 | 0.00 | 969.37 | | | |
| Butterball D18-75HN - Original Drilling - Original Drilling - | 2,112.69 | 2,110.92 | 972.83 | 959.29 | 71.809 | ES |
| Butterball D18-75HN - Original Drilling - Original Drilling - | 6,850.00 | 7,118.34 | 2,400.39 | 2,349.53 | 47.200 | SF |
| Butterball D19-17D - Butterball D19-17D - Butterball D19 | 8,575.37 | 7,585.64 | 1,024.26 | 968.59 | 18.399 | CC |
| Butterball D19-17D - Butterball D19-17D - Butterball D19 | 8,600.00 | 7,585.44 | 1,024.55 | 968.52 | 18.284 | ES |
| Butterball D19-17D - Butterball D19-17D - Butterball D19 | 9,400.00 | 7,578.69 | 1,314.94 | 1,198.13 | 11.257 | SF |
| Butterball D19-18D - Butterball D19-18D - Butterball D19 | 2,949.01 | 3,528.91 | 2,241.53 | 2,217.57 | 93.530 | CC, ES |
| Butterball D19-18D - Butterball D19-18D - Butterball D19 | 9,100.00 | 7,080.86 | 2,836.13 | 2,782.73 | 53.108 | SF |
| Butterball D19-19D - Butterball D19-19D - Butterball D19 | 742.72 | 734.74 | 2,628.38 | 2,623.56 | 544.881 | CC |
| Butterball D19-19D - Butterball D19-19D - Butterball D19 | 800.00 | 781.19 | 2,628.50 | 2,623.31 | 506.277 | ES |
| Butterball D19-19D - Butterball D19-19D - Butterball D19 | 10,100.00 | 7,074.29 | 3,913.13 | 3,853.94 | 66.116 | SF |
| Butterball D19-20D - Butterball D19-20D - Butterball D19 | 10,112.82 | 7,143.64 | 3,664.26 | 3,604.54 | 61.351 | CC, ES |
| Butterball D19-20D - Butterball D19-20D - Butterball D19 | 10,800.00 | 7,140.08 | 3,728.14 | 3,666.40 | 60.381 | SF |
| Butterball D19-22D - Wellbore #1 - Wellbore #1 - As Drill | 10,095.00 | 7,067.63 | 1,285.06 | 1,225.01 | 21.401 | CC |
| Butterball D19-22D - Wellbore #1 - Wellbore #1 - As Drill | 10,100.00 | 7,067.57 | 1,285.07 | 1,224.99 | 21.389 | ES |
| Butterball D19-22D - Wellbore #1 - Wellbore #1 - As Drill | 10,200.00 | 7,066.31 | 1,289.34 | 1,228.62 | 21.235 | SF |
| Butterball D19-75HN - Original Drilling - Original Drilling - | 0.00 | 0.00 | 991.71 | | | |
| Butterball D19-75HN - Original Drilling - Original Drilling - | 400.00 | 394.04 | 992.71 | 990.82 | 526.970 | ES |
| Butterball D19-75HN - Original Drilling - Original Drilling - | 12,900.00 | 12,900.00 | 2,453.41 | 2,292.06 | 15.206 | SF |
| Butterball D24-19 - Butterball D24-19 - Butterball D24-19 | 12,108.71 | 7,098.24 | 3,168.43 | 3,097.82 | 44.873 | CC, ES |
| Butterball D24-19 - Butterball D24-19 - Butterball D24-19 | 12,600.00 | 7,103.83 | 3,206.29 | 3,133.36 | 43.964 | SF |
| Butterball H24-69HN - Original Drilling - Original Drilling - | 2,469.70 | 2,536.81 | 914.86 | 897.03 | 51.321 | CC |
| Butterball H24-69HN - Original Drilling - Original Drilling - | 2,500.00 | 2,562.16 | 915.01 | 896.95 | 50.661 | ES |
| Butterball H24-69HN - Original Drilling - Original Drilling - | 6,300.00 | 6,181.18 | 1,649.27 | 1,605.64 | 37.797 | SF |
| Champlin 366 Amoco F 1 - Wellbore #1 - Wellbore #1 - A | 11,206.28 | 6,990.44 | 1,297.54 | 1,233.31 | 20.200 | CC, ES |
| Champlin 366 Amoco F 1 - Wellbore #1 - Wellbore #1 - A | 11,300.00 | 6,990.09 | 1,300.93 | 1,236.44 | 20.175 | SF |
| Dechant D19-32D - Dechant D19-32D - Dechant D19-32 | 333.17 | 324.18 | 2,648.41 | 2,646.49 | 1,378.356 | CC |
| Dechant D19-32D - Dechant D19-32D - Dechant D19-32 | 400.00 | 370.89 | 2,648.67 | 2,646.34 | 1,139.485 | ES |
| Dechant D19-32D - Dechant D19-32D - Dechant D19-32 | 12,400.00 | 7,650.20 | 5,557.06 | 5,425.35 | 42.190 | SF |
| Graznak 01-19 - Graznak 01-19 - Graznak 01-19 - As Dr | 11,551.90 | 6,993.00 | 4,024.76 | 3,921.57 | 39.003 | CC, ES |
| Graznak 01-19 - Graznak 01-19 - Graznak 01-19 - As Dr | 12,200.00 | 6,993.00 | 4,076.61 | 3,970.14 | 38.290 | SF |
| Higgins D19-720 - Original Drilling - Original Drilling - As | 4,250.50 | 4,238.89 | 258.40 | 230.98 | 9.426 | CC, ES |
| Higgins D19-720 - Original Drilling - Original Drilling - As | 4,400.00 | 4,376.23 | 265.03 | 236.47 | 9.279 | SF |
| Higgins D19-720 - Sidetrack Curve/Horizontal - ST01 - A | 4,250.50 | 4,238.89 | 258.40 | 230.98 | 9.426 | CC, ES |
| Higgins D19-720 - Sidetrack Curve/Horizontal - ST01 - A | 12,300.00 | 11,630.46 | 744.46 | 656.32 | 8.447 | SF |
| Independence D18-712 - Independence D18-712 - Plan 1 | 7,399.34 | 7,510.29 | 92.10 | 40.28 | 1.777 | CC |
| Independence D18-712 - Independence D18-712 - Plan 1 | 7,400.00 | 7,509.66 | 92.10 | 40.28 | 1.777 | ES, SF |
| Independence D18-717 - Independence D18-717 - Plan 1 | 2,200.00 | 2,202.00 | 151.03 | 135.71 | 9.862 | CC, ES |
| Independence D18-717 - Independence D18-717 - Plan 1 | 6,953.12 | 7,646.71 | 428.81 | 378.23 | 8.477 | SF |
| Independence D18-725 - Independence D18-725 - Plan 1 | 2,200.00 | 2,202.00 | 156.72 | 141.41 | 10.234 | CC, ES |
| Independence D18-725 - Independence D18-725 - Plan 1 | 2,400.00 | 2,401.84 | 163.06 | 146.32 | 9.740 | SF |
| Independence D18-732 - Independence D18-732 - Plan 1 | 2,200.00 | 2,202.00 | 164.88 | 149.57 | 10.767 | CC, ES |
| Independence D18-732 - Independence D18-732 - Plan 1 | 2,400.00 | 2,401.84 | 171.54 | 154.79 | 10.246 | SF |
| Independence D18-739 - Independence D18-739 - Plan 1 | 2,200.00 | 2,201.00 | 175.50 | 160.19 | 11.463 | CC, 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 - DJ Basin | Local Co-ordinate Reference: | Well Independence D30-711 |
| Project: | Mustang | TVD Reference: | WELL @ 4798.00ft (Original Well) |
| Reference Site: | D Section 19 | MD Reference: | WELL @ 4798.00ft (Original Well) |
| Site Error: | 0.00 ft | North Reference: | Grid |
| Reference Well: | Independence D30-711 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.00 ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Independence D30-711 | Database: | EDMP |
| Reference Design: | Plan 1 | Offset TVD Reference: | Offset Datum |

| Summary | | | | | | |
|--|-------------------------------|----------------------------|-------------------------------|--------------------------------|-------------------|-------------|
| Site Name | Reference Measured Depth (ft) | Offset Measured Depth (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Separation Factor | Warning |
| D Section 19 | | | | | | |
| Independence D18-739 - Independence D18-739 - Plan 1 | 2,400.00 | 2,396.49 | 183.55 | 166.84 | 10.986 | SF |
| Independence D18-744 - Independence D18-744 - Plan 1 | 2,200.00 | 2,200.00 | 188.20 | 172.89 | 12.295 | CC, ES |
| Independence D18-744 - Independence D18-744 - Plan 1 | 2,300.00 | 2,295.23 | 191.18 | 175.19 | 11.956 | SF |
| Independence D18-759 - Independence D18-759 - Plan 1 | 2,644.71 | 2,944.21 | 2,393.81 | 2,374.47 | 123.831 | CC, ES |
| Independence D18-759 - Independence D18-759 - Plan 1 | 6,750.00 | 7,760.59 | 2,767.07 | 2,716.45 | 54.666 | SF |
| Independence D18-767 - Independence D18-767 - Plan 1 | 2,200.00 | 2,219.00 | 2,440.62 | 2,425.24 | 158.741 | CC, ES |
| Independence D18-767 - Independence D18-767 - Plan 1 | 6,800.00 | 7,732.07 | 3,348.87 | 3,298.78 | 66.858 | SF |
| Independence D30-718 - Independence D30-718 - Plan 1 | 2,200.00 | 2,199.00 | 22.34 | 7.04 | 1.460 | Level 3, CC |
| Independence D30-718 - Independence D30-718 - Plan 1 | 2,300.00 | 2,299.40 | 22.65 | 6.64 | 1.414 | Level 3, ES |
| Independence D30-718 - Independence D30-718 - Plan 1 | 2,400.00 | 2,399.79 | 23.56 | 6.85 | 1.410 | Level 3, SF |
| Independence D30-724 - Independence D30-724 - Plan 1 | 2,200.00 | 2,198.00 | 44.68 | 29.38 | 2.920 | CC, ES |
| Independence D30-724 - Independence D30-724 - Plan 1 | 2,300.00 | 2,298.27 | 45.57 | 29.56 | 2.846 | SF |
| Independence D30-731 - Independence D30-731 - Plan 1 | 2,200.00 | 2,199.00 | 67.02 | 51.72 | 4.380 | CC, ES |
| Independence D30-731 - Independence D30-731 - Plan 1 | 2,300.00 | 2,298.69 | 68.43 | 52.41 | 4.273 | SF |
| Independence D30-737 - Independence D30-737 - Plan 1 | 2,200.00 | 2,201.00 | 89.36 | 74.05 | 5.837 | CC, ES |
| Independence D30-737 - Independence D30-737 - Plan 1 | 2,300.00 | 2,299.39 | 91.44 | 75.42 | 5.710 | SF |
| Independence D30-743 - Independence D30-743 - Plan 1 | 2,200.00 | 2,203.00 | 111.70 | 96.39 | 7.293 | CC, ES |
| Independence D30-743 - Independence D30-743 - Plan 1 | 2,300.00 | 2,300.30 | 114.11 | 98.10 | 7.125 | SF |
| Independence D30-758 - Independence D30-758 - Plan 1 | 2,625.72 | 2,906.63 | 2,408.61 | 2,389.39 | 125.301 | CC |
| Independence D30-758 - Independence D30-758 - Plan 1 | 2,700.00 | 3,004.90 | 2,408.77 | 2,388.96 | 121.581 | ES |
| Independence D30-758 - Independence D30-758 - Plan 1 | 18,060.85 | 17,826.93 | 2,912.97 | 2,732.68 | 16.157 | SF |
| Independence D30-765 - Independence D30-765 - Plan 1 | 2,203.46 | 2,224.50 | 2,432.83 | 2,417.42 | 157.907 | CC, ES |
| Independence D30-765 - Independence D30-765 - Plan 1 | 18,060.85 | 17,945.53 | 3,372.01 | 3,191.05 | 18.634 | SF |
| Independence D30-770 - Independence D30-770 - Plan 1 | 2,108.85 | 2,127.85 | 2,455.24 | 2,440.52 | 166.781 | CC |
| Independence D30-770 - Independence D30-770 - Plan 1 | 2,200.00 | 2,215.72 | 2,455.26 | 2,439.89 | 159.817 | ES |
| Independence D30-770 - Independence D30-770 - Plan 1 | 18,060.85 | 17,778.75 | 3,717.37 | 3,536.62 | 20.566 | SF |
| Independence D30-777 - Independence D30-777 - Plan 1 | 2,108.85 | 2,127.85 | 2,477.58 | 2,462.86 | 168.299 | CC |
| Independence D30-777 - Independence D30-777 - Plan 1 | 2,200.00 | 2,213.14 | 2,477.60 | 2,462.25 | 161.370 | ES |
| Independence D30-777 - Independence D30-777 - Plan 1 | 18,060.85 | 17,817.32 | 4,165.92 | 3,985.15 | 23.046 | SF |
| Independence State D30-784 - Independence State D30 | 2,108.85 | 2,127.85 | 2,499.92 | 2,485.20 | 169.816 | CC |
| Independence State D30-784 - Independence State D30 | 2,200.00 | 2,200.00 | 2,499.99 | 2,484.68 | 163.330 | ES |
| Independence State D30-784 - Independence State D30 | 18,060.85 | 18,059.95 | 4,669.24 | 4,487.90 | 25.749 | SF |
| LDS White D19-10 - LDS White D19-10 - LDS White D19 | 10,768.04 | 6,995.23 | 2,108.79 | 2,047.24 | 34.264 | CC, ES |
| LDS White D19-10 - LDS White D19-10 - LDS White D19 | 11,000.00 | 6,995.14 | 2,121.51 | 2,059.10 | 33.994 | SF |
| LDS White D19-15 - LDS White D19-15 - LDS White D19 | 12,181.64 | 6,972.93 | 2,044.42 | 1,973.91 | 28.993 | CC |
| LDS White D19-15 - LDS White D19-15 - LDS White D19 | 12,200.00 | 6,973.14 | 2,044.50 | 1,973.90 | 28.958 | ES |
| LDS White D19-15 - LDS White D19-15 - LDS White D19 | 12,400.00 | 6,975.35 | 2,056.05 | 1,984.65 | 28.796 | SF |
| LDS White D19-16 - Wellbore #1 - As Drilled | 12,146.51 | 7,008.30 | 753.00 | 682.53 | 10.685 | CC, ES, SF |
| Mile High 02-19 - Wellbore #1 - Wellbore #1 - As Drilled | 358.77 | 333.77 | 1,473.32 | 1,471.27 | 720.826 | CC |
| Mile High 02-19 - Wellbore #1 - Wellbore #1 - As Drilled | 2,249.46 | 2,248.73 | 1,477.89 | 1,462.38 | 95.308 | ES |
| Mile High 02-19 - Wellbore #1 - Wellbore #1 - As Drilled | 9,300.00 | 6,997.19 | 1,600.13 | 1,546.34 | 29.745 | SF |
| Sean D19-09 - Wellbore #1 - Wellbore #1 - As Drilled | 10,678.10 | 6,983.00 | 435.51 | 259.13 | 2.469 | CC, ES, SF |
| Turk Blue D19-02J - Turk Blue D19-02J - Turk Blue D19- | 278.76 | 267.76 | 2,669.12 | 2,667.59 | 1,746.684 | CC |
| Turk Blue D19-02J - Turk Blue D19-02J - Turk Blue D19- | 2,215.91 | 2,217.63 | 2,675.75 | 2,660.47 | 175.089 | ES |
| Turk Blue D19-02J - Turk Blue D19-02J - Turk Blue D19- | 9,200.00 | 7,010.05 | 3,657.80 | 3,604.79 | 69.006 | SF |
| Turk Blue D19-04 - Turk Blue D19-04 - Turk Blue D19-04 | 2,268.96 | 2,338.66 | 3,511.58 | 3,495.67 | 220.628 | CC |
| Turk Blue D19-04 - Turk Blue D19-04 - Turk Blue D19-04 | 2,300.00 | 2,374.32 | 3,511.69 | 3,495.53 | 217.424 | ES |
| Turk Blue D19-04 - Turk Blue D19-04 - Turk Blue D19-04 | 9,100.00 | 7,002.68 | 4,576.77 | 4,524.28 | 87.182 | SF |
| Turk Blue D19-05 - Turk Blue D19-05 - Turk Blue D19-05 | 681.97 | 672.98 | 4,066.09 | 4,061.69 | 925.516 | CC |
| Turk Blue D19-05 - Turk Blue D19-05 - Turk Blue D19-05 | 2,200.00 | 2,174.25 | 4,072.55 | 4,057.48 | 270.236 | ES |
| Turk Blue D19-05 - Turk Blue D19-05 - Turk Blue D19-05 | 11,000.00 | 7,089.96 | 4,611.90 | 4,550.34 | 74.911 | SF |
| Turk Blue D19-06 - Turk Blue D19-06 - Turk Blue D19-06 | 643.05 | 620.06 | 2,848.54 | 2,844.48 | 700.812 | CC |
| Turk Blue D19-06 - Turk Blue D19-06 - Turk Blue D19-06 | 2,214.98 | 2,212.64 | 2,848.66 | 2,833.40 | 186.723 | 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 - DJ Basin | Local Co-ordinate Reference: | Well Independence D30-711 |
| Project: | Mustang | TVD Reference: | WELL @ 4798.00ft (Original Well) |
| Reference Site: | D Section 19 | MD Reference: | WELL @ 4798.00ft (Original Well) |
| Site Error: | 0.00 ft | North Reference: | Grid |
| Reference Well: | Independence D30-711 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.00 ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Independence D30-711 | Database: | EDMP |
| Reference Design: | Plan 1 | Offset TVD Reference: | Offset Datum |

Summary

| Site Name | Reference Measured Depth (ft) | Offset Measured Depth (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Separation Factor | Warning |
|--|--|-------------------------------------|--|---|----------------------|---------------------|
| Offset Well - Wellbore - Design | | | | | | |
| D Section 19 | | | | | | |
| Turk Blue D19-06 - Turk Blue D19-06 | 10,200.00 | 6,997.37 | 3,221.12 | 3,163.62 | 56.013 | SF |
| Turk White D19-01 - Wellbore #1 - As Drill | 8,158.70 | 6,982.06 | 461.87 | 411.41 | 9.154 | CC, ES, SF |
| Turk White D19-02 - Wellbore #1 - As Drill | 100.00 | 61.28 | 971.73 | 971.50 | 4,165.199 | CC, ES |
| Turk White D19-02 - Wellbore #1 - As Drill | 8,100.00 | 7,014.42 | 1,919.05 | 1,868.57 | 38.014 | SF |
| Turk White D19-08 - Wellbore #1 - As Drill | 9,639.71 | 6,981.32 | 577.02 | 521.63 | 10.418 | CC, ES, SF |
| D Section 20 | | | | | | |
| Bohlender D20-2J - Wellbore #1 - No Surveys | 9,150.53 | 6,978.00 | 1,052.12 | 962.13 | 11.692 | CC, ES |
| Bohlender D20-2J - Wellbore #1 - No Surveys | 9,200.00 | 6,978.00 | 1,053.28 | 963.00 | 11.666 | SF |
| Bohlender D20-3 - Wellbore #1 - Gyro Surveys | 8,131.76 | 6,987.90 | 1,977.07 | 1,927.03 | 39.510 | CC, ES |
| Bohlender D20-3 - Wellbore #1 - Gyro Surveys | 8,400.00 | 6,988.82 | 1,995.18 | 1,944.44 | 39.323 | SF |
| Bohlender D20-4 (P&A) - Wellbore #1 - No Surveys | 8,011.64 | 6,980.00 | 619.70 | 454.08 | 3.742 | CC, ES, SF |
| Bohlender D20-6 - Wellbore#1 - Gyro Surveys | 9,475.64 | 6,965.73 | 2,012.21 | 1,957.68 | 36.901 | CC, ES |
| Bohlender D20-6 - Wellbore#1 - Gyro Surveys | 9,900.00 | 6,961.11 | 2,056.47 | 1,999.55 | 36.128 | SF |
| Butterball D19-27D - Butterball D19-27D - Butterball D19 | 4,200.00 | 4,247.86 | 179.39 | 124.46 | 3.266 | ES, SF |
| Butterball D19-27D - Butterball D19-27D - Butterball D19 | 4,227.45 | 4,270.00 | 178.69 | 124.48 | 3.296 | CC |
| Duncan D20-1 (P&A) - Wellbore #1 - No Surveys | 8,035.45 | 6,979.00 | 4,790.05 | 4,624.41 | 28.919 | CC, ES |
| Duncan D20-1 (P&A) - Wellbore #1 - No Surveys | 8,400.00 | 6,979.00 | 4,803.90 | 4,637.48 | 28.866 | SF |
| Duncan D20-10 - Wellbore #1 - Gyro Surveys | 11,163.16 | 6,974.95 | 3,649.92 | 3,585.99 | 57.087 | CC |
| Duncan D20-10 - Wellbore #1 - Gyro Surveys | 11,200.00 | 6,975.04 | 3,650.11 | 3,585.90 | 56.850 | ES |
| Duncan D20-10 - Wellbore #1 - Gyro Surveys | 12,200.00 | 6,977.51 | 3,794.34 | 3,723.62 | 53.659 | SF |
| Duncan D20-11 (SI) - Wellbore #1 - No Surveys | 10,757.84 | 6,985.00 | 2,095.15 | 1,997.00 | 21.346 | CC, ES |
| Duncan D20-11 (SI) - Wellbore #1 - No Surveys | 11,000.00 | 6,985.00 | 2,109.10 | 2,009.20 | 21.111 | SF |
| Duncan D20-12 (SI) - Wellbore #1 - No Surveys | 10,809.41 | 6,983.00 | 718.38 | 619.94 | 7.298 | CC, ES |
| Duncan D20-12 (SI) - Wellbore #1 - No Surveys | 10,900.00 | 6,983.00 | 724.07 | 624.78 | 7.292 | SF |
| Duncan D20-13 (SI) - Wellbore #1 - No Surveys | 12,345.69 | 6,988.00 | 691.19 | 582.70 | 6.371 | CC, ES |
| Duncan D20-13 (SI) - Wellbore #1 - No Surveys | 12,400.00 | 6,988.00 | 693.32 | 584.22 | 6.355 | SF |
| Duncan D20-14 (SI) - Wellbore #1 - Gyro Surveys | 11,806.28 | 6,917.83 | 1,712.45 | 1,644.35 | 25.146 | CC, ES |
| Duncan D20-14 (SI) - Wellbore #1 - Gyro Surveys | 12,100.00 | 6,923.24 | 1,737.45 | 1,667.09 | 24.692 | SF |
| Duncan D20-15 (P&A) - Wellbore #1 - Gyro Surveys | 12,150.25 | 6,971.65 | 3,185.27 | 3,114.99 | 45.320 | CC |
| Duncan D20-15 (P&A) - Wellbore #1 - Gyro Surveys | 12,200.00 | 6,971.39 | 3,185.66 | 3,114.98 | 45.068 | ES |
| Duncan D20-15 (P&A) - Wellbore #1 - Gyro Surveys | 12,900.00 | 6,967.68 | 3,272.32 | 3,196.80 | 43.332 | SF |
| Duncan D20-16 (SI) - Wellbore #1 - Gyro Surveys | 12,164.01 | 6,900.00 | 4,829.24 | 4,758.90 | 68.659 | CC |
| Duncan D20-16 (SI) - Wellbore #1 - Gyro Surveys | 12,200.00 | 6,900.00 | 4,829.37 | 4,758.76 | 68.391 | ES |
| Duncan D20-16 (SI) - Wellbore #1 - Gyro Surveys | 13,800.00 | 6,900.00 | 5,098.82 | 5,017.74 | 62.884 | SF |
| Duncan D20-2 - Wellbore #1 - Gyro Surveys | 8,134.11 | 6,971.89 | 3,362.65 | 3,312.62 | 67.212 | CC, ES |
| Duncan D20-2 - Wellbore #1 - Gyro Surveys | 9,000.00 | 6,979.39 | 3,472.34 | 3,419.66 | 65.911 | SF |
| Duncan D20-7 - Wellbore #1 - Gyro Surveys | 9,149.63 | 6,978.34 | 3,649.42 | 3,596.15 | 68.507 | CC, ES |
| Duncan D20-7 - Wellbore #1 - Gyro Surveys | 10,400.00 | 6,972.81 | 3,857.68 | 3,798.15 | 64.809 | SF |
| Duncan D20-8 - Wellbore #1 - Gyro Surveys | 9,537.03 | 6,900.00 | 4,732.71 | 4,677.93 | 86.390 | CC, ES |
| Duncan D20-8 - Wellbore #1 - Gyro Surveys | 11,500.00 | 6,900.00 | 5,123.65 | 5,058.18 | 78.254 | SF |
| Duncan D20-9 (P&A) - Wellbore #1 - Gyro Surveys | 10,784.88 | 6,999.07 | 4,783.16 | 4,721.99 | 78.192 | CC |
| Duncan D20-9 (P&A) - Wellbore #1 - Gyro Surveys | 10,800.00 | 6,999.14 | 4,783.18 | 4,721.91 | 78.063 | ES |
| Duncan D20-9 (P&A) - Wellbore #1 - Gyro Surveys | 12,600.00 | 7,007.95 | 5,115.98 | 5,043.69 | 70.775 | SF |
| E Ranches (P&A) - Wellbore #1 - No Surveys | 12,134.70 | 6,980.00 | 1,193.32 | 1,007.65 | 6.427 | CC, ES |
| E Ranches (P&A) - Wellbore #1 - No Surveys | 12,200.00 | 6,980.00 | 1,195.10 | 1,008.81 | 6.415 | SF |
| Guttersen 10-20 - Wellbore #1 - Gyro Surveys | 10,617.12 | 6,955.94 | 3,159.21 | 3,099.71 | 53.095 | CC, ES |
| Guttersen 10-20 - Wellbore #1 - Gyro Surveys | 11,500.00 | 6,957.37 | 3,280.26 | 3,215.18 | 50.406 | SF |
| LDS D20-30D - LDS D20-30D - LDS D20-30D - As Drille | 7,629.83 | 7,036.13 | 72.40 | 20.66 | 1.399 | Level 3, CC, ES, SF |

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 - DJ Basin | Local Co-ordinate Reference: | Well Independence D30-711 |
| Project: | Mustang | TVD Reference: | WELL @ 4798.00ft (Original Well) |
| Reference Site: | D Section 19 | MD Reference: | WELL @ 4798.00ft (Original Well) |
| Site Error: | 0.00 ft | North Reference: | Grid |
| Reference Well: | Independence D30-711 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.00 ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Independence D30-711 | Database: | EDMP |
| Reference Design: | Plan 1 | Offset TVD Reference: | Offset Datum |

Summary

| Site Name Offset Well - Wellbore - Design | Reference Measured Depth (ft) | Offset Measured Depth (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Separation Factor | Warning |
|--|--|-------------------------------------|--|---|----------------------|------------|
| D Section 29 | | | | | | |
| Guttersen D29-30D - Wellbore #1 - Design #1 | 12,894.83 | 7,177.26 | 135.32 | 52.46 | 1.633 | CC |
| Guttersen D29-30D - Wellbore #1 - Design #1 | 12,900.00 | 7,177.26 | 135.42 | 52.29 | 1.629 | ES, SF |
| Guttersen D29-31D - Wellbore #1 - Guttersen D29-31D | 14,133.62 | 7,075.62 | 204.44 | 117.90 | 2.362 | CC, ES, SF |
| Guttersen D29-33D - Wellbore #1 - Guttersen D29-33D - | 16,780.47 | 7,213.44 | 223.91 | 111.39 | 1.990 | CC, ES, SF |
| Guttersen D29-65HN - Original Drilling - Original Drilling | 15,473.84 | 6,663.00 | 599.11 | 507.40 | 6.532 | CC, ES |
| Guttersen D29-65HN - Original Drilling - Original Drilling | 15,500.00 | 6,663.00 | 599.68 | 507.49 | 6.505 | SF |
| Guttersen D29-67HN - Original Drilling - Original Drilling | 14,123.26 | 6,601.01 | 733.77 | 651.79 | 8.951 | CC, ES |
| Guttersen D29-67HN - Original Drilling - Original Drilling | 14,200.00 | 6,601.01 | 737.77 | 654.71 | 8.883 | SF |
| Guttersen D29-69HN - Original Drilling - Original Drilling | 12,879.62 | 6,760.36 | 734.11 | 655.30 | 9.315 | CC |
| Guttersen D29-69HN - Original Drilling - Original Drilling | 12,900.00 | 6,760.58 | 734.40 | 655.21 | 9.274 | ES |
| Guttersen D29-69HN - Original Drilling - Original Drilling | 13,000.00 | 6,761.68 | 743.92 | 663.39 | 9.238 | SF |
| Guttersen D29-722 - Guttersen D29-722 - Prelim - Rev 1 | 7,500.00 | 15,100.10 | 4,544.07 | 4,447.15 | 46.885 | ES |
| Guttersen D29-722 - Guttersen D29-722 - Prelim - Rev 1 | 7,538.63 | 15,061.42 | 4,543.84 | 4,447.20 | 47.020 | CC |
| Guttersen D29-722 - Guttersen D29-722 - Prelim - Rev 1 | 16,900.00 | 6,671.79 | 4,805.03 | 4,700.18 | 45.826 | SF |
| Guttersen D29-730 - Guttersen D29-730 - Prelim - Rev 1 | 7,050.00 | 15,409.74 | 3,969.50 | 3,870.59 | 40.133 | SF |
| Guttersen D29-730 - Guttersen D29-730 - Prelim - Rev 1 | 7,500.00 | 15,016.38 | 3,936.26 | 3,840.04 | 40.909 | ES |
| Guttersen D29-730 - Guttersen D29-730 - Prelim - Rev 1 | 7,531.07 | 14,985.44 | 3,936.13 | 3,840.14 | 41.005 | CC |
| Guttersen D29-738 - Guttersen D29-738 - Prelim - Rev 1 | 7,500.00 | 15,237.74 | 3,298.55 | 3,201.51 | 33.992 | ES |
| Guttersen D29-738 - Guttersen D29-738 - Prelim - Rev 1 | 7,536.92 | 15,200.96 | 3,298.35 | 3,201.57 | 34.080 | CC |
| Guttersen D29-738 - Guttersen D29-738 - Prelim - Rev 1 | 15,400.00 | 15,400.00 | 3,370.57 | 3,247.60 | 27.410 | SF |
| Guttersen D29-746 - Guttersen D29-746 - Prelim - Rev 1 | 7,150.00 | 15,270.96 | 2,739.77 | 2,640.90 | 27.711 | SF |
| Guttersen D29-746 - Guttersen D29-746 - Prelim - Rev 1 | 7,500.00 | 14,951.21 | 2,721.95 | 2,624.98 | 28.069 | ES |
| Guttersen D29-746 - Guttersen D29-746 - Prelim - Rev 1 | 7,524.15 | 14,927.17 | 2,721.88 | 2,625.08 | 28.118 | CC |
| Guttersen D29-754 - Guttersen D29-754 - Prelim - Rev 1 | 7,250.00 | 15,406.12 | 2,136.03 | 2,037.55 | 21.692 | SF |
| Guttersen D29-754 - Guttersen D29-754 - Prelim - Rev 1 | 7,546.79 | 15,123.01 | 2,119.73 | 2,023.15 | 21.949 | CC, ES |
| Guttersen D29-770 - Guttersen D29-770 - Prelim - Rev 1 | 7,250.00 | 15,223.27 | 1,507.83 | 1,409.22 | 15.291 | SF |
| Guttersen D29-770 - Guttersen D29-770 - Prelim - Rev 1 | 7,450.00 | 15,036.18 | 1,501.83 | 1,404.25 | 15.391 | ES |
| Guttersen D29-770 - Guttersen D29-770 - Prelim - Rev 1 | 7,504.94 | 14,981.88 | 1,501.60 | 1,404.38 | 15.445 | CC |
| Guttersen D29-778 - Guttersen D29-778 - Prelim - Rev 1 | 7,350.00 | 15,265.62 | 883.30 | 785.03 | 8.989 | SF |
| Guttersen D29-778 - Guttersen D29-778 - Prelim - Rev 1 | 7,500.00 | 15,120.00 | 880.08 | 782.79 | 9.046 | ES |
| Guttersen D29-778 - Guttersen D29-778 - Prelim - Rev 1 | 7,520.44 | 15,100.35 | 880.04 | 782.89 | 9.059 | CC |
| Guttersen D29-786 - Guttersen D29-786 - Prelim - Rev 1 | 7,100.00 | 15,359.70 | 329.77 | 231.32 | 3.349 | SF |
| Guttersen D29-786 - Guttersen D29-786 - Prelim - Rev 1 | 7,150.00 | 15,321.59 | 327.86 | 230.13 | 3.355 | ES |
| Guttersen D29-786 - Guttersen D29-786 - Prelim - Rev 1 | 7,154.78 | 15,317.82 | 327.84 | 230.20 | 3.358 | CC |
| Guttersen D29-99HZ - Wellbore #1 - MWD Surveys | 16,851.74 | 6,652.39 | 797.31 | 692.12 | 7.580 | CC, ES |
| Guttersen D29-99HZ - Wellbore #1 - MWD Surveys | 16,900.00 | 6,652.14 | 798.77 | 692.82 | 7.539 | SF |
| Guttersen D30-68-1HN - Original Drilling - Original Drilling | 13,795.77 | 6,921.62 | 276.29 | 205.91 | 3.926 | CC |
| Guttersen D30-68-1HN - Original Drilling - Original Drilling | 13,800.00 | 6,921.98 | 276.32 | 205.86 | 3.922 | ES, SF |
| Guttersen D30-69-1HN - Original Drilling - Original Drilling | 13,072.90 | 6,948.06 | 379.89 | 310.39 | 5.466 | CC, ES |
| Guttersen D30-69-1HN - Original Drilling - Original Drilling | 13,100.00 | 6,948.95 | 380.86 | 311.16 | 5.465 | SF |
| Guttersen State D29-714 - Guttersen D29-714 - Prelim - | 7,500.00 | 15,201.96 | 5,096.18 | 4,999.37 | 52.640 | ES |
| Guttersen State D29-714 - Guttersen D29-714 - Prelim - | 7,541.65 | 15,156.54 | 5,095.88 | 4,999.40 | 52.818 | CC |
| Guttersen State D29-714 - Guttersen D29-714 - Prelim - | 17,100.00 | 6,550.00 | 5,330.14 | 5,223.64 | 50.052 | SF |
| Guttersen Y05-719 - Guttersen Y05-719 - Prelim - Rev 1 | 14,604.40 | 6,874.38 | 4,994.35 | 4,906.06 | 56.562 | CC |
| Guttersen Y05-719 - Guttersen Y05-719 - Prelim - Rev 1 | 18,060.85 | 10,343.71 | 5,012.13 | 4,884.81 | 39.364 | ES, SF |
| Guttersen Y05-726 - Guttersen Y05-726 - Prelim - Rev 1 | 15,003.49 | 7,321.86 | 4,385.45 | 4,293.77 | 47.833 | CC |
| Guttersen Y05-726 - Guttersen Y05-726 - Prelim - Rev 1 | 18,060.85 | 10,358.78 | 4,399.57 | 4,272.33 | 34.577 | ES, SF |
| Guttersen Y05-734 - Guttersen Y05-734 - Prelim - Rev 1 | 15,035.02 | 7,415.80 | 3,772.77 | 3,680.30 | 40.799 | CC |
| Guttersen Y05-734 - Guttersen Y05-734 - Prelim - Rev 1 | 18,060.85 | 10,424.03 | 3,786.78 | 3,659.32 | 29.709 | ES, SF |
| Guttersen Y05-749 - Guttersen Y05-749 - Prelim - Rev 1 | 14,463.47 | 6,604.03 | 3,129.61 | 3,041.82 | 35.649 | CC |
| Guttersen Y05-749 - Guttersen Y05-749 - Prelim - Rev 1 | 14,500.00 | 6,616.68 | 3,129.80 | 3,041.67 | 35.513 | ES |
| Guttersen Y05-749 - Guttersen Y05-749 - Prelim - Rev 1 | 18,060.85 | 10,368.99 | 3,174.00 | 3,046.40 | 24.875 | SF |
| Guttersen Y05-756 - Guttersen Y05-756 - Prelim - Rev 1 | 14,876.16 | 7,130.80 | 2,542.00 | 2,451.30 | 28.027 | CC |

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 - DJ Basin | Local Co-ordinate Reference: | Well Independence D30-711 |
| Project: | Mustang | TVD Reference: | WELL @ 4798.00ft (Original Well) |
| Reference Site: | D Section 19 | MD Reference: | WELL @ 4798.00ft (Original Well) |
| Site Error: | 0.00 ft | North Reference: | Grid |
| Reference Well: | Independence D30-711 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.00 ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Independence D30-711 | Database: | EDMP |
| Reference Design: | Plan 1 | Offset TVD Reference: | Offset Datum |

| Summary | | | | | | |
|--|-------------------------------|----------------------------|-------------------------------|--------------------------------|-------------------|------------|
| Site Name | Reference Measured Depth (ft) | Offset Measured Depth (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Separation Factor | Warning |
| D Section 29 | | | | | | |
| Guttersen Y05-756 - Guttersen Y05-756 - Prelim - Rev 1 | 18,060.85 | 10,304.92 | 2,559.11 | 2,431.90 | 20.118 | ES, SF |
| Guttersen Y05-771 - Guttersen Y05-771 - Prelim - Rev 1 | 14,593.08 | 6,829.90 | 1,828.82 | 1,739.31 | 20.432 | CC |
| Guttersen Y05-771 - Guttersen Y05-771 - Prelim - Rev 1 | 18,060.85 | 10,359.08 | 1,861.81 | 1,733.98 | 14.566 | ES, SF |
| Guttersen Y05-779 - Guttersen Y05-779 - Prelim - Rev 1 | 14,766.97 | 7,085.12 | 1,312.02 | 1,221.78 | 14.540 | CC |
| Guttersen Y05-779 - Guttersen Y05-779 - Prelim - Rev 1 | 18,060.85 | 10,388.02 | 1,332.09 | 1,205.01 | 10.482 | ES, SF |
| Guttersen Y05-786 - Guttersen Y05-786 - Prelim - Rev 1 | 15,081.65 | 7,314.76 | 763.39 | 670.61 | 8.228 | CC |
| Guttersen Y05-786 - Guttersen Y05-786 - Prelim - Rev 1 | 18,060.85 | 10,289.76 | 779.58 | 652.12 | 6.116 | ES, SF |
| Jessie D29-1J - Wellbore #1 - Gyro Surveys | 13,747.45 | 6,966.32 | 3,668.65 | 3,587.10 | 44.986 | CC |
| Jessie D29-1J - Wellbore #1 - Gyro Surveys | 13,800.00 | 6,966.70 | 3,669.03 | 3,587.03 | 44.745 | ES |
| Jessie D29-1J - Wellbore #1 - Gyro Surveys | 14,600.00 | 6,972.51 | 3,766.40 | 3,678.82 | 43.003 | SF |
| Jessie D29-4J - Wellbore #1 - Gyro Surveys | 16,422.13 | 6,917.16 | 3,732.44 | 3,630.37 | 36.568 | CC, ES |
| Jessie D29-4J - Wellbore #1 - Gyro Surveys | 17,200.00 | 6,951.93 | 3,812.47 | 3,704.81 | 35.411 | SF |
| Kate Red D29-03J - Kate Red D29-03J - Kate Red D29-0 | 16,439.20 | 6,999.67 | 966.34 | 864.01 | 9.444 | CC, ES |
| Kate Red D29-03J - Kate Red D29-03J - Kate Red D29-0 | 16,500.00 | 6,999.45 | 968.25 | 865.28 | 9.404 | SF |
| Kate Red D29-11 - Wellbore #1 - Gyro Surveys | 16,070.45 | 7,017.74 | 1,936.92 | 1,837.61 | 19.504 | CC |
| Kate Red D29-11 - Wellbore #1 - Gyro Surveys | 16,100.00 | 7,017.44 | 1,937.14 | 1,837.54 | 19.449 | ES |
| Kate Red D29-11 - Wellbore #1 - Gyro Surveys | 16,300.00 | 7,015.39 | 1,950.47 | 1,849.30 | 19.278 | SF |
| Kate Red D29-13 - Wellbore #1 - Gyro Surveys | 17,516.52 | 7,011.28 | 617.88 | 507.48 | 5.597 | CC, ES, SF |
| Kate Red D29-14 - Wellbore #1 - Gyro Surveys | 17,405.63 | 7,012.31 | 1,982.93 | 1,873.42 | 18.107 | CC, ES |
| Kate Red D29-14 - Wellbore #1 - Gyro Surveys | 17,600.00 | 7,014.61 | 1,992.43 | 1,881.30 | 17.929 | SF |
| Kate Red D29-2J - Wellbore #1 - Kate Red D29-2J | 13,835.53 | 6,978.83 | 1,195.10 | 1,112.85 | 14.530 | CC, ES |
| Kate Red D29-2J - Wellbore #1 - Kate Red D29-2J | 14,000.00 | 6,980.00 | 1,206.37 | 1,122.72 | 14.423 | SF |
| Kate Red D29-3 - Wellbore #1 - Kate Red D29-3 | 13,429.76 | 6,971.76 | 2,079.97 | 2,000.79 | 26.270 | CC, ES |
| Kate Red D29-3 - Wellbore #1 - Kate Red D29-3 | 13,800.00 | 6,973.09 | 2,112.66 | 2,030.69 | 25.771 | SF |
| Kate Red D29-5 - Wellbore #1 - Gyro Surveys | 14,747.45 | 6,984.23 | 714.34 | 625.02 | 7.997 | CC, ES |
| Kate Red D29-5 - Wellbore #1 - Gyro Surveys | 14,800.00 | 6,984.08 | 716.27 | 626.35 | 7.966 | SF |
| Kate Red D29-6 - Wellbore #1 - Gyro Surveys | 14,783.18 | 6,983.61 | 2,069.57 | 1,980.35 | 23.196 | CC |
| Kate Red D29-6 - Wellbore #1 - Gyro Surveys | 14,800.00 | 6,983.66 | 2,069.64 | 1,980.25 | 23.154 | ES |
| Kate Red D29-6 - Wellbore #1 - Gyro Surveys | 15,100.00 | 6,984.53 | 2,093.68 | 2,002.00 | 22.837 | SF |
| Kate White D29-1 - Wellbore #1 - Gyro Surveys | 13,364.99 | 7,005.98 | 4,749.28 | 4,670.23 | 60.085 | CC |
| Kate White D29-1 - Wellbore #1 - Gyro Surveys | 13,400.00 | 7,006.12 | 4,749.41 | 4,670.08 | 59.870 | ES |
| Kate White D29-1 - Wellbore #1 - Gyro Surveys | 14,800.00 | 7,011.99 | 4,961.33 | 4,872.59 | 55.908 | SF |
| Kate White D29-15 - Wellbore #1 - Gyro Surveys | 17,294.45 | 6,860.15 | 3,236.40 | 3,127.55 | 29.732 | CC |
| Kate White D29-15 - Wellbore #1 - Gyro Surveys | 17,300.00 | 6,860.12 | 3,236.40 | 3,127.50 | 29.718 | ES |
| Kate White D29-15 - Wellbore #1 - Gyro Surveys | 17,800.00 | 6,857.83 | 3,275.64 | 3,162.98 | 29.075 | SF |
| Kate White D29-16 - Wellbore #1 - Gyro Surveys | 17,373.10 | 6,971.13 | 4,640.75 | 4,531.41 | 42.441 | CC |
| Kate White D29-16 - Wellbore #1 - Gyro Surveys | 17,400.00 | 6,971.13 | 4,640.83 | 4,531.25 | 42.349 | ES |
| Kate White D29-16 - Wellbore #1 - Gyro Surveys | 18,060.85 | 6,971.33 | 4,691.44 | 4,576.84 | 40.939 | SF |
| Kate White D29-7 - Wellbore #1 - Gyro Surveys | 14,778.41 | 6,945.50 | 3,556.18 | 3,466.85 | 39.807 | CC |
| Kate White D29-7 - Wellbore #1 - Gyro Surveys | 14,800.00 | 6,945.62 | 3,556.25 | 3,466.72 | 39.723 | ES |
| Kate White D29-7 - Wellbore #1 - Gyro Surveys | 15,500.00 | 6,949.55 | 3,628.65 | 3,534.09 | 38.373 | SF |
| Kate White D29-8 - Wellbore #1 - Gyro Surveys | 14,751.11 | 7,040.86 | 4,686.03 | 4,597.01 | 52.641 | CC |
| Kate White D29-8 - Wellbore #1 - Gyro Surveys | 14,800.00 | 7,041.92 | 4,686.28 | 4,596.85 | 52.401 | ES |
| Kate White D29-8 - Wellbore #1 - Gyro Surveys | 16,000.00 | 7,067.96 | 4,849.52 | 4,751.94 | 49.700 | SF |
| Kate White D29-9 (SI) - Wellbore #1 - Gyro Surveys | 16,147.32 | 6,900.00 | 4,660.73 | 4,560.87 | 46.673 | CC |
| Kate White D29-9 (SI) - Wellbore #1 - Gyro Surveys | 16,200.00 | 6,900.00 | 4,661.03 | 4,560.71 | 46.463 | ES |
| Kate White D29-9 (SI) - Wellbore #1 - Gyro Surveys | 17,200.00 | 6,900.00 | 4,778.13 | 4,670.80 | 44.520 | SF |

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 - DJ Basin | Local Co-ordinate Reference: | Well Independence D30-711 |
| Project: | Mustang | TVD Reference: | WELL @ 4798.00ft (Original Well) |
| Reference Site: | D Section 19 | MD Reference: | WELL @ 4798.00ft (Original Well) |
| Site Error: | 0.00 ft | North Reference: | Grid |
| Reference Well: | Independence D30-711 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.00 ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Independence D30-711 | Database: | EDMP |
| Reference Design: | Plan 1 | Offset TVD Reference: | Offset Datum |

Summary

| Site Name Offset Well - Wellbore - Design | Reference Measured Depth (ft) | Offset Measured Depth (ft) | Distance Between Centres (ft) | Between Ellipses (ft) | Separation Factor | Warning |
|--|--|-------------------------------------|--|-----------------------------|----------------------|------------|
| D Section 30 | | | | | | |
| Adams D30-27D - Adams D30-27D - Adams D30-27D - A | 12,668.91 | 7,095.19 | 1,410.23 | 1,333.27 | 18.323 | CC, ES |
| Adams D30-27D - Adams D30-27D - Adams D30-27D - A | 12,800.00 | 7,094.56 | 1,416.31 | 1,338.69 | 18.246 | SF |
| Adams D30-29D - Wellbore #1 - Wellbore #1 - As Drilled | 12,921.01 | 7,065.99 | 3,756.31 | 3,679.74 | 49.056 | CC, ES |
| Adams D30-29D - Wellbore #1 - Wellbore #1 - As Drilled | 13,700.00 | 7,069.39 | 3,836.23 | 3,755.76 | 47.669 | SF |
| Adams D30-30D - Adams D30-30D - Adams D30-30D - A | 10,200.00 | 10,200.00 | 5,701.41 | 5,545.02 | 36.455 | SF |
| Adams D30-30D - Adams D30-30D - Adams D30-30D - A | 12,817.29 | 4,814.80 | 5,065.27 | 4,999.05 | 76.500 | CC, ES |
| Adams D30-31D - Adams D30-31D - Adams D30-31D - A | 14,049.14 | 7,410.28 | 4,812.91 | 4,700.78 | 42.922 | CC |
| Adams D30-31D - Adams D30-31D - Adams D30-31D - A | 14,100.00 | 7,410.47 | 4,813.18 | 4,700.00 | 42.525 | ES |
| Adams D30-31D - Adams D30-31D - Adams D30-31D - A | 16,100.00 | 7,417.77 | 5,231.65 | 5,085.47 | 35.791 | SF |
| Corbin D30-23D - Corbin D30-23D - Corbin D30-23D - As | 17,120.08 | 7,393.55 | 1,187.21 | 1,065.31 | 9.739 | CC |
| Corbin D30-23D - Corbin D30-23D - Corbin D30-23D - As | 17,200.00 | 7,394.40 | 1,189.90 | 1,064.40 | 9.482 | ES |
| Corbin D30-23D - Corbin D30-23D - Corbin D30-23D - As | 17,400.00 | 7,396.55 | 1,219.76 | 1,086.57 | 9.158 | SF |
| Corbin Red D30-04J - Corbin Red D30-04J - Corbin Red | 16,523.14 | 7,078.51 | 1,539.57 | 1,435.98 | 14.862 | CC, ES |
| Corbin Red D30-04J - Corbin Red D30-04J - Corbin Red | 16,600.00 | 7,087.64 | 1,541.47 | 1,437.54 | 14.832 | SF |
| Corbin Red D30-09 - Corbin Red D30-09 - Corbin Red D | 16,131.67 | 7,029.46 | 550.23 | 449.93 | 5.486 | CC, ES, SF |
| Corbin Red D30-15 - Corbin Red D30-15 - Corbin Red D | 17,484.11 | 6,991.87 | 1,898.77 | 1,788.42 | 17.207 | CC |
| Corbin Red D30-15 - Corbin Red D30-15 - Corbin Red D | 17,500.00 | 6,992.69 | 1,898.84 | 1,788.40 | 17.194 | ES |
| Corbin Red D30-15 - Corbin Red D30-15 - Corbin Red D | 17,600.00 | 6,997.78 | 1,902.29 | 1,791.42 | 17.157 | SF |
| Corbin Red D30-16 - Corbin Red D30-16 - Corbin Red D | 17,560.11 | 7,015.95 | 663.09 | 551.95 | 5.966 | CC, ES, SF |
| Dechant D30-17D - Dechant D30-17D - Dechant D30-17 | 14,200.00 | 7,466.37 | 1,364.45 | 1,234.33 | 10.486 | SF |
| Dechant D30-17D - Dechant D30-17D - Dechant D30-17 | 14,400.00 | 7,466.14 | 1,340.03 | 1,214.82 | 10.702 | ES |
| Dechant D30-17D - Dechant D30-17D - Dechant D30-17 | 14,465.09 | 7,466.07 | 1,338.45 | 1,215.31 | 10.869 | CC |
| Dechant D30-20D - Dechant D30-20D - Dechant D30-20 | 15,419.92 | 7,076.56 | 3,797.30 | 3,700.08 | 39.061 | CC, ES |
| Dechant D30-20D - Dechant D30-20D - Dechant D30-20 | 16,100.00 | 7,076.68 | 3,857.72 | 3,756.04 | 37.941 | SF |
| Dechant D30-24D - Dechant D30-24D - Dechant D30-24 | 16,855.05 | 7,205.80 | 2,627.76 | 2,517.34 | 23.797 | CC, ES |
| Dechant D30-24D - Dechant D30-24D - Dechant D30-24 | 17,100.00 | 7,208.55 | 2,639.15 | 2,527.41 | 23.617 | SF |
| Dechant D30-25D - Dechant D30-25D - Dechant D30-25 | 16,817.26 | 7,265.47 | 3,811.03 | 3,695.34 | 32.941 | CC, ES |
| Dechant D30-25D - Dechant D30-25D - Dechant D30-25 | 17,100.00 | 7,273.30 | 3,821.50 | 3,705.13 | 32.839 | SF |
| Dechant D31-27D - Dechant D31-27D - Dechant D31-27 | 17,800.00 | 7,341.29 | 1,275.76 | 1,153.74 | 10.455 | SF |
| Dechant D31-27D - Dechant D31-27D - Dechant D31-27 | 18,000.00 | 7,340.18 | 1,257.30 | 1,138.59 | 10.592 | ES |
| Dechant D31-27D - Dechant D31-27D - Dechant D31-27 | 18,016.90 | 7,340.09 | 1,257.18 | 1,138.71 | 10.611 | CC |
| Dechant D31-28D - Dechant D31-28D - Dechant D31-28 | 17,969.40 | 7,056.97 | 2,665.16 | 2,550.50 | 23.245 | CC, ES |
| Dechant D31-28D - Dechant D31-28D - Dechant D31-28 | 18,060.85 | 7,058.06 | 2,666.73 | 2,551.59 | 23.160 | SF |
| Dechant D31-29D - Dechant D31-29D - Dechant D31-29 | 18,060.85 | 7,152.51 | 3,843.06 | 3,726.45 | 32.957 | CC, ES, SF |
| Dechant D31-77HN - Original Drilling - Original Drilling - A | 18,060.85 | 6,587.00 | 3,278.74 | 3,168.47 | 29.733 | CC, ES, SF |
| Hanson D30-11 - Hanson D30-11 - Hanson D30-11 - As D | 16,020.43 | 7,113.00 | 3,246.90 | 3,147.21 | 32.569 | CC, ES |
| Hanson D30-11 - Hanson D30-11 - Hanson D30-11 - As D | 16,400.00 | 7,111.96 | 3,269.01 | 3,167.42 | 32.177 | SF |
| Hanson D30-12 - Hanson D30-12 - Hanson D30-12 - As | 15,916.16 | 7,008.06 | 4,416.60 | 4,318.32 | 44.940 | CC, ES |
| Hanson D30-12 - Hanson D30-12 - Hanson D30-12 - As | 16,700.00 | 7,000.92 | 4,485.61 | 4,383.20 | 43.798 | SF |
| Hanson D30-13 - Hanson D30-13 - Hanson D30-13 - As | 17,494.66 | 7,078.82 | 4,536.54 | 4,425.61 | 40.894 | CC |
| Hanson D30-13 - Hanson D30-13 - Hanson D30-13 - As | 17,500.00 | 7,078.84 | 4,536.54 | 4,425.57 | 40.880 | ES |
| Hanson D30-13 - Hanson D30-13 - Hanson D30-13 - As | 18,060.85 | 7,081.52 | 4,571.74 | 4,457.56 | 40.043 | SF |
| Hanson D30-14 - Hanson D30-14 - Hanson D30-14 - As | 17,427.55 | 7,235.00 | 3,038.11 | 2,926.74 | 27.278 | CC, ES |
| Hanson D30-14 - Hanson D30-14 - Hanson D30-14 - As | 17,700.00 | 7,235.00 | 3,050.31 | 2,937.59 | 27.061 | SF |
| Hettinger C Unit 1 - Hettinger C Unit 1 - Hettinger C Unit | 13,639.50 | 7,037.78 | 1,004.57 | 923.04 | 12.322 | CC, ES, SF |
| Hettinger D30-02 - Hettinger D30-02 - Hettinger D30-02 - | 13,325.38 | 6,989.00 | 1,921.16 | 1,805.70 | 16.639 | CC, ES |
| Hettinger D30-02 - Hettinger D30-02 - Hettinger D30-02 - | 13,400.00 | 6,989.00 | 1,922.61 | 1,806.81 | 16.603 | SF |
| Hettinger D30-03 - Hettinger D30-03 - Hettinger D30-03 - | 13,292.56 | 7,025.43 | 3,272.56 | 3,193.90 | 41.604 | CC |
| Hettinger D30-03 - Hettinger D30-03 - Hettinger D30-03 - | 13,300.00 | 7,025.45 | 3,272.57 | 3,193.87 | 41.581 | ES |
| Hettinger D30-03 - Hettinger D30-03 - Hettinger D30-03 - | 13,800.00 | 7,026.44 | 3,311.67 | 3,230.52 | 40.810 | SF |
| Hettinger D30-04 - Hettinger D30-04 - Hettinger D30-04 - | 13,257.36 | 7,058.05 | 4,437.15 | 4,358.58 | 56.474 | CC |
| Hettinger D30-04 - Hettinger D30-04 - Hettinger D30-04 - | 13,300.00 | 7,058.35 | 4,437.36 | 4,358.52 | 56.287 | ES |
| Hettinger D30-04 - Hettinger D30-04 - Hettinger D30-04 - | 14,200.00 | 7,065.00 | 4,536.17 | 4,452.67 | 54.321 | SF |

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 - DJ Basin | Local Co-ordinate Reference: | Well Independence D30-711 |
| Project: | Mustang | TVD Reference: | WELL @ 4798.00ft (Original Well) |
| Reference Site: | D Section 19 | MD Reference: | WELL @ 4798.00ft (Original Well) |
| Site Error: | 0.00 ft | North Reference: | Grid |
| Reference Well: | Independence D30-711 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.00 ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Independence D30-711 | Database: | EDMP |
| Reference Design: | Plan 1 | Offset TVD Reference: | Offset Datum |

| Summary | | | | | | |
|--|-------------------------------|----------------------------|-------------------------------|--------------------------------|-------------------|---------------------|
| Site Name | Reference Measured Depth (ft) | Offset Measured Depth (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Separation Factor | Warning |
| D Section 30 | | | | | | |
| Hettinger D30-05 - Hettinger D30-05 - Hettinger D30-05 - | 15,038.88 | 6,989.37 | 4,421.73 | 4,330.28 | 48.355 | CC, ES |
| Hettinger D30-05 - Hettinger D30-05 - Hettinger D30-05 - | 15,900.00 | 6,994.53 | 4,504.80 | 4,408.78 | 46.918 | SF |
| Hettinger D30-06 - Hettinger D30-06 - Hettinger D30-06 - | 14,993.78 | 7,021.86 | 3,228.93 | 3,137.65 | 35.371 | CC |
| Hettinger D30-06 - Hettinger D30-06 - Hettinger D30-06 - | 15,000.00 | 7,021.83 | 3,228.94 | 3,137.62 | 35.357 | ES |
| Hettinger D30-06 - Hettinger D30-06 - Hettinger D30-06 - | 15,400.00 | 7,019.46 | 3,254.39 | 3,161.06 | 34.872 | SF |
| Hettinger D30-08 - Hettinger D30-08 - Hettinger D30-08 - | 14,895.82 | 7,000.16 | 739.84 | 649.41 | 8.182 | CC, ES |
| Hettinger D30-08 - Hettinger D30-08 - Hettinger D30-08 - | 14,900.00 | 7,000.19 | 739.85 | 649.42 | 8.181 | SF |
| Leslie E Hanson Gas Unit 1 - Leslie E Hanson Gas Unit | 16,880.40 | 7,007.00 | 4,058.25 | 3,915.65 | 28.460 | CC |
| Leslie E Hanson Gas Unit 1 - Leslie E Hanson Gas Unit | 16,900.00 | 7,007.00 | 4,058.29 | 3,915.57 | 28.435 | ES |
| Leslie E Hanson Gas Unit 1 - Leslie E Hanson Gas Unit | 17,400.00 | 7,007.00 | 4,091.38 | 3,945.93 | 28.130 | SF |
| McWilliams D29-32 - McWilliams D29-32 - McWilliams D | 15,382.92 | 7,003.95 | 54.01 | -40.30 | 0.573 | Level 1, CC, ES, SF |
| McWilliams D30-07 - McWilliams D30-07 - McWilliams D | 14,656.84 | 6,997.00 | 1,920.90 | 1,795.50 | 15.318 | CC, ES |
| McWilliams D30-07 - McWilliams D30-07 - McWilliams D | 14,800.00 | 6,997.00 | 1,926.23 | 1,800.23 | 15.288 | SF |
| McWilliams D30-18 - McWilliams D30-18 - McWilliams D | 14,167.44 | 7,046.19 | 2,580.37 | 2,495.12 | 30.268 | CC, ES |
| McWilliams D30-18 - McWilliams D30-18 - McWilliams D | 14,400.00 | 7,044.50 | 2,590.83 | 2,504.47 | 30.002 | SF |
| McWilliams D30-19 - McWilliams D30-19 - McWilliams D | 14,124.55 | 7,048.17 | 3,766.24 | 3,679.36 | 43.345 | CC, ES |
| McWilliams D30-19 - McWilliams D30-19 - McWilliams D | 14,800.00 | 7,044.79 | 3,826.33 | 3,736.07 | 42.389 | SF |
| McWilliams D30-21 - McWilliams D30-21 - McWilliams D | 15,766.42 | 7,042.57 | 2,247.37 | 2,150.01 | 23.082 | CC, ES |
| McWilliams D30-21 - McWilliams D30-21 - McWilliams D | 15,900.00 | 7,044.11 | 2,251.33 | 2,153.33 | 22.972 | SF |
| McWilliams D30-22 - McWilliams D30-22 - McWilliams D | 15,394.36 | 7,007.48 | 1,405.32 | 1,311.03 | 14.904 | CC |
| McWilliams D30-22 - McWilliams D30-22 - McWilliams D | 15,400.00 | 7,007.57 | 1,405.33 | 1,311.01 | 14.900 | ES |
| McWilliams D30-22 - McWilliams D30-22 - McWilliams D | 15,500.00 | 7,009.05 | 1,409.28 | 1,314.69 | 14.898 | SF |

Noble Energy, Inc.
Anticollision Summary Report

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|---------------------------|----------------------------|-------------------------------------|----------------------------------|
| Company: | Northern Region - DJ Basin | Local Co-ordinate Reference: | Well Independence D30-711 |
| Project: | Mustang | TVD Reference: | WELL @ 4798.00ft (Original Well) |
| Reference Site: | D Section 19 | MD Reference: | WELL @ 4798.00ft (Original Well) |
| Site Error: | 0.00 ft | North Reference: | Grid |
| Reference Well: | Independence D30-711 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.00 ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Independence D30-711 | Database: | EDMP |
| Reference Design: | Plan 1 | Offset TVD Reference: | Offset Datum |

Reference Depths are relative to WELL @ 4798.00ft (Original Well)

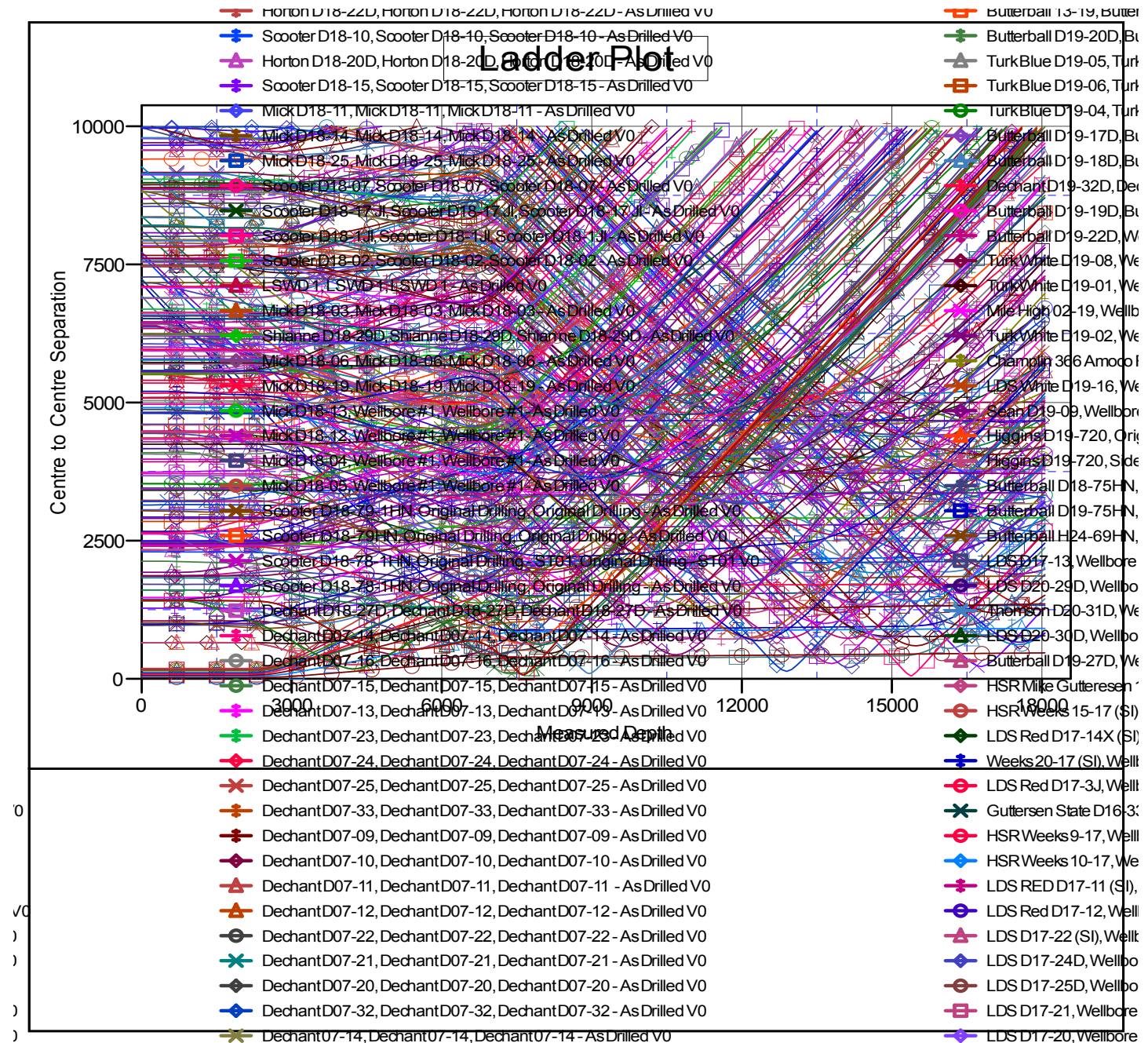
Coordinates are relative to: Independence D30-711

Offset Depths are relative to Offset Datum

Coordinate System is US State Plane 1983, Colorado Northern Zone

Central Meridian is -105.5000000

Grid Convergence at Surface is: 0.59°



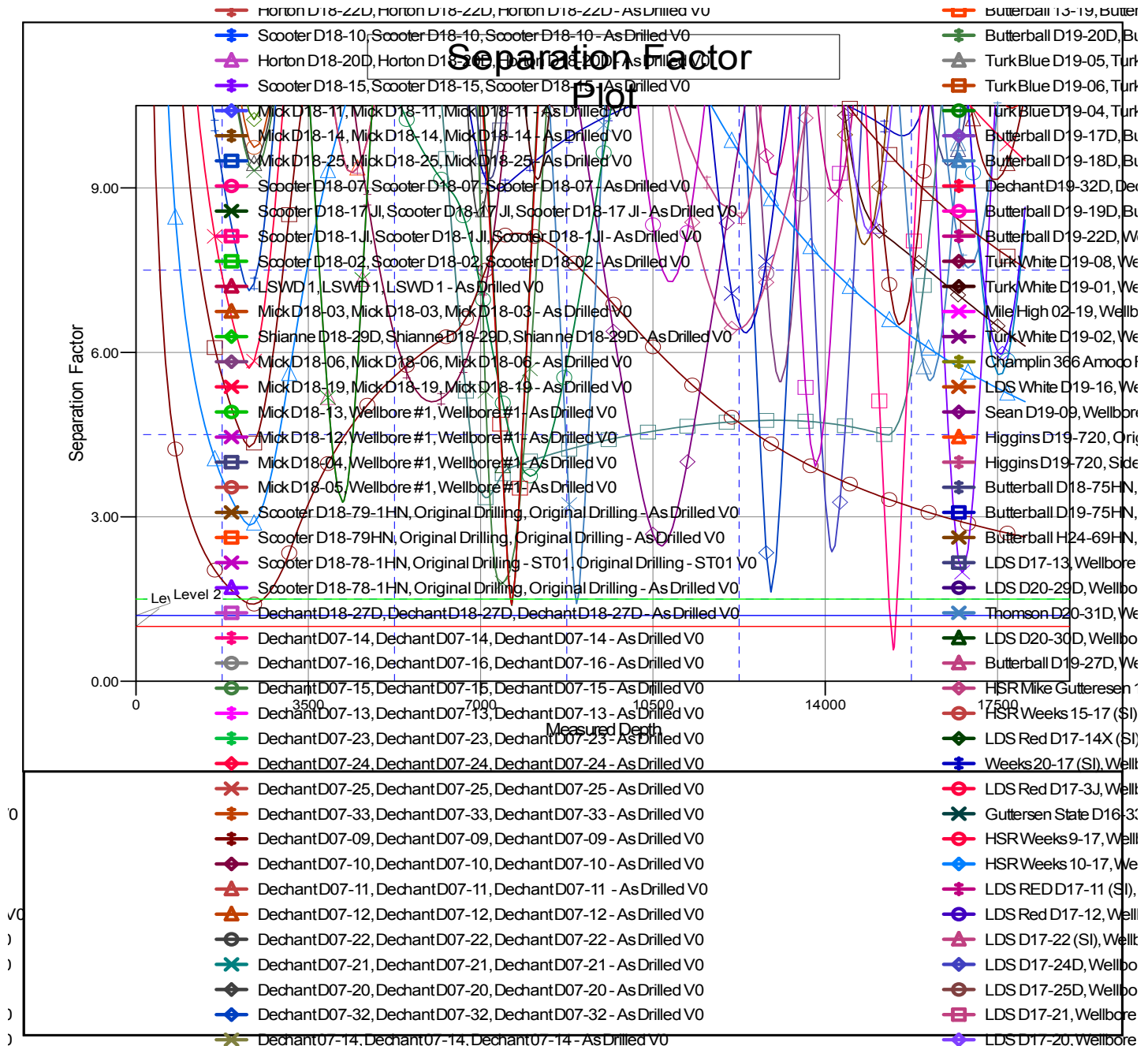
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Noble Energy, Inc.
Anticollision Summary Report

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