

Noble Energy Inc.- Weld County, CO (Grid North)

Well Name: **Castor LC35-62HN**

Surface Location: Castor LC35-62HN Pad Sec.35-T9N-R59W

North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

Ground Elevation: 4836.0

| +N/-S | +E/-W | Northing | Easting | Latitude | Longitude | Slot |
|-------|-------|------------|------------|-----------|-------------|------|
| 0.0 | 0.0 | 1501761.60 | 3428717.83 | 40.700467 | -103.953744 | |

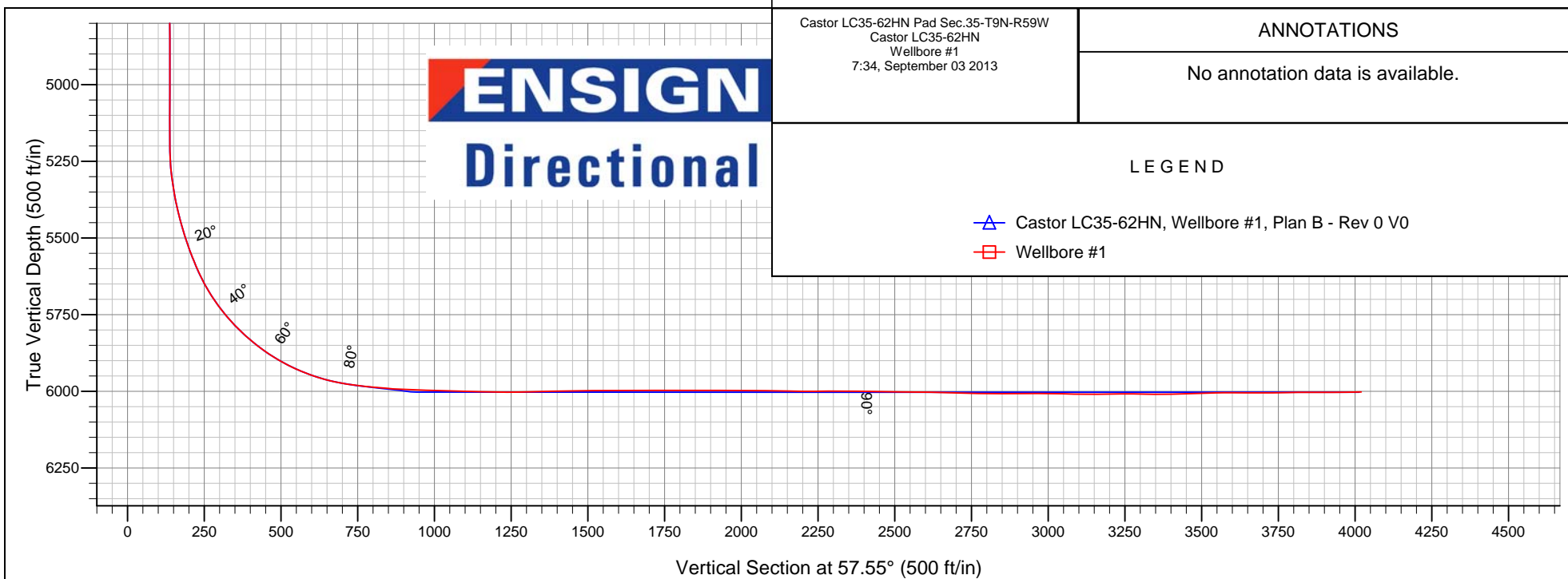
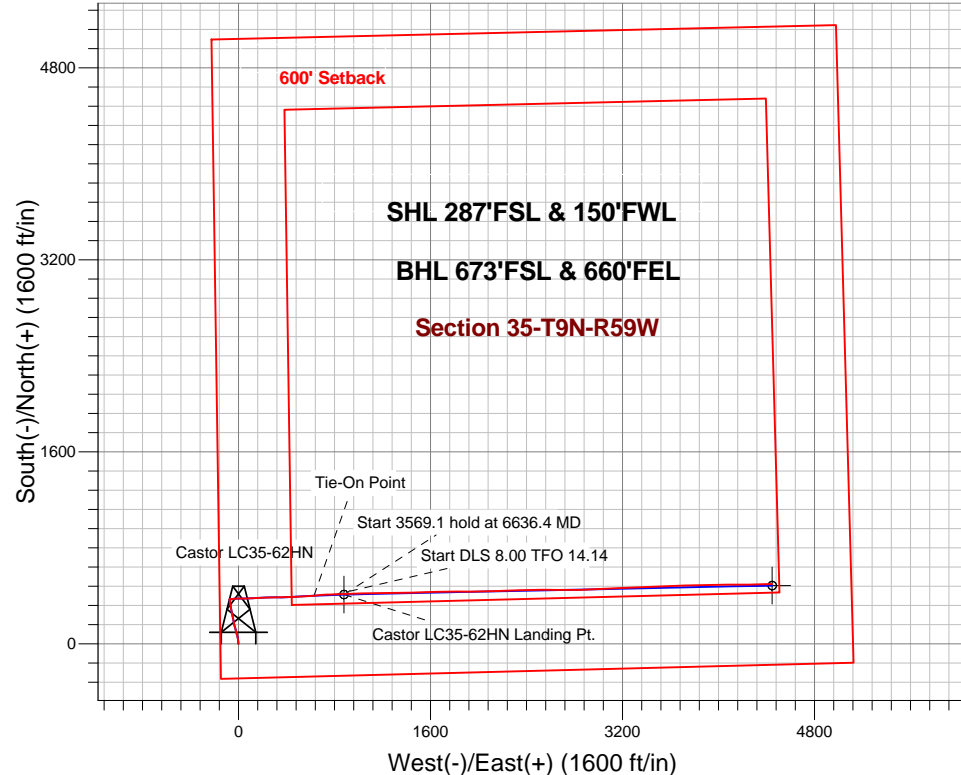
Precision 828 RKB - 16' WELL @ 4852.0ft (Precision 828 RKB - 16')

FINAL SURVEY

Projected Bottom Hole Location

10206' MD 6002' TVD 499' N & 4447' E of SHL

90.9 degree Incl @ 88.2 degree AZM





Noble Energy Inc.- Weld County, CO (Grid North)

Sec.35-T9N-R59W

Castor LC35-62HN Pad Sec.35-T9N-R59W

Castor LC35-62HN

Wellbore #1

Design: Wellbore #1

Standard Survey Report

03 September, 2013

| | | | |
|------------------|---|-------------------------------------|---|
| Company: | Noble Energy Inc.- Weld County, CO (Grid North) | Local Co-ordinate Reference: | Well Castor LC35-62HN |
| Project: | Sec.35-T9N-R59W | TVD Reference: | WELL @ 4852.0ft (Precision 828 RKB - 16') |
| Site: | Castor LC35-62HN Pad Sec.35-T9N-R59W | MD Reference: | WELL @ 4852.0ft (Precision 828 RKB - 16') |
| Well: | Castor LC35-62HN | North Reference: | Grid |
| Wellbore: | Wellbore #1 | Survey Calculation Method: | Minimum Curvature |
| Design: | Wellbore #1 | Database: | Landmark |

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|--------------------|----------------------------------|----------------------|-----------------------------|
| Project | Sec.35-T9N-R59W, Weld County, CO | | |
| Map System: | US State Plane 1983 | System Datum: | Mean Sea Level |
| Geo Datum: | North American Datum 1983 | | Using Well Reference Point |
| Map Zone: | Colorado Northern Zone | | Using geodetic scale factor |

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|-----------------------|----------|--------------------------------------|-----------------|------------|-------------------|--------|
| Site | | Castor LC35-62HN Pad Sec.35-T9N-R59W | | | | |
| Site Position: | | Northing: | 1,501,761.64 ft | Latitude: | 40.700467 | |
| From: | Lat/Long | Easting: | 3,428,717.83 ft | Longitude: | -103.953744 | |
| Position Uncertainty: | | 0.0 ft | Slot Radius: | " | Grid Convergence: | 1.00 ° |

| Well | Castor LC35-62HN | | | | | |
|----------------------|------------------|--------|---------------------|-----------------|---------------|-------------|
| Well Position | +N-S | 0.0 ft | Northing: | 1,501,761.60 ft | Latitude: | 40.700467 |
| | +E-W | 0.0 ft | Easting: | 3,428,717.83 ft | Longitude: | -103.953744 |
| Position Uncertainty | | 0.0 ft | Wellhead Elevation: | ft | Ground Level: | 4,836.0 ft |

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|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | Wellbore #1 | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2010 | 8/5/2013 | 8.15 | 67.35 | 53,145 |

| | | | | | |
|--------------------------|------------------------------|-------------------|-------------------|----------------------|-----|
| Design | Wellbore #1 | | | | |
| Audit Notes: | | | | | |
| Version: | 1.0 | Phase: | ACTUAL | Tie On Depth: | 0.0 |
| Vertical Section: | Depth From (TVD) (ft) | +N/-S (ft) | +E/-W (ft) | Direction (°) | |
| | 0.0 | 0.0 | 0.0 | 57.55 | |

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|-----------------------|----------------|--------------------------|------------------|---------------------|--|
| Survey Program | Date | 9/3/2013 | | | |
| From (ft) | To (ft) | Survey (Wellbore) | Tool Name | Description | |
| 310.0 | 512.0 | Survey #1 (Wellbore #1) | Flexi-Shot | VES Flexi-Shot Tool | |
| 613.0 | 10,206.0 | Survey #2 (Wellbore #1) | MWD | MWD - Standard | |

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|----------------------------|------------------------|--------------------|----------------------------|-------------------|-------------------|------------------------------|------------------------------|-----------------------------|----------------------------|--|
| 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) | |
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | |
| 310.0 | 0.40 | 354.80 | 310.0 | 1.1 | -0.1 | 0.5 | 0.13 | 0.13 | 0.00 | |
| 512.0 | 0.40 | 354.80 | 512.0 | 2.5 | -0.2 | 1.1 | 0.00 | 0.00 | 0.00 | |
| 613.0 | 0.10 | 335.30 | 613.0 | 2.9 | -0.3 | 1.3 | 0.30 | -0.30 | -19.31 | |
| 703.0 | 0.30 | 334.10 | 703.0 | 3.2 | -0.4 | 1.4 | 0.22 | 0.22 | -1.33 | |
| 793.0 | 0.30 | 328.50 | 793.0 | 3.6 | -0.7 | 1.4 | 0.03 | 0.00 | -6.22 | |
| 883.0 | 0.30 | 347.10 | 883.0 | 4.0 | -0.8 | 1.5 | 0.11 | 0.00 | 20.67 | |
| 973.0 | 0.40 | 353.60 | 973.0 | 4.6 | -0.9 | 1.7 | 0.12 | 0.11 | 7.22 | |
| 1,062.0 | 0.30 | 351.00 | 1,062.0 | 5.1 | -1.0 | 1.9 | 0.11 | -0.11 | -2.92 | |
| 1,157.0 | 0.20 | 329.20 | 1,157.0 | 5.5 | -1.1 | 2.0 | 0.14 | -0.11 | -22.95 | |
| 1,252.0 | 0.40 | 4.30 | 1,252.0 | 6.0 | -1.2 | 2.2 | 0.28 | 0.21 | 36.95 | |

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|------------------|---|-------------------------------------|---|
| Company: | Noble Energy Inc.- Weld County, CO (Grid North) | Local Co-ordinate Reference: | Well Castor LC35-62HN |
| Project: | Sec.35-T9N-R59W | TVD Reference: | WELL @ 4852.0ft (Precision 828 RKB - 16') |
| Site: | Castor LC35-62HN Pad Sec.35-T9N-R59W | MD Reference: | WELL @ 4852.0ft (Precision 828 RKB - 16') |
| Well: | Castor LC35-62HN | North Reference: | Grid |
| Wellbore: | Wellbore #1 | Survey Calculation Method: | Minimum Curvature |
| Design: | Wellbore #1 | Database: | Landmark |

| 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) |
| 1,347.0 | 0.40 | 20.70 | 1,347.0 | 6.6 | -1.0 | 2.7 | 0.12 | 0.00 | 17.26 |
| 1,442.0 | 0.30 | 25.40 | 1,442.0 | 7.2 | -0.8 | 3.2 | 0.11 | -0.11 | 4.95 |
| 1,537.0 | 0.50 | 8.00 | 1,537.0 | 7.8 | -0.6 | 3.6 | 0.24 | 0.21 | -18.32 |
| 1,632.0 | 0.70 | 9.30 | 1,632.0 | 8.8 | -0.5 | 4.3 | 0.21 | 0.21 | 1.37 |
| 1,727.0 | 0.60 | 333.40 | 1,727.0 | 9.8 | -0.6 | 4.7 | 0.43 | -0.11 | -37.79 |
| 1,822.0 | 2.70 | 348.30 | 1,821.9 | 12.4 | -1.3 | 5.6 | 2.24 | 2.21 | 15.68 |
| 1,917.0 | 5.20 | 355.70 | 1,916.7 | 18.9 | -2.1 | 8.4 | 2.68 | 2.63 | 7.79 |
| 1,996.0 | 6.70 | 355.90 | 1,995.3 | 27.1 | -2.7 | 12.3 | 1.90 | 1.90 | 0.25 |
| 2,086.0 | 8.40 | 349.00 | 2,084.5 | 38.8 | -4.3 | 17.2 | 2.14 | 1.89 | -7.67 |
| 2,176.0 | 8.20 | 350.80 | 2,173.5 | 51.6 | -6.6 | 22.1 | 0.36 | -0.22 | 2.00 |
| 2,266.0 | 7.70 | 345.40 | 2,262.7 | 63.7 | -9.1 | 26.5 | 1.00 | -0.56 | -6.00 |
| 2,356.0 | 7.80 | 342.50 | 2,351.9 | 75.4 | -12.5 | 29.9 | 0.45 | 0.11 | -3.22 |
| 2,446.0 | 9.20 | 342.90 | 2,440.9 | 88.1 | -16.4 | 33.4 | 1.56 | 1.56 | 0.44 |
| 2,536.0 | 9.50 | 344.30 | 2,529.7 | 102.1 | -20.6 | 37.4 | 0.42 | 0.33 | 1.56 |
| 2,625.0 | 9.50 | 348.70 | 2,617.4 | 116.4 | -24.0 | 42.2 | 0.82 | 0.00 | 4.94 |
| 2,715.0 | 9.30 | 346.20 | 2,706.2 | 130.7 | -27.2 | 47.2 | 0.51 | -0.22 | -2.78 |
| 2,805.0 | 9.30 | 342.70 | 2,795.1 | 144.7 | -31.1 | 51.4 | 0.63 | 0.00 | -3.89 |
| 2,895.0 | 8.90 | 348.30 | 2,883.9 | 158.5 | -34.7 | 55.8 | 1.08 | -0.44 | 6.22 |
| 2,985.0 | 8.40 | 349.00 | 2,972.9 | 171.8 | -37.3 | 60.7 | 0.57 | -0.56 | 0.78 |
| 3,075.0 | 8.10 | 345.20 | 3,062.0 | 184.4 | -40.2 | 65.0 | 0.69 | -0.33 | -4.22 |
| 3,164.0 | 7.50 | 355.50 | 3,150.1 | 196.2 | -42.2 | 69.6 | 1.71 | -0.67 | 11.57 |
| 3,254.0 | 8.20 | 348.20 | 3,239.3 | 208.4 | -44.0 | 74.7 | 1.35 | 0.78 | -8.11 |
| 3,344.0 | 8.70 | 347.80 | 3,328.3 | 221.3 | -46.8 | 79.3 | 0.56 | 0.56 | -0.44 |
| 3,434.0 | 9.20 | 347.50 | 3,417.2 | 235.0 | -49.8 | 84.1 | 0.56 | 0.56 | -0.33 |
| 3,524.0 | 9.10 | 348.00 | 3,506.1 | 248.9 | -52.8 | 89.0 | 0.14 | -0.11 | 0.56 |
| 3,614.0 | 9.60 | 348.50 | 3,594.9 | 263.3 | -55.8 | 94.2 | 0.56 | 0.56 | 0.56 |
| 3,704.0 | 9.80 | 348.20 | 3,683.6 | 278.1 | -58.8 | 99.6 | 0.23 | 0.22 | -0.33 |
| 3,793.0 | 9.70 | 349.20 | 3,771.3 | 292.9 | -61.8 | 105.0 | 0.22 | -0.11 | 1.12 |
| 3,883.0 | 9.40 | 349.70 | 3,860.1 | 307.6 | -64.5 | 110.6 | 0.35 | -0.33 | 0.56 |
| 3,973.0 | 7.70 | 350.30 | 3,949.1 | 320.7 | -66.9 | 115.7 | 1.89 | -1.89 | 0.67 |
| 4,063.0 | 7.60 | 345.00 | 4,038.3 | 332.4 | -69.4 | 119.8 | 0.79 | -0.11 | -5.89 |
| 4,153.0 | 6.30 | 351.30 | 4,127.6 | 343.1 | -71.7 | 123.6 | 1.67 | -1.44 | 7.00 |
| 4,242.0 | 5.50 | 345.50 | 4,216.1 | 352.0 | -73.5 | 126.9 | 1.12 | -0.90 | -6.52 |
| 4,332.0 | 4.20 | 1.00 | 4,305.8 | 359.5 | -74.5 | 130.0 | 2.04 | -1.44 | 17.22 |
| 4,422.0 | 2.80 | 359.20 | 4,395.6 | 365.0 | -74.5 | 133.0 | 1.56 | -1.56 | -2.00 |
| 4,512.0 | 2.20 | 352.60 | 4,485.6 | 368.9 | -74.8 | 134.9 | 0.74 | -0.67 | -7.33 |
| 4,602.0 | 1.10 | 49.50 | 4,575.5 | 371.2 | -74.3 | 136.5 | 2.05 | -1.22 | 63.22 |
| 4,692.0 | 0.40 | 141.80 | 4,665.5 | 371.5 | -73.5 | 137.3 | 1.32 | -0.78 | 102.56 |
| 4,782.0 | 0.50 | 70.30 | 4,755.5 | 371.4 | -72.9 | 137.8 | 0.59 | 0.11 | -79.44 |
| 4,872.0 | 0.50 | 114.20 | 4,845.5 | 371.4 | -72.2 | 138.4 | 0.42 | 0.00 | 48.78 |
| 4,962.0 | 0.40 | 175.20 | 4,935.5 | 370.9 | -71.8 | 138.4 | 0.52 | -0.11 | 67.78 |
| 5,051.0 | 0.20 | 221.80 | 5,024.5 | 370.5 | -71.9 | 138.1 | 0.34 | -0.22 | 52.36 |
| 5,141.0 | 0.00 | 117.20 | 5,114.5 | 370.3 | -72.0 | 138.0 | 0.22 | -0.22 | 0.00 |
| 5,231.0 | 0.50 | 107.00 | 5,204.5 | 370.2 | -71.6 | 138.2 | 0.56 | 0.56 | 0.00 |
| 5,276.0 | 3.90 | 85.90 | 5,249.5 | 370.3 | -69.9 | 139.7 | 7.64 | 7.56 | -46.89 |
| 5,321.0 | 7.10 | 76.80 | 5,294.3 | 371.0 | -65.7 | 143.7 | 7.35 | 7.11 | -20.22 |
| 5,366.0 | 9.80 | 80.60 | 5,338.8 | 372.3 | -59.2 | 149.8 | 6.12 | 6.00 | 8.44 |
| 5,411.0 | 12.80 | 80.80 | 5,382.9 | 373.7 | -50.5 | 157.9 | 6.67 | 6.67 | 0.44 |
| 5,456.0 | 15.70 | 84.50 | 5,426.5 | 375.1 | -39.5 | 168.0 | 6.75 | 6.44 | 8.22 |
| 5,501.0 | 18.00 | 86.10 | 5,469.6 | 376.1 | -26.5 | 179.5 | 5.21 | 5.11 | 3.56 |
| 5,545.0 | 21.10 | 85.70 | 5,511.0 | 377.2 | -11.8 | 192.4 | 7.05 | 7.05 | -0.91 |
| 5,590.0 | 24.30 | 89.10 | 5,552.5 | 377.9 | 5.5 | 207.5 | 7.68 | 7.11 | 7.56 |
| 5,635.0 | 27.30 | 92.20 | 5,593.0 | 377.7 | 25.1 | 223.9 | 7.31 | 6.67 | 6.89 |
| 5,680.0 | 30.50 | 89.90 | 5,632.4 | 377.3 | 46.9 | 242.0 | 7.53 | 7.11 | -5.11 |

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|------------------|---|-------------------------------------|---|
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| Well: | Castor LC35-62HN | North Reference: | Grid |
| Wellbore: | Wellbore #1 | Survey Calculation Method: | Minimum Curvature |
| Design: | Wellbore #1 | Database: | Landmark |

| 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) |
| 5,725.0 | 34.20 | 87.50 | 5,670.4 | 377.9 | 70.9 | 262.6 | 8.70 | 8.22 | -5.33 |
| 5,770.0 | 38.40 | 86.30 | 5,706.7 | 379.3 | 97.5 | 285.8 | 9.47 | 9.33 | -2.67 |
| 5,815.0 | 42.30 | 85.90 | 5,741.0 | 381.3 | 126.6 | 311.4 | 8.69 | 8.67 | -0.89 |
| 5,860.0 | 46.20 | 86.80 | 5,773.2 | 383.3 | 157.9 | 338.9 | 8.78 | 8.67 | 2.00 |
| 5,904.0 | 50.10 | 88.40 | 5,802.6 | 384.7 | 190.6 | 367.3 | 9.27 | 8.86 | 3.64 |
| 5,949.0 | 53.50 | 88.70 | 5,830.4 | 385.6 | 226.0 | 397.6 | 7.57 | 7.56 | 0.67 |
| 5,994.0 | 57.20 | 89.20 | 5,856.0 | 386.2 | 263.0 | 429.2 | 8.27 | 8.22 | 1.11 |
| 6,039.0 | 61.10 | 89.60 | 5,879.1 | 386.6 | 301.6 | 462.0 | 8.70 | 8.67 | 0.89 |
| 6,084.0 | 63.80 | 89.10 | 5,899.9 | 387.1 | 341.5 | 495.9 | 6.08 | 6.00 | -1.11 |
| 6,129.0 | 66.70 | 88.00 | 5,918.7 | 388.1 | 382.4 | 530.9 | 6.82 | 6.44 | -2.44 |
| 6,174.0 | 70.20 | 87.00 | 5,935.2 | 390.0 | 424.2 | 567.2 | 8.05 | 7.78 | -2.22 |
| 6,219.0 | 73.30 | 86.40 | 5,949.3 | 392.4 | 466.8 | 604.5 | 7.00 | 6.89 | -1.33 |
| 6,264.0 | 76.20 | 87.00 | 5,961.2 | 394.9 | 510.2 | 642.4 | 6.57 | 6.44 | 1.33 |
| 6,309.0 | 79.50 | 87.10 | 5,970.6 | 397.2 | 554.1 | 680.7 | 7.34 | 7.33 | 0.22 |
| 6,331.0 | 82.00 | 87.30 | 5,974.2 | 398.3 | 575.8 | 699.6 | 11.40 | 11.36 | 0.91 |
| 6,402.0 | 84.60 | 84.80 | 5,982.4 | 403.1 | 646.1 | 761.5 | 5.06 | 3.66 | -3.52 |
| 6,496.0 | 85.60 | 86.30 | 5,990.5 | 410.4 | 739.5 | 844.2 | 1.91 | 1.06 | 1.60 |
| 6,587.0 | 88.50 | 88.40 | 5,995.2 | 414.6 | 830.2 | 923.1 | 3.93 | 3.19 | 2.31 |
| 6,636.2 | 88.60 | 88.19 | 5,996.4 | 416.0 | 879.4 | 965.3 | 0.48 | 0.21 | -0.43 |
| Castor LC35-62HN Landing Pt. | | | | | | | | | |
| 6,681.0 | 88.70 | 88.00 | 5,997.5 | 417.5 | 924.2 | 1,003.9 | 0.48 | 0.21 | -0.43 |
| 6,775.0 | 88.60 | 87.70 | 5,999.7 | 421.1 | 1,018.1 | 1,085.0 | 0.34 | -0.11 | -0.32 |
| 6,865.0 | 88.50 | 90.10 | 6,001.9 | 422.8 | 1,108.0 | 1,161.9 | 2.67 | -0.11 | 2.67 |
| 6,954.0 | 90.10 | 90.10 | 6,003.0 | 422.6 | 1,197.0 | 1,236.9 | 1.80 | 1.80 | 0.00 |
| 7,044.0 | 91.60 | 89.20 | 6,001.7 | 423.2 | 1,287.0 | 1,313.1 | 1.94 | 1.67 | -1.00 |
| 7,134.0 | 91.00 | 87.70 | 5,999.7 | 425.6 | 1,376.9 | 1,390.3 | 1.79 | -0.67 | -1.67 |
| 7,224.0 | 90.30 | 87.80 | 5,998.6 | 429.1 | 1,466.9 | 1,468.1 | 0.79 | -0.78 | 0.11 |
| 7,314.0 | 90.80 | 89.10 | 5,997.8 | 431.6 | 1,556.8 | 1,545.3 | 1.55 | 0.56 | 1.44 |
| 7,404.0 | 90.00 | 88.90 | 5,997.1 | 433.1 | 1,646.8 | 1,622.1 | 0.92 | -0.89 | -0.22 |
| 7,494.0 | 90.10 | 88.50 | 5,997.1 | 435.2 | 1,736.8 | 1,699.1 | 0.46 | 0.11 | -0.44 |
| 7,584.0 | 89.90 | 89.10 | 5,997.1 | 437.1 | 1,826.8 | 1,776.0 | 0.70 | -0.22 | 0.67 |
| 7,674.0 | 90.00 | 89.90 | 5,997.1 | 437.9 | 1,916.8 | 1,852.4 | 0.90 | 0.11 | 0.89 |
| 7,764.0 | 89.60 | 89.80 | 5,997.5 | 438.1 | 2,006.8 | 1,928.5 | 0.46 | -0.44 | -0.11 |
| 7,854.0 | 90.20 | 89.60 | 5,997.6 | 438.6 | 2,096.8 | 2,004.7 | 0.70 | 0.67 | -0.22 |
| 7,943.0 | 89.30 | 87.50 | 5,998.0 | 440.8 | 2,185.7 | 2,080.9 | 2.57 | -1.01 | -2.36 |
| 8,033.0 | 88.80 | 88.00 | 5,999.5 | 444.4 | 2,275.6 | 2,158.7 | 0.79 | -0.56 | 0.56 |
| 8,123.0 | 90.00 | 87.80 | 6,000.4 | 447.7 | 2,365.6 | 2,236.4 | 1.35 | 1.33 | -0.22 |
| 8,213.0 | 90.30 | 89.90 | 6,000.2 | 449.5 | 2,455.6 | 2,313.3 | 2.36 | 0.33 | 2.33 |
| 8,303.0 | 90.00 | 90.50 | 6,000.0 | 449.1 | 2,545.6 | 2,389.0 | 0.75 | -0.33 | 0.67 |
| 8,393.0 | 88.50 | 89.80 | 6,001.1 | 448.9 | 2,635.5 | 2,464.8 | 1.84 | -1.67 | -0.78 |
| 8,483.0 | 89.60 | 89.90 | 6,002.6 | 449.1 | 2,725.5 | 2,540.9 | 1.23 | 1.22 | 0.11 |
| 8,573.0 | 89.40 | 89.90 | 6,003.4 | 449.3 | 2,815.5 | 2,616.9 | 0.22 | -0.22 | 0.00 |
| 8,662.0 | 88.50 | 87.70 | 6,005.1 | 451.2 | 2,904.5 | 2,693.0 | 2.67 | -1.01 | -2.47 |
| 8,752.0 | 89.00 | 87.10 | 6,007.0 | 455.2 | 2,994.4 | 2,771.0 | 0.87 | 0.56 | -0.67 |
| 8,842.0 | 90.00 | 87.30 | 6,007.8 | 459.6 | 3,084.3 | 2,849.2 | 1.13 | 1.11 | 0.22 |
| 8,932.0 | 90.70 | 86.30 | 6,007.3 | 464.7 | 3,174.1 | 2,927.8 | 1.36 | 0.78 | -1.11 |
| 9,022.0 | 88.70 | 87.10 | 6,007.7 | 469.8 | 3,264.0 | 3,006.3 | 2.39 | -2.22 | 0.89 |
| 9,112.0 | 89.40 | 88.50 | 6,009.2 | 473.3 | 3,353.9 | 3,084.1 | 1.74 | 0.78 | 1.56 |
| 9,201.0 | 90.20 | 88.70 | 6,009.5 | 475.5 | 3,442.8 | 3,160.3 | 0.93 | 0.90 | 0.22 |
| 9,291.0 | 90.60 | 87.10 | 6,008.9 | 478.8 | 3,532.8 | 3,238.0 | 1.83 | 0.44 | -1.78 |
| 9,381.0 | 88.90 | 86.60 | 6,009.3 | 483.7 | 3,622.6 | 3,316.5 | 1.97 | -1.89 | -0.56 |
| 9,471.0 | 90.60 | 89.20 | 6,009.7 | 487.0 | 3,712.6 | 3,394.1 | 3.45 | 1.89 | 2.89 |
| 9,561.0 | 91.90 | 89.20 | 6,007.7 | 488.3 | 3,802.5 | 3,470.7 | 1.44 | 1.44 | 0.00 |

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|------------------|---|-------------------------------------|---|
| Company: | Noble Energy Inc.- Weld County, CO (Grid North) | Local Co-ordinate Reference: | Well Castor LC35-62HN |
| Project: | Sec.35-T9N-R59W | TVD Reference: | WELL @ 4852.0ft (Precision 828 RKB - 16') |
| Site: | Castor LC35-62HN Pad Sec.35-T9N-R59W | MD Reference: | WELL @ 4852.0ft (Precision 828 RKB - 16') |
| Well: | Castor LC35-62HN | North Reference: | Grid |
| Wellbore: | Wellbore #1 | Survey Calculation Method: | Minimum Curvature |
| Design: | Wellbore #1 | Database: | Landmark |

| 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) |
| 9,651.0 | 91.10 | 89.20 | 6,005.4 | 489.5 | 3,892.5 | 3,547.3 | 0.89 | -0.89 | 0.00 |
| 9,741.0 | 89.40 | 87.00 | 6,005.0 | 492.5 | 3,982.4 | 3,624.8 | 3.09 | -1.89 | -2.44 |
| 9,831.0 | 90.50 | 91.30 | 6,005.1 | 493.8 | 4,072.4 | 3,701.4 | 4.93 | 1.22 | 4.78 |
| 9,921.0 | 90.70 | 89.90 | 6,004.1 | 492.9 | 4,162.4 | 3,776.8 | 1.57 | 0.22 | -1.56 |
| 10,011.0 | 89.50 | 89.10 | 6,004.0 | 493.7 | 4,252.4 | 3,853.2 | 1.60 | -1.33 | -0.89 |
| 10,101.0 | 90.50 | 88.70 | 6,004.0 | 495.4 | 4,342.4 | 3,930.1 | 1.20 | 1.11 | -0.44 |
| 10,151.0 | 90.90 | 88.20 | 6,003.3 | 496.8 | 4,392.3 | 3,973.0 | 1.28 | 0.80 | -1.00 |
| 10,206.0 | 90.90 | 88.20 | 6,002.5 | 498.5 | 4,447.3 | 4,020.3 | 0.00 | 0.00 | 0.00 |
| Castor LC35-62HN BHL 660'FSL & 660'FEL | | | | | | | | | |

| | | |
|-------------------|--------------------|-------------|
| Checked By: _____ | Approved By: _____ | Date: _____ |
|-------------------|--------------------|-------------|