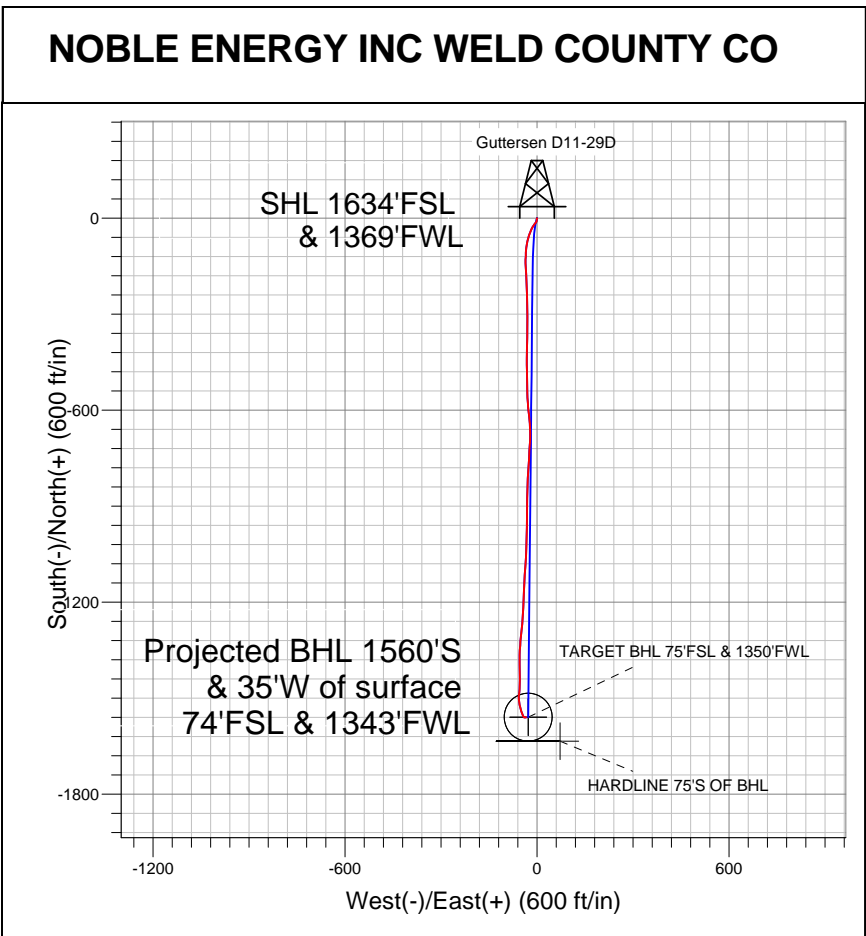
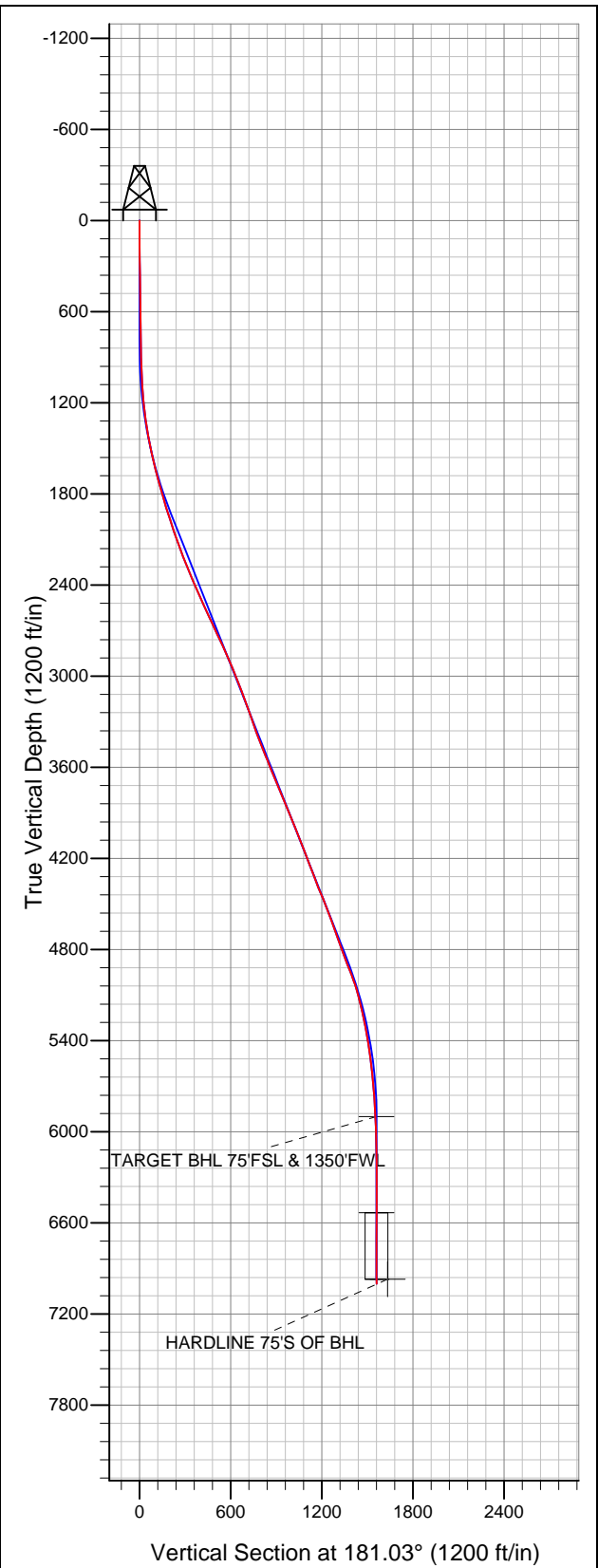




Well Name: Guttersen D11-29D
 Surface Location: Guttersen D11-29D Pad Sec.2-T3N-R64W
 North American Datum 1983 US State Plane 1983 Colorado Northern Zone
 Ground Elevation: 4700.0

| +N/-S | +E/-W | Northing | Easting | Latitude | Longitude | Slot |
|-------|-------|------------|------------|-----------|-------------|------|
| 0.0 | 0.0 | 1336016.77 | 3272730.85 | 40.251640 | -104.522870 | |

 Original Well Elev WELL @ 4713.0ft (Original Well Elev)



LEGEND

- Guttersen D11-29D, Wellbore #1, Noble Guttersen D11-29D Plan #1 (5-23-12) R V0
- Wellbore #1
- Survey #1

Final Survey Plot

Projected Final Survey -
 7271'MD & 7000'TVD @ 1561'VS
 0.80 deg Inc 116.70 deg AZ

Project: SEC.2-T3N-R64W
 Site: Guttersen D11-29D Pad Sec.2-T3N-R64W
 Well: Guttersen D11-29D
 Plan: Wellbore #1



NOBLE ENERGY INC WELD COUNTY CO

SEC.2-T3N-R64W

Guttersen D11-29D Pad Sec.2-T3N-R64W

Guttersen D11-29D

Wellbore #1

Survey: Survey #1

Standard Survey Report

31 May, 2012



| | | | |
|------------------|--------------------------------------|-------------------------------------|--------------------------------------|
| Company: | NOBLE ENERGY INC WELD COUNTY CO | Local Co-ordinate Reference: | Well Guttersen D11-29D |
| Project: | SEC.2-T3N-R64W | TVD Reference: | WELL @ 4713.0ft (Original Well Elev) |
| Site: | Guttersen D11-29D Pad Sec.2-T3N-R64W | MD Reference: | WELL @ 4713.0ft (Original Well Elev) |
| Well: | Guttersen D11-29D | North Reference: | True |
| Wellbore: | Wellbore #1 | Survey Calculation Method: | Minimum Curvature |
| Design: | Wellbore #1 | Database: | Landmark |

| | | | |
|--------------------|---------------------------------|----------------------|-----------------------------|
| Project | SEC.2-T3N-R64W, 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 |

| | | | | | |
|------------------------------|--------------------------------------|---------------------|----------------|--------------------------|-------------|
| Site | Guttersen D11-29D Pad Sec.2-T3N-R64W | | | | |
| Site Position: | | Northing: | 1,336,016.78ft | Latitude: | 40.251640 |
| From: | Lat/Long | Easting: | 3,272,730.85ft | Longitude: | -104.522870 |
| Position Uncertainty: | 0.0 ft | Slot Radius: | " | Grid Convergence: | 0.63 ° |

| | | | | | | |
|-----------------------------|-------------------|--------|----------------------------|-----------------|----------------------|-------------|
| Well | Guttersen D11-29D | | | | | |
| Well Position | +N/-S | 0.0 ft | Northing: | 1,336,016.77 ft | Latitude: | 40.251640 |
| | +E/-W | 0.0 ft | Easting: | 3,272,730.85 ft | Longitude: | -104.522870 |
| Position Uncertainty | | 0.0 ft | Wellhead Elevation: | ft | Ground Level: | 4,700.0 ft |

| | | | | | |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | Wellbore #1 | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2010 | 5/23/2012 | 8.60 | 66.94 | 52,981 |

| | | | | | |
|--------------------------|------------------------------|-------------------|-------------------|----------------------|-----|
| 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 (°) | |
| | 5,900.0 | 0.0 | 0.0 | 181.03 | |

| | | | | | |
|-----------------------|----------------|--------------------------|------------------|--------------------|--|
| Survey Program | Date | 5/31/2012 | | | |
| From (ft) | To (ft) | Survey (Wellbore) | Tool Name | Description | |
| 170.0 | 7,271.0 | Survey #1 (Wellbore #1) | MWD | MWD - Standard | |

| | | | | | | | | | | |
|----------------------------|------------------------|--------------------|----------------------------|-------------------|-------------------|------------------------------|------------------------------|-----------------------------|----------------------------|--|
| 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 | |
| 170.0 | 0.20 | 261.50 | 170.0 | 0.0 | -0.3 | 0.0 | 0.12 | 0.12 | 0.00 | |
| 265.0 | 0.80 | 179.60 | 265.0 | -0.7 | -0.5 | 0.7 | 0.84 | 0.63 | -86.21 | |
| 360.0 | 0.60 | 198.80 | 360.0 | -1.9 | -0.6 | 1.9 | 0.32 | -0.21 | 20.21 | |
| 455.0 | 0.70 | 196.00 | 455.0 | -2.9 | -0.9 | 2.9 | 0.11 | 0.11 | -2.95 | |
| 549.0 | 0.80 | 187.50 | 549.0 | -4.1 | -1.2 | 4.1 | 0.16 | 0.11 | -9.04 | |
| 645.0 | 0.90 | 188.60 | 645.0 | -5.5 | -1.4 | 5.5 | 0.11 | 0.10 | 1.15 | |
| 744.0 | 1.00 | 186.30 | 744.0 | -7.1 | -1.6 | 7.2 | 0.11 | 0.10 | -2.32 | |
| 845.0 | 1.10 | 177.20 | 844.9 | -9.0 | -1.6 | 9.0 | 0.19 | 0.10 | -9.01 | |
| 927.0 | 1.80 | 208.50 | 926.9 | -10.9 | -2.2 | 10.9 | 1.26 | 0.85 | 38.17 | |
| 1,009.0 | 2.80 | 223.80 | 1,008.8 | -13.5 | -4.2 | 13.5 | 1.42 | 1.22 | 18.66 | |
| 1,091.0 | 4.20 | 216.20 | 1,090.7 | -17.3 | -7.4 | 17.5 | 1.79 | 1.71 | -9.27 | |
| 1,172.0 | 5.80 | 212.70 | 1,171.4 | -23.2 | -11.3 | 23.4 | 2.01 | 1.98 | -4.32 | |

| | | | |
|------------------|--------------------------------------|-------------------------------------|--------------------------------------|
| Company: | NOBLE ENERGY INC WELD COUNTY CO | Local Co-ordinate Reference: | Well Guttersen D11-29D |
| Project: | SEC.2-T3N-R64W | TVD Reference: | WELL @ 4713.0ft (Original Well Elev) |
| Site: | Guttersen D11-29D Pad Sec.2-T3N-R64W | MD Reference: | WELL @ 4713.0ft (Original Well Elev) |
| Well: | Guttersen D11-29D | North Reference: | True |
| 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) | |
| 1,254.0 | 7.50 | 207.80 | 1,252.8 | -31.4 | -16.1 | 31.7 | 2.18 | 2.07 | -5.98 | |
| 1,336.0 | 9.30 | 202.70 | 1,333.9 | -42.2 | -21.1 | 42.6 | 2.37 | 2.20 | -6.22 | |
| 1,418.0 | 10.60 | 198.80 | 1,414.7 | -55.5 | -26.1 | 56.0 | 1.78 | 1.59 | -4.76 | |
| 1,499.0 | 12.00 | 192.30 | 1,494.1 | -70.8 | -30.3 | 71.3 | 2.33 | 1.73 | -8.02 | |
| 1,581.0 | 13.00 | 187.90 | 1,574.2 | -88.2 | -33.4 | 88.8 | 1.68 | 1.22 | -5.37 | |
| 1,663.0 | 14.70 | 183.20 | 1,653.8 | -107.8 | -35.2 | 108.4 | 2.48 | 2.07 | -5.73 | |
| 1,745.0 | 15.70 | 181.90 | 1,732.9 | -129.3 | -36.2 | 129.9 | 1.29 | 1.22 | -1.59 | |
| 1,827.0 | 16.10 | 177.90 | 1,811.8 | -151.7 | -36.1 | 152.3 | 1.42 | 0.49 | -4.88 | |
| 1,909.0 | 16.90 | 175.80 | 1,890.4 | -175.0 | -34.8 | 175.5 | 1.22 | 0.98 | -2.56 | |
| 1,990.0 | 17.80 | 177.20 | 1,967.7 | -199.1 | -33.4 | 199.6 | 1.22 | 1.11 | 1.73 | |
| 2,072.0 | 19.00 | 177.20 | 2,045.5 | -224.9 | -32.1 | 225.5 | 1.46 | 1.46 | 0.00 | |
| 2,154.0 | 19.90 | 179.10 | 2,122.9 | -252.2 | -31.2 | 252.7 | 1.34 | 1.10 | 2.32 | |
| 2,235.0 | 20.90 | 179.80 | 2,198.8 | -280.4 | -31.0 | 280.9 | 1.27 | 1.23 | 0.86 | |
| 2,317.0 | 21.80 | 179.50 | 2,275.2 | -310.3 | -30.8 | 310.8 | 1.11 | 1.10 | -0.37 | |
| 2,399.0 | 23.30 | 180.00 | 2,350.9 | -341.7 | -30.7 | 342.2 | 1.84 | 1.83 | 0.61 | |
| 2,481.0 | 24.00 | 181.00 | 2,426.0 | -374.6 | -31.0 | 375.1 | 0.98 | 0.85 | 1.22 | |
| 2,562.0 | 24.00 | 181.40 | 2,500.0 | -407.6 | -31.6 | 408.1 | 0.20 | 0.00 | 0.49 | |
| 2,644.0 | 24.00 | 181.00 | 2,574.9 | -440.9 | -32.3 | 441.4 | 0.20 | 0.00 | -0.49 | |
| 2,726.0 | 25.50 | 178.20 | 2,649.4 | -475.2 | -32.1 | 475.7 | 2.32 | 1.83 | -3.41 | |
| 2,808.0 | 24.70 | 179.10 | 2,723.6 | -510.0 | -31.3 | 510.5 | 1.08 | -0.98 | 1.10 | |
| 2,889.0 | 24.70 | 178.80 | 2,797.2 | -543.8 | -30.6 | 544.3 | 0.15 | 0.00 | -0.37 | |
| 2,971.0 | 24.70 | 176.10 | 2,871.7 | -578.1 | -29.1 | 578.5 | 1.38 | 0.00 | -3.29 | |
| 3,053.0 | 22.80 | 173.00 | 2,946.8 | -610.9 | -26.0 | 611.3 | 2.77 | -2.32 | -3.78 | |
| 3,135.0 | 21.50 | 176.50 | 3,022.7 | -641.7 | -23.2 | 642.0 | 2.26 | -1.59 | 4.27 | |
| 3,217.0 | 21.00 | 178.90 | 3,099.2 | -671.4 | -22.0 | 671.7 | 1.22 | -0.61 | 2.93 | |
| 3,298.0 | 19.80 | 182.80 | 3,175.1 | -699.6 | -22.3 | 699.9 | 2.24 | -1.48 | 4.81 | |
| 3,380.0 | 19.20 | 184.00 | 3,252.4 | -726.9 | -24.0 | 727.2 | 0.88 | -0.73 | 1.46 | |
| 3,462.0 | 19.60 | 182.60 | 3,329.7 | -754.1 | -25.5 | 754.5 | 0.75 | 0.49 | -1.71 | |
| 3,544.0 | 20.80 | 183.90 | 3,406.7 | -782.4 | -27.1 | 782.7 | 1.56 | 1.46 | 1.59 | |
| 3,626.0 | 21.60 | 183.60 | 3,483.1 | -812.0 | -29.1 | 812.4 | 0.98 | 0.98 | -0.37 | |
| 3,707.0 | 22.60 | 180.30 | 3,558.2 | -842.4 | -30.1 | 842.8 | 1.97 | 1.23 | -4.07 | |
| 3,789.0 | 21.20 | 182.10 | 3,634.3 | -873.0 | -30.7 | 873.4 | 1.89 | -1.71 | 2.20 | |
| 3,871.0 | 22.90 | 181.70 | 3,710.3 | -903.8 | -31.7 | 904.2 | 2.08 | 2.07 | -0.49 | |
| 3,953.0 | 23.50 | 180.20 | 3,785.6 | -936.1 | -32.3 | 936.5 | 1.03 | 0.73 | -1.83 | |
| 4,034.0 | 23.00 | 179.60 | 3,860.0 | -968.0 | -32.2 | 968.4 | 0.68 | -0.62 | -0.74 | |
| 4,116.0 | 21.50 | 181.60 | 3,935.9 | -999.1 | -32.5 | 999.5 | 2.05 | -1.83 | 2.44 | |
| 4,198.0 | 21.10 | 182.30 | 4,012.3 | -1,028.8 | -33.5 | 1,029.3 | 0.58 | -0.49 | 0.85 | |
| 4,280.0 | 21.80 | 182.80 | 4,088.7 | -1,058.8 | -34.9 | 1,059.3 | 0.88 | 0.85 | 0.61 | |
| 4,361.0 | 21.40 | 183.50 | 4,164.0 | -1,088.6 | -36.5 | 1,089.0 | 0.59 | -0.49 | 0.86 | |
| 4,443.0 | 20.80 | 183.90 | 4,240.5 | -1,118.0 | -38.4 | 1,118.5 | 0.75 | -0.73 | 0.49 | |
| 4,525.0 | 20.90 | 183.70 | 4,317.1 | -1,147.1 | -40.3 | 1,147.7 | 0.15 | 0.12 | -0.24 | |
| 4,607.0 | 21.90 | 182.30 | 4,393.4 | -1,177.0 | -41.9 | 1,177.6 | 1.37 | 1.22 | -1.71 | |
| 4,688.0 | 22.70 | 181.70 | 4,468.4 | -1,207.7 | -43.0 | 1,208.3 | 1.03 | 0.99 | -0.74 | |
| 4,770.0 | 21.20 | 183.00 | 4,544.4 | -1,238.4 | -44.2 | 1,239.0 | 1.92 | -1.83 | 1.59 | |
| 4,852.0 | 19.20 | 186.00 | 4,621.4 | -1,266.6 | -46.4 | 1,267.2 | 2.75 | -2.44 | 3.66 | |
| 4,934.0 | 19.90 | 187.00 | 4,698.7 | -1,293.8 | -49.5 | 1,294.5 | 0.95 | 0.85 | 1.22 | |
| 5,016.0 | 19.70 | 184.20 | 4,775.8 | -1,321.5 | -52.2 | 1,322.2 | 1.18 | -0.24 | -3.41 | |
| 5,098.0 | 21.10 | 182.80 | 4,852.7 | -1,350.0 | -54.0 | 1,350.8 | 1.81 | 1.71 | -1.71 | |
| 5,179.0 | 21.50 | 179.80 | 4,928.2 | -1,379.4 | -54.6 | 1,380.2 | 1.43 | 0.49 | -3.70 | |
| 5,261.0 | 19.60 | 178.80 | 5,004.9 | -1,408.2 | -54.3 | 1,408.9 | 2.36 | -2.32 | -1.22 | |
| 5,343.0 | 16.70 | 180.20 | 5,082.8 | -1,433.7 | -54.0 | 1,434.5 | 3.58 | -3.54 | 1.71 | |
| 5,425.0 | 13.50 | 180.90 | 5,162.0 | -1,455.1 | -54.2 | 1,455.8 | 3.91 | -3.90 | 0.85 | |
| 5,506.0 | 10.80 | 183.70 | 5,241.2 | -1,472.1 | -54.9 | 1,472.9 | 3.41 | -3.33 | 3.46 | |
| 5,588.0 | 10.70 | 187.90 | 5,321.7 | -1,487.3 | -56.4 | 1,488.1 | 0.96 | -0.12 | 5.12 | |

| | | | |
|------------------|---------------------------------------|-------------------------------------|--------------------------------------|
| Company: | NOBLE ENERGY INC WELD COUNTY CO | Local Co-ordinate Reference: | Well Gutteresen D11-29D |
| Project: | SEC.2-T3N-R64W | TVD Reference: | WELL @ 4713.0ft (Original Well Elev) |
| Site: | Gutteresen D11-29D Pad Sec.2-T3N-R64W | MD Reference: | WELL @ 4713.0ft (Original Well Elev) |
| Well: | Gutteresen D11-29D | North Reference: | True |
| 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) | |
| 5,670.0 | 9.20 | 177.70 | 5,402.5 | -1,501.4 | -57.2 | 1,502.2 | 2.82 | -1.83 | -12.44 | |
| 5,751.0 | 8.50 | 170.70 | 5,482.5 | -1,513.8 | -56.0 | 1,514.6 | 1.58 | -0.86 | -8.64 | |
| 5,833.0 | 6.80 | 166.10 | 5,563.8 | -1,524.5 | -53.8 | 1,525.2 | 2.20 | -2.07 | -5.61 | |
| 5,915.0 | 6.30 | 165.60 | 5,645.3 | -1,533.6 | -51.5 | 1,534.2 | 0.61 | -0.61 | -0.61 | |
| 5,997.0 | 4.80 | 158.50 | 5,726.9 | -1,541.1 | -49.2 | 1,541.7 | 2.01 | -1.83 | -8.66 | |
| 6,079.0 | 4.00 | 161.00 | 5,808.7 | -1,547.0 | -47.0 | 1,547.6 | 1.00 | -0.98 | 3.05 | |
| 6,160.0 | 3.30 | 157.50 | 5,889.5 | -1,551.8 | -45.2 | 1,552.4 | 0.91 | -0.86 | -4.32 | |
| 6,171.1 | 3.14 | 157.21 | 5,900.6 | -1,552.4 | -44.9 | 1,553.0 | 1.47 | -1.47 | -2.61 | |
| TARGET BHL 75'FSL & 1350'FWL | | | | | | | | | | |
| 6,242.0 | 2.10 | 154.30 | 5,971.4 | -1,555.4 | -43.6 | 1,555.9 | 1.47 | -1.46 | -4.11 | |
| 6,324.0 | 1.50 | 146.40 | 6,053.4 | -1,557.6 | -42.4 | 1,558.1 | 0.79 | -0.73 | -9.63 | |
| 6,406.0 | 0.90 | 139.70 | 6,135.3 | -1,559.0 | -41.3 | 1,559.5 | 0.75 | -0.73 | -8.17 | |
| 6,487.0 | 0.40 | 136.70 | 6,216.3 | -1,559.7 | -40.7 | 1,560.2 | 0.62 | -0.62 | -3.70 | |
| 6,651.0 | 0.30 | 95.40 | 6,380.3 | -1,560.1 | -39.9 | 1,560.6 | 0.16 | -0.06 | -25.18 | |
| 6,803.7 | 0.30 | 63.06 | 6,533.1 | -1,560.0 | -39.2 | 1,560.5 | 0.11 | 0.00 | -21.17 | |
| TARGET CIRCLE 75'FSL & 1350'FWL | | | | | | | | | | |
| 6,814.0 | 0.30 | 61.00 | 6,543.3 | -1,560.0 | -39.1 | 1,560.4 | 0.11 | 0.03 | -20.07 | |
| 6,978.0 | 0.40 | 90.50 | 6,707.3 | -1,559.8 | -38.2 | 1,560.2 | 0.12 | 0.06 | 17.99 | |
| 7,141.0 | 0.70 | 88.10 | 6,870.3 | -1,559.8 | -36.6 | 1,560.2 | 0.18 | 0.18 | -1.47 | |
| 7,225.0 | 0.80 | 116.70 | 6,954.3 | -1,560.0 | -35.6 | 1,560.4 | 0.46 | 0.12 | 34.05 | |
| HARDLINE 75'S OF BHL | | | | | | | | | | |
| 7,271.0 | 0.80 | 116.70 | 7,000.3 | -1,560.3 | -35.0 | 1,560.7 | 0.00 | 0.00 | 0.00 | |

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