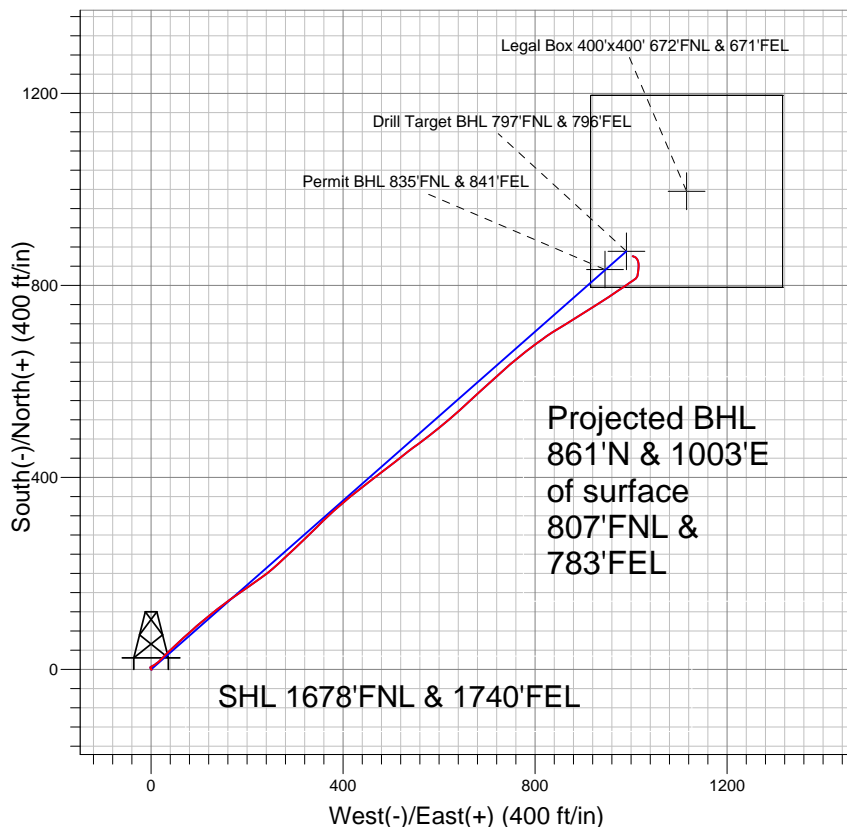
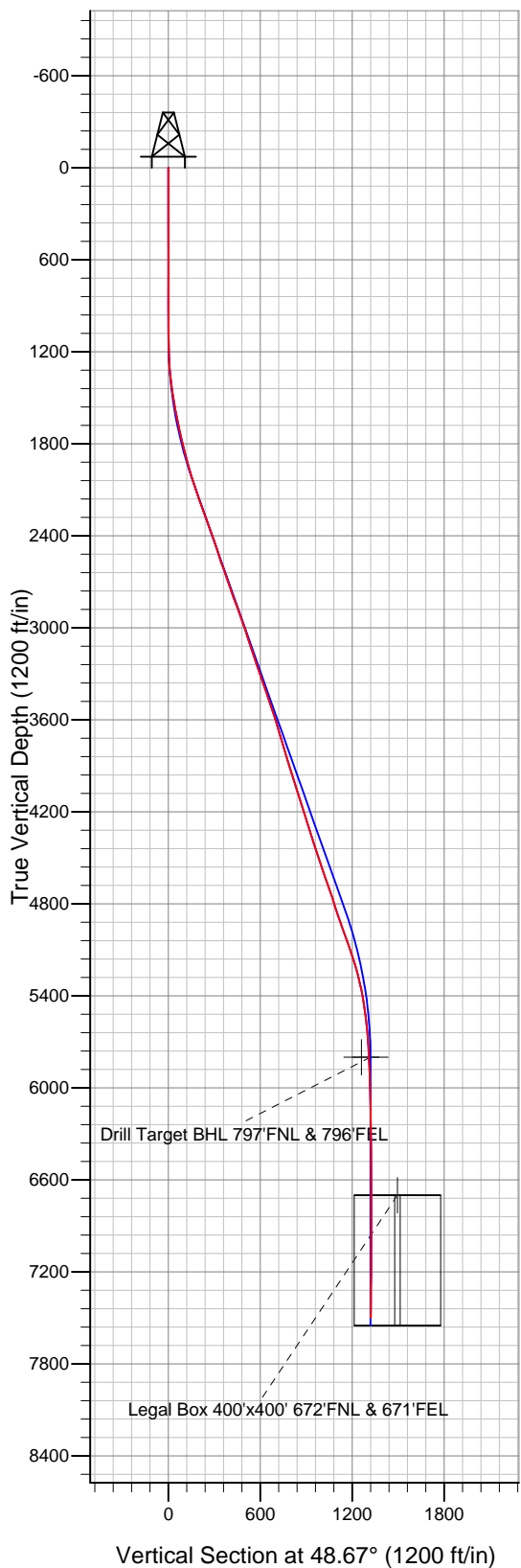


PETROLEUM DEVELOPMENT CORP Weld County CO



LEGEND

- Moody 41-32D, Wellbore #1, Plan#1 (1-28-11) V0
- Wellbore #1
- Survey #1

Final Survey Plot

Projected Final Survey -
7700'MD & 7499'TVD @ 1322'VS
0.4 deg Inc 291.3 deg AZ

Project: SEC.32-T7N-R66W
Site: Moody 31-32D Pad Sec.32-T7N-R66W
Well: Moody 41-32D
Plan: Wellbore #1



Directional

PETROLEUM DEVELOPMENT CORP Weld County CO

SEC.32-T7N-R66W

Moody 31-32D Pad Sec.32-T7N-R66W

Moody 41-32D

Wellbore #1

Survey: Survey #1

Standard Survey Report

21 March, 2011

| | | | |
|------------------|---|-------------------------------------|--------------------------------------|
| Company: | PETROLEUM DEVELOPMENT CORP Weld County CO | Local Co-ordinate Reference: | Well Moody 41-32D |
| Project: | SEC.32-T7N-R66W | TVD Reference: | WELL @ 4903.0ft (Original Well Elev) |
| Site: | Moody 31-32D Pad Sec.32-T7N-R66W | MD Reference: | WELL @ 4903.0ft (Original Well Elev) |
| Well: | Moody 41-32D | North Reference: | True |
| Wellbore: | Wellbore #1 | Survey Calculation Method: | Minimum Curvature |
| Design: | Wellbore #1 | Database: | Landmark |

| | | | |
|--------------------|--|----------------------|-----------------------------|
| Project | SEC.32-T7N-R66W, Weld County, Colorado | | |
| 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 | Moody 31-32D Pad Sec.32-T7N-R66W | | | | |
| Site Position: | | Northing: | 1,438,090.61 ft | Latitude: | 40° 32' 1.860 N |
| From: | Lat/Long | Easting: | 3,194,614.77 ft | Longitude: | 104° 47' 59.424 W |
| Position Uncertainty: | 0.0 ft | Slot Radius: | " | Grid Convergence: | 0.45 ° |

| | | | | | | |
|----------------------|--------------|--------|---------------------|-----------------|---------------|-------------------|
| Well | Moody 41-32D | | | | | |
| Well Position | +N-S | 0.0 ft | Northing: | 1,438,072.52 ft | Latitude: | 40° 32' 1.680 N |
| | +E-W | 0.0 ft | Easting: | 3,194,631.60 ft | Longitude: | 104° 47' 59.208 W |
| Position Uncertainty | | 0.0 ft | Wellhead Elevation: | ft | Ground Level: | 4,890.0 ft |

| | | | | | |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | Wellbore #1 | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF200510 | 1/24/2011 | 8.91 | 67.17 | 53,260 |

| | | | | | |
|--------------------------|------------------------------|-------------------|-------------------|----------------------|-----|
| 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 | 48.67 | |

| | | | | | |
|-----------------------|----------------|--------------------------|------------------|--------------------|--|
| Survey Program | Date | 3/21/2011 | | | |
| From (ft) | To (ft) | Survey (Wellbore) | Tool Name | Description | |
| 95.0 | 7,700.0 | 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 | |
| 95.0 | 0.20 | 16.40 | 95.0 | 0.2 | 0.0 | 0.1 | 0.21 | 0.21 | 0.00 | |
| 190.0 | 0.10 | 106.20 | 190.0 | 0.3 | 0.2 | 0.3 | 0.24 | -0.11 | 94.53 | |
| 285.0 | 0.20 | 166.10 | 285.0 | 0.1 | 0.3 | 0.3 | 0.18 | 0.11 | 63.05 | |
| 380.0 | 0.20 | 127.00 | 380.0 | -0.1 | 0.5 | 0.3 | 0.14 | 0.00 | -41.16 | |
| 475.0 | 0.30 | 148.50 | 475.0 | -0.5 | 0.7 | 0.2 | 0.14 | 0.11 | 22.63 | |
| 570.0 | 0.20 | 70.90 | 570.0 | -0.6 | 1.0 | 0.4 | 0.34 | -0.11 | -81.68 | |
| 665.0 | 0.40 | 336.30 | 665.0 | -0.3 | 1.0 | 0.6 | 0.49 | 0.21 | -99.58 | |
| 760.0 | 0.40 | 333.60 | 760.0 | 0.3 | 0.8 | 0.8 | 0.02 | 0.00 | -2.84 | |
| 855.0 | 0.50 | 341.60 | 855.0 | 1.0 | 0.5 | 1.0 | 0.12 | 0.11 | 8.42 | |
| 950.0 | 0.50 | 313.40 | 950.0 | 1.7 | 0.0 | 1.2 | 0.26 | 0.00 | -29.68 | |
| 958.0 | 0.90 | 306.20 | 958.0 | 1.8 | 0.0 | 1.1 | 5.11 | 5.00 | -90.00 | |

| | | | |
|------------------|---|-------------------------------------|--------------------------------------|
| Company: | PETROLEUM DEVELOPMENT CORP Weld County CO | Local Co-ordinate Reference: | Well Moody 41-32D |
| Project: | SEC.32-T7N-R66W | TVD Reference: | WELL @ 4903.0ft (Original Well Elev) |
| Site: | Moody 31-32D Pad Sec.32-T7N-R66W | MD Reference: | WELL @ 4903.0ft (Original Well Elev) |
| Well: | Moody 41-32D | 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) |
| 1,053.0 | 0.90 | 305.60 | 1,053.0 | 2.6 | -1.2 | 0.8 | 0.01 | 0.00 | -0.63 |
| 1,148.0 | 1.20 | 14.30 | 1,148.0 | 4.0 | -1.6 | 1.5 | 1.27 | 0.32 | 72.32 |
| 1,243.0 | 3.10 | 65.00 | 1,242.9 | 6.1 | 1.0 | 4.8 | 2.65 | 2.00 | 53.37 |
| 1,337.0 | 5.20 | 58.50 | 1,336.6 | 9.4 | 6.9 | 11.4 | 2.29 | 2.23 | -6.91 |
| 1,432.0 | 7.70 | 48.40 | 1,431.0 | 15.9 | 15.3 | 22.0 | 2.88 | 2.63 | -10.63 |
| 1,527.0 | 9.70 | 44.90 | 1,524.9 | 25.8 | 25.8 | 36.4 | 2.18 | 2.11 | -3.68 |
| 1,622.0 | 11.60 | 43.50 | 1,618.3 | 38.4 | 38.0 | 53.9 | 2.02 | 2.00 | -1.47 |
| 1,717.0 | 12.10 | 49.90 | 1,711.3 | 51.7 | 52.2 | 73.3 | 1.48 | 0.53 | 6.74 |
| 1,812.0 | 13.30 | 47.40 | 1,804.0 | 65.5 | 67.8 | 94.2 | 1.39 | 1.26 | -2.63 |
| 1,907.0 | 15.00 | 47.70 | 1,896.1 | 81.2 | 85.0 | 117.4 | 1.79 | 1.79 | 0.32 |
| 2,002.0 | 16.40 | 50.90 | 1,987.5 | 97.9 | 104.5 | 143.1 | 1.73 | 1.47 | 3.37 |
| 2,097.0 | 18.50 | 50.20 | 2,078.1 | 116.0 | 126.5 | 171.6 | 2.22 | 2.21 | -0.74 |
| 2,192.0 | 19.90 | 53.00 | 2,167.9 | 135.4 | 151.0 | 202.8 | 1.76 | 1.47 | 2.95 |
| 2,287.0 | 20.60 | 55.40 | 2,257.0 | 154.6 | 177.6 | 235.5 | 1.14 | 0.74 | 2.53 |
| 2,381.0 | 19.10 | 54.80 | 2,345.4 | 172.9 | 203.8 | 267.2 | 1.61 | -1.60 | -0.64 |
| 2,476.0 | 19.10 | 54.10 | 2,435.2 | 191.0 | 229.1 | 298.1 | 0.24 | 0.00 | -0.74 |
| 2,571.0 | 18.50 | 49.70 | 2,525.1 | 209.8 | 253.2 | 328.7 | 1.62 | -0.63 | -4.63 |
| 2,666.0 | 19.60 | 46.40 | 2,614.9 | 230.6 | 276.2 | 359.7 | 1.62 | 1.16 | -3.47 |
| 2,761.0 | 19.00 | 46.90 | 2,704.6 | 252.1 | 299.0 | 391.1 | 0.66 | -0.63 | 0.53 |
| 2,856.0 | 20.30 | 46.70 | 2,794.0 | 274.0 | 322.3 | 423.0 | 1.37 | 1.37 | -0.21 |
| 2,951.0 | 20.00 | 45.20 | 2,883.2 | 296.7 | 345.9 | 455.7 | 0.63 | -0.32 | -1.58 |
| 3,045.0 | 19.30 | 47.10 | 2,971.7 | 318.6 | 368.6 | 487.2 | 1.01 | -0.74 | 2.02 |
| 3,140.0 | 18.10 | 47.50 | 3,061.7 | 339.3 | 391.0 | 517.7 | 1.27 | -1.26 | 0.42 |
| 3,235.0 | 18.10 | 50.10 | 3,152.0 | 358.7 | 413.2 | 547.2 | 0.85 | 0.00 | 2.74 |
| 3,330.0 | 19.30 | 52.30 | 3,242.0 | 377.8 | 437.0 | 577.6 | 1.47 | 1.26 | 2.32 |
| 3,430.0 | 18.90 | 53.50 | 3,336.5 | 397.5 | 463.1 | 610.3 | 0.56 | -0.40 | 1.20 |
| 3,525.0 | 18.90 | 52.70 | 3,426.4 | 416.0 | 487.7 | 640.9 | 0.27 | 0.00 | -0.84 |
| 3,619.0 | 19.00 | 50.50 | 3,515.3 | 435.0 | 511.6 | 671.4 | 0.77 | 0.11 | -2.34 |
| 3,714.0 | 17.40 | 52.40 | 3,605.5 | 453.5 | 534.8 | 701.0 | 1.80 | -1.68 | 2.00 |
| 3,809.0 | 16.50 | 54.00 | 3,696.4 | 470.1 | 556.9 | 728.7 | 1.07 | -0.95 | 1.68 |
| 3,903.0 | 16.30 | 52.30 | 3,786.6 | 486.0 | 578.2 | 755.1 | 0.55 | -0.21 | -1.81 |
| 3,999.0 | 16.70 | 51.00 | 3,878.6 | 502.9 | 599.6 | 782.3 | 0.57 | 0.42 | -1.35 |
| 4,094.0 | 17.50 | 49.60 | 3,969.4 | 520.8 | 621.0 | 810.3 | 0.95 | 0.84 | -1.47 |
| 4,189.0 | 18.00 | 47.70 | 4,059.9 | 539.9 | 642.8 | 839.2 | 0.81 | 0.53 | -2.00 |
| 4,281.0 | 17.70 | 47.90 | 4,147.5 | 558.8 | 663.7 | 867.4 | 0.33 | -0.33 | 0.22 |
| 4,378.0 | 17.20 | 46.60 | 4,240.0 | 578.6 | 685.0 | 896.5 | 0.65 | -0.52 | -1.34 |
| 4,473.0 | 17.60 | 47.00 | 4,330.7 | 598.0 | 705.7 | 924.9 | 0.44 | 0.42 | 0.42 |
| 4,568.0 | 18.20 | 48.30 | 4,421.1 | 617.7 | 727.3 | 954.1 | 0.76 | 0.63 | 1.37 |
| 4,663.0 | 18.30 | 50.10 | 4,511.3 | 637.1 | 749.8 | 983.8 | 0.60 | 0.11 | 1.89 |
| 4,758.0 | 19.50 | 52.50 | 4,601.2 | 656.3 | 773.9 | 1,014.6 | 1.50 | 1.26 | 2.53 |
| 4,853.0 | 19.60 | 51.80 | 4,690.7 | 675.8 | 799.0 | 1,046.3 | 0.27 | 0.11 | -0.74 |
| 4,948.0 | 17.70 | 55.30 | 4,780.7 | 693.9 | 823.4 | 1,076.5 | 2.32 | -2.00 | 3.68 |
| 5,043.0 | 18.30 | 59.40 | 4,871.1 | 709.7 | 848.1 | 1,105.5 | 1.48 | 0.63 | 4.32 |
| 5,138.0 | 20.70 | 58.00 | 4,960.6 | 726.2 | 875.2 | 1,136.8 | 2.57 | 2.53 | -1.47 |
| 5,233.0 | 19.80 | 58.20 | 5,049.7 | 743.6 | 903.1 | 1,169.2 | 0.95 | -0.95 | 0.21 |
| 5,328.0 | 18.80 | 57.20 | 5,139.4 | 760.4 | 929.6 | 1,200.2 | 1.11 | -1.05 | -1.05 |
| 5,423.0 | 15.60 | 56.10 | 5,230.1 | 775.8 | 953.1 | 1,228.0 | 3.39 | -3.37 | -1.16 |
| 5,517.0 | 12.70 | 56.00 | 5,321.3 | 788.6 | 972.2 | 1,250.8 | 3.09 | -3.09 | -0.11 |
| 5,612.0 | 10.20 | 56.90 | 5,414.4 | 799.1 | 987.9 | 1,269.5 | 2.64 | -2.63 | 0.95 |
| 5,707.0 | 7.80 | 55.50 | 5,508.2 | 807.3 | 1,000.2 | 1,284.2 | 2.54 | -2.53 | -1.47 |
| 5,802.0 | 5.90 | 49.20 | 5,602.5 | 814.2 | 1,009.2 | 1,295.5 | 2.15 | -2.00 | -6.63 |
| 5,897.0 | 4.60 | 7.60 | 5,697.2 | 821.1 | 1,013.4 | 1,303.3 | 4.12 | -1.37 | -43.79 |
| 5,992.0 | 4.20 | 7.60 | 5,791.9 | 828.3 | 1,014.4 | 1,308.8 | 0.42 | -0.42 | 0.00 |

| | | | |
|------------------|---|-------------------------------------|--------------------------------------|
| Company: | PETROLEUM DEVELOPMENT CORP Weld County CO | Local Co-ordinate Reference: | Well Moody 41-32D |
| Project: | SEC.32-T7N-R66W | TVD Reference: | WELL @ 4903.0ft (Original Well Elev) |
| Site: | Moody 31-32D Pad Sec.32-T7N-R66W | MD Reference: | WELL @ 4903.0ft (Original Well Elev) |
| Well: | Moody 41-32D | 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) | |
| 5,999.9 | 4.13 | 7.50 | 5,799.7 | 828.9 | 1,014.5 | 1,309.2 | 0.95 | -0.95 | -1.26 | |
| Permit BHL 835'FNL & 841'FEL | | | | | | | | | | |
| 6,002.7 | 4.10 | 7.46 | 5,802.5 | 829.1 | 1,014.5 | 1,309.3 | 0.95 | -0.95 | -1.29 | |
| Drill Target BHL 797'FNL & 796'FEL | | | | | | | | | | |
| 6,087.0 | 3.30 | 6.10 | 5,886.7 | 834.5 | 1,015.1 | 1,313.4 | 0.95 | -0.95 | -1.62 | |
| 6,182.0 | 2.40 | 359.20 | 5,981.5 | 839.2 | 1,015.4 | 1,316.7 | 1.01 | -0.95 | -7.26 | |
| 6,277.0 | 1.90 | 358.60 | 6,076.5 | 842.8 | 1,015.3 | 1,319.0 | 0.53 | -0.53 | -0.63 | |
| 6,372.0 | 1.50 | 355.70 | 6,171.4 | 845.6 | 1,015.2 | 1,320.8 | 0.43 | -0.42 | -3.05 | |
| 6,467.0 | 1.50 | 350.50 | 6,266.4 | 848.1 | 1,014.9 | 1,322.2 | 0.14 | 0.00 | -5.47 | |
| 6,562.0 | 1.10 | 342.80 | 6,361.4 | 850.2 | 1,014.4 | 1,323.2 | 0.46 | -0.42 | -8.11 | |
| 6,656.0 | 1.10 | 333.90 | 6,455.4 | 851.8 | 1,013.8 | 1,323.8 | 0.18 | 0.00 | -9.47 | |
| 6,751.0 | 1.00 | 331.70 | 6,550.4 | 853.4 | 1,013.0 | 1,324.2 | 0.11 | -0.11 | -2.32 | |
| 6,846.0 | 0.90 | 331.60 | 6,645.3 | 854.8 | 1,012.2 | 1,324.6 | 0.11 | -0.11 | -0.11 | |
| 6,901.6 | 0.78 | 329.56 | 6,701.0 | 855.5 | 1,011.8 | 1,324.8 | 0.22 | -0.21 | -3.67 | |
| Legal Box 400'x400' 672'FNL & 671'FEL | | | | | | | | | | |
| 6,941.0 | 0.70 | 327.70 | 6,740.3 | 855.9 | 1,011.6 | 1,324.8 | 0.22 | -0.21 | -4.72 | |
| 7,036.0 | 0.70 | 312.50 | 6,835.3 | 856.8 | 1,010.8 | 1,324.9 | 0.19 | 0.00 | -16.00 | |
| 7,131.0 | 0.90 | 303.10 | 6,930.3 | 857.6 | 1,009.8 | 1,324.6 | 0.25 | 0.21 | -9.89 | |
| 7,226.0 | 1.00 | 304.00 | 7,025.3 | 858.5 | 1,008.5 | 1,324.2 | 0.11 | 0.11 | 0.95 | |
| 7,321.0 | 0.80 | 299.70 | 7,120.3 | 859.3 | 1,007.2 | 1,323.8 | 0.22 | -0.21 | -4.53 | |
| 7,416.0 | 0.80 | 292.00 | 7,215.3 | 859.8 | 1,006.0 | 1,323.3 | 0.11 | 0.00 | -8.11 | |
| 7,511.0 | 0.70 | 296.60 | 7,310.3 | 860.3 | 1,004.9 | 1,322.7 | 0.12 | -0.11 | 4.84 | |
| 7,605.0 | 0.50 | 259.20 | 7,404.3 | 860.5 | 1,004.0 | 1,322.2 | 0.46 | -0.21 | -39.79 | |
| 7,700.0 | 0.40 | 291.30 | 7,499.3 | 860.6 | 1,003.2 | 1,321.7 | 0.28 | -0.11 | 33.79 | |

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