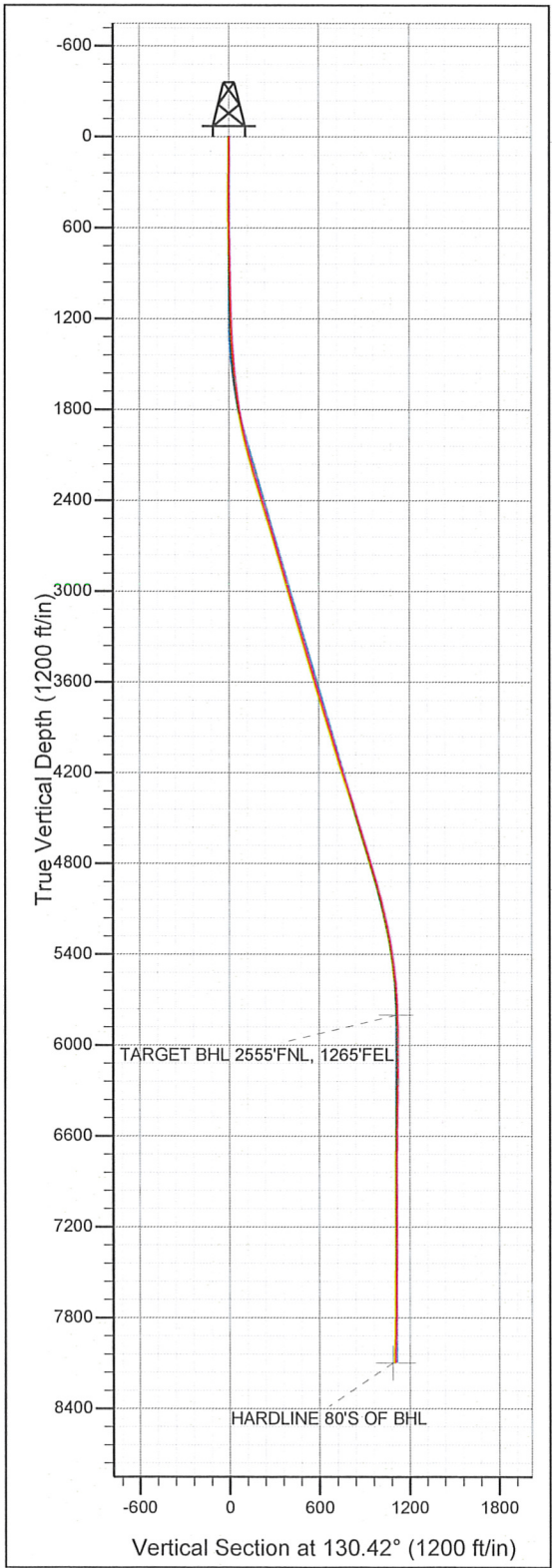
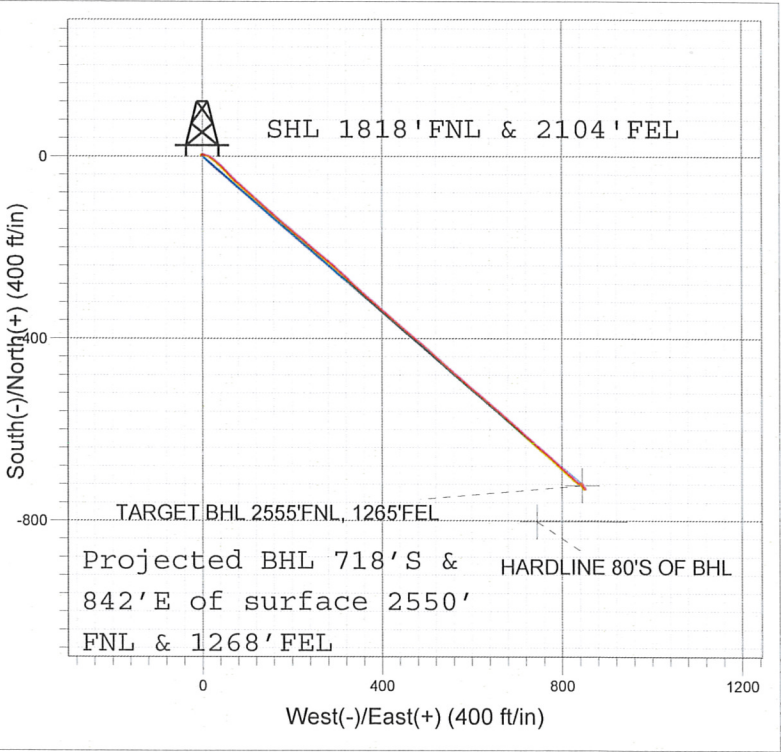




| | | | | | | |
|--|-------|------------|------------|--------------------------------------|-------------------|------|
| Well Name: Ft. Lupton Highlands USX WW 09-22D | | | | | | |
| Surface Location: Ft. Lupton Pad Sec.9-T1N-R66W | | | | | | |
| North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone | | | | | | |
| Ground Elevation: 5020.0 | | | | | | |
| +N/-S | +E/-W | Northing | Easting | Latitude | Longitude | Slot |
| 0.0 | 0.0 | 1268435.00 | 3201431.68 | 40° 4' 4.800 N | 104° 46' 48.972 W | |
| Original Well Elev | | | | WELL @ 5033.0ft (Original Well Elev) | | |



NOBLE ENERGY INC WELD COUNTY CO



| LEGEND | |
|--------|------------------------------------|
| | Ft. Lupton Highlands USX WW 09-22D |
| | Survey #1 |

Final Survey Plot

Projected Final Survey -
8248'MD & 8099'TVD @ 1107'
VS 1.1 deg Inc 305.9 deg AZ

Project: SEC.9-T1N-R66W
Site: Ft. Lupton Pad Sec.9-T1N-R66W
Well: Ft. Lupton Highlands USX WW 09-22D
Plan: Ft. Lupton Highlands USX WW 09-22D

| | | | |
|------------------|------------------------------------|-------------------------------------|---|
| Company: | NOBLE ENERGY INC WELD COUNTY CO | Local Co-ordinate Reference: | Well Ft. Lupton Highlands USX WW 09-22D |
| Project: | SEC.9-T1N-R66W | TVD Reference: | WELL @ 5033.0ft (Original Well Elev) |
| Site: | Ft. Lupton Pad Sec.9-T1N-R66W | MD Reference: | WELL @ 5033.0ft (Original Well Elev) |
| Well: | Ft. Lupton Highlands USX WW 09-22D | North Reference: | True |
| Wellbore: | Wellbore #1 | Survey Calculation Method: | Minimum Curvature |
| Design: | Ft. Lupton Highlands USX WW 09-22D | Database: | Landmark |

| | | | |
|--------------------|---------------------------------------|----------------------|----------------------------|
| Project | SEC.9-T1N-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 | | |

| | | | | | |
|------------------------------|-------------------------------|---------------------|-----------------|--------------------------|-------------------|
| Site | Ft. Lupton Pad Sec.9-T1N-R66W | | | | |
| Site Position: | | Northing: | 1,268,435.01 ft | Latitude: | 40° 4' 4.800 N |
| From: | Lat/Long | Easting: | 3,201,431.68 ft | Longitude: | 104° 46' 48.972 W |
| Position Uncertainty: | 0.0 ft | Slot Radius: | " | Grid Convergence: | 0.47 ° |

| | | | | | | |
|-----------------------------|------------------------------------|----------------------------|------------------|----------------------|-------------------|-------------------|
| Well | Ft. Lupton Highlands USX WW 09-22D | | | | | |
| Well Position | +N/-S | 0.0 ft | Northing: | 1,268,435.00 ft | Latitude: | 40° 4' 4.800 N |
| | +E/-W | 0.0 ft | Easting: | 3,201,431.68 ft | Longitude: | 104° 46' 48.972 W |
| Position Uncertainty | 0.0 ft | Wellhead Elevation: | ft | Ground Level: | 5,020.0 ft | |

| | | | | | |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | Wellbore #1 | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2010 | 7/21/2010 | 8.96 | 66.81 | 53,048 |

| | | | | | |
|--------------------------|------------------------------------|-------------------|-------------------|----------------------|-----|
| Design | Ft. Lupton Highlands USX WW 09-22D | | | | |
| 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 | 130.42 | |

| | | | | | |
|-----------------------|----------------|--------------------------|------------------|--------------------|--|
| Survey Program | Date 8/2/2010 | | | | |
| From (ft) | To (ft) | Survey (Wellbore) | Tool Name | Description | |
| 246.0 | 8,248.0 | 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 | |
| 246.0 | 0.60 | 344.80 | 246.0 | 1.2 | -0.3 | -1.1 | 0.24 | 0.24 | 0.00 | |
| 392.0 | 0.50 | 56.90 | 392.0 | 2.3 | 0.0 | -1.5 | 0.45 | -0.07 | 49.38 | |
| 562.0 | 1.00 | 101.10 | 562.0 | 2.4 | 2.1 | 0.0 | 0.43 | 0.29 | 26.00 | |
| 1,105.0 | 2.00 | 104.80 | 1,104.8 | -0.9 | 15.9 | 12.7 | 0.18 | 0.18 | 0.68 | |
| 1,200.0 | 1.60 | 112.10 | 1,199.7 | -1.8 | 18.7 | 15.4 | 0.48 | -0.42 | 7.68 | |
| 1,285.0 | 2.00 | 125.40 | 1,284.7 | -3.1 | 21.0 | 18.0 | 0.68 | 0.47 | 15.65 | |
| 1,371.0 | 2.60 | 133.90 | 1,370.6 | -5.3 | 23.7 | 21.5 | 0.80 | 0.70 | 9.88 | |
| 1,456.0 | 4.40 | 127.50 | 1,455.5 | -8.7 | 27.6 | 26.6 | 2.16 | 2.12 | -7.53 | |
| 1,542.0 | 5.30 | 133.90 | 1,541.2 | -13.4 | 33.1 | 33.9 | 1.22 | 1.05 | 7.44 | |
| 1,628.0 | 7.00 | 132.20 | 1,626.7 | -19.7 | 39.9 | 43.1 | 1.99 | 1.98 | -1.98 | |
| 1,713.0 | 8.40 | 135.20 | 1,710.9 | -27.6 | 48.1 | 54.5 | 1.71 | 1.65 | 3.53 | |
| 1,799.0 | 9.90 | 133.10 | 1,795.8 | -37.1 | 57.9 | 68.1 | 1.79 | 1.74 | -2.44 | |

Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.9-T1N-R66W
Site: Ft. Lupton Pad Sec.9-T1N-R66W
Well: Ft. Lupton Highlands USX WW 09-22D
Wellbore: Wellbore #1
Design: Ft. Lupton Highlands USX WW 09-22D

Local Co-ordinate Reference: Well Ft. Lupton Highlands USX WW 09-22D
TVD Reference: WELL @ 5033.0ft (Original Well Elev)
MD Reference: WELL @ 5033.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature
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) |
|-------------------------------|--------------------|----------------|---------------------------|---------------|---------------|-----------------------------|-----------------------------|----------------------------|---------------------------|
| 1,884.0 | 10.80 | 137.70 | 1,879.4 | -48.0 | 68.6 | 83.3 | 1.44 | 1.06 | 5.41 |
| 1,970.0 | 12.50 | 131.70 | 1,963.6 | -60.1 | 81.0 | 100.6 | 2.42 | 1.98 | -6.98 |
| 2,055.0 | 14.00 | 130.30 | 2,046.4 | -72.9 | 95.7 | 120.1 | 1.80 | 1.76 | -1.65 |
| 2,141.0 | 15.60 | 132.00 | 2,129.5 | -87.4 | 112.2 | 142.1 | 1.93 | 1.86 | 1.98 |
| 2,227.0 | 16.90 | 131.20 | 2,212.1 | -103.3 | 130.2 | 166.1 | 1.53 | 1.51 | -0.93 |
| 2,312.0 | 17.10 | 130.40 | 2,293.4 | -119.6 | 149.0 | 191.0 | 0.36 | 0.24 | -0.94 |
| 2,398.0 | 17.40 | 130.40 | 2,375.5 | -136.1 | 168.4 | 216.5 | 0.35 | 0.35 | 0.00 |
| 2,484.0 | 17.00 | 129.90 | 2,457.7 | -152.5 | 187.9 | 241.9 | 0.50 | -0.47 | -0.58 |
| 2,570.0 | 16.80 | 130.80 | 2,539.9 | -168.7 | 206.9 | 266.9 | 0.38 | -0.23 | 1.05 |
| 2,655.0 | 17.60 | 129.80 | 2,621.1 | -184.9 | 226.1 | 292.0 | 1.00 | 0.94 | -1.18 |
| 2,741.0 | 16.80 | 131.40 | 2,703.3 | -201.5 | 245.4 | 317.5 | 1.08 | -0.93 | 1.86 |
| 2,826.0 | 16.40 | 128.80 | 2,784.7 | -217.1 | 264.0 | 341.7 | 0.99 | -0.47 | -3.06 |
| 2,912.0 | 15.80 | 129.50 | 2,867.4 | -232.2 | 282.5 | 365.6 | 0.73 | -0.70 | 0.81 |
| 2,998.0 | 15.10 | 132.20 | 2,950.3 | -247.1 | 299.8 | 388.5 | 1.17 | -0.81 | 3.14 |
| 3,083.0 | 16.00 | 133.90 | 3,032.2 | -262.7 | 316.4 | 411.2 | 1.19 | 1.06 | 2.00 |
| 3,169.0 | 16.60 | 131.60 | 3,114.7 | -279.1 | 334.2 | 435.4 | 1.02 | 0.70 | -2.67 |
| 3,254.0 | 16.40 | 131.90 | 3,196.2 | -295.2 | 352.2 | 459.5 | 0.26 | -0.24 | 0.35 |
| 3,340.0 | 15.90 | 132.40 | 3,278.8 | -311.2 | 369.9 | 483.4 | 0.60 | -0.58 | 0.58 |
| 3,425.0 | 16.00 | 130.30 | 3,360.5 | -326.6 | 387.4 | 506.8 | 0.69 | 0.12 | -2.47 |
| 3,511.0 | 16.40 | 130.00 | 3,443.1 | -342.1 | 405.8 | 530.7 | 0.48 | 0.47 | -0.35 |
| 3,597.0 | 16.80 | 131.60 | 3,525.5 | -358.2 | 424.4 | 555.3 | 0.71 | 0.47 | 1.86 |
| 3,682.0 | 15.90 | 129.50 | 3,607.1 | -373.7 | 442.6 | 579.2 | 1.27 | -1.06 | -2.47 |
| 3,768.0 | 16.00 | 131.40 | 3,689.8 | -389.1 | 460.5 | 602.9 | 0.62 | 0.12 | 2.21 |
| 3,853.0 | 16.80 | 129.10 | 3,771.3 | -404.5 | 478.9 | 626.9 | 1.21 | 0.94 | -2.71 |
| 3,939.0 | 17.20 | 131.00 | 3,853.6 | -420.7 | 498.1 | 652.0 | 0.80 | 0.47 | 2.21 |
| 4,025.0 | 17.60 | 132.00 | 3,935.6 | -437.8 | 517.4 | 677.7 | 0.58 | 0.47 | 1.16 |
| 4,110.0 | 16.60 | 131.90 | 4,016.9 | -454.5 | 535.9 | 702.7 | 1.18 | -1.18 | -0.12 |
| 4,196.0 | 17.40 | 130.40 | 4,099.1 | -471.0 | 554.9 | 727.8 | 1.06 | 0.93 | -1.74 |
| 4,281.0 | 16.90 | 130.90 | 4,180.3 | -487.3 | 573.9 | 752.9 | 0.61 | -0.59 | 0.59 |
| 4,367.0 | 17.80 | 130.50 | 4,262.4 | -504.1 | 593.3 | 778.5 | 1.06 | 1.05 | -0.47 |
| 4,453.0 | 18.20 | 130.00 | 4,344.2 | -521.2 | 613.6 | 805.1 | 0.50 | 0.47 | -0.58 |
| 4,538.0 | 17.50 | 130.20 | 4,425.1 | -538.0 | 633.6 | 831.2 | 0.83 | -0.82 | 0.24 |
| 4,624.0 | 16.60 | 131.20 | 4,507.3 | -554.5 | 652.7 | 856.4 | 1.10 | -1.05 | 1.16 |
| 4,709.0 | 16.50 | 131.00 | 4,588.8 | -570.4 | 670.9 | 880.6 | 0.14 | -0.12 | -0.24 |
| 4,795.0 | 16.30 | 132.00 | 4,671.3 | -586.5 | 689.1 | 904.9 | 0.40 | -0.23 | 1.16 |
| 4,881.0 | 16.20 | 131.20 | 4,753.9 | -602.4 | 707.1 | 928.9 | 0.29 | -0.12 | -0.93 |
| 4,967.0 | 16.90 | 130.90 | 4,836.3 | -618.5 | 725.6 | 953.4 | 0.82 | 0.81 | -0.35 |
| 5,052.0 | 17.10 | 131.90 | 4,917.6 | -635.0 | 744.2 | 978.3 | 0.42 | 0.24 | 1.18 |
| 5,138.0 | 15.00 | 131.70 | 5,000.3 | -650.8 | 761.9 | 1,002.0 | 2.44 | -2.44 | -0.23 |
| 5,223.0 | 13.90 | 131.00 | 5,082.6 | -664.8 | 777.9 | 1,023.3 | 1.31 | -1.29 | -0.82 |
| 5,309.0 | 12.40 | 131.90 | 5,166.3 | -677.8 | 792.5 | 1,042.8 | 1.76 | -1.74 | 1.05 |
| 5,395.0 | 11.10 | 133.20 | 5,250.5 | -689.6 | 805.4 | 1,060.3 | 1.54 | -1.51 | 1.51 |
| 5,480.0 | 9.50 | 132.00 | 5,334.1 | -699.9 | 816.6 | 1,075.5 | 1.90 | -1.88 | -1.41 |
| 5,566.0 | 8.40 | 131.70 | 5,419.1 | -708.8 | 826.6 | 1,088.9 | 1.28 | -1.28 | -0.35 |
| 5,652.0 | 6.80 | 129.80 | 5,504.3 | -716.3 | 835.2 | 1,100.2 | 1.88 | -1.86 | -2.21 |
| 5,737.0 | 5.00 | 127.10 | 5,588.9 | -721.7 | 842.0 | 1,109.0 | 2.14 | -2.12 | -3.18 |
| 5,823.0 | 3.50 | 124.60 | 5,674.6 | -725.5 | 847.2 | 1,115.3 | 1.76 | -1.74 | -2.91 |
| 5,908.0 | 2.20 | 132.40 | 5,759.5 | -728.0 | 850.5 | 1,119.5 | 1.59 | -1.53 | 9.18 |
| 5,948.2 | 1.93 | 146.16 | 5,799.7 | -729.1 | 851.4 | 1,121.0 | 1.40 | -0.67 | 34.23 |
| TARGET BHL 2555'FNL, 1265'FEL | | | | | | | | | |
| 5,994.0 | 1.80 | 165.50 | 5,845.5 | -730.5 | 852.0 | 1,122.3 | 1.40 | -0.29 | 42.23 |
| 6,080.0 | 0.70 | 229.90 | 5,931.5 | -732.1 | 852.0 | 1,123.3 | 1.89 | -1.28 | 74.88 |
| 6,165.0 | 0.10 | 13.00 | 6,016.5 | -732.4 | 851.6 | 1,123.2 | 0.92 | -0.71 | 168.35 |
| 6,294.0 | 0.10 | 15.60 | 6,145.5 | -732.2 | 851.7 | 1,123.1 | 0.00 | 0.00 | 2.02 |

Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.9-T1N-R66W
Site: Ft. Lupton Pad Sec.9-T1N-R66W
Well: Ft. Lupton Highlands USX WW 09-22D
Wellbore: Wellbore #1
Design: Ft. Lupton Highlands USX WW 09-22D

Local Co-ordinate Reference: Well Ft. Lupton Highlands USX WW 09-22D
TVD Reference: WELL @ 5033.0ft (Original Well Elev)
MD Reference: WELL @ 5033.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature
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) |
|---------------------------|--------------------|----------------|---------------------------|---------------|---------------|-----------------------------|-----------------------------|----------------------------|---------------------------|
| 6,422.0 | 0.70 | 338.10 | 6,273.5 | -731.3 | 851.4 | 1,122.4 | 0.49 | 0.47 | -29.30 |
| 6,551.0 | 0.80 | 324.30 | 6,402.4 | -729.9 | 850.6 | 1,120.8 | 0.16 | 0.08 | -10.70 |
| 6,680.0 | 1.00 | 326.10 | 6,531.4 | -728.2 | 849.4 | 1,118.8 | 0.16 | 0.16 | 1.40 |
| 6,808.0 | 0.70 | 322.10 | 6,659.4 | -726.7 | 848.3 | 1,117.0 | 0.24 | -0.23 | -3.13 |
| 6,937.0 | 0.60 | 355.20 | 6,788.4 | -725.4 | 847.8 | 1,115.7 | 0.30 | -0.08 | 25.66 |
| 7,065.0 | 0.20 | 334.30 | 6,916.4 | -724.5 | 847.6 | 1,115.1 | 0.33 | -0.31 | -16.33 |
| 7,194.0 | 0.50 | 40.10 | 7,045.4 | -723.9 | 847.9 | 1,114.8 | 0.35 | 0.23 | 51.01 |
| 7,322.0 | 0.30 | 70.10 | 7,173.4 | -723.3 | 848.6 | 1,115.0 | 0.22 | -0.16 | 23.44 |
| 7,451.0 | 0.30 | 70.10 | 7,302.4 | -723.1 | 849.2 | 1,115.3 | 0.00 | 0.00 | 0.00 |
| 7,579.0 | 0.40 | 275.40 | 7,430.4 | -722.9 | 849.1 | 1,115.1 | 0.53 | 0.08 | -120.86 |
| 7,707.0 | 0.30 | 321.10 | 7,558.4 | -722.6 | 848.4 | 1,114.5 | 0.22 | -0.08 | 35.70 |
| 7,836.0 | 0.60 | 312.50 | 7,687.4 | -721.9 | 847.7 | 1,113.4 | 0.24 | 0.23 | -6.67 |
| 7,964.0 | 0.80 | 315.30 | 7,815.4 | -720.8 | 846.6 | 1,111.9 | 0.16 | 0.16 | 2.19 |
| 8,093.0 | 1.20 | 308.40 | 7,944.4 | -719.3 | 844.9 | 1,109.6 | 0.32 | 0.31 | -5.35 |
| 8,203.0 | 1.10 | 305.90 | 8,054.3 | -718.0 | 843.1 | 1,107.4 | 0.10 | -0.09 | -2.27 |
| 8,248.0 | 1.10 | 305.90 | 8,099.3 | -717.5 | 842.4 | 1,106.6 | 0.00 | 0.00 | 0.00 |

HARDLINE 80'S OF BHL

Checked By: _____ Approved By: _____ Date: _____