

Well Name: **Elmquist 2-4-23**

Surface Location: Elmquist 2-4-23 Pad Sec.23-T2N-R68W
 North American Datum 1983 US State Plane 1983 Colorado Northern Zone

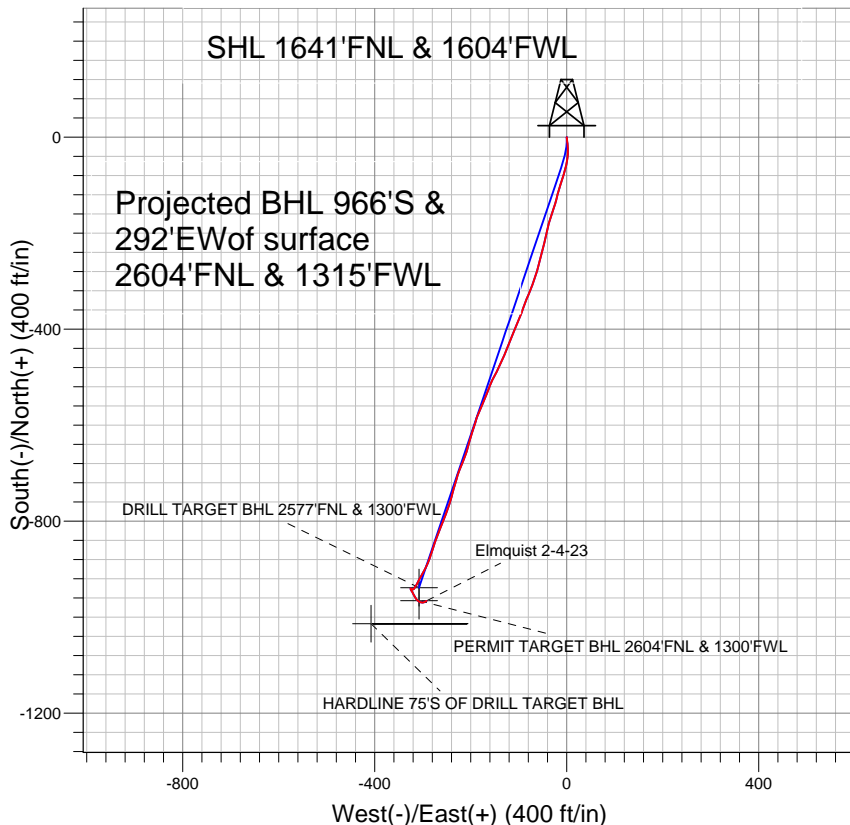
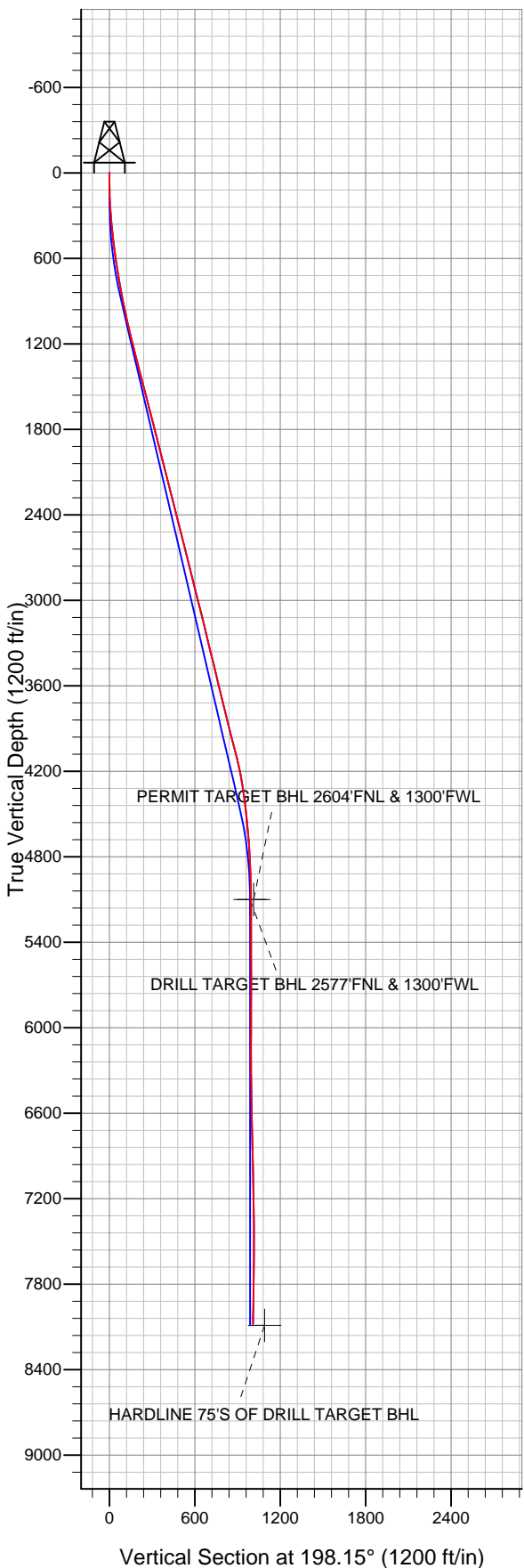
Ground Elevation: 4917.0

| +N/-S | +E/-W | Northing | Easting | Latitude | Longitude |
|-------|-------|------------|------------|-----------|-------------|
| 0.0 | 0.0 | 1289527.90 | 3147077.22 | 40.126950 | -104.974030 |

Original Well Elev WELL @ 4930.0ft (Original Well Elev)

Slot

EnCana Oil & Gas Weld County CO



LEGEND

- Elmquist 2-4-23, Wellbore #1, Plan #1 (11-16-11) V0
- Wellbore #1
- Survey #1

Final Survey Plot

Projected Final Survey -
 8195'MD & 8081'TVD @ 1009'VS
 1.1 deg Inc 57.0 deg AZ

Project: SEC.23-T2N-R68W
 Site: Elmquist 2-4-23 Pad Sec.23-T2N-R68W
 Well: Elmquist 2-4-23
 Plan: Wellbore #1



Directional

EnCana Oil & Gas Weld County CO

SEC.23-T2N-R68W

Elmqvist 2-4-23 Pad Sec.23-T2N-R68W

Elmqvist 2-4-23

Wellbore #1

Survey: Survey #1

Standard Survey Report

15 December, 2011

| | | | |
|------------------|-------------------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas Weld County CO | Local Co-ordinate Reference: | Well Elmquist 2-4-23 |
| Project: | SEC.23-T2N-R68W | TVD Reference: | WELL @ 4930.0ft (Original Well Elev) |
| Site: | Elmquist 2-4-23 Pad Sec.23-T2N-R68W | MD Reference: | WELL @ 4930.0ft (Original Well Elev) |
| Well: | Elmquist 2-4-23 | North Reference: | True |
| Wellbore: | Wellbore #1 | Survey Calculation Method: | Minimum Curvature |
| Design: | Wellbore #1 | Database: | Landmark |

| | | | |
|--------------------|--|----------------------|-----------------------------|
| Project | SEC.23-T2N-R68W, 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 | Elmquist 2-4-23 Pad Sec.23-T2N-R68W | | |
| Site Position: | | Northing: | 1,289,560.63 ft |
| From: | Lat/Long | Easting: | 3,147,065.84 ft |
| Position Uncertainty: | 0.0 ft | Slot Radius: | " |
| | | Latitude: | 40.127040 |
| | | Longitude: | -104.974070 |
| | | Grid Convergence: | 0.34 ° |

| | | | |
|-----------------------------|-----------------|----------------------------|----------------------------------|
| Well | Elmquist 2-4-23 | | |
| Well Position | +N/-S | 0.0 ft | Northing: 1,289,527.90 ft |
| | +E/-W | 0.0 ft | Easting: 3,147,077.22 ft |
| Position Uncertainty | 0.0 ft | Wellhead Elevation: | ft |
| | | Latitude: | 40.126950 |
| | | Longitude: | -104.974030 |
| | | Ground Level: | 4,917.0 ft |

| | | | |
|------------------|-------------------|--------------------|-----------------------------------|
| Wellbore | Wellbore #1 | | |
| Magnetics | Model Name | Sample Date | Declination (°) |
| | IGRF200510 | 11/16/2011 | 8.85 |
| | | | Dip Angle (°) 66.79 |
| | | | Field Strength (nT) 52,944 |

| | | | |
|--------------------------|------------------------------|----------------------|-----------------------------|
| 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) |
| | 0.0 | 0.0 | 0.0 |
| | | | Direction (°) 198.15 |

| | | | |
|-----------------------|------------------------|--------------------------|-----------------------------------|
| Survey Program | Date 12/15/2011 | | |
| From (ft) | To (ft) | Survey (Wellbore) | Tool Name |
| 72.0 | 8,195.0 | Survey #1 (Wellbore #1) | MWD |
| | | | Description 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 |
| 72.0 | 0.30 | 140.00 | 72.0 | -0.1 | 0.1 | 0.1 | 0.42 | 0.42 | 0.00 |
| 164.0 | 1.50 | 175.80 | 164.0 | -1.5 | 0.4 | 1.3 | 1.38 | 1.30 | 38.91 |
| 255.0 | 4.00 | 172.30 | 254.9 | -5.9 | 0.9 | 5.3 | 2.75 | 2.75 | -3.85 |
| 347.0 | 5.60 | 175.70 | 346.5 | -13.5 | 1.6 | 12.3 | 1.77 | 1.74 | 3.70 |
| 439.0 | 7.00 | 177.40 | 438.0 | -23.6 | 2.2 | 21.7 | 1.54 | 1.52 | 1.85 |
| 530.0 | 7.80 | 182.90 | 528.2 | -35.3 | 2.2 | 32.9 | 1.17 | 0.88 | 6.04 |
| 622.0 | 9.10 | 188.10 | 619.2 | -48.7 | 0.8 | 46.1 | 1.64 | 1.41 | 5.65 |
| 815.0 | 10.20 | 200.30 | 809.5 | -79.9 | -7.2 | 78.2 | 1.20 | 0.57 | 6.32 |
| 903.0 | 10.40 | 196.10 | 896.1 | -94.8 | -12.2 | 93.9 | 0.88 | 0.23 | -4.77 |
| 990.0 | 11.60 | 194.10 | 981.5 | -110.9 | -16.5 | 110.5 | 1.45 | 1.38 | -2.30 |
| 1,077.0 | 12.90 | 196.20 | 1,066.5 | -128.7 | -21.3 | 128.9 | 1.58 | 1.49 | 2.41 |
| 1,164.0 | 14.20 | 198.30 | 1,151.1 | -148.1 | -27.4 | 149.3 | 1.60 | 1.49 | 2.41 |

| | | | |
|------------------|-------------------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas Weld County CO | Local Co-ordinate Reference: | Well Elmquist 2-4-23 |
| Project: | SEC.23-T2N-R68W | TVD Reference: | WELL @ 4930.0ft (Original Well Elev) |
| Site: | Elmquist 2-4-23 Pad Sec.23-T2N-R68W | MD Reference: | WELL @ 4930.0ft (Original Well Elev) |
| Well: | Elmquist 2-4-23 | 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) |
|--|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| 1,252.0 | 14.60 | 197.80 | 1,236.3 | -168.9 | -34.1 | 171.2 | 0.48 | 0.45 | -0.57 |
| 1,339.0 | 14.70 | 192.70 | 1,320.5 | -190.1 | -39.9 | 193.1 | 1.49 | 0.11 | -5.86 |
| 1,426.0 | 14.60 | 192.40 | 1,404.7 | -211.6 | -44.7 | 215.0 | 0.14 | -0.11 | -0.34 |
| 1,514.0 | 14.50 | 193.10 | 1,489.9 | -233.2 | -49.6 | 237.0 | 0.23 | -0.11 | 0.80 |
| 1,601.0 | 14.10 | 194.30 | 1,574.2 | -254.1 | -54.7 | 258.4 | 0.57 | -0.46 | 1.38 |
| 1,688.0 | 14.30 | 198.00 | 1,658.5 | -274.5 | -60.6 | 279.8 | 1.07 | 0.23 | 4.25 |
| 1,776.0 | 15.20 | 198.70 | 1,743.6 | -295.8 | -67.7 | 302.2 | 1.04 | 1.02 | 0.80 |
| 1,863.0 | 14.90 | 201.50 | 1,827.6 | -317.0 | -75.4 | 324.7 | 0.90 | -0.34 | 3.22 |
| 1,950.0 | 14.00 | 202.20 | 1,911.9 | -337.2 | -83.5 | 346.4 | 1.05 | -1.03 | 0.80 |
| 2,037.0 | 13.60 | 199.60 | 1,996.4 | -356.5 | -90.9 | 367.1 | 0.85 | -0.46 | -2.99 |
| 2,125.0 | 14.60 | 202.00 | 2,081.7 | -376.6 | -98.5 | 388.5 | 1.32 | 1.14 | 2.73 |
| 2,212.0 | 14.50 | 201.70 | 2,165.9 | -396.9 | -106.7 | 410.3 | 0.14 | -0.11 | -0.34 |
| 2,299.0 | 14.30 | 203.30 | 2,250.2 | -416.9 | -114.9 | 431.9 | 0.51 | -0.23 | 1.84 |
| 2,387.0 | 13.80 | 200.80 | 2,335.6 | -436.6 | -123.0 | 453.2 | 0.89 | -0.57 | -2.84 |
| 2,474.0 | 13.60 | 202.70 | 2,420.1 | -455.8 | -130.6 | 473.8 | 0.57 | -0.23 | 2.18 |
| 2,561.0 | 14.90 | 206.60 | 2,504.4 | -475.2 | -139.6 | 495.0 | 1.86 | 1.49 | 4.48 |
| 2,649.0 | 15.40 | 207.10 | 2,589.3 | -495.7 | -149.9 | 517.8 | 0.59 | 0.57 | 0.57 |
| 2,736.0 | 14.00 | 202.20 | 2,673.5 | -515.8 | -159.2 | 539.7 | 2.15 | -1.61 | -5.63 |
| 2,823.0 | 14.10 | 200.60 | 2,757.9 | -535.4 | -166.9 | 560.8 | 0.46 | 0.11 | -1.84 |
| 2,910.0 | 13.80 | 203.40 | 2,842.3 | -554.9 | -174.7 | 581.7 | 0.85 | -0.34 | 3.22 |
| 2,998.0 | 13.90 | 203.40 | 2,927.8 | -574.2 | -183.1 | 602.7 | 0.11 | 0.11 | 0.00 |
| 3,085.0 | 14.40 | 197.80 | 3,012.1 | -594.1 | -190.6 | 623.9 | 1.67 | 0.57 | -6.44 |
| 3,172.0 | 14.20 | 195.70 | 3,096.4 | -614.7 | -196.8 | 645.4 | 0.64 | -0.23 | -2.41 |
| 3,260.0 | 13.50 | 197.10 | 3,181.9 | -634.9 | -202.7 | 666.4 | 0.88 | -0.80 | 1.59 |
| 3,347.0 | 13.50 | 196.20 | 3,266.5 | -654.3 | -208.5 | 686.7 | 0.24 | 0.00 | -1.03 |
| 3,434.0 | 13.60 | 202.90 | 3,351.1 | -673.5 | -215.3 | 707.1 | 1.81 | 0.11 | 7.70 |
| 3,522.0 | 14.20 | 201.00 | 3,436.5 | -693.1 | -223.2 | 728.2 | 0.86 | 0.68 | -2.16 |
| 3,609.0 | 13.30 | 195.20 | 3,521.0 | -712.7 | -229.7 | 748.8 | 1.89 | -1.03 | -6.67 |
| 3,696.0 | 13.00 | 196.60 | 3,605.7 | -731.8 | -235.1 | 768.6 | 0.50 | -0.34 | 1.61 |
| 3,783.0 | 14.00 | 194.70 | 3,690.3 | -751.3 | -240.6 | 788.9 | 1.26 | 1.15 | -2.18 |
| 3,871.0 | 13.80 | 199.00 | 3,775.7 | -771.6 | -246.7 | 810.0 | 1.20 | -0.23 | 4.89 |
| 3,958.0 | 14.30 | 201.50 | 3,860.1 | -791.4 | -254.0 | 831.1 | 0.90 | 0.57 | 2.87 |
| 4,045.0 | 14.20 | 203.40 | 3,944.5 | -811.2 | -262.2 | 852.5 | 0.55 | -0.11 | 2.18 |
| 4,133.0 | 14.80 | 199.20 | 4,029.7 | -831.7 | -270.2 | 874.4 | 1.38 | 0.68 | -4.77 |
| 4,220.0 | 13.90 | 197.60 | 4,113.9 | -852.1 | -277.0 | 896.0 | 1.13 | -1.03 | -1.84 |
| 4,307.0 | 11.70 | 199.40 | 4,198.8 | -870.4 | -283.1 | 915.3 | 2.57 | -2.53 | 2.07 |
| 4,395.0 | 9.50 | 201.20 | 4,285.3 | -885.6 | -288.6 | 931.5 | 2.53 | -2.50 | 2.05 |
| 4,482.0 | 7.90 | 206.80 | 4,371.3 | -897.6 | -293.9 | 944.5 | 2.08 | -1.84 | 6.44 |
| 4,569.0 | 6.90 | 211.50 | 4,457.5 | -907.4 | -299.4 | 955.5 | 1.34 | -1.15 | 5.40 |
| 4,656.0 | 6.00 | 210.50 | 4,544.0 | -915.8 | -304.4 | 965.1 | 1.04 | -1.03 | -1.15 |
| 4,744.0 | 5.10 | 205.90 | 4,631.6 | -923.3 | -308.4 | 973.4 | 1.14 | -1.02 | -5.23 |
| 4,831.0 | 3.60 | 202.90 | 4,718.3 | -929.3 | -311.2 | 980.0 | 1.74 | -1.72 | -3.45 |
| 4,918.0 | 3.30 | 216.60 | 4,805.2 | -933.8 | -313.8 | 985.1 | 1.01 | -0.34 | 15.75 |
| 5,006.0 | 1.90 | 206.30 | 4,893.1 | -937.1 | -315.9 | 988.9 | 1.67 | -1.59 | -11.70 |
| 5,093.0 | 1.80 | 208.20 | 4,980.0 | -939.6 | -317.2 | 991.7 | 0.13 | -0.11 | 2.18 |
| 5,180.0 | 1.00 | 241.60 | 5,067.0 | -941.2 | -318.5 | 993.6 | 1.28 | -0.92 | 38.39 |
| 5,212.9 | 0.78 | 242.72 | 5,099.9 | -941.4 | -319.0 | 994.0 | 0.69 | -0.68 | 3.39 |
| DRILL TARGET BHL 2577'FNL & 1300'FWL | | | | | | | | | |
| 5,213.0 | 0.78 | 242.72 | 5,100.0 | -941.4 | -319.0 | 994.0 | 0.00 | 0.00 | 0.00 |
| PERMIT TARGET BHL 2604'FNL & 1300'FWL | | | | | | | | | |
| 5,268.0 | 0.40 | 247.40 | 5,155.0 | -941.7 | -319.5 | 994.3 | 0.69 | -0.68 | 8.52 |
| 5,355.0 | 0.40 | 255.60 | 5,242.0 | -941.9 | -320.0 | 994.7 | 0.07 | 0.00 | 9.43 |
| 5,442.0 | 0.50 | 254.90 | 5,329.0 | -942.1 | -320.7 | 995.1 | 0.12 | 0.11 | -0.80 |
| 5,617.0 | 0.30 | 293.40 | 5,504.0 | -942.1 | -321.9 | 995.5 | 0.19 | -0.11 | 22.00 |

| | | | |
|------------------|-------------------------------------|-------------------------------------|--------------------------------------|
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| Site: | Elmquist 2-4-23 Pad Sec.23-T2N-R68W | MD Reference: | WELL @ 4930.0ft (Original Well Elev) |
| Well: | Elmquist 2-4-23 | 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) | |
| 5,791.0 | 0.30 | 309.30 | 5,678.0 | -941.6 | -322.6 | 995.3 | 0.05 | 0.00 | 9.14 | |
| 5,966.0 | 0.70 | 309.30 | 5,853.0 | -940.6 | -323.8 | 994.7 | 0.23 | 0.23 | 0.00 | |
| 6,141.0 | 0.20 | 289.90 | 6,028.0 | -939.9 | -324.9 | 994.3 | 0.29 | -0.29 | -11.09 | |
| 6,315.0 | 0.30 | 175.70 | 6,202.0 | -940.2 | -325.2 | 994.7 | 0.24 | 0.06 | -65.63 | |
| 6,490.0 | 0.80 | 159.50 | 6,377.0 | -941.8 | -324.7 | 996.1 | 0.30 | 0.29 | -9.26 | |
| 6,664.0 | 1.00 | 153.70 | 6,550.9 | -944.3 | -323.6 | 998.1 | 0.13 | 0.11 | -3.33 | |
| 6,839.0 | 1.50 | 148.60 | 6,725.9 | -947.6 | -321.7 | 1,000.7 | 0.29 | 0.29 | -2.91 | |
| 7,014.0 | 2.30 | 151.20 | 6,900.8 | -952.7 | -318.9 | 1,004.6 | 0.46 | 0.46 | 1.49 | |
| 7,188.0 | 3.10 | 150.40 | 7,074.6 | -959.8 | -314.9 | 1,010.1 | 0.46 | 0.46 | -0.46 | |
| 7,363.0 | 2.40 | 124.20 | 7,249.4 | -966.0 | -309.5 | 1,014.3 | 0.81 | -0.40 | -14.97 | |
| 7,537.0 | 1.50 | 108.70 | 7,423.3 | -968.8 | -304.3 | 1,015.4 | 0.59 | -0.52 | -8.91 | |
| 7,712.0 | 1.20 | 90.90 | 7,598.3 | -969.5 | -300.3 | 1,014.8 | 0.29 | -0.17 | -10.17 | |
| 7,887.0 | 1.00 | 58.90 | 7,773.2 | -968.8 | -297.2 | 1,013.1 | 0.36 | -0.11 | -18.29 | |
| 8,061.0 | 1.10 | 61.90 | 7,947.2 | -967.2 | -294.4 | 1,010.8 | 0.07 | 0.06 | 1.72 | |
| 8,145.0 | 1.10 | 57.00 | 8,031.2 | -966.4 | -293.0 | 1,009.6 | 0.11 | 0.00 | -5.83 | |
| 8,195.0 | 1.10 | 57.00 | 8,081.2 | -965.9 | -292.2 | 1,008.8 | 0.00 | 0.00 | 0.00 | |
| HARDLINE 75'S OF DRILL TARGET BHL | | | | | | | | | | |

Checked By: _____ Approved By: _____ Date: _____