

Exporting High-Resolution 2D & 3D Diagrams as Images

3/27/22

The **RockPlot2D / Edit / Copy Image** tool (Figure 1) will copy the current display on a pixel-by-pixel basis to the Windows Clipboard where it can be subsequently pasted into other programs such as Microsoft Word. In this example, the export was performed on a low-resolution monitor. An enlargement of a portion of the exported image is horribly pixelated and unsuitable for publication.

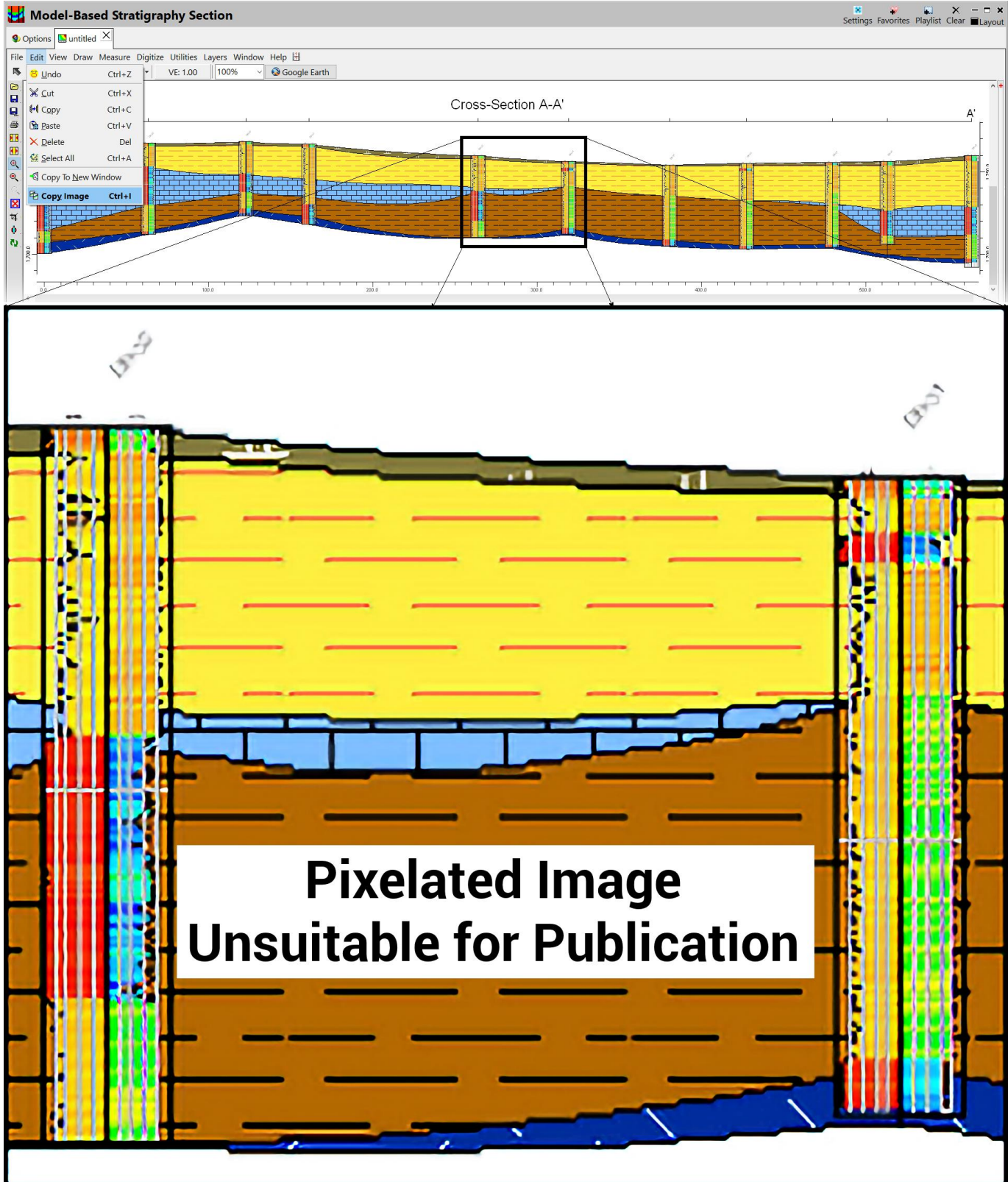


Figure 1

Conversely, the **RockPlot2D / File / Export / Raster** tools (Figure 2) allow the user to specify the output resolution (Figure 3) regardless of the monitor resolution. Compare the enlarged striplog content within Figure 2 with the striplogs in Figure 1.

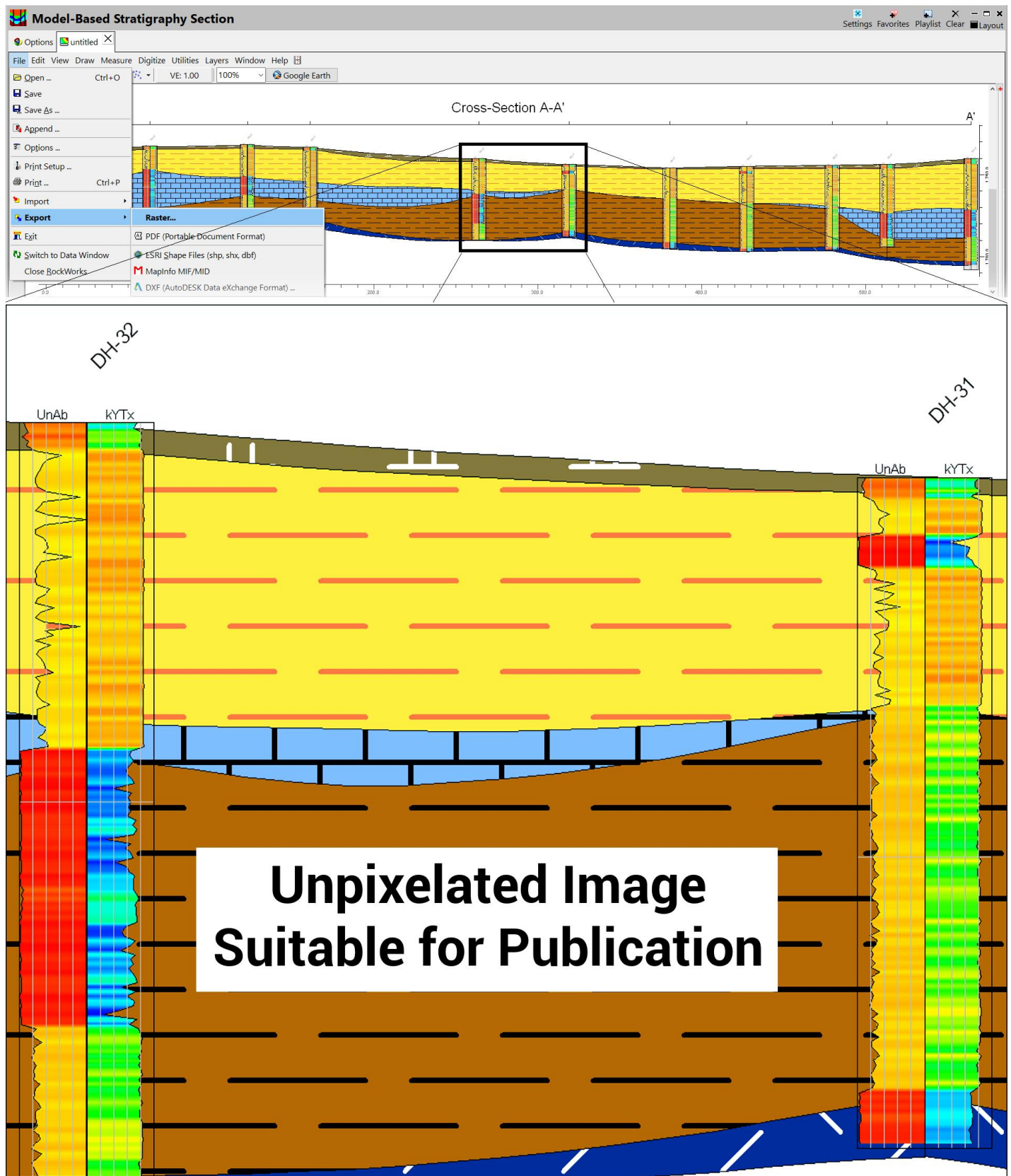


Figure 2

The resolution and size of the image created by the **Export / Raster** tool (Figure 3) is determined by the DPI (Dots Per Inch) setting. For example, a DPI setting of 1200 means that an 8" wide image will consist of 9600 pixels (1200 x 8). The **Image Width** should be determined by what the image will be used for. 2400 pixels is usually suitable for web pages, Word reports, and PowerPoint presentations. Higher resolutions may be required for poster presentations. Unnecessarily large images will result in unnecessarily large files.

RockPlot2D → Raster

Export Format

☐ BMP ☐ JPG ☒ PNG ☐ TIF

Output File Name:

Compression Level: ☐ Save Progressive

☐ Transparent Transparent Color:

☐ Change Background Color Background Color:

Dimensions Defined By ...

DPI: Units: ☒ Imperial (Inch) ☐ Metric (Cm)

☒ Width Image Width (Inch): = Pixels:

☐ Scale Factor

Line Width Adjustment

Pixels:

Vertical Exaggeration: Margin (%):

Pattern Scaling

☒ Automatic ☐ Manual

☐ Create "World" File

Naming Convention:

☒ Append "W" To Output File Extension ☐ 3-Character Extension

☒ Show Output In Default Viewer

Figure 3

When creating high-resolution images, line widths will be reduced in proportion to the increased resolution. If lines appear to be too thin within the final output, the **Line Width Adjustment** setting may be used to make the lines thicker or thinner (Figure 4).

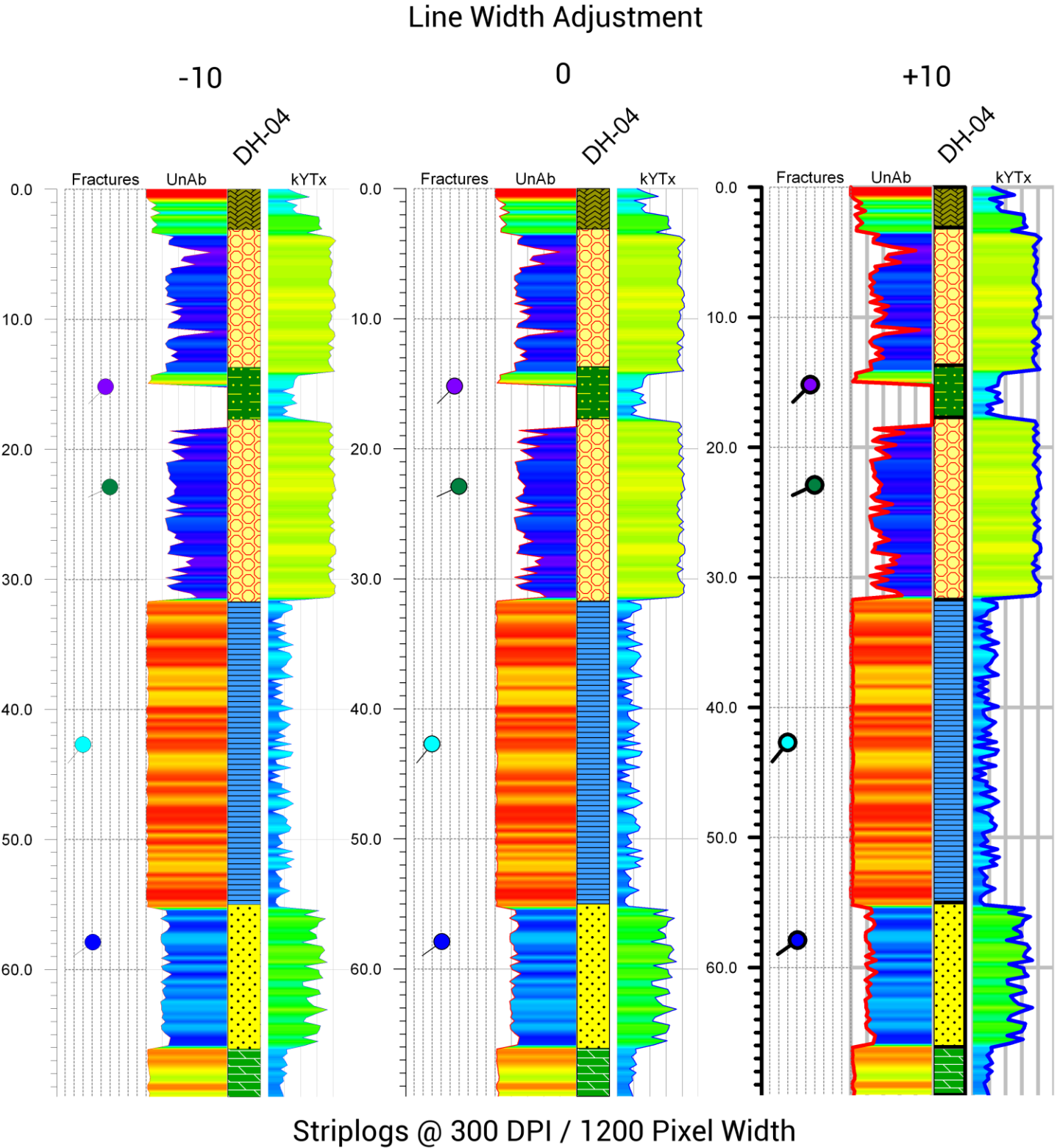


Figure 4

The **RockPlot3D / Edit / Copy Image** tool (Figure 5) will copy the current display on a pixel-by-pixel basis to the Windows Clipboard. In this example, the export was performed on a low-resolution monitor. An enlargement of a portion of the exported image is horribly pixelated and unsuitable for publication.

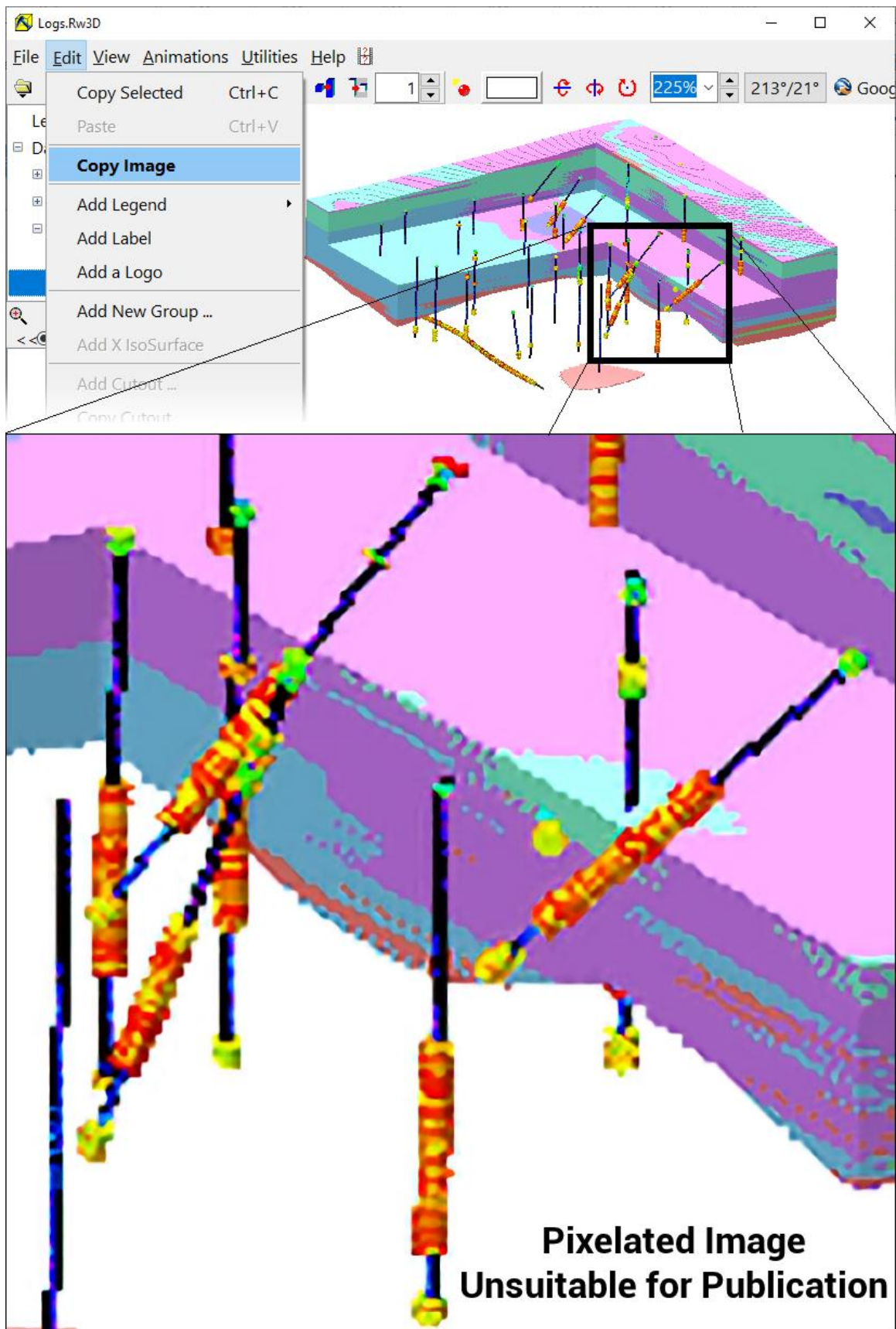


Figure 5

Conversely, the **RockPlot3D / File / Export** tools (Figure 6) allow the user to specify the output resolution (Figure 7) regardless of the monitor resolution.

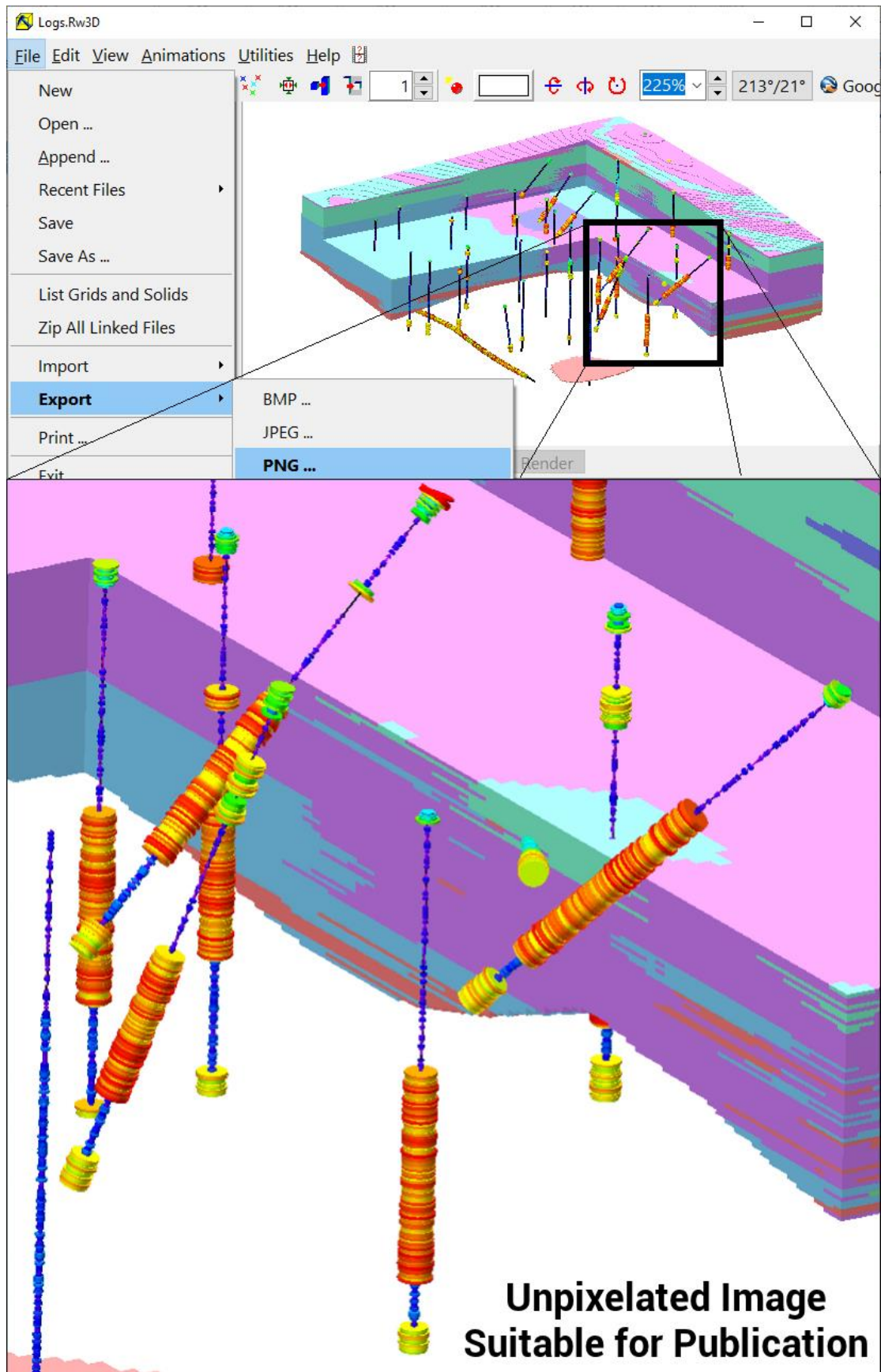
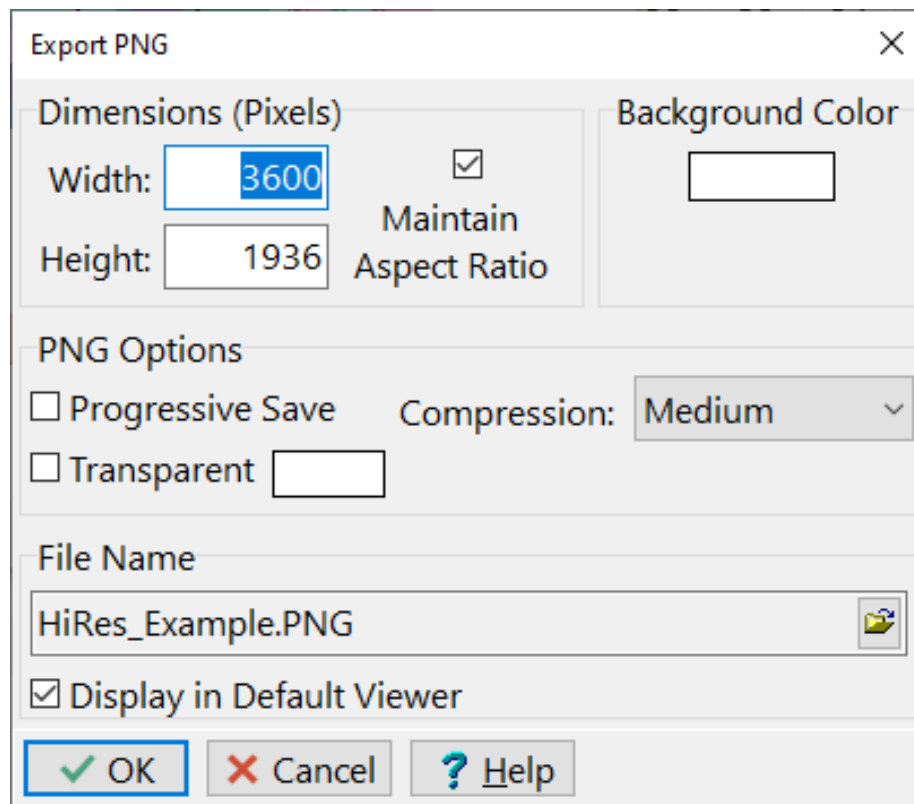


Figure 6

If the **Maintain Aspect Ratio** option is checked within the Export dialog (Figure 7), the **Height** of the image will be automatically calculated. The Width of the image depends upon what the image will be used for. 2400 pixels is usually suitable for web pages, Word reports, and PowerPoint presentations. Higher resolutions may be required for poster presentations. Unnecessarily large images will result in unnecessarily large files.



The image shows a software dialog box titled "Export PNG" with a close button (X) in the top right corner. The dialog is organized into several sections. The "Dimensions (Pixels)" section contains input fields for "Width" (set to 3600) and "Height" (set to 1936), with a checked checkbox for "Maintain Aspect Ratio". To the right is a "Background Color" section with a color selection box. Below this is the "PNG Options" section, which includes checkboxes for "Progressive Save" and "Transparent", and a "Compression" dropdown menu currently set to "Medium". The "File Name" section features a text input field containing "HiRes_Example.PNG" and a file icon button. At the bottom, there is a checked checkbox for "Display in Default Viewer" and three buttons: "OK" (with a green checkmark), "Cancel" (with a red X), and "Help" (with a question mark).

Figure 7