

Chapter 6: The Intervals Menu

The Intervals Menu

The Intervals Menu item is a tool that allows the user to selectively 'shade' intervals, either by partial, whole, or multiple tracks. This tool, as the example below shows, can be used to display formation tops across the whole log, connections in the depth column, slide intervals where ROP may be decreased, and other features. The below examples will show how to use some of the default intervals installed with the program, how to change formats of intervals, and how to create your own intervals.

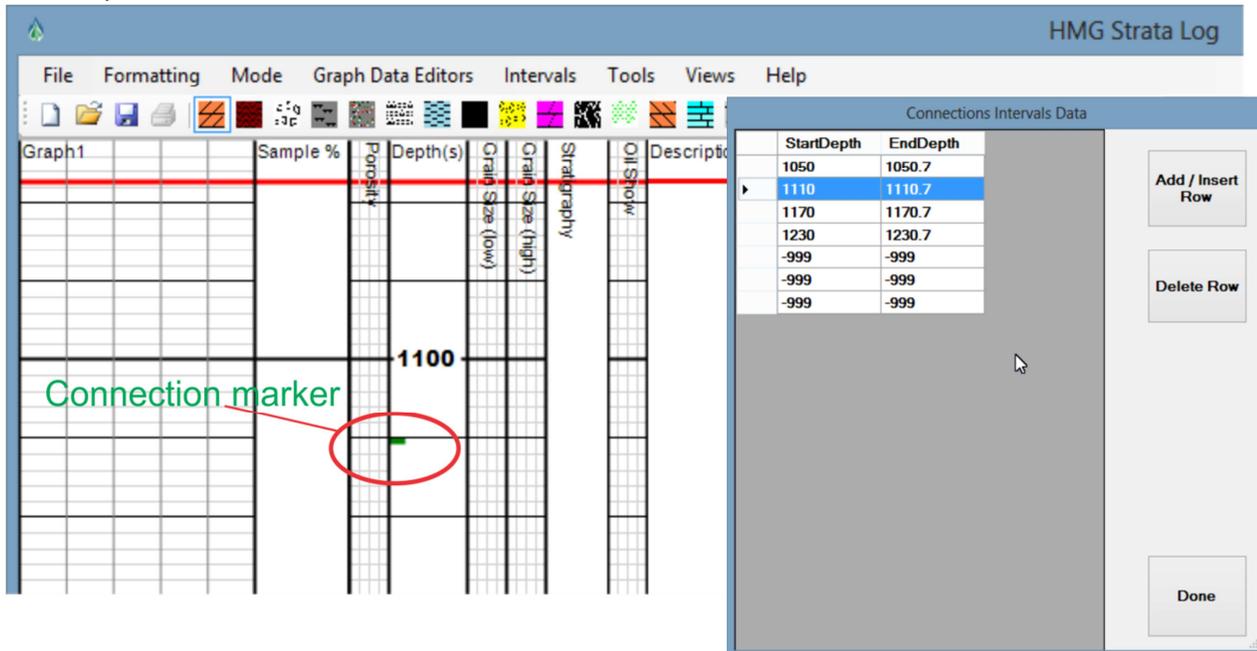
Default Intervals

For the well-site geologist, one of the most useful **Intervals** menu item is **Tops**. Tops are used to mark contacts between geologic units. To add a Top to the log, use Intervals->Tops. This will open a window which allows tops to be added as necessary. Use Add/Insert Row button to add as many rows as needed (or one at a time), then click in the *StartDepth* column and type a value. In the *EndDepth* column, type a value larger than starting depth; $x + 0.7$ works well for a 5-inch (1:240) log. Then click 'Done', and the new top interval will appear across the log as a red line (shown below).

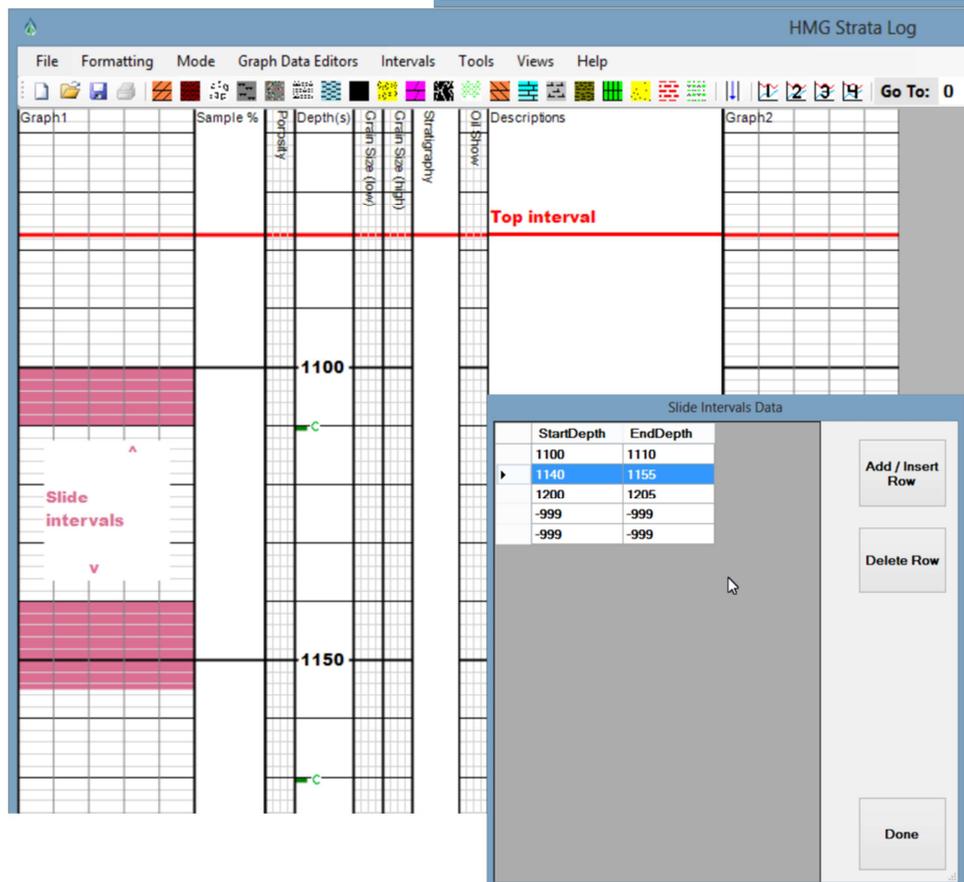
The screenshot shows a well log software interface with the 'Intervals' menu open. The menu options are: Show, Slide, **Tops**, Connections, Planned Core #1, Recovered Core #1, Planned Core #2, Recovered Core #2, and Format Intervals. The background shows a well log with depth (s) on the y-axis, ranging from 4450 to 4500. A red line is drawn at approximately 4465 feet, labeled 'Really Nice Sandstone: 4465' MD, 4354' TVD, 2696' SS'. Below this, a description of the sandstone is provided: 'SANDSTONE: White to light gray to salt and pepper sandstone clusters are poorly to moderately sorted with medium, sub-rounded grains. Sample also contains some loose quartz grains of similar description. Clusters are very...'. The 'Tops Intervals Data' dialog box is open, showing a table with columns 'StartDepth' and 'EndDepth'. The table contains several rows, with the row for 4465-4465.7 highlighted. The dialog box also has 'Add / Insert Row', 'Delete Row', and 'Done' buttons.

StartDepth	EndDepth
1022	1022.7
1077	1077.7
2500	2500.7
4465	4465.7
-999	-999
-999	-999
-999	-999
-999	-999

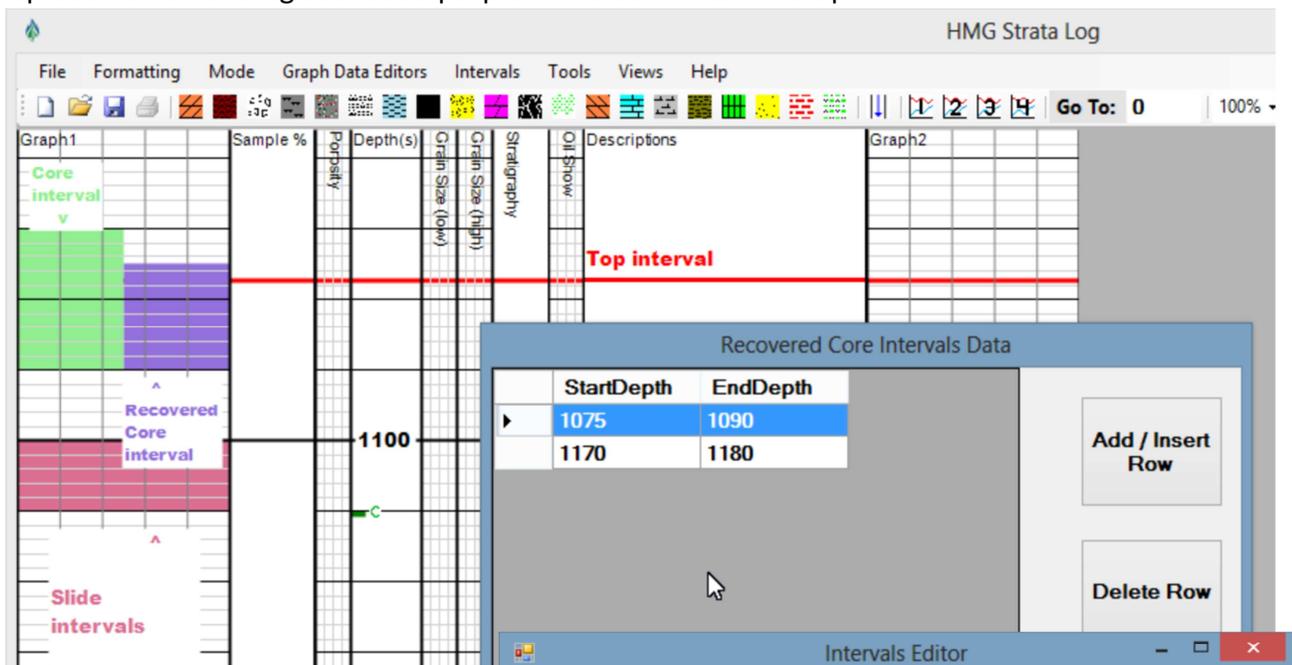
To add **Connections**, the process is similar: go to Intervals->**Connections**, and enter values corresponding to pipe tally or connection depth, then click *Done*. This will create a small green marker at the specified depth within the Depth track (the default track for connections but easily changed by the user). By default, the Connection intervals are displayed as 20% of the depth track. To add the green "C" connection symbol (see above image), use Mode->Image Mode->Connections and left-click in the Depth track. To change how the interval is represented, see section on *Format Intervals* later in this chapter.



To add **Slide** intervals, go to Intervals->Slide. Click Add/Insert Row button a few times to add spaces, then click within *StartDepth* and *EndDepth* spaces and input the depth intervals for each slide. The slides will be displayed on the log as a shaded pale red region within the Graph 1 track, as shown at right.



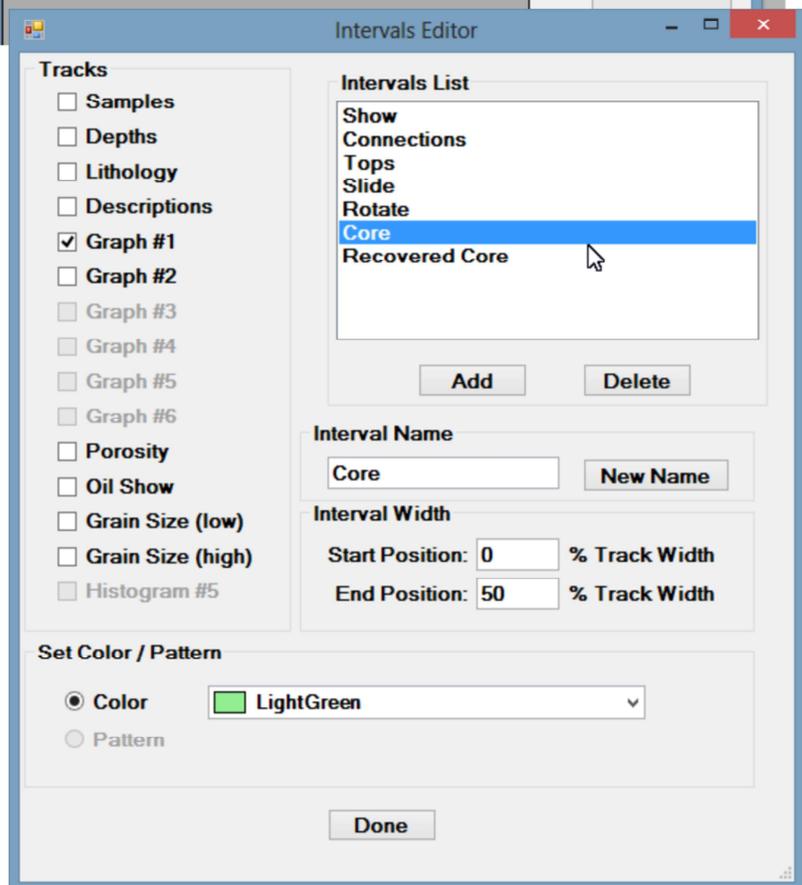
To add intervals for Planned Cores and Recovered Cores, follow the same steps. Go to Intervals->**Core**, click Add/Insert Row button several times, and input starting and ending depths for a planned core. The default will represent the interval as 50% of the Graph 1 width shaded light green. Then, after the core has been recovered (and commonly a few feet are missing) go to Intervals->Recovered Core and input start and end depths for the recovered core interval. Click *Done*, and these intervals will be represented on the log as shaded purple in the other 50% of Graph 1.



Formatting Intervals / Adding Custom Intervals

It is easy to change how intervals are represented in HMG Strata Log. You can quickly change the name for an Interval menu item, change the color, or change which tracks it is displayed in. Just go to Intervals->**Format Intervals** and it will open the window shown to the right.

Here, the highlighted interval is named "Core", is represented only on the Graph 1 track from 0 to 50% of track width, and is a Light Green



color.

But it is simple to add the same Core intervals into the Graph 2 track- just click the check-box on the left side of window. Or you could change the name from "Core" to "Planned Core Sample # A18-9c" by highlighting the interval, clicking in the Interval Name space, typing the new name, and click the *New Name* button. In this manner, the default intervals in HMG Strata Log can be modified to suit a variety of purposes.

A **new, custom** Interval can be added by clicking the *Add* button under the Intervals list. Say you want to add an interval to represent downtime gas and that is shown across the middle of Depth, Porosity, Oil Show and Graph 2 tracks- easy!

Click Add button, and a **New Interval** item will appear in the intervals list. Highlight it, then type a new name in the space and click New Name button. Uncheck the Graph 1 box, and check the others you want to add. Change the color using the dropdown, and set the extent within each track using Interval Width spaces. Click *Done* on the Intervals Editor window, and your new interval item is ready to use. You can add the new intervals by clicking Intervals->down time gas, add some rows and enter start/end depths, just like the default intervals discussed previously.

