

Chapter 2: The File and Formatting Menus

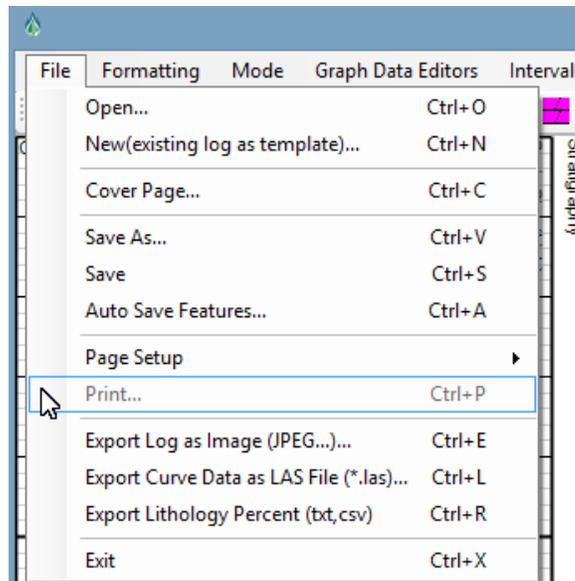
The File menu contains common menu items found in Windows programs as well as HMG Strata Log-specific items. The Formatting menu allows the user to add, remove, and format sections of their log. Chapter 2 discusses these features.

The File Menu

Open and New

After opening the HMG Strata Log program on your computer, click on **File** then **Open** (Ctrl+O) or use the *Open* icon in the toolbar. Navigate to a saved HMG Strata Log file (*.vsl) on your computer to open.

To create a **New** file there are two options; Either open the HMG Strata Log program from your desktop for a blank log with default format, or use File->New (Ctrl+N) from an existing log. Using File->New will preserve formatting and cover page information from the existing log. There is also a *New* icon in the toolbar.



Cover Page

The **Cover Page** is used to provide useful information about the well such as Well Name, API, and K.B. Elevations that precedes every log. The cover page also contains company info, logo, geologists and sections for notes.

A screenshot of the HMG Strata Log software interface showing the Cover Page information. The interface is divided into two main sections: Logging / Consultant Company and Personnel Information, and Well Information. The Logging section features the Laramide Geoservices LLC logo and fields for Geologists, Company, and Company Address. The Well Information section includes fields for Well Name, Field, Region, Coordinates, Location, State / County, API Index, Rig Operator, Rig Supervisor, Ground Elevation, K. B. Elevation, Spud Date, and Drilling Completed Date. The Company / Operator Information section includes fields for Company and Company Address. At the bottom, there are buttons for Import Header File, Export Header File, Done, Notes, Hole Data, and Casing Data.

Logging / Consultant Company and Personnel Information

Well Information

Well Name: Cambrian #2

Field: Pecos

Region: W. Texas

Coordinates: lat/long

Location: township and range

State / County: Hazzard County, UT

API Index: 44-444-44

Rig Operator: Big Rig Drilling

Rig Supervisor: Alfred Wegener

Ground Elevation: 5280 K. B. Elevation: 5310

Spud Date: 06/07/1776

Drilling Completed Date: 07/04/1776

Company / Operator Information

Company: Frontier Natural Resources

Company Address: 33 W Crockett St
Gatlinburg, TN
88888

Company Geologist(s): Robert Dietz and Harry Hess

Logging / Consultant Company and Personnel Information

Clear Drag and drop logo, use clear to delete

Geologists: James Hutton and Sir Charles Lyell

Company: Laramide Geoservices, LLC

Company Address: PO Box 20658
Albuquerque, NM 87154

Import Header File (*.hdf) Export Header File (*.hdf) Done Notes Hole Data Casing Data

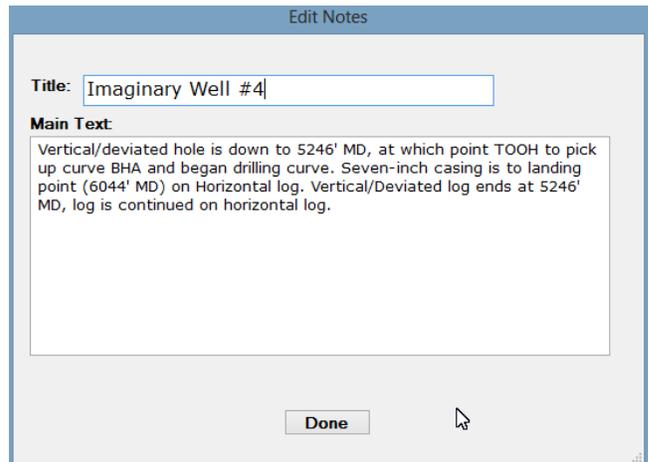
Use File->Cover Page (Ctrl+C) to open the “Title Page Editor.” From here, use “Import Header File” to load a template cover page from your computer, or “Export Header File” to save the current Cover Page as a template.

To add an image, drag and drop an image file (JPEG, TIFF, PNG, etc.) into the blank region. Images larger than 3”x5” will be automatically re-sized to fit.

There are three sections for “Notes” on the cover page; **Notes** can be used for general descriptions of the well, project information, or other explanations. **Hole Data** and **Casing Data** are handy for keeping track of hole diameters and casing depths. These sections will be shown on printed logs and logs exported as a JPEG, TIFF or other image type (see below).

Save As and Save

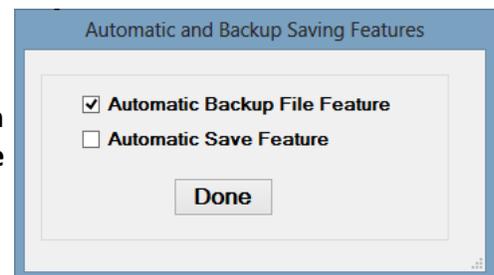
The File->**Save As** (Ctrl+ V) and File->**Save** (Ctrl+ S) menu items function the same as any other Windows program; use Save As to name the HMG Strata Log file and choose a location on your computer, use Save to save your work. Saving often is a good habit. There is also a *Save* icon in the toolbar.



Auto Save Features

Use File->**Auto Save Features** (Ctrl +A) to open the Automatic and Backup Saving Features window.

By default, the “Automatic Backup File Feature” is enabled when a HMG Strata Log is opened. The **Automatic Backup File Feature** will create a folder called “HMGStrataLog” in the same folder that you are saving the Strata Log file (from Save As). This “HMGStrataLog” folder will contain a HMG Strata Log (*.hxl) file called “BACKUP+ file name.” This is a backup version of the file you are working on.



Example: *If you create a new HMG Strata Log file called “PilotHole1” and save it to “MyDocuments,” the Automatic Backup File Feature will create a folder called “HMGStrataLog” in “MyDocuments,” containing a backup of the PilotHole1 file called “BACKUPPilotHole1.”*

The BACKUPfile will be updated after changes are made to the primary file. If the computer crashes or power is lost, the BACKUPfile will be the most up-to-date file of your log. If you remove or relocate the HMGStrataLog folder or the BACKUPfile, the HMG Strata Log program will create a new folder and/or file. This is a useful way to create backups. Simply move the BACKUP file to a removable drive, and HMG Strata Log will create a new backup file in its place.

If a BACKUPfile is used to recover a session, quickly rename the file and move it to your preferred Save As location. Otherwise, the HMG Strata Log will create a backup of the BACKUPfile called

“BACKUP+BACKUP+file.” This can get confusing fast- simply rename and relocate the backup file as soon as you open it.

The **Automatic Save Feature** works differently. This option is not enabled by default when the program is opened. When enabled, the “Automatic Save Feature” saves your HMG Strata Log file before new changes are made.

The Automatic Save Feature saves your file automatically whenever you:

- Open any of the *Formatting* menu items
- Select or change Track Specific, Lithology, Image, or TVD *Mode* (discussed in Ch. 5 & 9)
- Open *Graph Data Editors* menu items
- Open *Intervals* menu items
- Open *Tools* menu items
- Open the *Cover Page* window
- Open the Survey Editor
- Open the Text Editor

Page Setup and Print

Page Setup and **Print** (Ctrl+ P) are discussed in the chapter about printing (Chapter 8).

Export Log as Image

Use File->**Export Log as Image** (Ctrl+ E) to export the complete log, including Title Page and legend, as a JPEG, TIFF, Bitmap, PNG, or GIFF.

- JPEG files (*.jpg) are easily uploaded by photo processing software. ~2MB average file size
- TIFF files (*.tif) are common to oil field, high quality graphics. 2+MB average file size
- Bitmap files (*.bmp) are very large files, uncommon. ~50MB average
- PNG files (*.png) are web-browser friendly and high quality. ~2MB average file size
- GIFF files (*.gif) are small, lower quality, web-browser friendly files. <1MB average file size

Export Curve Data as LAS File

Use File->**Export Curve Data as LAS File** (Ctrl+ L) to save curve data from all graphs as an LAS 2.0 file (*.las). This will export ROP, Gas, Gamma, and other graph information, along with Cover Page information.

TVD Data in the LAS File

In TVD Mode (See Chapter 9) the **Export Curve Data as LAS File** feature will add a TVD column to the LAS File.

Export Lithology Percent

Use File->**Export Lithology Percent** to save lithology percentages from Sample % track as a Text File (*.txt) or Comma Delimited (*.csv) file.

Exit

File-> **Exit** (Ctrl+ X) will close the HMG Strata Log program. The program will ask if you want to save before exiting if changes have been made.

The Formatting Menu

The Formatting menu in HMG Strata Log controls the layout, appearance, and contents of the log. The Formatting menu also controls the dimensions of each element, allowing customization per client request and printing considerations.

Log depths, Log scales, and Track Positions

Use Formatting-> **Log depths** to set start and end depths for your HMG Strata Log.

Use Formatting-> **Log scales** to set the scale of the log; choose from Imperial or Metric units with several scales available for each.

Use Formatting-> **Track Positions** to re-arrange the position of tracks according to specific use or preference.

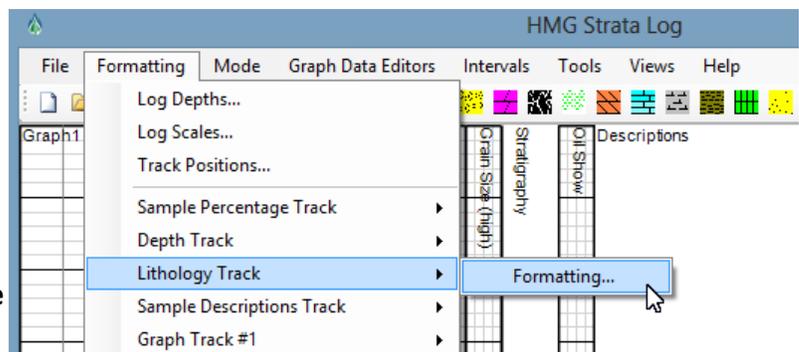
Track Formatting Except Histogram

Each track has its own formatting window, and all are similar in layout.

Use Formatting->(x) Track->**Formatting** to open the formatting window for the selected track.

The first check-box will **enable** or **disable** that track on your log.

The formatting window for each track will allow changes such as number and type of **divisions**, total **track width**, and other options. The format windows keep track of total log width. If the total log width number is **red**, the log is wider than 7.5 inches, indicating log width is too large for printing on standard 8.5x11" pages.

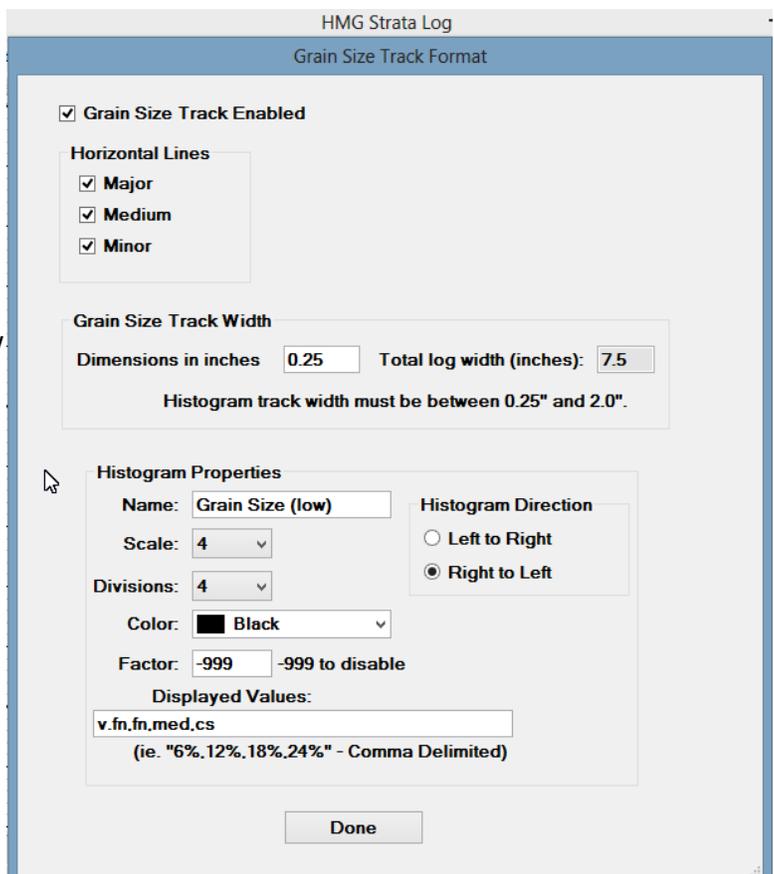


The **graph tracks** have an option to choose **linear** or **semi-log** for displaying graph data. See Chapter 3 for more about graph data.

Histogram Track Formatting

The **histogram tracks** have format windows which allow further customization. For instance, the Grain Size histogram tracks are preset with four grain size options, but allow changes (including track name) if you want to use the track for another feature, like oil fluorescence or degree of roundness.

If "Factor" is set to -999, the histogram is in "Values mode" and will display the values which are set (v. f, fn, etc.). If the "Factor" is set to another number, the histogram is in "Factor mode" and will display the "Scale"



drop-down menu value multiplied by the "Factor" value.

Value versus Factor Mode

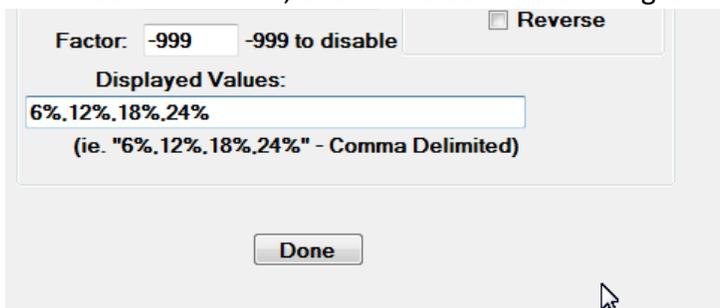
Simply put, if the "Factor" text box is set to the value "-999", the histogram is in values mode and will have the values shown in the displayed values text box. Otherwise, the histogram will have a scale dependent on the "Scale" drop down menu value multiplied by the "Factor" value. In value mode, the scale drop-down menu is ignored, similarly, in factor mode, the "Displayed Values" values are ignored.

Values mode

When the program is started, all three available histogram tracks are, by default, in values mode. The histogram values must be input by the geologist / user in the "Displayed Values" area. The values need to be separated by commas (comma delimited). For example, if the user enters the values "6%,12%,18%,24%" (there is no need to put in spaces between values), the histogram track will have five values: none, 6%, 12%, 18%,and 24% (i.e. vales for a porosity histogram). Another example would be to enter: "trace,fair,poor,good,v.good,excellent".

This would translate to a histogram with the values: none, trace, fair, poor, good, v.good, and excellent (i.e. oil show histogram). "None" does not need to be entered as a "Displayed Value", it is added to the histogram by default as a 0 value. When in values mode, the "Scale:" drop-down menu box will be ignored. In values mode the scale of the histogram is always set by the number of values separated by commas plus the "none" value. The "Visible Divisions:" drop-down menu box is still used in values mode for selecting the number of vertical divisions for the particular histogram track.

The below figure shows a portion of a histogram formatting editor set for values mode, with the Factor box set to -999, and the values of the histogram being set to 6%, 12%, 18%, and 24%.



Factor: -999 to disable Reverse

Displayed Values:

(ie. "6%.12%.18%.24%" - Comma Delimited)

Factor mode

The histogram is in "Factor" mode when the "Factor" value is set to any decimal value other than '-999'. When in "Factor" mode, the "Displayed Values:", used in "Values" mode are ignored by the program.

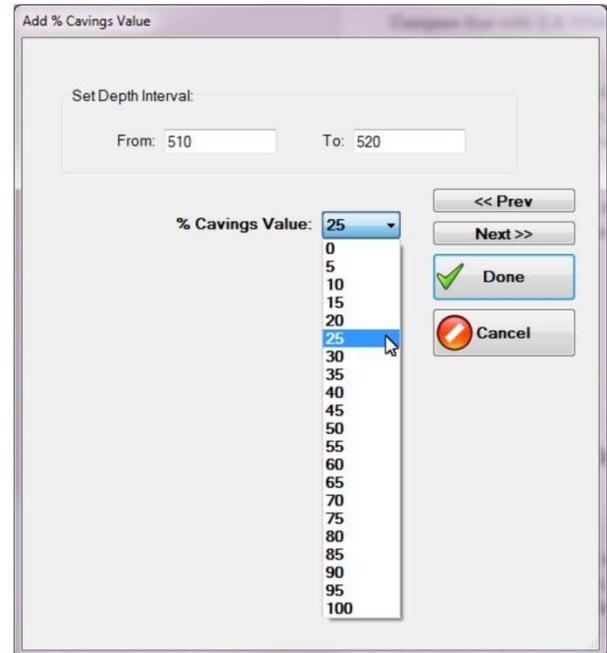
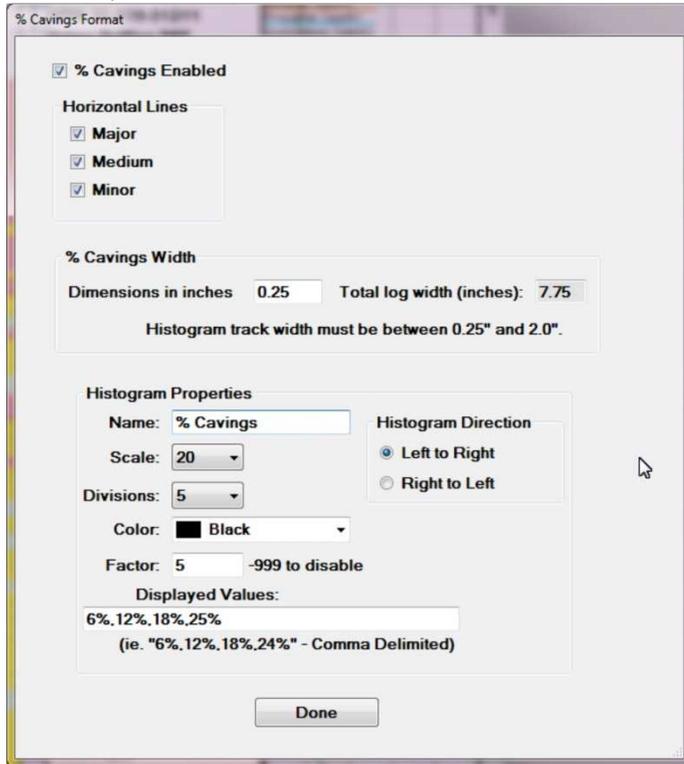
The basic procedure for using the histogram in factor mode is to pick a scale using the "Scale:" drop-down menu. Any scale from 2 through 20 can be selected (in the previous version, the histogram scale was immutable, set at 10). After a scale is selected, the user inputs a "Factor" value, which can be any decimal number. The program computes the histogram values to be selected by the user by multiplying each scale by the factor.

In the below example, the scale is set at 20, with a factor of 5. This means that the histogram values for the % Cavings Histogram will be: 0, 5, 10, 15....90, 95, 100. When the user clicks on the % Cavings

histogram track, they will be presented with a drop-down menu with the above just mentioned values as shown below.

Histogram Direction

The histogram can be formatted to draw Left to Right (default) or Right to Left (see below formatting window)



Adding Histogram Data to the Histogram Track

Similar to the sample track, the user can add data to the histogram track by simply clicking on the histogram track near where they want the data to go. This will open the histogram track editor allowing the user to edit the depth interval and the value of the histogram

Click and Drag

Histogram values may also be drawn using the mouse. Hold down the shift key and draw in the interval and value of the histogram. When the left mouse key is released, the histogram editor will open with the depth intervals and histogram values filled in based on the click and drag position.