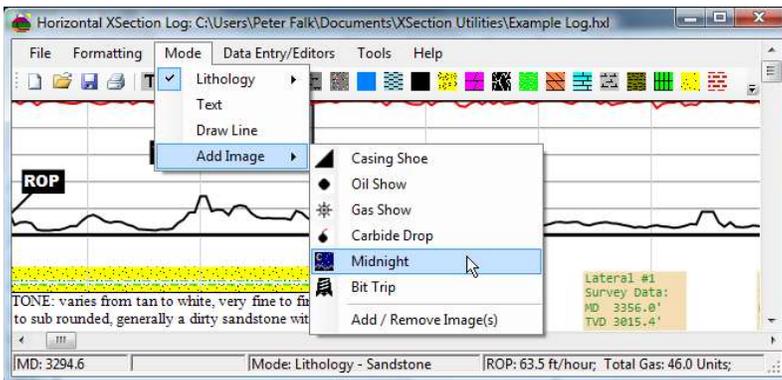


## Chapter 7 - Log Images and Photos

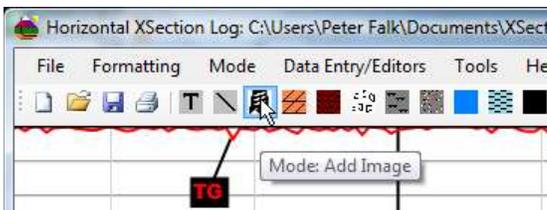
The Horizontal XSection software has an editing mode called "Add Image" that is devoted to adding images to your log. Images may include custom created symbols or events, photo's, or any image type that can be saved as a JPEG, Bitmap or TIFF file type. Presently, images may only be added to the cross-section track of the log<sup>i</sup>. There are a number of log images that are preloaded into the "Add Image" dropdown menu when Horizontal XSection is opened<sup>ii</sup>. Moreover, there is an extensive library of images for your perusal and use in a folder called "Log Images", found in the "XSection Utilities" folder. The Horizontal XSection Log makes it a simple process to add an image to the "Add Image" queue.

### Log Mode

To change the mode to the "Add Image" mode, either click an image from the "Add Image" dropdown menu,



or select the "Add Image" icon from the toolbar.



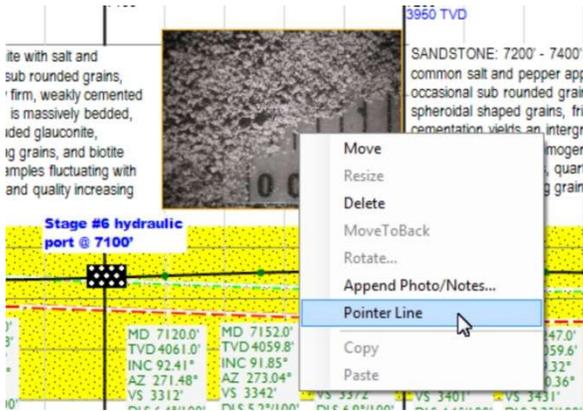
The Icon image in the toolbar represents the image that will be added to the log and will change only when a different image is selected from the main menu "Add Image" dropdown menu. In the example at left, the "Bit Trip" image will be selected by clicking on the toolbar "Bit Trip"

Image Add icon.

In "Add Image" mode, simply click anywhere on the cross-section track of the log to add the selected image to the log. The upper-left corner of the image will appear at the click point. To Delete or Remove an image, move the cursor over the image until the orange bounding rectangle appears, and then right-click to open the popup menu. The "Move" and "Delete" menu items will be enabled. If you select "Move" by right-clicking the "Move" item from the popup menu, move the image to the desired position and left-click to "drop" the image. The "Delete" item works similar to the "Text", "Lithology", and "Draw Line" modes.

### Pointer Line Attached to Photo's or Log Images

Like text blocks, a pointer line can be attached to a Photo or Log Image. Simply right-click the log image or photo, and select pointer line from the popup menu. To move the pointer line, move the cursor over the end of the pointer line and right-click when the orange selection rectangle appears, and select "Move" from the pop-up menu. Move the mouse to the new point (the pointer will follow) and then left-click the mouse. To remove a pointer line from the associated image or photo, follow the same process as selecting the pointer line. When a photo or log image has an associated pointer line, the pointer line will have a check mark selection marker in the popup menu. Each photo or log image may only have one associated pointer line.

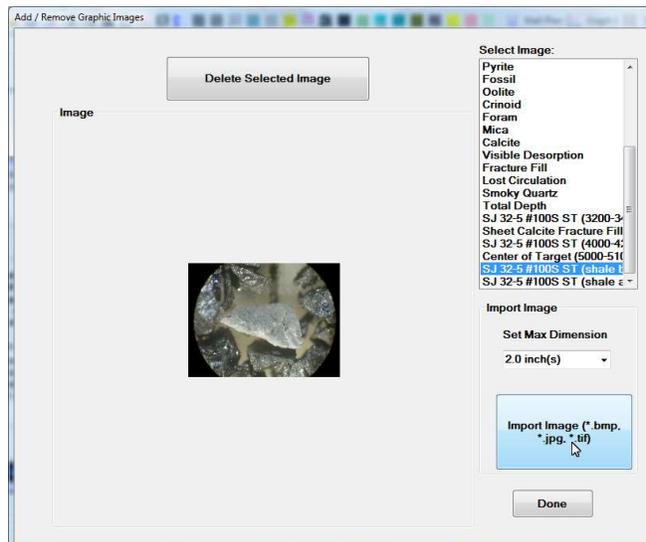
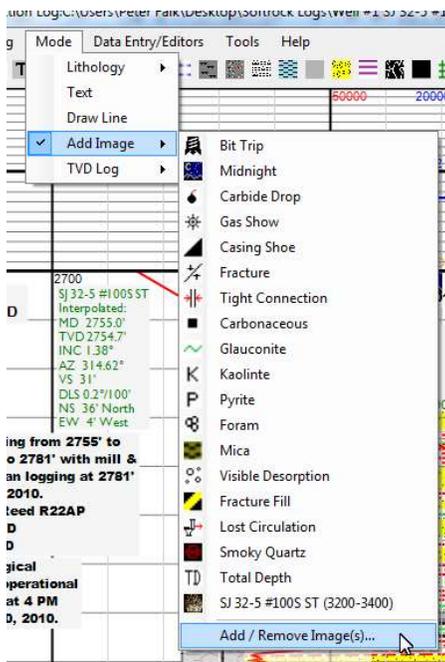


**Note:** it is advised to use the associated pointer line rather than the draw line feature with photos or log images. The reason is so that when the zooming feature is employed, the associated pointer line will be scaled correctly with the Photo or log image. This may not be the case with a line drawn using the draw line feature.

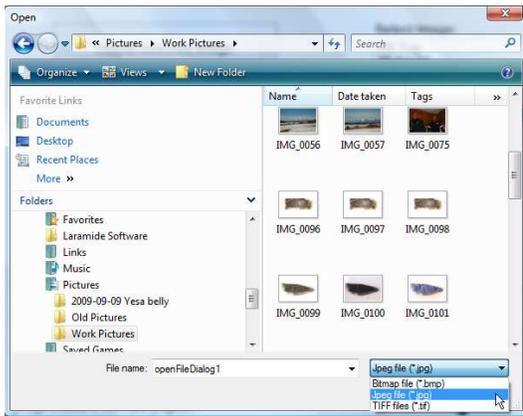
### Adding / Removing Images to the Add Image Dropdown Menu

Horizontal XSection makes it very easy to add images to the Dropdown Image list. Note, that all images under a quarter of an inch in height and half an inch in width that are displayed in the "Add Image" dropdown menu, will also appear on the log legend, when the log is printed. The legend can hold about 25 images. It is also very easy to remove images from the dropdown menu. Note, however, when an image is removed from the drop down menu, those same images on the log are **not** removed.

To remove or add images to the "Add Image" dropdown menu, open the "Add / Remove Graphic Images" window by clicking on the "Add / Remove Image(s)..." menu item as shown below. To delete an image, select the image from the "Select Image:" list and click on the "Delete Selected Image" button.



To import a bitmap, jpeg or tiff image to the "Add Image" drop-down menu, click the "Import Image (\*.bmp, \*.jpg, \*.tif)" button, which will open the "Open" file window. Presently, you are limited to importing the following file types: Bitmap's (bmp), JPEG's (jpg) and TIFF's (tif). However, this should cover the types of images most users will want to import. Use the dropdown menu in the lower-right corner of the "Open" file window to choose the file type of the image that you want to import.



After you choose the image with "Open" file window, you will be prompted to give a name to the image that you are importing. The image name does not need to be the same name as the file that is being imported, and will be the name that appears in the dropdown menu, and on the log legend.

### Creating Bitmaps

The simplest way to create log images like fossils or accessory minerals, is to use the "Paint" program that is part of the Microsoft Operating System (also see chapter 6 - creating patterns) :

- 1) Open paint by clicking Start->Programs->Accessories->Paint.
- 2) On the Paint programs menu bar click on Image->Attributes (or ctrl-e) and set the width to 15 pixels and the height to 16 pixels. Larger or smaller images may be created, however, the image shown on the XSection menu will be distorted to fit the dropdown menu image space . The image drawn on the log, will be exactly the same as the image created in the Paint program.
- 3) On the paint programs menu bar click on View->Zoom->Custom->800%.
- 4) Create your design and save it to a location you will remember as a bitmap (\*.bmp). You may also save the images as jpeg's and or tiff files.

### Bitmap Library (Log Images - XSection Utility Folder)

When the Horizontal XSection program is installed on your computer, a folder called "XSection Utilities" is created in the "Documents" section of your computer. This folder contains a folder called "Log Images", which contain three folders ("Fossils", "Minerals" and "Misc Images") with an assortment of bitmap images that can be loaded into the program for your use.

### Importing Photos and the "Set Max Dimension"

Most photos will be saved as JPEGS. When importing a photo into the "Add Image" queue, the software will resize the image so that the largest dimension is no greater than the "Set Maximum Value" selection. Hence, there is no need to resize photos before importing them into the program. Use the drop down menu to select any maximum dimension from 1" to 5" (in 0.5" increments). Once you are done adding photos to the log, you may delete the photo from the "Add Image" queue. Deleting the photos from the "Add Image" menu will decrease the size of the log file (\*.hxl), without affecting the photos in the log. Photos in the "Add Image" menu will not appear on the log legend when the log is printed.

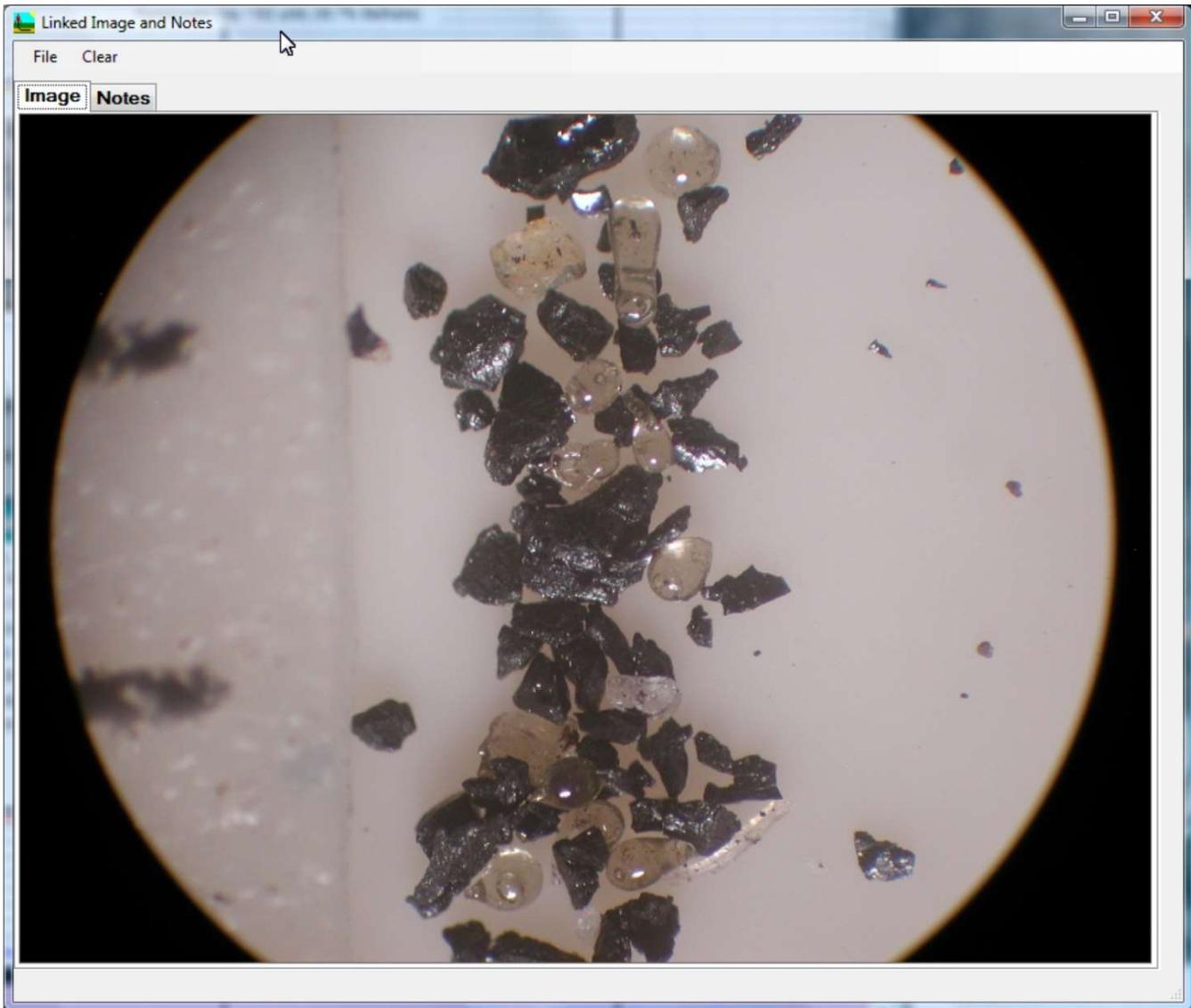
**Note: Be careful when changing the cross-section height dimension (see chapter on formatting) or the log scale because the size of photos (and all log images) are not affecting by changing the size of the cross-section dimensions**

in the way that other elements (i.e. Lithology beds) are affected. Hence, a one-inch photo inserted into a log will always be a one-inch photo regardless of cross-section track dimensions.

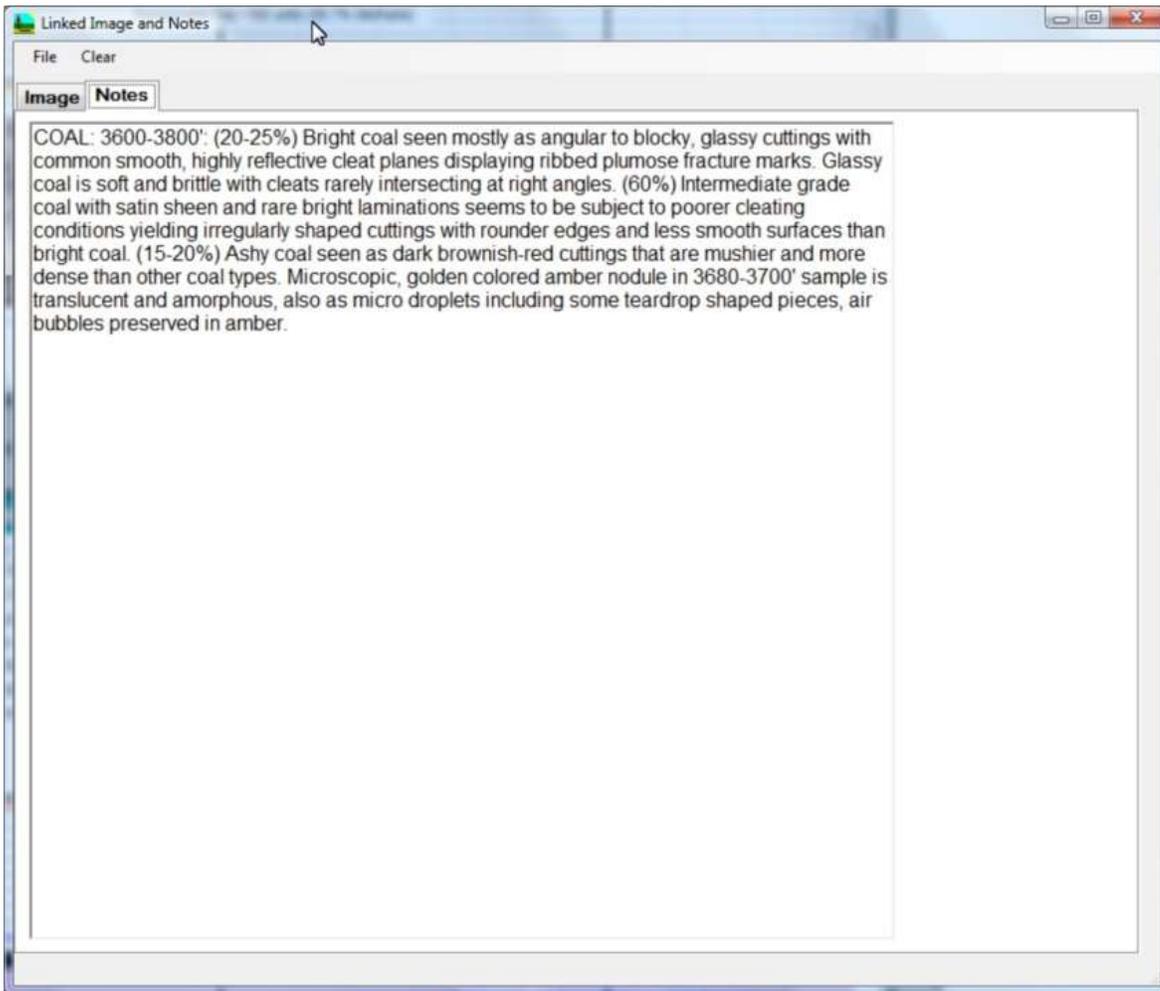
### Append Photo (or any Image), and Text to any "Log Image" or Photo Thumbnail

Photos and text can be added as an appendage to any log image or photo by simply selecting the photo or image and right-clicking the mouse. For example a large photo can be appended to a photo thumbnail on a log. The appended window has two tabs, one for photos or other images, the other for text. The below example<sup>iv</sup> shows each tab reduced ~30% to fit in this manual.

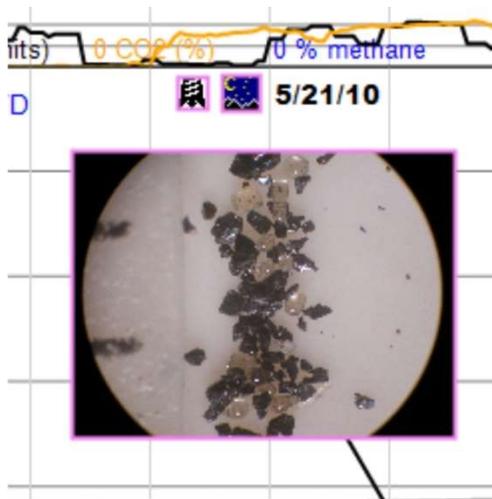
#### *9" X 6.75" Photo display*



*Add Descriptions, reports, casing information, bit info etc...*



When a log image has an appended note or image, that log image will have a constant violet colored border. The below example shows a "Bit Trip" image with an appended bit report (not shown), a thumbnail with an appended image (see above) and a "Midnight" symbol with an appended midnight report.



The image tab displays a 9.00 X 6.75" photo. The program will automatically resize large photos to fit in the available space. The method of importing an image is to "drag and drop" the selected image into the image tab in the 'Append Image/Text' window.

How one selects to open the appended images or notes depends on whether one is using a licensed version or the log viewer version of the Horizontal XSection Log:

- In the log viewer, click on any log image with a violet border.
- With a licensed version, first select "Add Image" from the mode menu or toolbar, then right-click over the 'Log Image' or photo and select "Append Photo/Notes..." from the popup menu (see first image on pg. 2).

Possible uses of this new feature:

- Link large photos to embedded photos.
- Link a "Show Report" in the text tab to a "Show" (oil or gas) image

- Embed morning or afternoon reports to a AM or PM report image. There is now a default "AM and PM Report" Log Image as part of the default log. Or go to "C:...\\Documents\\XSection Utilities\\Log Images\\Misc Images" to add the AM or PM report images to the 'Log Image' menu.
- Similarly embed Frac reports for each staged fracture to a frac report log image.
- Add Correlation images exported from the Geosteering tool.

## Log Size

Appending a photo that fills the 9" X 6.75" image tab will increase the size of the log by ~1MB. As a test, a log with 7 thumbnails with appended photos was ~9.5MB. High-speed internet connections on a well-site location are often slow or sporadic, and emailing a log with many appended photos can be difficult. In these situations, it may be advisable to wait until a high-speed internet connection is available before appending photos and emailing large MB log files (\*.hxl).

---

<sup>i</sup> I am thinking of changing that, and allowing images to be added to multiple tracks. Any feedback would be much appreciated. Send your comments to [peter@horizontalmudlog.com](mailto:peter@horizontalmudlog.com)

<sup>ii</sup> I have kept the preloaded images to a minimum focusing on common images that will be useful to all kinds of situations. It has been my experience that most mudloggers restrict themselves to using only a few choice images for a particular well (fossil fragments or minerals, symbols that represents drilling events like a bit trip). Why have a legend full of images that one never uses? Plus, I have received very little feedback (positive or negative) over the years from clients whether they even look at the accessory images added to a log. Again, if you have strong feelings regarding log images, let me know at [peter@horizontalmudlog.com](mailto:peter@horizontalmudlog.com)

<sup>iii</sup> The size of the image is not the size of the image in the "Add Image" dropdown menu, but the size of the image on the log. A quarter inch height and half inch width corresponds to about 48 X 23 pixels. If using "paint" to create images, make sure that the image is under about 48 pixels for the width and 23 pixels for the height in order to insure that the image is displayed in the log legend.