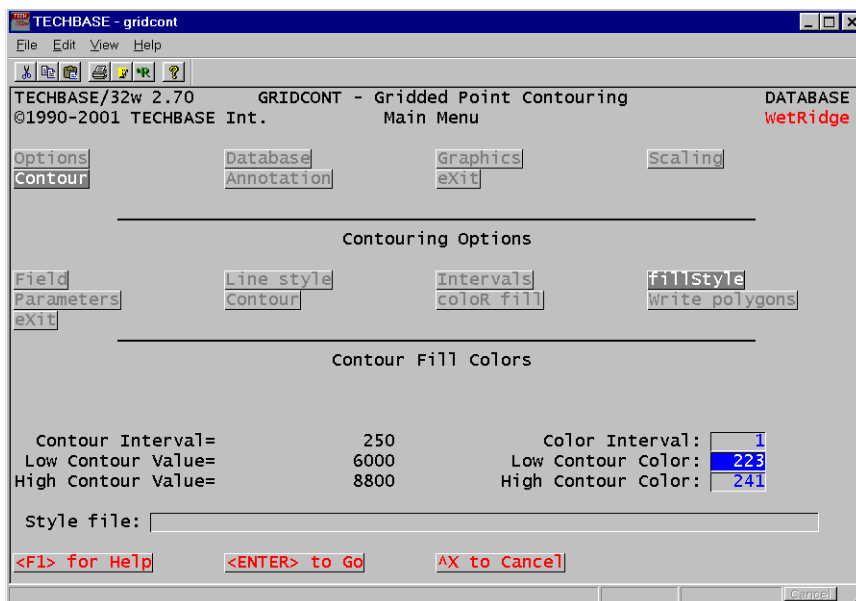


Color Filled Contours

TECHBASE Version 2.70 introduced the ability to fill solid color between contour intervals in the **TECHBASE** programs *GRIDCONT* and *RANDCONT*. Using the *Contour/color fill* option, you can add color to your contour maps at intervals you designate. Using color-filled contours can help you to highlight topography, geochemical results, isopach thicknesses or any other value you wish to contour.

To create a contour map with *Color Fill*, first set up your map options in either *GRIDCONT* or *RANDCONT*. Enter the *FIELD* you wish to contour, and *INTERVALS* you wish to use when contouring this field. You may select different *INTERVALS* for color filled contours and contour lines as they are separate entities on your metafile. Then set up your color fill choices in the *fillStyle* menu (as shown below). Finally select the *color fill* choice to draw your color filled contours.

The *GRIDCONT* menu below shows an example of settings for the *fillStyle* menu used to create color filled contours on a topographic map. In this example, a 250 foot interval is selected for color fill (set in the *Intervals* menu choice). Remember that in **TECHBASE**, colors are designated by integers defined in your *colors.map* file. *Low Contour* defines the lowest contour color integer, *Color Interval* how much to increment this color with each succeeding contour interval (in this case 1), *High Contour* sets the upper integer color. In the example below, the elevation between 6000 and 6250 feet will be filled with color 223, 6250 and 6500 with color 224 and so on up to color 241 at 10500 feet or whenever the map is completed:



You can also define which colors to use with contour intervals by using a *Style file*. This text file must contain sets of lower and upper bounding elevations followed by an integer defining which color will be plotted in this interval. To define contour colors using a file, enter it's name in the *Style file* menu. Remember, if you are using **TECHBASE** on a Windows platform, you can right click in this menu to access a Windows "file browse" menu. **TECHBASE** will look for the default file extension *.fil* when looking for a *Style file*. In the *Style file* example below a bottom elevation of 6000 feet, top elevation of 6250 feet, is filled with color 223, followed by the interval 6250 to 6500 filled with color 224 and so on.

```
6000 6250 223
6250 6500 224
6500 7000 225
7000 7250 226
```

Technote: Color Contours

Contour intervals defined in the style file will supersede any definitions in the *Contour/Intervals* menu. Intervals listed in the file do not have to be contiguous, and do not have to be entered in order. In fact, these intervals can overlap.

To add contour lines to your map, select a *Line style*, confirm what *Intervals* should be used to draw contour lines, then select the *Contour* choice. Contour lines are then drawn in a layer over the *color fill*. You may wish to draw a Grid on your map in a final draw. The *Grid* option is accessed in the *Scaling* menu.

If your map does not show contour intervals, or a grid, even though you have drawn them, check the draw order - you may have drawn them under the color contours, which means they will not show up on your final metafile or plots. You can use the *Graphics/Undraw* choice to delete entities drawn in incorrect order as long as you have not exited the *GRIDCONT* or *RANDCONT* programs.

The contour interval and range of contours you select may add up to a larger number of colors than you have available in your default colors.map file (256), or exceed the range you wish to plot (32 in the example above). The Color Fill choice automatically repeats the colors you specify if you run out of possible colors. To avoid repeating colors, which can produce confusing maps, consider selecting an alternate color.map file, or larger contour interval.

A visually pleasing map is often produced when a large contour interval is selected for the color fill, and a smaller, more detailed, interval for the overlying contour lines. The following topographic contour map shows the result of selecting an interval of 250 feet for color fill. Contour lines are then drawn over the color fill every 50 feet.

