Recalculation

The recalculation mode allows log data to be recalculated or relogged from raw data. Calibrations and other acquisition parameters, such as filters and depth offsets, may be changed. The data monitors used during actual logging are available to the operator during recalculation.

Double-click the Recalculation icon in the Warrior group and a menu box similar to that of Acquisition will appear. In this case though, Service and Action are disabled (appear feint on the menu bar). The Edit and Monitor menus are identical to those of Acquisition.
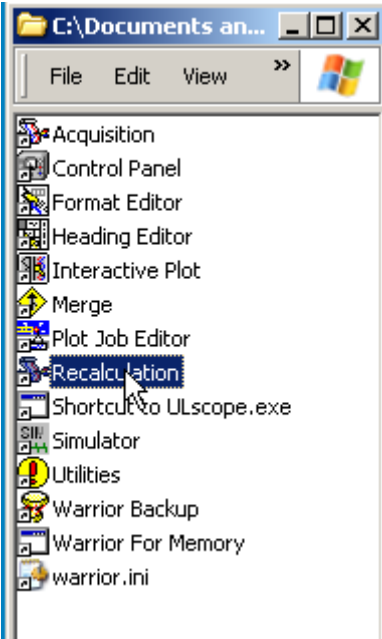

FIG: 10.1 Recalculation

10.1 File

The following option can be select in File:
Select Dataset, About, Exit, Close All.

10.1.1 Select Dataset
The Warrior well log database can (optionally) contain data from many wells, and within each well, data from many log passes. Each log pass is stored in a dataset. The dataset contains not only log data, but also other information about the logs, e.g. calibration and tool data
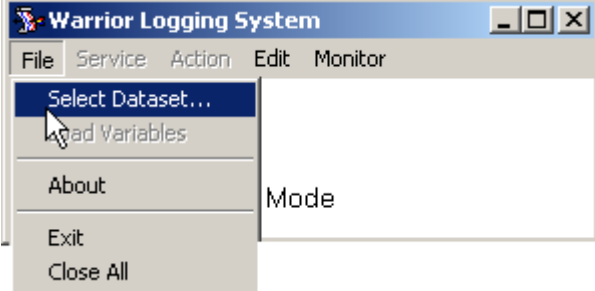
FIG: 10.2 Select Dataset

Choose the Select Dataset option from the File menu. A dialog box will appear as shown below.
The software includes a database named cbldem.db that may be used for the purpose of demonstrating the Recalculation mode. Select the dataset as shown below.
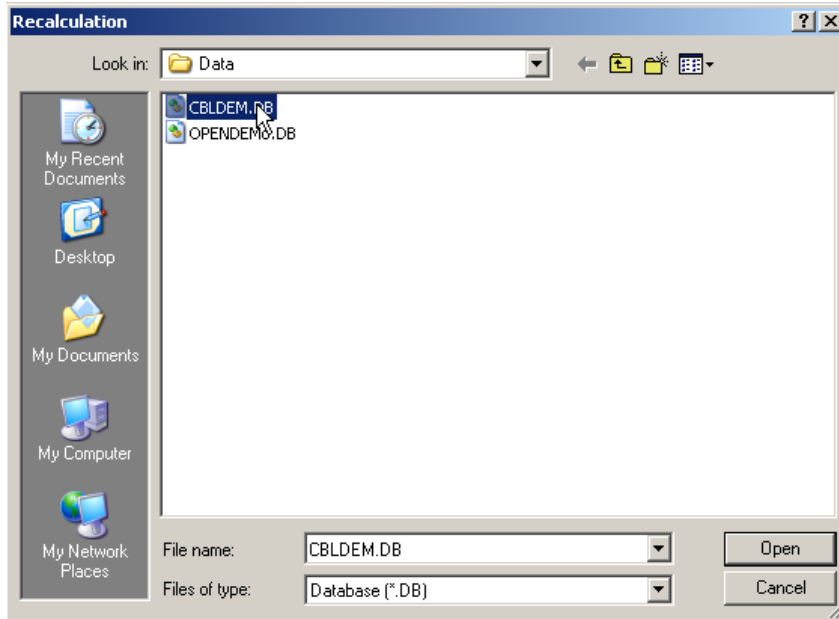

FIG: 10.3 Select Database

The Recalculation Output is the destination pass (or dataset) of the recalculated data. It may be named anything you like. If this pass already exists in the database when Recalculation. Is invoked, the software will give an error message and a new Recalculation Output should be selected.
Allowing the system to give a default name to the recalculated output will cause it to be named x.1, where x is the name of the original pass. Repeated passes through Recalculation. Will cause an incrementing number to be attached to the Recalculation. Output. In this case pass1.2, pass1.3 etc.
When recalculating, for example, pass 1.1 to 1.2, upon selecting 1.1 as the base pass the system will still indicate 1.1 as the output pass. It will however create a new pass 1.2
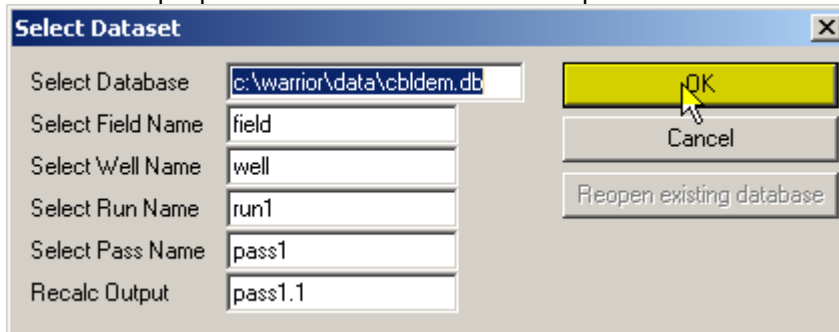

FIG: 10.4 Select Pass Name and Set recalculated Output

When OK is selected the software reads information from the log database and displays the Recalculation Control dialog box, as shown below.
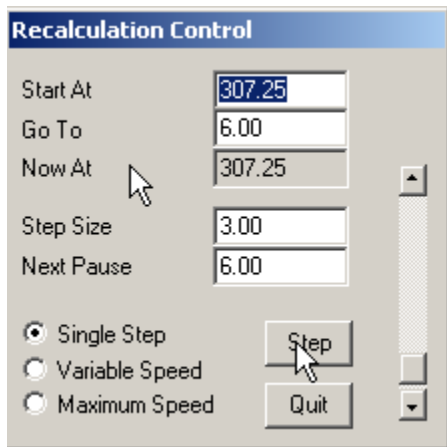
10.2 Recalculation Control

FIG: 10.5 Recalculated Control

The Recalculation Control allows setting of Start, Stop and Pause depths. It also enables setting of the Step size. The Step size is the log interval that Recalculation attempts to recalculate during its share of the CPU time and functions effectively as a speed control.
Recalculation may be run in three modes.

10.2.1   Run single step
Select a step size. This may be as small as a single sample.
Click the Single Step radio button. The log plot will appear on the left of the screen.
Successive clicks on the Step button will cause the pass to be recalculated step by step.

10.2.2   Run variable speed
Select a step size.
Click the Variable Speed radio button. The log will appear on the left of the screen and will scroll at a rate that may be varied by the scroll bar in the Recalculation dialog box. Increasing the step size also increases the recalculation rate.

10.2.3   Run maximum speed
Select a step size.
Click the Maximum Speed radio button. The log will appear on the left of the screen and scroll at its maximum rate. It is likely that the recalculation will complete quickly, but that the log on the screen will lag.

10.2.4   Pause Recalculation
Click once on the QUIT button causes the Recalculation to pause.

10.2.5   Quit Recalculation.
Click twice on the QUIT button.

10.3 Load Variables

The Load Variable is invoked from the Recalculation File menu. It is used to Load variables from the database. Load Variables the other Dataset, enabling depth dependent parameters associated with the selected service to be zoned and values to be set.
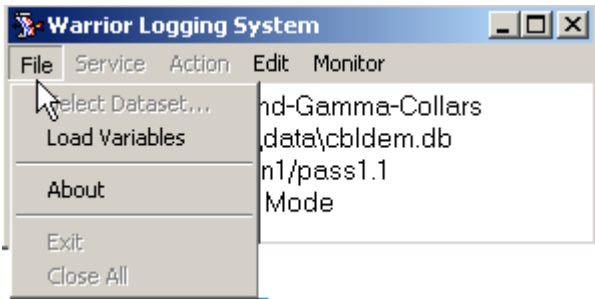
FIG: 10.6 Load Variables

10.4 Monitor

The Monitor option in recalculation has the same properties that Monitor in acquisition. (See Section 4.6)
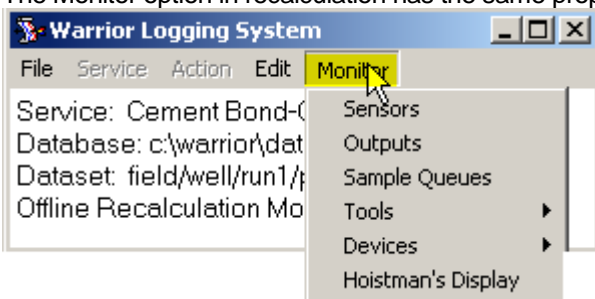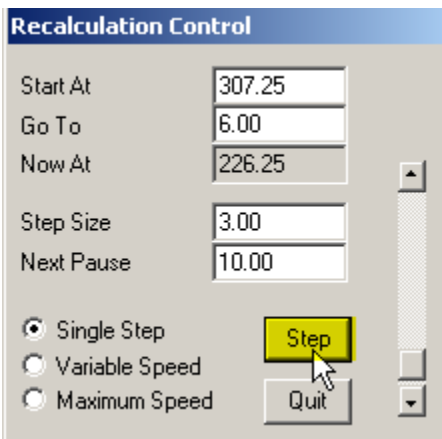

FIG: 10.7 Monitor Options

FIG: 10.8 Step Control

10.5 Edit

The Edit option in recalculation has the same properties that Edit in acquisition. (See Section 4.5).
Change parameters as required. These may include:
Tool String, Variables, Heading, Master Log Format, Plot Job, Sensors, Tool Configuration, Device Configuration, depth offsets, input channels, curve filters, calibrations, sonic amplitude gate settings.
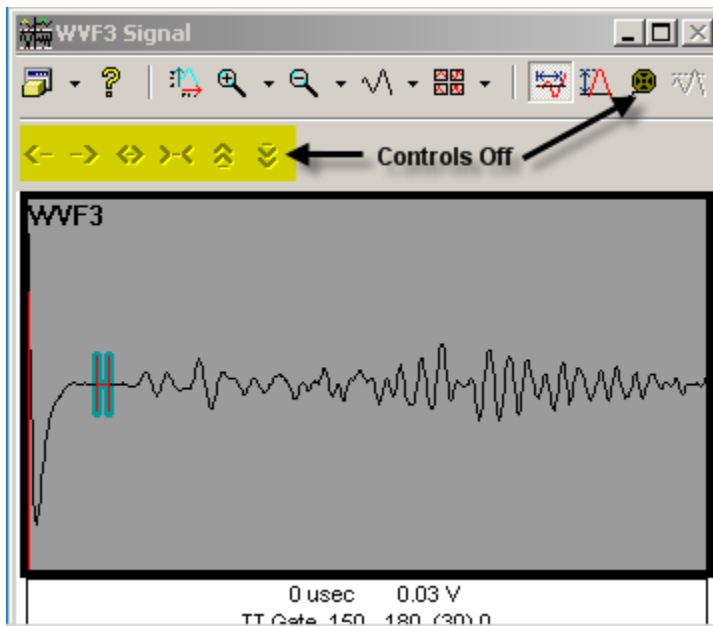
FIG: 10.9 Edit Options
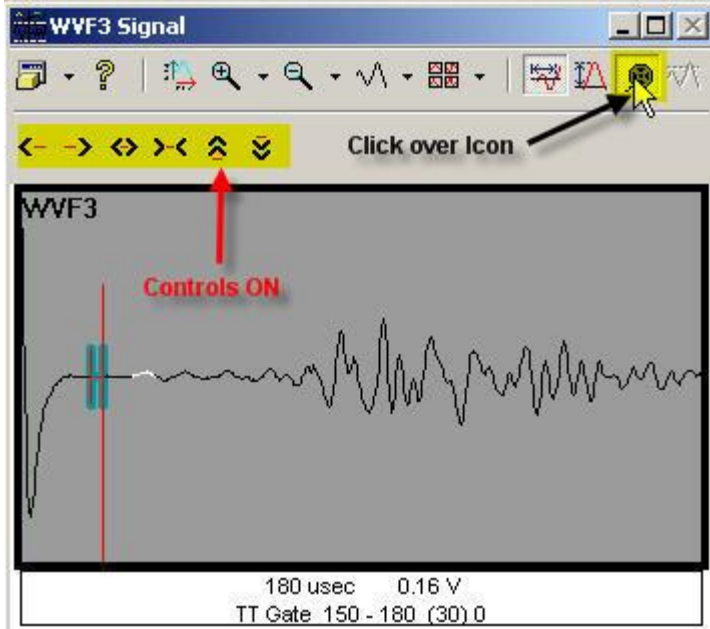

FIG: 10.10 Acoustic Signal Control Off

FIG: 10.11 Acoustic Signal Control set ON

FIG: 10.12 Thresholds and Gate Control ON

FIG: 10.13 Gate control Set ON
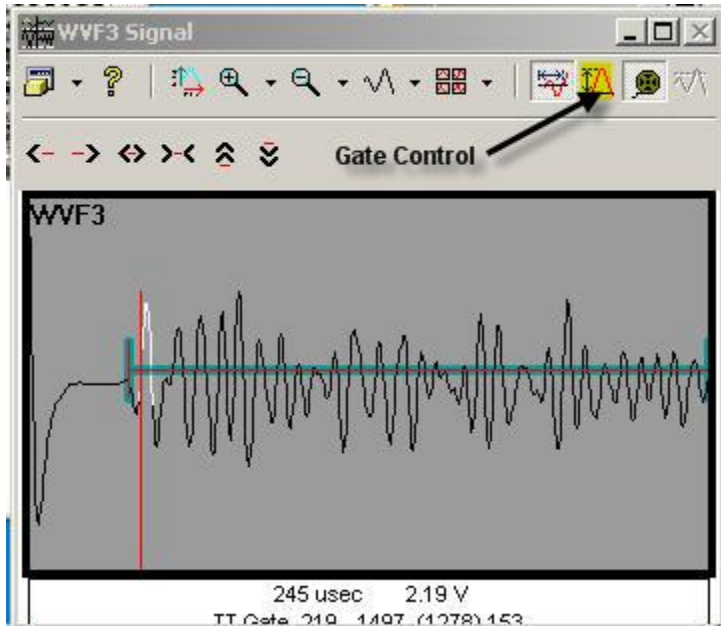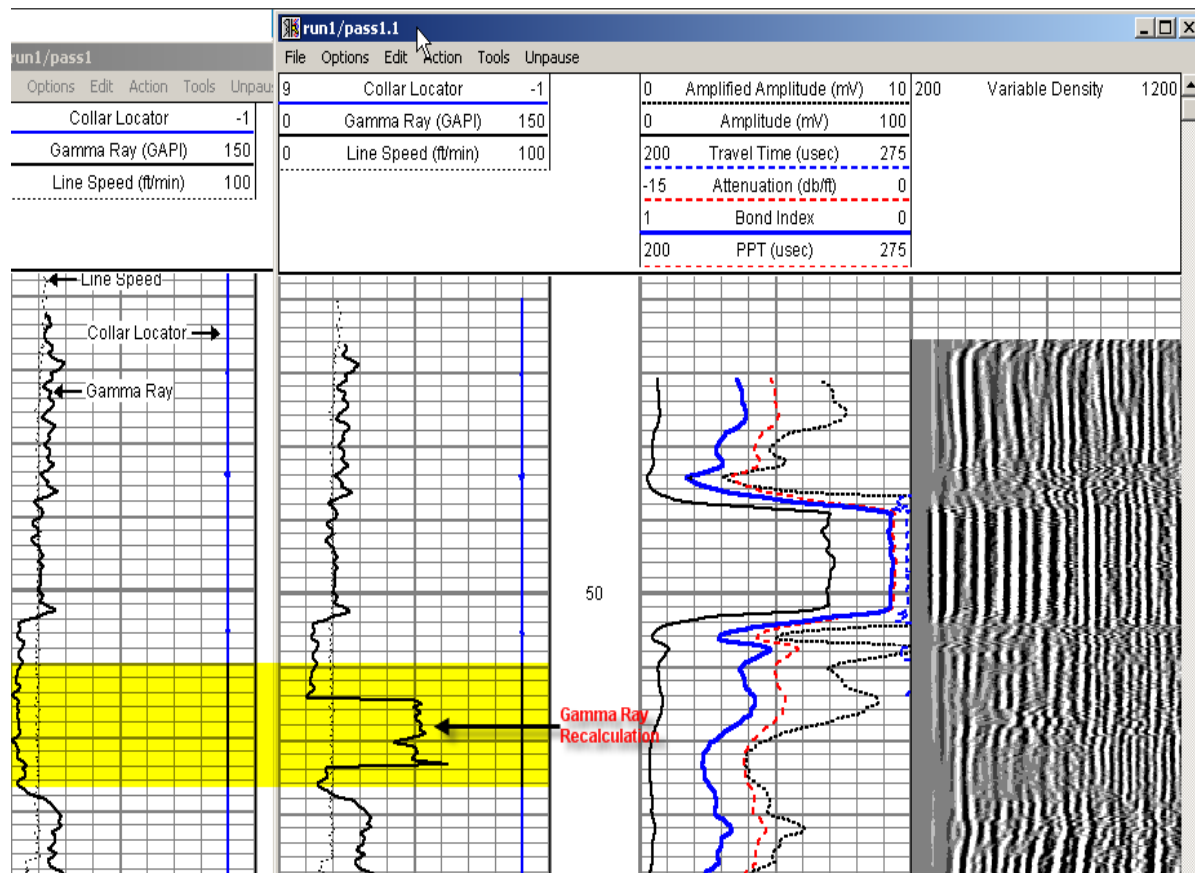

FIG: 10.14 Edit GR Calibrations

FIG: 10.15 GR Curve Before and After the Recalculation