Solaar Software
Version 10.xx
32-bit WindowsXP™

This presentation is designed to help the operator understand the Solaar software interface.

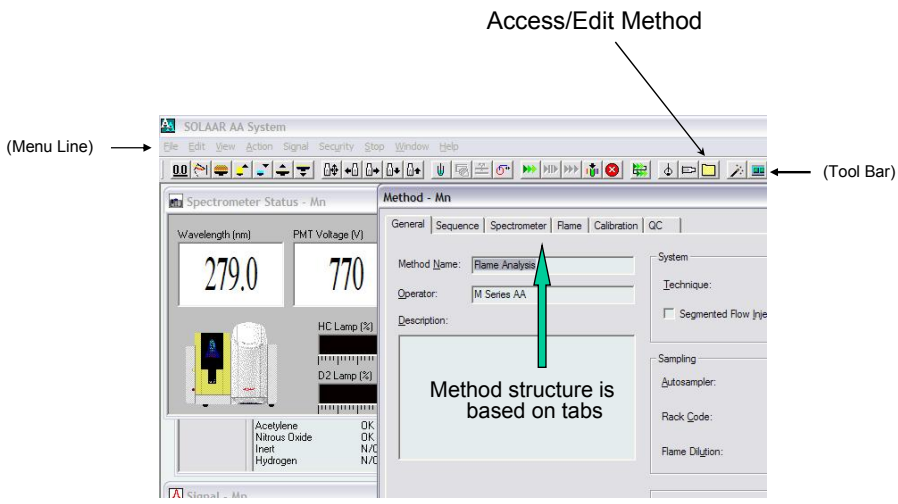
Please use the **help** buttons to get further detail on the features. Specific help includes definitions and "how it works" descriptions. Links are supplied to associated topics.

Using the context sensitive **help** icon allows the operator to "click" on a screen display to obtain information pertinent to the displayed subject.

Results Files

- A results file is selected prior to any analyses being performed
- Results files are not selected/specified in a method
- Results files are maintained separate from methods
- A specific result file will be used until another is selected

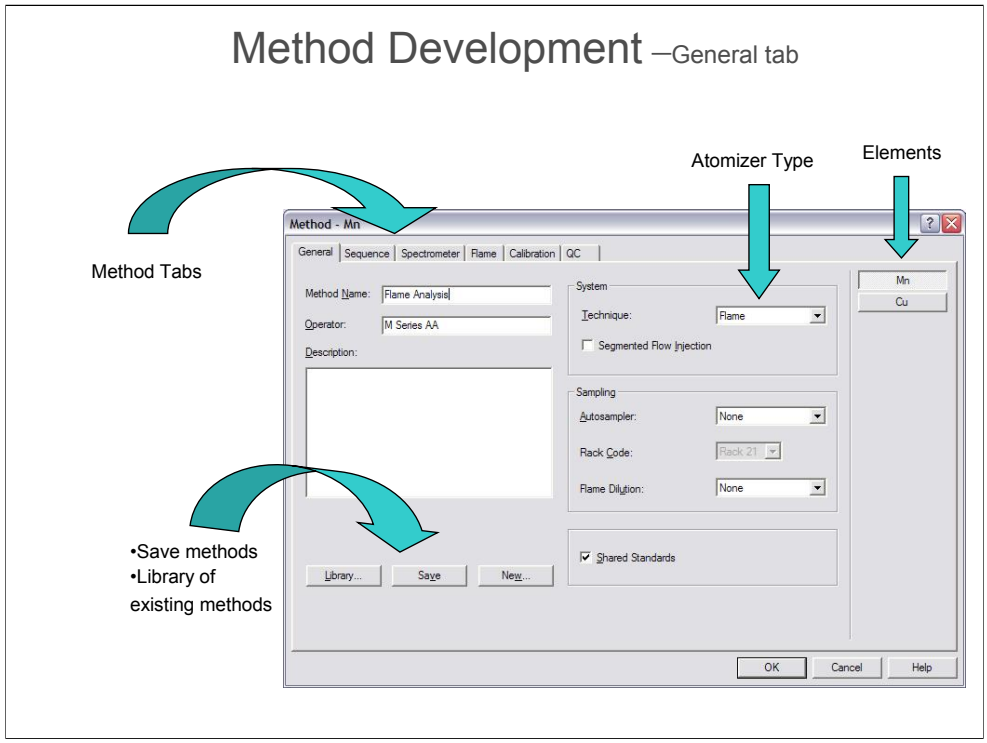
Method Development



(Multi-element design is implemented through the Sequence tab)

Method information is broken into several categories. The categories are displayed as folder tabs. These tabs are labeled general, Sequence, Spectrometer, either Flame or Furnace, Autosampler, Calibration, Ash/Atomize, and QC.

The Ash/Atomize tab is displayed only when furnace atomization has been selected. The QC tab is displayed only when optional AutoQC software has been installed.



This display shows the location of the tabs.

The General folder is the top display.

Independent information for multiple elements can be stored with the method and is accessible by clicking on the appropriate element button.

In the General folder you will find:

• Method storage and recall capabilities.

•Atomizer selection

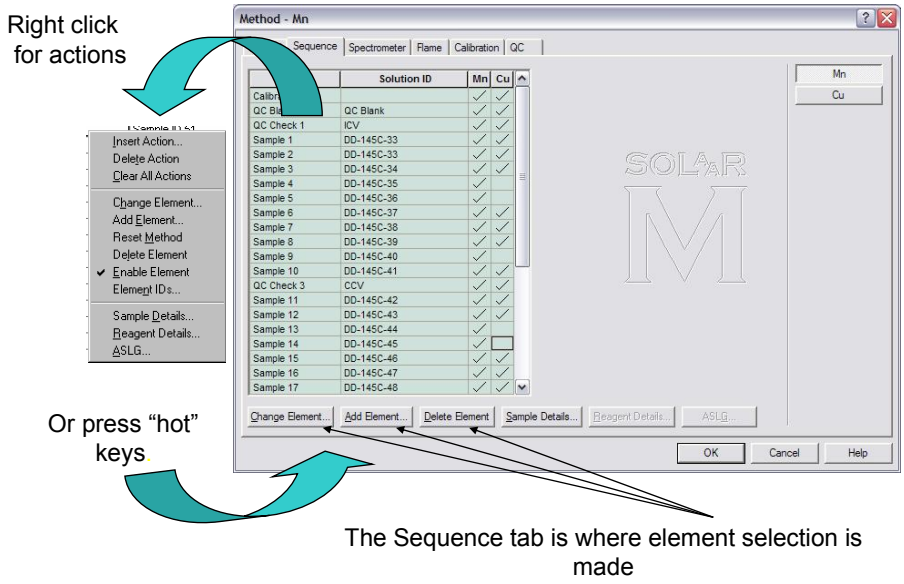
•Autosampler type selection

•Method and operator names

•Method description

•Shared solutions definition for multi-element methods

Method Development –Sequence tab



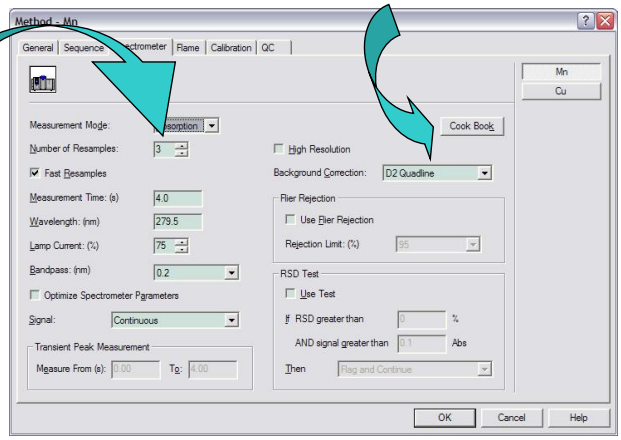
This display has the Sequence folder on top. A right mouse click on a sample field pulls down the action menu shown on the left. Alternatively, a left mouse click on the hot buttons at the bottom of the display allows direct access to several of the more important functions.

After an element column has been highlighted by clicking on the element symbol, the operator can enable or disable analysis for the highlighted element.

Method Development –Spectrometer tab

Element & atomizer specific performance information are in the Cook Book

Number of readings



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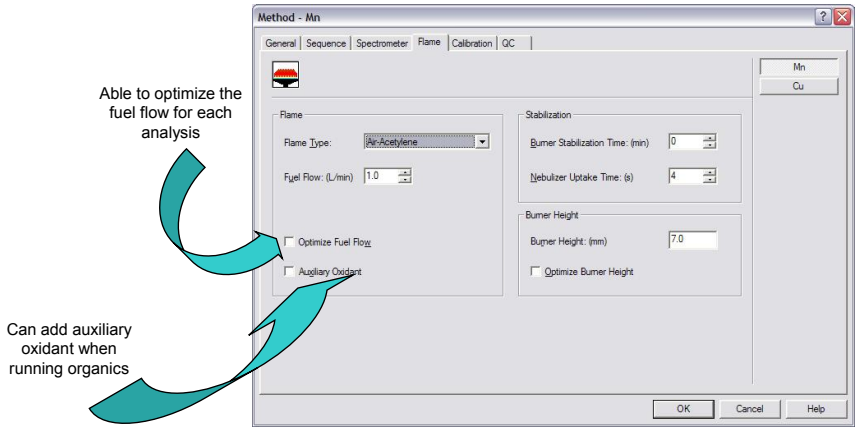
Method Development –Flame tab



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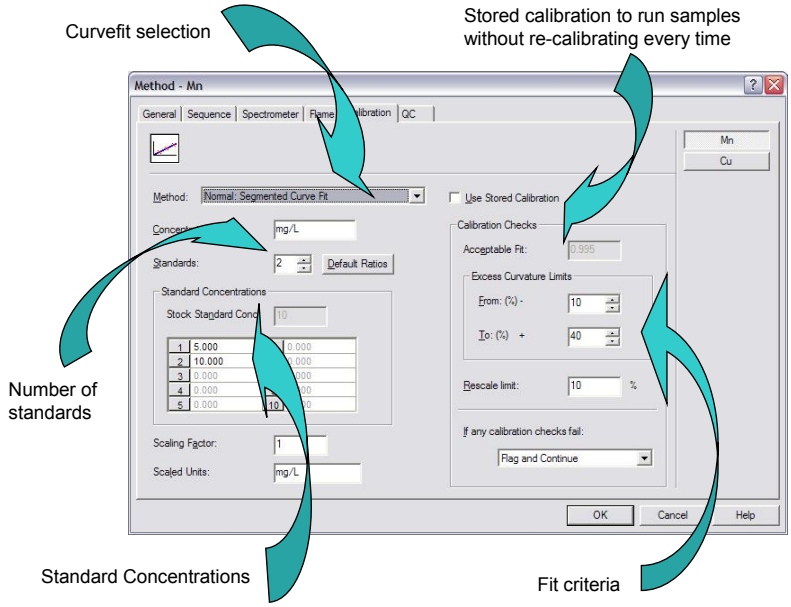
Method Development –Calibration tab



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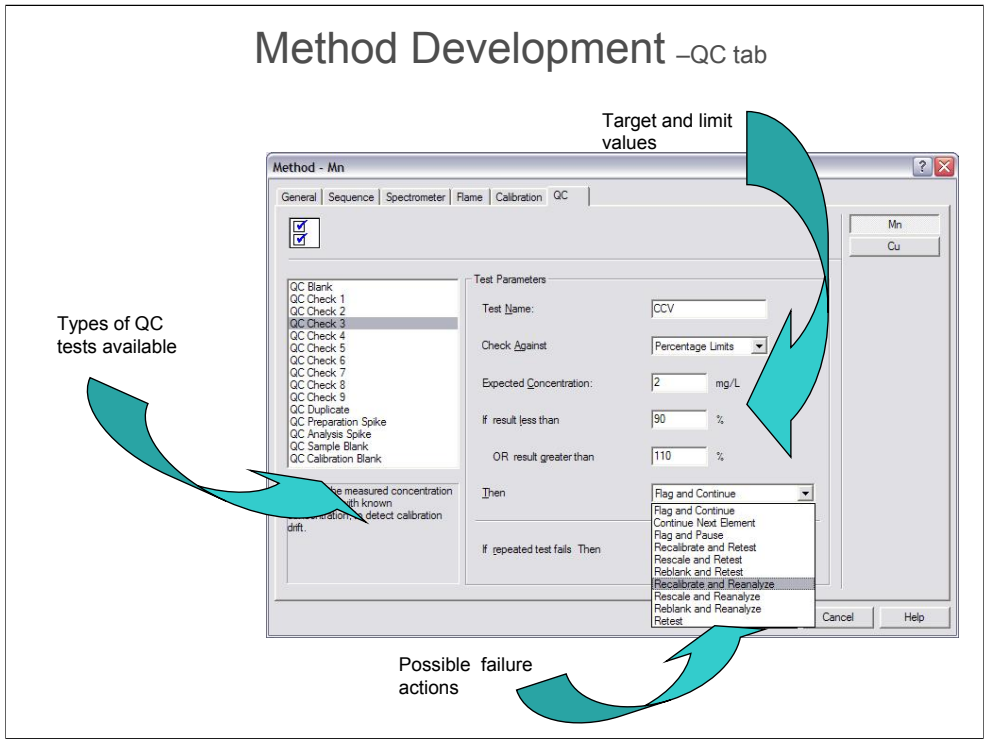
Method Development –QC tab



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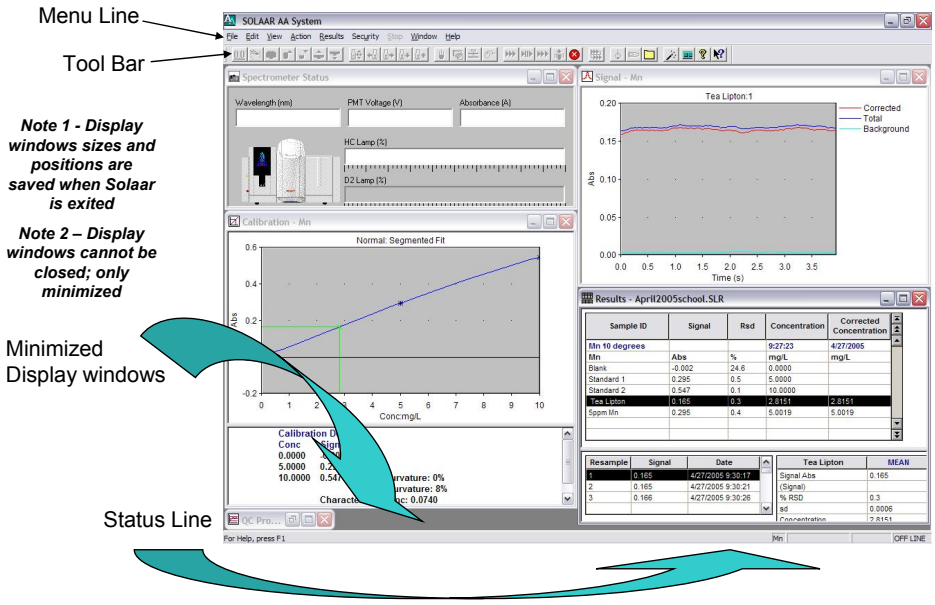
Quick Method Setup

- Click on **Method** folder (toolbar)
- Select atomizer type in **General** tab
- Open **Sequence** tab and press **Change Element** button at bottom of window.
- Highlight element symbol from periodic table and press **OK** button
- Open **Calibration** and input number of standards and concentrations for each.
- Select no. of resamples, type of integration, and background correction from **Spectrometer** folder. You should be able to leave wavelength, lamp current (%), and bandpass at default values.

SOLAAR Main Window



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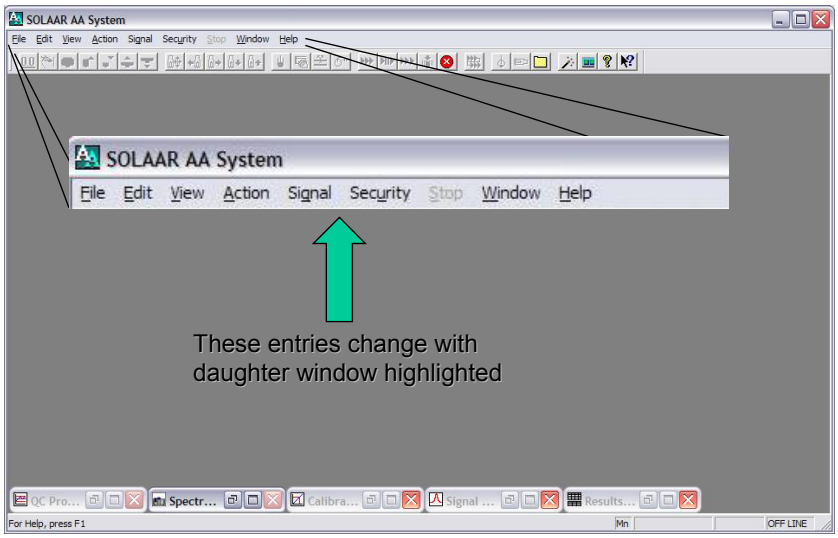
Menu Line



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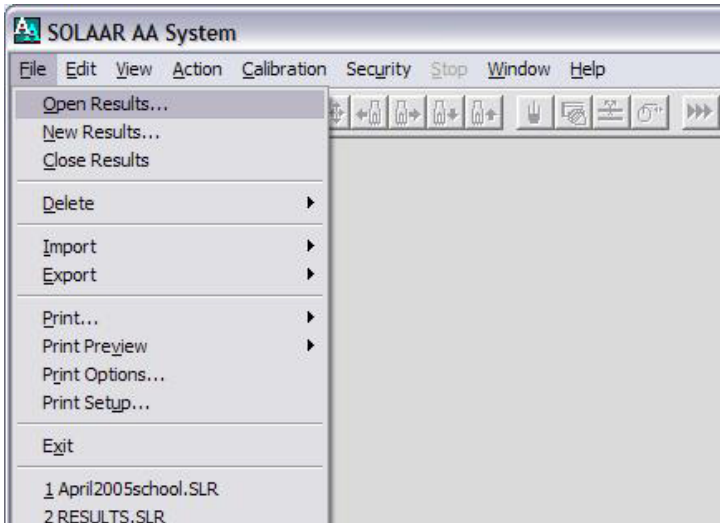
Menu Line -File Choices



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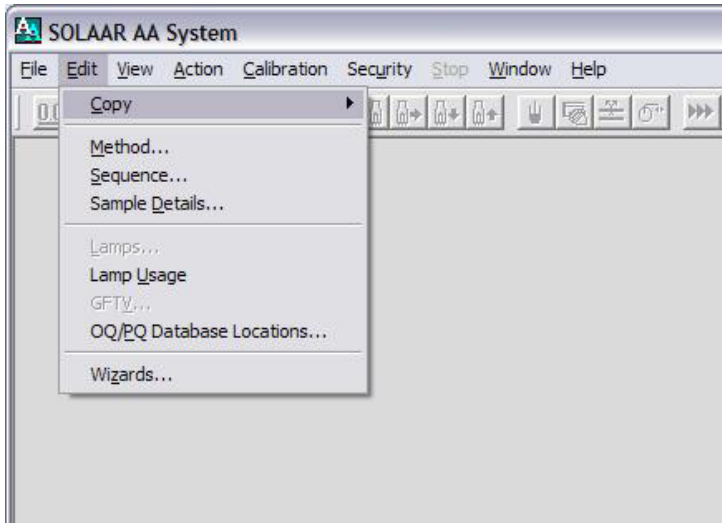
Menu Line -Edit Choices



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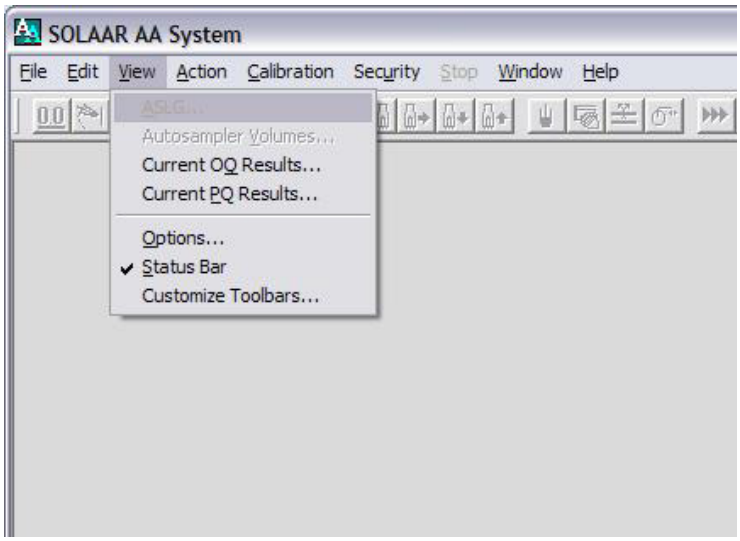
Menu Line -View Choices



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Menu Line -Action Choices

Only allowed actions enabled

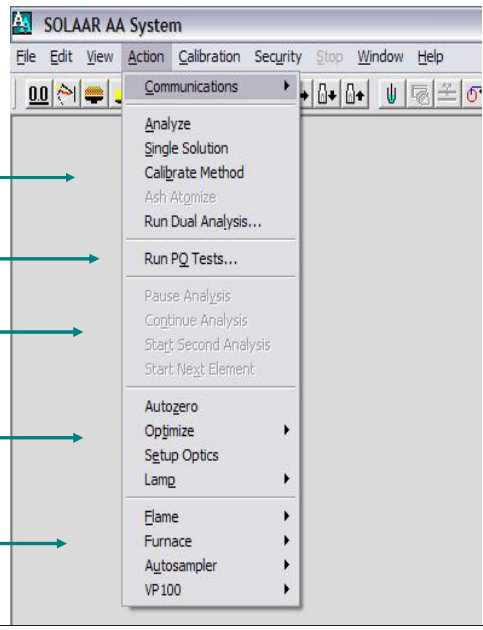
Analysis Functions

Performance Qualification

Analysis Run Controls

Spectrometer Controls

Atomizer Controls



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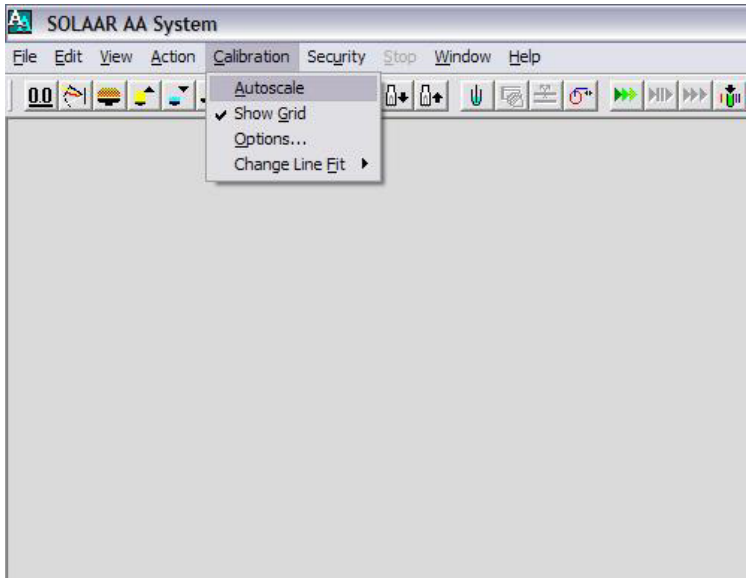
Menu Line -Calibration Choices



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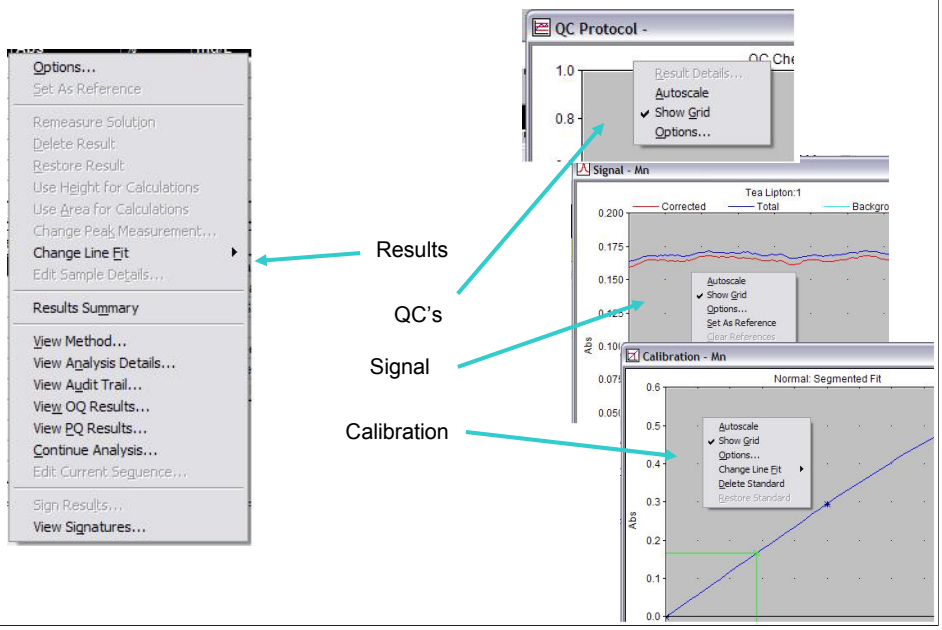
Right-Click Window Functions for:



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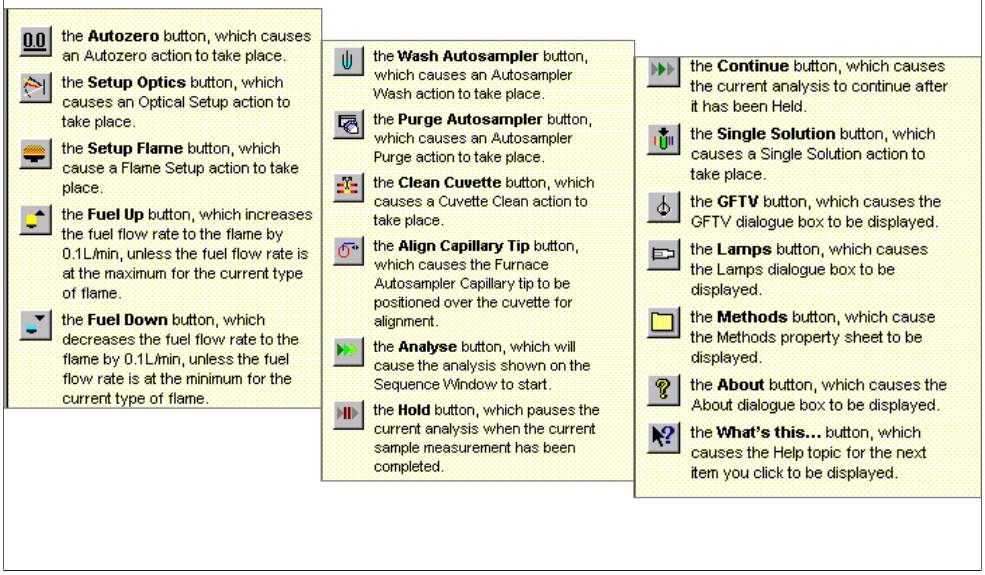
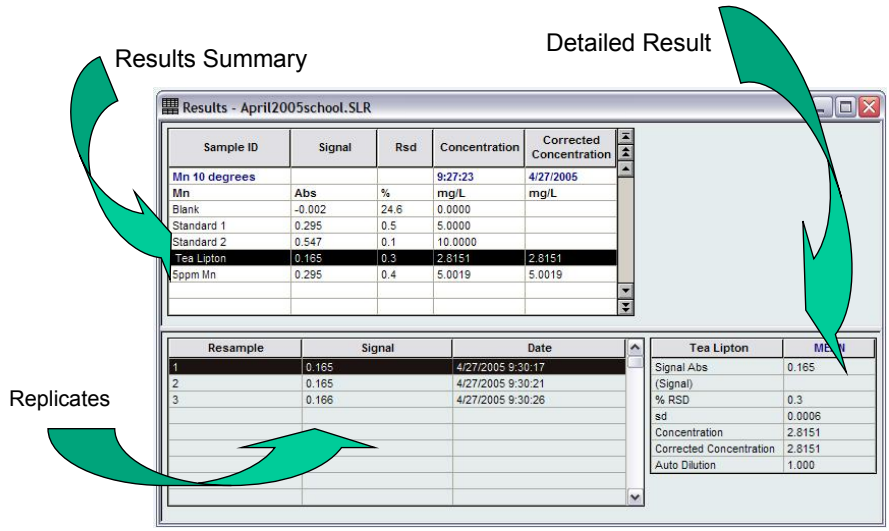
Tool Bar Buttons



- the **Autozero** button, which causes an Autozero action to take place.
- the **Setup Optics** button, which causes an Optical Setup action to take place.
- the **Setup Flame** button, which cause a Flame Setup action to take place.
- the **Fuel Up** button, which increases the fuel flow rate to the flame by 0.1L/min, unless the fuel flow rate is at the maximum for the current type of flame.
- the **Fuel Down** button, which decreases the fuel flow rate to the flame by 0.1L/min, unless the fuel flow rate is at the minimum for the current type of flame.
- the **Wash Autosampler** button, which causes an Autosampler Wash action to take place.
- the **Purge Autosampler** button, which causes an Autosampler Purge action to take place.
- the **Clean Cuvette** button, which causes a Cuvette Clean action to take place.
- the **Align Capillary Tip** button, which causes the Furnace Autosampler Capillary tip to be positioned over the cuvette for alignment.
- the **Analyse** button, which will cause the analysis shown on the Sequence Window to start.
- the **Hold** button, which pauses the current analysis when the current sample measurement has been completed.
- the **Continue** button, which causes the current analysis to continue after it has been Held.
- the **Single Solution** button, which causes a Single Solution action to take place.
- the **GFTV** button, which causes the GFTV dialogue box to be displayed.
- the **Lamps** button, which causes the Lamps dialogue box to be displayed.
- the **Methods** button, which cause the Methods property sheet to be displayed.
- the **About** button, which causes the About dialogue box to be displayed.
- the **What's this...** button, which causes the Help topic for the next item you click to be displayed.

Results Window



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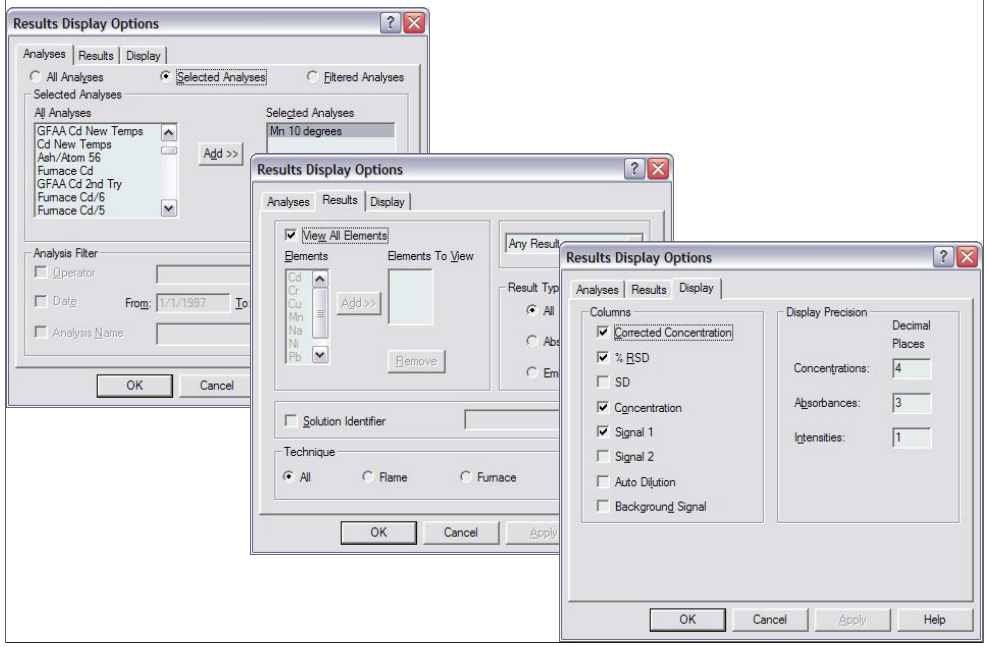
Results Right-Click Options



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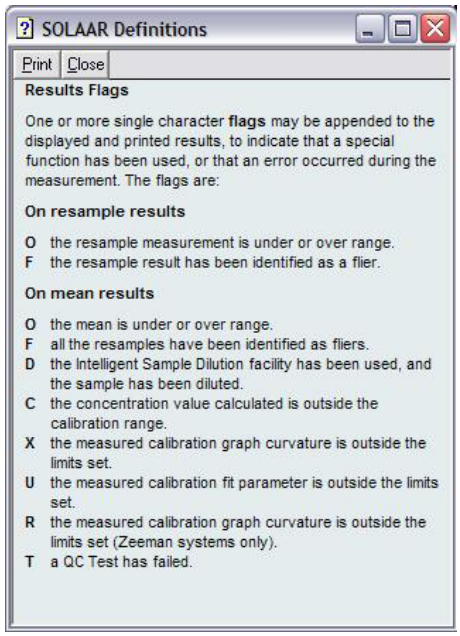
Result Error Flags

Definitions for the error flags are available in help files (F1).

- **Out-of-range results**
- **Fliers**
- **Dilution**
- **Excessive curvature**
- **Poor curvefit**
- **QC Failure**



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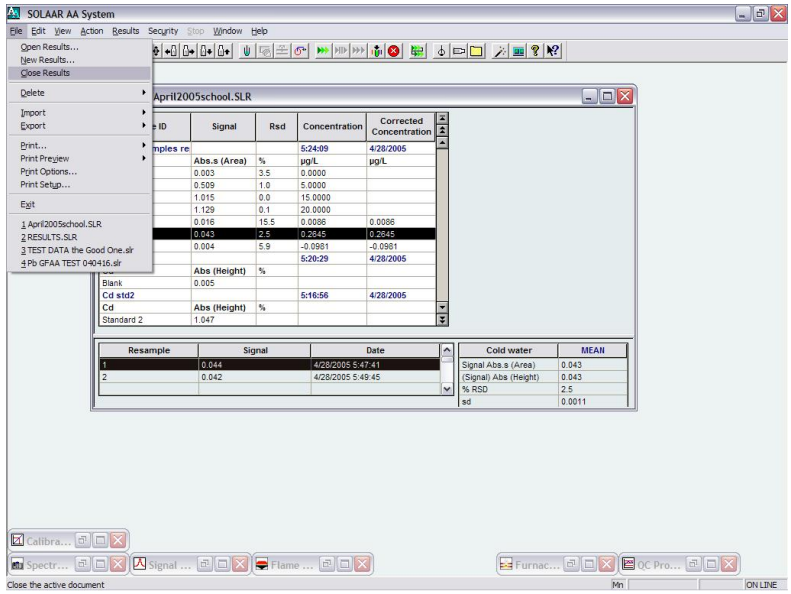
Closing Results Files



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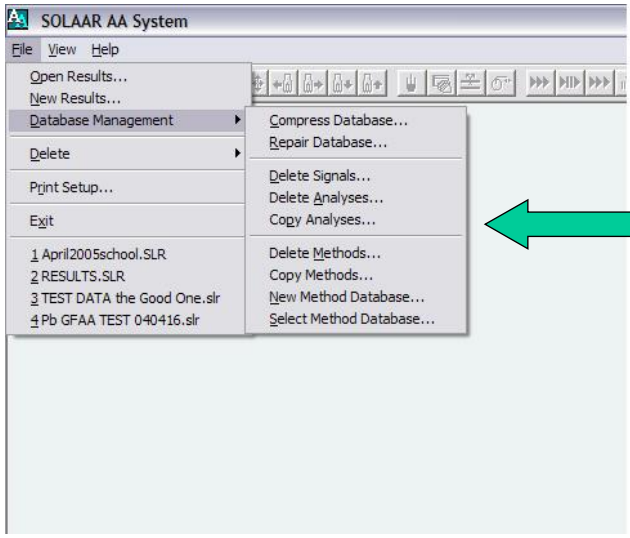
Results Files -Database Management



Options in Database Management

Database Management is not available if Results are open

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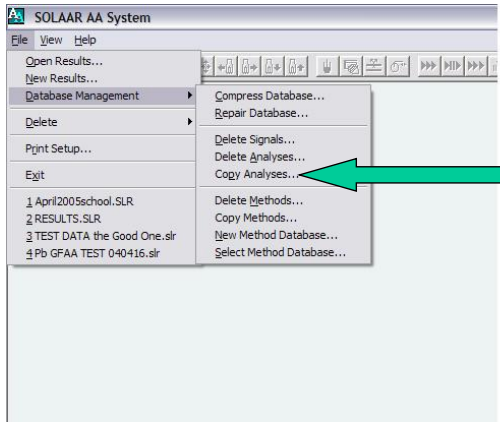
Results Files -Copy Data



Click here to copy analysis data from one file to another

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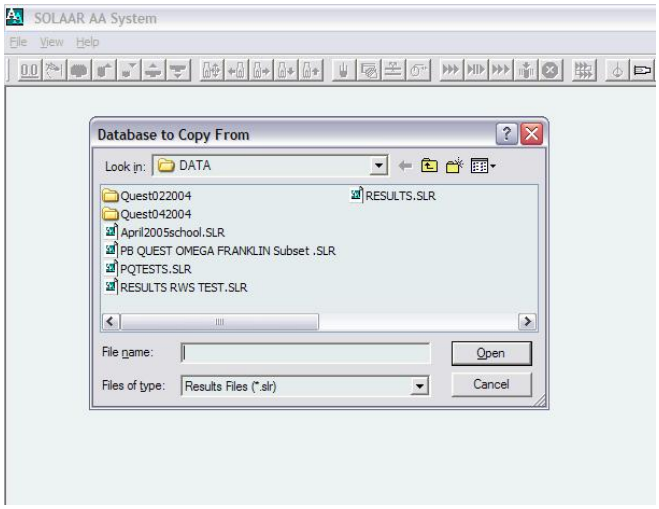
Results Files -Copy Data



Select results file to copy from

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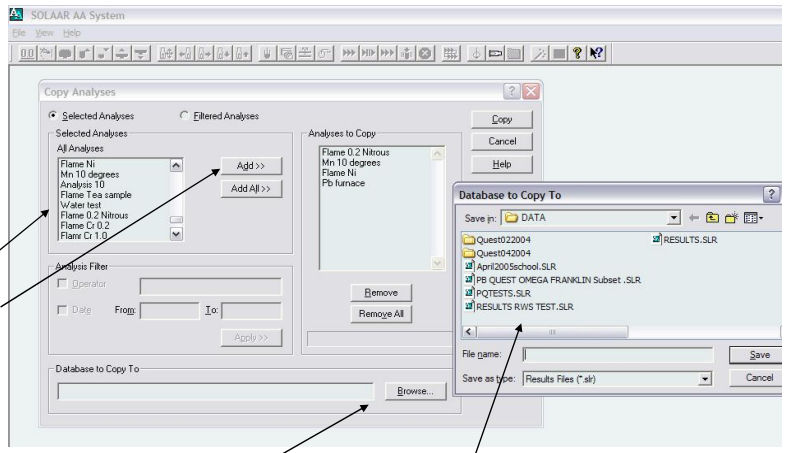
Results Files -Copy Data



Select the desired analyses to copy

Click here to select the results file to copy the data to

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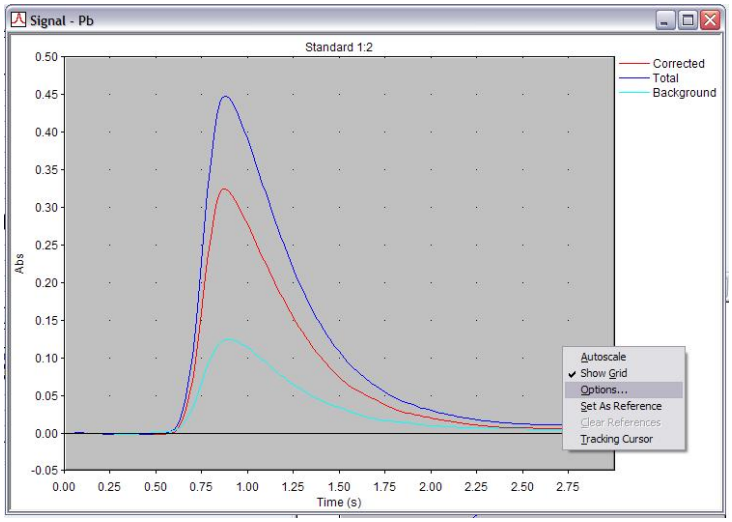
Signal Window



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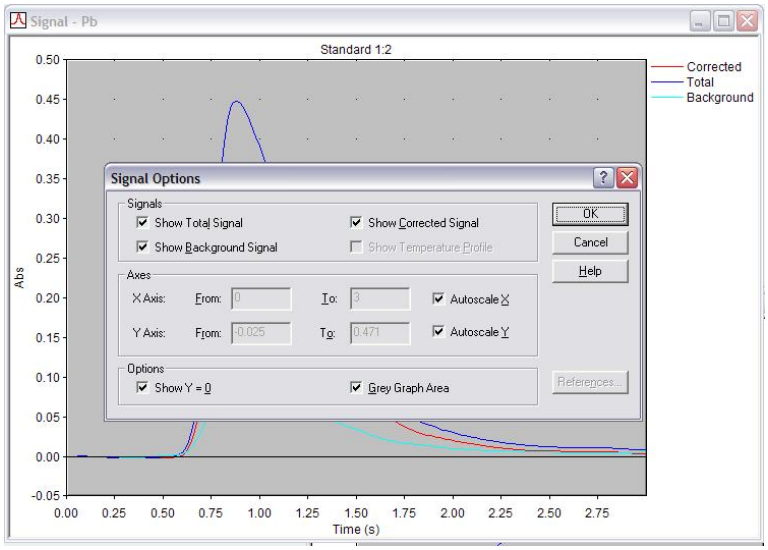
Signal Options



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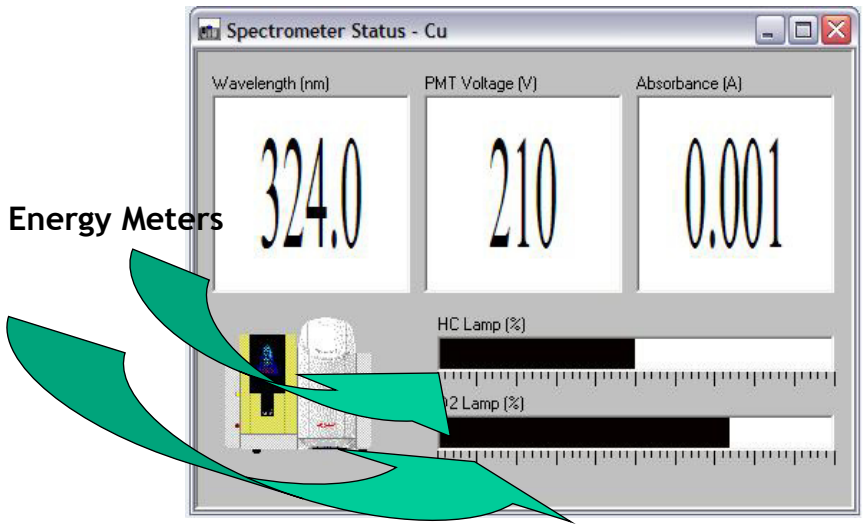
Spectrometer Window



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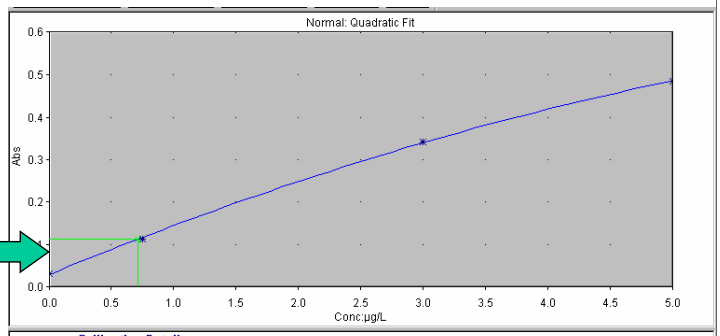
Calibration Window

Graphic Display

Highlighted result

Numerical fit



Calibration Details

Conc	Signal	
0.0000	0.032	Y = -0.00609x² + 0.12162x + 0.0296
0.7500	0.113	Fit: 0.9997
3.0000	0.342	
5.0000	0.485	

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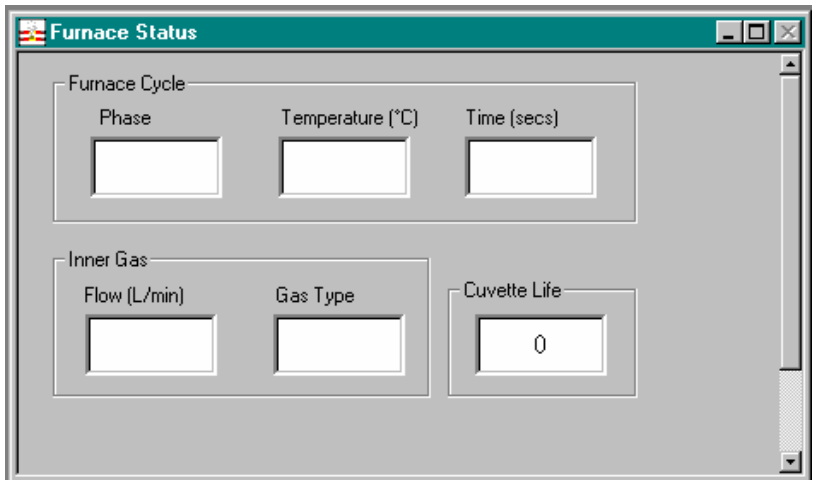
Furnace Status Window



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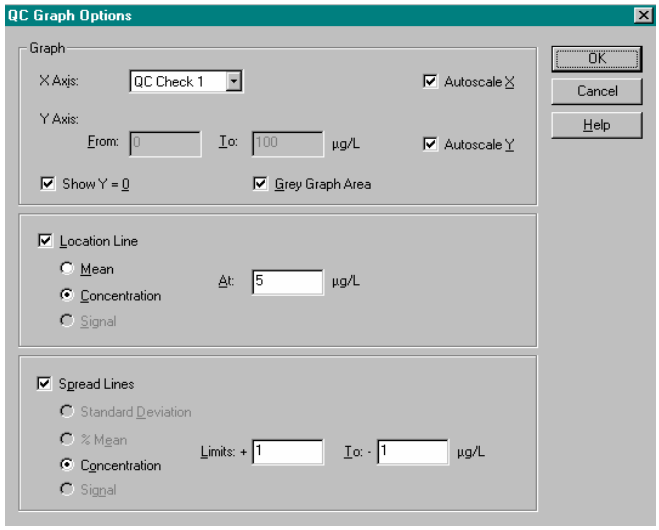
QC Plotting Options



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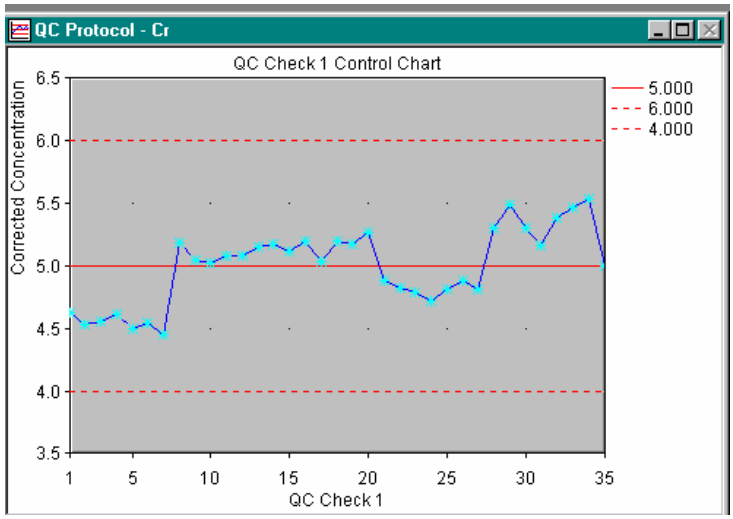
QC Charts



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