# Precision and Accuracy Report

Precision is verified by injection of 5 or 6 replicates of the sample, and calculating the % RSD (relative standard deviation) between the area and retention times (optional) values. The samples are processed, and the results are saved. The 5 precision's results are selected and the *Preview* tool is used to create a Summary report. The *Preview* tool brings about the following window, in which an easy place to start is the Report Wizard, which is accessed through the "*Use the current open Report Method named Untitled*".
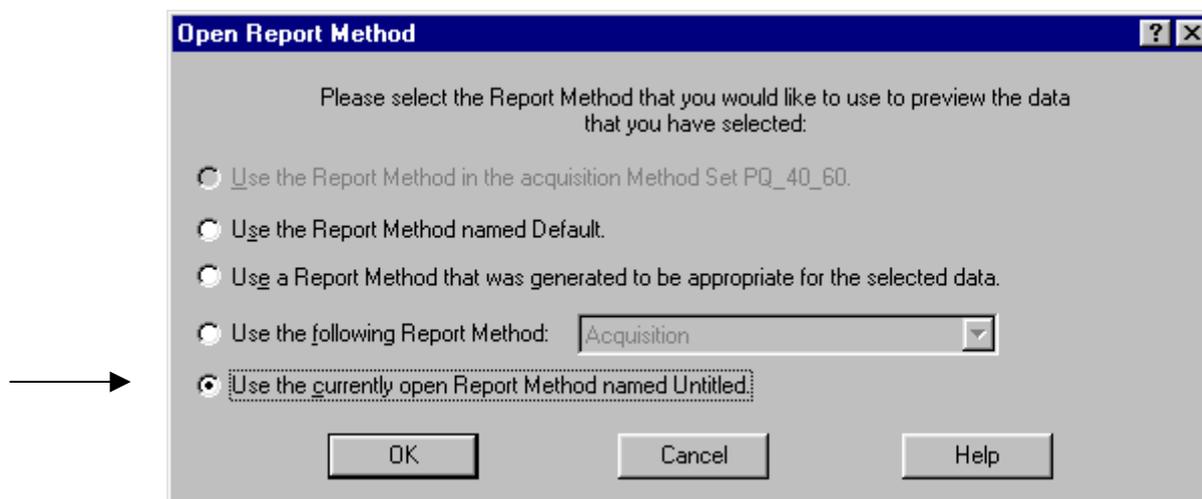


A blank page is opened and then the wizard starts by using: "*File > New > Use Report method wizard*". Select the Summary by All method and A4 for the page setup.
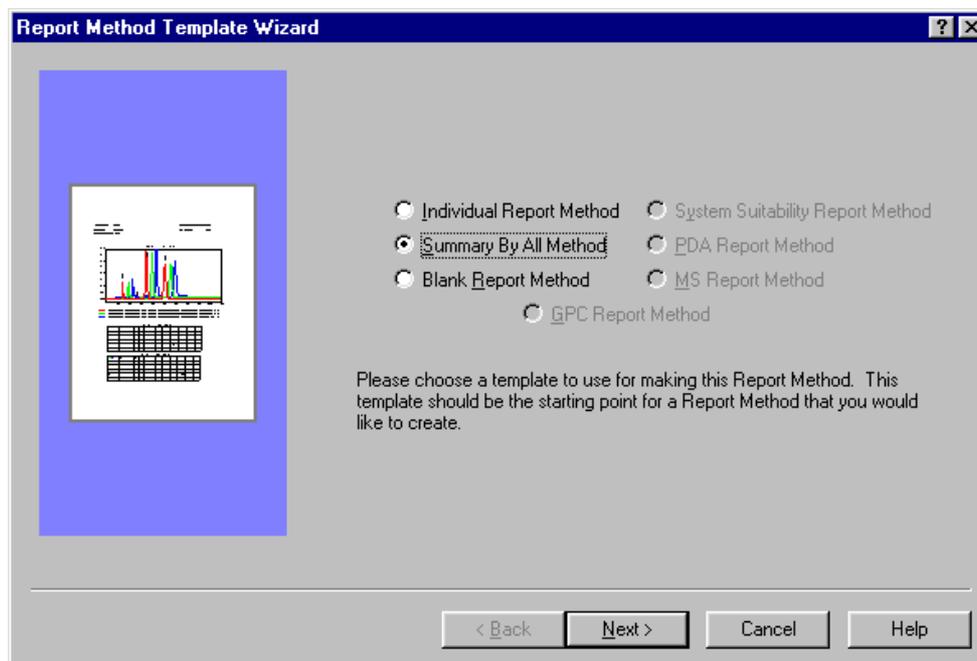


The default *Summary by All* report shows overlaid chromatograms shifted as in 3 dimensional plot, and a summary table that gives the RSD results of the time and area.

To change anything just click the *Close* button, and go to Edit mode. You can either delete the chromatogram (just hit the delete key) it or click on it twice to change the overlay properties. To show the 2D overlay just go to the overlay tab and un-check the *Use the Z-axis Plotting*.

To change the *Summary Table*, click on it twice and get the following window:

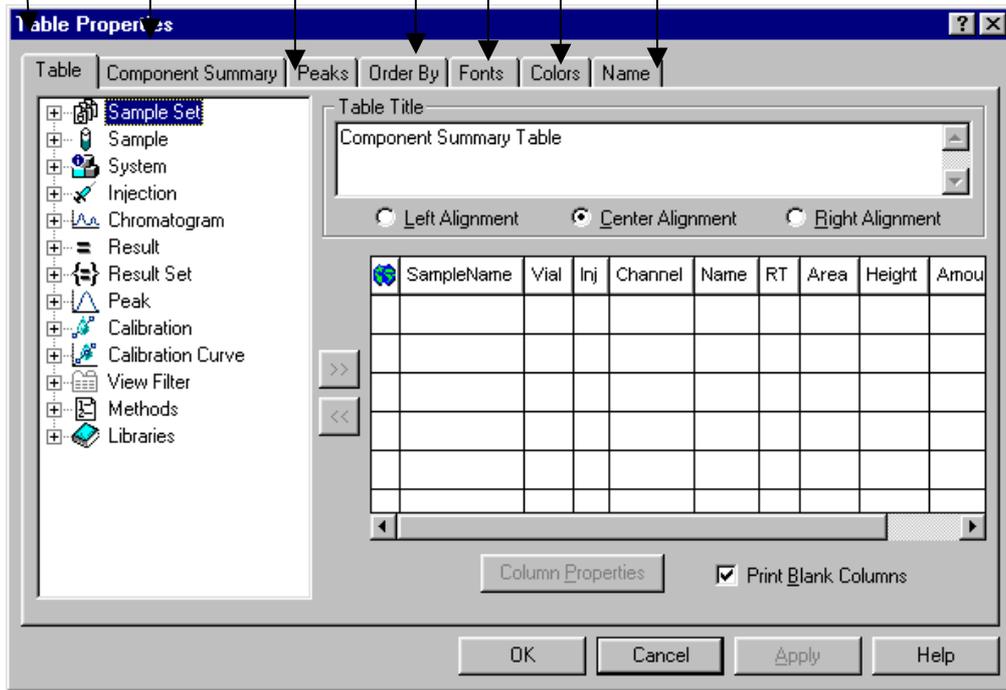Add and delete columns in the table
Prepare a specific summary report
Set which peaks to show
(known, unknown, missing etc.)
Set the order
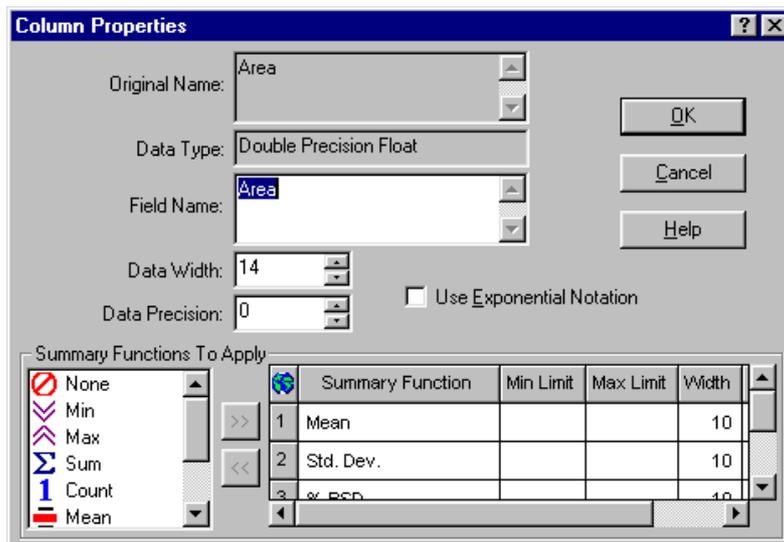and the grouping properties

Set the fonts and text size
Set the colors of data
Name the element and save it to data base



To set the summary parameters of specific columns, select it, and then the "*Column Properties*" button is highlighted. Click it, and the following window appears:

The title of the column can be edited here (use *cntr+2^{nd}Enter* to get a second line in the title) as well as the precision and the format (Exponential or not). At the bottom, there are summary functions to set too.

# Accuracy

Accuracy is verified by analysing a control standard as an unknown. In the *Channels* view the control standard is selected and set as an unknown in the *Alter Sample* tool. The sample weight of this sample will be the known amount (The same number that would have been entered in the *Amount loading table* if it was a standard to calibrate from). The final result then will be the ratio of (*Amount calculated/Sample Weight*).

If the difference is needed, a custom field of the type *Peak* is created, in which a formula is used:

$$(100*(Amount-SampleWeight))/((Amount+SampleWeight)/2)$$

Or alternatively:

$$100*(Amount/SampleWeight)-100$$

The new field can be called something like *Standard_Compare* and should be added to the table in the report of the unknown.