

Applying a New Baseline to Data in a SediGraph Sample Information File

This document explains how to apply a new baseline to data in a completed sample file (one that has been used in an analysis).

The quantity of particles still suspended at any point during a SediGraph analysis is determined from the amount of x-rays absorbed by the particles. In order to correct for the x-rays absorbed or scattered by the suspending liquid and optical components, the baseline absorption is subtracted from that absorbed when the particles are present.

This baseline absorption is measured when no particles are present and stored in the SediGraph memory. This baseline absorption is dependent upon the suspending liquid, and the type and amount of surfactant. Since each preparation of suspending solution may be slightly different, especially if the surfactant absorbs x-rays, you should measure a new baseline each time you prepare a new container of solution. And, you should always measure a new baseline at the start of each work shift during which you plan to use the SediGraph.

What happens if you forget to measure a baseline at the start of your shift or after preparing a new container of solution? Simply measure a new baseline and apply it to the previously measured sample. This is how it's done:

- 1. Measure the new baseline absorption.
- 2. Open the sample information file that contains the analysis data you wish to correct.
- 3. Click the **Materials Properties** tab. If the file is in the **Basic** mode, click the **Advanced** button at the bottom of the file window.
- 4. Click the Update Properties button; the Update Material Properties dialog is displayed.



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Update Material Properties	×	
Previously collected data must be con the sample or liquid properties. This minutes of computation. Sample Material Alumina Add Barium Sulfate Barium Titanate Calcium Carbonate Calcium Hudroxide Lelecium Hudroxide Delete Description CaCO3 Density 2.730 g/cm ³	Analysis Liquid SediSperse S-12 Lot Add SediSperse W-11 Lot SediSperse W-12 Lot Water Description Water X-Ray Intensity: Normal Properties	
Baseline An alternative baseline may be selected to replace the one active during the analysis. Changes to the sample or liquid properties will not be saved unless the "Apply Changes" button is selected. Changes Cancel		Becomes enabled when changes have been made.

5. Click the **Set Baseline** button; the Select Baseline dialog is displayed.

	Select Baseline	X
Select this option.	A baseline active on any attached unit may be selected as the alternate for this sample. The original baseline is preserved.	
	Alternate Baseline	
	Date and Time: 10/29/2003 2:47:57PM Average kilocounts/sec: 145	
Select the serial number of the analyzer on which the sample ——— was analyzed.		
	Select the instrument having the baseline you wish to use:	
	<u>OK</u>	

- 6. From the drop-down list, choose the SediGraph on which the sample was analyzed. If you have multiple SediGraphs installed on the computer, be sure to choose the correct one.
- 7. Click the **Apply Changes** button. The file is minimized automatically and the results recalculated using the new baseline (recalculations take only a few seconds). A message indicating changes have been applied displays on the screen, click **OK** to close the message dialog.
- 8. Restore the minimized sample file. Now you can generate a report using the new baseline. Save the file to make the change permanent.