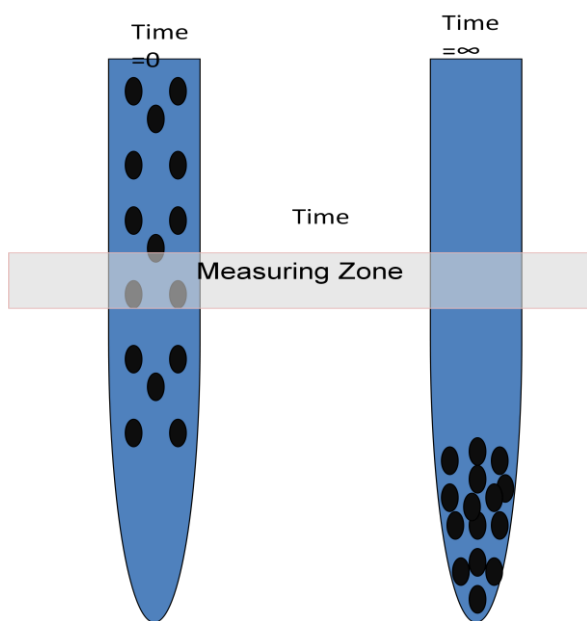


T2 as a Function of Time Barium Titanate

By Sean Race

The Acorn Area can be used to monitor sedimentation processes. As shown in the illustration below, the measuring zone of the sample is in the middle of the NMR tube. As particles settle to the bottom of the tube, the concentration of particles in the measuring zone decreases, increasing the relaxation time. The sedimentation process can be monitored using the **T2 as a function of time** measurement method in AreaQuant version 0.7.3 and higher.



In the following figure illustrates the change in the T2 relaxation of a Barium Titanate dispersion in water. Barium Titanate has a density of approximately 7.2 g/cm³. These particles are rather large, and hence settle quickly.

This measuring mode can be used to guide method development processes.

