



## Groundwater Monitoring Colloidal Solids Removal

The groundwater water samples contain colloidal particles (less than 5 micron) with at least 10% submicron in size. The water is from a ground water treatment system that is treating for perchlorate and Trichloroethylene (TCE). The process uses filters (5 micron) followed by ion exchange resins that remove the organics. The colloidal particles are passing through the filters and fouling the ion membranes.

The samples were received and tested. The pH was measured at 5.5 pH and the samples has a suspended solids of 382 ppm. The Floccin 1105 was used to agglomerate these solids from the liquid and settled quickly to the bottom of the jars. The dosage was tested at 10 lbs/1,000 gallons treated and the decanted water was 42 ppm suspended solids. The results of the jar tests are shown below:

