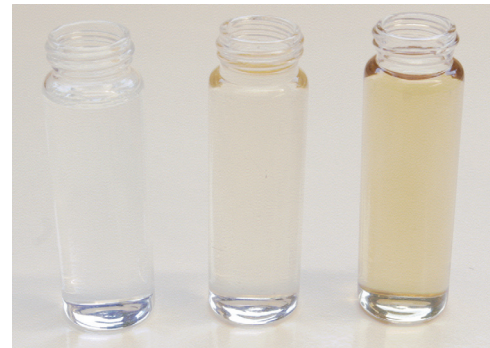


Total Organic Carbon Analysis

Rivers and stream waters contain carbon. The amount of carbon they contain can depend on many factors, including the nature of the soil they run through. For example, water from a peat bog may contain so much carbon it takes on a 'tea'-like colour. How do we measure the ORGANIC carbon present in water?



Peat bog

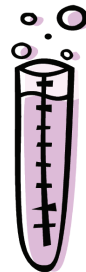


0.9 ppm C 7 ppm C 33 ppm C



Step 1

A sample is injected into the instrument



Step 2

Inorganic Carbon, mainly in the form of carbonates, is removed by adding acid



Step 3

Organic Carbon is then combusted at 750°C and CO₂ is produced



Step 4

An infrared analyser measures the amount of CO₂ in the sample