

Water Extractable Tritium in Solids

A known weight of the raw sample was shaken in the presence of a known amount of low-tritium water. The water was separated from the solid and then processed according to the tritium in water method. The water was made alkaline and sodium thiosulphate added. It was then distilled at a low temperature to remove both radioactive and non-radioactive interferences.

An aliquot of the distillate was measured in a liquid scintillation counter to determine the tritium activity. Tritiated water of known activity concentration was used to determine the counting efficiency.