

Method Number: TM 152

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**Method Summary****Determination of Dissolved and Total Metals by ICP-MS in Aqueous Samples****Scope and Range**

This method applies to all natural waters, treated waters, sewages, leachates and aqueous solutions.

References

None

Principle

Aqueous sample is filtered through 0.45um filter then acidified and analysed by ICP-MS.

Aqueous sample is acidified then heated to digest any suspended material or sediment. The sample is then filtered, and the filtrate analysed.

The samples are analysed using ICPMS using Kinetic Energy Discrimination to remove most polyatomic interferences for appropriate elements.

Interferences

Polyatomic interferences are removed using collision cell technology.

Doubly charged Strontium produced in the plasma can cause a direct interference on ⁴⁴Ca. A correction calculation is used in the instrument software to account for this potential interference.

Suspended solids or precipitates may impair the performance of the ICP-MS. Solids and precipitates are removed from digested samples prior to analysis.