

## Measurement of stable boron isotopic composition by MC-ICP-MS

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Boron has two stable isotopes (<sup>10</sup>B and <sup>11</sup>B) and these natural abundances are approximately 19% and 81%, respectively. The stable boron isotopic composition (<sup>11</sup>B/<sup>10</sup>B) has been used to understand, for example, groundwater contamination and adsorption-desorption mechanism. The isotopic composition has been originally measured by thermal ionization mass spectrometer (TIMS). Recently, a promising new technique by using multi collector type inductively coupled plasma mass spectrometer (MC-ICP-MS) is being proposed. In this study, the measurement condition (boron solution concentration and measurement time, mainly) was optimized by using boron standard material (NIST SRM 951) for establishing accurate and high-precision determination of the stable boron isotopic composition (<sup>11</sup>B/<sup>10</sup>B) by MC-ICP-MS.

Keywords: boron isotopes, MC-ICP-MS