

Samples submission

- Fill out a Sample Analysis Request form, acquired from our website or directly on the Centre
- All samples must be supplied in clearly labeled, closed plastic containers. Labels must include the sample number or identifier as listed on the Sample Analysis Request Form.
- Sample bottles should be cleaned beforehand by soaking in 2% nitric acid overnight, rinsed with pure water and air dried in a clean air fume hood.
- Submit the samples directly to a Technician, room S501 or S505, Chemistry Department
- Samples for trace and major element solution analysis should be submitted either as liquids that can be analyzed directly by ICP-MS (e.g. water samples) or as dissolved solid samples diluted in weak mineral acids (typically 2% nitric acid). Please make a note of sample weight and dilution factor – these will be required to calculate the concentration of trace elements in your samples.
- It is important that the solutions do not contain any solids, either the original non-dissolved sample or salt precipitates. Samples should be filtered (0.45 micron) and acidified as soon as they are collected, (acidification ensures that metals are retained in solution).
- Please submit at least one procedural blank together with your samples and preferably also a standard for quality control check. The standard should have a similar matrix composition as the unknown samples. The procedural blank and the standard should be treated during the preparation in the same way as all the other samples.
- The preferred concentration of elements for analysis in solution is 1 ppb (part per billion by weight) or 1 ppm (part per million by weight) for trace and major element analysis, respectively. However, higher and lower concentrations can usually be analyzed without difficulties.
- Sample consumption is 5 – 10 ml per analysis. Should the analysis be repeated, more sample solution will be required.

Sample Analyses

- Samples are analyzed as soon as possible in order of receipt. If required emergency analyses please contact the Centre for arrangements.
- Unless otherwise instructed, all samples are held for a maximum period of one (1) month under room temperature or refrigerated at 0-10°C if specified. Users are responsible for collecting their sample vials, should they be needed.
- Users will be contacted by email or phone once samples are analyzed. Results can be sent by mail or picked up at the Centre.

Reports

- Specifications of instrumental conditions utilized in the analysis are given, as well as calibration curves and calculated concentrations.
- All paper and electronic records are stored for a maximum of one (1) year following analysis. Electronic data from our analytical instruments is automatically captured and archived in specified dated files. Data is periodically copied onto a hard drive and removed from ICPMS computer.