

Laboratory Services

Date : July 22, 2015

The Geological Survey laboratory is responsible for analytical services ranging from sample preparation, petrography, XRF and chemistry, mineralogy, environmental chemistry and sealing of samples for export. Below are highlights of the key services carried out in the laboratory:

1. Sample Preparation

- Drying of samples
- Crushing of Rocks and soil samples (>2mm)
- Riffle splitting of crushed samples
- Pulverising of crushed rock and soil samples (<2mm)
- Sieving of powdered samples (75 microns)
- Mixing/homogenizing powdered samples
- Dividing homogenized Rock/soil samples
- Weighing/Labelling and packaging of samples







2. Petrographic Analysis of Samples

- Cutting/Grinding/Polishing of rock samples
- Thin sections of rocks
- Identification, verification and analysis of rocks





3. Mineralogical Analysis of Samples

- Heavy liquid extraction
- Magnetic separation
- Microscopic Analysis
- Identification, verification and analysis of minerals



4. XRF Analysis of Samples



- Sample preparation (fused beads)
- Qualitative analyses of geological and mineral samples
- Whole rock analysis
- Analysis of rare earth mineral ores and concentrates
- Quantitative analyses of rock, soil, stream sediment and environmental samples at ppm and percentage (%) levels

5. Environment Chemistry

- Water (pH, conductivity, TDS, dissolved oxygen, BOD, COD, etc)
- Soil/sediments
- Heavy metal determination (Lead, Copper, Nickel, Cadmium, Cobalt, Arsenic, Chromium, etc)
- Air Quality Analysis





6. Verification and Sealing of Samples for Export