



## **SAMPLE PREPARATION CODES AND DETAILS**

### **North Australian Laboratories Pty Ltd (NAL)**

NAL do not provide codes for sample preparation, although details of the **sample preparation process** are provided below:

- **Air Core, RAB** and **RC** samples are prepared by drying at 140°C for 2 hours, cooled to room temperature and then roll crushed through a Jaques 12 x 6 Roll Crusher so the sample is sub 2 mm. 500 gm is split and fine pulverised to 90% passing 75 µm in an LM2 Pulveriser.
- **Soil** samples are dried and pulverised in an LM2 pulveriser to 90% passing 75 µm.
- **Diamond Core** and **Rock Chip** samples are jaw crushed through a Jaques 8 x 5 Jaw Crusher then processed the same as the AC, RC and RAB samples.

### **Assaying Processes**

- **Fire assay** (method **FA50**) is a 50 g conventional fire assay with cupellation and dissolution of the dore prill in Nitric acid and Aqua Regia with an AAS finish to a detection limit of 0.01 ppm Au. Method **FALL** is also a 50 g fire assay followed by a dissolution of the dore prill from cupellation as above. DIBK is added and the Au extracted into the Organic phase and then determined using AAS to a Detection Limit of 1 ppb Au.
- Method **G400I** and **G400M** is a four acid [Nitric/Hydrochloric/Perchloric/Hydrofluoric] digest to fumes of HClO<sub>4</sub> followed by a leach in conc HCl and dilution to volume with demineralised water. The elemental readings are done with ICP-OES [Method G400I] and ICP-MS [Method G400M].
- Method **G120I** and **G120M** is a fusion digestion with Sodium Peroxide followed by dissolution of the fusion melt in dilute Hydrochloric acid. The elemental readings are again by ICP-OES [Method G120I] and ICP-MS [Method G120M].

### **ALS**

#### **Soils**

**PUL-32** (Soils up to 1 kg): Pulverise to nominal 85% passing 75 µm.

Preparation used for all ALS sampling methods including ME-MS61, ME-MS62 and Au/TL43.

### **INTERTEK**

#### **Rock and RC Chips**

**SP11 – 13:** Dry, crush (~10 mm), pulverise to 300 g (SP11), up to 1 kg (SP12), up to 3 kg (SP13).

**PU01 – 03:** Pulverise to nominal 85% passing 75 µm up to 300g (PU01), up to 1 kg (PU02), up to 300 kg (PU03).

Preparation used for all INTERTEK sampling methods including 4A/MS, 4A/OE, FP1/MS, FP1/OE and FA25/OE.