

G-BASE FIELD SAMPLING

Stream Sediment



Standard sampling kit:

- 2 sieves (2mm and 150µm)
- 1 fibre glass pan; 1 wooden pan
- sample bags
- 1 funnel
- 1 trenching tool
- rubber gauntlets.



Sediment is dug from beneath the oxidised layer in the centre of the stream channel and sequentially sieved through coarse (2mm) and fine (150µm) mesh. The fine fraction is collected in a fibre glass pan and left to settle for 20 minutes.



After settlement excess water is carefully drained off. The sediment is homogenised and transferred to a Kraft sample bag.



The samples are air dried until plastic in consistency, before being dispatched to Keyworth for freeze drying and sample preparation.

The excess <math><2\text{mm} + 150\mu\text{m}</math> fraction is washed, shaken and panned to provide a heavy mineral concentrate. This is carefully examined in the field for minerals of economic interest and contaminants. Samples are retained in the NGDC, Keyworth



Stream Water



Four water samples are collected, two filtered (one acidified, one unacidified) for major and trace element analysis and two unfiltered for alkalinity, conductivity and pH determination.



Water samples are laid out and checked off along with stream sediments and panned concentrates. Filtered waters are stored in a cool dark place prior to dispatch to BGS laboratories, while unfiltered waters are analysed daily at the field base.



Alkalinity titrations are undertaken at the field base following pH and conductivity measurements.

G-BASE REGIONAL PROGRAM											
DATE	TIME	LOCATION	WATER	SEDIMENT	PH	COND	ALKALINITY	TEMP	WIND	WAVE	REMARKS
8/11/03	07:21	1141414141	1141414141	1141414141	1141414141	1141414141	1141414141	1141414141	1141414141	1141414141	1141414141
8/11/03	08:21	1141414141	1141414141	1141414141	1141414141	1141414141	1141414141	1141414141	1141414141	1141414141	1141414141

At each sample location relevant details are recorded on a field card. This information, along with water chemistry data, is entered each day onto a database which is loaded, after checking, to the Geochemistry Database.

Soil



Soil samples are collected by hand using a Dutch auger. Each sample comprises a composite of 5 sub-samples taken from the points and centre of a 20 metre square.



Soil samples are transferred to a Kraft sample bag prior to air drying and dispatch to the laboratories for sample preparation and analysis.



All samples are checked off at the end of the day to identify any labelling errors.



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