

Preparation of biota (tree leaf) samples and analytical suite of elements from NTEL, Berrimah, NT.

The following summary of sample preparation and analytical methods is based on the NTEL Intertek Laboratories quote (Ref #:CAM002, 08/06/2012) for King River and Beatrice projects tree leaf sampling program.

Sample Preparation

- Turn biota samples into ash at 500°C
- Digest ash of biota via NTEL in-house method using nitric acid (digestion type is referred to as B100)
- Analyse for Pb isotopes and a suite of elements with ICP-MS analytical equipment

Element	Detection limit (ppm)	Analytical Method	Digestion
Pb204	0.2	ICP-MS	B100
Pb206	0.2	ICP-MS	B100
Pb207	0.2	ICP-MS	B100
Pb208	0.2	ICP-MS	B100
Au	0.05	ICP-MS	B100
Pd	0.05	ICP-MS	B100
Pt	0.05	ICP-MS	B100
Ag	0.05	ICP-MS	B100
Al	5	ICP-MS	B100
As	0.1	ICP-MS	B100
Ba	0.05	ICP-MS	B100
Be	0.1	ICP-MS	B100
Bi	0.1	ICP-MS	B100
Ca	100	ICP-MS	B100
Cd	0.05	ICP-MS	B100
Ce	0.01	ICP-MS	B100
Co	0.05	ICP-MS	B100
Cr	0.5	ICP-MS	B100
Cu	0.2	ICP-MS	B100
Dy	0.05	ICP-MS	B100
Er	0.05	ICP-MS	B100
Eu	0.05	ICP-MS	B100
Fe	10	ICP-MS	B100
Ga	0.1	ICP-MS	B100
Gd	0.1	ICP-MS	B100
Hf	0.05	ICP-MS	B100
Ho	0.05	ICP-MS	B100
K	100	ICP-MS	B100
La	0.05	ICP-MS	B100
Li	0.5	ICP-MS	B100

Lu	0.05	ICP-MS	B100
Mg	100	ICP-MS	B100
Mn	0.05	ICP-MS	B100
Mo	0.05	ICP-MS	B100
Na	100	ICP-MS	B100
Nb	0.05	ICP-MS	B100
Nd	0.1	ICP-MS	B100
Ni	0.2	ICP-MS	B100
P	100	ICP-MS	B100
Pb	0.2	ICP-MS	B100
Pr	0.05	ICP-MS	B100
Rb	0.1	ICP-MS	B100
S	100	ICP-MS	B100
Sb	0.05	ICP-MS	B100
Sc	0.1	ICP-MS	B100
Se	1	ICP-MS	B100
Sm	0.05	ICP-MS	B100
Sn	0.2	ICP-MS	B100
Sr	0.05	ICP-MS	B100
Ta	0.05	ICP-MS	B100
Tb	0.05	ICP-MS	B100
Th	0.01	ICP-MS	B100
Ti	100	ICP-MS	B100
Tm	0.05	ICP-MS	B100
U	0.01	ICP-MS	B100
V	10	ICP-MS	B100
W	0.5	ICP-MS	B100
Y	0.01	ICP-MS	B100
Yb	0.05	ICP-MS	B100
Zn	0.5	ICP-MS	B100
Zr	0.1	ICP-MS	B100