

Sample submission form for inorganic analyses at ALEC:

Your name:

Date of submission:

Contact info (phone and/or email):

Project PI/Dept:

Budget number (*needed before analysis*):

Number of samples: *(For large sample sets, please provide sample ID list in Excel format)*

Analyses requested (circle desired types): As Speciation Microwave digestion

ICP-MS Ion chromatography TOC—TN—TIC (aqueous) C—N—S (solid)

Sample description:

Solids Aqueous extracts Acid digests Water Other

For XRF analysis: Sample source (Soil/Sediment/Rock/Mine tailings)

Hazardous materials? Y / N If so, specify type (heavy metals, radioactivity, etc.):

Matrix description (background solution and concentration) for samples in solution:

Acids: HNO₃ HCl¹ HF² other Concentration:

Bases: NaOH TMAH other Concentration:

Buffers¹ (type and concentration needed):

¹: Presence of Cl- contributes significant interferences to ICP-MS which must be considered for certain analytes.

²: Solutions containing hydrofluoric acid require HF-resistant sample introduction system. There will be an additional charge for special handling.

ICP-MS info (analytes requested):

Standard set #	Analytes included per set:	Check or circle desired analytes
	<i>See fee schedule at http://www.alec.arizona.edu/services.html</i>	
Standard set 1 – Major cations	K, Ca, Na, Mg	
Standard set 2 – DRC	V, Cr, Fe, Co, As, Se	
Standard set 3 – Trace metals	Be, Al, Mn, Ni, Cu, Zn, Mo, Ag, Cd, Sn, Sb, Ba, Pb	
Standard set 4 – REY	Y, Ce, Dy, Er, Eu, Gd, Ho, La, Lu, Nd, Pr, Sm, Tb, Th, Tm, Yb	
Standard set 5 – Minor/HNO ₃	Li, Ga, Rb, Sr, In, Cs, Tl, Bi, U	
Standard set 6 – Minor/HCl	Ru, Rh, Pd, Te, Hf, Ir, Pt, Au	
Standard set 7 – Minor/HF	B, Si, P, Ti, Ge, Zr, Nb, Ta, W, Re (total S now available by request)	
Standard set 8 – Hg	Hg	

Special notes:

- All samples must be free of suspended material (< 0.45µm).
- If diluted, please provide a sample of diluent for analysis.
- Upon completion of analysis, **solutions will be held for at least 30 days**. Please make arrangements to retrieve your samples before this deadline, or they will be discarded.

ALEC Log#	Completion date:	Invoice #	Invoice date:
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