

Element/ Line	Crystal	Interference corrections	Counting times peak/background, seconds	typical detection limit, wt%, 99% confidence	typical precision, wt%, 1 sigma	Standard reference materials	Source
F Ka	PC0	Fe, Ce	60 / 50	0.029	0.030	Apatite, Durango*	3
Na Ka	TAP		20 / 2x10	0.014	0.008	Anorthoclase, Kakanui, NMNH 133868	1
Si Ka	TAP		20 / 2x10	0.008	0.006	Wollastonite, natural	2
P Ka	LPET	Ca	20 / 10	0.013	0.066	Apatite, Durango	4
S Ka	LPET		40 / 2x20	0.005	0.003	Celestine SrSO ₄ Yate, England	4
Cl Ka	LPET		30 / 2x15	0.006	0.004	Tugtupite	5
Ca Ka	LPET		10 / 2x3	0.019	0.079	Apatite, Durango	3
Fe Ka	LLIF		20 / 2x10	0.025	0.012	Specularite, Haile Moor UK	4
As La	TAP		30 / 2x15	0.019	0.009	GaAs, synthetic	4
Sr La	TAP	Si	60 / 2x30	0.014	0.009	Celestine SrSO ₄ Yate, England	4
La La	LPET	Nd	60 / 2x30	0.019	0.010	LaPO ₄ , synthetic	6
Ce La	LLIF		60 / 2x30	0.036	0.022	CePO ₄ , synthetic	6
Nd La	LLIF	Ce	60 / 2x30	0.034	0.018	NdPO ₄ , synthetic	6
Th Ma	LPET		70 / 2x35	0.020	0.010	Huttonite, synthetic	7

Table: Electron Microprobe conditions for apatite analysis.

1) Jarosewich et al.³⁷ 2) UTas in house 3) U Melbourne 4) P&H Developments Ltd., UK 5) Astimex Standards Ltd, Toronto 6) Cherniak et al.⁴⁵ 7) J. Hanchar, Memorial University.

*Durango apatite used for F calibration was oriented with the beam perpendicular to the C axis.