

## APPENDIX 2

### Technical parameters and detection limits for individual elements in studies of polymetallic nodules by EPMA

Element	Line	Crystal	Standard	Detection limit [ppm]
Zn	Zn K $\alpha$	LLIF	Willemite (SPI-53)	1.250–1.300
Cu	Cu K $\alpha$	LLIF	Chalcopyrite (P&H)	800
Ni	Ni K $\alpha$	LLIF	Skutterudite (SPI-53)	700
Co	Co K $\alpha$	LLIF	Cobaltite (MAC)	600
Fe	Fe K $\alpha$	LLIF	Hematite (SPI-53)	50–450
Mn	Mn K $\alpha$	LLIF	Rodonite (SPI-53)	580
Ba	Ba L $\alpha$	LLIF	Barite synt. (P&H)	1,2
Na	Na K $\alpha$	LTAP	Ortoclase (SPI-53)	200
Si	Si K $\alpha$	LTAP	Wollastonit (P&H)	110
Al	Al K $\alpha$	LTAP	Ortoklase (SPI-53)	130
Mg	Mg K $\alpha$	LTAP	Dolomite (SPI-53)	130
K	K K $\alpha$	LPET	Ortoclase (SPI-53)	140
Cl	Cl K $\alpha$	LPET	NaCl (P&H)	140
S	S K $\alpha$	LPET	Celestine (SPI-53)	140
P	P K $\alpha$	LPET	Apatite (SPI-53)	80–100
Sr	Sr L $\alpha$	LPET	Celestine (SPI-53)	800
Ca	Ca K $\alpha$	PET	Wollastonite (P&H)	50–400