

Appendix. Detection limits of all analyzed elements.

Analyzed elements (wt. %)	Detection limits (wt. %)	Analyzed elements (ppm)	Detection limits (ppm)	Analyzed elements (ppm)	Detection limits (ppm)
SiO₂	0.01 - 90	La	0.1 - 10000	Cs	0.05 - 1000
TiO₂	0.01 - 25	Ce	0.1 - 10000	Ba	10 - 100000
Al₂O₃	0.01 - 75	Pr	0.05 - 1000	Th	0.1 - 10000
Fe₂O_{3t}	0.01 - 75	Nd	0.1 - 10000	U	0.05 - 10000
MnO	0.01 - 10	Sm	0.1 - 1000	Ta	0.05 - 10000
MgO	0.01 - 30	Eu	0.05 - 1000	Nb	0.05 - 1000
CaO	0.01 - 60	Gd	0.05 - 1000	Zr	10 - 100000
Na₂O	0.01 - 30	Tb	0.05 - 1000	Hf	0.05 - 500
K₂O	0.01 - 25	Dy	0.05 - 1000	Ti	60 - 150000
P₂O₅	0.01 - 25	Ho	0.05 - 1000	Y	0.05 - 10000
		Er	0.05 - 1000	Sr	10 - 100000
		Tm	0.05 - 1000	Rb	0.2 - 10000
		Yb	0.1 - 1000	Ni	5 - 10000
		Lu	0.05 - 1000	V	5 - 10000