

Table S5. Concentrations of the Sm, Eu, Gd, and Tb (expressed in mg/kg) in BCR fractions and AR eluates of the tailings sample.

Sm						
BCR step	BCR1	BCR2	BCR3	BCR4	ΣBCR	Control
	Exchangeable	Reducible	Oxidisable	Residual		<i>aqua regia</i>
Site	mg/kg					
Tailings	n.d.	0.053 ± 0.002	1.77 ± 0.04	1.62 ± 0.03	3.45	2.95
Dust	0.375 ± 0.027	0.649 ± 0.034	1.17 ± 0.02	0.999 ± 0.109	3.19	3.01
MMART0-3	n.d.	n.d.	1.10 ± 0.03	0.458 ± 0.142	1.55	1.22
MMART5-7	n.d.	n.d.	0.653 ± 0.064	0.265 ± 0.010	0.918	1.23
MSTUP0-3	n.d.	n.d.	0.481 ± 0.015	0.394 ± 0.034	0.876	0.858
Eu						
BCR step	BCR1	BCR2	BCR3	BCR4	ΣBCR	Control
	Exchangeable	Reducible	Oxidisable	Residual		<i>aqua regia</i>
Site	mg/kg					
Tailings	n.d.	0.145 ± 0.000	0.431 ± 0.022	0.404 ± 0.002	0.981	0.667
Dust	0.097 ± 0.006	0.179 ± 0.008	0.312 ± 0.021	0.322 ± 0.018	0.910	0.754
MMART0-3	n.d.	n.d.	0.239 ± 0.002	0.152 ± 0.058	0.391	0.255
MMART5-7	n.d.	n.d.	0.147 ± 0.008	0.125 ± 0.022	0.273	0.272
MSTUP0-3	n.d.	n.d.	0.102 ± 0.000	0.033 ± 0.047	0.137	0.173
Gd						
BCR step	BCR1	BCR2	BCR3	BCR4	ΣBCR	Control
	Exchangeable	Reducible	Oxidisable	Residual		<i>aqua regia</i>
Site	mg/kg					
Tailings	n.d.	0.033 ± 0.002	0.808 ± 0.015	0.723 ± 0.001	1.57	1.27
Dust	0.079 ± 0.112	0.300 ± 0.003	0.495 ± 0.021	0.427 ± 0.011	1.30	1.29
MMART0-3	n.d.	n.d.	0.504 ± 0.005	0.164 ± 0.054	0.668	0.521
MMART5-7	n.d.	n.d.	0.306 ± 0.012	0.113 ± 0.002	0.419	0.536
MSTUP0-3	n.d.	n.d.	0.219 ± 0.002	0.151 ± 0.023	0.371	0.350
Tb						
BCR step	BCR1	BCR2	BCR3	BCR4	ΣBCR	Control
	Exchangeable	Reducible	Oxidisable	Residual		<i>aqua regia</i>
Site	mg/kg					
Tailings	n.d.	n.d.	0.226 ± 0.003	0.187 ± 0.004	0.413	0.387
Dust	0.040 ± 0.003	0.087 ± 0.000	0.149 ± 0.000	0.128 ± 0.014	0.404	0.365
MMART0-3	n.d.	n.d.	0.148 ± 0.001	n.d.	0.148	0.160
MMART5-7	n.d.	n.d.	0.084 ± 0.010	n.d.	0.084	0.155
MSTUP0-3	n.d.	n.d.	0.058 ± 0.002	n.d.	0.059	0.101

\*n.d. – not detected