

Table S1. Concentrations of the Mn, Fe, Co, and Ni (expressed in mg/kg) in BCR fractions and AR eluates of the tailings sample.

Mn						
BCR step	BCR1	BCR2	BCR3	BCR4	ΣBCR	Control <i>aqua regia</i>
	Exchangeable	Reducible	Oxidisable	Residual		
Site	mg/kg					
Tailings	221 ± 5	17160 ± 198	1137 ± 3	4595 ± 58	23112	20304
Dust	62339 ± 527	73639 ± 1046	53192 ± 993	67250 ± 3064	256420	241492
MMART0-3	65.2 ± 0.45	114 ± 4	282 ± 11	38.2 ± 15.1	500	462
MMART5-7	211 ± 10	491 ± 1	555 ± 73	141 ± 49	1398	1589
MSTUP0-3	15.0 ± 0.3	15.8 ± 2.6	8.77 ± 3.93	5.66 ± 12.76	45.3	43.2
Fe						
BCR step	BCR1	BCR2	BCR3	BCR4	ΣBCR	Control <i>aqua regia</i>
	Exchangeable	Reducible	Oxidisable	Residual		
Site	mg/kg					
Tailings	n.d.	1466 ± 34	629 ± 6	34436 ± 385	36530	31821
Dust	340 ± 19	5880 ± 76	6309 ± 138	36835 ± 925	49364	45009
MMART0-3	n.d.	45.5 ± 13.7	7092 ± 25	8920 ± 1980	16056	14396
MMART5-7	n.d.	129 ± 9	4705 ± 1095	10123 ± 587	14955	22736
MSTUP0-3	n.d.	21.4 ± 1.0	353 ± 1	2863 ± 487	3236	3658
Co						
BCR step	BCR1	BCR2	BCR3	BCR4	ΣBCR	Control <i>aqua regia</i>
	Exchangeable	Reducible	Oxidisable	Residual		
Site	mg/kg					
Tailings	0.030 ± 0.007	8.51 ± 0.22	3.07 ± 0.03	11.0 ± 0.2	23.6	20.1
Dust	9.70 ± 0.20	12.8 ± 0.07	12.6 ± 0.1	26.9 ± 0.4	62.0	56.7
MMART0-3	0.728±0.005	n.d.	3.89 ± 0.02	1.61 ± 0.36	6.23	5.69
MMART5-7	0.448 ± 0.017	0.013 ± 0.018	2.40 ± 0.13	1.13 ± 0.03	3.99	5.93
MSTUP0-3	0.073 ± 0.002	n.d.	0.208 ± 0.005	0.817 ± 0.140	1.10	1.19
Ni						
BCR step	BCR1	BCR2	BCR3	BCR4	ΣBCR	Control <i>aqua regia</i>
	Exchangeable	Reducible	Oxidisable	Residual		
Site	mg/kg					
Tailings	0.803 ± 0.018	24.4 ± 0.6	10.5 ± 0.2	121 ± 1	157	142
Dust	21.2 ± 0.81	34.3 ± 0.5	37.6 ± 1.3	104 ± 1	197	182
MMART0-3	1.77 ± 0.02	0.367 ± 0.023	15.9 ± 0.2	22.9 ± 4.9	40.9	37.6
MMART5-7	2.69 ± 0.16	0.984 ± 0.036	8.57 ± 0.74	13.5 ± 0.4	25.8	36.6
MSTUP0-3	0.437 ± 0.033	n.d.	1.91 ± 0.20	8.34 ± 1.40	10.6	11.6

*n.d. – not detected