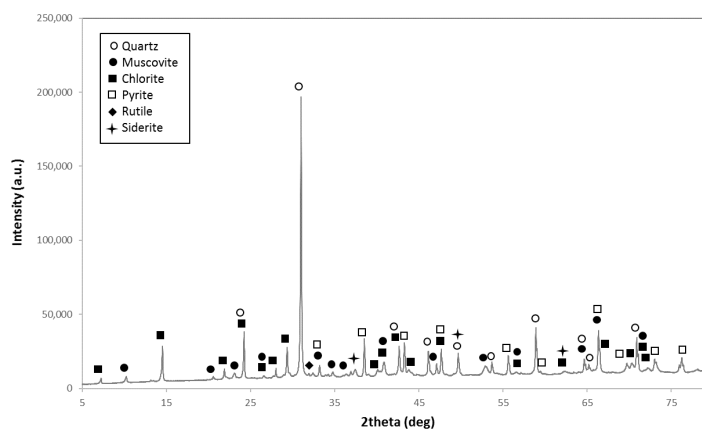


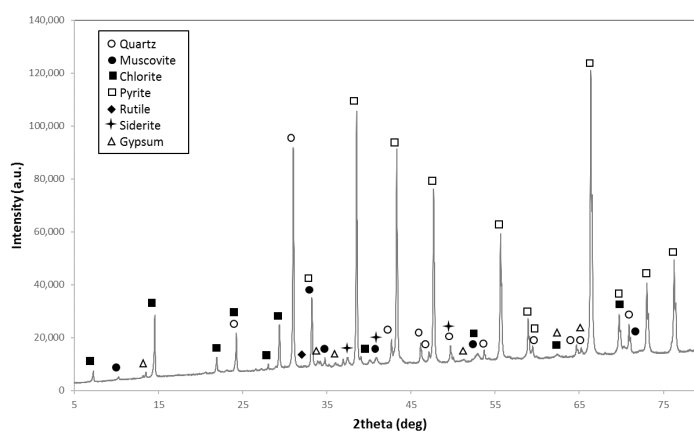
## Supplementary material

**Table S1.** Chemicals used in the study

Chemicals/reagents	Company
Deionised water	Weinert wassertechnik GMBH
HCl	Merck p.a.
HNO <sub>3</sub>	Roth p.a.
HF	Roth suprapur
NH <sub>4</sub> NO <sub>3</sub>	Merck z.A
CH <sub>3</sub> COONH <sub>4</sub>	Merck z.A.
NH <sub>2</sub> OH-HCl	Merck z.S.
EDTA	Roth z.A.
NH <sub>4</sub> -Oxalate	Merck p.a.
Ascorbic acid	Merck p.a.
Ammonia	Roth, Ph.Eur
Ethanol	Roth, denatured



**Figure S1.** XRD scan of the Neves Corvo waste rock (NC\_01)



**Figure S2.** XRD scan of the Neves Corvo tailing (NC\_02)