

# Supplementary Material

## Overview

In the supplementary materials, we have provided images of materials and some experimental data tables to further support the results and analysis presented in this article.



Figure S1. Cover material: (a) tailing; (b) waste rock; (c) HDS clay

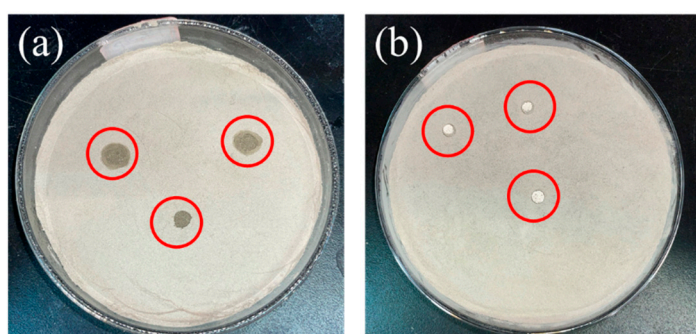


Figure S2. WDPT test: (a) waste rock; (b) coated waste rock

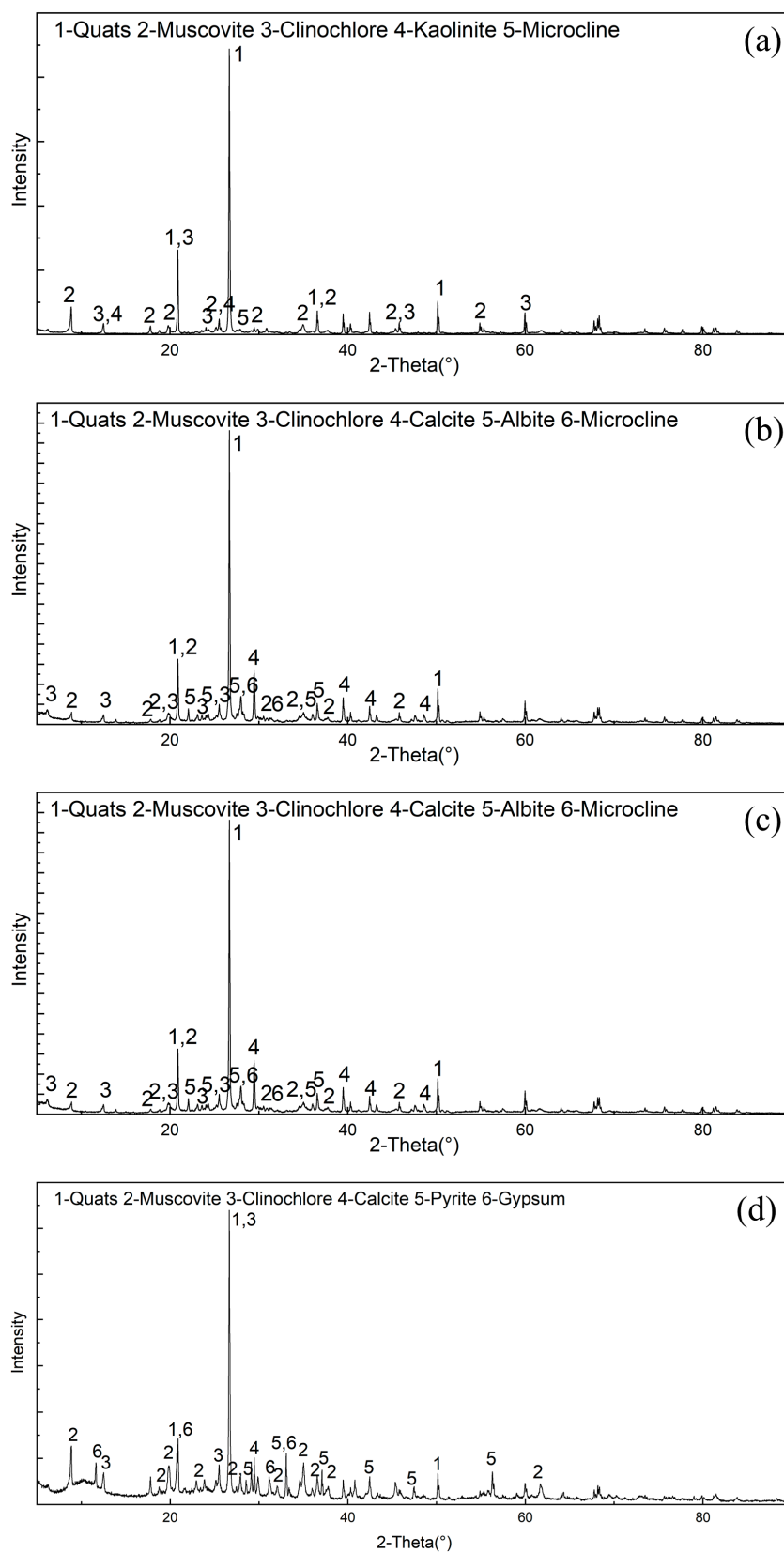


Figure S3. XRD pattern: (a) tailing; (2) HDS clay; (c) waste rock; (d) coated waste rock

Table S1. Data of grain size distribution curve (CGS)

Particle size (mm)	Percentage passing (%)
20	99.46
10	94.56
5	47.63
2	24.88
1	17.80
0.5	10.73
0.25	6.95
0.075	3.67

Table S2. Data of grain size distribution curve (HDS clay)

Particle size (mm)	Percentage passing (%)
0.3162	100.00
0.1380	96.40
0.0603	92.08
0.0263	82.74
0.0115	65.46
0.0050	39.91
0.0022	17.52
0.0010	7.10
0.0004	1.62
0.0002	0.01

Table S3. Data of grain size distribution curve (FGS)

Particle size (mm)	Percentage passing (%)
1.0000	99.66
0.4786	97.82
0.2754	82.96
0.1820	62.51
0.1202	42.54
0.0603	23.15
0.0302	15.30
0.0151	10.69
0.0033	3.23
0.0011	0.30