

MINERAL SEPARATION LOG

Sample Code:

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Key minerals: Quartz Date:

- Crush/grind (room 0.41 – MinSep)
- Sieve: 125–250–500 µm (room 0.42 – MinSep)
 - 125–250
 - 250–500**
 - 500–750
 - _____–_____
- Hand magnet (rooms 0.42/0.56 – MinSep)
- Frantz magnetic separator (room 0.56 – MinSep)
 - 10° 10° 0.6 amp
 - 10° 10° 0.9 amp
 - 10° 10° 1.2 amp
- 1:1 HCl:H₂O (18.5 wt% hydrochloric acid) for 12–24 hours at 95°C (HCl lab – Cosmo)
- Heavy liquid separation (Big lab – Cosmo)
 - Float (Qtz/Fsp/etc.) ⇒
 - Sink (Heavy minerals)
- HF cleaning (HF lab – Cosmo)
- Quartz dissolution (HF lab – Cosmo)
- Column chemistry (HF lab – Cosmo)
- Target preparation (HF lab – Cosmo)

Notes: