



MINERAL SEPARATION LOG

Sample Code: Age estimate:.....

Key minerals: Volcanic glass and zircons Date:

- Dry
- Remove detrital contaminants
- Crush/grind
- Sieve: 500 µm
- Split sample for glass shard separation →

Zircon separation path

- Water table
- 10% HAc (CH₃COOH) for >12 hr
- 3% H₂O₂ for >12 hr

- Frantz magnetic separator
 - 10° 10° 0.6 amp magnetic
 - 10° 10° 0.9 amp magnetic
 - 10° 10° 1.2 amp magnetic
 - 10° 10° 1.2 amp non-magnetic →

- SPT 2.87
 - Float (Qtz/San/etc)
 - Sink (Ap/Zr) →

- DI/MEI
 - Float (Ap)
 - Sink (Zr) →

- Zr picked
- Zr mounted

Glass shard separation path

- Bottled
- 10% HCl for 15 min
- 5% HF for 30 secs

- Frantz magnetic separator
 - 10° 10° 0.6 amp magnetic
 - 10° 10° 0.9 amp magnetic
 - 10° 10° 1.2 amp magnetic
 - 10° 10° 1.2 amp non-magnetic →

- SPT 2.45
 - Float (glass) →
 - Sink (...)

- Glass picked
- Glass packed

Notes: