Table 1. Whole rock analysis by X-ray fluorescence (XRF) and chemical composition of dominant minerals for quartz andesite by the electron microprobe (EPMA)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Oxides | XRF for  whole rock (wt.%) | EPMA for Anorthoclase (wt.%) | EPMA for  Albite (wt.%) | EPMA for Amphibole (wt.%) |
| SiO2 | 66.47 | 59.56 | 65.25 | 52.47 |
| Al2O3 | 13.57 | 26.20 | 19.75 | 3.61 |
| MgO | 0.44 | 0.15 | 0.03 | 15.72 |
| CaO | 1.12 | 2.28 | 0.62 | 12.18 |
| Na2O | 4.98 | 6.99 | 10.55 | 0.20 |
| K2O | 4.16 | 3.09 | 0.02 | 0.18 |
| FeO | 5.02 | 0.90 | 1.03 | 11.23 |
| TiO2 | 0.22 | 0.03 | 0.01 | 0.33 |
| Cr2O3 | 0.02 | 0.02 | 1.47 | 0.03 |
| MnO2 | / | 0.04 | 0.00 | 0.12 |
| P2O5 | 0.81 | / | / | / |
| L.O.I | 2.74 | / | / | / |
| Total | 99.55 | 99.26 | 98.73 | 96.07 |