Supplementary material 8. Differences (in %) between the REE concentrations in residual liquid model and natural samples of PQAC.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Parental sample | AGN-GM-05C | AGN-GM-03B | PQ-GM-06D | AGN-GM-02 | AGN-GM-04 | PQ-GM-06B |
| Basanite | Nephelinite | Alkaline basalt | Basanite | Phonotephrite | Alkaline basalt |
| Residual sample | AGN-GM-02 | AGN-GM-04 | PQ-GM-06B | PQ-JL-45B | PQ-JL-144B | PQ-JL-59C |
| Basanite | Phonotephrite | Alkaline basalt | Biotite phonolite | Hornblende phonolite | Aegirine-augite phonolite |
| La | 1.2 | 0.5 | 2.7 | 1.4 | 2.6 | 1.9 |
| Ce | 1.4 | 1.0 | 1.8 | 0.2 | 1.8 | 0.9 |
| Pr | 1.8 | 0.8 | 1.8 | 0.7 | 3.9 | 0.4 |
| Nd | 0.6 | 1.0 | 3.3 | 0.4 | 0.9 | 0.2 |
| Sm | 1.4 | 0.1 | 0.3 | 2.4 | 0.9 | 0.3 |
| Eu | 0.7 | 0.1 | 0.0 | 1.0 | 1.1 | 0.8 |
| Gd | 0.7 | 0.8 | 2.5 | 1.0 | 1.8 | 0.6 |
| Tb | 0.2 | 0.4 | 0.8 | 1.0 | 2.4 | 1.0 |
| Dy | 0.8 | 0.9 | 3.1 | 1.0 | 0.3 | 0.2 |
| Ho | 0.9 | 0.2 | 2.5 | 0.0 | 0.8 | 0.9 |
| Er | 0.6 | 0.4 | 3.7 | 0.1 | 3.9 | 0.3 |
| Tm | 0.1 | 0.6 | 0.5 | 0.3 | 0.3 | 0.7 |
| Yb | 1.7 | 0.3 | 1.2 | 2.1 | 2.4 | 0.0 |
| Lu | 0.9 | 0.6 | 0.9 | 0.7 | 0.4 | 0.6 |
| Mean | 0.9 | 0.5 | 1.8 | 0.9 | 1.7 | 0.6 |