Table 1 Detrital apatite fission track data for the northern QT

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sample | *ρ*s a | *N*s b | *ρ*i a | *N*i b | *ρ*d b | *N*d b | *P*(χ2) c | *D*par d | [*U*] e | Central age f | Pooled age g | Dispersion h | *N.* i | MTL (μm) | | | | *Nc.* k |
| (105 cm-2) | (105 cm-2) | (105 cm-2) | (μm) | (ppm) | (Ma) | (Ma) | (%) | Non-projected | SD j | *c*-axis projected | SD |
| GL-23 | 4.437 | 287 | 10.575 | 684 | 11.1 | 6621 | 0.01 | 2.7 | 11.7 | 77.8±7.5 | 78.6±6.6 | 33 | 31 | 12.3±0.3 | 2.0 | 14.1±0.3 | 1.1 | 5 |
| GL-21 | 5.677 | 383 | 10.954 | 739 | 11.0 | 6621 | 0.54 | 2.1 | 14.7 | 96.6±7.2 | 96.1±7.5 | 18 | 32 | 13.1±0.1 | 1.7 | 14.4±0.1 | 1.1 | 93 |
| GL-20 | 7.82 | 733 | 16.272 | 901 | 10.9 | 6621 | 0.53 | 1.7 | 17.9 | 88.3±5.2 | 88.3±6.6 | 0 | 34 | 12.7±0.3 | 2.0 | 14.1±0.2 | 1.3 | 103 |
| GL-19 | 10.971 | 833 | 16.45 | 1249 | 10.8 | 6621 | 0.27 | 1.9 | 20.3 | 105.9±6.0 | 105.0±7.0 | 14 | 32 | 12.8±0.1 | 1.9 | 14.2±0.1 | 1.2 | 105 |
| GL-24 | 7.575 | 664 | 12.39 | 1086 | 11.2 | 6621 | 0.38 | 1.9 | 16.7 | 111.2±6.3 | 113.0±8.0 | 13 | 32 | 12.8±0.1 | 1.8 | 14.2±0.1 | 1.2 | 103 |
| H-12 | 11.108 | 1233 | 57.414 | 6373 | 11.6 | 7573 | 0.16 | 3.9 | 62.4 | 38.3±1.3 | 38.0±2.1 | 5.8 | 20 | 14.1±0.2 | 1.1 | 14.9±0.2 | 0.8 | 107 |
| H-15 | 7.744 | 817 | 55.213 | 5825 | 11.9 | 7573 | 0.00 | 3.0 | 51.4 | 27.4±1.6 | 28.3±1.7 | 19 | 20 | 13.0±0.2 | 1.7 | 14.4±0.1 | 1.1 | 108 |
| H-2 | 8.645 | 1384 | 12.017 | 1924 | 10.8 | 7573 | 0.00 | 3.9 | 13.3 | 129.0±6.3 | 131.0±8.0 | 17 | 30 | 13.8±0.6 | 1.5 | 14.7±0.4 | 1.1 | 126 |
| H-3 | 7.286 | 341 | 17.799 | 833 | 10.9 | 7573 | 0.99 | 2.9 | 21.5 | 75.3±4.8 | 75.3±6.0 | 0 | 31 | 12.9±0.3 | 1.7 | 14.2±0.2 | 1.2 | 118 |
| H-4 | 5.132 | 272 | 14.962 | 793 | 11.0 | 7573 | 0.59 | 2.9 | 17.0 | 62.0±5.5 | 62.3±5.3 | 7.9 | 17 | 13.6±0.4 | 1.6 | 14.6±0.4 | 1.1 | 31 |
| H-16 | 4.755 | 561 | 16.658 | 1979 | 12.0 | 7573 | 0.05 | 3.1 | 18.4 | 64.2±4.3 | 62.1±4.4 | 20 | 31 | 13.5±0.2 | 1.9 | 14.6±0.2 | 1.4 | 57 |
| H-17 | 5.691 | 313 | 14.545 | 800 | 12.1 | 7573 | 0.35 | 2.5 | 14.0 | 75.5±5.5 | 74.3±6.0 | 14 | 32 | 13.3±0.1 | 1.7 | 14.5±0.1 | 1.1 | 110 |
| H-18 | 5.794 | 124 | 14.206 | 304 | 12.2 | 7573 | 0.83 | 3.0 | 11.4 | 101.0±11.0 | 101.0±12.0 | 0 | 9 | 12.1±0.5 | 1.5 | 13.7±0.5 | 1.2 | 4 |

a *ρ*s, *ρ*i, *ρ*d are track densities of spontaneous, induced and dosimeter tracks.

b *N*s, *N*i, *N*d are the number of spontaneous, induced and dosimeter tracks.

c *P*(χ2) is the value of chi-square test (Galbraith, 1981; Green, 1981).

d *D*par is the etch pit diameter, which is used as a proxy for the influence of chemical composition on track annealing (Donelick et al., 2005).

e Uranium content calculated with TrackKey (Dunkl, 2002).

f Central ages are calculated using Density Plotter (Vermeesch, 2012) with 1σ standard error. Ages for samples are calculated with ζ=339.52±15.11 for standard CN5 glass.

g Pooled ages are calculated using HeFTy (Ketcham, 2005) with 1σ standard error.

h Dispersion is the standard deviation of the true single-grain ages as a percentage of their central age (Galbraith, 2005).

i *N.* is the number of grains counted for age calculation.

j Standard deviation of MTLs.

k *Nc.* is the number of measured horizontal confined tracks.