|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Supplementary Table 6.** U-Pb monazite data and results. | | | | | | | | | | | | | | | | | | | | |
|  |  |  | Concentration | | | |  | Isotopic ratios | | | | | | | | |  | Ages (Ma) | | |
|  | Coord. UTM | | Weight | U | Pb | Pb |  | 206 Pb\*/  204 Pb | 208 Pb/  206 Pb | 206 Pb/  238 U |  | 207 Pb/  235 U |  | corr. | 207 Pb/  206 Pb |  |  | 206 Pb/  238 U | 207 Pb/  235 U | 207 Pb/  206 Pb |
| Fractions | x | y | (mg) | (ppm) | (ppm) | (pg) |  | % err. | % err. | coef. | % err. |  |
| *Sample 9224* | 587.450 | 4.671.200 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| M1 (X1) 10 xtls |  |  | 0.0093 | 1815.0 | 232.1 | 41.3 |  | 1210.40 | 1.817 | 0.050483 | 0.23 | 0.3674 | 0.53 | 0.49 | 0.05278 | 0.46 |  | 317.5 | 317.7 | 319.4 |
| M2 (X7) 15 xtls |  |  | 0.0100 | 1420.4 | 191.7 | 31.3 |  | 1085.60 | 1.977 | 0.050391 | 1.10 | 0.3668 | 1.14 | 0.96 | 0.052793 | 0.31 |  | 316.9 | 317.3 | 319.9 |
| M3 (X8) 5 xtls |  |  | 0.0065 | 2440.3 | 323.5 | 84.4 |  | 515.60 | 1.830 | 0.050620 | 0.43 | 0.3682 | 0.63 | 0.70 | 0.05275 | 0.45 |  | 318.3 | 318.3 | 318.1 |
| *Sample 9223* | 585.900 | 4.668.200 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| M1 (X3) 9 xtls |  |  | 0.0100 | 730.0 | 88.4 | 11.9 |  | 1373.99 | 1.721 | 0.049554 | 0.70 | 0.3594 | 0.71 | 0.99 | 0.05261 | 0.12 |  | 311.8 | 311.8 | 311.9 |
| M2 (X5) 4 xtls |  |  | 0.0050 | 82.0 | 29.2 | 27.2 |  | 60.62 | 4.808 | 0.054224 | 0.54 | 0.3991 | 4.72 | 0.39 | 0.05338 | 4.54 |  | 340.4 | 341.0 | 345.1 |
| *Sample 9222* | 584.150 | 4.669.750 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| M1 (X9) 5 xtls |  |  | 0.0065 | 367.5 | 80.7 | 25.5 |  | 258.62 | 3.848 | 0.049428 | 0.27 | 0.3585 | 1.16 | 0.40 | 0.05261 | 1.08 |  | 311.0 | 311.1 | 312.0 |
| M2 (X2) 3 xtls |  |  | 0.0060 | 1488.5 | 243.9 | 92.7 |  | 418.60 | 1.167 | 0.078896 | 0.16 | 0.6091 | 0.37 | 0.45 | 0.05599 | 0.33 |  | 489.5 | 483.0 | 452.0 |

M: Monazite, (beaker code), numbers of crystals (xtls), all crystals between 80 and 60 µm. Pb (pg), total common Pb. \* Measured ratio corrected for blank and fractionation. Atomic ratios corrected for fractionation (0.11±0,02% AMU Pb; 0.10±0,02% AMU, U), spike (208Pb-235U), laboratory blanks (6 pg Pb; 0.1 pg U) and initial common Pb after Stacey and Kramers (1975). Errors are at the 2-sigma level. Data reduced with PbMacDat (Isachsen *et al*., 2007; www.earth-time.org).