附表1 南汀河蛇绿混杂岩带英云闪长岩锆石LA-ICP-MS U-Pb年龄

Table 1 LA-ICP-MS zircon U-Pb data of the tonalite in the Nantinghe ophiolitic mélanges zone

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 样品号 | 测点号 | 含量（10-6） | | | 同位素比值 | | | | 年龄（Ma） | | | | 备注 |
| Th | U | Th/U | 207Pb/235U | 1*σ* | 206Pb/238U | 1*σ* | 207Pb/235U | 1*σ* | 206Pb/238U | 1*σ* |
| 11NTH-31 | 1 | 162 | 147 | 1.10 | 0.453 9 | 0.071 7 | 0.072 6 | 0.000 9 | 380 | 50 | 452 | 6 | 误差较大，舍去 |
| 2 | 44.8 | 338 | 0.13 | 0.478 1 | 0.065 2 | 0.073 9 | 0.001 2 | 397 | 45 | 460 | 7 | 非同期岩浆产物，舍去 |
| 3 | 155 | 166 | 0.93 | 0.528 7 | 0.072 8 | 0.071 9 | 0.001 0 | 431 | 48 | 448 | 6 |  |
| 4 | 176 | 156 | 1.13 | 0.496 6 | 0.044 2 | 0.071 6 | 0.000 8 | 409 | 30 | 446 | 5 |  |
| 5 | 162 | 187 | 0.87 | 0.471 0 | 0.036 4 | 0.072 0 | 0.001 1 | 392 | 25 | 448 | 6 | 误差较大，舍去 |
| 6 | 62.5 | 317 | 0.20 | 0.538 5 | 0.030 9 | 0.074 7 | 0.001 1 | 437 | 20 | 464 | 7 |  |
| 7 | 57.9 | 310 | 0.19 | 0.555 0 | 0.023 9 | 0.073 4 | 0.000 9 | 448 | 16 | 457 | 5 |  |
| 8 | 142 | 192 | 0.74 | 0.555 6 | 0.022 2 | 0.073 3 | 0.000 7 | 449 | 14 | 456 | 4 |  |
| 9 | 74.8 | 299 | 0.25 | 0.583 1 | 0.015 0 | 0.074 2 | 0.001 1 | 466 | 10 | 462 | 7 |  |
| 10 | 168 | 167 | 1.01 | 0.564 4 | 0.024 9 | 0.071 0 | 0.000 8 | 454 | 16 | 442 | 5 |  |
| 11 | 169 | 153 | 1.10 | 0.552 4 | 0.029 1 | 0.072 5 | 0.001 2 | 447 | 19 | 451 | 7 |  |
| 12 | 54.4 | 315 | 0.17 | 0.556 1 | 0.028 0 | 0.070 8 | 0.000 6 | 449 | 18 | 441 | 4 |  |
| 13 | 176 | 162 | 1.09 | 0.538 9 | 0.038 3 | 0.072 9 | 0.001 0 | 438 | 25 | 454 | 6 |  |
| 14 | 41.7 | 332 | 0.13 | 0.661 3 | 0.120 7 | 0.072 3 | 0.000 6 | 515 | 74 | 450 | 4 | 误差较大，舍去 |
| 15 | 59.9 | 320 | 0.19 | 0.551 9 | 0.044 2 | 0.073 9 | 0.000 6 | 446 | 29 | 460 | 4 |  |
| 16 | 54.4 | 289 | 0.19 | 0.608 8 | 0.055 4 | 0.073 5 | 0.001 0 | 483 | 35 | 457 | 6 |  |
| 17 | 138 | 268 | 0.51 | 0.527 6 | 0.053 8 | 0.072 3 | 0.000 6 | 430 | 36 | 450 | 4 |  |
| 18 | 101 | 270 | 0.37 | 0.522 9 | 0.059 0 | 0.072 8 | 0.000 8 | 427 | 39 | 453 | 5 |  |
| 19 | 245 | 235 | 1.04 | 0.545 1 | 0.060 0 | 0.073 7 | 0.002 3 | 442 | 39 | 459 | 14 |  |
| 20 | 73.7 | 298 | 0.25 | 0.531 9 | 0.052 2 | 0.076 7 | 0.000 9 | 433 | 35 | 476 | 5 | 误差较大，舍去 |
| 21 | 128 | 218 | 0.59 | 0.509 5 | 0.045 8 | 0.072 7 | 0.000 7 | 418 | 31 | 453 | 4 |  |
| 22 | 31 | 367 | 0.08 | 0.513 1 | 0.041 9 | 0.073 9 | 0.000 9 | 421 | 28 | 460 | 6 |  |
| 23 | 47.6 | 335 | 0.14 | 0.547 6 | 0.040 0 | 0.075 4 | 0.000 8 | 443 | 26 | 469 | 5 |  |
| 24 | 53.3 | 330 | 0.16 | 0.533 1 | 0.031 0 | 0.074 2 | 0.000 9 | 434 | 21 | 461 | 5 |  |
| 25 | 92.2 | 280 | 0.33 | 0.542 3 | 0.026 9 | 0.073 5 | 0.000 5 | 440 | 18 | 457 | 3 |  |
| 26 | 57.4 | 322 | 0.18 | 0.548 9 | 0.024 1 | 0.073 9 | 0.000 8 | 444 | 16 | 460 | 5 |  |
| 11NTH-35 | 1 | 106 | 266 | 0.40 | 0.590 9 | 0.011 6 | 0.071 7 | 0.000 7 | 471 | 7 | 446 | 4 |  |
| 2 | 81 | 266 | 0.30 | 0.571 8 | 0.009 5 | 0.071 5 | 0.000 7 | 459 | 6 | 445 | 4 |  |
| 3 | 62 | 303 | 0.21 | 0.555 3 | 0.010 9 | 0.072 2 | 0.000 8 | 448 | 7 | 449 | 5 |  |
| 4 | 519 | 316 | 1.64 | 0.559 3 | 0.013 1 | 0.071 2 | 0.000 8 | 451 | 9 | 443 | 5 |  |
| 5 | 189 | 114 | 1.66 | 0.560 0 | 0.009 2 | 0.071 3 | 0.000 7 | 452 | 6 | 444 | 4 |  |
| 6 | 210 | 88 | 2.38 | 0.558 5 | 0.009 9 | 0.071 2 | 0.000 7 | 451 | 6 | 443 | 4 |  |
| 7 | 56 | 292 | 0.19 | 0.583 1 | 0.011 1 | 0.071 2 | 0.000 8 | 466 | 7 | 444 | 5 |  |
| 8 | 542 | 307 | 1.77 | 0.569 9 | 0.013 3 | 0.071 9 | 0.001 3 | 458 | 9 | 448 | 8 |  |
| 9 | 612 | 314 | 1.95 | 0.565 4 | 0.011 3 | 0.071 7 | 0.000 6 | 455 | 7 | 446 | 3 |  |
| 10 | 460 | 342 | 1.35 | 0.564 5 | 0.011 2 | 0.070 7 | 0.001 0 | 454 | 7 | 440 | 6 |  |
| 11 | 113 | 225 | 0.50 | 0.578 0 | 0.013 8 | 0.070 8 | 0.000 7 | 463 | 9 | 441 | 4 |  |
| 12 | 539 | 342 | 1.58 | 0.526 8 | 0.011 6 | 0.068 9 | 0.000 8 | 430 | 8 | 430 | 5 |  |
| 13 | 753 | 290 | 2.60 | 0.555 9 | 0.011 1 | 0.070 7 | 0.000 7 | 449 | 7 | 440 | 4 |  |

附表2 南汀河英云闪长岩主量（%）、微量元素（10-6）分析结果

Table 2 Major element (%) and trace element (10-6) compositions of tonalite in the Nantinghe ophiolitic mélanges

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | 11NTH-31 | 11NTH-32 | 11NTH-35 |  | 11NTH-31 | 11NTH-32 | 11NTH-35 |
| SiO2 | 68.5 | 63.4 | 63.8 | Ce | 51.0 | 44.6 | 57.6 |
| TiO2 | 0.29 | 0.41 | 0.36 | Pr | 4.86 | 4.24 | 5.94 |
| Al2O3 | 16.1 | 18.3 | 17.9 | Nd | 16.7 | 14.9 | 20.8 |
| Fe2O3 | 2.88 | 3.86 | 3.82 | Sm | 2.16 | 1.98 | 3.19 |
| MnO | 0.03 | 0.06 | 0.05 | Eu | 0.91 | 1.06 | 0.91 |
| MgO | 0.98 | 1.39 | 1.03 | Gd | 1.6 | 1.59 | 2.54 |
| CaO | 2.90 | 4.61 | 4.57 | Tb | 0.13 | 0.15 | 0.3 |
| Na2O | 4.20 | 4.11 | 5.07 | Dy | 0.55 | 0.74 | 1.57 |
| K2O | 2.17 | 1.69 | 1.31 | Ho | 0.1 | 0.14 | 0.3 |
| P2O5 | 0.05 | 0.05 | 0.05 | Er | 0.26 | 0.40 | 0.83 |
| LOI | 1.53 | 1.93 | 1.75 | Tm | 0.04 | 0.06 | 0.12 |
| Total | 99.7 | 99.8 | 99.8 | Yb | 0.27 | 0.44 | 0.79 |
| Rb | 43.3 | 19.2 | 26.8 | Lu | 0.05 | 0.08 | 0.12 |
| Sr | 898 | 765 | 917 | Hf | 3.21 | 4.17 | 3.35 |
| Y | 2.40 | 3.64 | 7.53 | Ta | 0.05 | 0.09 | 0.17 |
| Zr | 135 | 183 | 144 | Pb | 9.38 | 8.50 | 9.16 |
| Nb | 2.3 | 3.08 | 4.32 | Th | 6.98 | 2.50 | 9.06 |
| Cs | 1.07 | 0.87 | 0.60 | U | 0.61 | 0.60 | 0.69 |
| Ba | 2 103 | 1 036 | 814 | Sr/Y | 374 | 210 | 121 |
| La | 31.1 | 28.0 | 34.4 | La/Yb | 115 | 63.6 | 43.5 |