表1 样品主量、微量和稀土元素分析结果

Table 1 Main, trace and rare earth elements analytical results of samples

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 样品编号 | D1553-1H | D1553-2H | D1553-3H | D1553-4H | D1553-5H | D1553-6H |
| SiO2 | 69 | 69 | 69 | 69 | 68 | 69 |
| Al2O3 | 15 | 15 | 15 | 15 | 16 | 15 |
| Fe2O3 | 0.47 | 0.42 | 0.28 | 0.50 | 0.57 | 0.32 |
| FeO | 2.4 | 2.4 | 2.5 | 2.5 | 2.6 | 2.1 |
| CaO | 3.1 | 3.0 | 3.0 | 3.1 | 3.2 | 2.6 |
| MgO | 1.2 | 1.2 | 1.2 | 1.1 | 1.4 | 1.2 |
| K2O | 3.0 | 3.4 | 3.0 | 2.7 | 3.0 | 3.0 |
| Na2O | 4.0 | 4.0 | 4.1 | 4.1 | 4.1 | 4.0 |
| TiO2 | 0.45 | 0.44 | 0.42 | 0.45 | 0.50 | 0.38 |
| P2O5 | 0.12 | 0.11 | 0.11 | 0.13 | 0.13 | 0.10 |
| MnO | 0.08 | 0.09 | 0.08 | 0.09 | 0.08 | 0.08 |
| LOI | 0.80 | 0.71 | 1.30 | 0.76 | 0.96 | 0.80 |
| La | 32 | 25 | 19 | 32 | 38 | 37 |
| Ce | 62 | 46 | 37 | 62 | 68 | 70 |
| Pr | 7.4 | 5.8 | 4.4 | 7.1 | 7.9 | 7.6 |
| Nd | 26 | 21 | 15 | 23 | 26 | 25 |
| Sm | 4.8 | 3.4 | 2.8 | 3.7 | 3.9 | 3.5 |
| Eu | 1.0 | 0.95 | 0.76 | 1.0 | 1.1 | 1.0 |
| Gd | 3.6 | 2.7 | 2.2 | 3.1 | 3.0 | 3.0 |
| Tb | 0.56 | 0.42 | 0.33 | 0.45 | 0.45 | 0.43 |
| Dy | 2.9 | 2.1 | 1.7 | 2.0 | 2.2 | 2.1 |
| Ho | 0.55 | 0.38 | 0.30 | 0.38 | 0.42 | 0.40 |
| Er | 1.5 | 1.0 | 0.8 | 1.0 | 1.1 | 1.1 |
| Tm | 0.24 | 0.16 | 0.13 | 0.15 | 0.18 | 0.16 |
| Yb | 1.5 | 1.0 | 0.80 | 0.94 | 1.1 | 1.1 |
| Lu | 0.23 | 0.16 | 0.13 | 0.15 | 0.18 | 0.16 |
| Y | 16 | 11 | 8 | 11 | 11 | 11 |
| Cu | 3.2 | 4.9 | 3.8 | 5.6 | 5.1 | 5.1 |
| Pb | 25 | 28 | 24 | 27 | 31 | 32 |
| Zn | 52 | 47 | 38 | 49 | 54 | 43 |
| Cr | 27 | 25 | 34 | 39 | 42 | 28 |
| Ni | 5.4 | 5.4 | 4.5 | 4.8 | 6.4 | 8.1 |
| Co | 5.5 | 5.5 | 4.6 | 5.7 | 6.4 | 5.3 |
| Li | 43 | 44 | 38 | 42 | 39 | 22 |
| Rb | 139 | 123 | 88 | 117 | 141 | 117 |
| Cs | 3.7 | 6.3 | 4.7 | 7.0 | 12 | 4.7 |
| Sr | 371 | 350 | 254 | 391 | 446 | 516 |
| Ba | 755 | 675 | 509 | 628 | 725 | 793 |
| V | 36 | 36 | 30 | 36 | 44 | 34 |
| Sc | 9.0 | 7.8 | 5.5 | 7.5 | 8.4 | 7.1 |
| Nb | 10 | 8.9 | 6.9 | 8.9 | 9.7 | 8.2 |
| Ta | 0.86 | 0.74 | 0.56 | 0.73 | 0.77 | 0.62 |
| Zr | 224 | 202 | 144 | 169 | 178 | 173 |
| Hf | 5.6 | 5.4 | 4.0 | 4.5 | 4.6 | 4.8 |
| Be | 2.6 | 2.5 | 2.4 | 2.8 | 3.2 | 2.7 |
| Ga | 20 | 19 | 17 | 21 | 22 | 19 |
| Ge | 1.1 | 1.1 | 1.0 | 1.2 | 1.3 | 1.1 |
| U | 1.8 | 1.5 | 1.7 | 2.4 | 2.2 | 1.7 |
| Th | 13 | 12 | 10 | 17 | 17 | 16 |

表2锆石U-Th-Pb年龄分析结果

Table 2 Zircon U-Th-Pb dating results

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Analysis\_# | Pb207/Pb206 | 1σ | Pb207/U235 | 1σ | Pb206/U238 | 1σ | Pb208/Th232 | 1σ | Pb207/Pb206 | 1σ | Pb206/U238 | 1σ | Pb207/U235 | 1σ | Pb208/Th232 | 1σ | Th232 | U238 | Pb | Th/U | 协和度 |
| D155301 | 0.05565 | 0.00459 | 0.35369 | 0.02852 | 0.04606 | 0.00097 | 0.01422 | 0.0007 | 438.1 | 174.0 | 290.3 | 6.0 | 307.5 | 21.4 | 285.4 | 14.0 | 293.36 | 570.84 | 31.492 | 0.51 | 1.06 |
| D155302 | 0.05534 | 0.00402 | 0.34228 | 0.02434 | 0.04482 | 0.00084 | 0.01375 | 0.00066 | 425.9 | 154.4 | 282.6 | 5.2 | 298.9 | 18.4 | 276.1 | 13.2 | 184.94 | 451.01 | 23.59246 | 0.41 | 1.06 |
| D155303 | 0.05635 | 0.00508 | 0.365 | 0.03219 | 0.04694 | 0.00105 | 0.01511 | 0.00081 | 465.4 | 188.8 | 295.7 | 6.5 | 315.9 | 24.0 | 303.2 | 16.1 | 297.91 | 579.37 | 32.77074 | 0.51 | 1.07 |
| D155304 | 0.06052 | 0.00535 | 0.38858 | 0.03354 | 0.04653 | 0.00107 | 0.01618 | 0.00082 | 622.1 | 180.1 | 293.2 | 6.6 | 333.3 | 24.5 | 324.3 | 16.3 | 300.15 | 558.56 | 31.89808 | 0.54 | 1.14 |
| D155305 | 0.05467 | 0.00462 | 0.34174 | 0.02827 | 0.0453 | 0.00096 | 0.01522 | 0.00082 | 398.6 | 179.0 | 285.6 | 5.9 | 298.5 | 21.4 | 305.3 | 16.4 | 185.64 | 463.77 | 24.65486 | 0.40 | 1.05 |
| D155306 | 0.0591 | 0.00686 | 0.35627 | 0.04035 | 0.04369 | 0.00124 | 0.01153 | 0.00067 | 570.9 | 234.2 | 275.6 | 7.7 | 309.4 | 30.2 | 231.8 | 13.3 | 312.17 | 337.72 | 18.88281 | 0.92 | 1.12 |
| D155307 | 0.05825 | 0.00757 | 0.37357 | 0.04744 | 0.04648 | 0.00143 | 0.01454 | 0.00102 | 538.5 | 262.1 | 292.9 | 8.8 | 322.3 | 35.1 | 291.7 | 20.4 | 129.14 | 209.56 | 11.98562 | 0.62 | 1.10 |
| D155308 | 0.05928 | 0.00427 | 0.36238 | 0.02548 | 0.0443 | 0.00087 | 0.01473 | 0.0006 | 577.4 | 149.2 | 279.4 | 5.4 | 314 | 19.0 | 295.6 | 12.0 | 417.22 | 717.81 | 39.10005 | 0.58 | 1.12 |
| D155309 | 0.06279 | 0.00436 | 0.35453 | 0.02402 | 0.04092 | 0.00079 | 0.01139 | 0.00038 | 701 | 141.3 | 258.6 | 4.9 | 308.1 | 18.0 | 229 | 7.7 | 1030.22 | 977.73 | 52.97281 | 1.05 | 1.19 |
| D155310 | 0.0676 | 0.00398 | 0.39721 | 0.02279 | 0.04259 | 0.00076 | 0.01401 | 0.00042 | 856.3 | 117.7 | 268.8 | 4.7 | 339.6 | 16.6 | 281.3 | 8.4 | 1279.54 | 1433.3 | 80.95904 | 0.89 | 1.26 |
| D155311 | 0.05777 | 0.00966 | 0.34915 | 0.05729 | 0.0438 | 0.00156 | 0.01324 | 0.00109 | 520.9 | 330.3 | 276.4 | 9.6 | 304.1 | 43.1 | 265.9 | 21.7 | 133.57 | 217.08 | 11.62978 | 0.62 | 1.10 |
| D155312 | 0.05685 | 0.00674 | 0.35611 | 0.04128 | 0.0454 | 0.00128 | 0.01396 | 0.00091 | 485 | 242.9 | 286.2 | 7.9 | 309.3 | 30.9 | 280.2 | 18.2 | 225.96 | 388.04 | 21.38356 | 0.58 | 1.08 |
| D155313 | 0.05639 | 0.00447 | 0.33681 | 0.02612 | 0.04329 | 0.00089 | 0.01265 | 0.0006 | 467 | 167.2 | 273.2 | 5.5 | 294.7 | 19.8 | 254.1 | 11.9 | 410.07 | 731.83 | 37.92831 | 0.56 | 1.08 |
| D155314 | 0.0611 | 0.00984 | 0.37488 | 0.05906 | 0.04447 | 0.00162 | 0.01278 | 0.00106 | 642.7 | 312.8 | 280.5 | 10.0 | 323.3 | 43.6 | 256.6 | 21.1 | 141.75 | 188.2 | 10.48361 | 0.75 | 1.15 |
| D155315 | 0.05689 | 0.00459 | 0.33819 | 0.0267 | 0.04309 | 0.00091 | 0.01266 | 0.00063 | 486.6 | 169.6 | 272 | 5.6 | 295.8 | 20.3 | 254.3 | 12.5 | 369.62 | 688.51 | 35.32321 | 0.54 | 1.09 |
| D155316 | 0.05811 | 0.00718 | 0.35296 | 0.04272 | 0.04403 | 0.00125 | 0.01379 | 0.00095 | 533.3 | 250.3 | 277.8 | 7.7 | 306.9 | 32.1 | 276.9 | 18.9 | 152.42 | 274.23 | 14.59504 | 0.56 | 1.10 |
| D155317 | 0.0573 | 0.00707 | 0.34928 | 0.0422 | 0.04418 | 0.00126 | 0.01453 | 0.00086 | 502.7 | 251.2 | 278.7 | 7.8 | 304.2 | 31.8 | 291.6 | 17.1 | 224.85 | 316.57 | 17.65991 | 0.71 | 1.09 |
| D155318 | 0.05695 | 0.00452 | 0.34665 | 0.02688 | 0.04412 | 0.00092 | 0.01193 | 0.00073 | 489 | 166.6 | 278.3 | 5.7 | 302.2 | 20.3 | 239.7 | 14.5 | 291.63 | 800.21 | 40.11456 | 0.36 | 1.09 |
| D155319 | 0.05815 | 0.00453 | 0.35568 | 0.02712 | 0.04434 | 0.0009 | 0.01328 | 0.0006 | 534.9 | 162.5 | 279.7 | 5.6 | 309 | 20.3 | 266.7 | 12.0 | 379.32 | 617.88 | 33.26755 | 0.61 | 1.10 |
| D155320 | 0.06315 | 0.00466 | 0.37399 | 0.02695 | 0.04293 | 0.00087 | 0.01393 | 0.00069 | 713.4 | 149.5 | 271 | 5.4 | 322.6 | 20.0 | 279.6 | 13.8 | 311.31 | 712.37 | 36.10404 | 0.44 | 1.19 |
| D155321 | 0.05726 | 0.00355 | 0.34768 | 0.02108 | 0.04402 | 0.00077 | 0.01369 | 0.00047 | 501.1 | 131.3 | 277.7 | 4.8 | 303 | 15.9 | 274.8 | 9.4 | 672.44 | 1032.2 | 55.84961 | 0.65 | 1.09 |
| D155322 | 0.05487 | 0.00536 | 0.34431 | 0.0329 | 0.0455 | 0.0011 | 0.01498 | 0.00086 | 406.8 | 205.0 | 286.8 | 6.8 | 300.4 | 24.9 | 300.4 | 17.0 | 328.62 | 655.75 | 35.52495 | 0.50 | 1.05 |
| D155323 | 0.05695 | 0.00377 | 0.3474 | 0.02251 | 0.04422 | 0.0008 | 0.01335 | 0.0005 | 489.1 | 140.2 | 279 | 4.9 | 302.8 | 17.0 | 268 | 10.1 | 356.34 | 596.8 | 31.83959 | 0.60 | 1.09 |
| D155324 | 0.06822 | 0.0058 | 0.43095 | 0.0357 | 0.0458 | 0.00107 | 0.0179 | 0.00108 | 875.1 | 166.9 | 288.7 | 6.6 | 363.9 | 25.3 | 358.7 | 21.5 | 169.38 | 459.78 | 24.95684 | 0.37 | 1.26 |
| D155325 | 0.06782 | 0.00475 | 0.4459 | 0.0305 | 0.04767 | 0.00095 | 0.01357 | 0.00045 | 863.1 | 139.0 | 300.2 | 5.9 | 374.4 | 21.4 | 272.4 | 8.9 | 425.44 | 359.52 | 23.25124 | 1.18 | 1.25 |