**Supplementary Table 4. Sr-Nd isotopic data for bulk rocks**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Sample | PYZ18 | PYZ26 | HS3 | HS5 | HS10 | HS14 | HS17 |
| Rb(ppm) | 10.31 | 18.1 | 14.17 | 10.33 | 15.64 | 18.61 | 23.16 |
| Sr(ppm) | 503.87 | 400.51 | 502.39 | 917.88 | 910.18 | 440.15 | 537.02 |
| Sm(ppm) | 8.76 | 7.54 | 9.36 | 9.33 | 9.57 | 9.05 | 9.33 |
| Nd(ppm) | 42.58 | 36 | 44.34 | 43.88 | 44.02 | 44.39 | 43.56 |
| 87Rb/86Sr | 0.059187 | 0.130725 | 0.081587 | 0.032559 | 0.049712 | 0.122309 | 0.124761 |
| 87Sr/86Sr(1σ) | 0.705357±8 | 0.705531±6 | 0.705492±5 | 0.706997±6 | 0.706946±5 | 0.705934±6 | 0.706400±9 |
| 147Sm/144Nd | 0.124446 | 0.126693 | 0.127692 | 0.128617 | 0.131506 | 0.123324 | 0.129562 |
| 143Nd/144Nd(1σ) | 0.512623±7 | 0.512645±6 | 0.512624±6 | 0.512628±4 | 0.512626±9 | 0.512633±7 | 0.512637±6 |
| 87Sr/86Sri | 0.705138 | 0.705047 | 0.705190 | 0.706877 | 0.706762 | 0.705482 | 0.705939 |
| (143Nd/144Nd)i | 0.512411 | 0.512429 | 0.512407 | 0.512409 | 0.512402 | 0.512423 | 0.512417 |
| *ε*Nd(*t*) | 2.11 | 2.46 | 2.02 | 2.07 | 1.93 | 2.34 | 2.21 |
| Sample | XD02 | XD14 | XD16 | XD17 | QYG03 | QYG06 | LC01 |
| Rb(ppm) | 53.06 | 29.28 | 28.23 | 15.64 | 23.3 | 30.6 | 67.4 |
| Sr(ppm) | 660.3 | 905.24 | 763.49 | 851.27 | 532 | 596 | 692 |
| Sm(ppm) | 11.27 | 11.06 | 11.03 | 11.32 | 10.7 | 11.4 | 11.5 |
| Nd(ppm) | 53.89 | 53.58 | 53.73 | 55.21 | 53.4 | 55.2 | 55.4 |
| 87Rb/86Sr | 0.232482 | 0.093572 | 0.106966 | 0.053150 | 0.126704 | 0.148529 | 0.281781 |
| 87Sr/86Sr(1σ) | 0.707170±7 | 0.706612±6 | 0.706581±6 | 0.706518±10 | 0.706766±6 | 0.706522±6 | 0.707037±4 |
| 147Sm/144Nd | 0.126503 | 0.124864 | 0.124177 | 0.124026 | 0.121207 | 0.124925 | 0.125566 |
| 143Nd/144Nd(1σ) | 0.512543±6 | 0.512526±6 | 0.512539±7 | 0.512525±3 | 0.512507±4 | 0.512535±3 | 0.512564±6 |
| 87Sr/86Sri | 0.706310 | 0.706266 | 0.706185 | 0.706321 | 0.706297 | 0.705973 | 0.705995 |
| (143Nd/144Nd)i | 0.512328 | 0.512314 | 0.512328 | 0.512314 | 0.512301 | 0.512322 | 0.512350 |
| *ε*Nd(*t*) | 0.48 | 0.20 | 0.48 | 0.21 | 0.05 | 0.37 | 0.92 |
| Sample | LC04 | LC05 | LC11 | XY02 | XY04 | XY06 |  |
| Rb(ppm) | 15.5 | 20.6 | 25.3 | 8.41 | 6.66 | 13.9 |  |
| Sr(ppm) | 464 | 483 | 529 | 365 | 315 | 509 |  |
| Sm(ppm) | 11.9 | 11.1 | 11 | 11.7 | 12.5 | 12.3 |  |
| Nd(ppm) | 56.4 | 51.1 | 52.2 | 52.3 | 55.8 | 55.8 |  |
| 87Rb/86Sr | 0.096643 | 0.123390 | 0.138360 | 0.066656 | 0.061165 | 0.079001 |  |
| 87Sr/86Sr(1σ) | 0.706984±8 | 0.707029±7 | 0.706703±8 | 0.706534±8 | 0.706541±6 | 0.706522±8 |  |
| 147Sm/144Nd | 0.127630 | 0.131397 | 0.127469 | 0.135322 | 0.135506 | 0.133338 |  |
| 143Nd/144Nd(1σ) | 0.512559±4 | 0.512558±3 | 0.512558±4 | 0.512617±10 | 0.512606±7 | 0.512619±10 |  |
| 87Sr/86Sri | 0.706627 | 0.706573 | 0.706191 | 0.706287 | 0.706315 | 0.706230 |  |
| (143Nd/144Nd)i | 0.512342 | 0.512334 | 0.512341 | 0.512387 | 0.512375 | 0.512392 |  |
| *ε*Nd(*t*) | 0.75 | 0.61 | 0.74 | 1.63 | 1.41 | 1.73 |  |