**Table S3. Bulk Rock Sr-Nd isotopes of the JW gabbro**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sample | Rb  (ppm) | Sr  (ppm) | 87Rb/86Sr | 87Sr/86Sr | Error (2σ) | (87Sr/86Sr)i | Sm (ppm) | Nd  (ppm) | 147Sm/144Nd | 143Nd/144Nd | Error (2σ) | (143Nd/144Nd)i | ε(Nd)t |
| JW02(1)-1 | 34.8 | 688 | 0.146463 | 0.707297 | 0.000016 | 0.706751 | 4.45 | 17.9 | 0.150296 | 0.51244 | 0.00001 | 0.512182 | -0.231 |
| JW02(1)-2 | 33.9 | 699 | 0.140430 | 0.707202 | 0.000009 | 0.706679 | 4.38 | 18.6 | 0.142364 | 0.512425 | 0.000013 | 0.512181 | -0.234 |
| JW02(1)-4 | 33.3 | 668 | 0.144347 | 0.707221 | 0.000013 | 0.706683 | 4.39 | 18.1 | 0.146631 | 0.512456 | 0.000008 | 0.512204 | -0.188 |

**Note:**

(87Sr/86Sr)i = (87Sr/86Sr)-(87Rb/86Sr)×(eλt-1);

(143Nd/144Nd)i = (143Nd/144Nd)-(147Sm/144Nd)×(eλt-1);

εNd(t) = {(143Nd/144Nd)i / [(143Nd/144Nd)CHUR,0-(147Sm/144Nd) CHUR×(eλt-1)]-1}×10000;

t = 262 Ma, which is the formation age of the JW gabbro, the values is referred from our SHRIMP U-Pb dating results (Table S1);

Decay constant (λ): λRb=1.42×10-11 year-1, λSm=6.54×10-12 year-1;

(87Rb/86Sr)CHUR = 0.0847 (Mcculloch and Black, 1984), (87Sr/86Sr)CHUR = 0.7045 (DePaolo, 1988), (147Sm/144Nd)CHUR = 0.1967 (Jacobsen and Wasserburg, 1980) and (143Nd/144Nd)CHUR = 0.512638 (Goldstein et al., 1984), Where the subscript CHUR means chondritic uniform reservoir.