**Table ST1**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Spot Name** | **Domain** | **18O/16O** | **± 95% cl** | **∂18O (‰)** | **± 2 sigma1** |
| **PB1124-1** | 3.3 Ma | 0.002039773 | 1.91E-07 | 12.78 | 0.22 |
| **PB1124-2** | 3.3 Ma | 0.002024634 | 5.21E-07 | 5.32 | 0.53 |
| **PB1125-1** | 3.3 Ma | 0.002040915 | 2.00E-07 | 13.34 | 0.23 |
| **PB1125-2** | 3.3 Ma | 0.002040052 | 1.70E-07 | 12.92 | 0.21 |
| **PB1126-1** | 3.3 Ma | 0.002041921 | 2.13E-07 | 13.84 | 0.24 |
| **PB32-2** | 3.3 Ma | 0.002042550 | 1.82E-07 | 14.15 | 0.22 |
| **PB32-1** | 3.3 Ma | 0.002038892 | 1.76E-07 | 12.35 | 0.21 |
| **PB32-3** | 3.3 Ma | 0.002039917 | 2.47E-07 | 12.85 | 0.27 |
| **PB32-4** | 3.3 Ma | 0.002040262 | 1.62E-07 | 13.02 | 0.20 |
| **PB32-5** | 3.3 Ma | 0.002038741 | 2.60E-07 | 12.27 | 0.28 |
| **PB32-6** | 3.3 Ma | 0.002040383 | 2.21E-07 | 13.08 | 0.25 |
| **PB32-7** | 3.3 Ma | 0.002039985 | 1.41E-07 | 12.88 | 0.19 |
| **PB32-9** | 3.3 Ma | 0.002039153 | 1.99E-07 | 12.47 | 0.23 |
| **PB32-8** | 3.3 Ma | 0.002017046 | 1.66E-07 | 1.59 | 0.21 |
|  |  |  |  |  |  |
| **PB28-1** | 3.3 Ma core | 0.002040445 | 1.99E-07 | 13.11 | 0.23 |
| **PB28-2** | 3.3 Ma core | 0.002041239 | 1.21E-07 | 13.50 | 0.17 |
| **PB28-3** | 3.3 Ma core | 0.002040607 | 2.70E-07 | 13.19 | 0.29 |
| **PB28-4** | 3.3 Ma core | 0.002040276 | 1.76E-07 | 13.03 | 0.21 |
| **PB28-5** | 3.3 Ma core | 0.002040250 | 1.66E-07 | 13.01 | 0.20 |
| **PB28-6** | 3.3 Ma core | 0.002037990 | 2.42E-07 | 11.90 | 0.27 |
| **PB28-7.1** | 3.3 Ma core | 0.002040019 | 1.32E-07 | 12.90 | 0.18 |
| **PB28-8** | 3.3 Ma core | 0.002040150 | 1.65E-07 | 12.97 | 0.20 |
| **PB28-9** | 3.3 Ma core | 0.002040031 | 2.13E-07 | 12.91 | 0.24 |
| **PB28-10** | 3.3 Ma core | 0.002040308 | 1.54E-07 | 13.04 | 0.20 |
| **PB28-12** | 3.3 Ma core | 0.002039841 | 1.40E-07 | 12.81 | 0.19 |
| **PB28-13** | 3.3 Ma core | 0.002040703 | 1.78E-07 | 13.24 | 0.21 |
| **PB28-14** | 3.3 Ma core | 0.002040635 | 1.98E-07 | 13.20 | 0.23 |
| **PB28-17** | 3.3 Ma core | 0.002038851 | 2.00E-07 | 12.33 | 0.23 |
| **PB28-20** | 3.3 Ma core | 0.002040170 | 1.37E-07 | 12.98 | 0.18 |
| **PB28-23** | 3.3 Ma core | 0.002039725 | 1.37E-07 | 12.76 | 0.18 |
| **PB28-24** | 3.3 Ma core | 0.002040714 | 1.93E-07 | 13.24 | 0.23 |
| **PB28-11** | rim | 0.002031506 | 1.91E-07 | 8.71 | 0.23 |
| **PB28-15** | rim | 0.002031050 | 2.42E-07 | 8.48 | 0.27 |
| **PB28-21** | rim | 0.002030937 | 2.89E-07 | 8.43 | 0.31 |
| **PB28-16** | rim | 0.002028635 | 1.82E-07 | 7.29 | 0.22 |
| **PB28-7R** | rim | 0.002028521 | 3.29E-07 | 7.24 | 0.35 |
| **PB28-22** | rim | 0.002027789 | 2.52E-07 | 6.88 | 0.28 |
| **PB28-19** | rim | 0.002027135 | 1.60E-07 | 6.56 | 0.20 |
| **PB28-18** | rim | 0.002022574 | 1.55E-07 | 4.31 | 0.20 |
|  |  |  |  |  |  |
| 1. The error includes the reproducibility of the standard TEM in the same analytical session. | | | | | |