附表1 弄巴地区泥盆系和石炭系锆石LA-ICP-MS U-Pb年龄

Table 1 Zircon LA-ICP-MS U-Pb data of the Devonian and Carboniferous rocks in the Nongba area

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 分析号 | 含量（10-6） | Th/U | 同位素比值 | 　年龄（Ma） | 谐和度 | 备注 |
| Th | U | 207Pb/206Pb | 1*σ* | 207Pb/235U | 1*σ* | 206Pb/238U | 1*σ* | 207Pb/206Pb | 1*σ* | 207Pb/235U | 1*σ* | 206Pb/238U | 1*σ* |
| 样品13NB01-1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13NB01-1-01 | 126  | 187  | 0.67  | 0.0688  | 0.0027  | 1.1362  | 0.0428  | 0.1198  | 0.0012  | 894  | 80.7  | 771  | 20.3  | 730  | 6.9  | 94% |  |
| 13NB01-1-02 | 37.5  | 29.8  | 1.26  | 0.0855  | 0.0197  | 0.6941  | 0.1343  | 0.0686  | 0.0027  | 1326  | 459  | 535  | 80.7  | 428  | 16.4  | 77% | N |
| 13NB01-1-03 | 95.9  | 114  | 0.84  | 0.0469  | 0.0048  | 0.3655  | 0.0373  | 0.0561  | 0.0010  | 55.7  | 217  | 316  | 27.8  | 352  | 6.0  | 89% |  |
| 13NB01-1-04 | 107  | 182  | 0.59  | 0.0667  | 0.0020  | 1.1927  | 0.0351  | 0.1296  | 0.0012  | 828  | 67.6  | 797  | 16.2  | 785  | 6.6  | 98% |  |
| 13NB01-1-05 | 45.0  | 47.5  | 0.95  | 0.0983  | 0.0158  | 0.7121  | 0.0990  | 0.0575  | 0.0014  | 1591  | 304  | 546  | 58.8  | 360  | 8.6  | 59% | N |
| 13NB01-1-06 | 87.8  | 132  | 0.66  | 0.0679  | 0.0024  | 1.2409  | 0.0435  | 0.1327  | 0.0012  | 866  | 74.1  | 819  | 19.7  | 803  | 6.9  | 98% |  |
| 13NB01-1-07 | 91.5  | 138  | 0.66  | 0.0611  | 0.0020  | 1.0878  | 0.0355  | 0.1289  | 0.0010  | 643  | 68.5  | 747  | 17.3  | 782  | 5.9  | 95% |  |
| 13NB01-1-09 | 44.1  | 74.4  | 0.59  | 0.0611  | 0.0031  | 1.1280  | 0.0537  | 0.1359  | 0.0016  | 643  | 109  | 767  | 25.6  | 821  | 8.9  | 93% |  |
| 13NB01-1-10 | 56.4  | 98.4  | 0.57  | 0.0623  | 0.0026  | 1.1097  | 0.0457  | 0.1292  | 0.0012  | 685  | 90.7  | 758  | 22.0  | 784  | 7.0  | 96% |  |
| 13NB01-1-11 | 59.8  | 103  | 0.58  | 0.0640  | 0.0026  | 1.0295  | 0.0378  | 0.1184  | 0.0015  | 743  | 89.8  | 719  | 18.9  | 721  | 8.6  | 99% |  |
| 13NB01-1-12 | 49.9  | 112  | 0.44  | 0.0671  | 0.0025  | 1.2350  | 0.0445  | 0.1338  | 0.0013  | 840  | 77.8  | 817  | 20.2  | 810  | 7.5  | 99% |  |
| 13NB01-1-13 | 116  | 194  | 0.60  | 0.0636  | 0.0022  | 1.1115  | 0.0372  | 0.1261  | 0.0011  | 728  | 72.2  | 759  | 17.9  | 766  | 6.1  | 99% |  |
| 13NB01-1-14 | 80.5  | 140  | 0.57  | 0.1930  | 0.0046  | 15.8002  | 0.3809  | 0.5890  | 0.0061  | 2768  | 39.5  | 2865  | 23.0  | 2985  | 24.7  | 95% |  |
| 13NB01-1-15 | 130  | 148  | 0.88  | 0.0739  | 0.0026  | 1.7550  | 0.0591  | 0.1718  | 0.0017  | 1039  | 72.2  | 1029  | 21.8  | 1022  | 9.5  | 99% |  |
| 13NB01-1-16 | 98.9  | 164  | 0.60  | 0.0642  | 0.0024  | 1.1015  | 0.0388  | 0.1243  | 0.0013  | 746  | 50.0  | 754  | 18.7  | 755  | 7.3  | 99% |  |
| 13NB01-1-17 | 418  | 318  | 1.31  | 0.0642  | 0.0018  | 1.1542  | 0.0322  | 0.1293  | 0.0012  | 750  | 54.6  | 779  | 15.2  | 784  | 6.9  | 99% |  |
| 13NB01-1-18 | 318  | 445  | 0.71  | 0.0577  | 0.0018  | 0.6822  | 0.0205  | 0.0851  | 0.0007  | 517  | 66.7  | 528  | 12.4  | 527  | 4.0  | 99% |  |
| 13NB01-1-19 | 94.1  | 118  | 0.80  | 0.0695  | 0.0029  | 1.2737  | 0.0518  | 0.1326  | 0.0014  | 922  | 82.4  | 834  | 23.1  | 803  | 8.0  | 96% |  |
| 13NB01-1-20 | 478  | 421  | 1.14  | 0.0583  | 0.0028  | 0.4394  | 0.0210  | 0.0543  | 0.0006  | 539  | 105.5  | 370  | 14.8  | 341  | 3.6  | 91% |  |
| 13NB01-1-21 | 97.4  | 267  | 0.37  | 0.0603  | 0.0027  | 1.4874  | 0.0661  | 0.1776  | 0.0021  | 613  | 91.7  | 925  | 27.0  | 1054  | 11.3  | 86% | N |
| 13NB01-1-22 | 142  | 316  | 0.45  | 0.0647  | 0.0025  | 1.4791  | 0.0557  | 0.1655  | 0.0019  | 765  | 86.1  | 922  | 22.8  | 987  | 10.4  | 93% |  |
| 13NB01-1-23 | 111  | 188  | 0.59  | 0.0632  | 0.0020  | 1.1136  | 0.0356  | 0.1270  | 0.0011  | 722  | 73.1  | 760  | 17.1  | 771  | 6.5  | 98% |  |
| 13NB01-1-24 | 49.0  | 75.9  | 0.65  | 0.0622  | 0.0035  | 1.0708  | 0.0570  | 0.1267  | 0.0016  | 680  | 120  | 739  | 27.9  | 769  | 9.3  | 96% |  |
| 13NB01-1-26 | 90.9  | 141  | 0.64  | 0.0635  | 0.0028  | 1.1296  | 0.0479  | 0.1292  | 0.0014  | 724  | 94.4  | 768  | 22.9  | 783  | 8.1  | 97% |  |
| 13NB01-1-27 | 299  | 356  | 0.84  | 0.1618  | 0.0015  | 11.1028  | 0.1140  | 0.4929  | 0.0030  | 2476  | 15.4  | 2532  | 9.6  | 2583  | 12.8  | 97% |  |
| 13NB01-1-28 | 96.2  | 170  | 0.57  | 0.0686  | 0.0022  | 1.2851  | 0.0388  | 0.1358  | 0.0013  | 887  | 65.6  | 839  | 17.3  | 821  | 7.2  | 97% |  |
| 13NB01-1-29 | 126  | 371  | 0.34  | 0.0685  | 0.0013  | 1.7874  | 0.0332  | 0.1885  | 0.0015  | 887  | 40.4  | 1041  | 12.1  | 1113  | 8.2  | 93% |  |
| 13NB01-1-30 | 126  | 166  | 0.76  | 0.0819  | 0.0029  | 1.4457  | 0.0496  | 0.1275  | 0.0011  | 1243  | 68.7  | 908  | 20.6  | 774  | 6.1  | 84% | N |
| 13NB01-1-31 | 113  | 155  | 0.73  | 0.0635  | 0.0020  | 1.1352  | 0.0359  | 0.1293  | 0.0011  | 724  | 68.5  | 770  | 17.1  | 784  | 6.3  | 98% |  |
| 13NB01-1-32 | 297  | 405  | 0.73  | 0.0662  | 0.0014  | 1.5800  | 0.0343  | 0.1716  | 0.0013  | 813  | 45.5  | 962  | 13.5  | 1021  | 7.3  | 94% |  |
| 13NB01-1-33 | 385  | 540  | 0.71  | 0.0642  | 0.0019  | 1.5363  | 0.0458  | 0.1717  | 0.0015  | 746  | 61.9  | 945  | 18.3  | 1022  | 8.2  | 92% |  |
| 13NB01-1-34 | 175  | 218  | 0.80  | 0.0668  | 0.0021  | 1.2719  | 0.0408  | 0.1370  | 0.0014  | 831  | 66.7  | 833  | 18.2  | 828  | 7.8  | 99% |  |
| 13NB01-1-35 | 42.7  | 88.5  | 0.48  | 0.0578  | 0.0035  | 1.0397  | 0.0610  | 0.1305  | 0.0018  | 520  | 136  | 724  | 30.4  | 791  | 10.4  | 91% |  |
| 13NB01-1-36 | 49.3  | 54.2  | 0.91  | 0.0699  | 0.0042  | 1.2674  | 0.0741  | 0.1334  | 0.0024  | 924  | 122  | 831  | 33.2  | 807  | 13.6  | 97% |  |
| 13NB01-1-37 | 116  | 205  | 0.57  | 0.0644  | 0.0021  | 1.0978  | 0.0359  | 0.1229  | 0.0011  | 754  | 69.3  | 752  | 17.4  | 747  | 6.1  | 99% |  |
| 13NB01-1-38 | 94.6  | 134  | 0.71  | 0.0658  | 0.0030  | 1.1598  | 0.0531  | 0.1278  | 0.0016  | 1200  | 96.3  | 782  | 25.0  | 775  | 9.4  | 99% |  |
| 13NB01-1-39 | 409  | 704  | 0.58  | 0.0665  | 0.0016  | 1.2109  | 0.0288  | 0.1312  | 0.0008  | 833  | 50.0  | 806  | 13.2  | 795  | 4.8  | 98% |  |
| 13NB01-1-40 | 48.0  | 139  | 0.35  | 0.0725  | 0.0031  | 1.2791  | 0.0544  | 0.1282  | 0.0015  | 999  | 87.0  | 836  | 24.2  | 778  | 8.5  | 92% |  |
| 13NB01-1-41 | 58.9  | 122  | 0.48  | 0.0625  | 0.0027  | 1.1790  | 0.0501  | 0.1378  | 0.0018  | 700  | 94.4  | 791  | 23.3  | 832  | 9.9  | 94% |  |
| 13NB01-1-42 | 185  | 255  | 0.72  | 0.1755  | 0.0041  | 13.0618  | 0.2975  | 0.5364  | 0.0044  | 2611  | 39.0  | 2684  | 21.5  | 2768  | 18.3  | 96% |  |
| 13NB01-1-45 | 166  | 276  | 0.60  | 0.0649  | 0.0017  | 1.1403  | 0.0315  | 0.1264  | 0.0011  | 772  | 52.8  | 773  | 14.9  | 767  | 6.1  | 99% |  |
| 13NB01-1-48 | 174  | 297  | 0.59  | 0.0852  | 0.0015  | 2.8144  | 0.0496  | 0.2385  | 0.0020  | 1320  | 35.2  | 1359  | 13.2  | 1379  | 10.5  | 98% |  |
| 13NB01-1-49 | 18.8  | 28.8  | 0.65  | 0.2874  | 0.0049  | 28.1878  | 0.4980  | 0.7074  | 0.0070  | 3403  | 27.3  | 3426  | 17.3  | 3449  | 26.5  | 99% |  |
| 13NB01-1-50 | 55.2  | 170  | 0.33  | 0.0702  | 0.0023  | 1.2735  | 0.0383  | 0.1316  | 0.0012  | 1000  | 65.9  | 834  | 17.1  | 797  | 7.1  | 95% |  |
| 13NB01-1-52 | 87.5  | 143  | 0.61  | 0.0711  | 0.0024  | 1.2677  | 0.0438  | 0.1283  | 0.0012  | 961  | 63.9  | 831  | 19.6  | 778  | 6.7  | 93% |  |
| 13NB01-1-53 | 46.6  | 80.0  | 0.58  | 0.0600  | 0.0035  | 1.0776  | 0.0629  | 0.1298  | 0.0014  | 606  | 128  | 742  | 30.7  | 787  | 8.1  | 94% |  |
| 13NB01-1-54 | 93.0  | 127  | 0.73  | 0.0889  | 0.0060  | 1.5308  | 0.0907  | 0.1261  | 0.0020  | 1411  | 131  | 943  | 36.4  | 766  | 11.4  | 79% | N |
| 13NB01-1-55 | 81.4  | 179  | 0.45  | 0.0656  | 0.0023  | 1.2112  | 0.0414  | 0.1344  | 0.0014  | 794  | 80.6  | 806  | 19.0  | 813  | 8.1  | 99% |  |
| 13NB01-1-56 | 103  | 111  | 0.93  | 0.1164  | 0.0083  | 0.8681  | 0.0632  | 0.0551  | 0.0010  | 1902  | 128  | 635  | 34.4  | 346  | 6.2  | 41% | N |
| 13NB01-1-57 | 54.3  | 48.9  | 1.11  | 0.0829  | 0.0123  | 0.6408  | 0.0784  | 0.0596  | 0.0015  | 1266  | 293  | 503  | 48.6  | 373  | 9.1  | 70% | N |
| 13NB01-1-59 | 215  | 531  | 0.40  | 0.0667  | 0.0025  | 1.5383  | 0.0561  | 0.1668  | 0.0017  | 829  | 77.8  | 946  | 22.4  | 994  | 9.2  | 94% |  |
| 13NB01-1-60 | 145  | 570  | 0.25  | 0.0651  | 0.0015  | 1.1674  | 0.0282  | 0.1288  | 0.0012  | 777  | 50.0  | 785  | 13.2  | 781  | 6.6  | 99% |  |
| 13NB01-1-61 | 361  | 671  | 0.54  | 0.0680  | 0.0015  | 1.4781  | 0.0331  | 0.1562  | 0.0013  | 878  | 46.8  | 921  | 13.6  | 935  | 7.4  | 98% |  |
| 13NB01-1-62 | 143  | 1322  | 0.11  | 0.0577  | 0.0015  | 0.7567  | 0.0194  | 0.0944  | 0.0009  | 517  | 57.4  | 572  | 11.2  | 581  | 5.3  | 98% |  |
| 13NB01-1-64 | 55.8  | 153  | 0.37  | 0.0647  | 0.0033  | 1.0958  | 0.0541  | 0.1220  | 0.0016  | 765  | 112.0  | 751  | 26.2  | 742  | 9.2  | 98% |  |
| 13NB01-1-65 | 85.4  | 161  | 0.53  | 0.0670  | 0.0025  | 1.1555  | 0.0411  | 0.1247  | 0.0013  | 839  | 77.8  | 780  | 19.4  | 758  | 7.3  | 97% |  |
| 13NB01-1-66 | 58.3  | 105  | 0.56  | 0.0670  | 0.0033  | 1.2195  | 0.0586  | 0.1313  | 0.0015  | 839  | 97.2  | 810  | 26.8  | 795  | 8.4  | 98% |  |
| 13NB01-1-67 | 137  | 155  | 0.88  | 0.0647  | 0.0027  | 1.1120  | 0.0441  | 0.1243  | 0.0013  | 765  | 85.9  | 759  | 21.2  | 755  | 7.2  | 99% |  |
| 13NB01-1-68 | 207  | 266  | 0.78  | 0.0550  | 0.0022  | 0.6930  | 0.0287  | 0.0902  | 0.0008  | 413  | 90.7  | 535  | 17.2  | 557  | 5.0  | 95% |  |
| 13NB01-1-69 | 212  | 362  | 0.58  | 0.0782  | 0.0014  | 2.0560  | 0.0372  | 0.1892  | 0.0014  | 1152  | 36.7  | 1134  | 12.4  | 1117  | 7.5  | 98% |  |
| 13NB01-1-70 | 88.5  | 146  | 0.60  | 0.0684  | 0.0025  | 1.2723  | 0.0449  | 0.1344  | 0.0013  | 881  | 74.1  | 833  | 20.1  | 813  | 7.4  | 97% |  |
| 13NB01-1-71 | 80.9  | 328  | 0.25  | 0.0606  | 0.0025  | 1.4630  | 0.0602  | 0.1752  | 0.0017  | 628  | 61.1  | 915  | 24.8  | 1041  | 9.3  | 87% |  |
| 13NB01-1-73 | 106  | 191  | 0.56  | 0.0711  | 0.0021  | 1.2674  | 0.0356  | 0.1283  | 0.0011  | 961  | 58.9  | 831  | 15.9  | 778  | 6.3  | 93% |  |
| 13NB01-1-74 | 46.2  | 77.8  | 0.59  | 0.0696  | 0.0051  | 1.2147  | 0.0864  | 0.1283  | 0.0019  | 917  | 147  | 807  | 39.6  | 778  | 10.6  | 96% |  |
| 13NB01-1-75 | 92.0  | 140  | 0.65  | 0.0929  | 0.0024  | 3.1377  | 0.0819  | 0.2420  | 0.0024  | 1487  | 49.7  | 1442  | 20.1  | 1397  | 12.2  | 96% |  |
| 13NB01-1-76 | 89.6  | 171  | 0.52  | 0.0669  | 0.0024  | 1.2251  | 0.0428  | 0.1316  | 0.0014  | 835  | 71.3  | 812  | 19.5  | 797  | 8.3  | 98% |  |
| 13NB01-1-77 | 161  | 214  | 0.75  | 0.0660  | 0.0029  | 1.2285  | 0.0547  | 0.1333  | 0.0016  | 807  | 88.0  | 814  | 24.9  | 807  | 9.1  | 99% |  |
| 13NB01-1-78 | 38.2  | 33.8  | 1.13  | 0.1076  | 0.0223  | 0.7657  | 0.1366  | 0.0624  | 0.0024  | 1759  | 388  | 577  | 78.7  | 390  | 14.5  | 61% | N |
| 13NB01-1-79 | 211  | 662  | 0.32  | 0.0687  | 0.0020  | 1.3451  | 0.0377  | 0.1402  | 0.0014  | 889  | 60.0  | 865  | 16.3  | 846  | 7.7  | 97% |  |
| 13NB01-1-80 | 89.0  | 150  | 0.59  | 0.0622  | 0.0028  | 1.1038  | 0.0480  | 0.1275  | 0.0015  | 683  | 96.3  | 755  | 23.2  | 774  | 8.6  | 97% |  |
| 13NB01-1-82 | 81.7  | 110  | 0.75  | 0.0564  | 0.0045  | 0.4361  | 0.0353  | 0.0565  | 0.0010  | 478  | 176  | 368  | 25.0  | 354  | 5.9  | 96% |  |
| 13NB01-1-83 | 44.8  | 137  | 0.33  | 0.0761  | 0.0025  | 1.9803  | 0.0692  | 0.1873  | 0.0029  | 1098  | 66.7  | 1109  | 23.6  | 1107  | 15.5  | 99% |  |
| 13NB01-1-84 | 45.6  | 89.9  | 0.51  | 0.0680  | 0.0033  | 1.1232  | 0.0540  | 0.1203  | 0.0015  | 878  | 104  | 765  | 25.8  | 732  | 8.7  | 95% |  |
| 13NB01-1-85 | 62.1  | 153  | 0.41  | 0.0668  | 0.0023  | 1.2218  | 0.0441  | 0.1311  | 0.0014  | 831  | 73.3  | 811  | 20.1  | 794  | 8.2  | 97% |  |
| 样品13NB02-1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13NB02-1-01 | 255  | 239  | 1.07  | 0.0549  | 0.0022  | 0.5415  | 0.0226  | 0.0710  | 0.0009  | 409  | 90.7  | 439  | 14.9  | 442  | 5.5  | 99% |  |
| 13NB02-1-02 | 218  | 387  | 0.56  | 0.0707  | 0.0019  | 1.3556  | 0.0350  | 0.1384  | 0.0012  | 950  | 58.3  | 870  | 15.1  | 835  | 7.0  | 95% |  |
| 13NB02-1-03 | 154  | 281  | 0.55  | 0.1261  | 0.0026  | 6.4834  | 0.1361  | 0.3707  | 0.0041  | 2044  | 36.1  | 2044  | 18.5  | 2033  | 19.1  | 99% |  |
| 13NB02-1-04 | 56.6  | 96.8  | 0.58  | 0.0606  | 0.0035  | 0.6646  | 0.0392  | 0.0793  | 0.0014  | 626  | 126  | 517  | 23.9  | 492  | 8.4  | 94% |  |
| 13NB02-1-05 | 309  | 389  | 0.80  | 0.0588  | 0.0021  | 0.5093  | 0.0174  | 0.0630  | 0.0008  | 561  | 79.6  | 418  | 11.7  | 394  | 4.9  | 94% |  |
| 13NB02-1-06 | 284  | 483  | 0.59  | 0.0560  | 0.0016  | 0.5576  | 0.0161  | 0.0717  | 0.0007  | 450  | 67.6  | 450  | 10.5  | 447  | 4.3  | 99% |  |
| 13NB02-1-07 | 340  | 396  | 0.86  | 0.0550  | 0.0020  | 0.5162  | 0.0186  | 0.0679  | 0.0007  | 413  | 83.3  | 423  | 12.5  | 423  | 4.5  | 99% |  |
| 13NB02-1-08 | 90.6  | 333  | 0.27  | 0.0701  | 0.0019  | 1.5827  | 0.0434  | 0.1625  | 0.0016  | 931  | 55.6  | 963  | 17.1  | 971  | 9.0  | 99% |  |
| 13NB02-1-09 | 121  | 148  | 0.82  | 0.0575  | 0.0034  | 0.5484  | 0.0324  | 0.0686  | 0.0011  | 522  | 131  | 444  | 21.2  | 428  | 6.8  | 96% |  |
| 13NB02-1-10 | 207  | 449  | 0.46  | 0.0763  | 0.0018  | 1.8854  | 0.0462  | 0.1777  | 0.0018  | 1103  | 47.7  | 1076  | 16.3  | 1054  | 9.9  | 97% |  |
| 13NB02-1-11 | 227  | 270  | 0.84  | 0.0713  | 0.0017  | 1.6239  | 0.0385  | 0.1642  | 0.0017  | 966  | 50.0  | 979  | 14.9  | 980  | 9.2  | 99% |  |
| 13NB02-1-13 | 223  | 259  | 0.86  | 0.0665  | 0.0034  | 0.6594  | 0.0336  | 0.0718  | 0.0010  | 833  | 103  | 514  | 20.5  | 447  | 6.1  | 85% | N |
| 13NB02-1-14 | 161  | 204  | 0.79  | 0.0684  | 0.0028  | 1.1801  | 0.0470  | 0.1252  | 0.0015  | 880  | 86.3  | 791  | 21.9  | 761  | 8.8  | 96% |  |
| 13NB02-1-15 | 120  | 177  | 0.68  | 0.0544  | 0.0026  | 0.5700  | 0.0264  | 0.0761  | 0.0009  | 387  | 112  | 458  | 17.1  | 473  | 5.5  | 96% |  |
| 13NB02-1-16 | 237  | 647  | 0.37  | 0.0690  | 0.0017  | 1.5002  | 0.0361  | 0.1559  | 0.0013  | 898  | 46.1  | 930  | 14.7  | 934  | 7.5  | 99% |  |
| 13NB02-1-17 | 368  | 399  | 0.92  | 0.0728  | 0.0019  | 1.6788  | 0.0428  | 0.1657  | 0.0015  | 1007  | 53.7  | 1001  | 16.2  | 989  | 8.4  | 98% |  |
| 13NB02-1-18 | 482  | 1051  | 0.46  | 0.0796  | 0.0019  | 1.7227  | 0.0369  | 0.1564  | 0.0019  | 1187  | 46.0  | 1017  | 13.8  | 937  | 10.6  | 91% |  |
| 13NB02-1-19 | 153  | 197  | 0.78  | 0.0526  | 0.0023  | 0.5166  | 0.0228  | 0.0713  | 0.0009  | 309  | 100.0  | 423  | 15.2  | 444  | 5.5  | 95% |  |
| 13NB02-1-20 | 93.8  | 132  | 0.71  | 0.0597  | 0.0031  | 0.5787  | 0.0299  | 0.0712  | 0.0011  | 594  | 113  | 464  | 19.2  | 443  | 6.9  | 95% |  |
| 13NB02-1-21 | 155  | 314  | 0.49  | 0.0842  | 0.0019  | 2.4798  | 0.0564  | 0.2118  | 0.0023  | 1298  | 43.4  | 1266  | 16.5  | 1239  | 12.3  | 97% |  |
| 13NB02-1-22 | 180  | 248  | 0.73  | 0.0578  | 0.0023  | 0.5881  | 0.0229  | 0.0739  | 0.0008  | 520  | 90.7  | 470  | 14.7  | 459  | 4.7  | 97% |  |
| 13NB02-1-23 | 117  | 147  | 0.79  | 0.0962  | 0.0024  | 3.8056  | 0.0940  | 0.2862  | 0.0032  | 1551  | 47.7  | 1594  | 19.9  | 1623  | 16.0  | 98% |  |
| 13NB02-1-24 | 72.5  | 235  | 0.31  | 0.0835  | 0.0021  | 2.5984  | 0.0645  | 0.2242  | 0.0022  | 1280  | 48.1  | 1300  | 18.2  | 1304  | 11.4  | 99% |  |
| 13NB02-1-25 | 115  | 89.1  | 1.29  | 0.0635  | 0.0030  | 1.1424  | 0.0507  | 0.1319  | 0.0020  | 724  | 106  | 774  | 24.0  | 799  | 11.6  | 96% |  |
| 13NB02-1-26 | 95.8  | 271  | 0.35  | 0.0554  | 0.0019  | 0.5744  | 0.0195  | 0.0746  | 0.0008  | 432  | 77.8  | 461  | 12.6  | 464  | 4.8  | 99% |  |
| 13NB02-1-27 | 123  | 198  | 0.62  | 0.0559  | 0.0024  | 0.5488  | 0.0232  | 0.0711  | 0.0008  | 450  | 96.3  | 444  | 15.2  | 443  | 5.1  | 99% |  |
| 13NB02-1-28 | 133  | 732  | 0.18  | 0.0694  | 0.0015  | 1.3754  | 0.0292  | 0.1428  | 0.0011  | 909  | 44.4  | 878  | 12.5  | 861  | 6.4  | 97% |  |
| 13NB02-1-29 | 445  | 430  | 1.04  | 0.0715  | 0.0015  | 1.7218  | 0.0390  | 0.1732  | 0.0017  | 972  | 43.4  | 1017  | 14.5  | 1029  | 9.4  | 98% |  |
| 13NB02-1-30 | 235  | 397  | 0.59  | 0.0590  | 0.0024  | 0.5552  | 0.0222  | 0.0681  | 0.0007  | 569  | 87.0  | 448  | 14.5  | 425  | 4.2  | 94% |  |
| 13NB02-1-31 | 325  | 220  | 1.48  | 0.0722  | 0.0021  | 1.3854  | 0.0396  | 0.1384  | 0.0016  | 992  | 59.3  | 883  | 16.9  | 836  | 9.1  | 94% |  |
| 13NB02-1-32 | 165  | 274  | 0.60  | 0.0565  | 0.0019  | 0.5674  | 0.0199  | 0.0723  | 0.0009  | 472  | 75.9  | 456  | 12.9  | 450  | 5.7  | 98% |  |
| 13NB02-1-33 | 354  | 476  | 0.74  | 0.0668  | 0.0016  | 1.4688  | 0.0354  | 0.1579  | 0.0016  | 831  | 48.1  | 918  | 14.6  | 945  | 8.7  | 97% |  |
| 13NB02-1-34 | 164  | 229  | 0.72  | 0.0632  | 0.0019  | 1.1790  | 0.0353  | 0.1344  | 0.0014  | 722  | 63.0  | 791  | 16.5  | 813  | 7.9  | 97% |  |
| 13NB02-1-35 | 266  | 1124  | 0.24  | 0.0682  | 0.0014  | 1.2079  | 0.0278  | 0.1277  | 0.0018  | 876  | 42.6  | 804  | 12.8  | 775  | 10.1  | 96% |  |
| 13NB02-1-36 | 135  | 327  | 0.41  | 0.0547  | 0.0020  | 0.5292  | 0.0190  | 0.0700  | 0.0007  | 398  | 81.5  | 431  | 12.6  | 436  | 4.0  | 98% |  |
| 13NB02-1-37 | 163  | 240  | 0.68  | 0.0511  | 0.0022  | 0.5007  | 0.0222  | 0.0711  | 0.0008  | 243  | 100.0  | 412  | 15.0  | 443  | 4.9  | 92% |  |
| 13NB02-1-38 | 56.9  | 98.3  | 0.58  | 0.0710  | 0.0028  | 1.6026  | 0.0654  | 0.1630  | 0.0021  | 967  | 82.6  | 971  | 25.5  | 974  | 11.9  | 99% |  |
| 13NB02-1-40 | 237  | 179  | 1.32  | 0.1145  | 0.0029  | 4.9424  | 0.1282  | 0.3130  | 0.0032  | 1872  | 46.3  | 1810  | 21.9  | 1755  | 15.7  | 96% |  |
| 13NB02-1-41 | 54.1  | 117  | 0.46  | 0.0621  | 0.0035  | 0.5674  | 0.0308  | 0.0679  | 0.0011  | 680  | 120  | 456  | 20.0  | 424  | 6.4  | 92% |  |
| 13NB02-1-42 | 166  | 173  | 0.96  | 0.1098  | 0.0026  | 4.5959  | 0.1168  | 0.3018  | 0.0030  | 1795  | 42.6  | 1749  | 21.2  | 1700  | 14.9  | 97% |  |
| 13NB02-1-43 | 251  | 319  | 0.79  | 0.0734  | 0.0018  | 1.6236  | 0.0412  | 0.1600  | 0.0016  | 1025  | 51.1  | 979  | 16.0  | 957  | 9.0  | 97% |  |
| 13NB02-1-44 | 93.9  | 169  | 0.56  | 0.0744  | 0.0023  | 1.6085  | 0.0494  | 0.1569  | 0.0016  | 1054  | 62.7  | 974  | 19.2  | 939  | 9.1  | 96% |  |
| 13NB02-1-45 | 173  | 153  | 1.13  | 0.1352  | 0.0029  | 6.5346  | 0.1438  | 0.3488  | 0.0030  | 2166  | 37.7  | 2051  | 19.4  | 1929  | 14.6  | 93% |  |
| 13NB02-1-47 | 197  | 373  | 0.53  | 0.0595  | 0.0020  | 0.5941  | 0.0195  | 0.0725  | 0.0008  | 587  | 74.1  | 473  | 12.4  | 451  | 4.9  | 95% |  |
| 13NB02-1-49 | 415  | 712  | 0.58  | 0.0735  | 0.0022  | 0.7194  | 0.0213  | 0.0706  | 0.0007  | 1028  | 61.1  | 550  | 12.6  | 440  | 4.3  | 77% | N |
| 13NB02-1-50 | 211  | 195  | 1.08  | 0.1751  | 0.0038  | 11.5339  | 0.2465  | 0.4743  | 0.0043  | 2607  | 35.3  | 2567  | 20.0  | 2503  | 19.0  | 97% |  |
| 13NB02-1-51 | 531  | 548  | 0.97  | 0.1655  | 0.0031  | 10.1479  | 0.1929  | 0.4414  | 0.0036  | 2512  | 31.8  | 2448  | 17.6  | 2357  | 16.3  | 96% |  |
| 13NB02-1-52 | 228  | 566  | 0.40  | 0.0586  | 0.0017  | 0.6283  | 0.0188  | 0.0772  | 0.0007  | 554  | 64.8  | 495  | 11.7  | 479  | 4.3  | 96% |  |
| 13NB02-1-53 | 274  | 413  | 0.66  | 0.0650  | 0.0018  | 0.7392  | 0.0202  | 0.0821  | 0.0008  | 774  | 57.4  | 562  | 11.8  | 508  | 4.7  | 90% |  |
| 13NB02-1-54 | 312  | 374  | 0.83  | 0.0596  | 0.0021  | 0.5981  | 0.0206  | 0.0727  | 0.0008  | 587  | 69.4  | 476  | 13.1  | 452  | 4.8  | 94% |  |
| 13NB02-1-55 | 301  | 1364  | 0.22  | 0.0633  | 0.0014  | 0.8739  | 0.0203  | 0.0993  | 0.0011  | 720  | 46.3  | 638  | 11.0  | 611  | 6.2  | 95% |  |
| 13NB02-1-56 | 169  | 301  | 0.56  | 0.0597  | 0.0023  | 0.6232  | 0.0250  | 0.0751  | 0.0010  | 594  | 83.3  | 492  | 15.6  | 467  | 5.7  | 94% |  |
| 13NB02-1-57 | 312  | 591  | 0.53  | 0.0574  | 0.0017  | 0.5739  | 0.0169  | 0.0721  | 0.0007  | 506  | 64.8  | 461  | 10.9  | 449  | 4.4  | 97% |  |
| 13NB02-1-58 | 217  | 152  | 1.43  | 0.0718  | 0.0023  | 1.6385  | 0.0545  | 0.1644  | 0.0018  | 989  | 66.7  | 985  | 21.0  | 981  | 10.2  | 99% |  |
| 13NB02-1-59 | 118  | 106  | 1.11  | 0.0614  | 0.0030  | 0.8379  | 0.0401  | 0.0998  | 0.0016  | 654  | 104  | 618  | 22.2  | 613  | 9.1  | 99% |  |
| 13NB02-1-60 | 143  | 246  | 0.58  | 0.0625  | 0.0025  | 0.5989  | 0.0240  | 0.0693  | 0.0008  | 700  | 82.4  | 477  | 15.2  | 432  | 5.1  | 90% |  |
| 13NB02-1-61 | 121  | 194  | 0.62  | 0.0589  | 0.0023  | 0.5904  | 0.0238  | 0.0718  | 0.0008  | 561  | 89.8  | 471  | 15.2  | 447  | 4.9  | 94% |  |
| 13NB02-1-62 | 395  | 992  | 0.40  | 0.1402  | 0.0024  | 6.6700  | 0.1087  | 0.3421  | 0.0024  | 2229  | 29.6  | 2069  | 14.5  | 1897  | 11.8  | 91% |  |
| 13NB02-1-63 | 245  | 334  | 0.73  | 0.0570  | 0.0021  | 0.5736  | 0.0223  | 0.0723  | 0.0008  | 500  | 79.6  | 460  | 14.4  | 450  | 5.0  | 97% |  |
| 13NB02-1-64 | 51.4  | 75.8  | 0.68  | 0.0568  | 0.0047  | 0.6162  | 0.0479  | 0.0799  | 0.0017  | 487  | 179  | 487  | 30.1  | 496  | 10.2  | 98% |  |
| 13NB02-1-65 | 535  | 779  | 0.69  | 0.2180  | 0.0039  | 16.0736  | 0.2946  | 0.5304  | 0.0055  | 2966  | 27.6  | 2881  | 17.6  | 2743  | 23.1  | 95% |  |
| 13NB02-1-66 | 220  | 521  | 0.42  | 0.0582  | 0.0017  | 0.5908  | 0.0170  | 0.0731  | 0.0007  | 539  | 69.4  | 471  | 10.9  | 455  | 4.1  | 96% |  |
| 13NB02-1-67 | 200  | 197  | 1.02  | 0.0619  | 0.0024  | 0.5950  | 0.0231  | 0.0694  | 0.0008  | 733  | 83.3  | 474  | 14.7  | 433  | 4.8  | 90% |  |
| 13NB02-1-68 | 69.8  | 174  | 0.40  | 0.0661  | 0.0020  | 1.2170  | 0.0362  | 0.1326  | 0.0013  | 811  | 63.0  | 808  | 16.6  | 803  | 7.3  | 99% |  |
| 13NB02-1-69 | 203  | 234  | 0.87  | 0.0560  | 0.0019  | 0.5523  | 0.0196  | 0.0710  | 0.0008  | 450  | 77.8  | 447  | 12.8  | 442  | 4.8  | 98% |  |
| 13NB02-1-70 | 268  | 682  | 0.39  | 0.0766  | 0.0017  | 1.9547  | 0.0413  | 0.1833  | 0.0017  | 1122  | 10.7  | 1100  | 14.2  | 1085  | 9.3  | 98% |  |
| 13NB02-1-71 | 146  | 401  | 0.36  | 0.1292  | 0.0026  | 6.9051  | 0.1416  | 0.3838  | 0.0033  | 2087  | 35.8  | 2099  | 18.2  | 2094  | 15.4  | 99% |  |
| 13NB02-1-72 | 176  | 131  | 1.35  | 0.0673  | 0.0023  | 1.3479  | 0.0463  | 0.1445  | 0.0021  | 856  | 70.4  | 867  | 20.0  | 870  | 11.7  | 99% |  |
| 13NB02-1-73 | 111  | 135  | 0.82  | 0.0555  | 0.0030  | 0.5659  | 0.0304  | 0.0745  | 0.0012  | 432  | 122  | 455  | 19.7  | 463  | 6.9  | 98% |  |
| 13NB02-1-74 | 92.4  | 132  | 0.70  | 0.1006  | 0.0025  | 3.8980  | 0.0953  | 0.2795  | 0.0028  | 1636  | 47.4  | 1613  | 19.8  | 1589  | 14.1  | 98% |  |
| 13NB02-1-75 | 180  | 602  | 0.30  | 0.1048  | 0.0020  | 4.2855  | 0.0806  | 0.2938  | 0.0023  | 1722  | 34.7  | 1691  | 15.5  | 1661  | 11.7  | 98% |  |
| 13NB02-1-76 | 340  | 386  | 0.88  | 0.0549  | 0.0015  | 0.5605  | 0.0159  | 0.0735  | 0.0008  | 409  | 65.7  | 452  | 10.3  | 457  | 4.7  | 98% |  |
| 13NB02-1-77 | 194  | 330  | 0.59  | 0.0692  | 0.0017  | 1.6106  | 0.0390  | 0.1675  | 0.0016  | 906  | 49.2  | 974  | 15.2  | 998  | 8.8  | 97% |  |
| 13NB02-1-78 | 174  | 329  | 0.53  | 0.0555  | 0.0018  | 0.5539  | 0.0189  | 0.0721  | 0.0009  | 432  | 69.4  | 448  | 12.3  | 449  | 5.3  | 99% |  |
| 13NB02-1-80 | 315  | 547  | 0.58  | 0.0561  | 0.0017  | 0.5448  | 0.0162  | 0.0700  | 0.0006  | 457  | 66.7  | 442  | 10.7  | 436  | 3.8  | 98% |  |
| 13NB02-1-81 | 269  | 333  | 0.81  | 0.0553  | 0.0020  | 0.5058  | 0.0176  | 0.0661  | 0.0007  | 433  | 79.6  | 416  | 11.9  | 413  | 4.5  | 99% |  |
| 13NB02-1-82 | 131  | 164  | 0.80  | 0.0485  | 0.0025  | 0.4456  | 0.0233  | 0.0671  | 0.0010  | 124  | 119  | 374  | 16.3  | 419  | 5.8  | 88% | N |
| 13NB02-1-83 | 200  | 999  | 0.20  | 0.1565  | 0.0028  | 9.5237  | 0.1684  | 0.4384  | 0.0030  | 2418  | 31.3  | 2390  | 16.3  | 2343  | 13.5  | 98% |  |
| 13NB02-1-84 | 127  | 469  | 0.27  | 0.0878  | 0.0018  | 2.8529  | 0.0567  | 0.2345  | 0.0020  | 1389  | 38.9  | 1370  | 15.0  | 1358  | 10.4  | 99% |  |
| 13NB02-1-85 | 101  | 182  | 0.56  | 0.0668  | 0.0031  | 0.7434  | 0.0324  | 0.0809  | 0.0013  | 833  | 91.7  | 564  | 18.9  | 502  | 7.8  | 88% | N |
| 13NB02-1-86 | 384  | 548  | 0.70  | 0.0675  | 0.0016  | 1.2206  | 0.0275  | 0.1309  | 0.0012  | 854  | 48.1  | 810  | 12.6  | 793  | 6.6  | 97% |  |
| 13NB02-1-87 | 626  | 1174  | 0.53  | 0.0552  | 0.0014  | 0.4728  | 0.0124  | 0.0618  | 0.0007  | 420  | 57.4  | 393  | 8.6  | 387  | 4.0  | 98% |  |
| 13NB02-1-88 | 409  | 304  | 1.35  | 0.0555  | 0.0022  | 0.5408  | 0.0220  | 0.0703  | 0.0007  | 435  | 88.9  | 439  | 14.5  | 438  | 4.3  | 99% |  |
| 13NB02-1-89 | 244  | 382  | 0.64  | 0.0707  | 0.0017  | 1.7182  | 0.0434  | 0.1754  | 0.0019  | 950  | 50.0  | 1015  | 16.2  | 1042  | 10.7  | 97% |  |
| 13NB02-1-90 | 139  | 365  | 0.38  | 0.0746  | 0.0017  | 1.8885  | 0.0432  | 0.1831  | 0.0019  | 1057  | 44.4  | 1077  | 15.2  | 1084  | 10.4  | 99% |  |
| 13NB02-1-92 | 161  | 891  | 0.18  | 0.1491  | 0.0026  | 7.6736  | 0.1511  | 0.3709  | 0.0039  | 2336  | 29.3  | 2194  | 17.7  | 2034  | 18.4  | 92% |  |
| 13NB02-1-93 | 225  | 378  | 0.60  | 0.0575  | 0.0019  | 0.5725  | 0.0185  | 0.0725  | 0.0007  | 509  | 74.1  | 460  | 11.9  | 451  | 4.3  | 98% |  |
| 13NB02-1-94 | 175  | 473  | 0.37  | 0.0775  | 0.0016  | 1.9995  | 0.0429  | 0.1865  | 0.0015  | 1144  | 41.8  | 1115  | 14.5  | 1102  | 8.4  | 98% |  |
| 13NB02-1-95 | 132  | 212  | 0.62  | 0.0640  | 0.0022  | 0.8844  | 0.0307  | 0.1001  | 0.0009  | 743  | 39.8  | 643  | 16.5  | 615  | 5.5  | 95% |  |
| 13NB02-1-96 | 208  | 274  | 0.76  | 0.0583  | 0.0023  | 0.5776  | 0.0231  | 0.0718  | 0.0008  | 543  | 89.8  | 463  | 14.9  | 447  | 4.8  | 96% |  |
| 13NB02-1-97 | 223  | 210  | 1.06  | 0.1003  | 0.0024  | 3.9184  | 0.0963  | 0.2824  | 0.0025  | 1631  | 45.5  | 1617  | 19.9  | 1604  | 12.7  | 99% |  |
| 13NB02-1-98 | 44.8  | 147  | 0.30  | 0.0771  | 0.0023  | 1.9182  | 0.0588  | 0.1797  | 0.0019  | 1124  | 59.3  | 1087  | 20.5  | 1065  | 10.6  | 97% |  |
| 13NB02-1-99 | 188  | 210  | 0.90  | 0.0636  | 0.0025  | 0.6414  | 0.0245  | 0.0734  | 0.0008  | 728  | 83.3  | 503  | 15.1  | 457  | 4.8  | 90% |  |
| 13NB02-1-100 | 62.2  | 143  | 0.43  | 0.2632  | 0.0047  | 24.5282  | 0.4476  | 0.6720  | 0.0056  | 3266  | 28.1  | 3290  | 17.9  | 3314  | 21.5  | 99% |  |
| 13NB02-1-101 | 132  | 174  | 0.76  | 0.0649  | 0.0030  | 0.6546  | 0.0292  | 0.0735  | 0.0008  | 770  | 97.4  | 511  | 17.9  | 457  | 4.9  | 88% | N |
| 13NB02-1-102 | 150  | 446  | 0.34  | 0.0734  | 0.0016  | 1.6748  | 0.0380  | 0.1641  | 0.0014  | 1033  | 72.2  | 999  | 14.4  | 979  | 7.7  | 98% |  |
| 13NB02-1-103 | 121  | 159  | 0.77  | 0.0670  | 0.0024  | 1.2575  | 0.0453  | 0.1353  | 0.0014  | 839  | 80.6  | 827  | 20.4  | 818  | 8.1  | 98% |  |
| 13NB02-1-104 | 152  | 206  | 0.74  | 0.0664  | 0.0029  | 0.6858  | 0.0309  | 0.0741  | 0.0010  | 817  | 91.5  | 530  | 18.6  | 461  | 5.9  | 85% | N |
| 13NB02-1-105 | 233  | 376  | 0.62  | 0.0583  | 0.0021  | 0.5780  | 0.0204  | 0.0715  | 0.0007  | 539  | 77.8  | 463  | 13.1  | 445  | 4.3  | 96% |  |
| 13NB02-1-106 | 296  | 480  | 0.62  | 0.0723  | 0.0019  | 1.4989  | 0.0378  | 0.1488  | 0.0012  | 994  | 56.5  | 930  | 15.4  | 894  | 6.9  | 96% |  |
| 13NB02-1-107 | 59.3  | 824  | 0.07  | 0.0727  | 0.0016  | 1.5625  | 0.0339  | 0.1543  | 0.0013  | 1006  | 43.4  | 955  | 13.4  | 925  | 7.3  | 96% |  |
| 13NB02-1-108 | 337  | 1279  | 0.26  | 0.0715  | 0.0015  | 1.4607  | 0.0316  | 0.1465  | 0.0014  | 972  | 43.7  | 914  | 13.1  | 881  | 8.0  | 96% |  |
| 13NB02-1-109 | 103  | 217  | 0.47  | 0.0783  | 0.0020  | 1.9201  | 0.0504  | 0.1761  | 0.0017  | 1155  | 51.9  | 1088  | 17.6  | 1046  | 9.5  | 96% |  |
| 13NB02-1-110 | 384  | 691  | 0.56  | 0.0636  | 0.0014  | 0.8948  | 0.0199  | 0.1011  | 0.0009  | 728  | 46.3  | 649  | 10.6  | 621  | 5.2  | 95% |  |
| 13NB02-1-111 | 106  | 119  | 0.89  | 0.0698  | 0.0029  | 1.3865  | 0.0584  | 0.1432  | 0.0018  | 924  | 87.0  | 883  | 24.8  | 862  | 10.4  | 97% |  |
| 13NB02-1-112 | 185  | 403  | 0.46  | 0.0575  | 0.0019  | 0.5777  | 0.0180  | 0.0726  | 0.0007  | 509  | 75.0  | 463  | 11.6  | 452  | 4.5  | 97% | 　 |

注：N代表不参入年龄计算.

附表2 弄巴地区泥盆系和石炭系锆石Hf同位素组成

Table 2 Zircon Hf isotopic compositions of the Devonian and Carboniferous rocks in the Nongba area

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 分析点号 | 176Yb/177Hf | 176Lu/177Hf | 176Hf/177Hf | 2*σ* | (176Hf/177Hf)i | *ε*Hf(0) | *ε*Hf(*t*) |
| 样品13NB01-1 |  |  |  |  |  |  |  |
| 13NB01-1-82 | 0.042513  | 0.000978  | 0.282811  | 0.000009  | 0.282805 | 1.4  | 8.9 |
| 13NB01-1-04 | 0.024668  | 0.000654  | 0.282341  | 0.000009  | 0.282331 | -15.3  | 1.8 |
| 13NB01-1-09 | 0.021662  | 0.000568  | 0.282307  | 0.000008  | 0.282299 | -16.4  | 1.4 |
| 13NB01-1-10 | 0.050156  | 0.001267  | 0.282355  | 0.000008  | 0.282336 | -14.8  | 1.9 |
| 13NB01-1-11 | 0.020181  | 0.000542  | 0.282332  | 0.000008  | 0.282325 | -15.5  | 0.1 |
| 13NB01-1-12 | 0.021106  | 0.000599  | 0.282339  | 0.000009  | 0.282329 | -15.3  | 2.2 |
| 13NB01-1-13 | 0.035736  | 0.000916  | 0.282339  | 0.000008  | 0.282326 | -15.3  | 1.1 |
| 13NB01-1-16 | 0.028551  | 0.000744  | 0.282352  | 0.000008  | 0.282341 | -14.9  | 1.4 |
| 13NB01-1-19 | 0.037336  | 0.000933  | 0.282363  | 0.000010  | 0.282349 | -14.5  | 2.8 |
| 13NB01-1-22 | 0.033261  | 0.000921  | 0.282333  | 0.000009  | 0.282327 | -15.5  | -8.2 |
| 13NB01-1-23 | 0.025586  | 0.000662  | 0.282328  | 0.000009  | 0.282318 | -15.7  | 1.0 |
| 13NB01-1-24 | 0.040098  | 0.001035  | 0.282404  | 0.000008  | 0.282389 | -13.0  | 3.4 |
| 13NB01-1-26 | 0.034825  | 0.000902  | 0.282334  | 0.000008  | 0.282321 | -15.5  | 1.3 |
| 13NB01-1-28 | 0.029366  | 0.000758  | 0.282369  | 0.000008  | 0.282357 | -14.3  | 3.5 |
| 13NB01-1-83 | 0.022119  | 0.000664  | 0.282141  | 0.000009  | 0.282127 | -22.3  | 1.7 |
| 13NB01-1-31 | 0.052564  | 0.001493  | 0.282425  | 0.000010  | 0.282403 | -12.3  | 4.3 |
| 13NB01-1-32 | 0.033110  | 0.000834  | 0.282240  | 0.000009  | 0.282224 | -18.8  | 3.2 |
| 13NB01-1-34 | 0.081652  | 0.002142  | 0.282219  | 0.000008  | 0.282185 | -19.6  | -2.5 |
| 13NB01-1-35 | 0.019517  | 0.000530  | 0.282360  | 0.000008  | 0.282352 | -14.6  | 2.6 |
| 13NB01-1-84 | 0.025876  | 0.000662  | 0.282324  | 0.000009  | 0.282315 | -15.8  | 0.0 |
| 13NB01-1-37 | 0.027387  | 0.000693  | 0.282364  | 0.000009  | 0.282354 | -14.4  | 1.7 |
| 13NB01-1-85 | 0.040604  | 0.001015  | 0.282369  | 0.000009  | 0.282354 | -14.2  | 2.8 |
| 13NB01-1-39 | 0.049638  | 0.001279  | 0.282328  | 0.000008  | 0.282309 | -15.7  | 1.2 |
| 13NB01-1-40 | 0.049167  | 0.001223  | 0.282342  | 0.000008  | 0.282324 | -15.2  | 1.3 |
| 13NB01-1-41 | 0.043387  | 0.001192  | 0.282397  | 0.000009  | 0.282378 | -13.3  | 4.5 |
| 13NB01-1-42 | 0.035957  | 0.000909  | 0.281133  | 0.000008  | 0.281088 | -58.0  | -0.9 |
| 13NB01-1-45 | 0.034457  | 0.000882  | 0.282340  | 0.000008  | 0.282327 | -15.3  | 1.2 |
| 13NB01-1-50 | 0.048482  | 0.001222  | 0.282356  | 0.000009  | 0.282338 | -14.7  | 2.3 |
| 13NB01-1-52 | 0.029257  | 0.000780  | 0.282346  | 0.000009  | 0.282334 | -15.1  | 1.7 |
| 13NB01-1-53 | 0.031039  | 0.000835  | 0.282360  | 0.000009  | 0.282347 | -14.6  | 2.4 |
| 13NB01-1-55 | 0.030734  | 0.000782  | 0.282346  | 0.000008  | 0.282334 | -15.1  | 2.5 |
| 13NB01-1-59 | 0.028453  | 0.000722  | 0.282341  | 0.000008  | 0.282328 | -15.2  | 6.3 |
| 13NB01-1-60 | 0.059064  | 0.001379  | 0.282328  | 0.000009  | 0.282307 | -15.7  | 0.8 |
| 13NB01-1-61 | 0.070699  | 0.001781  | 0.282155  | 0.000012  | 0.282123 | -21.8  | -2.3 |
| 13NB01-1-62 | 0.035275  | 0.000817  | 0.282495  | 0.000008  | 0.282486 | -9.8  | 2.7 |
| 13NB01-1-64 | 0.043332  | 0.001082  | 0.282368  | 0.000010  | 0.282352 | -14.3  | 1.5 |
| 13NB01-1-65 | 0.026578  | 0.000681  | 0.282359  | 0.000009  | 0.282349 | -14.6  | 1.8 |
| 13NB01-1-66 | 0.054156  | 0.001363  | 0.282366  | 0.000010  | 0.282346 | -14.3  | 2.5 |
| 13NB01-1-68 | 0.011432  | 0.000275  | 0.282159  | 0.000009  | 0.282156 | -21.7  | -9.5 |
| 13NB01-1-69 | 0.035787  | 0.000873  | 0.282052  | 0.000009  | 0.282033 | -25.5  | -1.4 |
| 13NB01-1-70 | 0.035446  | 0.000892  | 0.282357  | 0.000008  | 0.282344 | -14.7  | 2.8 |
| 13NB01-1-71 | 0.037572  | 0.000956  | 0.282369  | 0.000008  | 0.282350 | -14.2  | 8.2 |
| 13NB01-1-73 | 0.036349  | 0.000916  | 0.282353  | 0.000008  | 0.282340 | -14.8  | 1.9 |
| 13NB01-1-74 | 0.032529  | 0.000835  | 0.282364  | 0.000009  | 0.282352 | -14.4  | 2.3 |
| 13NB01-1-75 | 0.039164  | 0.001014  | 0.281904  | 0.000009  | 0.281877 | -30.7  | -0.6 |
| 13NB01-1-77 | 0.057994  | 0.001396  | 0.282181  | 0.000008  | 0.282159 | -20.9  | -3.9 |
| 13NB01-1-80 | 0.068253  | 0.001682  | 0.282391  | 0.000009  | 0.282367 | -13.5  | 2.7 |
| 样品13NB02-1 |  |  |  |  |  |  |  |
| 13NB02-1-01 | 0.019592  | 0.000547  | 0.282416  | 0.000010  | 0.282411 | -12.6  | -3.0 |
| 13NB02-1-04 | 0.056295  | 0.002019  | 0.282819  | 0.000015  | 0.282801 | 1.7  | 11.9 |
| 13NB02-1-06 | 0.025207  | 0.000704  | 0.282603  | 0.000010  | 0.282597 | -6.0  | 3.6 |
| 13NB02-1-08 | 0.015579  | 0.000493  | 0.282313  | 0.000017  | 0.282304 | -16.2  | 4.9 |
| 13NB02-1-11 | 0.049156  | 0.001382  | 0.282200  | 0.000010  | 0.282175 | -20.2  | 0.6 |
| 13NB02-1-15 | 0.037365  | 0.000922  | 0.282241  | 0.000008  | 0.282233 | -18.8  | -8.7 |
| 13NB02-1-16 | 0.046997  | 0.001098  | 0.282098  | 0.000007  | 0.282078 | -23.8  | -3.9 |
| 13NB02-1-19 | 0.047350  | 0.001345  | 0.282242  | 0.000011  | 0.282230 | -18.8  | -9.4 |
| 13NB02-1-20 | 0.036576  | 0.000914  | 0.282262  | 0.000009  | 0.282255 | -18.0  | -8.5 |
| 13NB02-1-23 | 0.024330  | 0.000606  | 0.281681  | 0.000009  | 0.281662 | -38.6  | -3.1 |
| 13NB02-1-24 | 0.028834  | 0.000706  | 0.281730  | 0.000009  | 0.281712 | -36.9  | -8.6 |
| 13NB02-1-26 | 0.021345  | 0.000586  | 0.282215  | 0.000009  | 0.282210 | -19.7  | -9.7 |
| 13NB02-1-27 | 0.033002  | 0.000838  | 0.282332  | 0.000010  | 0.282325 | -15.6  | -6.1 |
| 13NB02-1-28 | 0.083245  | 0.002045  | 0.282153  | 0.000008  | 0.282120 | -21.9  | -4.1 |
| 13NB02-1-29 | 0.037738  | 0.001032  | 0.282025  | 0.000008  | 0.282005 | -26.4  | -4.3 |
| 13NB02-1-30 | 0.047370  | 0.001245  | 0.282239  | 0.000008  | 0.282229 | -18.8  | -9.9 |
| 13NB02-1-32 | 0.030432  | 0.000777  | 0.282354  | 0.000009  | 0.282348 | -14.8  | -5.1 |
| 13NB02-1-33 | 0.071246  | 0.001862  | 0.282184  | 0.000011  | 0.282150 | -20.8  | -1.1 |
| 13NB02-1-36 | 0.037094  | 0.000909  | 0.282253  | 0.000007  | 0.282246 | -18.3  | -9.0 |
| 13NB02-1-38 | 0.033815  | 0.000856  | 0.282365  | 0.000008  | 0.282350 | -14.4  | 6.6 |
| 13NB02-1-40 | 0.054259  | 0.001506  | 0.281317  | 0.000012  | 0.281267 | -51.4  | -14.2 |
| 13NB02-1-41 | 0.034440  | 0.000839  | 0.282210  | 0.000009  | 0.282203 | -19.9  | -10.8 |
| 13NB02-1-42 | 0.038738  | 0.000957  | 0.281379  | 0.000008  | 0.281346 | -49.3  | -10.4 |
| 13NB02-1-44 | 0.040246  | 0.000965  | 0.282232  | 0.000009  | 0.282215 | -19.1  | 1.1 |
| 13NB02-1-51 | 0.027199  | 0.000702  | 0.280962  | 0.000009  | 0.280928 | -64.0  | -8.9 |
| 13NB02-1-52 | 0.029370  | 0.000754  | 0.282385  | 0.000007  | 0.282378 | -13.7  | -3.4 |
| 13NB02-1-56 | 0.031906  | 0.000840  | 0.282197  | 0.000007  | 0.282190 | -20.3  | -10.3 |
| 13NB02-1-59 | 0.019253  | 0.000551  | 0.282451  | 0.000008  | 0.282445 | -11.3  | 2.0 |
| 13NB02-1-60 | 0.037978  | 0.000952  | 0.282227  | 0.000008  | 0.282219 | -19.3  | -10.1 |
| 13NB02-1-61 | 0.045657  | 0.001453  | 0.282808  | 0.000011  | 0.282796 | 1.3  | 10.7 |
| 13NB02-1-64 | 0.029724  | 0.000813  | 0.282776  | 0.000009  | 0.282768 | 0.1  | 10.8 |
| 13NB02-1-66 | 0.049566  | 0.001243  | 0.282235  | 0.000008  | 0.282224 | -19.0  | -9.4 |
| 13NB02-1-67 | 0.028951  | 0.000731  | 0.282596  | 0.000009  | 0.282590 | -6.2  | 3.1 |
| 13NB02-1-68 | 0.020374  | 0.000493  | 0.281995  | 0.000008  | 0.281988 | -27.5  | -10.0 |
| 13NB02-1-69 | 0.023612  | 0.000644  | 0.282322  | 0.000009  | 0.282317 | -15.9  | -6.4 |
| 13NB02-1-71 | 0.022448  | 0.000608  | 0.281351  | 0.000009  | 0.281327 | -50.3  | -4.5 |
| 13NB02-1-73 | 0.023330  | 0.000630  | 0.282811  | 0.000007  | 0.282805 | 1.4  | 11.4 |
| 13NB02-1-74 | 0.012000  | 0.000309  | 0.281550  | 0.000009  | 0.281540 | -43.2  | -7.2 |
| 13NB02-1-75 | 0.041437  | 0.001055  | 0.281545  | 0.000009  | 0.281510 | -43.4  | -6.3 |
| 13NB02-1-77 | 0.067035  | 0.001811  | 0.282357  | 0.000009  | 0.282323 | -14.7  | 6.2 |
| 13NB02-1-86 | 0.083305  | 0.002191  | 0.282202  | 0.000014  | 0.282169 | -20.2  | -3.8 |
| 13NB02-1-88 | 0.037248  | 0.001018  | 0.282606  | 0.000011  | 0.282597 | -5.9  | 3.5 |
| 13NB02-1-90 | 0.033571  | 0.000950  | 0.282173  | 0.000008  | 0.282154 | -21.2  | 2.1 |
| 13NB02-1-109 | 0.040880  | 0.001193  | 0.282415  | 0.000009  | 0.282392 | -12.6  | 9.7 |
| 13NB02-1-94 | 0.043942  | 0.001105  | 0.281932  | 0.000007  | 0.281909 | -29.7  | -6.1 |
| 13NB02-1-95 | 0.052981  | 0.001283  | 0.282611  | 0.000008  | 0.282596 | -5.7  | 7.3 |
| 13NB02-1-110 | 0.053686  | 0.001292  | 0.282472  | 0.000009  | 0.282457 | -10.6  | 2.6 |
| 13NB02-1-103 | 0.048518  | 0.001187  | 0.281858  | 0.000008  | 0.281840 | -32.3  | -14.9 |
| 13NB02-1-106 | 0.036738  | 0.001038  | 0.282261  | 0.000011  | 0.282243 | -18.1  | 1.1 |
| 13NB02-1-112 | 0.044000  | 0.001137  | 0.282235  | 0.000009  | 0.282225 | -19.0  | -9.4 |

注：锆石Hf分析点号与年龄分析点相同，初始Hf计算采用锆石年龄.