APPENDIX B

SUPPLEMENTARY DATA TABLES

Table B-1. Granitoid xenoliths, Grassrange, zircon LA-ICP-MS U-Pb data (Ma).

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | Err. | 206Pb | Err. | εHf(IA) | εHf(T) | Hf Model Age |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | (%) | 238U | (%) | \* | \*\* | (DM)a |
|  | age |  | age |  |  |  |  |  |  |  |  |  |
| MX-06\_01 | 2089 | 122 | 2207 | 45 | 5 | 0.1384 | 2.6 | 0.3824 | 6.8 |  |  |  |
| MX-06\_02 | 1647 | 89 | 2052 | 25 | 20 | 0.1267 | 1.4 | 0.2908 | 6.1 |  |  |  |
| MX-06\_03 | 1960 | 77 | 2324 | 15 | 16 | 0.1481 | 0.9 | 0.3550 | 4.6 |  |  |  |
| MX-06\_04 | 1665 | 45 | 1805 | 25 | 8 | 0.1103 | 1.4 | 0.2945 | 3.1 |  |  |  |
| MX-06\_05 | 1863 | 61 | 1984 | 22 | 6 | 0.1219 | 1.2 | 0.3348 | 3.8 |  |  |  |
| MX-06\_06 | 2163 | 78 | 2305 | 16 | 6 | 0.1465 | 0.9 | 0.3982 | 4.3 | -5.1 | -0.2 | 2813 |
| MX-06\_07 | 1773 | 40 | 2131 | 35 | 17 | 0.1324 | 2.0 | 0.3163 | 2.6 |  |  |  |
| MX-06\_08 | 2226 | 54 | 2370 | 11 | 6 | 0.1521 | 0.6 | 0.4121 | 2.9 | -0.5 | 3.0 | 2693 |
| MX-06\_09 | 1583 | 31 | 1804 | 15 | 12 | 0.1103 | 0.8 | 0.2781 | 2.2 |  |  |  |
| MX-06\_10 | 1733 | 88 | 1976 | 45 | 12 | 0.1214 | 2.6 | 0.3081 | 5.8 |  |  |  |
| MX-06\_11 | 2363 | 52 | 2466 | 12 | 4 | 0.1609 | 0.7 | 0.4423 | 2.7 |  |  |  |
| MX-06\_12 | 1732 | 59 | 1953 | 21 | 11 | 0.1198 | 1.2 | 0.3080 | 3.9 |  |  |  |
| MX-06\_13 | 1613 | 66 | 1855 | 16 | 13 | 0.1134 | 0.9 | 0.2840 | 4.6 |  |  |  |
| MX-06\_14 | 1978 | 121 | 2125 | 50 | 7 | 0.1321 | 2.9 | 0.3589 | 7.1 |  |  |  |
| MX-06\_15 | 2234 | 160 | 2256 | 71 | 1 | 0.1423 | 4.1 | 0.4139 | 8.5 |  |  |  |
| MX-06\_16 | 2323 | 50 | 2474 | 14 | 6 | 0.1618 | 0.8 | 0.4334 | 2.6 | -0.8 | 0.3 | 2792 |
| MX-06\_17 | 2528 | 74 | 2541 | 11 | 0 | 0.1683 | 0.6 | 0.4797 | 3.5 | -2.6 | -3.0 | 2916 |
| MX-06\_18 | 2322 | 85 | 2411 | 13 | 4 | 0.1559 | 0.8 | 0.4332 | 4.4 | -5.6 | -3.1 | 2925 |
| MX-06\_19 | 2000 | 165 | 2196 | 37 | 9 | 0.1375 | 2.1 | 0.3634 | 9.6 | -7.8 | -0.7 | 2840 |
| MX-06\_20 | 1886 | 72 | 2108 | 12 | 11 | 0.1308 | 0.7 | 0.3394 | 4.4 |  |  |  |
| MX-06\_21 | 1632 | 47 | 1988 | 88 | 18 | 0.1222 | 5.0 | 0.2877 | 3.3 |  |  |  |
| MX-06\_22 | 1832 | 66 | 2014 | 33 | 9 | 0.1240 | 1.8 | 0.3284 | 4.1 |  |  |  |
| MX-06\_23 | 2308 | 61 | 2478 | 12 | 7 | 0.1621 | 0.7 | 0.4301 | 3.2 |  |  |  |
| MX-06\_24 | 2447 | 66 | 2503 | 10 | 2 | 0.1645 | 0.6 | 0.4612 | 3.3 |  |  |  |
| MX-06\_25 | 2424 | 110 | 2454 | 24 | 1 | 0.1598 | 1.4 | 0.4561 | 5.5 | -2.3 | -0.7 | 2835 |
| MX-06\_26 | 2380 | 59 | 2541 | 12 | 6 | 0.1683 | 0.7 | 0.4461 | 3.0 | 2.3 | 1.9 | 2731 |
| MX-06\_27 | 2091 | 139 | 2101 | 79 | 0 | 0.1302 | 4.5 | 0.3828 | 7.8 |  |  |  |
| MX-06\_28 | 2004 | 45 | 2250 | 17 | 11 | 0.1419 | 1.0 | 0.3642 | 2.6 |  |  |  |
| MX-06\_29 | 1755 | 157 | 2060 | 52 | 15 | 0.1272 | 3.0 | 0.3126 | 10.3 |  |  |  |
| MX-06\_30 | 1940 | 125 | 2179 | 40 | 11 | 0.1362 | 2.3 | 0.3508 | 7.5 |  |  |  |
| MX-06\_31 | 1921 | 69 | 2159 | 27 | 11 | 0.1347 | 1.5 | 0.3469 | 4.2 |  |  |  |
| MX-06\_32 | 2046 | 125 | 2225 | 41 | 8 | 0.1398 | 2.4 | 0.3732 | 7.1 | -9.6 | -2.8 | 2914 |
| MX-06\_33 | 1691 | 62 | 2045 | 12 | 17 | 0.1261 | 0.7 | 0.2997 | 4.2 |  |  |  |
| MX-06\_34 | 2153 | 105 | 2255 | 41 | 5 | 0.1423 | 2.4 | 0.3962 | 5.7 | -7.7 | -1.7 | 2876 |
| MX-06\_35 | 2221 | 51 | 2348 | 24 | 5 | 0.1501 | 1.4 | 0.4110 | 2.7 |  |  |  |
| MX-06\_36 | 2063 | 102 | 2201 | 25 | 6 | 0.1379 | 1.4 | 0.3768 | 5.8 |  |  |  |
| MX-06\_37 | 1614 | 37 | 1761 | 14 | 8 | 0.1077 | 0.8 | 0.2842 | 2.6 |  |  |  |
| MX-06\_38 | 2029 | 50 | 2202 | 16 | 8 | 0.1380 | 0.9 | 0.3697 | 2.9 | -9.3 | -2.1 | 2884 |
| MX-06\_39 | 2282 | 102 | 2483 | 15 | 8 | 0.1626 | 0.9 | 0.4243 | 5.3 |  |  |  |
| MX-06\_40 | 1910 | 116 | 2071 | 77 | 8 | 0.1280 | 4.4 | 0.3446 | 7.0 | -10.0 | 0.1 | 2805 |
| MX-06\_41 | 1873 | 106 | 2026 | 76 | 8 | 0.1248 | 4.3 | 0.3369 | 6.6 | -11.6 | -0.5 | 2829 |
| MX-06\_42 | 1587 | 32 | 1788 | 12 | 11 | 0.1093 | 0.6 | 0.2789 | 2.3 |  |  |  |
| MX-06\_43 | 2264 | 72 | 2362 | 11 | 4 | 0.1514 | 0.6 | 0.4203 | 3.8 |  |  |  |

Table B-1. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | Err. | 206Pb | Err. | εHf(IA) | εHf(T) | Hf Model Age |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | (%) | 238U | (%) | \* | \*\* | (DM)a |
|  | age |  | age |  |  |  |  |  |  |  |  |  |
| MX-06\_44 | 2343 | 124 | 2375 | 35 | 1 | 0.1525 | 2.1 | 0.4380 | 6.3 | -4.8 | -1.5 | 2867 |
| MX-06\_45 | 1994 | 55 | 2139 | 65 | 7 | 0.1331 | 3.7 | 0.3622 | 3.2 | -6.0 | 2.4 | 2720 |
| MX-06\_46 | 1671 | 41 | 1757 | 12 | 5 | 0.1075 | 0.7 | 0.2956 | 2.8 | -19.2 | -2.1 | 2889 |
| MX-06\_47 | 1722 | 50 | 1815 | 17 | 5 | 0.1109 | 0.9 | 0.3059 | 3.3 | -18.1 | -2.6 | 2909 |
| MX-06\_48 | 2305 | 59 | 2477 | 18 | 7 | 0.1620 | 1.1 | 0.4295 | 3.0 | -0.3 | 0.7 | 2778 |
| MX-06\_49 | 2268 | 78 | 2296 | 69 | 1 | 0.1457 | 4.0 | 0.4212 | 4.1 | -4.5 | 0.6 | 2782 |
| MX-06\_50 | 2451 | 50 | 2525 | 16 | 3 | 0.1667 | 0.9 | 0.4622 | 2.5 |  |  |  |
| MX-06\_51 | 1718 | 73 | 1794 | 25 | 4 | 0.1097 | 1.3 | 0.3052 | 4.8 | -19.5 | -3.4 | 2938 |
| MX-06\_52 | 1600 | 60 | 1768 | 12 | 9 | 0.1081 | 0.7 | 0.2815 | 4.2 | -19.9 | -3.2 | 2933 |
| MX-06\_53 | 1506 | 39 | 1788 | 17 | 16 | 0.1093 | 0.9 | 0.2629 | 2.9 |  |  |  |
| MX-06\_54 | 2261 | 71 | 2404 | 12 | 6 | 0.1552 | 0.7 | 0.4196 | 3.7 |  |  |  |
| MX-06\_55 | 2393 | 50 | 2444 | 15 | 2 | 0.1589 | 0.9 | 0.4490 | 2.5 | -2.4 | -0.6 | 2832 |
| MX-06\_56 | 2362 | 81 | 2433 | 29 | 3 | 0.1578 | 1.7 | 0.4420 | 4.1 |  |  |  |
| MX-06\_57 | 2111 | 71 | 2307 | 17 | 9 | 0.1467 | 1.0 | 0.3870 | 3.9 |  |  |  |
| MX-06\_58 | 2217 | 88 | 2313 | 20 | 4 | 0.1472 | 1.2 | 0.4101 | 4.7 | -8.3 | -3.6 | 2945 |
| MX-06\_59 | 1549 | 47 | 1780 | 19 | 13 | 0.1088 | 1.1 | 0.2713 | 3.4 |  |  |  |
| MX-06\_60 | 1809 | 97 | 1967 | 40 | 8 | 0.1207 | 2.2 | 0.3236 | 6.2 | -10.4 | 2.2 | 2722 |
| MX-06\_61 | 2499 | 86 | 2500 | 15 | 0 | 0.1643 | 0.9 | 0.4732 | 4.2 | -1.8 | -1.2 | 2856 |
| MX-06\_62 | 1804 | 93 | 1979 | 56 | 9 | 0.1215 | 3.1 | 0.3226 | 5.9 |  |  |  |
| MX-08\_01 | 1437 | 76 | 1763 | 25 | 18 | 0.1078 | 1.4 | 0.2496 | 6.0 |  |  |  |
| MX-08\_02 | 847 | 28 | 1752 | 23 | 52 | 0.1072 | 1.2 | 0.1402 | 3.6 |  |  |  |
| MX-08\_03 | 1852 | 53 | 1928 | 22 | 4 | 0.1181 | 1.2 | 0.3324 | 3.3 | -0.5 | -4.7 | 2300 |
| MX-08\_04 | 705 | 24 | 1703 | 24 | 59 | 0.1044 | 1.3 | 0.1154 | 3.6 |  |  |  |
| MX-08\_05 | 984 | 51 | 1751 | 22 | 44 | 0.1071 | 1.2 | 0.1647 | 5.7 |  |  |  |
| MX-08\_06 | 1085 | 202 | 1786 | 29 | 39 | 0.1092 | 1.6 | 0.1832 | 20.4 |  |  |  |
| MX-08\_07 | 1284 | 114 | 1833 | 22 | 30 | 0.1120 | 1.2 | 0.2202 | 9.8 |  |  |  |
| MX-08\_08 | 1695 | 43 | 1737 | 23 | 2 | 0.1063 | 1.2 | 0.3004 | 2.9 | -11.8 | -11.9 | 2592 |
| MX-08\_09 | 1006 | 101 | 1779 | 24 | 43 | 0.1088 | 1.3 | 0.1687 | 10.9 |  |  |  |
| MX-08\_10 | 673 | 35 | 1755 | 23 | 62 | 0.1074 | 1.2 | 0.1100 | 5.4 |  |  |  |
| MX-08\_11 | 580 | 14 | 1738 | 23 | 67 | 0.1064 | 1.2 | 0.0941 | 2.5 |  |  |  |
| MX-08\_12 | 640 | 18 | 1836 | 23 | 65 | 0.1122 | 1.2 | 0.1043 | 3.0 |  |  |  |
| MX-08\_13 | 1471 | 38 | 1764 | 23 | 17 | 0.1079 | 1.2 | 0.2562 | 2.9 |  |  |  |
| MX-08\_14 | 1301 | 25 | 1778 | 26 | 27 | 0.1087 | 1.4 | 0.2234 | 2.1 |  |  |  |
| MX-08\_15 | 749 | 29 | 1947 | 41 | 62 | 0.1194 | 2.3 | 0.1230 | 4.1 |  |  |  |
| MX-08\_16 | 1677 | 49 | 1734 | 23 | 3 | 0.1061 | 1.2 | 0.2969 | 3.3 | -9.1 | -9.3 | 2476 |
| MX-08\_17 | 1655 | 62 | 1737 | 23 | 5 | 0.1063 | 1.2 | 0.2924 | 4.3 | -10.9 | -11.1 | 2550 |
| MX-08\_18 | 1279 | 42 | 1732 | 23 | 26 | 0.1060 | 1.2 | 0.2192 | 3.6 |  |  |  |
| MX-08\_19 | 517 | 20 | 1723 | 23 | 70 | 0.1055 | 1.2 | 0.0835 | 4.0 |  |  |  |
| MX-08\_20 | 1482 | 46 | 1820 | 31 | 19 | 0.1113 | 1.7 | 0.2582 | 3.5 |  |  |  |
| MX-08\_21 | 1340 | 44 | 1730 | 23 | 23 | 0.1059 | 1.2 | 0.2309 | 3.6 |  |  |  |
| MX-08\_22 | 712 | 55 | 1808 | 30 | 61 | 0.1105 | 1.7 | 0.1167 | 8.2 |  |  |  |
| MX-08\_23 | 1777 | 53 | 1732 | 23 | -3 | 0.1060 | 1.2 | 0.3172 | 3.4 | -9.5 | -9.6 | 2489 |
| MX-08\_24 | 706 | 18 | 1741 | 23 | 59 | 0.1065 | 1.2 | 0.1156 | 2.7 |  |  |  |
| MX-08\_25 | 997 | 65 | 1750 | 22 | 43 | 0.1071 | 1.2 | 0.1671 | 7.1 |  |  |  |
| MX-08\_26 | 834 | 42 | 1916 | 23 | 56 | 0.1173 | 1.3 | 0.1380 | 5.4 |  |  |  |
| MX-08\_27 | 790 | 52 | 1589 | 25 | 50 | 0.0982 | 1.3 | 0.1303 | 7.0 |  |  |  |

Table B-1. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | Err. | 206Pb | Err. | εHf(IA) | εHf(T) | Hf Model Age |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | (%) | 238U | (%) | \* | \*\* | (DM)a |
|  | age |  | age |  |  |  |  |  |  |  |  |  |
| MX-08\_28 | 1371 | 54 | 1744 | 23 | 21 | 0.1067 | 1.3 | 0.2367 | 4.4 |  |  |  |
| MX-08\_29 | 978 | 74 | 2042 | 29 | 52 | 0.1259 | 1.7 | 0.1636 | 8.2 |  |  |  |
| MX-08\_30 | 1679 | 43 | 1727 | 23 | 3 | 0.1057 | 1.2 | 0.2973 | 2.9 | -8.8 | -8.9 | 2465 |
| MX-08\_31 | 1665 | 38 | 1734 | 22 | 4 | 0.1061 | 1.2 | 0.2943 | 2.6 | -11.1 | -11.4 | 2560 |
| MX-08\_32 | 982 | 33 | 1842 | 26 | 47 | 0.1126 | 1.4 | 0.1644 | 3.6 |  |  |  |
| MX-08\_33 | 1798 | 61 | 1727 | 22 | -4 | 0.1057 | 1.2 | 0.3214 | 3.9 | -9.4 | -9.6 | 2487 |
| MX-08\_34 | 1129 | 87 | 1756 | 25 | 36 | 0.1074 | 1.4 | 0.1912 | 8.4 |  |  |  |
| MX-08\_35 | 490 | 30 | 1732 | 23 | 72 | 0.1060 | 1.2 | 0.0790 | 6.3 |  |  |  |
| MX-08\_36 | 1674 | 39 | 1723 | 23 | 3 | 0.1055 | 1.3 | 0.2961 | 2.6 | -9.6 | -9.8 | 2507 |
| MX-08\_37 | 394 | 74 | 1883 | 35 | 79 | 0.1152 | 1.9 | 0.0629 | 19.5 |  |  |  |
| MX-08\_38 | 722 | 38 | 1801 | 23 | 60 | 0.1101 | 1.3 | 0.1184 | 5.5 |  |  |  |
| MX-08\_39 | 1645 | 44 | 1723 | 23 | 4 | 0.1055 | 1.2 | 0.2905 | 3.1 | -11.8 | -12.0 | 2580 |
| MX-08\_40 | 1214 | 123 | 1745 | 24 | 30 | 0.1068 | 1.3 | 0.2071 | 11.2 |  |  |  |
| MX-08\_41 | 652 | 23 | 1598 | 25 | 59 | 0.0986 | 1.3 | 0.1063 | 3.8 |  |  |  |
| MX-08\_42 | 375 | 30 | 1731 | 23 | 78 | 0.1059 | 1.2 | 0.0599 | 8.2 |  |  |  |
| MX-08\_43 | 879 | 179 | 1935 | 67 | 55 | 0.1186 | 3.7 | 0.1460 | 21.9 |  |  |  |
| MX-08\_44 | 1087 | 139 | 1852 | 63 | 41 | 0.1132 | 3.5 | 0.1835 | 14.0 |  |  |  |
| MX-08\_45 | 475 | 47 | 1690 | 23 | 72 | 0.1037 | 1.3 | 0.0764 | 10.3 |  |  |  |
| MX-08\_46 | 1373 | 27 | 1747 | 23 | 21 | 0.1069 | 1.2 | 0.2372 | 2.2 |  |  |  |
| MX-08\_48 | 1463 | 48 | 1721 | 23 | 15 | 0.1054 | 1.2 | 0.2545 | 3.7 |  |  |  |
| MX-08\_49 | 1030 | 71 | 1770 | 25 | 42 | 0.1082 | 1.4 | 0.1730 | 7.5 |  |  |  |
| MX-08\_50 | 1129 | 42 | 1713 | 22 | 34 | 0.1050 | 1.2 | 0.1912 | 4.1 |  |  |  |
| MX-08\_51 | 1006 | 39 | 1752 | 25 | 43 | 0.1072 | 1.4 | 0.1688 | 4.2 |  |  |  |
| MX-08\_52 | 1833 | 50 | 1875 | 23 | 2 | 0.1147 | 1.3 | 0.3286 | 3.2 | -2.7 | -6.4 | 2372 |
| MX-08\_53 | 1739 | 48 | 1723 | 23 | -1 | 0.1055 | 1.3 | 0.3093 | 3.1 | -10.3 | -10.7 | 2531 |
| MX-08\_54 | 1585 | 48 | 1720 | 23 | 8 | 0.1053 | 1.3 | 0.2784 | 3.4 | -10.0 | -10.3 | 2510 |
| MX-08\_55 | 981 | 41 | 1876 | 21 | 48 | 0.1148 | 1.2 | 0.1642 | 4.6 |  |  |  |
| MX-08\_56 | 574 | 35 | 1734 | 17 | 67 | 0.1061 | 0.9 | 0.0931 | 6.3 |  |  |  |
| MX-08\_57 | 1604 | 50 | 1730 | 11 | 7 | 0.1059 | 0.6 | 0.2823 | 3.5 | -11.2 | -11.2 | 2556 |
| MX-08\_58 | 1478 | 96 | 1731 | 11 | 15 | 0.1059 | 0.6 | 0.2575 | 7.3 |  |  |  |
| MX-08\_59 | 1633 | 47 | 1733 | 11 | 6 | 0.1060 | 0.6 | 0.2881 | 3.3 | -9.6 | -9.7 | 2493 |
| MX-08\_60 | 762 | 18 | 1798 | 10 | 58 | 0.1099 | 0.6 | 0.1253 | 2.5 |  |  |  |
| MX-08\_61 | 1248 | 144 | 1777 | 14 | 30 | 0.1087 | 0.8 | 0.2134 | 12.8 |  |  |  |
| MX-08\_62 | 461 | 21 | 1433 | 11 | 68 | 0.0904 | 0.6 | 0.0741 | 4.6 |  |  |  |
| MX-08\_63 | 1264 | 49 | 1779 | 11 | 29 | 0.1088 | 0.6 | 0.2164 | 4.3 |  |  |  |
| MX-08\_64 | 1475 | 39 | 1746 | 12 | 15 | 0.1068 | 0.7 | 0.2569 | 2.9 |  |  |  |
| MX-09\_01 | 1406 | 49 | 1814 | 28 | 22 | 0.1109 | 1.6 | 0.2436 | 3.9 |  |  |  |
| MX-09\_02 | 1807 | 53 | 2037 | 27 | 11 | 0.1256 | 1.6 | 0.3233 | 3.4 |  |  |  |
| MX-09\_03 | 1576 | 56 | 1915 | 28 | 18 | 0.1173 | 1.6 | 0.2767 | 4.0 |  |  |  |
| MX-09\_04 | 2119 | 69 | 2470 | 26 | 14 | 0.1614 | 1.5 | 0.3888 | 3.8 |  |  |  |
| MX-09\_05 | 1654 | 52 | 2317 | 28 | 29 | 0.1475 | 1.6 | 0.2921 | 3.6 |  |  |  |
| MX-09\_06 | 1597 | 51 | 1784 | 29 | 10 | 0.1091 | 1.6 | 0.2809 | 3.6 | -15.3 | 0.2 | 2806 |
| MX-09\_07 | 1340 | 55 | 1931 | 30 | 31 | 0.1183 | 1.7 | 0.2308 | 4.5 |  |  |  |
| MX-09\_08 | 1622 | 55 | 2021 | 29 | 20 | 0.1244 | 1.6 | 0.2858 | 3.8 |  |  |  |
| MX-09\_09 | 2385 | 70 | 2530 | 26 | 6 | 0.1672 | 1.6 | 0.4472 | 3.5 | -4.9 | -5.3 | 3005 |
| MX-09\_10 | 1936 | 65 | 2390 | 30 | 19 | 0.1539 | 1.8 | 0.3500 | 3.9 |  |  |  |

Table B-1. Continued

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | Err. | 206Pb | Err. | εHf(IA) | εHf(T) | Hf Model Age |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | (%) | 238U | (%) | \* | \*\* | (DM)a |
|  | age |  | age |  |  |  |  |  |  |  |  |  |
| MX-09\_11 | 2311 | 68 | 2479 | 27 | 7 | 0.1622 | 1.6 | 0.4307 | 3.5 | -0.7 | 0.2 | 2794 |
| MX-09\_12 | 2240 | 65 | 2478 | 26 | 10 | 0.1621 | 1.6 | 0.4152 | 3.4 | -2.9 | -1.9 | 2875 |
| MX-09\_13 | 1474 | 51 | 1828 | 29 | 19 | 0.1117 | 1.6 | 0.2566 | 3.9 |  |  |  |
| MX-09\_14 | 1805 | 57 | 2072 | 28 | 13 | 0.1281 | 1.6 | 0.3229 | 3.6 |  |  |  |
| MX-09\_15 | 2056 | 62 | 2371 | 27 | 13 | 0.1522 | 1.6 | 0.3753 | 3.5 |  |  |  |
| MX-09\_16 | 1572 | 51 | 2123 | 28 | 26 | 0.1319 | 1.6 | 0.2759 | 3.7 |  |  |  |
| MX-09\_17 | 2353 | 68 | 2513 | 27 | 6 | 0.1656 | 1.6 | 0.4401 | 3.4 | -2.0 | -1.9 | 2873 |
| MX-09\_18 | 2211 | 71 | 2416 | 26 | 8 | 0.1563 | 1.6 | 0.4087 | 3.8 | -5.6 | -3.3 | 2928 |
| MX-09\_19 | 1447 | 66 | 2120 | 29 | 32 | 0.1317 | 1.7 | 0.2514 | 5.1 |  |  |  |
| MX-09\_20 | 1863 | 78 | 2079 | 56 | 10 | 0.1286 | 3.2 | 0.3348 | 4.8 | -9.3 | 0.4 | 2793 |
| MX-09\_21 | 1332 | 48 | 1822 | 28 | 27 | 0.1114 | 1.6 | 0.2293 | 4.0 |  |  |  |
| MX-09\_22 | 1532 | 48 | 1930 | 28 | 21 | 0.1183 | 1.6 | 0.2681 | 3.5 |  |  |  |
| MX-09\_23 | 1605 | 63 | 2170 | 33 | 26 | 0.1355 | 1.9 | 0.2824 | 4.4 |  |  |  |
| MX-09\_24 | 1520 | 56 | 1921 | 28 | 21 | 0.1176 | 1.6 | 0.2658 | 4.2 |  |  |  |
| MX-09\_25 | 1385 | 47 | 1880 | 28 | 26 | 0.1150 | 1.6 | 0.2394 | 3.7 |  |  |  |
| MX-09\_26 | 1623 | 69 | 2049 | 28 | 21 | 0.1265 | 1.6 | 0.2861 | 4.8 |  |  |  |
| MX-09\_27 | 1686 | 53 | 1762 | 28 | 4 | 0.1078 | 1.6 | 0.2987 | 3.6 | -18.1 | -1.0 | 2840 |
| MX-09\_28 | 1495 | 47 | 1900 | 28 | 21 | 0.1163 | 1.6 | 0.2608 | 3.5 |  |  |  |
| MX-09\_29 | 1868 | 98 | 2259 | 37 | 17 | 0.1426 | 2.1 | 0.3359 | 6.0 |  |  |  |
| MX-09\_30 | 2424 | 70 | 2523 | 26 | 4 | 0.1665 | 1.6 | 0.4559 | 3.5 | -2.5 | -2.4 | 2893 |
| MX-09\_31 | 1756 | 55 | 1894 | 28 | 7 | 0.1159 | 1.6 | 0.3128 | 3.6 | -15.8 | -1.7 | 2868 |
| MX-09\_32 | 1828 | 58 | 2126 | 28 | 14 | 0.1321 | 1.6 | 0.3275 | 3.6 |  |  |  |
| MX-09\_33 | 1307 | 51 | 1877 | 30 | 30 | 0.1148 | 1.7 | 0.2245 | 4.3 |  |  |  |
| MX-09\_34 | 1921 | 61 | 2189 | 27 | 12 | 0.1369 | 1.6 | 0.3469 | 3.7 |  |  |  |
| MX-09\_35 | 2436 | 74 | 2522 | 26 | 3 | 0.1664 | 1.6 | 0.4588 | 3.6 | -1.8 | -1.6 | 2864 |
| MX-09\_36 | 2005 | 76 | 2221 | 35 | 10 | 0.1395 | 2.0 | 0.3644 | 4.4 | -11.3 | -4.4 | 2968 |
| MX-09\_37 | 1616 | 65 | 2144 | 37 | 25 | 0.1335 | 2.1 | 0.2847 | 4.6 |  |  |  |
| MX-09\_38 | 1903 | 66 | 2158 | 30 | 12 | 0.1345 | 1.7 | 0.3432 | 4.0 |  |  |  |
| MX-09\_39 | 2298 | 66 | 2511 | 26 | 8 | 0.1653 | 1.5 | 0.4280 | 3.4 | -0.8 | -0.4 | 2817 |
| MX-09\_40 | 1763 | 74 | 2343 | 28 | 25 | 0.1497 | 1.7 | 0.3143 | 4.8 |  |  |  |
| MX-09\_41 | 1351 | 43 | 1875 | 28 | 28 | 0.1147 | 1.6 | 0.2329 | 3.5 |  |  |  |
| MX-09\_42 | 2478 | 70 | 2545 | 26 | 3 | 0.1687 | 1.6 | 0.4682 | 3.4 | -5.3 | -5.5 | 3008 |
| MX-09\_43 | 2058 | 64 | 2241 | 29 | 8 | 0.1411 | 1.7 | 0.3758 | 3.7 | -7.2 | -0.6 | 2822 |
| MX-09\_44 | 1702 | 61 | 2046 | 35 | 17 | 0.1262 | 2.0 | 0.3019 | 4.1 |  |  |  |
| MX-09\_45 | 1417 | 51 | 1947 | 28 | 27 | 0.1194 | 1.6 | 0.2456 | 4.0 |  |  |  |
| MX-09\_46 | 2185 | 63 | 2412 | 26 | 9 | 0.1559 | 1.6 | 0.4032 | 3.4 |  |  |  |
| MX-09\_47 | 2052 | 60 | 2226 | 28 | 8 | 0.1399 | 1.6 | 0.3746 | 3.4 | -8.5 | -1.6 | 2866 |
| MX-09\_48 | 1285 | 42 | 1817 | 28 | 29 | 0.1111 | 1.6 | 0.2203 | 3.6 |  |  |  |
| MX-09\_49 | 2548 | 73 | 2522 | 26 | -1 | 0.1665 | 1.6 | 0.4842 | 3.5 | -2.6 | -2.4 | 2893 |
| MX-09\_50 | 1755 | 53 | 1950 | 29 | 10 | 0.1196 | 1.6 | 0.3126 | 3.5 | -15.7 | -2.5 | 2897 |
| MX-09\_51 | 1713 | 78 | 2086 | 30 | 18 | 0.1291 | 1.7 | 0.3042 | 5.2 |  |  |  |
| MX-09\_52 | 1683 | 58 | 1901 | 29 | 11 | 0.1164 | 1.6 | 0.2981 | 3.9 |  |  |  |
| MX-09\_53 | 1362 | 51 | 1808 | 28 | 25 | 0.1105 | 1.5 | 0.2350 | 4.2 |  |  |  |
| MX-09\_54 | 1592 | 53 | 1801 | 29 | 12 | 0.1101 | 1.6 | 0.2799 | 3.8 |  |  |  |
| MX-09\_55 | 2350 | 65 | 2466 | 27 | 5 | 0.1609 | 1.6 | 0.4395 | 3.3 | -1.8 | -0.2 | 2813 |
| MX-09\_56 | 2088 | 73 | 2241 | 32 | 7 | 0.1411 | 1.9 | 0.3822 | 4.1 | -11.2 | -4.4 | 2967 |

Table B-1. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | Err. | 206Pb | Err. | εHf(IA) | εHf(T) | Hf Model Age |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | (%) | 238U | (%) | \* | \*\* | (DM)a |
|  | age |  | age |  |  |  |  |  |  |  |  |  |
| MX-09\_57 | 1998 | 77 | 2147 | 47 | 7 | 0.1337 | 2.7 | 0.3630 | 4.5 | -11.0 | -2.2 | 2883 |
| MX-09\_58 | 1709 | 68 | 2135 | 29 | 20 | 0.1327 | 1.7 | 0.3033 | 4.5 |  |  |  |
| MX-09\_59 | 1563 | 49 | 1990 | 29 | 21 | 0.1223 | 1.7 | 0.2742 | 3.5 |  |  |  |
| MX-09\_60 | 1493 | 49 | 1847 | 29 | 19 | 0.1129 | 1.6 | 0.2603 | 3.7 |  |  |  |
| MX-10\_01 | 1725 | 70 | 2007 | 23 | 14 | 0.1235 | 1.3 | 0.3066 | 4.6 |  |  |  |
| MX-10\_02 | 1577 | 77 | 1955 | 27 | 19 | 0.1199 | 1.5 | 0.2769 | 5.5 |  |  |  |
| MX-10\_03 | 2431 | 99 | 2524 | 14 | 4 | 0.1667 | 0.8 | 0.4577 | 4.9 |  |  |  |
| MX-10\_04 | 1662 | 71 | 1821 | 15 | 9 | 0.1113 | 0.8 | 0.2939 | 4.8 | -19.0 | -3.7 | 2962 |
| MX-10\_05 | 2044 | 110 | 2207 | 37 | 7 | 0.1384 | 2.2 | 0.3728 | 6.3 |  |  |  |
| MX-10\_06 | 1787 | 81 | 1985 | 27 | 10 | 0.1219 | 1.5 | 0.3192 | 5.2 |  |  |  |
| MX-10\_07 | 2469 | 100 | 2527 | 15 | 2 | 0.1669 | 0.9 | 0.4662 | 4.9 | -3.9 | -3.8 | 2952 |
| MX-10\_08 | 1684 | 74 | 1901 | 22 | 11 | 0.1164 | 1.2 | 0.2983 | 5.0 |  |  |  |
| MX-10\_09 | 2458 | 126 | 2423 | 25 | -1 | 0.1569 | 1.5 | 0.4636 | 6.2 | -5.4 | -3.1 | 2927 |
| MX-10\_10 | 1890 | 102 | 2093 | 30 | 10 | 0.1296 | 1.7 | 0.3404 | 6.3 | -12.2 | -2.6 | 2914 |
| MX-10\_11 | 1879 | 106 | 2192 | 20 | 14 | 0.1372 | 1.2 | 0.3381 | 6.5 |  |  |  |
| MX-10\_12 | 1698 | 73 | 1965 | 22 | 14 | 0.1206 | 1.2 | 0.3011 | 4.9 |  |  |  |
| MX-10\_13 | 1542 | 67 | 1782 | 18 | 13 | 0.1090 | 1.0 | 0.2700 | 4.9 |  |  |  |
| MX-10\_14 | 1695 | 79 | 2010 | 29 | 16 | 0.1237 | 1.6 | 0.3006 | 5.3 |  |  |  |
| MX-10\_16 | 2183 | 132 | 2414 | 47 | 10 | 0.1561 | 2.8 | 0.4026 | 7.1 |  |  |  |
| MX-10\_17 | 1700 | 119 | 1980 | 36 | 14 | 0.1216 | 2.0 | 0.3015 | 8.0 |  |  |  |
| MX-10\_18 | 1872 | 119 | 2149 | 50 | 13 | 0.1338 | 2.9 | 0.3367 | 7.3 |  |  |  |
| MX-10\_19 | 2365 | 102 | 2464 | 16 | 4 | 0.1608 | 1.0 | 0.4428 | 5.2 | -4.8 | -3.3 | 2936 |
| MX-10\_20 | 1772 | 79 | 2006 | 22 | 12 | 0.1234 | 1.2 | 0.3162 | 5.1 |  |  |  |
| MX-10\_21 | 2484 | 124 | 2522 | 16 | 1 | 0.1664 | 0.9 | 0.4697 | 6.0 | -3.0 | -2.8 | 2916 |
| MX-10\_22 | 2115 | 139 | 2392 | 28 | 12 | 0.1541 | 1.7 | 0.3879 | 7.7 |  |  |  |
| MX-10\_23 | 1565 | 84 | 1760 | 15 | 11 | 0.1076 | 0.8 | 0.2745 | 6.1 |  |  |  |
| MX-10\_24 | 1986 | 91 | 2258 | 19 | 12 | 0.1425 | 1.1 | 0.3606 | 5.4 |  |  |  |
| MX-10\_25 | 2266 | 128 | 2432 | 37 | 7 | 0.1577 | 2.2 | 0.4209 | 6.7 |  |  |  |
| MX-10\_26 | 2166 | 88 | 2366 | 16 | 8 | 0.1517 | 0.9 | 0.3990 | 4.8 |  |  |  |
| MX-10\_27 | 2032 | 137 | 2363 | 46 | 14 | 0.1515 | 2.7 | 0.3702 | 7.9 |  |  |  |
| MX-10\_28 | 1627 | 74 | 1810 | 19 | 10 | 0.1106 | 1.0 | 0.2869 | 5.1 | -19.5 | -3.6 | 2952 |
| MX-10\_29 | 2068 | 104 | 2292 | 26 | 10 | 0.1454 | 1.5 | 0.3778 | 5.9 | -8.3 | -3.1 | 2935 |
| MX-10\_30 | 2247 | 91 | 2456 | 14 | 9 | 0.1601 | 0.8 | 0.4166 | 4.8 | -3.8 | -2.2 | 2895 |
| MX-10\_31 | 2009 | 88 | 2279 | 19 | 12 | 0.1442 | 1.1 | 0.3654 | 5.1 |  |  |  |
| MX-10\_32 | 1582 | 65 | 1825 | 21 | 13 | 0.1116 | 1.1 | 0.2778 | 4.7 |  |  |  |
| MX-10\_33 | 1677 | 86 | 1925 | 41 | 13 | 0.1179 | 2.3 | 0.2968 | 5.8 |  |  |  |
| MX-10\_34 | 2234 | 83 | 2412 | 21 | 7 | 0.1560 | 1.2 | 0.4137 | 4.4 | -4.5 | -1.9 | 2879 |
| MX-10\_35 | 1517 | 60 | 1771 | 15 | 14 | 0.1083 | 0.8 | 0.2651 | 4.4 |  |  |  |
| MX-10\_36 | 2086 | 102 | 2291 | 30 | 9 | 0.1453 | 1.8 | 0.3816 | 5.8 | -8.9 | -3.6 | 2944 |
| MX-10\_37 | 1644 | 69 | 1891 | 19 | 13 | 0.1157 | 1.1 | 0.2902 | 4.8 |  |  |  |
| MX-10\_38 | 2260 | 90 | 2424 | 28 | 7 | 0.1571 | 1.7 | 0.4195 | 4.7 |  |  |  |
| MX-10\_39 | 1634 | 70 | 1857 | 18 | 12 | 0.1136 | 1.0 | 0.2882 | 4.9 |  |  |  |
| MX-10\_40 | 2165 | 120 | 2385 | 34 | 9 | 0.1535 | 2.0 | 0.3987 | 6.6 | -5.7 | -2.5 | 2906 |
| MX-10\_41 | 2055 | 101 | 2292 | 30 | 10 | 0.1453 | 1.8 | 0.3750 | 5.8 |  |  |  |
| MX-10\_42 | 2160 | 109 | 2384 | 29 | 9 | 0.1534 | 1.7 | 0.3977 | 6.0 |  |  |  |
| MX-10\_43 | 2219 | 84 | 2434 | 19 | 9 | 0.1580 | 1.1 | 0.4106 | 4.5 | -3.5 | -1.4 | 2862 |

Table B-1. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | Err. | 206Pb | Err. | εHf(IA) | εHf(T) | Hf Model Age |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | (%) | 238U | (%) | \* | \*\* | (DM)a |
|  | age |  | age |  |  |  |  |  |  |  |  |  |
| MX-10\_44 | 1865 | 81 | 2126 | 18 | 12 | 0.1321 | 1.0 | 0.3352 | 5.0 |  |  |  |
| MX-10\_45 | 1881 | 100 | 2089 | 55 | 10 | 0.1294 | 3.1 | 0.3385 | 6.2 |  |  |  |
| MX-10\_46 | 2035 | 77 | 2389 | 21 | 15 | 0.1538 | 1.2 | 0.3709 | 4.4 |  |  |  |
| MX-10\_47 | 1994 | 101 | 2520 | 14 | 21 | 0.1662 | 0.8 | 0.3621 | 5.9 |  |  |  |
| MX-10\_48 | 1959 | 83 | 2331 | 19 | 16 | 0.1487 | 1.1 | 0.3548 | 4.9 |  |  |  |
| MX-10\_49 | 1429 | 63 | 1838 | 16 | 22 | 0.1124 | 0.9 | 0.2479 | 4.9 |  |  |  |
| MX-10\_50 | 2049 | 105 | 2366 | 27 | 13 | 0.1518 | 1.6 | 0.3738 | 6.0 |  |  |  |
| MX-10\_51 | 1550 | 64 | 1818 | 17 | 15 | 0.1111 | 1.0 | 0.2716 | 4.6 |  |  |  |
| MX-10\_52 | 1770 | 79 | 2195 | 15 | 19 | 0.1374 | 0.9 | 0.3156 | 5.1 |  |  |  |
| MX-10\_53 | 1633 | 73 | 1996 | 15 | 18 | 0.1227 | 0.8 | 0.2881 | 5.1 |  |  |  |
| MX-10\_54 | 2340 | 93 | 2537 | 15 | 8 | 0.1679 | 0.9 | 0.4373 | 4.7 | -3.3 | -3.5 | 2942 |
| MX-10\_55 | 1799 | 93 | 2239 | 34 | 20 | 0.1410 | 2.0 | 0.3217 | 5.9 |  |  |  |
| MX-10\_56 | 1708 | 79 | 1911 | 25 | 11 | 0.1170 | 1.4 | 0.3031 | 5.3 |  |  |  |
| MX-10\_57 | 2122 | 107 | 2322 | 23 | 9 | 0.1479 | 1.4 | 0.3894 | 5.9 |  |  |  |
| MX-10\_58 | 1625 | 70 | 1823 | 15 | 11 | 0.1114 | 0.8 | 0.2864 | 4.9 |  |  |  |
| MX-10\_59 | 2040 | 107 | 2343 | 29 | 13 | 0.1497 | 1.7 | 0.3718 | 6.2 |  |  |  |
| MX-10\_60 | 1956 | 126 | 2171 | 70 | 10 | 0.1355 | 4.0 | 0.3542 | 7.5 |  |  |  |
| MX-11\_01 | 2004 | 69 | 2234 | 22 | 10 | 0.1406 | 1.3 | 0.3642 | 4.0 |  |  |  |
| MX-11\_02 | 1594 | 39 | 1886 | 22 | 15 | 0.1154 | 1.2 | 0.2802 | 2.8 |  |  |  |
| MX-11\_03 | 1497 | 38 | 1790 | 18 | 16 | 0.1094 | 1.0 | 0.2612 | 2.8 |  |  |  |
| MX-11\_04 | 1633 | 40 | 1833 | 18 | 11 | 0.1121 | 1.0 | 0.2880 | 2.8 |  |  |  |
| MX-11\_05 | 1586 | 44 | 1856 | 28 | 15 | 0.1135 | 1.6 | 0.2787 | 3.1 |  |  |  |
| MX-11\_06 | 1899 | 69 | 2147 | 27 | 12 | 0.1337 | 1.6 | 0.3422 | 4.2 |  |  |  |
| MX-11\_07 | 2150 | 58 | 2325 | 22 | 8 | 0.1482 | 1.3 | 0.3954 | 3.2 |  |  |  |
| MX-11\_08 | 1716 | 65 | 1919 | 44 | 11 | 0.1175 | 2.5 | 0.3047 | 4.3 |  |  |  |
| MX-11\_09 | 1680 | 64 | 1947 | 27 | 14 | 0.1194 | 1.5 | 0.2975 | 4.3 |  |  |  |
| MX-11\_10 | 1686 | 40 | 1878 | 19 | 10 | 0.1149 | 1.0 | 0.2988 | 2.7 |  |  |  |
| MX-11\_11 | 1761 | 59 | 1979 | 34 | 11 | 0.1215 | 1.9 | 0.3139 | 3.9 |  |  |  |
| MX-11\_12 | 1490 | 38 | 1876 | 18 | 21 | 0.1147 | 1.0 | 0.2599 | 2.9 |  |  |  |
| MX-11\_13 | 1862 | 42 | 1792 | 22 | -4 | 0.1096 | 1.2 | 0.3345 | 2.6 |  |  |  |
| MX-11\_14 | 1800 | 53 | 1973 | 37 | 9 | 0.1211 | 2.1 | 0.3217 | 3.4 |  |  |  |
| MX-11\_15 | 1635 | 36 | 1776 | 18 | 8 | 0.1086 | 1.0 | 0.2884 | 2.5 |  |  |  |
| MX-11\_16 | 1613 | 37 | 1819 | 19 | 11 | 0.1112 | 1.0 | 0.2841 | 2.6 |  |  |  |
| MX-11\_17 | 1636 | 38 | 1916 | 19 | 15 | 0.1173 | 1.1 | 0.2886 | 2.6 |  |  |  |
| MX-11\_18 | 1619 | 38 | 1805 | 18 | 10 | 0.1103 | 1.0 | 0.2853 | 2.7 |  |  |  |
| MX-11\_19 | 2168 | 74 | 2349 | 32 | 8 | 0.1502 | 1.9 | 0.3995 | 4.0 |  |  |  |
| MX-11\_20 | 2196 | 61 | 2426 | 17 | 9 | 0.1573 | 1.0 | 0.4055 | 3.3 |  |  |  |
| MX-11\_21 | 1674 | 43 | 1860 | 21 | 10 | 0.1138 | 1.2 | 0.2963 | 2.9 |  |  |  |
| MX-11\_22 | 1723 | 40 | 1831 | 24 | 6 | 0.1119 | 1.3 | 0.3061 | 2.6 |  |  |  |
| MX-11\_23 | 1988 | 56 | 2138 | 32 | 7 | 0.1330 | 1.8 | 0.3610 | 3.3 |  |  |  |
| MX-11\_24 | 2256 | 60 | 2346 | 20 | 4 | 0.1500 | 1.2 | 0.4187 | 3.1 | -4.6 | -2.1 | 2834 |
| MX-11\_25 | 1912 | 54 | 2128 | 42 | 10 | 0.1323 | 2.4 | 0.3450 | 3.3 |  |  |  |
| MX-11\_26 | 1966 | 72 | 2098 | 54 | 6 | 0.1300 | 3.1 | 0.3563 | 4.2 |  |  |  |
| MX-11\_27 | 1836 | 65 | 2085 | 29 | 12 | 0.1290 | 1.7 | 0.3292 | 4.1 |  |  |  |
| MX-11\_28 | 2041 | 70 | 2157 | 36 | 5 | 0.1345 | 2.1 | 0.3722 | 4.0 | -11.0 | -4.3 | 2913 |
| MX-11\_29 | 2058 | 105 | 2288 | 45 | 10 | 0.1451 | 2.6 | 0.3757 | 6.0 |  |  |  |

Table B-1. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | Err. | 206Pb | Err. | εHf(IA) | εHf(T) | Hf Model Age |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | (%) | 238U | (%) | \* | \*\* | (DM)a |
|  | age |  | age |  |  |  |  |  |  |  |  |  |
| MX-11\_30 | 1733 | 69 | 1943 | 40 | 11 | 0.1191 | 2.3 | 0.3081 | 4.5 |  |  |  |
| MX-11\_31 | 1831 | 83 | 2036 | 41 | 10 | 0.1255 | 2.3 | 0.3281 | 5.2 |  |  |  |
| MX-11\_32 | 1542 | 59 | 1841 | 30 | 16 | 0.1125 | 1.6 | 0.2699 | 4.3 |  |  |  |
| MX-11\_33 | 1762 | 51 | 2008 | 18 | 12 | 0.1236 | 1.0 | 0.3141 | 3.3 |  |  |  |
| MX-11\_34 | 1576 | 40 | 1783 | 18 | 12 | 0.1090 | 1.0 | 0.2766 | 2.8 |  |  |  |
| MX-11\_35 | 1251 | 36 | 1793 | 20 | 30 | 0.1096 | 1.1 | 0.2139 | 3.2 |  |  |  |
| MX-11\_36 | 2384 | 70 | 2432 | 25 | 2 | 0.1578 | 1.5 | 0.4471 | 3.5 | -5.5 | -5.0 | 2945 |
| MX-11\_37 | 1284 | 30 | 1766 | 19 | 27 | 0.1080 | 1.0 | 0.2202 | 2.6 |  |  |  |
| MX-11\_38 | 1687 | 40 | 1789 | 18 | 6 | 0.1094 | 1.0 | 0.2989 | 2.7 |  |  |  |
| MX-11\_39 | 2011 | 94 | 2191 | 69 | 8 | 0.1371 | 4.0 | 0.3658 | 5.4 |  |  |  |
| MX-11\_40 | 2059 | 49 | 2161 | 18 | 5 | 0.1347 | 1.1 | 0.3760 | 2.8 | -10.8 | -4.3 | 2922 |
| MX-11\_41 | 1765 | 38 | 1772 | 18 | 0 | 0.1083 | 1.0 | 0.3146 | 2.5 | -19.4 | -5.0 | 2965 |
| MX-11\_42 | 1673 | 46 | 1854 | 27 | 10 | 0.1133 | 1.5 | 0.2961 | 3.1 |  |  |  |
| MX-11\_43 | 2178 | 115 | 2296 | 75 | 5 | 0.1457 | 4.4 | 0.4016 | 6.3 | -9.0 | -5.5 | 2957 |
| MX-11\_44 | 1819 | 47 | 1775 | 18 | -3 | 0.1085 | 1.0 | 0.3257 | 3.0 |  |  |  |
| MX-11\_45 | 1620 | 45 | 1814 | 19 | 11 | 0.1109 | 1.0 | 0.2854 | 3.2 |  |  |  |
| MX-11\_46 | 2041 | 54 | 2179 | 19 | 6 | 0.1361 | 1.1 | 0.3722 | 3.1 |  |  |  |
| MX-11\_47 | 1646 | 39 | 1757 | 18 | 6 | 0.1074 | 1.0 | 0.2907 | 2.7 | -20.2 | -5.4 | 2973 |
| MX-11\_48 | 1911 | 46 | 2020 | 23 | 5 | 0.1244 | 1.3 | 0.3447 | 2.8 | -15.1 | -5.4 | 2959 |
| MX-11\_49 | 2283 | 63 | 2398 | 21 | 5 | 0.1547 | 1.2 | 0.4245 | 3.3 | -8.0 | -6.7 | 3024 |
| MX-11\_50 | 1568 | 37 | 1789 | 18 | 12 | 0.1094 | 1.0 | 0.2751 | 2.7 |  |  |  |
| MX-11\_51 | 1688 | 45 | 1794 | 20 | 6 | 0.1097 | 1.1 | 0.2990 | 3.1 |  |  |  |
| MX-11\_52 | 1718 | 39 | 1781 | 18 | 4 | 0.1089 | 1.0 | 0.3051 | 2.6 | -19.3 | -4.7 | 2942 |
| MX-11\_53 | 1898 | 51 | 2026 | 30 | 6 | 0.1248 | 1.7 | 0.3420 | 3.1 |  |  |  |
| MX-11\_54 | 2239 | 125 | 2332 | 78 | 4 | 0.1488 | 4.6 | 0.4149 | 6.6 | -6.6 | -3.8 | 2900 |
| MX-11\_55 | 2022 | 70 | 2232 | 34 | 9 | 0.1404 | 2.0 | 0.3681 | 4.0 |  |  |  |
| MX-11\_56 | 1777 | 40 | 1803 | 20 | 1 | 0.1102 | 1.1 | 0.3170 | 2.6 | -14.7 | -0.6 | 2779 |
| MX-11\_57 | 1790 | 46 | 1821 | 18 | 2 | 0.1113 | 1.0 | 0.3197 | 2.9 | -19.1 | -5.4 | 2968 |
| MX-11\_58 | 1757 | 47 | 1840 | 21 | 5 | 0.1125 | 1.1 | 0.3129 | 3.1 |  |  |  |
| MX-11\_59 | 1759 | 40 | 1829 | 18 | 4 | 0.1118 | 1.0 | 0.3134 | 2.6 | -14.8 | -1.5 | 2819 |
| MX-11\_60 | 1810 | 40 | 1888 | 19 | 4 | 0.1155 | 1.0 | 0.3238 | 2.5 |  |  |  |
| MX-18\_01 | 633 | 166 | 1785 | 18 | 65 | 0.1091 | 1.0 | 0.1032 | 27.7 |  |  |  |
| MX-18\_02 | 1205 | 33 | 1876 | 15 | 36 | 0.1148 | 0.8 | 0.2053 | 3.0 |  |  |  |
| MX-18\_03 | 1145 | 126 | 1773 | 17 | 35 | 0.1084 | 0.9 | 0.1943 | 12.0 |  |  |  |
| MX-18\_04 | 1234 | 86 | 1720 | 14 | 28 | 0.1053 | 0.8 | 0.2108 | 7.7 |  |  |  |
| MX-18\_05 | 985 | 86 | 1768 | 15 | 44 | 0.1081 | 0.8 | 0.1650 | 9.5 |  |  |  |
| MX-18\_06 | 1138 | 169 | 1781 | 30 | 36 | 0.1089 | 1.7 | 0.1929 | 16.3 |  |  |  |
| MX-18\_07 | 791 | 81 | 1767 | 14 | 55 | 0.1080 | 0.8 | 0.1304 | 10.9 |  |  |  |
| MX-18\_08 | 1153 | 138 | 1814 | 24 | 36 | 0.1109 | 1.3 | 0.1957 | 13.1 |  |  |  |
| MX-18\_09 | 613 | 25 | 1800 | 13 | 66 | 0.1100 | 0.7 | 0.0997 | 4.3 |  |  |  |
| MX-18\_10 | 1214 | 68 | 1751 | 14 | 31 | 0.1071 | 0.8 | 0.2070 | 6.1 |  |  |  |
| MX-18\_11 | 597 | 95 | 1844 | 30 | 68 | 0.1128 | 1.6 | 0.0969 | 16.8 |  |  |  |
| MX-18\_12 | 909 | 28 | 1677 | 15 | 46 | 0.1029 | 0.8 | 0.1513 | 3.3 |  |  |  |
| MX-18\_13 | 1055 | 27 | 1696 | 14 | 38 | 0.1040 | 0.8 | 0.1776 | 2.8 |  |  |  |
| MX-18\_14 | 974 | 46 | 1662 | 17 | 41 | 0.1021 | 0.9 | 0.1630 | 5.1 |  |  |  |
| MX-18\_15 | 919 | 65 | 1782 | 14 | 48 | 0.1090 | 0.8 | 0.1531 | 7.6 |  |  |  |

Table B-1. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | Err. | 206Pb | Err. | εHf(IA) | εHf(T) | Hf Model Age |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | (%) | 238U | (%) | \* | \*\* | (DM)a |
|  | age |  | age |  |  |  |  |  |  |  |  |  |
| MX-18\_16 | 612 | 18 | 1735 | 14 | 65 | 0.1062 | 0.8 | 0.0995 | 3.1 |  |  |  |
| MX-18\_17 | 1564 | 44 | 1874 | 37 | 17 | 0.1146 | 2.1 | 0.2743 | 3.1 |  |  |  |
| MX-18\_18 | 1215 | 60 | 1673 | 16 | 27 | 0.1027 | 0.8 | 0.2072 | 5.5 |  |  |  |
| MX-18\_19 | 1452 | 133 | 1769 | 15 | 18 | 0.1082 | 0.8 | 0.2525 | 10.3 |  |  |  |
| MX-18\_20 | 1220 | 46 | 1762 | 14 | 31 | 0.1078 | 0.8 | 0.2082 | 4.1 |  |  |  |
| MX-18\_21 | 1578 | 52 | 1757 | 16 | 10 | 0.1075 | 0.9 | 0.2772 | 3.7 | -12.2 | -12.5 | 2634 |
| MX-18\_22 | 960 | 77 | 1783 | 15 | 46 | 0.1090 | 0.8 | 0.1605 | 8.7 |  |  |  |
| MX-18\_23 | 1126 | 49 | 1734 | 16 | 35 | 0.1062 | 0.9 | 0.1906 | 4.8 |  |  |  |
| MX-18\_24 | 1107 | 74 | 1762 | 15 | 37 | 0.1078 | 0.8 | 0.1872 | 7.3 |  |  |  |
| MX-18\_25 | 1412 | 36 | 1805 | 14 | 22 | 0.1103 | 0.7 | 0.2446 | 2.8 |  |  |  |
| MX-18\_26 | 1105 | 48 | 1728 | 14 | 36 | 0.1058 | 0.8 | 0.1868 | 4.7 |  |  |  |
| MX-18\_27 | 1028 | 82 | 1795 | 29 | 43 | 0.1097 | 1.6 | 0.1727 | 8.7 |  |  |  |
| MX-18\_28 | 1011 | 108 | 1761 | 19 | 43 | 0.1077 | 1.1 | 0.1697 | 11.6 |  |  |  |
| MX-18\_29 | 1242 | 93 | 1769 | 14 | 30 | 0.1082 | 0.8 | 0.2123 | 8.2 |  |  |  |
| MX-18\_30 | 1566 | 62 | 1856 | 14 | 16 | 0.1135 | 0.7 | 0.2747 | 4.5 |  |  |  |
| MX-18\_31 | 1043 | 108 | 1754 | 15 | 41 | 0.1073 | 0.8 | 0.1755 | 11.2 |  |  |  |
| MX-18\_32 | 1304 | 94 | 1775 | 17 | 27 | 0.1085 | 0.9 | 0.2239 | 8.0 |  |  |  |
| MX-18\_33 | 1088 | 34 | 1707 | 15 | 36 | 0.1046 | 0.8 | 0.1838 | 3.3 |  |  |  |
| MX-18\_34 | 1460 | 92 | 1778 | 21 | 18 | 0.1087 | 1.2 | 0.2540 | 7.1 |  |  |  |
| MX-18\_35 | 1293 | 95 | 1755 | 16 | 26 | 0.1074 | 0.9 | 0.2219 | 8.2 |  |  |  |
| MX-18\_36 | 1515 | 49 | 1735 | 14 | 13 | 0.1062 | 0.8 | 0.2646 | 3.6 |  |  |  |
| MX-18\_37 | 1645 | 44 | 1733 | 14 | 5 | 0.1061 | 0.7 | 0.2904 | 3.1 | -12.9 | -12.6 | 2631 |
| MX-18\_38 | 925 | 76 | 1809 | 21 | 49 | 0.1106 | 1.2 | 0.1542 | 8.8 |  |  |  |
| MX-18\_39 | 1300 | 103 | 1760 | 15 | 26 | 0.1076 | 0.8 | 0.2232 | 8.8 |  |  |  |
| MX-18\_40 | 912 | 30 | 1747 | 14 | 48 | 0.1069 | 0.8 | 0.1519 | 3.5 |  |  |  |
| MX-18\_41 | 818 | 25 | 1743 | 15 | 53 | 0.1067 | 0.8 | 0.1351 | 3.3 |  |  |  |
| MX-18\_42 | 1357 | 77 | 1743 | 14 | 22 | 0.1066 | 0.7 | 0.2341 | 6.4 |  |  |  |
| MX-18\_43 | 2069 | 198 | 1854 | 16 | -12 | 0.1133 | 0.9 | 0.3780 | 11.3 |  |  |  |
| MX-18\_44 | 679 | 50 | 1834 | 25 | 63 | 0.1121 | 1.4 | 0.1110 | 7.7 |  |  |  |
| MX-18\_45 | 1670 | 66 | 1753 | 21 | 5 | 0.1072 | 1.1 | 0.2955 | 4.5 | -10.8 | -10.9 | 2556 |
| MX-18\_46 | 1612 | 113 | 1736 | 14 | 7 | 0.1062 | 0.8 | 0.2838 | 7.9 | -11.9 | -11.6 | 2582 |
| MX-18\_47 | 1019 | 36 | 1751 | 14 | 42 | 0.1071 | 0.7 | 0.1712 | 3.8 |  |  |  |
| MX-18\_48 | 1150 | 92 | 1749 | 14 | 34 | 0.1070 | 0.7 | 0.1951 | 8.8 |  |  |  |
| MX-18\_49 | 1269 | 42 | 1769 | 14 | 28 | 0.1082 | 0.7 | 0.2174 | 3.7 |  |  |  |
| MX-18\_50 | 630 | 20 | 1894 | 24 | 67 | 0.1159 | 1.3 | 0.1025 | 3.3 |  |  |  |
| MX-18\_51 | 1653 | 54 | 1744 | 14 | 5 | 0.1067 | 0.8 | 0.2921 | 3.7 | -9.9 | -9.8 | 2526 |
| MX-18\_52 | 1283 | 35 | 1745 | 14 | 26 | 0.1068 | 0.8 | 0.2201 | 3.0 |  |  |  |
| MX-18\_53 | 1612 | 97 | 1742 | 15 | 7 | 0.1066 | 0.8 | 0.2837 | 6.8 | -7.5 | -7.4 | 2422 |
| MX-18\_54 | 1268 | 113 | 1782 | 17 | 29 | 0.1090 | 0.9 | 0.2172 | 9.9 |  |  |  |
| MX-18\_55 | 1559 | 47 | 1759 | 14 | 11 | 0.1076 | 0.8 | 0.2733 | 3.4 |  |  |  |
| MX-18\_56 | 523 | 17 | 1820 | 15 | 71 | 0.1112 | 0.9 | 0.0844 | 3.4 |  |  |  |
| MX-18\_57 | 1790 | 53 | 1737 | 14 | -3 | 0.1063 | 0.8 | 0.3197 | 3.4 | -15.0 | -14.8 | 2720 |
| MX-18\_58 | 1056 | 42 | 1763 | 14 | 40 | 0.1078 | 0.8 | 0.1779 | 4.3 |  |  |  |
| MX-18\_59 | 1223 | 75 | 1752 | 14 | 30 | 0.1072 | 0.8 | 0.2087 | 6.8 |  |  |  |
| MX-18\_60 | 1023 | 40 | 1766 | 14 | 42 | 0.1080 | 0.7 | 0.1718 | 4.3 |  |  |  |
| MX-18\_61 | 562 | 58 | 1809 | 20 | 69 | 0.1106 | 1.1 | 0.0910 | 10.7 |  |  |  |

Table B-1. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | Err. | 206Pb | Err. | εHf(IA) | εHf(T) | Hf Model Age |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | (%) | 238U | (%) | \* | \*\* | (DM)a |
|  | age |  | age |  |  |  |  |  |  |  |  |  |
| MX-18\_62 | 1022 | 113 | 1638 | 16 | 38 | 0.1008 | 0.9 | 0.1716 | 12.0 |  |  |  |
| MX-18\_63 | 1033 | 90 | 1752 | 17 | 41 | 0.1072 | 0.9 | 0.1737 | 9.5 |  |  |  |
| MX-18\_64 | 1303 | 84 | 1776 | 13 | 27 | 0.1086 | 0.7 | 0.2238 | 7.1 |  |  |  |

\*εHf(IA) calculated for individual zircon 207Pb/206Pb ages.

\*\*εHf(T) calculated for crystallization age (Table 2-3).

aDepleted Mantle model ages were calculated using the model of Mueller et al. (2008).

Table B-2. Schist xenoliths, Grassrange, zircon LA-ICP-MS U-Pb data (Ma).

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | Err. | 206Pb | Err. | εHf(IA) | Hf Model Age |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | (%) | 238U | (%) | \* | (DM)a |
|  | age |  | age |  |  |  |  |  |  |  |  |
| HAL-1\_01 | 2335 | 54 | 2532 | 11.6 | 8 | 0.1674 | 0.7 | 0.4362 | 2.7 |  |  |
| HAL-1\_02 | 1809 | 139 | 2378 | 48.4 | 24 | 0.1528 | 2.8 | 0.3236 | 8.9 |  |  |
| HAL-1\_03 | 1351 | 32 | 1862 | 11.1 | 27 | 0.1139 | 0.6 | 0.2329 | 2.6 |  |  |
| HAL-1\_04 | 2175 | 87 | 2465 | 17.8 | 12 | 0.1609 | 1.1 | 0.4008 | 4.7 |  |  |
| HAL-1\_05 | 1044 | 35 | 1880 | 67.5 | 44 | 0.1150 | 3.8 | 0.1756 | 3.6 |  |  |
| HAL-1\_06 | 1588 | 83 | 1846 | 10.3 | 14 | 0.1129 | 0.6 | 0.2790 | 5.9 |  |  |
| HAL-1\_07 | 1844 | 46 | 1849 | 10.3 | 0 | 0.1131 | 0.6 | 0.3309 | 2.9 |  |  |
| HAL-1\_08 | 1356 | 38 | 2430 | 12.9 | 44 | 0.1576 | 0.8 | 0.2339 | 3.1 |  |  |
| HAL-1\_09 | 1674 | 45 | 2420 | 10.3 | 31 | 0.1567 | 0.6 | 0.2963 | 3.1 |  |  |
| HAL-1\_10 | 1020 | 167 | 1915 | 9.8 | 47 | 0.1172 | 0.5 | 0.1714 | 17.8 |  |  |
| HAL-1\_11 | 1171 | 88 | 1799 | 16.7 | 35 | 0.1100 | 0.9 | 0.1991 | 8.3 |  |  |
| HAL-1\_12 | 1005 | 94 | 2424 | 19.5 | 59 | 0.1570 | 1.2 | 0.1686 | 10.1 |  |  |
| HAL-1\_13 | 2297 | 64 | 2492 | 12.4 | 8 | 0.1635 | 0.7 | 0.4277 | 3.3 |  |  |
| HAL-1\_14 | 1541 | 211 | 2700 | 17.8 | 43 | 0.1852 | 1.1 | 0.2697 | 15.5 |  |  |
| HAL-1\_15 | 1740 | 52 | 2091 | 28.0 | 17 | 0.1295 | 1.6 | 0.3095 | 3.4 |  |  |
| HAL-1\_16 | 2022 | 149 | 2441 | 13.5 | 17 | 0.1587 | 0.8 | 0.3681 | 8.6 |  |  |
| HAL-1\_17 | 1180 | 42 | 2001 | 18.4 | 41 | 0.1230 | 1.0 | 0.2008 | 3.9 |  |  |
| HAL-1\_18 | 1709 | 59 | 1810 | 10.4 | 6 | 0.1106 | 0.6 | 0.3033 | 3.9 |  |  |
| HAL-1\_19 | 1344 | 72 | 2369 | 14.6 | 43 | 0.1520 | 0.9 | 0.2316 | 5.9 |  |  |
| HAL-1\_20 | 958 | 37 | 1947 | 9.8 | 51 | 0.1194 | 0.6 | 0.1600 | 4.2 |  |  |
| HAL-1\_21 | 2228 | 169 | 2521 | 41.7 | 12 | 0.1663 | 2.5 | 0.4125 | 9.0 |  |  |
| HAL-1\_22 | 1722 | 73 | 1830 | 10.3 | 6 | 0.1119 | 0.6 | 0.3060 | 4.9 |  |  |
| HAL-1\_23 | 896 | 65 | 1853 | 10.8 | 52 | 0.1133 | 0.6 | 0.1490 | 7.8 |  |  |
| HAL-1\_24 | 1223 | 63 | 1975 | 16.9 | 38 | 0.1213 | 1.0 | 0.2088 | 5.6 |  |  |
| HAL-1\_25 | 1784 | 97 | 1899 | 23.5 | 6 | 0.1162 | 1.3 | 0.3186 | 6.3 |  |  |
| HAL-1\_26 | 2226 | 65 | 2319 | 18.4 | 4 | 0.1476 | 1.1 | 0.4121 | 3.5 |  |  |
| HAL-1\_27 | 1026 | 34 | 2360 | 31.7 | 57 | 0.1512 | 1.9 | 0.1724 | 3.6 |  |  |
| HAL-1\_28 | 1622 | 131 | 2642 | 40.5 | 39 | 0.1789 | 2.4 | 0.2857 | 9.2 |  |  |
| HAL-1\_29 | 1237 | 50 | 1862 | 12.2 | 34 | 0.1139 | 0.7 | 0.2114 | 4.5 |  |  |
| HAL-1\_30 | 1832 | 80 | 1937 | 15.9 | 5 | 0.1187 | 0.9 | 0.3285 | 5.1 |  |  |
| HAL-1\_31 | 976 | 81 | 1859 | 9.8 | 48 | 0.1137 | 0.5 | 0.1632 | 9.0 |  |  |
| HAL-1\_32 | 1704 | 64 | 2402 | 25.7 | 29 | 0.1550 | 1.5 | 0.3024 | 4.3 |  |  |
| HAL-1\_33 | 1071 | 37 | 1898 | 11.6 | 44 | 0.1162 | 0.6 | 0.1805 | 3.8 |  |  |
| HAL-5\_01 | 2401 | 56 | 2678 | 9.7 | 10 | 0.1828 | 0.6 | 0.4509 | 2.8 | -5.5 | 3148 |
| HAL-5\_02 | 2691 | 58 | 2711 | 9.5 | 1 | 0.1864 | 0.6 | 0.5176 | 2.7 | 2.6 | 2865 |
| HAL-5\_03 | 1591 | 72 | 1922 | 12.6 | 17 | 0.1177 | 0.7 | 0.2796 | 5.1 |  |  |
| HAL-5\_04 | 1818 | 45 | 1842 | 10.7 | 1 | 0.1126 | 0.6 | 0.3255 | 2.9 | 8.9 | 1873 |
| HAL-5\_05 | 1577 | 75 | 1848 | 11.7 | 15 | 0.1130 | 0.7 | 0.2769 | 5.3 |  |  |
| HAL-5\_06 | 2142 | 51 | 2266 | 10.1 | 5 | 0.1432 | 0.6 | 0.3938 | 2.8 | -11.1 | 2999 |
| HAL-5\_07 | 1144 | 30 | 1909 | 15.2 | 40 | 0.1169 | 0.9 | 0.1940 | 2.9 |  |  |
| HAL-5\_08 | 339 | 11 | 2140 | 10.5 | 84 | 0.1331 | 0.6 | 0.0540 | 3.4 |  |  |
| HAL-5\_09 | 2995 | 64 | 3055 | 9.2 | 2 | 0.2304 | 0.6 | 0.5907 | 2.7 | 3.2 | 3143 |
| HAL-5\_10 | 1014 | 22 | 1972 | 10.5 | 49 | 0.1211 | 0.6 | 0.1702 | 2.3 |  |  |
| HAL-5\_11 | 2516 | 56 | 2586 | 9.7 | 3 | 0.1729 | 0.6 | 0.4769 | 2.7 | 0.6 | 2834 |
| HAL-5\_12 | 1770 | 48 | 2987 | 10.1 | 41 | 0.2209 | 0.6 | 0.3157 | 3.1 |  |  |
| HAL-5\_13 | 1647 | 50 | 1867 | 12.0 | 12 | 0.1142 | 0.7 | 0.2908 | 3.5 |  |  |

Table B-2. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | Err. | 206Pb | Err. | εHf(IA) | Hf Model Age |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | (%) | 238U | (%) | \* | (DM)a |
|  | age |  | age |  |  |  |  |  |  |  |  |
| HAL-5\_14 | 1886 | 47 | 3114 | 14.0 | 39 | 0.2391 | 0.9 | 0.3395 | 2.9 |  |  |
| HAL-5\_15 | 491 | 12 | 2526 | 12.9 | 81 | 0.1668 | 0.8 | 0.0791 | 2.6 |  |  |
| HAL-5\_16 | 1538 | 46 | 1898 | 17.2 | 19 | 0.1162 | 1.0 | 0.2692 | 3.4 |  |  |
| HAL-5\_17 | 1807 | 41 | 1902 | 11.0 | 5 | 0.1164 | 0.6 | 0.3233 | 2.6 | -4.5 | 2441 |
| HAL-5\_18 | 1897 | 50 | 2338 | 9.9 | 19 | 0.1493 | 0.6 | 0.3418 | 3.0 |  |  |
| HAL-5\_19 | 1126 | 100 | 2537 | 17.4 | 56 | 0.1679 | 1.0 | 0.1906 | 9.7 |  |  |
| HAL-5\_20 | 2406 | 65 | 2628 | 9.6 | 8 | 0.1773 | 0.6 | 0.4519 | 3.3 | -3.6 | 3032 |
| HAL-5\_21 | 1313 | 52 | 2101 | 15.4 | 38 | 0.1302 | 0.9 | 0.2256 | 4.3 |  |  |
| HAL-5\_22 | 2180 | 49 | 2647 | 10.3 | 18 | 0.1794 | 0.6 | 0.4020 | 2.7 |  |  |
| HAL-5\_23 | 2695 | 50 | 2686 | 9.7 | 0 | 0.1836 | 0.6 | 0.5184 | 2.3 | -3.9 | 3086 |
| HAL-5\_24 | 1533 | 61 | 1878 | 19.7 | 18 | 0.1149 | 1.1 | 0.2682 | 4.5 |  |  |
| HAL-5\_25 | 1758 | 43 | 1875 | 11.2 | 6 | 0.1147 | 0.6 | 0.3131 | 2.8 | -3.0 | 2360 |
| HAL-5\_26 | 1739 | 162 | 2037 | 19.0 | 15 | 0.1256 | 1.1 | 0.3094 | 10.7 |  |  |
| HAL-5\_27 | 1833 | 43 | 1900 | 11.1 | 3 | 0.1163 | 0.6 | 0.3287 | 2.7 | -2.7 | 2372 |
| HAL-5\_28 | 1969 | 70 | 2797 | 11.0 | 30 | 0.1965 | 0.7 | 0.3568 | 4.1 |  |  |
| HAL-5\_29 | 1314 | 86 | 1869 | 10.8 | 30 | 0.1143 | 0.6 | 0.2260 | 7.2 |  |  |
| HAL-5\_30 | 1242 | 28 | 2111 | 13.2 | 41 | 0.1309 | 0.8 | 0.2124 | 2.5 |  |  |
| HAL-5\_31 | 1868 | 58 | 1859 | 11.2 | 0 | 0.1137 | 0.6 | 0.3357 | 3.6 | 9.9 | 1850 |
| HAL-5\_32 | 933 | 36 | 2437 | 22.9 | 62 | 0.1583 | 1.4 | 0.1555 | 4.2 |  |  |
| HAL-5\_33 | 1617 | 84 | 1835 | 14.7 | 12 | 0.1122 | 0.8 | 0.2848 | 5.9 |  |  |
| HAL-5\_34 | 1969 | 65 | 2645 | 10.6 | 26 | 0.1792 | 0.6 | 0.3568 | 3.9 |  |  |
| HAL-5\_35 | 963 | 24 | 1904 | 10.9 | 49 | 0.1165 | 0.6 | 0.1610 | 2.7 |  |  |
| HAL-5\_36 | 1630 | 48 | 1820 | 10.8 | 10 | 0.1112 | 0.6 | 0.2875 | 3.3 |  |  |
| HAL-5\_37 | 1206 | 31 | 2184 | 15.5 | 45 | 0.1366 | 0.9 | 0.2055 | 2.8 |  |  |
| HAL-5\_38 | 1809 | 44 | 1871 | 11.7 | 3 | 0.1144 | 0.6 | 0.3237 | 2.8 | -3.1 | 2365 |
| HAL-5\_39 | 921 | 144 | 2430 | 18.6 | 62 | 0.1576 | 1.1 | 0.1535 | 16.9 |  |  |
| HAL-5\_40 | 2605 | 81 | 2664 | 15.6 | 2 | 0.1813 | 0.9 | 0.4974 | 3.8 | -0.3 | 2937 |
| HAL-5\_41 | 1505 | 85 | 2490 | 27.1 | 40 | 0.1633 | 1.6 | 0.2626 | 6.3 |  |  |
| HAL-5\_42 | 1993 | 140 | 2656 | 15.3 | 25 | 0.1803 | 0.9 | 0.3618 | 8.2 |  |  |
| HAL-5\_43 | 1196 | 50 | 2361 | 17.1 | 49 | 0.1513 | 1.0 | 0.2037 | 4.6 |  |  |
| HAL-5\_44 | 1818 | 100 | 2577 | 10.9 | 29 | 0.1720 | 0.7 | 0.3256 | 6.4 |  |  |
| HAL-5\_45 | 1765 | 120 | 2472 | 12.1 | 29 | 0.1616 | 0.7 | 0.3146 | 7.8 |  |  |
| HAL-5\_46 | 1628 | 89 | 3042 | 11.0 | 46 | 0.2286 | 0.7 | 0.2869 | 6.2 |  |  |
| HAL-5\_47 | 2552 | 80 | 2695 | 9.9 | 5 | 0.1847 | 0.6 | 0.4853 | 3.8 | 1.9 | 2879 |
| HAL-5\_48 | 1491 | 96 | 1853 | 11.2 | 20 | 0.1133 | 0.6 | 0.2601 | 7.2 |  |  |
| HAL-5\_49 | 759 | 39 | 1850 | 10.7 | 59 | 0.1131 | 0.6 | 0.1248 | 5.4 |  |  |
| HAL-5\_50 | 1843 | 49 | 1840 | 11.1 | 0 | 0.1125 | 0.6 | 0.3307 | 3.1 | 3.3 | 2094 |
| HAL-5\_51 | 1464 | 60 | 1896 | 12.7 | 23 | 0.1160 | 0.7 | 0.2548 | 4.6 |  |  |
| HAL-5\_52 | 1782 | 37 | 1854 | 10.5 | 4 | 0.1134 | 0.6 | 0.3181 | 2.4 | 6.1 | 1994 |
| HAL-5\_53 | 2416 | 98 | 2695 | 9.7 | 10 | 0.1846 | 0.6 | 0.4541 | 4.9 | 0.8 | 2920 |
| HAL-5\_54 | 891 | 29 | 2095 | 10.5 | 57 | 0.1297 | 0.6 | 0.1482 | 3.5 |  |  |
| HAL-5\_55 | 2313 | 51 | 2549 | 10.0 | 9 | 0.1692 | 0.6 | 0.4312 | 2.6 | -3.0 | 2939 |
| HAL-5\_56 | 1663 | 69 | 1858 | 11.4 | 10 | 0.1136 | 0.6 | 0.2941 | 4.7 | 4.2 | 2071 |
| HAL-5\_57 | 1930 | 58 | 2213 | 10.3 | 13 | 0.1389 | 0.6 | 0.3486 | 3.5 |  |  |
| HAL-5\_58 | 1046 | 162 | 1910 | 11.1 | 45 | 0.1170 | 0.6 | 0.1759 | 16.9 |  |  |
| HAL-5\_59 | 2116 | 55 | 2403 | 10.3 | 12 | 0.1551 | 0.6 | 0.3881 | 3.1 |  |  |

Table B-2. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | Err. | 206Pb | Err. | εHf(IA) | Hf Model Age |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | (%) | 238U | (%) | \* | (DM)a |
|  | age |  | age |  |  |  |  |  |  |  |  |
| HAL-6\_01 | 1639 | 53 | 1819 | 19.4 | 10 | 0.1112 | 1.1 | 0.2891 | 3.7 |  |  |
| HAL-6\_02 | 1073 | 40 | 1771 | 17.7 | 39 | 0.1083 | 1.0 | 0.1810 | 4.1 |  |  |
| HAL-6\_03 | 1309 | 44 | 2005 | 22.8 | 35 | 0.1233 | 1.3 | 0.2249 | 3.7 |  |  |
| HAL-6\_04 | 1530 | 56 | 1766 | 19.6 | 13 | 0.1080 | 1.1 | 0.2676 | 4.1 |  |  |
| HAL-6\_05 | 1365 | 144 | 1785 | 17.1 | 24 | 0.1091 | 0.9 | 0.2356 | 11.8 |  |  |
| HAL-6\_06 | 798 | 54 | 1794 | 20.3 | 55 | 0.1097 | 1.1 | 0.1317 | 7.1 |  |  |
| HAL-6\_07 | 889 | 49 | 1819 | 21.5 | 51 | 0.1112 | 1.2 | 0.1477 | 5.9 |  |  |
| HAL-6\_08 | 1625 | 55 | 1766 | 18.2 | 8 | 0.1080 | 1.0 | 0.2863 | 3.9 |  |  |
| HAL-6\_09 | 1266 | 58 | 1800 | 17.9 | 30 | 0.1100 | 1.0 | 0.2168 | 5.0 |  |  |
| HAL-6\_10 | 811 | 37 | 1963 | 55.5 | 59 | 0.1204 | 3.1 | 0.1340 | 4.8 |  |  |
| HAL-6\_11 | 844 | 28 | 2071 | 34.7 | 59 | 0.1280 | 2.0 | 0.1397 | 3.6 |  |  |
| HAL-6\_12 | 1478 | 54 | 2421 | 62.6 | 39 | 0.1568 | 3.7 | 0.2574 | 4.1 |  |  |
| HAL-6\_13 | 1616 | 71 | 1754 | 17.5 | 8 | 0.1073 | 1.0 | 0.2847 | 5.0 |  |  |
| HAL-6\_14 | 991 | 65 | 1791 | 19.3 | 45 | 0.1095 | 1.1 | 0.1660 | 7.1 |  |  |
| HAL-6\_15 | 1390 | 170 | 1939 | 16.4 | 28 | 0.1189 | 0.9 | 0.2404 | 13.7 |  |  |
| HAL-6\_16 | 1295 | 40 | 1968 | 19.7 | 34 | 0.1208 | 1.1 | 0.2223 | 3.4 |  |  |
| HAL-6\_17 | 1781 | 83 | 1871 | 16.7 | 5 | 0.1144 | 0.9 | 0.3179 | 5.3 |  |  |
| HAL-6\_18 | 932 | 42 | 2009 | 88.4 | 54 | 0.1236 | 5.0 | 0.1554 | 4.8 |  |  |
| HAL-6\_19 | 1509 | 65 | 1766 | 17.3 | 15 | 0.1080 | 0.9 | 0.2635 | 4.8 |  |  |
| HAL-6\_20 | 870 | 133 | 1869 | 18.6 | 53 | 0.1143 | 1.0 | 0.1444 | 16.4 |  |  |
| HAL-6\_21 | 1589 | 55 | 1756 | 18.6 | 10 | 0.1074 | 1.0 | 0.2792 | 3.9 |  |  |
| HAL-6\_22 | 903 | 47 | 2088 | 83.9 | 57 | 0.1293 | 4.8 | 0.1503 | 5.6 |  |  |
| HAL-6\_23 | 1592 | 141 | 1878 | 16.8 | 15 | 0.1149 | 0.9 | 0.2799 | 10.0 |  |  |
| HAL-6\_24 | 1063 | 34 | 1847 | 28.2 | 42 | 0.1129 | 1.6 | 0.1792 | 3.5 |  |  |
| HAL-6\_25 | 1547 | 80 | 2136 | 41.5 | 28 | 0.1328 | 2.4 | 0.2710 | 5.8 |  |  |
| HAL-6\_26 | 1654 | 52 | 1751 | 17.2 | 6 | 0.1071 | 0.9 | 0.2923 | 3.6 |  |  |
| HAL-6\_27 | 1454 | 55 | 1781 | 17.1 | 18 | 0.1089 | 0.9 | 0.2528 | 4.2 |  |  |
| HAL-6\_28 | 1474 | 52 | 1775 | 16.8 | 17 | 0.1085 | 0.9 | 0.2567 | 3.9 |  |  |
| HAL-6\_29 | 1480 | 77 | 1754 | 17.5 | 16 | 0.1073 | 1.0 | 0.2579 | 5.9 |  |  |
| HAL-6\_30 | 1622 | 59 | 1754 | 17.1 | 8 | 0.1073 | 0.9 | 0.2858 | 4.1 |  |  |
| HALa-2\_01 | 2055 | 82 | 2019 | 9 | -2 | 0.1243 | 0.5 | 0.3751 | 4.7 | -5.2 | 2582 |
| HALa-2\_02 | 2031 | 65 | 1978 | 8 | -3 | 0.1215 | 0.5 | 0.3699 | 3.7 | -4.3 | 2501 |
| HALa-2\_03 | 1684 | 82 | 1877 | 10 | 10 | 0.1148 | 0.6 | 0.2982 | 5.5 |  |  |
| HALa-2\_04 | 690 | 64 | 1911 | 9.2 | 64 | 0.1170 | 0.5 | 0.1128 | 9.8 |  |  |
| HALa-2\_05 | 1557 | 54 | 2031 | 8.5 | 23 | 0.1252 | 0.5 | 0.2730 | 3.9 |  |  |
| HALa-2\_06 | 800 | 23 | 1957 | 34.4 | 59 | 0.1200 | 1.9 | 0.1320 | 3.1 |  |  |
| HALa-2\_07 | 2741 | 82 | 2666 | 11 | -3 | 0.1815 | 0.7 | 0.5293 | 3.7 | 1.4 | 2874 |
| HALa-2\_08 | 781 | 32 | 2078 | 8.3 | 62 | 0.1285 | 0.5 | 0.1286 | 4.4 |  |  |
| HALa-2\_09 | 2659 | 78 | 2519 | 10.8 | -6 | 0.1662 | 0.6 | 0.5100 | 3.6 |  |  |
| HALa-2\_10 | 775 | 25 | 2058 | 38.2 | 62 | 0.1271 | 2.2 | 0.1277 | 3.5 |  |  |
| HALa-2\_11 | 1437 | 85 | 1862 | 12.2 | 23 | 0.1139 | 0.7 | 0.2494 | 6.6 |  |  |
| HALa-2\_12 | 1868 | 94 | 1989 | 10 | 6 | 0.1222 | 0.6 | 0.3359 | 5.8 | -1.1 | 2396 |
| HALa-2\_13 | 1339 | 161 | 1918 | 15.7 | 30 | 0.1174 | 0.9 | 0.2307 | 13.4 |  |  |
| HALa-2\_14 | 1314 | 94 | 1817 | 12.1 | 28 | 0.1110 | 0.7 | 0.2259 | 7.9 |  |  |
| HALa-2\_15 | 1894 | 78 | 1895 | 12 | 0 | 0.1159 | 0.6 | 0.3411 | 4.8 | -6.9 | 2528 |
| HALa-2\_16 | 1350 | 77 | 2486 | 79.3 | 46 | 0.1629 | 4.7 | 0.2328 | 6.3 |  |  |

Table B-2. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | Err. | 206Pb | Err. | εHf(IA) | Hf Model Age |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | (%) | 238U | (%) | \* | (DM)a |
|  | age |  | age |  |  |  |  |  |  |  |  |
| HALa-2\_17 | 1958 | 70 | 2252 | 9.3 | 13 | 0.1421 | 0.5 | 0.3546 | 4.1 |  |  |
| HALa-2\_18 | 1565 | 96 | 1866 | 9.5 | 16 | 0.1141 | 0.5 | 0.2745 | 6.9 |  |  |
| HALa-2\_19 | 1777 | 68 | 1868 | 9 | 5 | 0.1142 | 0.5 | 0.3171 | 4.4 | 6.8 | 1982 |
| HALa-2\_20 | 1210 | 47 | 1845 | 8.6 | 34 | 0.1128 | 0.5 | 0.2063 | 4.3 |  |  |
| HALa-2\_21 | 1927 | 60 | 1882 | 9 | -2 | 0.1152 | 0.5 | 0.3481 | 3.6 | -1.8 | 2332 |
| HALb-2\_01 | 1567 | 96 | 1886 | 14.1 | 17 | 0.1154 | 0.8 | 0.2749 | 6.9 |  |  |
| HALb-2\_02 | 996 | 36 | 1815 | 12.4 | 45 | 0.1109 | 0.7 | 0.1670 | 3.9 |  |  |
| HALb-2\_03 | 1240 | 69 | 1852 | 10.0 | 33 | 0.1133 | 0.6 | 0.2120 | 6.1 |  |  |
| HALb-2\_04 | 1079 | 45 | 1859 | 9.9 | 42 | 0.1137 | 0.6 | 0.1820 | 4.6 |  |  |
| HALb-2\_05 | 1649 | 50 | 2549 | 7.1 | 35 | 0.1691 | 0.4 | 0.2913 | 3.4 |  |  |
| HALb-2\_06 | 1715 | 55 | 2008 | 7.2 | 15 | 0.1236 | 0.4 | 0.3046 | 3.7 |  |  |
| HALb-2\_07 | 1514 | 99 | 2056 | 7.7 | 26 | 0.1269 | 0.4 | 0.2646 | 7.3 |  |  |
| HALb-2\_08 | 2527 | 76 | 2593 | 7.0 | 3 | 0.1736 | 0.4 | 0.4795 | 3.6 | 3.3 | 2738 |
| HALb-2\_09 | 1226 | 75 | 1906 | 8.8 | 36 | 0.1167 | 0.5 | 0.2093 | 6.8 |  |  |
| HALb-2\_10 | 2257 | 57 | 2513 | 7.0 | 10 | 0.1655 | 0.4 | 0.4189 | 3.0 | -0.2 | 2810 |
| HALb-2\_11 | 699 | 22 | 1754 | 8.4 | 60 | 0.1073 | 0.5 | 0.1143 | 3.3 |  |  |
| HALb-2\_12 | 1813 | 62 | 2029 | 7.4 | 11 | 0.1250 | 0.4 | 0.3246 | 3.9 |  |  |
| HALb-2\_13 | 1357 | 163 | 1919 | 14.1 | 29 | 0.1175 | 0.8 | 0.2341 | 13.4 |  |  |
| HALb-2\_14 | 2052 | 61 | 1970 | 7.7 | -4 | 0.1210 | 0.4 | 0.3744 | 3.5 | -7.2 | 2602 |
| HALb-2\_15 | 1255 | 47 | 1880 | 8.3 | 33 | 0.1150 | 0.5 | 0.2146 | 4.2 |  |  |
| HALb-2\_16 | 2097 | 77 | 2088 | 11.9 | 0 | 0.1293 | 0.7 | 0.3840 | 4.3 | -1.9 | 2500 |
| HALb-2\_17 | 1409 | 52 | 2047 | 17.7 | 31 | 0.1263 | 1.0 | 0.2441 | 4.1 |  |  |
| HALb-2\_18 | 1343 | 42 | 2068 | 37.8 | 35 | 0.1278 | 2.1 | 0.2314 | 3.5 |  |  |
| HALb-2\_19 | 1849 | 57 | 1848 | 8.0 | 0 | 0.1130 | 0.4 | 0.3320 | 3.6 | 6.7 | 1963 |
| HALb-2\_20 | 636 | 30 | 1964 | 8.1 | 68 | 0.1205 | 0.5 | 0.1036 | 5.0 |  |  |
| HALb-2\_21 | 1665 | 54 | 1818 | 9.8 | 8 | 0.1111 | 0.5 | 0.2945 | 3.7 | -11.4 | 2630 |
| HALb-2\_22 | 1801 | 100 | 1868 | 8.3 | 4 | 0.1142 | 0.5 | 0.3220 | 6.4 | -9.4 | 2603 |
| HALb-2\_23 | 1125 | 80 | 1910 | 11.0 | 41 | 0.1169 | 0.6 | 0.1905 | 7.7 |  |  |
| HALb-2\_24 | 1621 | 61 | 1907 | 14.2 | 15 | 0.1168 | 0.8 | 0.2856 | 4.3 |  |  |
| HALb-2\_25 | 1604 | 67 | 2430 | 9.5 | 34 | 0.1576 | 0.6 | 0.2823 | 4.7 |  |  |
| HALb-2\_26 | 1458 | 64 | 2389 | 18.8 | 39 | 0.1538 | 1.1 | 0.2535 | 4.9 |  |  |
| HALb-2\_27 | 1453 | 81 | 1842 | 9.3 | 21 | 0.1126 | 0.5 | 0.2526 | 6.2 |  |  |
| HALb-2\_28 | 1546 | 187 | 1827 | 10.9 | 15 | 0.1117 | 0.6 | 0.2708 | 13.7 |  |  |
| HALb-2\_29 | 1864 | 81 | 2553 | 12.0 | 27 | 0.1695 | 0.7 | 0.3350 | 5.0 |  |  |
| HALb-2\_30 | 1140 | 52 | 2005 | 26.4 | 43 | 0.1233 | 1.5 | 0.1934 | 5.0 |  |  |
| HALb-2\_31 | 1379 | 54 | 1836 | 9.3 | 25 | 0.1122 | 0.5 | 0.2384 | 4.4 |  |  |
| HALb-2\_32 | 2398 | 182 | 2628 | 10.9 | 9 | 0.1773 | 0.7 | 0.4501 | 9.1 | 0.9 | 2859 |
| HALb-2\_33 | 1636 | 126 | 1873 | 10.9 | 13 | 0.1146 | 0.6 | 0.2885 | 8.8 |  |  |
| HALb-2\_34 | 1164 | 66 | 1939 | 12.2 | 40 | 0.1188 | 0.7 | 0.1977 | 6.2 |  |  |
| HALb-2\_35 | 1473 | 104 | 1808 | 13.7 | 19 | 0.1105 | 0.8 | 0.2565 | 7.9 |  |  |
| HALb-2\_36 | 1432 | 55 | 2031 | 32.5 | 30 | 0.1252 | 1.8 | 0.2485 | 4.3 |  |  |
| HALb-2\_37 | 1164 | 39 | 1097 | 8.8 | -6 | 0.0761 | 0.4 | 0.1978 | 3.7 |  |  |
| MX-13\_01 | 2027 | 54 | 1932 | 17.1 | -5 | 0.1184 | 1.0 | 0.3692 | 3.1 | -9.9 | 2698 |
| MX-13\_02 | 2230 | 119 | 2496 | 34.3 | 11 | 0.1639 | 2.0 | 0.4128 | 6.3 |  |  |
| MX-13\_03 | 1585 | 70 | 2438 | 35.6 | 35 | 0.1583 | 2.1 | 0.2786 | 5.0 |  |  |
| MX-13\_04 | 1580 | 49 | 1862 | 7.5 | 15 | 0.1139 | 0.4 | 0.2775 | 3.5 |  |  |

Table B-2. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | Err. | 206Pb | Err. | εHf(IA) | Hf Model Age |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | (%) | 238U | (%) | \* | (DM)a |
|  | age |  | age |  |  |  |  |  |  |  |  |
| MX-13\_05 | 1809 | 148 | 2597 | 9.6 | 30 | 0.1740 | 0.6 | 0.3236 | 9.4 |  |  |
| MX-13\_06 | 1153 | 53 | 1875 | 8.1 | 38 | 0.1147 | 0.4 | 0.1957 | 5.0 |  |  |
| MX-13\_07 | 1330 | 61 | 2562 | 7.0 | 48 | 0.1704 | 0.4 | 0.2290 | 5.1 |  |  |
| MX-13\_08 | 1454 | 48 | 2153 | 12.2 | 32 | 0.1342 | 0.7 | 0.2529 | 3.7 |  |  |
| MX-13\_09 | 805 | 23 | 1867 | 7.6 | 57 | 0.1142 | 0.4 | 0.1329 | 3.0 |  |  |
| MX-13\_10 | 631 | 51 | 1961 | 9.9 | 68 | 0.1203 | 0.6 | 0.1027 | 8.4 |  |  |
| MX-13\_11 | 1187 | 45 | 2465 | 21.3 | 52 | 0.1609 | 1.3 | 0.2021 | 4.1 |  |  |
| MX-13\_12 | 1131 | 31 | 1870 | 7.6 | 40 | 0.1144 | 0.4 | 0.1916 | 3.0 |  |  |
| MX-13\_13 | 1551 | 191 | 2578 | 15.3 | 40 | 0.1721 | 0.9 | 0.2717 | 14.0 |  |  |
| MX-13\_14 | 1756 | 66 | 1864 | 7.5 | 6 | 0.1140 | 0.4 | 0.3128 | 4.3 | 2.8 | 2129 |
| MX-13\_15 | 1265 | 38 | 1851 | 7.8 | 32 | 0.1132 | 0.4 | 0.2166 | 3.3 |  |  |
| MX-13\_16 | 1410 | 53 | 2252 | 11.0 | 37 | 0.1420 | 0.6 | 0.2443 | 4.2 |  |  |
| MX-13\_17 | 484 | 27 | 1923 | 7.9 | 75 | 0.1178 | 0.4 | 0.0779 | 5.7 |  |  |
| MX-13\_18 | 2349 | 59 | 2406 | 8.2 | 2 | 0.1554 | 0.5 | 0.4392 | 3.0 | 0.6 | 2676 |
| MX-13\_19 | 1167 | 47 | 2084 | 8.2 | 44 | 0.1290 | 0.5 | 0.1984 | 4.4 |  |  |
| MX-13\_20 | 915 | 32 | 1844 | 42.6 | 50 | 0.1128 | 2.4 | 0.1524 | 3.7 |  |  |
| MX-13\_21 | 1026 | 31 | 1989 | 10.0 | 48 | 0.1222 | 0.6 | 0.1724 | 3.3 |  |  |
| MX-13\_22 | 1276 | 157 | 1910 | 7.5 | 33 | 0.1169 | 0.4 | 0.2187 | 13.7 |  |  |
| MX-13\_23 | 2282 | 52 | 2409 | 45.7 | 5 | 0.1557 | 2.7 | 0.4243 | 2.7 | -2.6 | 2804 |
| MX-13\_24 | 1183 | 35 | 1898 | 9.3 | 38 | 0.1162 | 0.5 | 0.2013 | 3.2 |  |  |
| MX-13\_25 | 1263 | 75 | 1981 | 7.8 | 36 | 0.1217 | 0.4 | 0.2162 | 6.5 |  |  |
| MX-13\_26 | 2009 | 44 | 3119 | 7.5 | 36 | 0.2398 | 0.5 | 0.3654 | 2.6 |  |  |
| MX-13\_27 | 917 | 102 | 2411 | 22.0 | 62 | 0.1558 | 1.3 | 0.1527 | 12.0 |  |  |
| MX-13\_28 | 1041 | 64 | 1868 | 9.4 | 44 | 0.1143 | 0.5 | 0.1750 | 6.7 |  |  |
| MX-13\_29 | 2027 | 62 | 2516 | 9.2 | 19 | 0.1658 | 0.5 | 0.3691 | 3.6 |  |  |
| MX-13\_30 | 782 | 25 | 1822 | 7.5 | 57 | 0.1114 | 0.4 | 0.1288 | 3.4 |  |  |
| MX-13\_31 | 1917 | 131 | 2311 | 8.6 | 17 | 0.1470 | 0.5 | 0.3460 | 8.0 |  |  |
| MX-13\_32 | 1757 | 78 | 2818 | 7.2 | 38 | 0.1990 | 0.4 | 0.3130 | 5.1 |  |  |
| MX-13\_33 | 1573 | 64 | 2466 | 7.7 | 36 | 0.1610 | 0.5 | 0.2761 | 4.6 |  |  |
| MX-13\_34 | 457 | 13 | 1780 | 40.8 | 74 | 0.1088 | 2.2 | 0.0735 | 3.0 |  |  |
| MX-13\_35 | 1433 | 43 | 1858 | 7.8 | 23 | 0.1136 | 0.4 | 0.2487 | 3.3 |  |  |
| MX-13\_36 | 1341 | 33 | 1857 | 7.5 | 28 | 0.1135 | 0.4 | 0.2311 | 2.8 |  |  |
| MX-13\_37 | 1831 | 49 | 2116 | 7.3 | 13 | 0.1314 | 0.4 | 0.3283 | 3.1 |  |  |
| MX-13\_38 | 870 | 51 | 1856 | 20.1 | 53 | 0.1135 | 1.1 | 0.1443 | 6.2 |  |  |
| MX-13\_39 | 2227 | 54 | 3375 | 7.5 | 34 | 0.2822 | 0.5 | 0.4123 | 2.9 |  |  |
| MX-13\_40 | 2546 | 59 | 3305 | 6.7 | 23 | 0.2697 | 0.4 | 0.4839 | 2.8 |  |  |
| MX-13\_41 | 2516 | 80 | 3269 | 15.6 | 23 | 0.2638 | 1.0 | 0.4769 | 3.9 |  |  |
| MX-13\_42 | 1885 | 51 | 1985 | 7.4 | 5 | 0.1220 | 0.4 | 0.3393 | 3.1 | -3.8 | 2483 |
| MX-13\_43 | 1780 | 50 | 1890 | 7.9 | 6 | 0.1156 | 0.4 | 0.3177 | 3.2 | -1.4 | 2310 |
| MX-13\_44 | 1857 | 49 | 1867 | 9.1 | 1 | 0.1142 | 0.5 | 0.3336 | 3.1 | -0.7 | 2268 |
| MX-13\_45 | 2059 | 49 | 2525 | 6.9 | 18 | 0.1667 | 0.4 | 0.3759 | 2.8 |  |  |
| MX-13\_46 | 1778 | 44 | 1849 | 7.7 | 4 | 0.1130 | 0.4 | 0.3172 | 2.8 | 2.8 | 2133 |
| MX-13\_47 | 865 | 55 | 1871 | 8.2 | 54 | 0.1144 | 0.5 | 0.1434 | 6.8 |  |  |
| MX-13\_48 | 658 | 22 | 2008 | 38.2 | 67 | 0.1236 | 2.2 | 0.1074 | 3.5 |  |  |
| MX-13\_49 | 655 | 17 | 1819 | 11.0 | 64 | 0.1112 | 0.6 | 0.1068 | 2.8 |  |  |
| MX-13\_50 | 928 | 27 | 1855 | 7.7 | 50 | 0.1134 | 0.4 | 0.1546 | 3.1 |  |  |

Table B-2. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | Err. | 206Pb | Err. | εHf(IA) | Hf Model Age |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | (%) | 238U | (%) | \* | (DM)a |
|  | age |  | age |  |  |  |  |  |  |  |  |
| MX-13\_51 | 1464 | 46 | 2552 | 11.1 | 43 | 0.1694 | 0.7 | 0.2548 | 3.5 |  |  |
| MX-13\_52 | 1664 | 73 | 2587 | 15.8 | 36 | 0.1730 | 0.9 | 0.2941 | 5.0 |  |  |
| MX-13\_53 | 1663 | 41 | 1893 | 7.6 | 12 | 0.1158 | 0.4 | 0.2940 | 2.8 |  |  |

\*εHf(IA) calculated for individual zircon 207Pb/206Pb ages.

aDM model ages were calculated using the model of Mueller et al. (2008).

Table B-3. Quartzite xenoliths, Grassrange, zircon LA-ICP-MS U-Pb data (Ma).

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | Err. | 206Pb | Err. | εHf(IA) | Hf Model Age |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | (%) | 238U | (%) | \* | (DM)a |
|  | age |  | age |  |  |  |  |  |  |  |  |
| MX-12\_01 | 1715 | 51 | 1888 | 25 | 9 | 0.1155 | 1.4 | 0.3044 | 3.4 | 0.8 | 2224 |
| MX-12\_02 | 1823 | 48 | 1873 | 15 | 3 | 0.1146 | 0.8 | 0.3266 | 3.0 | -4.7 | 2384 |
| MX-12\_03 | 1713 | 110 | 2003 | 20 | 14 | 0.1232 | 1.2 | 0.3042 | 7.3 |  |  |
| MX-12\_04 | 2500 | 55 | 2600 | 13 | 4 | 0.1744 | 0.8 | 0.4732 | 2.7 | 1.3 | 2817 |
| MX-12\_05 | 1771 | 48 | 2284 | 28 | 22 | 0.1447 | 1.6 | 0.3158 | 3.1 |  |  |
| MX-12\_06 | 993 | 42 | 1904 | 15 | 48 | 0.1165 | 0.8 | 0.1664 | 4.6 |  |  |
| MX-12\_07 | 1739 | 42 | 1879 | 15 | 7 | 0.1149 | 0.9 | 0.3093 | 2.8 | -5.4 | 2473 |
| MX-12\_08 | 1723 | 49 | 1833 | 15 | 6 | 0.1121 | 0.9 | 0.3062 | 3.2 | 5.8 | 1988 |
| MX-12\_09 | 1459 | 52 | 1836 | 15 | 21 | 0.1122 | 0.8 | 0.2537 | 4.0 |  |  |
| MX-12\_10 | 1511 | 52 | 1906 | 15 | 21 | 0.1167 | 0.8 | 0.2638 | 3.9 |  |  |
| MX-12\_11 | 2045 | 93 | 2261 | 33 | 10 | 0.1427 | 1.9 | 0.3730 | 5.3 |  |  |
| MX-12\_12 | 1039 | 27 | 1847 | 15 | 44 | 0.1129 | 0.8 | 0.1748 | 2.8 |  |  |
| MX-12\_13 | 2281 | 68 | 2423 | 17 | 6 | 0.1570 | 1.0 | 0.4240 | 3.6 | -8.1 | 3027 |
| MX-12\_14 | 1686 | 39 | 1837 | 17 | 8 | 0.1123 | 0.9 | 0.2986 | 2.6 | 1.3 | 2169 |
| MX-12\_15 | 2076 | 54 | 2318 | 40 | 10 | 0.1476 | 2.3 | 0.3796 | 3.0 |  |  |
| MX-12\_16 | 1213 | 36 | 1883 | 15 | 36 | 0.1152 | 0.8 | 0.2069 | 3.3 |  |  |
| MX-12\_17 | 2070 | 60 | 2085 | 15 | 1 | 0.1290 | 0.8 | 0.3784 | 3.4 | -3.3 | 2550 |
| MX-12\_18 | 1924 | 49 | 1902 | 15 | -1 | 0.1164 | 0.8 | 0.3475 | 2.9 | -14.4 | 2811 |
| MX-12\_19 | 1846 | 51 | 1866 | 15 | 1 | 0.1141 | 0.8 | 0.3313 | 3.2 | -3.7 | 2364 |
| MX-12\_20 | 2655 | 63 | 2685 | 13 | 1 | 0.1835 | 0.8 | 0.5091 | 2.9 | -1.5 | 2999 |
| MX-12\_21 | 1614 | 42 | 2063 | 18 | 22 | 0.1275 | 1.0 | 0.2843 | 2.9 |  |  |
| MX-12\_22 | 1620 | 44 | 1860 | 15 | 13 | 0.1137 | 0.8 | 0.2854 | 3.1 |  |  |
| MX-12\_23 | 808 | 26 | 1859 | 15 | 56 | 0.1137 | 0.8 | 0.1335 | 3.5 |  |  |
| MX-12\_24 | 2112 | 67 | 2302 | 15 | 8 | 0.1462 | 0.9 | 0.3872 | 3.8 | -0.1 | 2628 |
| MX-12\_25 | 1106 | 27 | 1896 | 15 | 42 | 0.1161 | 0.9 | 0.1869 | 2.6 |  |  |
| MX-12\_26 | 1381 | 75 | 1826 | 16 | 24 | 0.1116 | 0.9 | 0.2387 | 6.1 |  |  |
| MX-12\_27 | 1563 | 49 | 1805 | 16 | 13 | 0.1104 | 0.9 | 0.2742 | 3.6 |  |  |
| MX-12\_28 | 2541 | 59 | 2668 | 14 | 5 | 0.1816 | 0.8 | 0.4827 | 2.8 | 1.3 | 2878 |
| MX-12\_29 | 2320 | 51 | 2541 | 15 | 9 | 0.1683 | 0.9 | 0.4327 | 2.6 | -2.5 | 2911 |
| MX-12\_30 | 1139 | 51 | 1978 | 15 | 42 | 0.1215 | 0.9 | 0.1931 | 4.9 |  |  |
| MX-12\_31 | 1198 | 36 | 1282 | 17 | 7 | 0.0836 | 0.9 | 0.2041 | 3.3 | 3.5 | 1610 |
| MX-12\_32 | 1254 | 50 | 1915 | 15 | 35 | 0.1173 | 0.8 | 0.2145 | 4.4 |  |  |
| MX-12\_33 | 1520 | 37 | 2010 | 15 | 24 | 0.1237 | 0.9 | 0.2656 | 2.8 |  |  |
| MX-12\_34 | 1331 | 41 | 1935 | 15 | 31 | 0.1186 | 0.8 | 0.2291 | 3.4 |  |  |
| MX-12\_35 | 1696 | 38 | 2162 | 15 | 22 | 0.1348 | 0.8 | 0.3007 | 2.5 |  |  |
| MX-12\_36 | 1533 | 40 | 1897 | 15 | 19 | 0.1161 | 0.8 | 0.2683 | 2.9 |  |  |
| MX-12\_37 | 816 | 38 | 1784 | 16 | 54 | 0.1091 | 0.9 | 0.1349 | 5.0 |  |  |
| MX-12\_38 | 1048 | 46 | 2427 | 14 | 57 | 0.1573 | 0.8 | 0.1764 | 4.8 |  |  |
| MX-12\_39 | 1637 | 69 | 1857 | 21 | 12 | 0.1135 | 1.2 | 0.2888 | 4.8 |  |  |
| MX-12\_40 | 1309 | 130 | 1859 | 16 | 30 | 0.1137 | 0.9 | 0.2249 | 11.0 |  |  |
| MX-12\_41 | 2360 | 60 | 2571 | 14 | 8 | 0.1714 | 0.8 | 0.4417 | 3.1 |  |  |
| MX-12\_42 | 1846 | 41 | 1887 | 15 | 2 | 0.1155 | 0.8 | 0.3312 | 2.5 | -3.8 | 2397 |
| MX-12\_43 | 1834 | 45 | 1867 | 18 | 2 | 0.1142 | 1.0 | 0.3289 | 2.8 | -2.3 | 2325 |
| MX-12\_44 | 1312 | 40 | 1877 | 16 | 30 | 0.1148 | 0.9 | 0.2256 | 3.3 |  |  |
| MX-12\_45 | 2493 | 53 | 2575 | 15 | 3 | 0.1717 | 0.9 | 0.4717 | 2.6 | 2.9 | 2737 |
| MX-12\_46 | 1839 | 45 | 1867 | 15 | 1 | 0.1142 | 0.9 | 0.3299 | 2.8 | -3.6 | 2381 |

Table B-3. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | Err. | 206Pb | Err. | εHf(IA) | Hf Model Age |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | (%) | 238U | (%) | \* | (DM)a |
|  | age |  | age |  |  |  |  |  |  |  |  |
| MX-12\_47 | 1824 | 44 | 1879 | 17 | 3 | 0.1149 | 0.9 | 0.3267 | 2.8 | 3.1 | 2128 |
| MX-12\_48 | 1693 | 46 | 1871 | 15 | 10 | 0.1144 | 0.8 | 0.3000 | 3.1 |  |  |
| MX-12\_49 | 708 | 26 | 1672 | 16 | 58 | 0.1026 | 0.8 | 0.1160 | 4.0 |  |  |
| MX-12\_50 | 2448 | 55 | 2490 | 14 | 2 | 0.1633 | 0.8 | 0.4614 | 2.7 | 2.5 | 2680 |
| MX-12\_51 | 1784 | 47 | 1860 | 18 | 4 | 0.1137 | 1.0 | 0.3185 | 3.0 | -4.1 | 2409 |
| MX-12\_52 | 1978 | 62 | 2270 | 16 | 13 | 0.1435 | 0.9 | 0.3587 | 3.6 |  |  |
| MX-12\_53 | 2510 | 57 | 2599 | 14 | 3 | 0.1743 | 0.8 | 0.4757 | 2.8 | 1.2 | 2823 |
| MX-12\_54 | 1826 | 49 | 1868 | 18 | 2 | 0.1142 | 1.0 | 0.3272 | 3.1 | 5.5 | 2031 |
| MX-12\_55 | 1594 | 46 | 1856 | 15 | 14 | 0.1135 | 0.9 | 0.2802 | 3.3 |  |  |
| MX-12\_56 | 2397 | 57 | 2497 | 14 | 4 | 0.1639 | 0.8 | 0.4499 | 2.8 | -4.0 | 2932 |
| MX-12\_57 | 1428 | 47 | 1799 | 21 | 21 | 0.1100 | 1.2 | 0.2477 | 3.7 |  |  |
| MX-12\_58 | 1908 | 50 | 1958 | 19 | 3 | 0.1201 | 1.1 | 0.3442 | 3.0 | -1.5 | 2374 |
| MX-12\_59 | 1862 | 46 | 1886 | 15 | 1 | 0.1154 | 0.8 | 0.3346 | 2.8 | -0.5 | 2270 |
| MX-12\_60 | 2441 | 57 | 2501 | 15 | 2 | 0.1644 | 0.9 | 0.4598 | 2.8 | 2.3 | 2698 |
| MX-16\_01 | 1735 | 50 | 1871 | 12 | 7 | 0.1144 | 0.7 | 0.3085 | 3.3 | 9.3 | 1883 |
| MX-16\_02 | 1641 | 44 | 1777 | 13 | 8 | 0.1087 | 0.7 | 0.2896 | 3.0 | -0.8 | 2191 |
| MX-16\_03 | 1314 | 130 | 1801 | 15 | 27 | 0.1101 | 0.8 | 0.2259 | 11.0 |  |  |
| MX-16\_04 | 1710 | 48 | 1838 | 11 | 7 | 0.1123 | 0.6 | 0.3034 | 3.2 | -8.2 | 2529 |
| MX-16\_05 | 1702 | 49 | 1826 | 14 | 7 | 0.1116 | 0.8 | 0.3019 | 3.3 | -5.9 | 2423 |
| MX-16\_06 | 1564 | 77 | 1852 | 12 | 16 | 0.1132 | 0.7 | 0.2743 | 5.5 |  |  |
| MX-16\_07 | 1697 | 51 | 1842 | 11 | 8 | 0.1126 | 0.6 | 0.3009 | 3.4 | -5.5 | 2423 |
| MX-16\_08 | 1699 | 44 | 1834 | 16 | 7 | 0.1121 | 0.9 | 0.3013 | 2.9 | -7.2 | 2483 |
| MX-16\_09 | 1061 | 32 | 1210 | 13 | 12 | 0.0805 | 0.7 | 0.1787 | 3.3 |  |  |
| MX-16\_10 | 1414 | 41 | 1662 | 12 | 15 | 0.1021 | 0.6 | 0.2451 | 3.3 |  |  |
| MX-16\_11 | 931 | 28 | 1018 | 13 | 9 | 0.0732 | 0.7 | 0.1553 | 3.3 | 3.7 | 1374 |
| MX-16\_12 | 1850 | 48 | 1995 | 13 | 7 | 0.1227 | 0.8 | 0.3321 | 3.0 | 3.6 | 2213 |
| MX-16\_13 | 975 | 28 | 1075 | 12 | 9 | 0.0752 | 0.6 | 0.1632 | 3.1 | 8.0 | 1247 |
| MX-16\_14 | 943 | 31 | 1037 | 22 | 9 | 0.0738 | 1.1 | 0.1575 | 3.6 | -1.2 | 1575 |
| MX-16\_15 | 1690 | 50 | 1871 | 16 | 10 | 0.1144 | 0.9 | 0.2995 | 3.4 |  |  |
| MX-16\_16 | 1973 | 56 | 2086 | 10 | 5 | 0.1291 | 0.6 | 0.3578 | 3.3 | -2.9 | 2536 |
| MX-16\_17 | 1707 | 46 | 1872 | 19 | 9 | 0.1145 | 1.1 | 0.3028 | 3.1 |  |  |
| MX-16\_18 | 1927 | 52 | 2088 | 11 | 8 | 0.1293 | 0.6 | 0.3481 | 3.1 | -11.7 | 2870 |
| MX-16\_19 | 2479 | 65 | 2607 | 10 | 5 | 0.1751 | 0.6 | 0.4685 | 3.2 | -2.9 | 2983 |
| MX-16\_20 | 2654 | 69 | 2852 | 12 | 7 | 0.2032 | 0.8 | 0.5089 | 3.2 |  |  |
| MX-16\_21 | 1719 | 47 | 1853 | 12 | 7 | 0.1133 | 0.7 | 0.3053 | 3.1 | -3.5 | 2360 |
| MX-16\_22 | 150 | 4 | 441 | 120 | 66 | 0.0557 | 5.4 | 0.0235 | 2.8 |  |  |
| MX-16\_23 | 2544 | 62 | 2705 | 10 | 6 | 0.1858 | 0.6 | 0.4834 | 3.0 | -4.4 | 3123 |
| MX-16\_24 | 1682 | 45 | 1784 | 11 | 6 | 0.1091 | 0.6 | 0.2979 | 3.1 | -6.7 | 2428 |
| MX-16\_25 | 2611 | 67 | 2724 | 10 | 4 | 0.1879 | 0.6 | 0.4988 | 3.1 | 1.5 | 2918 |
| MX-16\_26 | 1638 | 49 | 1808 | 18 | 9 | 0.1105 | 1.0 | 0.2891 | 3.4 |  |  |
| MX-16\_27 | 1502 | 53 | 1831 | 11 | 18 | 0.1119 | 0.6 | 0.2622 | 4.0 |  |  |
| MX-16\_28 | 221 | 7 | 404 | 104 | 45 | 0.0548 | 4.6 | 0.0349 | 3.3 |  |  |
| MX-16\_29 | 232 | 7 | 316 | 28 | 27 | 0.0527 | 1.3 | 0.0366 | 3.3 |  |  |
| MX-16\_30 | 1718 | 58 | 1858 | 15 | 8 | 0.1136 | 0.8 | 0.3050 | 3.8 | -4.4 | 2405 |
| MX-16\_31 | 1679 | 53 | 1774 | 11 | 5 | 0.1085 | 0.6 | 0.2973 | 3.6 | -1.1 | 2206 |
| MX-16\_32 | 1814 | 56 | 1918 | 13 | 5 | 0.1175 | 0.8 | 0.3246 | 3.5 | -8.4 | 2599 |

Table B-3. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | Err. | 206Pb | Err. | εHf(IA) | Hf Model Age |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | (%) | 238U | (%) | \* | (DM)a |
|  | age |  | age |  |  |  |  |  |  |  |  |
| MX-16\_33 | 386 | 13 | 680 | 35 | 43 | 0.0622 | 1.6 | 0.0616 | 3.6 |  |  |
| MX-16\_34 | 2049 | 49 | 2476 | 10 | 17 | 0.1619 | 0.6 | 0.3737 | 2.8 |  |  |
| MX-16\_35 | 1721 | 52 | 1842 | 16 | 7 | 0.1126 | 0.9 | 0.3057 | 3.5 | -8.6 | 2544 |
| MX-16\_36 | 1982 | 55 | 2072 | 13 | 4 | 0.1281 | 0.7 | 0.3596 | 3.2 | -1.9 | 2487 |
| MX-16\_37 | 2503 | 68 | 2611 | 11 | 4 | 0.1755 | 0.6 | 0.4739 | 3.3 | 3.1 | 2762 |
| MX-17\_01 | 1805 | 55 | 1895 | 16 | 5 | 0.1160 | 0.9 | 0.3228 | 3.5 | -8.4 | 2589 |
| MX-17\_02 | 1785 | 60 | 1819 | 16 | 2 | 0.1112 | 0.9 | 0.3187 | 3.8 | 0.5 | 2194 |
| MX-17\_03 | 1688 | 81 | 1889 | 16 | 11 | 0.1156 | 0.9 | 0.2990 | 5.5 |  |  |
| MX-17\_04 | 1669 | 88 | 2458 | 20 | 32 | 0.1602 | 1.2 | 0.2952 | 6.0 |  |  |
| MX-17\_05 | 1557 | 75 | 1861 | 17 | 16 | 0.1138 | 0.9 | 0.2729 | 5.4 |  |  |
| MX-17\_06 | 2552 | 79 | 2690 | 15 | 5 | 0.1841 | 0.9 | 0.4853 | 3.8 | 0.7 | 2924 |
| MX-17\_07 | 1831 | 60 | 1866 | 15 | 2 | 0.1141 | 0.9 | 0.3282 | 3.8 | 5.8 | 2021 |
| MX-17\_08 | 2535 | 77 | 2683 | 15 | 6 | 0.1833 | 0.9 | 0.4813 | 3.7 | -1.0 | 2987 |
| MX-17\_09 | 1779 | 62 | 2241 | 26 | 21 | 0.1411 | 1.5 | 0.3174 | 4.0 |  |  |
| MX-17\_10 | 724 | 28 | 1846 | 15 | 61 | 0.1129 | 0.8 | 0.1187 | 4.2 |  |  |
| MX-17\_11 | 1491 | 39 | 2005 | 13 | 26 | 0.1233 | 0.7 | 0.2599 | 3.0 |  |  |
| MX-17\_12 | 2333 | 66 | 2358 | 15 | 1 | 0.1511 | 0.9 | 0.4356 | 3.4 | 0.3 | 2661 |
| MX-17\_13 | 1370 | 38 | 1898 | 13 | 28 | 0.1162 | 0.7 | 0.2365 | 3.1 |  |  |
| MX-17\_14 | 722 | 27 | 1872 | 24 | 61 | 0.1145 | 1.3 | 0.1184 | 4.0 |  |  |
| MX-17\_15 | 1831 | 53 | 1834 | 12 | 0 | 0.1121 | 0.7 | 0.3282 | 3.3 | 4.1 | 2072 |
| MX-17\_16 | 1738 | 58 | 1850 | 12 | 6 | 0.1131 | 0.7 | 0.3091 | 3.8 |  |  |
| MX-17\_17 | 1843 | 54 | 1850 | 12 | 0 | 0.1131 | 0.7 | 0.3307 | 3.4 | 5.4 | 2030 |
| MX-17\_18 | 1850 | 55 | 1822 | 12 | -2 | 0.1114 | 0.7 | 0.3320 | 3.4 | 6.8 | 1950 |
| MX-17\_19 | 1812 | 45 | 2326 | 12 | 22 | 0.1483 | 0.7 | 0.3243 | 2.8 |  |  |
| MX-17\_20 | 1824 | 47 | 2025 | 12 | 10 | 0.1247 | 0.7 | 0.3268 | 3.0 |  |  |
| MX-17\_21 | 2278 | 58 | 2574 | 12 | 11 | 0.1716 | 0.7 | 0.4235 | 3.0 |  |  |
| MX-17\_22 | 1795 | 55 | 1881 | 12 | 5 | 0.1151 | 0.7 | 0.3207 | 3.5 | -4.2 | 2408 |
| MX-17\_23 | 1906 | 61 | 2030 | 12 | 6 | 0.1251 | 0.7 | 0.3437 | 3.7 | -7.4 | 2661 |
| MX-17\_24 | 2551 | 72 | 2669 | 11 | 4 | 0.1818 | 0.7 | 0.4850 | 3.4 | 0.0 | 2923 |
| MX-17\_25 | 1563 | 37 | 2100 | 16 | 26 | 0.1301 | 0.9 | 0.2741 | 2.7 |  |  |
| MX-17\_26 | 1741 | 47 | 1847 | 12 | 6 | 0.1129 | 0.7 | 0.3097 | 3.1 | 2.8 | 2119 |
| MX-17\_27 | 1773 | 58 | 1870 | 12 | 5 | 0.1144 | 0.7 | 0.3163 | 3.8 | 0.9 | 2206 |
| MX-17\_28 | 1886 | 42 | 1962 | 14 | 4 | 0.1204 | 0.8 | 0.3395 | 2.5 | -0.7 | 2348 |
| MX-17\_29 | 1742 | 39 | 1900 | 12 | 8 | 0.1163 | 0.7 | 0.3099 | 2.5 | 0.2 | 2253 |
| MX-17\_30 | 1661 | 46 | 1817 | 12 | 9 | 0.1111 | 0.7 | 0.2936 | 3.1 | -0.6 | 2217 |
| MX-17\_31 | 1052 | 38 | 2133 | 11 | 51 | 0.1326 | 0.7 | 0.1771 | 3.9 |  |  |
| MX-17\_32 | 1999 | 62 | 2009 | 13 | 0 | 0.1236 | 0.7 | 0.3632 | 3.6 | -4.6 | 2529 |
| MX-17\_33 | 1826 | 58 | 1886 | 12 | 3 | 0.1154 | 0.7 | 0.3271 | 3.6 | -9.5 | 2610 |
| MX-17\_34 | 1786 | 57 | 1814 | 12 | 2 | 0.1109 | 0.7 | 0.3189 | 3.7 | -0.1 | 2199 |
| MX-17\_35 | 2167 | 61 | 2498 | 13 | 13 | 0.1641 | 0.8 | 0.3992 | 3.3 |  |  |
| MX-17\_36 | 1790 | 52 | 1859 | 13 | 4 | 0.1137 | 0.7 | 0.3198 | 3.4 | -4.8 | 2408 |
| MX-17\_37 | 1486 | 100 | 1838 | 14 | 19 | 0.1124 | 0.8 | 0.2590 | 7.6 |  |  |
| MX-17\_38 | 1346 | 67 | 1814 | 16 | 26 | 0.1109 | 0.9 | 0.2319 | 5.5 |  |  |
| MX-17\_39 | 2458 | 123 | 2688 | 11 | 9 | 0.1839 | 0.7 | 0.4636 | 6.0 |  |  |
| MX-17\_40 | 1473 | 65 | 2263 | 38 | 35 | 0.1429 | 2.2 | 0.2565 | 5.0 |  |  |
| MX-17\_41 | 2187 | 65 | 2388 | 13 | 8 | 0.1537 | 0.8 | 0.4036 | 3.5 |  |  |

Table B-3. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | Err. | 206Pb | Err. | εHf(IA) | Hf Model Age |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | (%) | 238U | (%) | \* | (DM)a |
|  | age |  | age |  |  |  |  |  |  |  |  |
| MX-17\_42 | 1524 | 65 | 2403 | 17 | 37 | 0.1551 | 1.0 | 0.2664 | 4.8 |  |  |
| MX-17\_43 | 1933 | 55 | 2448 | 19 | 21 | 0.1593 | 1.1 | 0.3494 | 3.3 |  |  |
| MX-17\_44 | 626 | 18 | 2402 | 12 | 74 | 0.1550 | 0.7 | 0.1018 | 3.1 |  |  |
| MX-17\_45 | 2326 | 57 | 2437 | 11 | 5 | 0.1582 | 0.7 | 0.4340 | 2.9 | -0.4 | 2740 |
| MX-17\_46 | 1746 | 50 | 1874 | 13 | 7 | 0.1146 | 0.7 | 0.3109 | 3.3 | 5.8 | 2016 |
| MX-17\_47 | 1867 | 80 | 2297 | 15 | 19 | 0.1458 | 0.9 | 0.3356 | 4.9 |  |  |
| MX-17\_48 | 1773 | 51 | 1866 | 13 | 5 | 0.1141 | 0.7 | 0.3164 | 3.3 | -8.2 | 2544 |
| MX-17\_49 | 1778 | 52 | 1901 | 12 | 6 | 0.1164 | 0.7 | 0.3174 | 3.4 | -1.6 | 2329 |
| MX-17\_50 | 1973 | 54 | 2450 | 13 | 19 | 0.1595 | 0.8 | 0.3577 | 3.2 |  |  |
| MX-17\_51 | 1811 | 88 | 2284 | 11 | 21 | 0.1447 | 0.7 | 0.3241 | 5.6 |  |  |
| MX-17\_52 | 1525 | 58 | 1848 | 12 | 17 | 0.1130 | 0.7 | 0.2667 | 4.3 |  |  |
| MX-17\_53 | 1778 | 51 | 1853 | 12 | 4 | 0.1133 | 0.7 | 0.3174 | 3.3 |  |  |
| MX-17\_54 | 2206 | 144 | 2403 | 11 | 8 | 0.1551 | 0.7 | 0.4077 | 7.8 | 0.3 | 2689 |
| MX-17\_55 | 1710 | 38 | 1860 | 12 | 8 | 0.1138 | 0.7 | 0.3035 | 2.6 | 3.8 | 2094 |
| MX-17\_56 | 1958 | 198 | 2628 | 20 | 26 | 0.1773 | 1.2 | 0.3545 | 11.8 |  |  |
| MX-17\_57 | 1800 | 42 | 1916 | 12 | 6 | 0.1173 | 0.7 | 0.3218 | 2.7 | -9.5 | 2636 |
| MX-17\_58 | 2295 | 81 | 2408 | 11 | 5 | 0.1555 | 0.7 | 0.4273 | 4.2 | 0.9 | 2668 |
| MX-17\_59 | 2389 | 51 | 2600 | 21 | 8 | 0.1744 | 1.3 | 0.4482 | 2.6 |  |  |
| MX-17\_60 | 2383 | 59 | 2508 | 12 | 5 | 0.1650 | 0.7 | 0.4468 | 2.9 | -2.8 | 2889 |

\* εHf(IA) calculated for individual zircon 207Pb/206Pb ages.

aDM model ages were calculated using the model of Mueller et al. (2008).

Table B-4. Grassrange xenolith sample locations.

|  |  |  |
| --- | --- | --- |
| Sample | Latitude | Longitude |
| MX-06 | 47.0011 | -108.5532 |
| MX-08 | 47.0011 | -108.5532 |
| MX-09 | 47.0011 | -108.5532 |
| MX-10 | 47.0011 | -108.5532 |
| MX-11 | 47.0011 | -108.5532 |
| MX-12 | 47.0011 | -108.5532 |
| MX-13 | 47.0011 | -108.5532 |
| MX-16 | 46.9233 | -108.4754 |
| MX-17 | 46.9233 | -108.4754 |
| MX-18 | 46.9233 | -108.4754 |
| HAL-1 | 47.0011 | -108.5532 |
| HAL-2 | 47.0011 | -108.5532 |
| HAL-5 | 47.0011 | -108.5532 |
| HAL-6 | 47.0011 | -108.5532 |

Table B-5. Xenolith samples, Missouri Breaks diatremes, Bearpaw Mountains, Highwood Mountains, zircon LA-ICP-MS U-Pb data reported (Ma).

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | (2σ) | 206Pb | (2σ) | εHf(IA) | εHf(T) | Hf |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | Rel. | 238U | Rel. | \* | \*\* | T(DM)a |
|  | age |  | age |  |  |  | Err. |  | Err. |  |  |  |
| BSD10-04\_01 | 1561 | 30 | 1689 | 11 | 8 | 0.1035 | 0.6 | 0.2741 | 2.2 |  |  |  |
| BSD10-04\_02 | 1575 | 36 | 1736 | 11 | 9 | 0.1062 | 0.6 | 0.2767 | 2.6 | -33.2 | -11.5 | 3369 |
| BSD10-04\_03 | 1639 | 45 | 1936 | 26 | 15 | 0.1186 | 1.5 | 0.2894 | 3.1 | -30.9 | -14.0 | 3474 |
| BSD10-04\_04 | 1597 | 30 | 1715 | 9 | 7 | 0.1051 | 0.5 | 0.2812 | 2.2 |  |  |  |
| BSD10-04\_05c | 2340 | 54 | 2640 | 8 | 11 | 0.1786 | 0.5 | 0.4376 | 2.8 |  |  |  |
| BSD10-04\_06c | 1646 | 33 | 1754 | 15 | 6 | 0.1073 | 0.8 | 0.2909 | 2.3 |  |  |  |
| BSD10-04\_06r | 1543 | 24 | 1690 | 7 | 9 | 0.1036 | 0.4 | 0.2705 | 1.7 | -33.8 | -11.0 | 3348 |
| BSD10-04\_07 | 2525 | 99 | 2684 | 39 | 6 | 0.1834 | 2.4 | 0.4796 | 4.7 |  |  |  |
| BSD10-04\_08 | 1595 | 30 | 1679 | 8 | 5 | 0.1030 | 0.4 | 0.2807 | 2.2 | -33.1 | -10.2 | 3326 |
| BSD10-04\_09 | 1604 | 26 | 1680 | 12 | 5 | 0.1030 | 0.7 | 0.2824 | 1.8 |  |  |  |
| BSD10-04\_10 | 1544 | 34 | 1632 | 9 | 5 | 0.1004 | 0.5 | 0.2707 | 2.5 |  |  |  |
| BSD10-04\_11 | 1577 | 35 | 1646 | 7 | 4 | 0.1012 | 0.4 | 0.2773 | 2.5 | -34.4 | -10.5 | 3330 |
| BSD10-04\_12 | 1654 | 43 | 1709 | 8 | 3 | 0.1047 | 0.4 | 0.2924 | 2.9 | -34.3 | -12.1 | 3392 |
| BSD10-04\_13 | 1727 | 51 | 1757 | 14 | 2 | 0.1075 | 0.8 | 0.3071 | 3.4 | -34.2 | -13.3 | 3445 |
| BSD10-04\_14 | 1486 | 31 | 1587 | 9 | 6 | 0.0980 | 0.5 | 0.2592 | 2.4 | -37.6 | -12.6 | 3413 |
| BSD10-04\_15 | 1990 | 58 | 2349 | 20 | 15 | 0.1503 | 1.2 | 0.3616 | 3.4 |  |  |  |
| BSD10-04\_16 | 1681 | 30 | 1753 | 17 | 4 | 0.1073 | 0.9 | 0.2980 | 2.0 |  |  |  |
| BSD10-04\_17 | 1627 | 27 | 1804 | 26 | 10 | 0.1103 | 1.4 | 0.2870 | 1.9 |  |  |  |
| BSD10-04\_18 | 1703 | 35 | 1777 | 8 | 4 | 0.1086 | 0.5 | 0.3023 | 2.4 |  |  |  |
| BSD10-04\_19c | 1602 | 38 | 1703 | 8 | 6 | 0.1044 | 0.4 | 0.2821 | 2.7 | -33.2 | -10.6 | 3330 |
| BSD10-04\_20 | 1724 | 24 | 1838 | 23 | 6 | 0.1124 | 1.3 | 0.3066 | 1.6 |  |  |  |
| BSD10-04\_21 | 1580 | 27 | 1693 | 9 | 7 | 0.1038 | 0.5 | 0.2778 | 1.9 | -32.2 | -9.7 | 3304 |
| BSD10-04\_22 | 1563 | 33 | 1712 | 15 | 9 | 0.1048 | 0.8 | 0.2745 | 2.4 | -32.3 | -9.9 | 3310 |
| BSD10-04\_23 | 1691 | 40 | 1766 | 7 | 4 | 0.1080 | 0.4 | 0.3000 | 2.7 | -32.6 | -11.7 | 3382 |
| BSD10-04\_24c | 1534 | 20 | 1674 | 14 | 8 | 0.1027 | 0.8 | 0.2687 | 1.5 |  |  |  |
| BSD10-04\_24r | 2306 | 93 | 2757 | 59 | 16 | 0.1917 | 3.6 | 0.4301 | 4.8 |  |  |  |
| BSD10-04\_25 | 1687 | 31 | 1789 | 8 | 6 | 0.1094 | 0.4 | 0.2991 | 2.1 | -31.6 | -10.9 | 3345 |
| BSD10-04\_26 | 1698 | 35 | 1769 | 6 | 4 | 0.1082 | 0.4 | 0.3013 | 2.4 | -33.2 | -12.6 | 3418 |
| BSD10-04\_27r | 1587 | 29 | 1657 | 12 | 4 | 0.1018 | 0.6 | 0.2792 | 2.1 |  |  |  |
| BSD10-04\_28 | 1587 | 26 | 1683 | 10 | 6 | 0.1032 | 0.5 | 0.2791 | 1.8 | -34.0 | -11.2 | 3358 |
| BSD10-04\_29c | 1711 | 38 | 1769 | 6 | 3 | 0.1082 | 0.4 | 0.3041 | 2.5 |  |  |  |
| BSD10-04\_29r | 1678 | 34 | 1783 | 8 | 6 | 0.1090 | 0.4 | 0.2974 | 2.3 |  |  |  |
| BSD10-04\_30 | 1607 | 36 | 1688 | 7 | 5 | 0.1035 | 0.4 | 0.2831 | 2.6 |  |  |  |
| BSD10-04\_31 | 1645 | 39 | 1706 | 8 | 4 | 0.1045 | 0.4 | 0.2906 | 2.7 |  |  |  |
| BSD10-04\_32 | 1685 | 28 | 1777 | 11 | 5 | 0.1086 | 0.6 | 0.2987 | 1.9 |  |  |  |
| BSD10-04\_33 | 1654 | 39 | 1742 | 13 | 5 | 0.1066 | 0.7 | 0.2924 | 2.7 | -33.3 | -11.7 | 3377 |
| BSD10-04\_34 | 1655 | 26 | 1712 | 7 | 3 | 0.1048 | 0.4 | 0.2927 | 1.8 |  |  |  |
| BSD10-04\_35c | 1665 | 39 | 1745 | 6 | 5 | 0.1068 | 0.4 | 0.2947 | 2.7 |  |  |  |
| BSD10-04\_35r | 1633 | 38 | 1716 | 14 | 5 | 0.1051 | 0.7 | 0.2883 | 2.6 |  |  |  |
| BSD10-04\_36 | 1570 | 25 | 1685 | 10 | 7 | 0.1033 | 0.6 | 0.2759 | 1.8 | -34.2 | -11.2 | 3355 |
| BSD10-04\_37 | 1597 | 38 | 1702 | 12 | 6 | 0.1043 | 0.7 | 0.2812 | 2.7 |  |  |  |
| BSD10-04\_38 | 1607 | 39 | 1748 | 12 | 8 | 0.1069 | 0.6 | 0.2831 | 2.7 |  |  |  |
| BSD10-04\_39 | 1597 | 36 | 1716 | 14 | 7 | 0.1051 | 0.7 | 0.2812 | 2.6 | -34.7 | -12.6 | 3414 |
| BSD10-04\_40 | 1607 | 32 | 1720 | 6 | 7 | 0.1053 | 0.3 | 0.2832 | 2.2 | -32.6 | -10.4 | 3324 |
| BSD10-04\_41 | 1629 | 28 | 1732 | 7 | 6 | 0.1060 | 0.4 | 0.2876 | 2.0 |  |  |  |

Table B-5. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | (2σ) | 206Pb | (2σ) | εHf(IA) | εHf(T) | Hf |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | Rel. | 238U | Rel. | \* | \*\* | T(DM)a |
|  | age |  | age |  |  |  | Err. |  | Err. |  |  |  |
| BSD10-04\_42 | 1637 | 31 | 1741 | 9 | 6 | 0.1065 | 0.5 | 0.2892 | 2.1 |  |  |  |
| BSD10-04\_43 | 1620 | 29 | 1729 | 9 | 6 | 0.1058 | 0.5 | 0.2856 | 2.1 |  |  |  |
| BSD10-04\_44 | 1648 | 33 | 1751 | 7 | 6 | 0.1071 | 0.4 | 0.2914 | 2.3 | -31.3 | -9.8 | 3303 |
| BSD10-04\_45 | 1528 | 27 | 1636 | 7 | 7 | 0.1007 | 0.4 | 0.2676 | 2.0 | -33.5 | -9.4 | 3288 |
| BSD10-04\_46 | 1624 | 34 | 1718 | 6 | 5 | 0.1052 | 0.3 | 0.2866 | 2.4 | -33.6 | -11.6 | 3379 |
| BSD10-04\_47 | 1602 | 29 | 1705 | 7 | 6 | 0.1045 | 0.4 | 0.2821 | 2.1 |  |  |  |
| BSD10-04\_48 | 1600 | 34 | 1704 | 9 | 6 | 0.1044 | 0.5 | 0.2816 | 2.4 |  |  |  |
| BSD10-04\_49 | 1641 | 43 | 1766 | 11 | 7 | 0.1080 | 0.6 | 0.2899 | 3.0 |  |  |  |
| BSD10-04\_50 | 1491 | 19 | 1632 | 19 | 9 | 0.1005 | 1.0 | 0.2602 | 1.4 | -34.7 | -10.5 | 3329 |
| BSD10-04\_51 | 1656 | 27 | 1773 | 8 | 7 | 0.1084 | 0.4 | 0.2930 | 1.9 | -32.6 | -11.8 | 3380 |
| BSD10-04\_52 | 1589 | 28 | 1727 | 8 | 8 | 0.1057 | 0.4 | 0.2795 | 2.0 |  |  |  |
| BSD10-04\_53 | 1618 | 34 | 1935 | 17 | 16 | 0.1186 | 0.9 | 0.2853 | 2.4 |  |  |  |
| BSD10-04\_54 | 1668 | 39 | 1801 | 16 | 7 | 0.1101 | 0.9 | 0.2954 | 2.7 |  |  |  |
| BSD10-04\_55 | 1554 | 33 | 1695 | 8 | 8 | 0.1039 | 0.4 | 0.2726 | 2.4 |  |  |  |
| BSD10-04\_56 | 1563 | 30 | 1720 | 13 | 9 | 0.1053 | 0.7 | 0.2743 | 2.2 |  |  |  |
| BSD10-05\_01 | 1738 | 67 | 1696 | 12 | -2 | 0.1040 | 0.6 | 0.3094 | 4.4 |  |  |  |
| BSD10-05\_02c | 1692 | 57 | 1666 | 11 | -2 | 0.1031 | 0.6 | 0.3078 | 3.3 |  |  |  |
| BSD10-05\_02r | 1730 | 50 | 1681 | 11 | -3 | 0.1023 | 0.6 | 0.3002 | 3.9 |  |  |  |
| BSD10-05\_03 | 1728 | 33 | 1681 | 11 | -3 | 0.1031 | 0.6 | 0.3074 | 2.2 |  |  |  |
| BSD10-05\_04 | 1595 | 32 | 1653 | 12 | 3 | 0.1016 | 0.6 | 0.2807 | 2.2 | -10.8 | -8.9 | 2456 |
| BSD10-05\_05 | 1836 | 54 | 1760 | 12 | -4 | 0.1076 | 0.6 | 0.3295 | 3.4 |  |  |  |
| BSD10-05\_06 | 1728 | 61 | 1745 | 13 | 1 | 0.1068 | 0.7 | 0.3074 | 4.0 |  |  |  |
| BSD10-05\_08 | 1738 | 55 | 1736 | 11 | 0 | 0.1063 | 0.6 | 0.3095 | 3.6 |  |  |  |
| BSD10-05\_09 | 1757 | 56 | 1718 | 12 | -2 | 0.1052 | 0.7 | 0.3132 | 3.7 |  |  |  |
| BSD10-05\_10 | 1719 | 33 | 1722 | 10 | 0 | 0.1054 | 0.5 | 0.3057 | 2.2 |  |  |  |
| BSD10-05\_11 | 1657 | 48 | 1673 | 10 | 1 | 0.1027 | 0.5 | 0.2932 | 3.3 |  |  |  |
| BSD10-05\_12 | 1749 | 59 | 1716 | 12 | -2 | 0.1051 | 0.6 | 0.3118 | 3.9 |  |  |  |
| BSD10-05\_13 | 1708 | 53 | 1701 | 10 | 0 | 0.1042 | 0.5 | 0.3034 | 3.6 | -10.1 | -9.3 | 2471 |
| BSD10-05\_14 | 1731 | 61 | 1746 | 13 | 1 | 0.1068 | 0.7 | 0.3081 | 4.0 |  |  |  |
| BSD10-05\_15 | 1714 | 57 | 1733 | 11 | 1 | 0.1060 | 0.6 | 0.3045 | 3.8 |  |  |  |
| BSD10-05\_16 | 1746 | 47 | 1787 | 11 | 2 | 0.1093 | 0.6 | 0.3112 | 3.1 |  |  |  |
| BSD10-05\_17 | 1698 | 69 | 1703 | 12 | 0 | 0.1044 | 0.6 | 0.3015 | 4.7 |  |  |  |
| BSD10-05\_18 | 1716 | 57 | 1718 | 10 | 0 | 0.1052 | 0.5 | 0.3049 | 3.8 | -8.8 | -8.4 | 2437 |
| BSD10-05\_19c | 1755 | 61 | 1715 | 9 | -2 | 0.1062 | 2.0 | 0.2988 | 3.6 | -10.4 | -9.9 | 2494 |
| BSD10-05\_19r | 1685 | 53 | 1735 | 37 | 3 | 0.1050 | 0.5 | 0.3130 | 3.9 |  |  |  |
| BSD10-05\_20 | 1719 | 42 | 1722 | 10 | 0 | 0.1054 | 0.6 | 0.3057 | 2.8 |  |  |  |
| BSD10-05\_21 | 1685 | 57 | 1729 | 12 | 3 | 0.1058 | 0.7 | 0.2987 | 3.9 |  |  |  |
| BSD10-05\_22 | 1692 | 52 | 1712 | 9 | 1 | 0.1049 | 0.5 | 0.3002 | 3.5 |  |  |  |
| BSD10-05\_23 | 1697 | 57 | 1733 | 11 | 2 | 0.1061 | 0.6 | 0.3012 | 3.9 |  |  |  |
| BSD10-05\_24 | 1840 | 80 | 1796 | 13 | -2 | 0.1098 | 0.7 | 0.3303 | 5.0 |  |  |  |
| BSD10-05\_25 | 1645 | 48 | 1702 | 10 | 3 | 0.1043 | 0.6 | 0.2907 | 3.3 |  |  |  |
| BSD10-05\_26 | 1648 | 47 | 1697 | 14 | 3 | 0.1040 | 0.8 | 0.2913 | 3.2 |  |  |  |
| BSD10-05\_27 | 1694 | 44 | 1736 | 13 | 2 | 0.1062 | 0.7 | 0.3006 | 3.0 |  |  |  |
| BSD10-05\_28 | 1732 | 48 | 1723 | 10 | -1 | 0.1055 | 0.6 | 0.3082 | 3.2 | -11.3 | -11.0 | 2534 |
| BSD10-05\_29c | 1738 | 63 | 1732 | 11 | 0 | 0.1046 | 0.5 | 0.3182 | 3.5 |  |  |  |
| BSD10-05\_29r | 1781 | 54 | 1708 | 9 | -4 | 0.1060 | 0.6 | 0.3095 | 4.1 | -11.7 | -11.0 | 2536 |

Table B-5. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | (2σ) | 206Pb | (2σ) | εHf(IA) | εHf(T) | Hf |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | Rel. | 238U | Rel. | \* | \*\* | T(DM)a |
|  | age |  | age |  |  |  | Err. |  | Err. |  |  |  |
| BSD10-05\_30 | 1649 | 46 | 1706 | 10 | 3 | 0.1045 | 0.5 | 0.2915 | 3.2 | -10.1 | -9.4 | 2474 |
| BSD10-05\_31 | 1744 | 42 | 1792 | 14 | 3 | 0.1096 | 0.8 | 0.3108 | 2.7 | -9.1 | -10.3 | 2510 |
| BSD10-05\_32 | 1692 | 48 | 1738 | 11 | 3 | 0.1064 | 0.6 | 0.3001 | 3.2 | -9.2 | -9.2 | 2467 |
| BSD10-05\_33 | 1716 | 67 | 1721 | 10 | 0 | 0.1054 | 0.5 | 0.3050 | 4.5 |  |  |  |
| BSD10-05\_34 | 1741 | 63 | 1693 | 13 | -3 | 0.1038 | 0.7 | 0.3101 | 4.1 |  |  |  |
| BSD10-05\_35c | 1733 | 45 | 1735 | 10 | 0 | 0.1025 | 0.6 | 0.2929 | 3.4 | -9.7 | -9.6 | 2485 |
| BSD10-05\_35r | 1656 | 49 | 1670 | 12 | 1 | 0.1062 | 0.5 | 0.3085 | 3.0 |  |  |  |
| BSD10-05\_36 | 1730 | 45 | 1762 | 10 | 2 | 0.1078 | 0.5 | 0.3078 | 3.0 | -8.0 | -8.6 | 2444 |
| BSD10-05\_37 | 1732 | 43 | 1737 | 10 | 0 | 0.1063 | 0.6 | 0.3083 | 2.8 | -8.3 | -8.2 | 2431 |
| BSD10-05\_38 | 1741 | 73 | 1738 | 10 | 0 | 0.1064 | 0.6 | 0.3100 | 4.8 |  |  |  |
| BSD10-05\_39 | 1703 | 62 | 1684 | 15 | -1 | 0.1033 | 0.8 | 0.3025 | 4.1 |  |  |  |
| BSD10-05\_40 | 1754 | 63 | 1768 | 12 | 1 | 0.1081 | 0.7 | 0.3128 | 4.1 |  |  |  |
| BSD10-05\_41 | 1759 | 63 | 1777 | 10 | 1 | 0.1087 | 0.5 | 0.3137 | 4.1 |  |  |  |
| BSD10-05\_42c | 1676 | 51 | 1714 | 9 | 2 | 0.1078 | 0.7 | 0.3130 | 3.6 | -10.3 | -9.8 | 2490 |
| BSD10-05\_42r | 1755 | 55 | 1763 | 13 | 0 | 0.1050 | 0.5 | 0.2969 | 3.5 | -9.2 | -9.7 | 2489 |
| BSD10-05\_43 | 1713 | 35 | 1732 | 9 | 1 | 0.1060 | 0.5 | 0.3044 | 2.3 | -9.0 | -8.8 | 2454 |
| BSD10-05\_44 | 1672 | 42 | 1716 | 9 | 3 | 0.1051 | 0.5 | 0.2962 | 2.9 |  |  |  |
| BSD10-05\_45 | 1781 | 77 | 1714 | 12 | -4 | 0.1050 | 0.7 | 0.3182 | 4.9 |  |  |  |
| BSD10-05\_46 | 1776 | 62 | 1728 | 11 | -3 | 0.1058 | 0.6 | 0.3172 | 4.0 |  |  |  |
| BSD10-05\_47 | 1701 | 44 | 1733 | 13 | 2 | 0.1061 | 0.7 | 0.3020 | 3.0 |  |  |  |
| BSD10-05\_48 | 1736 | 54 | 1689 | 13 | -3 | 0.1036 | 0.7 | 0.3090 | 3.6 | -10.8 | -9.7 | 2485 |
| BSD10-05\_49 | 1715 | 52 | 1738 | 10 | 1 | 0.1063 | 0.6 | 0.3049 | 3.5 |  |  |  |
| BSD10-05\_50 | 1722 | 51 | 1741 | 10 | 1 | 0.1065 | 0.5 | 0.3063 | 3.4 |  |  |  |
| BSD10-05\_51 | 1673 | 48 | 1729 | 11 | 3 | 0.1059 | 0.6 | 0.2964 | 3.3 | -6.5 | -6.2 | 2358 |
| BSD10-05\_52 | 1775 | 57 | 1730 | 10 | -3 | 0.1059 | 0.5 | 0.3170 | 3.7 |  |  |  |
| BSD10-05\_53 | 1794 | 72 | 1742 | 10 | -3 | 0.1066 | 0.5 | 0.3209 | 4.6 | -6.7 | -6.8 | 2377 |
| BSD10-05\_54 | 1755 | 55 | 1743 | 11 | -1 | 0.1066 | 0.6 | 0.3129 | 3.6 |  |  |  |
| BSD10-05\_55 | 1790 | 57 | 1751 | 19 | -2 | 0.1071 | 1.0 | 0.3201 | 3.7 |  |  |  |
| BSD10-06\_01 | 1721 | 32 | 1742 | 24 | 1 | 0.1066 | 1.3 | 0.3059 | 2.1 | 7.0 |  | 1862 |
| BSD10-06\_02 | 1921 | 48 | 1831 | 10 | -5 | 0.1120 | 0.5 | 0.3472 | 2.9 | 10.1 |  | 1825 |
| HX1-03 | 1864 | 17 | 1865 | 10 | 0 | 0.1140 | 0.6 | 0.3354 | 1.0 |  |  |  |
| HX1-04r | 1851 | 16 | 1835 | 7 | -1 | 0.1122 | 0.4 | 0.3326 | 1.0 |  |  |  |
| HX1-05 | 2460 | 21 | 2573 | 21 | 5 | 0.1716 | 1.3 | 0.4647 | 1.0 |  |  |  |
| HX1-06 | 2613 | 21 | 2643 | 17 | 1 | 0.1790 | 1.0 | 0.4997 | 1.0 |  |  |  |
| HX1-07 | 2598 | 22 | 2609 | 7 | 0 | 0.1753 | 0.4 | 0.4963 | 1.0 |  |  |  |
| HX1-08 | 1734 | 17 | 2144 | 19 | 24 | 0.1335 | 1.1 | 0.3086 | 1.1 |  |  |  |
| HX1-09c | 2525 | 23 | 2578 | 21 | 2 | 0.1721 | 1.2 | 0.4795 | 1.1 |  |  |  |
| HX1-09r | 1935 | 16 | 1843 | 7 | -5 | 0.1127 | 0.4 | 0.3501 | 1.0 |  |  |  |
| HX1-10 | 1795 | 23 | 2036 | 49 | 13 | 0.1255 | 2.8 | 0.3211 | 1.5 |  |  |  |
| HX1-11 | 2522 | 24 | 2501 | 8 | -1 | 0.1644 | 0.5 | 0.4788 | 1.2 |  |  |  |
| HX1-12 | 2250 | 19 | 2348 | 30 | 4 | 0.1501 | 1.8 | 0.4177 | 1.0 |  |  |  |
| HX1-13 | 2502 | 23 | 2662 | 33 | 6 | 0.1810 | 2.0 | 0.4742 | 1.1 |  |  |  |
| HX1-14 | 2593 | 23 | 2652 | 21 | 2 | 0.1799 | 1.3 | 0.4952 | 1.1 |  |  |  |
| HX1-15 | 2684 | 26 | 2650 | 11 | -1 | 0.1797 | 0.6 | 0.5164 | 1.2 |  |  |  |
| HX1-16 | 2429 | 24 | 2467 | 34 | 2 | 0.1611 | 2.0 | 0.4577 | 1.2 |  |  |  |
| HX1-17 | 2419 | 22 | 2527 | 26 | 4 | 0.1669 | 1.6 | 0.4553 | 1.1 |  |  |  |

Table B-5. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | (2σ) | 206Pb | (2σ) | εHf(IA) | εHf(T) | Hf |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | Rel. | 238U | Rel. | \* | \*\* | T(DM)a |
|  | age |  | age |  |  |  | Err. |  | Err. |  |  |  |
| HX1-18 | 1957 | 17 | 2305 | 13 | 18 | 0.1465 | 0.8 | 0.3548 | 1.0 |  |  |  |
| HX1-19 | 2404 | 23 | 2581 | 16 | 7 | 0.1724 | 1.0 | 0.4520 | 1.2 |  |  |  |
| HX1-20 | 2277 | 31 | 2443 | 26 | 7 | 0.1588 | 1.5 | 0.4237 | 1.6 |  |  |  |
| HX1-21 | 2648 | 26 | 2744 | 27 | 4 | 0.1902 | 1.6 | 0.5081 | 1.2 |  |  |  |
| HX1-22 | 2307 | 20 | 2497 | 6 | 8 | 0.1640 | 0.4 | 0.4303 | 1.0 |  |  |  |
| HX1-23r | 1869 | 16 | 1843 | 7 | -1 | 0.1127 | 0.4 | 0.3364 | 1.0 |  |  |  |
| LD10-01\_01c | 1550 | 32 | 1739 | 13 | 11 | 0.1064 | 0.7 | 0.2718 | 2.3 |  |  |  |
| LD10-01\_01r | 1609 | 24 | 1770 | 19 | 9 | 0.1082 | 1.0 | 0.2836 | 1.7 |  |  |  |
| LD10-01\_02 | 1470 | 26 | 1638 | 11 | 10 | 0.1008 | 0.6 | 0.2562 | 2.0 | -24.3 | -22.1 | 2946 |
| LD10-01\_03c | 1622 | 35 | 1850 | 7 | 12 | 0.1131 | 0.4 | 0.2861 | 2.4 |  |  |  |
| LD10-01\_03r | 1607 | 47 | 1758 | 13 | 9 | 0.1075 | 0.7 | 0.2831 | 3.3 |  |  |  |
| LD10-01\_04 | 1492 | 26 | 1652 | 4 | 10 | 0.1015 | 0.2 | 0.2605 | 1.9 | -23.1 | -21.3 | 2924 |
| LD10-01\_05 | 1671 | 25 | 1956 | 24 | 15 | 0.1200 | 1.4 | 0.2960 | 1.7 | -15.1 | -20.3 | 2874 |
| LD10-01\_06 | 1549 | 31 | 1672 | 5 | 7 | 0.1026 | 0.3 | 0.2717 | 2.2 | -24.3 | -22.9 | 2979 |
| LD10-01\_07c | 1599 | 31 | 1730 | 5 | 8 | 0.1059 | 0.3 | 0.2815 | 2.2 |  |  |  |
| LD10-01\_07r | 1489 | 17 | 1626 | 7 | 8 | 0.1001 | 0.4 | 0.2598 | 1.3 |  |  |  |
| LD10-01\_08 | 1677 | 34 | 1847 | 7 | 9 | 0.1129 | 0.4 | 0.2972 | 2.3 | -18.5 | -21.1 | 2906 |
| LD10-01\_09 | 1527 | 27 | 1672 | 9 | 9 | 0.1026 | 0.5 | 0.2674 | 2.0 | -23.1 | -21.7 | 2943 |
| LD10-01\_10c | 2043 | 36 | 2328 | 8 | 12 | 0.1484 | 0.5 | 0.3729 | 2.0 | -7.5 | -21.2 | 2915 |
| LD10-01\_10r | 1541 | 27 | 1693 | 10 | 9 | 0.1038 | 0.5 | 0.2700 | 2.0 |  |  |  |
| LD10-01\_11 | 1412 | 38 | 1569 | 13 | 10 | 0.0971 | 0.7 | 0.2449 | 3.0 |  |  |  |
| LD10-01\_12c | 1541 | 36 | 1720 | 4 | 10 | 0.1053 | 0.2 | 0.2700 | 2.6 |  |  |  |
| LD10-01\_12r | 1518 | 11 | 1660 | 27 | 9 | 0.1020 | 1.5 | 0.2654 | 0.8 |  |  |  |
| LD10-01\_13 | 2065 | 38 | 2288 | 12 | 10 | 0.1450 | 0.7 | 0.3775 | 2.2 |  |  |  |
| LD10-01\_14 | 1786 | 20 | 2109 | 43 | 15 | 0.1308 | 2.4 | 0.3193 | 1.3 |  |  |  |
| LD10-01\_15 | 1806 | 26 | 2036 | 22 | 11 | 0.1255 | 1.3 | 0.3233 | 1.7 | -15.0 | -21.9 | 2947 |
| LD10-01\_16 | 1771 | 42 | 1984 | 10 | 11 | 0.1219 | 0.6 | 0.3161 | 2.7 |  |  |  |
| LD10-01\_17 | 1678 | 30 | 1838 | 8 | 9 | 0.1124 | 0.5 | 0.2973 | 2.1 | -12.9 | -15.3 | 2690 |
| LD10-01\_18 | 1633 | 23 | 1906 | 11 | 14 | 0.1167 | 0.6 | 0.2883 | 1.6 |  |  |  |
| LD10-01\_19c | 1516 | 20 | 1703 | 6 | 11 | 0.1044 | 0.3 | 0.2651 | 1.5 |  |  |  |
| LD10-01\_19r | 1611 | 22 | 1735 | 14 | 7 | 0.1062 | 0.8 | 0.2840 | 1.5 |  |  |  |
| LD10-01\_20 | 1793 | 29 | 1991 | 11 | 10 | 0.1224 | 0.6 | 0.3206 | 1.9 |  |  |  |
| LD10-01\_21 | 1661 | 34 | 1816 | 6 | 8 | 0.1110 | 0.3 | 0.2940 | 2.4 |  |  |  |
| LD10-01\_22 | 1902 | 25 | 2177 | 20 | 13 | 0.1360 | 1.1 | 0.3433 | 1.5 | -10.6 | -20.8 | 2895 |
| LD10-01\_23 | 1743 | 28 | 1860 | 9 | 6 | 0.1137 | 0.5 | 0.3105 | 1.8 | -4.0 | -6.9 | 2377 |
| LD10-01\_24 | 1653 | 24 | 1785 | 9 | 7 | 0.1091 | 0.5 | 0.2922 | 1.7 |  |  |  |
| LD10-01\_25 | 1621 | 36 | 1798 | 8 | 10 | 0.1099 | 0.4 | 0.2860 | 2.5 |  |  |  |
| LD10-01\_26c | 1606 | 27 | 1746 | 5 | 8 | 0.1068 | 0.3 | 0.2829 | 1.9 | -14.1 | -14.3 | 2654 |
| LD10-01\_26r | 1648 | 16 | 1780 | 15 | 7 | 0.1088 | 0.8 | 0.2914 | 1.1 |  |  |  |
| LD10-01\_27 | 1636 | 20 | 1792 | 13 | 9 | 0.1095 | 0.7 | 0.2890 | 1.4 |  |  |  |
| LD10-01\_28c | 1674 | 36 | 1838 | 10 | 9 | 0.1124 | 0.6 | 0.2966 | 2.4 | -18.4 | -20.8 | 2900 |
| LD10-01\_28r | 1597 | 27 | 1731 | 13 | 8 | 0.1060 | 0.7 | 0.2811 | 1.9 |  |  |  |
| LD10-01\_29 | 1643 | 32 | 1735 | 5 | 5 | 0.1062 | 0.3 | 0.2903 | 2.2 |  |  |  |
| LD10-01\_30 | 1595 | 47 | 1713 | 17 | 7 | 0.1049 | 0.9 | 0.2808 | 3.3 |  |  |  |
| LD10-01\_31 | 1636 | 29 | 1843 | 12 | 11 | 0.1127 | 0.7 | 0.2889 | 2.0 |  |  |  |
| LD10-01\_32 | 1589 | 29 | 1714 | 17 | 7 | 0.1050 | 0.9 | 0.2795 | 2.1 | -17.0 | -16.6 | 2740 |

Table B-5. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | (2σ) | 206Pb | (2σ) | εHf(IA) | εHf(T) | Hf |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | Rel. | 238U | Rel. | \* | \*\* | T(DM)a |
|  | age |  | age |  |  |  | Err. |  | Err. |  |  |  |
| LD10-01\_33 | 1695 | 15 | 1899 | 31 | 11 | 0.1162 | 1.7 | 0.3007 | 1.0 |  |  |  |
| LD10-01\_34c | 1663 | 33 | 1764 | 6 | 6 | 0.1079 | 0.3 | 0.2944 | 2.3 | -25.5 | -26.2 | 3114 |
| LD10-01\_34r | 1561 | 31 | 1710 | 12 | 9 | 0.1047 | 0.7 | 0.2740 | 2.2 |  |  |  |
| LD10-01\_35 | 1599 | 31 | 1698 | 5 | 6 | 0.1041 | 0.3 | 0.2814 | 2.2 |  |  |  |
| LD10-01\_36 | 1586 | 59 | 1787 | 83 | 11 | 0.1093 | 4.6 | 0.2790 | 4.2 |  |  |  |
| LD10-01\_37 | 1558 | 32 | 1700 | 8 | 8 | 0.1042 | 0.4 | 0.2734 | 2.3 |  |  |  |
| LD10-01\_38c | 1534 | 24 | 1703 | 8 | 10 | 0.1044 | 0.4 | 0.2687 | 1.8 |  |  |  |
| LD10-01\_38r | 1594 | 33 | 1741 | 8 | 8 | 0.1065 | 0.4 | 0.2806 | 2.4 | -18.4 | -18.6 | 2814 |
| LD10-01\_39 | 1770 | 55 | 2027 | 21 | 13 | 0.1249 | 1.2 | 0.3160 | 3.6 | -11.7 | -18.5 | 2810 |
| LD10-01\_40 | 1828 | 24 | 2054 | 33 | 11 | 0.1268 | 1.9 | 0.3278 | 1.5 |  |  |  |
| LD10-01\_41 | 1620 | 24 | 1782 | 8 | 9 | 0.1089 | 0.4 | 0.2857 | 1.7 | -12.7 | -13.8 | 2633 |
| LD10-01\_42 | 1622 | 23 | 1784 | 6 | 9 | 0.1091 | 0.3 | 0.2862 | 1.6 | -10.1 | -11.3 | 2540 |
| LD10-01\_43 | 1581 | 19 | 1720 | 12 | 8 | 0.1053 | 0.6 | 0.2779 | 1.4 | -12.5 | -12.2 | 2578 |
| LD10-01\_44 | 1867 | 57 | 2128 | 32 | 12 | 0.1322 | 1.8 | 0.3360 | 3.5 |  |  |  |
| LD10-01\_45 | 1689 | 32 | 1823 | 5 | 7 | 0.1114 | 0.3 | 0.2996 | 2.1 |  |  |  |
| LD10-01\_46 | 1780 | 67 | 2025 | 54 | 12 | 0.1247 | 3.0 | 0.3180 | 4.3 |  |  |  |
| LD10-01\_47 | 1652 | 16 | 1746 | 25 | 5 | 0.1068 | 1.4 | 0.2920 | 1.1 |  |  |  |
| LD10-01\_48 | 1653 | 16 | 1749 | 9 | 5 | 0.1070 | 0.5 | 0.2923 | 1.1 |  |  |  |
| LD10-01\_49 | 1592 | 20 | 1737 | 10 | 8 | 0.1063 | 0.5 | 0.2801 | 1.4 | -15.6 | -15.7 | 2707 |
| LD10-01\_50 | 1652 | 25 | 1761 | 7 | 6 | 0.1077 | 0.4 | 0.2922 | 1.7 | -17.6 | -18.2 | 2806 |
| LD10-07\_01 | 1445 | 32 | 1690 | 11 | 14 | 0.1036 | 0.6 | 0.2512 | 2.5 |  |  |  |
| LD10-07\_02 | 1411 | 25 | 1664 | 9 | 15 | 0.1022 | 0.5 | 0.2448 | 2.0 |  |  |  |
| LD10-07\_03 | 1521 | 45 | 1843 | 35 | 17 | 0.1127 | 1.9 | 0.2662 | 3.3 |  |  |  |
| LD10-07\_04 | 1492 | 26 | 1740 | 8 | 14 | 0.1065 | 0.5 | 0.2605 | 2.0 |  |  |  |
| LD10-07\_05 | 1703 | 24 | 2094 | 14 | 19 | 0.1297 | 0.8 | 0.3023 | 1.6 |  |  |  |
| LD10-07\_06 | 2241 | 116 | 2523 | 42 | 11 | 0.1665 | 2.5 | 0.4158 | 6.2 |  |  |  |
| LD10-07\_07c | 1748 | 37 | 2122 | 16 | 18 | 0.1586 | 0.3 | 0.3844 | 1.8 |  |  |  |
| LD10-07\_07r | 2097 | 32 | 2441 | 5 | 14 | 0.1318 | 0.9 | 0.3114 | 2.4 |  |  |  |
| LD10-07\_08 | 1483 | 13 | 1718 | 24 | 14 | 0.1052 | 1.3 | 0.2586 | 1.0 |  |  |  |
| LD10-07\_09 | 1558 | 29 | 1778 | 5 | 12 | 0.1087 | 0.3 | 0.2734 | 2.1 |  |  |  |
| LD10-07\_10 | 1451 | 14 | 1684 | 15 | 14 | 0.1033 | 0.8 | 0.2525 | 1.1 |  |  |  |
| LD10-07\_11 | 1595 | 25 | 1793 | 32 | 11 | 0.1096 | 1.7 | 0.2808 | 1.7 |  |  |  |
| LD10-07\_12 | 1654 | 36 | 1994 | 27 | 17 | 0.1226 | 1.5 | 0.2925 | 2.5 |  |  |  |
| LD10-07\_13 | 1491 | 24 | 1739 | 13 | 14 | 0.1064 | 0.7 | 0.2602 | 1.8 |  |  |  |
| LD10-07\_14 | 1809 | 51 | 2097 | 19 | 14 | 0.1299 | 1.1 | 0.3240 | 3.2 |  |  |  |
| LD10-07\_15 | 1612 | 15 | 1920 | 36 | 16 | 0.1176 | 2.0 | 0.2841 | 1.1 |  |  |  |
| LD10-07\_16c | 1517 | 31 | 1756 | 8 | 14 | 0.1072 | 0.9 | 0.2614 | 2.6 | -19.7 | -4.6 | 2901 |
| LD10-07\_16r | 1497 | 34 | 1752 | 17 | 15 | 0.1074 | 0.4 | 0.2654 | 2.3 |  |  |  |
| LD10-07\_17 | 1473 | 17 | 1681 | 8 | 12 | 0.1031 | 0.5 | 0.2566 | 1.3 |  |  |  |
| LD10-07\_18 | 1581 | 72 | 1895 | 67 | 17 | 0.1160 | 3.8 | 0.2779 | 5.1 |  |  |  |
| LD10-07\_19 | 1481 | 29 | 1716 | 9 | 14 | 0.1051 | 0.5 | 0.2583 | 2.2 |  |  |  |
| LD10-07\_20 | 1535 | 39 | 1762 | 22 | 13 | 0.1077 | 1.2 | 0.2688 | 2.9 |  |  |  |
| LD10-07\_21 | 1520 | 27 | 1761 | 7 | 14 | 0.1077 | 0.4 | 0.2660 | 2.0 |  |  |  |
| LD10-07\_22 | 1581 | 72 | 1804 | 36 | 12 | 0.1103 | 2.0 | 0.2780 | 5.1 | -8.7 | 5.8 | 2506 |
| LD10-07\_23 | 1587 | 31 | 1810 | 21 | 12 | 0.1106 | 1.1 | 0.2791 | 2.2 | -9.7 | 4.6 | 2548 |
| LD10-07\_24 | 1534 | 31 | 1754 | 10 | 12 | 0.1073 | 0.5 | 0.2687 | 2.3 | -13.0 | 2.7 | 2621 |

Table B-5. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | (2σ) | 206Pb | (2σ) | εHf(IA) | εHf(T) | Hf |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | Rel. | 238U | Rel. | \* | \*\* | T(DM)a |
|  | age |  | age |  |  |  | Err. |  | Err. |  |  |  |
| LD10-07\_25 | 1561 | 25 | 1809 | 11 | 14 | 0.1106 | 0.6 | 0.2740 | 1.8 |  |  |  |
| LD10-07\_26 | 1653 | 38 | 1971 | 24 | 16 | 0.1210 | 1.4 | 0.2923 | 2.6 |  |  |  |
| LD10-07\_27 | 2215 | 38 | 2458 | 9 | 10 | 0.1603 | 0.5 | 0.4100 | 2.0 | -5.4 | -6.1 | 2948 |
| LD10-07\_28 | 1612 | 31 | 1962 | 25 | 18 | 0.1204 | 1.4 | 0.2842 | 2.2 | -14.3 | -3.6 | 2862 |
| LD10-07\_29 | 1494 | 36 | 1676 | 6 | 11 | 0.1029 | 0.3 | 0.2607 | 2.7 | -14.7 | 2.7 | 2622 |
| LD10-07\_30 | 1549 | 27 | 1800 | 15 | 14 | 0.1100 | 0.8 | 0.2716 | 2.0 |  |  |  |
| LD10-07\_31 | 1598 | 73 | 1954 | 65 | 18 | 0.1198 | 3.6 | 0.2814 | 5.2 |  |  |  |
| LD10-07\_32 | 1881 | 29 | 2237 | 22 | 16 | 0.1408 | 1.3 | 0.3389 | 1.8 |  |  |  |
| LD10-07\_33 | 1504 | 24 | 1721 | 6 | 13 | 0.1054 | 0.3 | 0.2627 | 1.8 |  |  |  |
| LD10-07\_34 | 1534 | 45 | 1833 | 38 | 16 | 0.1121 | 2.1 | 0.2687 | 3.3 |  |  |  |
| LD10-07\_35 | 2354 | 36 | 2401 | 24 | 2 | 0.1549 | 1.4 | 0.4407 | 1.8 | -4.2 | -3.5 | 2854 |
| LD10-07\_36 | 1528 | 22 | 1759 | 8 | 13 | 0.1076 | 0.4 | 0.2674 | 1.6 |  |  |  |
| LD10-07\_37 | 1629 | 40 | 1840 | 20 | 11 | 0.1125 | 1.1 | 0.2875 | 2.8 | -12.9 | 0.7 | 2695 |
| LD10-07\_38 | 1541 | 29 | 1730 | 15 | 11 | 0.1059 | 0.8 | 0.2700 | 2.1 | -14.3 | 1.9 | 2649 |
| LD10-07\_39 | 1430 | 28 | 1688 | 11 | 15 | 0.1035 | 0.6 | 0.2484 | 2.2 |  |  |  |
| LD10-07\_40 | 1486 | 29 | 1686 | 5 | 12 | 0.1034 | 0.3 | 0.2592 | 2.2 | -13.6 | 3.6 | 2586 |
| LD10-07\_41 | 2155 | 32 | 2525 | 30 | 15 | 0.1667 | 1.8 | 0.3971 | 1.7 |  |  |  |
| LD10-07\_42 | 1891 | 56 | 2265 | 24 | 17 | 0.1431 | 1.4 | 0.3409 | 3.4 |  |  |  |
| LD10-07\_43 | 1713 | 26 | 2085 | 13 | 18 | 0.1290 | 0.7 | 0.3043 | 1.7 |  |  |  |
| LD10-07\_44 | 1601 | 77 | 1836 | 61 | 13 | 0.1122 | 3.3 | 0.2819 | 5.4 |  |  |  |
| LD10-07\_45 | 1580 | 21 | 1900 | 29 | 17 | 0.1163 | 1.6 | 0.2778 | 1.5 |  |  |  |
| LD10-07\_46 | 1437 | 26 | 1677 | 23 | 14 | 0.1029 | 1.2 | 0.2498 | 2.0 |  |  |  |
| LD10-07\_47 | 1499 | 42 | 1742 | 23 | 14 | 0.1066 | 1.3 | 0.2618 | 3.2 |  |  |  |
| LD10-07\_48 | 1452 | 30 | 1719 | 12 | 16 | 0.1053 | 0.7 | 0.2526 | 2.3 |  |  |  |
| LD10-07\_49 | 1556 | 30 | 1769 | 10 | 12 | 0.1082 | 0.6 | 0.2730 | 2.2 |  |  |  |
| LD10-07\_50 | 1900 | 74 | 2250 | 41 | 16 | 0.1418 | 2.4 | 0.3427 | 4.5 |  |  |  |
| LD10-07\_51 | 1664 | 17 | 1975 | 21 | 16 | 0.1212 | 1.2 | 0.2944 | 1.2 | -13.8 | -3.3 | 2842 |
| LD10-07\_52 | 1515 | 12 | 1912 | 16 | 21 | 0.1171 | 0.9 | 0.2649 | 0.9 |  |  |  |
| LD10-07\_53 | 1554 | 34 | 1737 | 5 | 10 | 0.1063 | 0.3 | 0.2727 | 2.5 | -19.1 | -3.5 | 2861 |
| LD10-07\_54 | 1441 | 22 | 1693 | 22 | 15 | 0.1038 | 1.2 | 0.2506 | 1.7 |  |  |  |
| LD10-07\_55 | 1587 | 33 | 1770 | 8 | 10 | 0.1082 | 0.4 | 0.2792 | 2.3 | -14.9 | 0.4 | 2706 |
| LD10-08\_01 | 1954 | 76 | 1721 | 13 | -14 | 0.1054 | 0.7 | 0.3540 | 4.5 |  |  |  |
| LD10-08\_02 | 1967 | 78 | 1723 | 15 | -14 | 0.1055 | 0.8 | 0.3568 | 4.6 |  |  |  |
| LD10-08\_03c | 2333 | 110 | 2207 | 25 | -6 | 0.1074 | 0.5 | 0.3587 | 4.4 |  |  |  |
| LD10-08\_03r | 1976 | 74 | 1756 | 10 | -13 | 0.1384 | 1.4 | 0.4361 | 5.7 |  |  |  |
| LD10-08\_04 | 1875 | 80 | 1768 | 7 | -6 | 0.1081 | 0.4 | 0.3377 | 5.0 |  |  |  |
| LD10-08\_05 | 2351 | 99 | 2282 | 59 | -3 | 0.1445 | 3.4 | 0.4401 | 5.0 |  |  |  |
| LD10-08\_06 | 2025 | 75 | 1845 | 27 | -10 | 0.1128 | 1.5 | 0.3692 | 4.3 |  |  |  |
| LD10-08\_07 | 1858 | 87 | 1732 | 10 | -7 | 0.1060 | 0.6 | 0.3341 | 5.4 |  |  |  |
| LD10-08\_08 | 1862 | 59 | 1716 | 53 | -9 | 0.1051 | 2.9 | 0.3349 | 3.6 |  |  |  |
| LD10-08\_09 | 2072 | 59 | 2009 | 39 | -3 | 0.1236 | 2.2 | 0.3790 | 3.3 |  |  |  |
| LD10-08\_10 | 1650 | 90 | 1875 | 83 | 12 | 0.1147 | 4.6 | 0.2916 | 6.2 |  |  |  |
| LD10-08\_11 | 1853 | 78 | 1788 | 14 | -4 | 0.1093 | 0.8 | 0.3329 | 4.8 | -14.4 | 3.3 | 2703 |
| LD10-08\_12 | 2632 | 88 | 2560 | 12 | -3 | 0.1703 | 0.7 | 0.5043 | 4.1 |  |  |  |
| LD10-08\_13 | 1781 | 69 | 1714 | 10 | -4 | 0.1050 | 0.6 | 0.3182 | 4.4 |  |  |  |
| LD10-08\_14 | 2525 | 108 | 2416 | 8 | -5 | 0.1563 | 0.5 | 0.4796 | 5.2 | -3.1 | 0.0 | 2832 |

Table B-5. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | (2σ) | 206Pb | (2σ) | εHf(IA) | εHf(T) | Hf |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | Rel. | 238U | Rel. | \* | \*\* | T(DM)a |
|  | age |  | age |  |  |  | Err. |  | Err. |  |  |  |
| LD10-08\_15 | 2155 | 84 | 2307 | 23 | 7 | 0.1467 | 1.3 | 0.3970 | 4.6 |  |  |  |
| LD10-08\_16 | 2548 | 119 | 2467 | 15 | -3 | 0.1611 | 0.9 | 0.4848 | 5.7 | -1.8 | 0.2 | 2824 |
| LD10-08\_17 | 2607 | 128 | 2542 | 25 | -3 | 0.1684 | 1.5 | 0.4985 | 6.0 |  |  |  |
| LD10-08\_18 | 1763 | 58 | 1727 | 7 | -2 | 0.1058 | 0.4 | 0.3145 | 3.8 | -16.8 | 2.3 | 2740 |
| LD10-08\_19 | 1828 | 100 | 1727 | 9 | -6 | 0.1057 | 0.5 | 0.3279 | 6.3 | -15.6 | 3.5 | 2695 |
| LD10-08\_20 | 1766 | 66 | 1699 | 7 | -4 | 0.1042 | 0.4 | 0.3152 | 4.3 | -12.7 | 7.0 | 2566 |
| LD10-08\_21 | 1868 | 68 | 1783 | 7 | -5 | 0.1090 | 0.4 | 0.3362 | 4.2 | -14.3 | 3.5 | 2694 |
| LD10-08\_22 | 1774 | 56 | 1738 | 10 | -2 | 0.1064 | 0.5 | 0.3167 | 3.6 |  |  |  |
| LD10-08\_23 | 1679 | 63 | 1726 | 14 | 3 | 0.1057 | 0.8 | 0.2975 | 4.3 | -20.2 | -1.5 | 2887 |
| LD10-08\_24 | 1708 | 77 | 1723 | 12 | 1 | 0.1055 | 0.6 | 0.3034 | 5.1 |  |  |  |
| LD10-08\_25 | 2234 | 85 | 2296 | 12 | 3 | 0.1457 | 0.7 | 0.4142 | 4.5 |  |  |  |
| LD10-08\_26 | 1869 | 84 | 1877 | 33 | 0 | 0.1148 | 1.8 | 0.3363 | 5.2 | -16.5 | -1.0 | 2866 |
| LD10-08\_27 | 1751 | 64 | 1734 | 8 | -1 | 0.1061 | 0.4 | 0.3120 | 4.2 |  |  |  |
| LD10-08\_28 | 1772 | 69 | 1722 | 8 | -3 | 0.1055 | 0.4 | 0.3164 | 4.5 | -12.5 | 6.6 | 2579 |
| LD10-08\_29 | 2256 | 161 | 1817 | 35 | -24 | 0.1110 | 1.9 | 0.4190 | 8.5 |  |  |  |
| LD10-08\_30 | 1788 | 58 | 1927 | 20 | 7 | 0.1181 | 1.1 | 0.3197 | 3.8 |  |  |  |
| LD10-08\_31 | 1578 | 70 | 1600 | 9 | 1 | 0.0987 | 0.5 | 0.2774 | 5.0 | -23.5 | -1.8 | 2896 |
| LD10-08\_32 | 1739 | 70 | 1653 | 13 | -5 | 0.1016 | 0.7 | 0.3097 | 4.6 |  |  |  |
| LD10-08\_33 | 1632 | 47 | 1722 | 47 | 5 | 0.1054 | 2.5 | 0.2880 | 3.3 |  |  |  |
| LD10-08\_34 | 1596 | 62 | 1627 | 9 | 2 | 0.1001 | 0.5 | 0.2809 | 4.4 |  |  |  |
| LD10-08\_35 | 2157 | 69 | 2276 | 14 | 5 | 0.1440 | 0.8 | 0.3973 | 3.8 |  |  |  |
| LD10-08\_36 | 1646 | 73 | 1642 | 9 | 0 | 0.1010 | 0.5 | 0.2909 | 5.0 | -16.2 | 4.6 | 2654 |
| LD10-08\_37 | 1598 | 93 | 1627 | 20 | 2 | 0.1002 | 1.1 | 0.2813 | 6.6 |  |  |  |
| LD10-08\_38 | 1839 | 58 | 1894 | 21 | 3 | 0.1159 | 1.2 | 0.3302 | 3.6 | -13.4 | 1.3 | 2783 |
| LD10-08\_39 | 1914 | 75 | 1991 | 26 | 4 | 0.1223 | 1.5 | 0.3458 | 4.6 |  |  |  |
| LD10-08\_40 | 1665 | 62 | 1691 | 12 | 2 | 0.1037 | 0.6 | 0.2947 | 4.2 |  |  |  |
| LD10-08\_41 | 2024 | 54 | 2253 | 12 | 10 | 0.1421 | 0.7 | 0.3689 | 3.1 |  |  |  |
| LD10-08\_42 | 1621 | 52 | 1760 | 32 | 8 | 0.1076 | 1.7 | 0.2858 | 3.7 | -24.7 | -7.3 | 3116 |
| LD10-08\_43 | 1696 | 49 | 1741 | 7 | 3 | 0.1065 | 0.4 | 0.3009 | 3.3 | -18.1 | 0.6 | 2801 |
| LD10-08\_44 | 1604 | 58 | 1662 | 9 | 3 | 0.1021 | 0.5 | 0.2826 | 4.1 | -22.9 | -2.5 | 2918 |
| LD10-08\_45 | 1951 | 155 | 1687 | 14 | -16 | 0.1034 | 0.8 | 0.3534 | 9.2 |  |  |  |
| LD10-08\_46r | 1698 | 62 | 1704 | 9 | 0 | 0.1044 | 0.5 | 0.3013 | 4.2 | -12.4 | 7.2 | 2557 |
| LD10-08\_47 | 2328 | 81 | 2411 | 10 | 3 | 0.1559 | 0.6 | 0.4350 | 4.1 |  |  |  |
| LD10-08\_48 | 1869 | 62 | 1997 | 22 | 6 | 0.1228 | 1.2 | 0.3364 | 3.8 | -12.5 | 0.4 | 2810 |
| LD10-08\_49 | 1647 | 63 | 1648 | 8 | 0 | 0.1013 | 0.4 | 0.2910 | 4.4 | -14.9 | 6.0 | 2602 |
| LD10-08\_50 | 1665 | 66 | 1680 | 9 | 1 | 0.1030 | 0.5 | 0.2947 | 4.5 |  |  |  |
| LD10-08\_51 | 1664 | 67 | 1675 | 10 | 1 | 0.1028 | 0.5 | 0.2946 | 4.6 |  |  |  |
| LD10-08\_52r | 1858 | 81 | 1811 | 8 | -3 | 0.1107 | 0.4 | 0.3342 | 5.1 |  |  |  |
| LD10-08\_53 | 2176 | 88 | 2241 | 17 | 3 | 0.1411 | 1.0 | 0.4015 | 4.8 |  |  |  |
| LD10-08\_54 | 1637 | 60 | 1661 | 10 | 1 | 0.1020 | 0.6 | 0.2891 | 4.1 |  |  |  |
| LD10-08\_55 | 1679 | 71 | 1838 | 24 | 9 | 0.1124 | 1.3 | 0.2975 | 4.8 |  |  |  |
| LD10-08\_56 | 1653 | 52 | 1728 | 37 | 4 | 0.1058 | 2.0 | 0.2923 | 3.5 |  |  |  |
| LD10-08\_57 | 1611 | 55 | 1656 | 23 | 3 | 0.1017 | 1.3 | 0.2839 | 3.8 | -23.0 | -2.7 | 2931 |
| LD10-08\_58 | 2104 | 85 | 2243 | 17 | 6 | 0.1413 | 1.0 | 0.3860 | 4.8 |  |  |  |
| LD10-08\_59 | 1826 | 70 | 1837 | 10 | 1 | 0.1123 | 0.6 | 0.3274 | 4.4 |  |  |  |
| LD10-11\_01 | 1876 | 117 | 1811 | 18 | -4 | 0.1107 | 1.0 | 0.3378 | 7.2 |  |  |  |

Table B-5. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | (2σ) | 206Pb | (2σ) | εHf(IA) | εHf(T) | Hf |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | Rel. | 238U | Rel. | \* | \*\* | T(DM)a |
|  | age |  | age |  |  |  | Err. |  | Err. |  |  |  |
| LD10-11\_02 | 1674 | 153 | 1495 | 64 | -12 | 0.0934 | 3.4 | 0.2965 | 10.4 |  |  |  |
| LD10-11\_03 | 1731 | 101 | 1720 | 26 | -1 | 0.1053 | 1.4 | 0.3081 | 6.7 | 0.8 | 3.4 | 2079 |
| LD10-11\_04 | 1900 | 125 | 1839 | 18 | -3 | 0.1124 | 1.0 | 0.3429 | 7.6 |  |  |  |
| LD10-11\_06 | 1756 | 102 | 1664 | 22 | -6 | 0.1022 | 1.2 | 0.3131 | 6.7 | -4.8 | -0.9 | 2241 |
| LD10-11\_07 | 1888 | 137 | 1669 | 17 | -13 | 0.1025 | 0.9 | 0.3403 | 8.4 |  |  |  |
| LD10-11\_08 | 1661 | 82 | 1670 | 19 | 0 | 0.1025 | 1.0 | 0.2940 | 5.6 |  |  |  |
| LD10-11\_09 | 1641 | 82 | 1674 | 20 | 2 | 0.1027 | 1.1 | 0.2899 | 5.7 |  |  |  |
| LD10-11\_10c | 1636 | 49 | 1700 | 17 | 4 | 0.1042 | 0.9 | 0.2890 | 3.4 | 12.4 | 15.4 | 1621 |
| LD10-11\_10r | 1482 | 52 | 1622 | 15 | 9 | 0.0999 | 0.8 | 0.2586 | 3.9 | 8.4 | 13.2 | 1707 |
| LD10-11\_11 | 1895 | 125 | 1791 | 17 | -6 | 0.1095 | 0.9 | 0.3417 | 7.6 |  |  |  |
| LD10-11\_12 | 2039 | 196 | 1987 | 55 | -3 | 0.1221 | 3.1 | 0.3722 | 11.3 | -3.2 | -6.6 | 2469 |
| LD10-11\_13 | 308 | 17 | 2849 | 91 | 89 | 0.2028 | 5.6 | 0.0490 | 5.6 |  |  |  |
| LD10-11\_14 | 1707 | 58 | 1735 | 21 | 2 | 0.1062 | 1.1 | 0.3031 | 3.9 |  |  |  |
| LD10-11\_15 | 1761 | 90 | 1727 | 16 | -2 | 0.1057 | 0.9 | 0.3141 | 5.9 | 5.1 | 7.5 | 1924 |
| LD10-11\_16 | 657 | 26 | 2157 | 34 | 70 | 0.1345 | 1.9 | 0.1072 | 4.2 |  |  |  |
| LD10-11\_17 | 1744 | 88 | 1704 | 17 | -2 | 0.1044 | 0.9 | 0.3107 | 5.8 |  |  |  |
| LD10-11\_18 | 1972 | 148 | 1857 | 17 | -6 | 0.1136 | 0.9 | 0.3580 | 8.8 |  |  |  |
| LD10-11\_19 | 1730 | 75 | 1666 | 18 | -4 | 0.1023 | 1.0 | 0.3079 | 5.0 |  |  |  |
| LD10-11\_20 | 1716 | 116 | 1757 | 18 | 2 | 0.1075 | 1.0 | 0.3050 | 7.8 | -0.3 | 1.4 | 2157 |
| LD10-11\_21 | 1808 | 138 | 1741 | 16 | -4 | 0.1065 | 0.9 | 0.3238 | 8.8 |  |  |  |
| LD10-11\_22 | 2079 | 146 | 1942 | 18 | -7 | 0.1190 | 1.0 | 0.3806 | 8.3 |  |  |  |
| LD10-11\_23 | 1892 | 149 | 1741 | 15 | -9 | 0.1065 | 0.8 | 0.3412 | 9.2 |  |  |  |
| LD10-11\_24 | 752 | 40 | 1794 | 21 | 58 | 0.1097 | 1.1 | 0.1237 | 5.7 |  |  |  |
| LD10-11\_25 | 1779 | 73 | 1797 | 18 | 1 | 0.1099 | 1.0 | 0.3178 | 4.7 | -0.1 | 0.7 | 2177 |
| LD10-11\_26 | 1784 | 127 | 1661 | 17 | -7 | 0.1020 | 0.9 | 0.3188 | 8.2 |  |  |  |
| LD10-11\_27 | 2079 | 159 | 1869 | 15 | -11 | 0.1143 | 0.8 | 0.3806 | 9.0 |  |  |  |
| LD10-11\_28 | 480 | 21 | 2215 | 31 | 78 | 0.1390 | 1.8 | 0.0774 | 4.6 |  |  |  |
| LD10-11\_29 | 1866 | 126 | 2018 | 89 | 8 | 0.1243 | 5.0 | 0.3357 | 7.8 |  |  |  |
| LD10-11\_30 | 1859 | 94 | 1870 | 16 | 1 | 0.1144 | 0.9 | 0.3343 | 5.8 |  |  |  |
| LD10-11\_31 | 1857 | 123 | 1858 | 19 | 0 | 0.1136 | 1.0 | 0.3339 | 7.6 |  |  |  |
| LD10-11\_32 | 1941 | 173 | 1750 | 17 | -11 | 0.1071 | 0.9 | 0.3515 | 10.4 |  |  |  |
| LD10-11\_33 | 1646 | 122 | 1639 | 17 | 0 | 0.1008 | 0.9 | 0.2910 | 8.5 | -0.4 | 3.9 | 2058 |
| LD10-11\_34 | 1661 | 93 | 1634 | 17 | -2 | 0.1006 | 0.9 | 0.2940 | 6.4 |  |  |  |
| LD10-11\_35 | 731 | 44 | 1641 | 20 | 55 | 0.1009 | 1.1 | 0.1200 | 6.4 |  |  |  |
| LD10-11\_36br | 1804 | 124 | 1764 | 20 | -2 | 0.1079 | 1.1 | 0.3229 | 7.9 | 3.0 | 4.6 | 2034 |
| LD10-11\_36c | 1691 | 65 | 1788 | 18 | 5 | 0.1093 | 1.0 | 0.2999 | 4.4 |  |  |  |
| LD10-11\_36r | 1827 | 104 | 1740 | 16 | -5 | 0.1065 | 0.9 | 0.3276 | 6.6 |  |  |  |
| LD10-11\_37 | 663 | 33 | 2205 | 27 | 70 | 0.1382 | 1.5 | 0.1083 | 5.2 |  |  |  |
| LD10-11\_38 | 2598 | 102 | 3610 | 145 | 28 | 0.3284 | 9.4 | 0.4963 | 4.8 |  |  |  |
| LD10-11\_39 | 1849 | 175 | 1739 | 23 | -6 | 0.1064 | 1.3 | 0.3323 | 11.0 |  |  |  |
| LD10-11\_41 | 1941 | 149 | 1744 | 18 | -11 | 0.1067 | 1.0 | 0.3514 | 8.9 |  |  |  |
| LD10-11\_42 | 1635 | 76 | 1717 | 19 | 5 | 0.1052 | 1.0 | 0.2887 | 5.3 |  |  |  |
| LD10-11\_43 | 1903 | 99 | 1858 | 18 | -2 | 0.1136 | 1.0 | 0.3434 | 6.0 |  |  |  |
| LD10-11\_44 | 1777 | 88 | 1793 | 16 | 1 | 0.1096 | 0.9 | 0.3175 | 5.7 |  |  |  |
| LD10-11\_44c2 | 2263 | 115 | 2348 | 18 | 4 | 0.1502 | 1.0 | 0.4205 | 6.1 | 14.8 | 2.9 | 2096 |
| LD10-11\_45 | 1622 | 90 | 1758 | 25 | 8 | 0.1075 | 1.4 | 0.2862 | 6.3 |  |  |  |

Table B-5. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | (2σ) | 206Pb | (2σ) | εHf(IA) | εHf(T) | Hf |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | Rel. | 238U | Rel. | \* | \*\* | T(DM)a |
|  | age |  | age |  |  |  | Err. |  | Err. |  |  |  |
| LD10-11\_46 | 2031 | 100 | 2023 | 20 | 0 | 0.1246 | 1.2 | 0.3703 | 5.8 |  |  |  |
| LD10-11\_47 | 1819 | 111 | 1805 | 17 | -1 | 0.1104 | 1.0 | 0.3261 | 7.0 |  |  |  |
| LD10-11\_48 | 2064 | 116 | 2138 | 34 | 3 | 0.1330 | 1.9 | 0.3773 | 6.6 | 12.0 | 5.1 | 2016 |
| LD10-11\_49 | 1661 | 121 | 1713 | 18 | 3 | 0.1049 | 1.0 | 0.2940 | 8.3 |  |  |  |
| LD10-11\_50 | 1678 | 122 | 1679 | 18 | 0 | 0.1030 | 1.0 | 0.2973 | 8.3 |  |  |  |
| LD10-11\_51 | 2113 | 127 | 1913 | 16 | -10 | 0.1172 | 0.9 | 0.3878 | 7.1 |  |  |  |
| LD10-11\_52 | 1631 | 94 | 1915 | 19 | 15 | 0.1173 | 1.1 | 0.2879 | 6.6 |  |  |  |
| LD10-11\_53 | 1665 | 78 | 1819 | 19 | 8 | 0.1112 | 1.0 | 0.2946 | 5.4 |  |  |  |
| LD10-11\_54 | 1678 | 102 | 1712 | 16 | 2 | 0.1049 | 0.9 | 0.2974 | 6.9 |  |  |  |
| LD10-11\_55 | 2257 | 93 | 2366 | 22 | 5 | 0.1518 | 1.3 | 0.4192 | 4.9 |  |  |  |
| LD10-11\_56 | 1815 | 119 | 1742 | 16 | -4 | 0.1066 | 0.9 | 0.3252 | 7.6 | 0.2 | 2.3 | 2119 |
| LD10-11\_57 | 1671 | 67 | 1773 | 20 | 6 | 0.1084 | 1.1 | 0.2958 | 4.6 |  |  |  |
| LD10-11\_58 | 1851 | 116 | 1769 | 16 | -5 | 0.1082 | 0.9 | 0.3327 | 7.3 |  |  |  |
| LD10-11\_60 | 1564 | 61 | 1746 | 18 | 10 | 0.1069 | 1.0 | 0.2745 | 4.4 |  |  |  |
| LD10-11\_61 | 1694 | 76 | 1813 | 17 | 7 | 0.1109 | 0.9 | 0.3007 | 5.1 |  |  |  |
| LD10-11\_62 | 1515 | 51 | 1726 | 17 | 12 | 0.1057 | 0.9 | 0.2649 | 3.8 |  |  |  |
| LD10-11\_63c | 1785 | 90 | 1840 | 16 | 3 | 0.1125 | 0.9 | 0.3191 | 5.8 | 6.3 | 6.1 | 1975 |
| LD10-11\_63r | 1606 | 52 | 1773 | 17 | 9 | 0.1084 | 0.9 | 0.2829 | 3.6 |  |  |  |
| LSC10-03\_01 | 1710 | 67 | 1801 | 6 | 5 | 0.1101 | 0.4 | 0.3039 | 4.5 |  |  |  |
| LSC10-03\_02 | 1883 | 73 | 1798 | 6 | -5 | 0.1099 | 0.3 | 0.3392 | 4.5 | 7.8 | 7.9 | 1882 |
| LSC10-03\_03c | 1833 | 73 | 1790 | 6 | -2 | 0.1095 | 0.3 | 0.3289 | 4.6 | 5.3 | 5.6 | 1970 |
| LSC10-03\_03r | 1862 | 70 | 1800 | 4 | -3 | 0.1101 | 0.2 | 0.3348 | 4.4 |  |  |  |
| LSC10-03\_04 | 1726 | 57 | 1795 | 3 | 4 | 0.1097 | 0.2 | 0.3070 | 3.8 |  |  |  |
| LSC10-03\_05 | 1840 | 83 | 1808 | 5 | -2 | 0.1105 | 0.3 | 0.3304 | 5.2 |  |  |  |
| LSC10-03\_06 | 1812 | 66 | 1813 | 5 | 0 | 0.1108 | 0.3 | 0.3246 | 4.2 |  |  |  |
| LSC10-03\_07 | 1825 | 74 | 1799 | 4 | -1 | 0.1100 | 0.2 | 0.3273 | 4.7 | 5.6 | 5.6 | 1970 |
| LSC10-03\_08 | 1777 | 72 | 1815 | 6 | 2 | 0.1109 | 0.3 | 0.3174 | 4.6 |  |  |  |
| LSC10-03\_09 | 1252 | 43 | 1811 | 6 | 31 | 0.1107 | 0.3 | 0.2144 | 3.8 |  |  |  |
| LSC10-03\_10 | 1770 | 63 | 1808 | 7 | 2 | 0.1105 | 0.4 | 0.3160 | 4.1 |  |  |  |
| LSC10-03\_11c | 1828 | 57 | 1804 | 3 | -1 | 0.1103 | 0.1 | 0.3278 | 3.6 | 5.9 | 5.9 | 1958 |
| LSC10-03\_11r | 1792 | 69 | 1819 | 5 | 1 | 0.1112 | 0.3 | 0.3206 | 4.4 |  |  |  |
| LSC10-03\_12 | 1751 | 72 | 1790 | 5 | 2 | 0.1095 | 0.3 | 0.3121 | 4.7 |  |  |  |
| LSC10-03\_13 | 1725 | 55 | 1806 | 4 | 4 | 0.1104 | 0.2 | 0.3068 | 3.6 |  |  |  |
| LSC10-03\_14 | 1843 | 79 | 1798 | 4 | -3 | 0.1099 | 0.2 | 0.3309 | 4.9 | 6.4 | 6.5 | 1940 |
| LSC10-03\_15 | 1815 | 69 | 1797 | 3 | -1 | 0.1098 | 0.2 | 0.3251 | 4.4 | 6.3 | 6.4 | 1939 |
| LSC10-03\_16 | 1760 | 56 | 1808 | 5 | 3 | 0.1105 | 0.3 | 0.3140 | 3.7 |  |  |  |
| LSC10-03\_17 | 1790 | 55 | 1789 | 4 | 0 | 0.1093 | 0.2 | 0.3200 | 3.5 | 5.9 | 6.2 | 1945 |
| LSC10-03\_18 | 1689 | 56 | 1782 | 4 | 5 | 0.1090 | 0.2 | 0.2995 | 3.8 |  |  |  |
| LSC10-03\_19 | 1568 | 57 | 1821 | 6 | 14 | 0.1113 | 0.4 | 0.2754 | 4.1 |  |  |  |
| LSC10-03\_20 | 1903 | 75 | 1802 | 4 | -6 | 0.1101 | 0.2 | 0.3435 | 4.6 |  |  |  |
| LSC10-03\_21 | 1791 | 63 | 1804 | 4 | 1 | 0.1103 | 0.2 | 0.3203 | 4.1 | 6.8 | 6.7 | 1927 |
| LSC10-03\_22 | 1775 | 74 | 1806 | 6 | 2 | 0.1104 | 0.3 | 0.3169 | 4.8 |  |  |  |
| LSC10-03\_23 | 1562 | 36 | 1810 | 6 | 14 | 0.1106 | 0.4 | 0.2742 | 2.6 |  |  |  |
| LSC10-03\_24 | 1719 | 46 | 1809 | 3 | 5 | 0.1106 | 0.2 | 0.3056 | 3.0 | 6.3 | 6.2 | 1950 |
| LSC10-03\_25 | 1816 | 82 | 1814 | 6 | 0 | 0.1109 | 0.3 | 0.3255 | 5.2 |  |  |  |
| LSC10-03\_26 | 1864 | 69 | 1803 | 3 | -3 | 0.1102 | 0.2 | 0.3352 | 4.3 | 5.9 | 5.8 | 1959 |

Table B-5. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | (2σ) | 206Pb | (2σ) | εHf(IA) | εHf(T) | Hf |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | Rel. | 238U | Rel. | \* | \*\* | T(DM)a |
|  | age |  | age |  |  |  | Err. |  | Err. |  |  |  |
| LSC10-03\_27 | 1739 | 72 | 1796 | 4 | 3 | 0.1098 | 0.2 | 0.3096 | 4.8 | 6.2 | 6.3 | 1942 |
| LSC10-03\_28 | 1769 | 75 | 1794 | 5 | 1 | 0.1097 | 0.3 | 0.3159 | 4.8 |  |  |  |
| LSC10-03\_29 | 1951 | 118 | 1797 | 5 | -9 | 0.1099 | 0.3 | 0.3535 | 7.0 |  |  |  |
| LSC10-03\_30 | 1864 | 73 | 1816 | 5 | -3 | 0.1110 | 0.3 | 0.3354 | 4.5 |  |  |  |
| LSC10-03\_31 | 1906 | 65 | 1818 | 5 | -5 | 0.1111 | 0.3 | 0.3440 | 4.0 |  |  |  |
| LSC10-03\_32 | 1872 | 56 | 1811 | 4 | -3 | 0.1107 | 0.2 | 0.3370 | 3.5 |  |  |  |
| LSC10-03\_33 | 1921 | 64 | 1832 | 6 | -5 | 0.1120 | 0.3 | 0.3471 | 3.9 |  |  |  |
| LSC10-03\_34 | 1906 | 81 | 1807 | 4 | -6 | 0.1104 | 0.2 | 0.3440 | 4.9 |  |  |  |
| LSC10-03\_35 | 1864 | 76 | 1811 | 5 | -3 | 0.1107 | 0.3 | 0.3354 | 4.7 |  |  |  |
| LSC10-03\_36 | 1872 | 64 | 1798 | 6 | -4 | 0.1099 | 0.3 | 0.3371 | 4.0 | 6.3 | 6.4 | 1938 |
| LSC10-03\_37 | 1791 | 63 | 1803 | 4 | 1 | 0.1102 | 0.2 | 0.3203 | 4.1 | 6.2 | 6.2 | 1946 |
| LSC10-03\_38 | 1719 | 48 | 1805 | 5 | 5 | 0.1103 | 0.3 | 0.3057 | 3.2 |  |  |  |
| LSC10-03\_39 | 1748 | 83 | 1818 | 4 | 4 | 0.1111 | 0.2 | 0.3115 | 5.5 |  |  |  |
| LSC10-03\_40 | 1809 | 55 | 1808 | 3 | 0 | 0.1105 | 0.2 | 0.3239 | 3.5 | 5.6 | 5.5 | 1976 |
| LSC10-03\_41 | 1721 | 57 | 1809 | 6 | 5 | 0.1106 | 0.3 | 0.3059 | 3.8 |  |  |  |
| LSC10-03\_42 | 1920 | 63 | 1800 | 3 | -7 | 0.1100 | 0.2 | 0.3470 | 3.8 |  |  |  |
| LSC10-03\_43 | 1827 | 53 | 1792 | 4 | -2 | 0.1096 | 0.2 | 0.3276 | 3.3 | 6.4 | 6.7 | 1929 |
| LSC10-03\_44 | 1730 | 53 | 1804 | 3 | 4 | 0.1103 | 0.2 | 0.3079 | 3.5 |  |  |  |
| LSC10-03\_45 | 1790 | 48 | 1802 | 4 | 1 | 0.1102 | 0.2 | 0.3200 | 3.1 | 8.0 | 8.0 | 1880 |
| LSC10-03\_46 | 1833 | 66 | 1804 | 4 | -2 | 0.1103 | 0.2 | 0.3290 | 4.1 |  |  |  |
| LSC10-03\_47 | 1815 | 50 | 1819 | 5 | 0 | 0.1112 | 0.3 | 0.3253 | 3.2 |  |  |  |
| LSC10-03\_48 | 1814 | 55 | 1800 | 4 | -1 | 0.1100 | 0.2 | 0.3251 | 3.5 |  |  |  |
| LSC10-03\_49 | 1770 | 39 | 1804 | 3 | 2 | 0.1103 | 0.2 | 0.3159 | 2.5 | 4.1 | 4.1 | 2032 |
| LSC10-03\_50 | 1922 | 50 | 1804 | 3 | -7 | 0.1103 | 0.2 | 0.3473 | 3.0 |  |  |  |
| LSC10-03\_51 | 1875 | 61 | 1813 | 5 | -3 | 0.1109 | 0.3 | 0.3376 | 3.7 |  |  |  |
| LSC10-03\_52 | 1838 | 45 | 1805 | 4 | -2 | 0.1103 | 0.2 | 0.3299 | 2.8 |  |  |  |
| LSC10-03\_53 | 1974 | 59 | 1815 | 6 | -9 | 0.1109 | 0.4 | 0.3584 | 3.5 |  |  |  |
| LSC10-03\_54 | 1741 | 50 | 1835 | 5 | 5 | 0.1122 | 0.3 | 0.3100 | 3.3 | 7.2 | 6.4 | 1939 |
| LSC10-03\_55 | 1857 | 75 | 1767 | 4 | -5 | 0.1081 | 0.2 | 0.3339 | 4.7 | 6.0 | 6.8 | 1924 |
| LSC10-03\_56 | 1977 | 62 | 1824 | 6 | -8 | 0.1115 | 0.3 | 0.3590 | 3.6 |  |  |  |
| LSC10-03\_57 | 2269 | 81 | 1807 | 4 | -26 | 0.1104 | 0.2 | 0.4218 | 4.2 |  |  |  |
| LSC10-03\_58 | 1898 | 68 | 1818 | 4 | -4 | 0.1111 | 0.2 | 0.3424 | 4.1 | 6.5 | 6.2 | 1949 |
| LSC10-10\_01 | 1840 | 66 | 1798 | 6 | -2 | 0.1099 | 0.4 | 0.3303 | 4.1 | -1.2 | -1.4 | 2231 |
| LSC10-10\_02 | 1847 | 60 | 1784 | 5 | -4 | 0.1091 | 0.3 | 0.3319 | 3.8 | -3.3 | -3.1 | 2301 |
| LSC10-10\_03 | 1830 | 59 | 1796 | 6 | -2 | 0.1098 | 0.3 | 0.3283 | 3.7 | -0.2 | -0.3 | 2190 |
| LSC10-10\_04 | 1733 | 56 | 1734 | 5 | 0 | 0.1061 | 0.3 | 0.3084 | 3.7 | -1.0 | 0.3 | 2158 |
| LSC10-10\_05 | 1770 | 59 | 1821 | 7 | 3 | 0.1113 | 0.4 | 0.3159 | 3.8 |  |  |  |
| LSC10-10\_06 | 1955 | 100 | 1810 | 6 | -8 | 0.1106 | 0.3 | 0.3543 | 5.9 |  |  |  |
| LSC10-10\_07a | 1871 | 55 | 1809 | 8 | -3 | 0.1106 | 0.4 | 0.3367 | 3.4 | -0.3 | -0.7 | 2205 |
| LSC10-10\_08 | 1869 | 81 | 1802 | 6 | -4 | 0.1102 | 0.3 | 0.3363 | 5.0 |  |  |  |
| LSC10-10\_09 | 1927 | 63 | 1819 | 7 | -6 | 0.1112 | 0.4 | 0.3483 | 3.8 |  |  |  |
| LSC10-10\_09a | 1909 | 69 | 1808 | 9 | -6 | 0.1105 | 0.5 | 0.3446 | 4.2 |  |  |  |
| LSC10-10\_10 | 1963 | 80 | 1804 | 6 | -9 | 0.1103 | 0.3 | 0.3560 | 4.7 |  |  |  |
| LSC10-10\_11 | 1836 | 60 | 1783 | 7 | -3 | 0.1090 | 0.4 | 0.3295 | 3.8 | -3.9 | -3.7 | 2317 |
| LSC10-10\_12 | 1820 | 66 | 1807 | 8 | -1 | 0.1105 | 0.4 | 0.3263 | 4.2 |  |  |  |
| LSC10-10\_13 | 1987 | 65 | 1812 | 6 | -10 | 0.1108 | 0.3 | 0.3610 | 3.8 |  |  |  |

Table B-5. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | (2σ) | 206Pb | (2σ) | εHf(IA) | εHf(T) | Hf |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | Rel. | 238U | Rel. | \* | \*\* | T(DM)a |
|  | age |  | age |  |  |  | Err. |  | Err. |  |  |  |
| LSC10-10\_14a | 1795 | 47 | 1785 | 7 | -1 | 0.1092 | 0.4 | 0.3212 | 3.0 | -2.1 | -2.0 | 2261 |
| LSC10-10\_15a | 1821 | 46 | 1807 | 8 | -1 | 0.1105 | 0.4 | 0.3265 | 2.9 | -3.5 | -3.9 | 2325 |
| LSC10-10\_16a | 1819 | 51 | 1804 | 7 | -1 | 0.1103 | 0.4 | 0.3260 | 3.2 | -0.8 | -1.1 | 2225 |
| LSC10-10\_17a | 1903 | 71 | 1803 | 9 | -6 | 0.1102 | 0.5 | 0.3434 | 4.3 |  |  |  |
| LSC10-10\_18a | 1819 | 62 | 1805 | 10 | -1 | 0.1104 | 0.5 | 0.3260 | 3.9 |  |  |  |
| LSC10-10\_19a | 1859 | 62 | 1812 | 9 | -3 | 0.1108 | 0.5 | 0.3342 | 3.8 |  |  |  |
| LSC10-10\_20a | 1826 | 47 | 1807 | 7 | -1 | 0.1104 | 0.4 | 0.3274 | 3.0 | -2.5 | -2.9 | 2289 |
| LSC10-10\_21a | 1794 | 42 | 1816 | 8 | 1 | 0.1110 | 0.4 | 0.3208 | 2.7 | 0.1 | -0.5 | 2196 |
| LSC10-10\_22a | 1817 | 48 | 1808 | 7 | -1 | 0.1105 | 0.4 | 0.3257 | 3.0 | -1.8 | -2.2 | 2260 |
| LSC10-10\_23a | 1798 | 53 | 1810 | 8 | 1 | 0.1107 | 0.4 | 0.3216 | 3.4 |  |  |  |
| LSC10-10\_24a | 1864 | 64 | 1805 | 8 | -3 | 0.1104 | 0.4 | 0.3353 | 3.9 | -3.3 | -3.6 | 2317 |
| LSC10-10\_25 | 1937 | 60 | 1799 | 6 | -8 | 0.1100 | 0.3 | 0.3505 | 3.6 | -1.3 | -1.6 | 2243 |
| LSC10-10\_26 | 1793 | 65 | 1788 | 7 | 0 | 0.1093 | 0.4 | 0.3207 | 4.2 |  |  |  |
| LSC10-10\_27a | 1902 | 58 | 1823 | 11 | -4 | 0.1114 | 0.6 | 0.3433 | 3.6 | -0.3 | -1.0 | 2222 |
| LSC10-10\_28a | 1891 | 73 | 1812 | 7 | -4 | 0.1108 | 0.4 | 0.3410 | 4.4 | 2.8 | 2.3 | 2082 |
| LSC10-10\_29 | 1805 | 52 | 1776 | 5 | -2 | 0.1086 | 0.3 | 0.3231 | 3.3 | -3.0 | -2.7 | 2286 |
| LSC10-10\_30 | 1864 | 78 | 1782 | 6 | -5 | 0.1089 | 0.3 | 0.3352 | 4.8 | 0.2 | 0.4 | 2159 |
| LSC10-10\_31a | 2126 | 106 | 1803 | 8 | -18 | 0.1102 | 0.4 | 0.3907 | 5.9 |  |  |  |
| LSC10-10\_32a | 1925 | 84 | 1809 | 9 | -6 | 0.1106 | 0.5 | 0.3479 | 5.1 |  |  |  |
| LSC10-10\_33a | 1971 | 81 | 1806 | 8 | -9 | 0.1104 | 0.4 | 0.3576 | 4.8 |  |  |  |
| LSC10-10\_34a | 1956 | 85 | 1812 | 7 | -8 | 0.1108 | 0.4 | 0.3545 | 5.0 |  |  |  |
| LSC10-10\_35a | 1962 | 76 | 1805 | 7 | -9 | 0.1103 | 0.4 | 0.3558 | 4.5 |  |  |  |
| LSC10-10\_36a | 2087 | 109 | 1785 | 8 | -17 | 0.1092 | 0.4 | 0.3822 | 6.1 |  |  |  |
| LSC10-10\_37a | 2127 | 120 | 1803 | 10 | -18 | 0.1102 | 0.5 | 0.3910 | 6.7 |  |  |  |
| LSC10-10\_38a | 1892 | 71 | 1800 | 8 | -5 | 0.1100 | 0.4 | 0.3412 | 4.4 |  |  |  |
| LSC10-10\_39a | 1994 | 95 | 1807 | 8 | -10 | 0.1104 | 0.4 | 0.3625 | 5.6 |  |  |  |
| LSC10-11\_01 | 2187 | 91 | 2678 | 75 | 18 | 0.1828 | 4.5 | 0.4039 | 4.9 |  |  |  |
| LSC10-11\_02c | 2164 | 68 | 2657 | 13 | 19 | 0.1804 | 0.8 | 0.3990 | 3.7 |  |  |  |
| LSC10-11\_02gr | 1976 | 29 | 2289 | 35 | 14 | 0.1451 | 2.0 | 0.3587 | 1.7 |  |  |  |
| LSC10-11\_02r | 1999 | 57 | 2388 | 19 | 16 | 0.1537 | 1.1 | 0.3635 | 3.3 |  |  |  |
| LSC10-11\_03 | 2585 | 48 | 2757 | 4 | 6 | 0.1918 | 0.3 | 0.4933 | 2.3 | -11.3 | -3.3 | 3432 |
| LSC10-11\_04 | 2341 | 96 | 2478 | 19 | 5 | 0.1621 | 1.1 | 0.4379 | 4.9 |  |  |  |
| LSC10-11\_05 | 2267 | 106 | 2420 | 30 | 6 | 0.1567 | 1.8 | 0.4215 | 5.5 |  |  |  |
| LSC10-11\_06c | 2813 | 68 | 3042 | 13 | 8 | 0.2286 | 0.8 | 0.5470 | 3.0 | -6.1 | -4.7 | 3487 |
| LSC10-11\_06r | 2121 | 40 | 2321 | 60 | 9 | 0.1478 | 3.5 | 0.3896 | 2.2 |  |  |  |
| LSC10-11\_07 | 2169 | 74 | 2333 | 10 | 7 | 0.1489 | 0.6 | 0.4001 | 4.0 |  |  |  |
| LSC10-11\_08 | 2298 | 81 | 2459 | 8 | 7 | 0.1603 | 0.5 | 0.4283 | 4.2 |  |  |  |
| LSC10-11\_09 | 2045 | 63 | 2249 | 16 | 9 | 0.1418 | 0.9 | 0.3734 | 3.6 |  |  |  |
| LSC10-11\_10 | 2413 | 46 | 2723 | 66 | 11 | 0.1878 | 4.0 | 0.4540 | 2.3 |  |  |  |
| LSC10-11\_11 | 2219 | 60 | 2405 | 13 | 8 | 0.1553 | 0.8 | 0.4109 | 3.2 |  |  |  |
| LSC10-11\_12 | 1797 | 52 | 1937 | 18 | 7 | 0.1187 | 1.0 | 0.3216 | 3.3 |  |  |  |
| LSC10-11\_13 | 2602 | 85 | 2964 | 14 | 12 | 0.2177 | 0.9 | 0.4973 | 4.0 |  |  |  |
| LSC10-11\_14 | 2447 | 62 | 2467 | 11 | 1 | 0.1611 | 0.6 | 0.4617 | 3.1 |  |  |  |
| LSC10-11\_15c | 2545 | 43 | 2884 | 12 | 12 | 0.2073 | 0.8 | 0.4840 | 2.1 |  |  |  |
| LSC10-11\_15r | 2064 | 63 | 2305 | 12 | 10 | 0.1465 | 0.7 | 0.3775 | 3.6 |  |  |  |
| LSC10-11\_16 | 2302 | 60 | 2396 | 18 | 4 | 0.1545 | 1.1 | 0.4292 | 3.1 | -13.9 | 2.1 | 3231 |

Table B-5. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | (2σ) | 206Pb | (2σ) | εHf(IA) | εHf(T) | Hf |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | Rel. | 238U | Rel. | \* | \*\* | T(DM)a |
|  | age |  | age |  |  |  | Err. |  | Err. |  |  |  |
| LSC10-11\_17 | 2032 | 52 | 2250 | 20 | 10 | 0.1418 | 1.2 | 0.3705 | 3.0 |  |  |  |
| LSC10-11\_18 | 2206 | 93 | 2474 | 35 | 11 | 0.1618 | 2.1 | 0.4081 | 5.0 |  |  |  |
| LSC10-11\_19 | 2158 | 65 | 2332 | 7 | 7 | 0.1488 | 0.4 | 0.3976 | 3.5 |  |  |  |
| LSC10-11\_20 | 2143 | 53 | 2399 | 17 | 11 | 0.1548 | 1.0 | 0.3944 | 2.9 |  |  |  |
| LSC10-11\_21 | 1788 | 25 | 2028 | 28 | 12 | 0.1250 | 1.6 | 0.3196 | 1.6 | -22.3 | 1.9 | 3235 |
| LSC10-11\_22c | 2709 | 31 | 3098 | 6 | 13 | 0.2367 | 0.4 | 0.5224 | 1.4 |  |  |  |
| LSC10-11\_22r | 2406 | 63 | 2770 | 17 | 13 | 0.1933 | 1.0 | 0.4524 | 3.1 |  |  |  |
| LSC10-11\_23 | 1948 | 27 | 2319 | 10 | 16 | 0.1477 | 0.6 | 0.3529 | 1.6 |  |  |  |
| LSC10-11\_24 | 2193 | 64 | 2678 | 23 | 18 | 0.1827 | 1.4 | 0.4052 | 3.5 | -11.5 | -2.0 | 3386 |
| LSC10-11\_25 | 2078 | 98 | 2200 | 35 | 6 | 0.1378 | 2.0 | 0.3804 | 5.6 |  |  |  |
| LSC10-11\_26 | 2411 | 133 | 2469 | 48 | 2 | 0.1613 | 2.8 | 0.4535 | 6.6 |  |  |  |
| LSC10-11\_27 | 1700 | 55 | 1833 | 23 | 7 | 0.1121 | 1.2 | 0.3018 | 3.7 |  |  |  |
| LSC10-11\_28 | 2480 | 60 | 2545 | 9 | 3 | 0.1688 | 0.5 | 0.4692 | 2.9 |  |  |  |
| LSC10-11\_29 | 1712 | 60 | 1767 | 7 | 3 | 0.1080 | 0.4 | 0.3042 | 4.0 |  |  |  |
| LSC10-11\_30 | 2039 | 44 | 2211 | 24 | 8 | 0.1387 | 1.4 | 0.3720 | 2.5 |  |  |  |
| LSC10-11\_31 | 2072 | 52 | 2258 | 20 | 8 | 0.1425 | 1.1 | 0.3792 | 2.9 | -13.5 | 5.6 | 3098 |
| LSC10-11\_32 | 2042 | 38 | 2253 | 12 | 9 | 0.1421 | 0.7 | 0.3727 | 2.2 |  |  |  |
| LSC10-11\_33 | 1994 | 32 | 2233 | 18 | 11 | 0.1405 | 1.1 | 0.3625 | 1.9 |  |  |  |
| LSC10-11\_34 | 2824 | 80 | 3139 | 6 | 10 | 0.2429 | 0.4 | 0.5498 | 3.5 | -2.8 | -3.6 | 3446 |
| LSC10-11\_35 | 2391 | 47 | 2781 | 78 | 14 | 0.1946 | 4.8 | 0.4490 | 2.4 |  |  |  |
| LSC10-11\_36 | 2541 | 48 | 3006 | 17 | 15 | 0.2234 | 1.1 | 0.4832 | 2.3 |  |  |  |
| LSC10-11\_37 | 2251 | 65 | 2430 | 6 | 7 | 0.1576 | 0.3 | 0.4179 | 3.4 |  |  |  |
| LSC10-11\_38 | 1954 | 76 | 2136 | 13 | 9 | 0.1329 | 0.7 | 0.3541 | 4.5 |  |  |  |
| LSC10-11\_39 | 1945 | 76 | 2182 | 24 | 11 | 0.1364 | 1.4 | 0.3521 | 4.6 |  |  |  |
| LSC10-11\_40 | 2410 | 71 | 2487 | 8 | 3 | 0.1630 | 0.5 | 0.4534 | 3.5 | -12.1 | 1.8 | 3243 |
| LSC10-11\_41c | 2186 | 35 | 2528 | 20 | 14 | 0.1670 | 1.2 | 0.4036 | 1.9 | -15.4 | -2.5 | 3408 |
| LSC10-11\_41r | 1780 | 30 | 2051 | 18 | 13 | 0.1266 | 1.0 | 0.3181 | 1.9 |  |  |  |
| LSC10-11\_42 | 2225 | 58 | 2343 | 10 | 5 | 0.1497 | 0.6 | 0.4122 | 3.1 | -22.6 | -5.9 | 3541 |
| LSC10-11\_43 | 1900 | 79 | 2097 | 35 | 9 | 0.1299 | 2.0 | 0.3428 | 4.8 |  |  |  |
| LSC10-11\_44 | 2370 | 79 | 2600 | 8 | 9 | 0.1744 | 0.5 | 0.4444 | 4.0 | -12.1 | -0.6 | 3328 |
| LSC10-11\_45 | 1563 | 44 | 1651 | 6 | 5 | 0.1015 | 0.3 | 0.2745 | 3.2 |  |  |  |
| LSC10-11\_46 | 1867 | 47 | 2122 | 55 | 12 | 0.1318 | 3.1 | 0.3360 | 2.9 |  |  |  |
| LSC10-11\_47 | 2343 | 54 | 2496 | 16 | 6 | 0.1639 | 1.0 | 0.4384 | 2.7 |  |  |  |
| LSC10-11\_48 | 2360 | 36 | 2398 | 28 | 2 | 0.1547 | 1.7 | 0.4422 | 1.8 |  |  |  |
| LSC10-11\_49 | 2526 | 93 | 2829 | 42 | 11 | 0.2004 | 2.6 | 0.4797 | 4.4 | -3.7 | 2.6 | 3211 |
| LSC10-11\_50 | 2169 | 74 | 2312 | 18 | 6 | 0.1471 | 1.1 | 0.3999 | 4.0 |  |  |  |
| LSC10-11\_51 | 2679 | 70 | 2903 | 13 | 8 | 0.2096 | 0.8 | 0.5154 | 3.2 | -2.6 | 2.0 | 3232 |
| LSC10-11\_52r | 2289 | 85 | 2423 | 18 | 6 | 0.1569 | 1.1 | 0.4263 | 4.4 |  |  |  |
| LSC10-11\_53 | 1753 | 55 | 1843 | 23 | 5 | 0.1127 | 1.3 | 0.3124 | 3.6 |  |  |  |
| LSC10-11\_54 | 2349 | 146 | 2545 | 90 | 8 | 0.1687 | 5.4 | 0.4398 | 7.5 | -11.7 | 1.1 | 3265 |
| LSC10-11\_55 | 2178 | 90 | 2383 | 48 | 9 | 0.1533 | 2.8 | 0.4020 | 4.9 |  |  |  |
| LSC10-11\_56 | 2126 | 79 | 2220 | 16 | 4 | 0.1394 | 0.9 | 0.3907 | 4.4 | -24.1 | -4.2 | 3469 |
| LSC10-11\_57 | 2357 | 35 | 2628 | 26 | 10 | 0.1774 | 1.6 | 0.4415 | 1.8 | -7.8 | 3.1 | 3191 |
| LSC10-11\_58 | 2411 | 73 | 2349 | 20 | -3 | 0.1502 | 1.2 | 0.4535 | 3.6 |  |  |  |
| LSC10-11\_59c | 2355 | 65 | 2561 | 15 | 8 | 0.1704 | 0.9 | 0.4411 | 3.3 |  |  |  |
| LSC10-11\_59r | 2051 | 46 | 2273 | 14 | 10 | 0.1438 | 0.8 | 0.3746 | 2.6 |  |  |  |

Table B-5. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | (2σ) | 206Pb | (2σ) | εHf(IA) | εHf(T) | Hf |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | Rel. | 238U | Rel. | \* | \*\* | T(DM)a |
|  | age |  | age |  |  |  | Err. |  | Err. |  |  |  |
| LSC10-11\_60 | 2577 | 141 | 2747 | 56 | 6 | 0.1905 | 3.4 | 0.4916 | 6.7 | -10.2 | -2.2 | 3391 |
| LSC10-11\_61c | 2307 | 60 | 2750 | 16 | 16 | 0.1909 | 1.0 | 0.4304 | 3.1 |  |  |  |
| LSC10-11\_61r | 2143 | 44 | 2165 | 21 | 1 | 0.1351 | 1.2 | 0.3945 | 2.4 |  |  |  |
| LSC10-11\_62 | 2569 | 97 | 2897 | 51 | 11 | 0.2089 | 3.1 | 0.4897 | 4.6 |  |  |  |
| LSC10-11\_63c | 2276 | 79 | 2374 | 19 | 4 | 0.1524 | 1.1 | 0.4234 | 4.1 |  |  |  |
| LSC10-11\_64 | 2130 | 98 | 2141 | 22 | 0 | 0.1333 | 1.3 | 0.3917 | 5.4 |  |  |  |
| LSC10-11\_65 | 2560 | 68 | 2790 | 7 | 8 | 0.1956 | 0.4 | 0.4877 | 3.2 | -5.3 | 1.8 | 3240 |
| LSC10-11\_66 | 2309 | 51 | 2437 | 14 | 5 | 0.1582 | 0.8 | 0.4307 | 2.6 |  |  |  |
| LSC10-12\_01 | 1677 | 23 | 1823 | 23 | 8 | 0.1114 | 1.2 | 0.2971 | 1.6 | -11.7 |  | 2631 |
| LSC10-12\_02 | 1600 | 34 | 1708 | 10 | 6 | 0.1046 | 0.6 | 0.2818 | 2.4 |  |  |  |
| LSC10-12\_03 | 1506 | 24 | 1680 | 10 | 10 | 0.1030 | 0.5 | 0.2632 | 1.8 |  |  |  |
| LSC10-12\_04 | 1742 | 140 | 1923 | 16 | 9 | 0.1178 | 0.9 | 0.3103 | 9.2 | -25.9 |  | 3254 |
| LSC10-12\_05 | 1635 | 33 | 1730 | 9 | 5 | 0.1059 | 0.5 | 0.2887 | 2.3 | -14.5 |  | 2658 |
| LSC10-12\_06 | 1613 | 29 | 1732 | 9 | 7 | 0.1060 | 0.5 | 0.2844 | 2.0 |  |  |  |
| LSC10-12\_07 | 1763 | 44 | 1862 | 24 | 5 | 0.1139 | 1.3 | 0.3146 | 2.9 | -16.2 |  | 2842 |
| LSC10-12\_08 | 1683 | 37 | 1763 | 9 | 5 | 0.1078 | 0.5 | 0.2983 | 2.5 | -14.8 |  | 2697 |
| LSC10-12\_09 | 1642 | 32 | 1706 | 9 | 4 | 0.1045 | 0.5 | 0.2901 | 2.2 |  |  |  |
| LSC10-12\_10 | 1730 | 33 | 1884 | 26 | 8 | 0.1153 | 1.4 | 0.3078 | 2.2 | -14.6 |  | 2795 |
| LSC10-12\_11 | 2964 | 88 | 2844 | 9 | -4 | 0.2022 | 0.6 | 0.5839 | 3.7 |  |  |  |
| LSC10-12\_12 | 1779 | 18 | 2003 | 33 | 11 | 0.1232 | 1.8 | 0.3178 | 1.1 | -13.0 |  | 2842 |
| LSC10-12\_13 | 1677 | 42 | 1781 | 12 | 6 | 0.1089 | 0.7 | 0.2971 | 2.9 | -18.8 |  | 2865 |
| LSC10-12\_14 | 1595 | 29 | 1700 | 14 | 6 | 0.1042 | 0.8 | 0.2806 | 2.0 |  |  |  |
| LSC10-12\_15 | 1731 | 43 | 1782 | 9 | 3 | 0.1090 | 0.5 | 0.3081 | 2.8 | -15.6 |  | 2741 |
| LSC10-12\_16 | 1648 | 26 | 1741 | 10 | 5 | 0.1065 | 0.6 | 0.2913 | 1.8 |  |  |  |
| LSC10-12\_17 | 2514 | 45 | 2704 | 11 | 7 | 0.1856 | 0.7 | 0.4771 | 2.1 | 0.0 |  | 2962 |
| LSC10-12\_18 | 2815 | 70 | 2848 | 10 | 1 | 0.2027 | 0.6 | 0.5476 | 3.1 | -2.0 |  | 3170 |
| LSC10-12\_19 | 2814 | 59 | 2838 | 8 | 1 | 0.2014 | 0.5 | 0.5473 | 2.6 | -3.6 |  | 3232 |
| LSC10-12\_20 | 2826 | 73 | 2827 | 11 | 0 | 0.2002 | 0.7 | 0.5502 | 3.2 |  |  |  |
| LSC10-12\_21 | 3032 | 58 | 3189 | 8 | 5 | 0.2507 | 0.5 | 0.6007 | 2.4 |  |  |  |
| LSC10-12\_22 | 2584 | 69 | 2827 | 9 | 9 | 0.2002 | 0.6 | 0.4932 | 3.3 |  |  |  |
| LSC10-12\_23 | 2875 | 76 | 3083 | 8 | 7 | 0.2345 | 0.5 | 0.5619 | 3.3 |  |  |  |
| LSC10-12\_24 | 2631 | 39 | 2841 | 7 | 7 | 0.2018 | 0.5 | 0.5039 | 1.8 | -2.0 |  | 3155 |
| LSC10-12\_25 | 2761 | 36 | 2805 | 8 | 2 | 0.1974 | 0.5 | 0.5345 | 1.6 |  |  |  |
| LSC10-12\_26 | 3354 | 62 | 3346 | 7 | 0 | 0.2770 | 0.5 | 0.6826 | 2.4 |  |  |  |
| LSC10-12\_27 | 1496 | 43 | 3017 | 9 | 50 | 0.2250 | 0.6 | 0.2613 | 3.2 |  |  |  |
| LSC10-12\_28 | 2788 | 46 | 2838 | 8 | 2 | 0.2014 | 0.5 | 0.5411 | 2.0 |  |  |  |
| LSC10-12\_29 | 2744 | 42 | 2823 | 9 | 3 | 0.1996 | 0.6 | 0.5306 | 1.9 |  |  |  |
| LSC10-12\_30 | 2786 | 45 | 2812 | 8 | 1 | 0.1983 | 0.5 | 0.5407 | 2.0 |  |  |  |
| LSC10-12\_31 | 1372 | 96 | 3050 | 12 | 55 | 0.2296 | 0.7 | 0.2373 | 7.8 |  |  |  |
| LSC10-12\_32 | 2769 | 120 | 2818 | 8 | 2 | 0.1990 | 0.5 | 0.5366 | 5.4 |  |  |  |
| LSC10-12\_33 | 2945 | 45 | 3077 | 7 | 4 | 0.2336 | 0.5 | 0.5790 | 1.9 |  |  |  |
| LSC10-12\_34 | 2759 | 52 | 2822 | 9 | 2 | 0.1994 | 0.5 | 0.5342 | 2.3 | -1.3 |  | 3112 |
| LSC10-12\_35 | 2898 | 71 | 3016 | 8 | 4 | 0.2249 | 0.5 | 0.5677 | 3.0 |  |  |  |
| LSC10-12\_37 | 2895 | 118 | 3008 | 45 | 4 | 0.2238 | 2.8 | 0.5668 | 5.1 |  |  |  |
| LSC10-12\_38 | 2773 | 31 | 2815 | 9 | 1 | 0.1986 | 0.5 | 0.5376 | 1.4 | -3.6 |  | 3194 |
| LSC10-12\_39 | 2191 | 73 | 3178 | 11 | 31 | 0.2489 | 0.7 | 0.4048 | 4.0 |  |  |  |

Table B-5. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | (2σ) | 206Pb | (2σ) | εHf(IA) | εHf(T) | Hf |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | Rel. | 238U | Rel. | \* | \*\* | T(DM)a |
|  | age |  | age |  |  |  | Err. |  | Err. |  |  |  |
| LSC10-12\_40 | 2071 | 181 | 3104 | 8 | 33 | 0.2376 | 0.5 | 0.3789 | 10.3 |  |  |  |
| LSC10-12\_41 | 2847 | 62 | 2838 | 10 | 0 | 0.2014 | 0.6 | 0.5552 | 2.7 |  |  |  |
| LSC10-12\_42 | 275 | 8 | 2119 | 54 | 87 | 0.1316 | 3.1 | 0.0436 | 2.9 |  |  |  |
| LSC10-12\_43 | 2748 | 32 | 2853 | 9 | 4 | 0.2034 | 0.5 | 0.5316 | 1.4 |  |  |  |
| LSC10-12\_44 | 1895 | 123 | 2631 | 9 | 28 | 0.1777 | 0.5 | 0.3418 | 7.6 |  |  |  |
| LSC10-12\_45 | 2868 | 50 | 2824 | 9 | -2 | 0.1998 | 0.5 | 0.5603 | 2.2 | -0.9 |  | 3102 |
| LSC10-12\_46 | 2796 | 53 | 2898 | 21 | 4 | 0.2091 | 1.3 | 0.5430 | 2.3 |  |  |  |
| LSC10-12\_47 | 2485 | 84 | 3212 | 7 | 23 | 0.2544 | 0.5 | 0.4703 | 4.1 |  |  |  |
| LSC10-12\_48 | 2444 | 160 | 3316 | 45 | 26 | 0.2717 | 2.9 | 0.4611 | 7.9 |  |  |  |
| LSC10-12\_49 | 1286 | 204 | 3150 | 8 | 59 | 0.2446 | 0.5 | 0.2209 | 17.7 |  |  |  |
| LSC10-13\_01a | 1705 | 79 | 1770 | 6 | 4 | 0.1082 | 0.3 | 0.3029 | 5.3 |  |  |  |
| LSC10-13\_03 | 2083 | 227 | 1731 | 9 | -20 | 0.1060 | 0.5 | 0.3815 | 12.8 |  |  |  |
| LSC10-13\_04a | 1630 | 65 | 1763 | 6 | 8 | 0.1078 | 0.3 | 0.2876 | 4.5 |  |  |  |
| LSC10-13\_05a | 1655 | 67 | 1820 | 7 | 9 | 0.1113 | 0.4 | 0.2927 | 4.6 | -6.2 | -7.0 | 2427 |
| LSC10-13\_06 | 2189 | 212 | 1736 | 10 | -26 | 0.1063 | 0.6 | 0.4043 | 11.5 |  |  |  |
| LSC10-13\_07 | 2103 | 156 | 1887 | 14 | -11 | 0.1155 | 0.8 | 0.3858 | 8.7 |  |  |  |
| LSC10-13\_07a | 2219 | 67 | 2472 | 8 | 10 | 0.1616 | 0.5 | 0.4108 | 3.6 |  |  |  |
| LSC10-13\_08 | 1742 | 131 | 1899 | 25 | 8 | 0.1162 | 1.4 | 0.3103 | 8.6 |  |  |  |
| LSC10-13\_09 | 1771 | 111 | 1683 | 9 | -5 | 0.1032 | 0.5 | 0.3161 | 7.2 | -9.4 | -7.1 | 2432 |
| LSC10-13\_10 | 1949 | 182 | 1686 | 9 | -16 | 0.1034 | 0.5 | 0.3531 | 10.9 |  |  |  |
| LSC10-13\_10a | 1633 | 65 | 1808 | 6 | 10 | 0.1105 | 0.4 | 0.2883 | 4.5 | -6.8 | -7.4 | 2441 |
| LSC10-13\_11a | 1633 | 65 | 1811 | 7 | 10 | 0.1107 | 0.4 | 0.2882 | 4.5 | -5.1 | -5.8 | 2380 |
| LSC10-13\_12a | 1697 | 63 | 1813 | 7 | 6 | 0.1108 | 0.4 | 0.3011 | 4.2 | -6.4 | -7.1 | 2430 |
| LSC10-13\_13 | 1667 | 70 | 1669 | 9 | 0 | 0.1024 | 0.5 | 0.2951 | 4.8 | -8.1 | -5.5 | 2370 |
| LSC10-13\_14 | 1717 | 121 | 1673 | 11 | -3 | 0.1027 | 0.6 | 0.3052 | 8.1 | -6.9 | -4.4 | 2329 |
| LSC10-13\_15a | 1667 | 59 | 1811 | 7 | 8 | 0.1107 | 0.4 | 0.2951 | 4.0 |  |  |  |
| LSC10-13\_16a | 1732 | 88 | 1795 | 10 | 4 | 0.1097 | 0.5 | 0.3082 | 5.8 |  |  |  |
| LSC10-13\_17a | 1624 | 49 | 1819 | 7 | 11 | 0.1112 | 0.4 | 0.2865 | 3.4 | -6.7 | -6.1 | 2393 |
| LSC10-13\_18a | 1764 | 68 | 1818 | 10 | 3 | 0.1111 | 0.5 | 0.3148 | 4.4 |  |  |  |
| LSC10-13\_19a | 1649 | 55 | 1771 | 7 | 7 | 0.1083 | 0.4 | 0.2915 | 3.8 | -9.3 | -9.1 | 2502 |
| LSC10-13\_20a | 1735 | 63 | 1796 | 7 | 3 | 0.1098 | 0.4 | 0.3089 | 4.1 | -4.8 | -5.1 | 2355 |
| LSC10-13\_21a | 1784 | 59 | 1768 | 7 | -1 | 0.1081 | 0.4 | 0.3189 | 3.8 |  |  |  |
| LSC10-13\_22 | 1593 | 371 | 1744 | 39 | 9 | 0.1067 | 2.1 | 0.2804 | 26.7 |  |  |  |
| LSC10-13\_23 | 1797 | 185 | 1708 | 9 | -5 | 0.1046 | 0.5 | 0.3215 | 11.9 |  |  |  |
| LSC10-13\_24a | 1722 | 53 | 1841 | 7 | 6 | 0.1125 | 0.4 | 0.3062 | 3.5 |  |  |  |
| LSC10-13\_25a | 1720 | 60 | 1817 | 8 | 5 | 0.1111 | 0.4 | 0.3058 | 4.0 | -5.1 | -5.9 | 2384 |
| LSC10-13\_26 | 1744 | 137 | 1674 | 9 | -4 | 0.1027 | 0.5 | 0.3106 | 9.0 | -9.5 | -7.0 | 2426 |
| LSC10-13\_27a | 1906 | 79 | 1805 | 8 | -6 | 0.1104 | 0.4 | 0.3441 | 4.8 |  |  |  |
| LSC10-13\_28a | 1780 | 52 | 1827 | 7 | 3 | 0.1117 | 0.4 | 0.3179 | 3.3 |  |  |  |
| LSC10-13\_29a | 1791 | 58 | 1822 | 7 | 2 | 0.1114 | 0.4 | 0.3202 | 3.7 |  |  |  |
| LSC10-13\_30c | 2328 | 186 | 2241 | 14 | -4 | 0.1411 | 0.8 | 0.4349 | 9.6 |  |  |  |
| LSC10-13\_30r | 1856 | 135 | 1692 | 10 | -10 | 0.1037 | 0.6 | 0.3337 | 8.4 |  |  |  |
| LSC10-13\_30ra | 1697 | 60 | 1796 | 11 | 6 | 0.1098 | 0.6 | 0.3012 | 4.0 |  |  |  |
| LSC10-13\_31a | 1763 | 49 | 1844 | 7 | 4 | 0.1128 | 0.4 | 0.3145 | 3.2 |  |  |  |
| LSC10-13\_32 | 1746 | 149 | 1712 | 9 | -2 | 0.1049 | 0.5 | 0.3112 | 9.8 | -6.9 | -5.3 | 2364 |
| LSC10-13\_33a | 1855 | 61 | 1815 | 7 | -2 | 0.1109 | 0.4 | 0.3334 | 3.8 | -3.7 | -4.4 | 2330 |

Table B-5. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | (2σ) | 206Pb | (2σ) | εHf(IA) | εHf(T) | Hf |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | Rel. | 238U | Rel. | \* | \*\* | T(DM)a |
|  | age |  | age |  |  |  | Err. |  | Err. |  |  |  |
| LSC10-13\_34a | 1801 | 64 | 1784 | 7 | -1 | 0.1091 | 0.4 | 0.3222 | 4.1 |  |  |  |
| LSC10-13\_35a | 1734 | 54 | 1803 | 7 | 4 | 0.1102 | 0.4 | 0.3086 | 3.5 | -4.5 | -4.9 | 2355 |
| LSC10-13\_36a | 1767 | 65 | 1809 | 7 | 2 | 0.1106 | 0.4 | 0.3154 | 4.2 |  |  |  |
| LSC10-13\_37 | 1814 | 148 | 1946 | 66 | 7 | 0.1193 | 3.7 | 0.3250 | 9.4 |  |  |  |
| LSC10-13\_38a | 1720 | 54 | 1806 | 7 | 5 | 0.1104 | 0.4 | 0.3059 | 3.6 | -5.9 | -6.4 | 2408 |
| LSC10-13\_39 | 1736 | 137 | 1722 | 9 | -1 | 0.1055 | 0.5 | 0.3090 | 9.0 |  |  |  |
| LSC10-13\_40 | 1671 | 78 | 1692 | 10 | 1 | 0.1038 | 0.6 | 0.2959 | 5.3 |  |  |  |
| LSC10-13\_41 | 1696 | 100 | 1746 | 9 | 3 | 0.1068 | 0.5 | 0.3010 | 6.7 |  |  |  |
| LSC10-13\_42 | 1733 | 127 | 1715 | 9 | -1 | 0.1050 | 0.5 | 0.3085 | 8.4 |  |  |  |
| LSC10-13\_43a | 1812 | 73 | 1807 | 7 | 0 | 0.1104 | 0.4 | 0.3245 | 4.7 |  |  |  |
| LSC10-13\_44 | 1767 | 129 | 1698 | 9 | -4 | 0.1041 | 0.5 | 0.3154 | 8.4 |  |  |  |
| LSC10-13\_45a | 1713 | 58 | 1798 | 7 | 5 | 0.1099 | 0.4 | 0.3044 | 3.9 |  |  |  |
| LSC10-13\_46a | 1785 | 53 | 1825 | 7 | 2 | 0.1115 | 0.4 | 0.3189 | 3.4 |  |  |  |
| LSC10-13\_47c | 1812 | 127 | 1790 | 19 | -1 | 0.1094 | 1.0 | 0.3245 | 8.1 |  |  |  |
| LSC10-13\_47r | 1690 | 134 | 1706 | 9 | 1 | 0.1046 | 0.5 | 0.2998 | 9.0 |  |  |  |
| LSC10-13\_48 | 1778 | 135 | 1795 | 22 | 1 | 0.1097 | 1.2 | 0.3176 | 8.7 | -6.7 | -6.9 | 2427 |
| LSC10-13\_49 | 1685 | 67 | 1739 | 9 | 3 | 0.1064 | 0.5 | 0.2988 | 4.5 |  |  |  |
| LSC10-13\_50a | 1770 | 57 | 1830 | 8 | 3 | 0.1119 | 0.5 | 0.3159 | 3.7 |  |  |  |
| LSC10-13\_51 | 1779 | 135 | 1738 | 10 | -2 | 0.1064 | 0.5 | 0.3178 | 8.7 | -7.5 | -6.5 | 2408 |
| LSC10-13\_52 | 1539 | 122 | 1731 | 9 | 11 | 0.1059 | 0.5 | 0.2696 | 8.9 | -6.4 | -5.2 | 2358 |
| RRD10-05\_01 | 1768 | 106 | 1892 | 12 | 7 | 0.1158 | 0.7 | 0.3155 | 6.9 | -4.4 | -4.5 | 2427 |
| RRD10-05\_02 | 1576 | 94 | 2073 | 47 | 24 | 0.1282 | 2.7 | 0.2769 | 6.8 |  |  |  |
| RRD10-05\_03 | 1858 | 87 | 2053 | 84 | 9 | 0.1268 | 4.8 | 0.3341 | 5.4 |  |  |  |
| RRD10-05\_04 | 1566 | 51 | 2076 | 12 | 25 | 0.1284 | 0.7 | 0.2749 | 3.7 |  |  |  |
| RRD10-05\_05 | 1954 | 51 | 1884 | 12 | -4 | 0.1153 | 0.7 | 0.3540 | 3.0 |  |  |  |
| RRD10-05\_06 | 1919 | 64 | 1880 | 9 | -2 | 0.1150 | 0.5 | 0.3468 | 3.9 |  |  |  |
| RRD10-05\_07 | 1891 | 69 | 1880 | 9 | -1 | 0.1150 | 0.5 | 0.3408 | 4.2 | -7.1 | -6.8 | 2517 |
| RRD10-05\_08 | 2036 | 92 | 1920 | 12 | -6 | 0.1176 | 0.7 | 0.3713 | 5.3 |  |  |  |
| RRD10-05\_09 | 1376 | 38 | 1923 | 10 | 28 | 0.1178 | 0.6 | 0.2380 | 3.1 |  |  |  |
| RRD10-05\_10 | 2023 | 99 | 1936 | 9 | -5 | 0.1187 | 0.5 | 0.3687 | 5.7 |  |  |  |
| RRD10-05\_11 | 1937 | 64 | 1859 | 9 | -4 | 0.1137 | 0.5 | 0.3505 | 3.8 |  |  |  |
| RRD10-05\_12 | 2017 | 71 | 1907 | 9 | -6 | 0.1167 | 0.5 | 0.3674 | 4.1 |  |  |  |
| RRD10-05\_13 | 1794 | 43 | 1895 | 8 | 5 | 0.1160 | 0.5 | 0.3209 | 2.7 |  |  |  |
| RRD10-05\_14 | 1867 | 68 | 1890 | 12 | 1 | 0.1157 | 0.6 | 0.3359 | 4.2 | -5.7 | -5.7 | 2473 |
| RRD10-05\_15 | 2029 | 86 | 1863 | 8 | -9 | 0.1139 | 0.5 | 0.3699 | 5.0 |  |  |  |
| RRD10-05\_16 | 1737 | 40 | 1916 | 13 | 9 | 0.1173 | 0.7 | 0.3093 | 2.6 |  |  |  |
| RRD10-05\_17 | 1867 | 52 | 1881 | 8 | 1 | 0.1150 | 0.5 | 0.3359 | 3.2 | -6.2 | -5.9 | 2482 |
| RRD10-05\_18 | 1320 | 46 | 2097 | 23 | 37 | 0.1299 | 1.3 | 0.2273 | 3.8 |  |  |  |
| RRD10-05\_19 | 1758 | 37 | 1964 | 6 | 10 | 0.1205 | 0.4 | 0.3134 | 2.4 |  |  |  |
| RRD10-05\_20 | 1758 | 46 | 1894 | 4 | 7 | 0.1159 | 0.2 | 0.3135 | 3.0 | -5.1 | -5.2 | 2451 |
| RRD10-05\_21 | 1680 | 89 | 1946 | 13 | 14 | 0.1193 | 0.7 | 0.2978 | 6.0 |  |  |  |
| RRD10-05\_22 | 1772 | 51 | 1901 | 5 | 7 | 0.1163 | 0.3 | 0.3164 | 3.3 | -5.8 | -6.1 | 2487 |
| RRD10-05\_23 | 1928 | 74 | 1883 | 3 | -2 | 0.1152 | 0.2 | 0.3486 | 4.5 | -4.9 | -4.7 | 2437 |
| RRD10-05\_24 | 1218 | 87 | 1995 | 20 | 39 | 0.1227 | 1.1 | 0.2079 | 7.9 |  |  |  |
| RRD10-05\_25 | 1764 | 76 | 1901 | 12 | 7 | 0.1164 | 0.6 | 0.3148 | 4.9 | -8.1 | -8.4 | 2581 |
| RRD10-05\_26 | 1776 | 50 | 1908 | 5 | 7 | 0.1168 | 0.3 | 0.3172 | 3.2 |  |  |  |

Table B-5. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | (2σ) | 206Pb | (2σ) | εHf(IA) | εHf(T) | Hf |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | Rel. | 238U | Rel. | \* | \*\* | T(DM)a |
|  | age |  | age |  |  |  | Err. |  | Err. |  |  |  |
| RRD10-05\_27 | 1308 | 32 | 2059 | 14 | 36 | 0.1272 | 0.8 | 0.2249 | 2.7 |  |  |  |
| RRD10-05\_28 | 1788 | 62 | 1939 | 14 | 8 | 0.1188 | 0.8 | 0.3196 | 4.0 |  |  |  |
| RRD10-05\_29 | 1873 | 63 | 1919 | 7 | 2 | 0.1175 | 0.4 | 0.3371 | 3.9 |  |  |  |
| RRD10-05\_30 | 1736 | 42 | 1881 | 4 | 8 | 0.1150 | 0.2 | 0.3091 | 2.8 | -7.0 | -6.8 | 2511 |
| RRD10-05\_31 | 1782 | 41 | 1891 | 7 | 6 | 0.1157 | 0.4 | 0.3184 | 2.6 | -7.2 | -7.2 | 2529 |
| RRD10-05\_32 | 1785 | 57 | 1891 | 4 | 6 | 0.1157 | 0.2 | 0.3190 | 3.6 | -3.2 | -3.2 | 2383 |
| RRD10-05\_33 | 1713 | 46 | 1898 | 5 | 10 | 0.1161 | 0.3 | 0.3044 | 3.1 | -5.2 | -5.4 | 2462 |
| RRD10-05\_34 | 1625 | 51 | 1899 | 5 | 14 | 0.1162 | 0.3 | 0.2868 | 3.5 |  |  |  |
| RRD10-05\_35 | 1404 | 25 | 2307 | 17 | 39 | 0.1466 | 1.0 | 0.2434 | 2.0 |  |  |  |
| RRD10-05\_36 | 1303 | 49 | 1975 | 14 | 34 | 0.1213 | 0.8 | 0.2241 | 4.2 |  |  |  |
| RRD10-05\_37 | 1724 | 50 | 1885 | 5 | 9 | 0.1153 | 0.3 | 0.3065 | 3.3 | -5.6 | -5.5 | 2467 |
| RRD10-05\_38 | 1765 | 53 | 1879 | 4 | 6 | 0.1150 | 0.2 | 0.3150 | 3.4 | -7.0 | -6.7 | 2513 |
| RRD10-05\_39 | 1646 | 32 | 1881 | 5 | 12 | 0.1151 | 0.3 | 0.2910 | 2.2 |  |  |  |
| RRD10-05\_40 | 1515 | 35 | 1911 | 19 | 21 | 0.1170 | 1.1 | 0.2649 | 2.6 |  |  |  |
| RRD10-05\_41 | 1636 | 42 | 1896 | 9 | 14 | 0.1161 | 0.5 | 0.2889 | 2.9 |  |  |  |
| RRD10-05\_42 | 1630 | 40 | 1899 | 5 | 14 | 0.1162 | 0.3 | 0.2877 | 2.8 |  |  |  |
| RRD10-05\_43 | 1586 | 40 | 1887 | 5 | 16 | 0.1155 | 0.3 | 0.2790 | 2.8 |  |  |  |
| RRD10-05\_44 | 1650 | 38 | 1871 | 5 | 12 | 0.1144 | 0.3 | 0.2917 | 2.6 |  |  |  |
| RRD10-05\_45 | 1647 | 41 | 1905 | 5 | 13 | 0.1166 | 0.3 | 0.2912 | 2.8 |  |  |  |
| RRD10-05\_46 | 1646 | 36 | 1893 | 5 | 13 | 0.1159 | 0.3 | 0.2909 | 2.5 | -6.9 | -7.0 | 2520 |
| RRD10-05\_47 | 1723 | 40 | 1891 | 7 | 9 | 0.1157 | 0.4 | 0.3065 | 2.6 | -6.7 | -6.7 | 2508 |
| RRD10-05\_48 | 1498 | 43 | 1890 | 4 | 21 | 0.1157 | 0.2 | 0.2617 | 3.2 |  |  |  |
| RRD10-05\_49 | 1745 | 47 | 1875 | 4 | 7 | 0.1147 | 0.2 | 0.3110 | 3.1 |  |  |  |
| RRD10-05\_50 | 1713 | 37 | 1878 | 4 | 9 | 0.1149 | 0.2 | 0.3045 | 2.5 |  |  |  |
| RRD10-05\_51 | 1725 | 51 | 1896 | 4 | 9 | 0.1161 | 0.2 | 0.3069 | 3.4 |  |  |  |
| RRD10-05\_52 | 1434 | 57 | 1966 | 11 | 27 | 0.1207 | 0.6 | 0.2492 | 4.5 |  |  |  |
| RRD10-05\_53 | 1883 | 29 | 1896 | 4 | 1 | 0.1160 | 0.2 | 0.3392 | 1.8 | -6.5 | -6.6 | 2506 |
| RRD10-05\_54 | 1851 | 62 | 1994 | 31 | 7 | 0.1225 | 1.8 | 0.3326 | 3.8 |  |  |  |
| RRD10-05\_55 | 1877 | 61 | 1915 | 7 | 2 | 0.1173 | 0.4 | 0.3379 | 3.8 |  |  |  |
| RRD10-05\_56 | 1747 | 54 | 1889 | 5 | 8 | 0.1156 | 0.3 | 0.3114 | 3.5 | -5.5 | -5.5 | 2465 |
| RRD10-05\_57 | 1698 | 90 | 1892 | 4 | 10 | 0.1158 | 0.2 | 0.3013 | 6.1 | -7.4 | -7.4 | 2537 |
| RRD10-05\_58 | 1772 | 33 | 1884 | 4 | 6 | 0.1152 | 0.2 | 0.3163 | 2.2 | -8.9 | -8.8 | 2593 |
| RRD10-09\_01 | 1221 | 52 | 1923 | 10 | 37 | 0.1178 | 0.5 | 0.2085 | 4.7 |  |  |  |
| RRD10-09\_02 | 1955 | 86 | 1891 | 9 | -3 | 0.1157 | 0.5 | 0.3542 | 5.1 |  |  |  |
| RRD10-09\_03 | 1948 | 71 | 1880 | 7 | -4 | 0.1150 | 0.4 | 0.3528 | 4.2 |  |  |  |
| RRD10-09\_04 | 1925 | 86 | 1877 | 5 | -3 | 0.1148 | 0.3 | 0.3479 | 5.2 |  |  |  |
| RRD10-09\_05 | 2041 | 77 | 1882 | 5 | -8 | 0.1152 | 0.3 | 0.3725 | 4.4 |  |  |  |
| RRD10-09\_06 | 1907 | 69 | 1876 | 4 | -2 | 0.1147 | 0.2 | 0.3443 | 4.2 |  |  |  |
| RRD10-09\_07 | 1934 | 70 | 1886 | 4 | -3 | 0.1154 | 0.2 | 0.3498 | 4.2 |  |  |  |
| RRD10-09\_08 | 1904 | 102 | 1891 | 6 | -1 | 0.1157 | 0.3 | 0.3437 | 6.2 |  |  |  |
| RRD10-09\_09 | 1780 | 161 | 1937 | 18 | 8 | 0.1187 | 1.0 | 0.3179 | 10.4 |  |  |  |
| RRD10-09\_10 | 1752 | 112 | 1879 | 5 | 7 | 0.1149 | 0.3 | 0.3123 | 7.3 |  |  |  |
| RRD10-09\_11 | 2012 | 94 | 1982 | 50 | -2 | 0.1217 | 2.8 | 0.3663 | 5.4 |  |  |  |
| RRD10-09\_12 | 1918 | 77 | 1854 | 5 | -3 | 0.1134 | 0.3 | 0.3465 | 4.7 |  |  |  |
| RRD10-09\_13 | 1896 | 75 | 1876 | 5 | -1 | 0.1147 | 0.3 | 0.3419 | 4.6 |  |  |  |
| RRD10-09\_14 | 1965 | 88 | 1865 | 5 | -5 | 0.1140 | 0.3 | 0.3564 | 5.2 |  |  |  |

Table B-5. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | (2σ) | 206Pb | (2σ) | εHf(IA) | εHf(T) | Hf |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | Rel. | 238U | Rel. | \* | \*\* | T(DM)a |
|  | age |  | age |  |  |  | Err. |  | Err. |  |  |  |
| RRD10-09\_15 | 1967 | 65 | 1897 | 12 | -4 | 0.1161 | 0.7 | 0.3568 | 3.9 | -5.4 | -5.9 | 2470 |
| RRD10-09\_16 | 1950 | 64 | 1864 | 4 | -5 | 0.1140 | 0.2 | 0.3533 | 3.8 |  |  |  |
| RRD10-09\_17 | 1882 | 83 | 1909 | 6 | 1 | 0.1169 | 0.3 | 0.3390 | 5.1 |  |  |  |
| RRD10-09\_18 | 1937 | 86 | 1986 | 35 | 2 | 0.1220 | 2.0 | 0.3505 | 5.1 |  |  |  |
| RRD10-09\_19 | 1918 | 92 | 1915 | 24 | 0 | 0.1173 | 1.3 | 0.3464 | 5.6 |  |  |  |
| RRD10-09\_20 | 1894 | 62 | 1868 | 4 | -1 | 0.1143 | 0.2 | 0.3415 | 3.8 |  |  |  |
| RRD10-09\_21 | 1932 | 69 | 1876 | 8 | -3 | 0.1147 | 0.4 | 0.3495 | 4.1 |  |  |  |
| RRD10-09\_22 | 1913 | 74 | 1854 | 5 | -3 | 0.1133 | 0.3 | 0.3455 | 4.5 |  |  |  |
| RRD10-09\_23c | 1917 | 76 | 1871 | 4 | -2 | 0.1144 | 0.2 | 0.3463 | 4.6 |  |  |  |
| RRD10-09\_23r | 1811 | 67 | 1847 | 9 | 2 | 0.1129 | 0.5 | 0.3244 | 4.3 |  |  |  |
| RRD10-09\_24 | 1968 | 90 | 1871 | 5 | -5 | 0.1144 | 0.3 | 0.3570 | 5.4 | -5.9 | -5.8 | 2463 |
| RRD10-09\_25c | 1938 | 85 | 1857 | 10 | -4 | 0.1135 | 0.5 | 0.3508 | 5.1 |  |  |  |
| RRD10-09\_25r | 1847 | 79 | 1850 | 8 | 0 | 0.1131 | 0.4 | 0.3318 | 4.9 |  |  |  |
| RRD10-09\_26 | 1460 | 123 | 2187 | 44 | 33 | 0.1368 | 2.5 | 0.2543 | 9.5 |  |  |  |
| RRD10-09\_27 | 1888 | 78 | 1861 | 5 | -1 | 0.1138 | 0.3 | 0.3404 | 4.8 |  |  |  |
| RRD10-09\_28 | 1899 | 69 | 1863 | 4 | -2 | 0.1139 | 0.2 | 0.3426 | 4.2 | -4.3 | -4.0 | 2399 |
| RRD10-09\_29 | 1965 | 92 | 1873 | 7 | -5 | 0.1146 | 0.4 | 0.3563 | 5.4 | -4.5 | -4.4 | 2411 |
| RRD10-09\_30 | 1895 | 50 | 1858 | 4 | -2 | 0.1136 | 0.2 | 0.3418 | 3.1 | -5.6 | -5.2 | 2441 |
| RRD10-09\_31 | 1891 | 68 | 1862 | 6 | -2 | 0.1139 | 0.3 | 0.3410 | 4.2 |  |  |  |
| RRD10-09\_32 | 1868 | 77 | 1870 | 6 | 0 | 0.1144 | 0.3 | 0.3361 | 4.7 | -6.5 | -6.4 | 2491 |
| RRD10-09\_33 | 1983 | 66 | 1861 | 4 | -7 | 0.1138 | 0.2 | 0.3603 | 3.9 |  |  |  |
| RRD10-09\_34 | 1914 | 69 | 1870 | 8 | -2 | 0.1144 | 0.5 | 0.3457 | 4.2 | -6.0 | -5.9 | 2469 |
| RRD10-09\_35 | 1957 | 55 | 1933 | 7 | -1 | 0.1185 | 0.4 | 0.3547 | 3.3 |  |  |  |
| RRD10-09\_36 | 1750 | 70 | 1891 | 6 | 7 | 0.1157 | 0.4 | 0.3119 | 4.6 | -5.9 | -6.2 | 2480 |
| RRD10-09\_37 | 1963 | 65 | 1871 | 4 | -5 | 0.1145 | 0.2 | 0.3560 | 3.9 | -6.4 | -6.3 | 2483 |
| RRD10-09\_38 | 1877 | 68 | 1880 | 4 | 0 | 0.1150 | 0.2 | 0.3380 | 4.2 | -6.1 | -6.2 | 2480 |
| RRD10-09\_39 | 1903 | 70 | 1864 | 4 | -2 | 0.1140 | 0.2 | 0.3433 | 4.3 | -9.9 | -9.6 | 2607 |
| RRD10-09\_40c | 1893 | 70 | 1868 | 5 | -1 | 0.1143 | 0.3 | 0.3412 | 4.3 | -4.7 | -4.5 | 2413 |
| RRD10-09\_40r | 1879 | 84 | 1869 | 12 | -1 | 0.1143 | 0.6 | 0.3385 | 5.2 |  |  |  |
| RRD10-09\_41 | 1929 | 81 | 1908 | 31 | -1 | 0.1168 | 1.7 | 0.3488 | 4.9 |  |  |  |
| RRD10-09\_42 | 1932 | 59 | 1892 | 7 | -2 | 0.1158 | 0.4 | 0.3494 | 3.6 | -3.1 | -3.5 | 2382 |
| RRD10-09\_43 | 1882 | 78 | 1855 | 4 | -1 | 0.1134 | 0.2 | 0.3390 | 4.8 |  |  |  |
| RRD10-09\_44 | 1834 | 61 | 1885 | 10 | 3 | 0.1153 | 0.5 | 0.3290 | 3.8 | -4.6 | -4.8 | 2426 |
| RRD10-09\_45 | 1883 | 64 | 1872 | 5 | -1 | 0.1145 | 0.3 | 0.3393 | 3.9 | -5.7 | -5.6 | 2458 |
| RRD10-09\_46 | 1802 | 56 | 2031 | 31 | 11 | 0.1252 | 1.8 | 0.3226 | 3.6 |  |  |  |
| RRD10-09\_47 | 1999 | 102 | 1898 | 8 | -5 | 0.1161 | 0.4 | 0.3636 | 6.0 | -4.7 | -5.2 | 2445 |
| RRD10-09\_48 | 1931 | 44 | 1874 | 6 | -3 | 0.1146 | 0.3 | 0.3492 | 2.6 | -5.0 | -5.0 | 2435 |
| RRD10-09\_49 | 1654 | 65 | 1886 | 7 | 12 | 0.1154 | 0.4 | 0.2924 | 4.5 |  |  |  |
| RRD10-09\_50 | 1851 | 66 | 1851 | 4 | 0 | 0.1132 | 0.2 | 0.3326 | 4.1 |  |  |  |
| RRD10-09\_51 | 1975 | 76 | 1874 | 4 | -5 | 0.1146 | 0.2 | 0.3585 | 4.5 | -4.4 | -4.3 | 2410 |
| RRD10-09\_52 | 1672 | 42 | 1885 | 7 | 11 | 0.1154 | 0.4 | 0.2960 | 2.9 |  |  |  |
| RRD10-09\_53 | 1864 | 95 | 1862 | 5 | 0 | 0.1139 | 0.3 | 0.3352 | 5.9 | -7.8 | -7.5 | 2527 |
| RRD10-09\_54 | 1867 | 61 | 1880 | 5 | 1 | 0.1150 | 0.3 | 0.3360 | 3.8 | -3.3 | -3.4 | 2376 |
| RRD10-09\_55 | 2044 | 112 | 1937 | 23 | -6 | 0.1187 | 1.3 | 0.3731 | 6.4 | -6.2 | -7.6 | 2532 |
| RRD10-09\_56 | 1852 | 66 | 1871 | 4 | 1 | 0.1145 | 0.2 | 0.3328 | 4.1 | -4.9 | -4.8 | 2430 |
| RRD10-09\_57 | 1389 | 170 | 2046 | 26 | 32 | 0.1262 | 1.5 | 0.2404 | 13.7 |  |  |  |

Table B-5. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | (2σ) | 206Pb | (2σ) | εHf(IA) | εHf(T) | Hf |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | Rel. | 238U | Rel. | \* | \*\* | T(DM)a |
|  | age |  | age |  |  |  | Err. |  | Err. |  |  |  |
| RRD10-13\_01 | 1905 | 61 | 1748 | 7 | -9 | 0.1069 | 0.4 | 0.3439 | 3.7 | -14.3 | -11.5 | 2667 |
| RRD10-13\_02a | 1574 | 95 | 1748 | 20 | 10 | 0.1070 | 1.1 | 0.2766 | 6.8 | -12.8 | -9.9 | 2609 |
| RRD10-13\_03a | 1710 | 36 | 1788 | 13 | 4 | 0.1093 | 0.7 | 0.3039 | 2.4 |  |  |  |
| RRD10-13\_04a | 1740 | 50 | 1763 | 7 | 1 | 0.1078 | 0.4 | 0.3099 | 3.3 |  |  |  |
| RRD10-13\_05a | 1791 | 57 | 1758 | 8 | -2 | 0.1075 | 0.4 | 0.3202 | 3.7 |  |  |  |
| RRD10-13\_06a | 1667 | 32 | 1686 | 8 | 1 | 0.1034 | 0.4 | 0.2951 | 2.2 | -13.6 | -9.3 | 2585 |
| RRD10-13\_07a | 1745 | 48 | 1753 | 11 | 0 | 0.1072 | 0.6 | 0.3110 | 3.1 |  |  |  |
| RRD10-13\_08a | 1728 | 53 | 1714 | 9 | -1 | 0.1050 | 0.5 | 0.3074 | 3.5 | -13.3 | -9.7 | 2600 |
| RRD10-13\_09a | 1721 | 51 | 1725 | 7 | 0 | 0.1056 | 0.4 | 0.3061 | 3.4 |  |  |  |
| RRD10-13\_10a | 1736 | 49 | 1757 | 7 | 1 | 0.1075 | 0.4 | 0.3090 | 3.2 |  |  |  |
| RRD10-13\_11a | 1417 | 56 | 1383 | 9 | -2 | 0.0880 | 0.5 | 0.2459 | 4.4 |  |  |  |
| RRD10-13\_12a | 1720 | 59 | 1733 | 7 | 1 | 0.1061 | 0.4 | 0.3058 | 3.9 |  |  |  |
| RRD10-13\_13a | 1731 | 41 | 1764 | 7 | 2 | 0.1079 | 0.4 | 0.3081 | 2.7 |  |  |  |
| RRD10-13\_14a | 1796 | 52 | 1870 | 7 | 4 | 0.1144 | 0.4 | 0.3214 | 3.3 |  |  |  |
| RRD10-13\_15a | 1837 | 53 | 1865 | 9 | 2 | 0.1141 | 0.5 | 0.3297 | 3.3 |  |  |  |
| RRD10-13\_16a | 1704 | 44 | 1744 | 8 | 2 | 0.1067 | 0.4 | 0.3026 | 3.0 |  |  |  |
| RRD10-13\_17 | 1964 | 50 | 1778 | 12 | -10 | 0.1087 | 0.6 | 0.3562 | 3.0 | -9.9 | -7.8 | 2539 |
| RRD10-13\_18a | 1702 | 55 | 1688 | 9 | -1 | 0.1035 | 0.5 | 0.3023 | 3.7 |  |  |  |
| RRD10-13\_19a | 1739 | 37 | 1753 | 10 | 1 | 0.1072 | 0.6 | 0.3097 | 2.4 |  |  |  |
| RRD10-13\_20a | 1912 | 54 | 1877 | 8 | -2 | 0.1148 | 0.4 | 0.3453 | 3.3 | -7.7 | -7.8 | 2539 |
| RRD10-13\_21a | 1739 | 57 | 1726 | 8 | -1 | 0.1057 | 0.5 | 0.3097 | 3.8 |  |  |  |
| RRD10-13\_22a | 1741 | 45 | 1696 | 12 | -3 | 0.1040 | 0.7 | 0.3100 | 2.9 |  |  |  |
| RRD10-13\_23 | 1865 | 46 | 1726 | 8 | -8 | 0.1056 | 0.4 | 0.3354 | 2.8 | -18.0 | -14.6 | 2785 |
| RRD10-13\_24a | 1716 | 43 | 1704 | 8 | -1 | 0.1044 | 0.4 | 0.3050 | 2.9 |  |  |  |
| RRD10-13\_25a | 1781 | 55 | 1758 | 8 | -1 | 0.1075 | 0.4 | 0.3182 | 3.5 |  |  |  |
| RRD10-13\_26a | 1705 | 45 | 1722 | 7 | 1 | 0.1054 | 0.4 | 0.3028 | 3.0 |  |  |  |
| RRD10-13\_27a | 1836 | 48 | 1862 | 8 | 1 | 0.1139 | 0.4 | 0.3296 | 3.0 |  |  |  |
| RRD10-13\_28a | 1733 | 44 | 1682 | 12 | -3 | 0.1031 | 0.6 | 0.3085 | 2.9 | -13.9 | -9.5 | 2592 |
| RRD10-13\_29a | 1753 | 49 | 1722 | 9 | -2 | 0.1054 | 0.5 | 0.3124 | 3.2 |  |  |  |
| RRD10-13\_30 | 1797 | 56 | 1723 | 6 | -4 | 0.1055 | 0.3 | 0.3215 | 3.6 | -12.9 | -9.5 | 2593 |
| RRD10-13\_31a | 1747 | 55 | 1725 | 8 | -1 | 0.1056 | 0.4 | 0.3112 | 3.6 | -12.9 | -9.5 | 2593 |
| RRD10-13\_32a | 1828 | 60 | 1731 | 7 | -6 | 0.1060 | 0.4 | 0.3279 | 3.8 |  |  |  |
| RRD10-13\_33a | 1761 | 51 | 1729 | 7 | -2 | 0.1058 | 0.4 | 0.3141 | 3.3 |  |  |  |
| RRD10-13\_34 | 1552 | 29 | 1667 | 11 | 7 | 0.1023 | 0.6 | 0.2723 | 2.1 | -9.4 | -4.7 | 2413 |
| RRD10-13\_35 | 1882 | 94 | 1658 | 12 | -14 | 0.1019 | 0.7 | 0.3391 | 5.8 |  |  |  |
| RRD10-13\_37 | 1846 | 52 | 1742 | 13 | -6 | 0.1066 | 0.7 | 0.3316 | 3.2 | -12.4 | -9.4 | 2588 |
| RRD10-13\_38a | 1653 | 53 | 1675 | 33 | 1 | 0.1028 | 1.8 | 0.2924 | 3.6 | -8.7 | -4.2 | 2394 |
| RRD10-13\_39 | 1788 | 85 | 1625 | 47 | -10 | 0.1001 | 2.5 | 0.3196 | 5.4 | -19.0 | -13.4 | 2735 |
| RRD10-13\_40 | 1785 | 83 | 1677 | 10 | -6 | 0.1029 | 0.6 | 0.3191 | 5.4 | -18.3 | -13.8 | 2755 |
| RRD10-13\_41a | 1855 | 54 | 1856 | 12 | 0 | 0.1135 | 0.7 | 0.3335 | 3.4 |  |  |  |
| RRD10-13\_42a | 1826 | 76 | 1730 | 7 | -6 | 0.1059 | 0.4 | 0.3275 | 4.8 |  |  |  |
| RRD10-13\_43a | 1838 | 48 | 1699 | 8 | -8 | 0.1041 | 0.5 | 0.3299 | 3.0 |  |  |  |
| RRD10-13\_44 | 1771 | 55 | 1756 | 13 | -1 | 0.1074 | 0.7 | 0.3162 | 3.5 |  |  |  |
| RRD10-13\_45 | 1685 | 61 | 1721 | 14 | 2 | 0.1054 | 0.8 | 0.2987 | 4.1 | -13.5 | -10.0 | 2611 |
| RRD10-13\_46 | 1874 | 73 | 1689 | 13 | -11 | 0.1036 | 0.7 | 0.3373 | 4.5 |  |  |  |
| RRD10-13\_47a | 1708 | 48 | 1677 | 12 | -2 | 0.1029 | 0.7 | 0.3033 | 3.2 |  |  |  |

Table B-5. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | (2σ) | 206Pb | (2σ) | εHf(IA) | εHf(T) | Hf |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | Rel. | 238U | Rel. | \* | \*\* | T(DM)a |
|  | age |  | age |  |  |  | Err. |  | Err. |  |  |  |
| RRD10-13\_48a | 2011 | 69 | 1875 | 9 | -7 | 0.1147 | 0.5 | 0.3661 | 4.0 | -3.3 | -3.4 | 2370 |
| RRD10-13\_49a | 1883 | 65 | 1725 | 11 | -9 | 0.1056 | 0.6 | 0.3393 | 4.0 |  |  |  |
| RRD10-13\_50 | 1577 | 42 | 1694 | 5 | 7 | 0.1039 | 0.3 | 0.2772 | 3.0 | -14.8 | -10.7 | 2637 |
| RRD10-13\_51a | 1859 | 63 | 2118 | 170 | 12 | 0.1315 | 9.7 | 0.3343 | 3.9 |  |  |  |
| RRD10-13\_52a | 1855 | 67 | 1714 | 9 | -8 | 0.1050 | 0.5 | 0.3335 | 4.2 |  |  |  |
| RRD10-20\_01c | 2156 | 49 | 2564 | 68 | 16 | 0.1706 | 4.1 | 0.3972 | 2.7 | -11.5 |  | 3272 |
| RRD10-20\_01r | 1780 | 82 | 1947 | 23 | 9 | 0.1194 | 1.3 | 0.3181 | 5.3 |  |  |  |
| RRD10-20\_02 | 2128 | 80 | 2384 | 10 | 11 | 0.1534 | 0.6 | 0.3912 | 4.4 |  |  |  |
| RRD10-20\_03c | 2176 | 85 | 2397 | 5 | 9 | 0.1545 | 0.3 | 0.4014 | 4.6 | -13.9 |  | 3186 |
| RRD10-20\_03r | 1672 | 77 | 1756 | 7 | 5 | 0.1074 | 0.4 | 0.2962 | 5.3 |  |  |  |
| RRD10-20\_04c | 2778 | 104 | 3121 | 24 | 11 | 0.2402 | 1.5 | 0.5387 | 4.6 |  |  |  |
| RRD10-20\_04r | 2118 | 41 | 2256 | 68 | 6 | 0.1423 | 3.9 | 0.3891 | 2.3 |  |  |  |
| RRD10-20\_05 | 2125 | 61 | 2220 | 79 | 4 | 0.1394 | 4.6 | 0.3905 | 3.4 | -16.6 |  | 3120 |
| RRD10-20\_06 | 2661 | 69 | 2729 | 144 | 2 | 0.1884 | 8.7 | 0.5110 | 3.2 |  |  |  |
| RRD10-20\_07c | 2735 | 76 | 3077 | 25 | 11 | 0.2336 | 1.5 | 0.5285 | 3.4 |  |  |  |
| RRD10-20\_07r | 2107 | 88 | 2335 | 17 | 10 | 0.1490 | 1.0 | 0.3866 | 4.9 | -20.3 |  | 3357 |
| RRD10-20\_08c | 2591 | 185 | 3055 | 84 | 15 | 0.2304 | 5.3 | 0.4947 | 8.7 | -5.4 |  | 3463 |
| RRD10-20\_08r | 1655 | 62 | 1758 | 6 | 6 | 0.1075 | 0.3 | 0.2927 | 4.3 |  |  |  |
| RRD10-20\_09 | 2266 | 170 | 2251 | 24 | -1 | 0.1419 | 1.4 | 0.4213 | 9.0 | -17.4 |  | 3238 |
| RRD10-20\_10 | 2174 | 73 | 2378 | 6 | 9 | 0.1528 | 0.4 | 0.4012 | 4.0 |  |  |  |
| RRD10-20\_11c | 2147 | 95 | 2349 | 13 | 9 | 0.1502 | 0.8 | 0.3952 | 5.2 | -16.3 |  | 3249 |
| RRD10-20\_11r | 1645 | 54 | 1779 | 7 | 8 | 0.1088 | 0.4 | 0.2907 | 3.7 | -25.6 |  | 3073 |
| RRD10-20\_12 | 2075 | 52 | 2264 | 62 | 8 | 0.1430 | 3.6 | 0.3798 | 3.0 |  |  |  |
| RRD10-20\_13 | 2841 | 111 | 3215 | 7 | 12 | 0.2548 | 0.4 | 0.5539 | 4.8 |  |  |  |
| RRD10-20\_14c | 2657 | 59 | 3052 | 32 | 13 | 0.2300 | 2.0 | 0.5101 | 2.7 |  |  |  |
| RRD10-20\_14r | 2228 | 85 | 2434 | 5 | 8 | 0.1579 | 0.3 | 0.4128 | 4.5 | -16.8 |  | 3329 |
| RRD10-20\_15 | 2000 | 55 | 2394 | 5 | 16 | 0.1543 | 0.3 | 0.3637 | 3.2 |  |  |  |
| RRD10-20\_16 | 2197 | 78 | 2343 | 18 | 6 | 0.1497 | 1.1 | 0.4060 | 4.2 | -16.8 |  | 3253 |
| RRD10-20\_17c | 2134 | 47 | 2548 | 110 | 16 | 0.1690 | 6.6 | 0.3925 | 2.6 | -12.9 |  | 3312 |
| RRD10-20\_17r | 2260 | 80 | 2296 | 14 | 2 | 0.1457 | 0.8 | 0.4200 | 4.2 |  |  |  |
| RRD10-20\_18 | 2978 | 116 | 3244 | 10 | 8 | 0.2596 | 0.7 | 0.5871 | 4.9 |  |  |  |
| RRD10-20\_19 | 2252 | 68 | 2424 | 6 | 7 | 0.1570 | 0.4 | 0.4182 | 3.6 | -14.4 |  | 3237 |
| RRD10-20\_20 | 2123 | 61 | 2403 | 9 | 12 | 0.1551 | 0.6 | 0.3900 | 3.4 |  |  |  |
| RRD10-20\_21 | 2201 | 78 | 2386 | 5 | 8 | 0.1536 | 0.3 | 0.4069 | 4.2 | -15.7 |  | 3257 |
| RRD10-20\_22 | 2915 | 87 | 3220 | 7 | 9 | 0.2556 | 0.5 | 0.5717 | 3.7 |  |  |  |
| RRD10-20\_23 | 1986 | 40 | 2207 | 82 | 10 | 0.1384 | 4.7 | 0.3607 | 2.3 | -20.8 |  | 3268 |
| RRD10-20\_24c | 2316 | 61 | 2589 | 107 | 11 | 0.1732 | 6.4 | 0.4323 | 3.1 |  |  |  |
| RRD10-20\_25c | 2266 | 91 | 2388 | 5 | 5 | 0.1537 | 0.3 | 0.4212 | 4.8 | -13.6 |  | 3178 |
| RRD10-20\_25r | 1669 | 53 | 1778 | 7 | 6 | 0.1087 | 0.4 | 0.2954 | 3.6 |  |  |  |

\*εHf(IA) calculated for individual zircon 207Pb/206Pb ages.

\*\*εHf(T) calculated for crystallization age (Table 3-3).

aDepleted Mantle model ages were calculated using the model of Mueller et al. (2008).

Table B-6. Missouri Breaks

|  |  |  |
| --- | --- | --- |
| Sample | Latitude | Longitude |
| BSD10-04 | 47.8306 | -109.2672 |
| BSD10-05 | 47.8306 | -109.2672 |
| BSD10-06 | 47.8306 | -109.2672 |
| LSC10-03 | 48.0227 | -109.5418 |
| LSC10-10 | 48.0227 | -109.5418 |
| LSC10-11 | 48.0227 | -109.5418 |
| LSC10-12 | 48.0227 | -109.5418 |
| LSC10-13 | 48.0227 | -109.5418 |
| RRD10-05 | 48.0190 | -109.2509 |
| RRD10-09 | 48.0190 | -109.2509 |
| RRD10-13 | 48.0190 | -109.2509 |
| RRD10-20 | 48.0190 | -109.2509 |
| LD10-01 | 48.2455 | -109.3386 |
| LD10-07 | 48.2455 | -109.3386 |
| LD10-08 | 48.2455 | -109.3386 |
| LD10-11 | 48.2455 | -109.3386 |
| HX-1 | 47.4098 | -110.3378 |

Table B-7. Orthogneiss and amphibolite samples from the Little Rocky Mountains, zircon LA-ICP-MS U-Pb data (Ma).

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | Err. | 206Pb | Err. | εHf(IA) | εHf(T) | Hf Model Age |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | (%) | 238U | (%) | \* | \*\* | (DM)a |
|  | age |  | age |  |  |  |  |  |  |  |  |  |
| LRM-3\_01 | 2570 | 65 | 2711 | 6 | 5 | 0.186 | 0.3 | 0.490 | 3.1 | -15.5 | -13.4 | 3539 |
| LRM-3\_02 | 2459 | 71 | 2750 | 6 | 11 | 0.191 | 0.4 | 0.464 | 3.5 |  |  |  |
| LRM-3\_03 | 2406 | 62 | 2674 | 6 | 10 | 0.182 | 0.4 | 0.452 | 3.1 | -15.1 | -12.2 | 3493 |
| LRM-3\_04 | 2317 | 75 | 2574 | 23 | 10 | 0.172 | 1.4 | 0.433 | 3.8 | -18.4 | -13.1 | 3527 |
| LRM-3\_05 | 2663 | 72 | 2807 | 5 | 5 | 0.198 | 0.3 | 0.512 | 3.3 | -12.2 | -12.4 | 3510 |
| LRM-3\_06a | 2334 | 56 | 2722 | 8 | 14 | 0.188 | 0.5 | 0.436 | 2.9 |  |  |  |
| LRM-3\_06b | 2458 | 82 | 2752 | 6 | 11 | 0.191 | 0.4 | 0.464 | 4.0 |  |  |  |
| LRM-3\_07 | 2093 | 68 | 2467 | 36 | 15 | 0.161 | 2.1 | 0.384 | 3.8 |  |  |  |
| LRM-3\_08 | 2639 | 65 | 2798 | 5 | 6 | 0.197 | 0.3 | 0.506 | 3.0 | -12.9 | -12.8 | 3548 |
| LRM-3\_09 | 1686 | 36 | 2154 | 12 | 22 | 0.134 | 0.7 | 0.299 | 2.4 |  |  |  |
| LRM-3\_10 | 1763 | 41 | 2740 | 19 | 36 | 0.190 | 1.2 | 0.315 | 2.7 |  |  |  |
| LRM-3\_11 | 2651 | 69 | 2779 | 6 | 5 | 0.194 | 0.3 | 0.509 | 3.2 | -14.0 | -13.5 | 3540 |
| LRM-3\_12 | 2416 | 70 | 2669 | 6 | 9 | 0.182 | 0.4 | 0.455 | 3.5 | -16.8 | -13.8 | 3562 |
| LRM-3\_13 | 2615 | 75 | 2751 | 7 | 5 | 0.191 | 0.4 | 0.500 | 3.5 | -14.4 | -13.3 | 3538 |
| LRM-3\_14 | 2458 | 52 | 2674 | 7 | 8 | 0.182 | 0.4 | 0.464 | 2.5 | -14.9 | -12.0 | 3494 |
| LRM-3\_15 | 1983 | 88 | 2661 | 54 | 25 | 0.181 | 3.3 | 0.360 | 5.1 |  |  |  |
| LRM-3\_16 | 1658 | 40 | 2273 | 17 | 27 | 0.144 | 1.0 | 0.293 | 2.8 |  |  |  |
| LRM-3\_17 | 2569 | 56 | 2754 | 7 | 7 | 0.191 | 0.4 | 0.490 | 2.6 | -14.1 | -13.0 | 3538 |
| LRM-3\_18 | 2400 | 56 | 2630 | 9 | 9 | 0.178 | 0.5 | 0.451 | 2.8 | -18.1 | -14.2 | 3577 |
| LRM-3\_19 | 2580 | 65 | 2723 | 6 | 5 | 0.188 | 0.4 | 0.492 | 3.1 | -14.4 | -12.6 | 3509 |
| LRM-3\_20 | 1799 | 61 | 2747 | 6 | 35 | 0.191 | 0.4 | 0.322 | 3.9 |  |  |  |
| LRM-3\_21 | 2233 | 101 | 2747 | 6 | 19 | 0.191 | 0.3 | 0.414 | 5.4 |  |  |  |
| LRM-3\_22 | 2744 | 64 | 2770 | 6 | 1 | 0.193 | 0.4 | 0.531 | 2.9 | -12.1 | -11.4 | 3463 |
| LRM-5\_01 | 981 | 115 | 2685 | 41 | 63 | 0.184 | 2.5 | 0.164 | 12.8 |  |  |  |
| LRM-5\_02 | 1910 | 106 | 2807 | 10 | 32 | 0.198 | 0.6 | 0.345 | 6.4 |  |  |  |
| LRM-5\_03 | 749 | 114 | 2871 | 33 | 74 | 0.206 | 2.0 | 0.123 | 16.2 |  |  |  |
| LRM-5\_04 | 890 | 21 | 2798 | 9 | 68 | 0.197 | 0.6 | 0.148 | 2.6 |  |  |  |
| LRM-5\_05 | 1585 | 206 | 2787 | 11 | 43 | 0.195 | 0.6 | 0.279 | 14.8 |  |  |  |
| LRM-5\_06 | 1577 | 42 | 2793 | 5 | 44 | 0.196 | 0.3 | 0.277 | 3.0 |  |  |  |
| LRM-5\_07 | 1164 | 31 | 2732 | 11 | 57 | 0.189 | 0.7 | 0.198 | 2.9 |  |  |  |
| LRM-5\_08 | 1889 | 84 | 2808 | 14 | 33 | 0.198 | 0.9 | 0.341 | 5.2 |  |  |  |
| LRM-5\_09 | 1788 | 116 | 2758 | 6 | 35 | 0.192 | 0.3 | 0.320 | 7.5 |  |  |  |
| LRM-5\_10 | 2183 | 51 | 2801 | 6 | 22 | 0.197 | 0.3 | 0.403 | 2.8 |  |  |  |
| LRM-5\_11 | 1054 | 41 | 2837 | 7 | 63 | 0.201 | 0.4 | 0.178 | 4.2 |  |  |  |
| LRM-5\_12 | 2535 | 68 | 2765 | 12 | 8 | 0.193 | 0.7 | 0.482 | 3.2 | -10.7 | -9.6 | 3428 |
| LRM-5\_13 | 1708 | 114 | 2789 | 7 | 39 | 0.196 | 0.4 | 0.303 | 7.6 |  |  |  |
| LRM-5\_14 | 688 | 31 | 2773 | 13 | 75 | 0.194 | 0.8 | 0.113 | 4.7 |  |  |  |
| LRM-5\_15 | 496 | 22 | 2814 | 36 | 82 | 0.198 | 2.2 | 0.080 | 4.7 |  |  |  |
| LRM-5\_16 | 2596 | 58 | 2779 | 6 | 7 | 0.194 | 0.3 | 0.496 | 2.7 | -10.1 | -9.3 | 3402 |
| LRM-5\_17 | 665 | 85 | 2903 | 37 | 77 | 0.210 | 2.3 | 0.109 | 13.4 |  |  |  |
| LRM-5\_18 | 2509 | 67 | 2778 | 25 | 10 | 0.194 | 1.6 | 0.476 | 3.3 | -12.5 | -11.7 | 3520 |
| LRM-5\_19 | 1207 | 42 | 2753 | 7 | 56 | 0.191 | 0.4 | 0.206 | 3.8 |  |  |  |
| LRM-5\_20 | 1586 | 47 | 2802 | 7 | 43 | 0.197 | 0.4 | 0.279 | 3.4 |  |  |  |
| LRM-5\_21 | 318 | 31 | 2739 | 24 | 88 | 0.190 | 1.5 | 0.051 | 9.9 |  |  |  |
| LRM-5\_22 | 468 | 78 | 3045 | 65 | 85 | 0.229 | 4.1 | 0.075 | 17.4 |  |  |  |

Table B-7. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | Err. | 206Pb | Err. | εHf(IA) | εHf(T) | Hf Model Age |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | (%) | 238U | (%) | \* | \*\* | (DM)a |
|  | age |  | age |  |  |  |  |  |  |  |  |  |
| LRM-5\_23 | 1161 | 125 | 2746 | 20 | 58 | 0.190 | 1.2 | 0.197 | 11.8 |  |  |  |
| LRM-5\_24 | 1413 | 122 | 2743 | 12 | 48 | 0.190 | 0.8 | 0.245 | 9.7 |  |  |  |
| LRM-5\_25 | 960 | 101 | 2768 | 9 | 65 | 0.193 | 0.5 | 0.161 | 11.4 |  |  |  |
| LRM-5\_26 | 2539 | 41 | 2796 | 5 | 9 | 0.196 | 0.3 | 0.483 | 2.0 | -10.4 | -10.0 | 3438 |
| LRM-5\_27 | 1003 | 35 | 2769 | 5 | 64 | 0.193 | 0.3 | 0.168 | 3.8 |  |  |  |
| LRM-5\_28 | 2775 | 58 | 2811 | 4 | 1 | 0.198 | 0.2 | 0.538 | 2.6 | -6.7 | -6.6 | 3311 |
| LRM-5\_29 | 1383 | 134 | 2778 | 6 | 50 | 0.194 | 0.4 | 0.239 | 10.8 |  |  |  |
| LRM-5\_30 | 1694 | 135 | 2788 | 9 | 39 | 0.195 | 0.6 | 0.301 | 9.1 |  |  |  |
| LRM-5\_31 | 593 | 32 | 2816 | 15 | 79 | 0.199 | 0.9 | 0.096 | 5.6 |  |  |  |
| LRM-5\_32 | 1849 | 69 | 2850 | 4 | 35 | 0.203 | 0.2 | 0.332 | 4.3 |  |  |  |
| LRM-5\_33 | 468 | 51 | 2694 | 6 | 83 | 0.185 | 0.4 | 0.075 | 11.2 |  |  |  |
| LRM-5\_34 | 1057 | 22 | 2801 | 6 | 62 | 0.197 | 0.4 | 0.178 | 2.2 |  |  |  |
| LRM-5\_35 | 503 | 19 | 2841 | 18 | 82 | 0.202 | 1.1 | 0.081 | 3.9 |  |  |  |
| LRM-5\_36 | 2343 | 54 | 2838 | 6 | 17 | 0.201 | 0.4 | 0.438 | 2.8 |  |  |  |
| LRM-5\_37 | 1695 | 106 | 2850 | 5 | 41 | 0.203 | 0.3 | 0.301 | 7.1 |  |  |  |
| LRM-5\_38 | 926 | 23 | 2901 | 16 | 68 | 0.209 | 1.0 | 0.155 | 2.7 |  |  |  |
| LRM-5\_39 | 797 | 23 | 2792 | 5 | 71 | 0.196 | 0.3 | 0.132 | 3.1 |  |  |  |
| LRM-5\_40 | 2715 | 40 | 2798 | 4 | 3 | 0.197 | 0.2 | 0.524 | 1.8 | -10.9 | -10.6 | 3449 |
| LRM-5\_41 | 1418 | 116 | 2765 | 6 | 49 | 0.193 | 0.4 | 0.246 | 9.2 |  |  |  |
| LRM-5\_42 | 2456 | 120 | 2795 | 4 | 12 | 0.196 | 0.3 | 0.464 | 5.9 |  |  |  |
| LRM-5\_43 | 1314 | 83 | 2736 | 8 | 52 | 0.189 | 0.5 | 0.226 | 7.0 |  |  |  |
| LRM-5\_44 | 2724 | 39 | 2804 | 4 | 3 | 0.197 | 0.3 | 0.526 | 1.8 | -9.6 | -9.4 | 3409 |
| LRM-5\_45 | 2328 | 47 | 2783 | 4 | 16 | 0.195 | 0.2 | 0.435 | 2.4 |  |  |  |
| LRM-5\_46 | 2234 | 46 | 2769 | 4 | 19 | 0.193 | 0.3 | 0.414 | 2.4 |  |  |  |
| LRM-5\_47 | 1173 | 116 | 2723 | 5 | 57 | 0.188 | 0.3 | 0.200 | 10.9 |  |  |  |
| LRM-5\_48 | 1527 | 31 | 2736 | 4 | 44 | 0.189 | 0.2 | 0.267 | 2.3 |  |  |  |
| LRM-5\_49 | 1517 | 47 | 2828 | 4 | 46 | 0.200 | 0.3 | 0.265 | 3.5 |  |  |  |
| LRM-5\_50 | 2715 | 75 | 2806 | 6 | 3 | 0.197 | 0.4 | 0.524 | 3.4 | -8.4 | -8.3 | 3367 |
| LRM-5\_51 | 1168 | 42 | 2782 | 5 | 58 | 0.195 | 0.3 | 0.199 | 3.9 |  |  |  |
| LRM-5\_52 | 1349 | 117 | 2807 | 9 | 52 | 0.198 | 0.5 | 0.233 | 9.7 |  |  |  |
| LRM-5\_53 | 865 | 139 | 2830 | 24 | 69 | 0.201 | 1.5 | 0.144 | 17.2 |  |  |  |
| LRM-5\_54 | 930 | 31 | 2740 | 7 | 66 | 0.190 | 0.4 | 0.155 | 3.6 |  |  |  |
| LRM-5\_55 | 863 | 51 | 2732 | 7 | 68 | 0.189 | 0.4 | 0.143 | 6.3 |  |  |  |
| LRM-7\_01 | 1527 | 83 | 2726 | 17 | 44 | 0.188 | 1.0 | 0.267 | 6.1 |  |  |  |
| LRM-7\_02 | 820 | 116 | 2716 | 21 | 70 | 0.187 | 1.3 | 0.136 | 15.2 |  |  |  |
| LRM-7\_03 | 852 | 76 | 2347 | 129 | 64 | 0.150 | 7.6 | 0.141 | 9.5 |  |  |  |
| LRM-7\_04 | 1668 | 71 | 2769 | 6 | 40 | 0.193 | 0.4 | 0.295 | 4.8 |  |  |  |
| LRM-7\_05 | 2565 | 76 | 2726 | 5 | 6 | 0.188 | 0.3 | 0.489 | 3.6 | -12.6 | -11.6 | 3447 |
| LRM-7\_06 | 2703 | 64 | 2777 | 5 | 3 | 0.194 | 0.3 | 0.521 | 2.9 | -9.2 | -9.4 | 3371 |
| LRM-7\_07 | 1894 | 198 | 2761 | 6 | 31 | 0.192 | 0.4 | 0.342 | 12.1 |  |  |  |
| LRM-7\_08 | 2590 | 55 | 2791 | 6 | 7 | 0.196 | 0.3 | 0.494 | 2.6 | -11.6 | -12.1 | 3465 |
| LRM-7\_09 | 550 | 50 | 2720 | 7 | 80 | 0.187 | 0.4 | 0.089 | 9.4 |  |  |  |
| LRM-7\_10 | 330 | 77 | 2649 | 28 | 88 | 0.180 | 1.7 | 0.053 | 23.8 |  |  |  |
| LRM-7\_11 | 519 | 25 | 2739 | 7 | 81 | 0.190 | 0.4 | 0.084 | 5.1 |  |  |  |
| LRM-7\_12 | 1356 | 85 | 2760 | 7 | 51 | 0.192 | 0.4 | 0.234 | 7.0 |  |  |  |
| LRM-7\_13 | 2467 | 84 | 2696 | 31 | 8 | 0.185 | 1.9 | 0.466 | 4.1 | -13.9 | -12.2 | 3478 |

Table B-7. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | Err. | 206Pb | Err. | εHf(IA) | εHf(T) | Hf Model Age |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | (%) | 238U | (%) | \* | \*\* | (DM)a |
|  | age |  | age |  |  |  |  |  |  |  |  |  |
| LRM-7\_14 | 2560 | 60 | 2781 | 6 | 8 | 0.195 | 0.3 | 0.487 | 2.8 | -10.6 | -10.8 | 3426 |
| LRM-7\_15 | 2460 | 68 | 2742 | 6 | 10 | 0.190 | 0.3 | 0.465 | 3.3 | -12.2 | -11.6 | 3448 |
| LRM-7\_16 | 2468 | 84 | 2633 | 45 | 6 | 0.178 | 2.7 | 0.466 | 4.1 | -14.6 | -11.6 | 3462 |
| LRM-7\_17 | 1185 | 61 | 2809 | 8 | 58 | 0.198 | 0.5 | 0.202 | 5.6 |  |  |  |
| LRM-7\_18 | 1215 | 174 | 2696 | 6 | 55 | 0.185 | 0.4 | 0.207 | 15.9 |  |  |  |
| LRM-7\_19 | 2609 | 94 | 2795 | 5 | 7 | 0.196 | 0.3 | 0.499 | 4.4 | -10.0 | -10.6 | 3412 |
| LRM-7\_20 | 1759 | 116 | 2749 | 7 | 36 | 0.191 | 0.4 | 0.314 | 7.5 |  |  |  |
| LRM-7\_21 | 2630 | 56 | 2788 | 6 | 6 | 0.195 | 0.3 | 0.504 | 2.6 | -13.6 | -14.0 | 3559 |
| LRM-7\_22 | 851 | 73 | 2739 | 9 | 69 | 0.190 | 0.5 | 0.141 | 9.1 |  |  |  |
| LRM-7\_23 | 1721 | 193 | 2658 | 63 | 35 | 0.181 | 3.8 | 0.306 | 12.9 |  |  |  |
| LRM-7\_24 | 1767 | 165 | 2758 | 9 | 36 | 0.192 | 0.5 | 0.315 | 10.7 |  |  |  |
| LRM-7\_25 | 571 | 24 | 2734 | 10 | 79 | 0.189 | 0.6 | 0.093 | 4.3 |  |  |  |
| LRM-7\_26 | 1217 | 43 | 2752 | 5 | 56 | 0.191 | 0.3 | 0.208 | 3.9 |  |  |  |
| LRM-7\_27 | 1621 | 31 | 2518 | 83 | 36 | 0.166 | 5.0 | 0.286 | 2.2 |  |  |  |
| LRM-7\_28 | 996 | 133 | 2577 | 63 | 61 | 0.172 | 3.8 | 0.167 | 14.5 |  |  |  |
| LRM-7\_29 | 1858 | 149 | 2768 | 5 | 33 | 0.193 | 0.3 | 0.334 | 9.3 |  |  |  |
| LRM-7\_29a | 598 | 196 | 2695 | 28 | 78 | 0.185 | 1.7 | 0.097 | 34.7 |  |  |  |
| LRM-7\_30 | 1085 | 12 | 1831 | 6 | 41 | 0.112 | 0.3 | 0.183 | 1.2 |  |  |  |
| LRM-7\_31 | 993 | 29 | 2633 | 14 | 62 | 0.178 | 0.8 | 0.166 | 3.2 |  |  |  |
| LRM-7\_32 | 565 | 25 | 2674 | 5 | 79 | 0.182 | 0.3 | 0.092 | 4.7 |  |  |  |
| LRM-7\_33 | 1500 | 105 | 2787 | 6 | 46 | 0.195 | 0.4 | 0.262 | 7.9 |  |  |  |
| LRM-7\_33a | 250 | 12 | 2668 | 8 | 91 | 0.182 | 0.5 | 0.040 | 4.8 |  |  |  |
| LRM-7\_34 | 395 | 46 | 2756 | 7 | 86 | 0.192 | 0.4 | 0.063 | 12.0 |  |  |  |
| LRM-7\_35 | 1107 | 104 | 2728 | 26 | 59 | 0.188 | 1.5 | 0.187 | 10.2 |  |  |  |
| LRM-7\_36 | 833 | 221 | 2744 | 16 | 70 | 0.190 | 1.0 | 0.138 | 28.5 |  |  |  |
| LRM-7\_36a | 2088 | 28 | 2729 | 5 | 23 | 0.189 | 0.3 | 0.382 | 1.5 |  |  |  |
| LRM-7\_37 | 1400 | 86 | 1773 | 4 | 21 | 0.108 | 0.2 | 0.243 | 6.9 |  |  |  |
| LRM-7\_38 | 2336 | 37 | 2457 | 4 | 5 | 0.160 | 0.2 | 0.437 | 1.9 | -15.6 | -8.3 | 3324 |
| LRM-7\_39 | 1330 | 44 | 2750 | 7 | 52 | 0.191 | 0.4 | 0.229 | 3.7 |  |  |  |
| LRM-7\_40 | 1278 | 105 | 2822 | 9 | 55 | 0.199 | 0.5 | 0.219 | 9.1 |  |  |  |
| LRM-7\_41 | 1053 | 50 | 2827 | 10 | 63 | 0.200 | 0.6 | 0.177 | 5.1 |  |  |  |
| LRM-7\_42 | 1903 | 78 | 2741 | 11 | 31 | 0.190 | 0.6 | 0.344 | 4.7 |  |  |  |
| LRM-7\_43 | 1414 | 26 | 1790 | 7 | 21 | 0.109 | 0.4 | 0.245 | 2.0 |  |  |  |
| LRM-7\_44 | 449 | 24 | 2666 | 5 | 83 | 0.181 | 0.3 | 0.072 | 5.5 |  |  |  |
| LRM-7\_45 | 2089 | 30 | 2620 | 5 | 20 | 0.176 | 0.3 | 0.383 | 1.7 |  |  |  |
| LRM-7\_46 | 1069 | 18 | 2771 | 5 | 61 | 0.193 | 0.3 | 0.180 | 1.8 |  |  |  |
| LRM-7\_47 | 498 | 47 | 2681 | 5 | 81 | 0.183 | 0.3 | 0.080 | 9.8 |  |  |  |
| LRM-7\_48 | 2679 | 28 | 2759 | 4 | 3 | 0.192 | 0.3 | 0.515 | 1.3 | -10.6 | -10.3 | 3400 |
| LRM-7\_49 | 1111 | 17 | 2722 | 4 | 59 | 0.188 | 0.3 | 0.188 | 1.7 |  |  |  |
| LRM-7\_50 | 1193 | 37 | 2841 | 4 | 58 | 0.202 | 0.2 | 0.203 | 3.4 |  |  |  |
| LRM-7\_51 | 619 | 64 | 2762 | 6 | 78 | 0.192 | 0.4 | 0.101 | 10.9 |  |  |  |
| LRM-7\_51a | 134 | 8 | 2722 | 47 | 95 | 0.188 | 2.9 | 0.021 | 6.0 |  |  |  |
| LRM-7\_52 | 2004 | 39 | 2709 | 10 | 26 | 0.186 | 0.6 | 0.365 | 2.3 |  |  |  |
| LRM-7\_53 | 1914 | 94 | 2713 | 6 | 29 | 0.187 | 0.4 | 0.346 | 5.7 |  |  |  |
| LRM-7\_54 | 1003 | 50 | 2727 | 6 | 63 | 0.188 | 0.4 | 0.168 | 5.4 |  |  |  |
| LRM-8\_01 | 2328 | 99 | 2739 | 7 | 15 | 0.190 | 0.4 | 0.435 | 5.1 |  |  |  |

Table B-7. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | Err. | 206Pb | Err. | εHf(IA) | εHf(T) | Hf Model Age |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | (%) | 238U | (%) | \* | \*\* | (DM)a |
|  | age |  | age |  |  |  |  |  |  |  |  |  |
| LRM-8\_03 | 2595 | 61 | 2804 | 6 | 7 | 0.197 | 0.3 | 0.496 | 2.8 | -5.8 |  | 3243 |
| LRM-8\_04 | 1057 | 207 | 1878 | 28 | 44 | 0.115 | 1.6 | 0.178 | 21.4 |  |  |  |
| LRM-8\_05 | 66 | 2 | 549 | 110 | 88 | 0.059 | 5.1 | 0.010 | 2.5 |  |  |  |
| LRM-8\_06 | 156 | 10 | 1469 | 42 | 89 | 0.092 | 2.2 | 0.024 | 6.7 |  |  |  |
| LRM-8\_07 | 2673 | 63 | 2782 | 6 | 4 | 0.195 | 0.4 | 0.514 | 2.9 | -9.1 |  | 3383 |
| MLR-01\_01 | 164 | 16 | 2611 | 32 | 94 | 0.176 | 1.9 | 0.026 | 9.9 |  |  |  |
| MLR-01\_02 | 2227 | 123 | 2431 | 8 | 8 | 0.158 | 0.5 | 0.413 | 6.6 | -9.1 | -9.4 | 3067 |
| MLR-01\_03 | 1797 | 102 | 2407 | 9 | 25 | 0.155 | 0.5 | 0.322 | 6.5 |  |  |  |
| MLR-01\_04 | 573 | 143 | 1917 | 44 | 70 | 0.117 | 2.5 | 0.093 | 26.2 |  |  |  |
| MLR-01\_05 | 2264 | 33 | 2418 | 4 | 6 | 0.157 | 0.3 | 0.421 | 1.7 |  |  |  |
| MLR-01\_06 | 2140 | 125 | 2306 | 24 | 7 | 0.147 | 1.4 | 0.394 | 6.9 | -11.8 | -9.1 | 3056 |
| MLR-01\_07 | 1910 | 31 | 2413 | 6 | 21 | 0.156 | 0.3 | 0.345 | 1.9 |  |  |  |
| MLR-01\_08 | 1984 | 40 | 2404 | 10 | 17 | 0.155 | 0.6 | 0.360 | 2.4 | -7.6 | -7.2 | 2986 |
| MLR-01\_09 | 2385 | 56 | 2441 | 5 | 2 | 0.159 | 0.3 | 0.448 | 2.8 | -7.0 | -7.5 | 2993 |
| MLR-01\_10 | 1057 | 42 | 2388 | 6 | 56 | 0.154 | 0.4 | 0.178 | 4.3 |  |  |  |
| MLR-01\_11 | 2358 | 79 | 2419 | 5 | 3 | 0.157 | 0.3 | 0.442 | 4.0 | -4.5 | -4.5 | 2883 |
| MLR-01\_12 | 2298 | 73 | 2406 | 6 | 4 | 0.155 | 0.3 | 0.428 | 3.8 | -7.5 | -7.2 | 2982 |
| MLR-01\_13 | 2221 | 47 | 2423 | 8 | 8 | 0.157 | 0.5 | 0.411 | 2.5 |  |  |  |
| MLR-01\_14 | 2362 | 33 | 2394 | 6 | 1 | 0.154 | 0.4 | 0.443 | 1.7 |  |  |  |
| MLR-01\_15 | 1806 | 60 | 2394 | 5 | 25 | 0.154 | 0.3 | 0.323 | 3.8 |  |  |  |
| MLR-01\_16 | 1121 | 230 | 2286 | 9 | 51 | 0.145 | 0.5 | 0.190 | 22.6 |  |  |  |
| MLR-01\_17 | 1172 | 114 | 2297 | 46 | 49 | 0.146 | 2.7 | 0.199 | 10.7 |  |  |  |
| MLR-01\_18 | 2494 | 62 | 2415 | 5 | -3 | 0.156 | 0.3 | 0.472 | 3.0 |  |  |  |
| MLR-01\_19 | 1271 | 109 | 2400 | 14 | 47 | 0.155 | 0.8 | 0.218 | 9.5 |  |  |  |
| MLR-01\_20 | 2257 | 77 | 2423 | 4 | 7 | 0.157 | 0.2 | 0.419 | 4.0 |  |  |  |
| MLR-01\_21 | 259 | 22 | 2593 | 40 | 90 | 0.174 | 2.4 | 0.041 | 8.6 |  |  |  |
| MLR-01\_22 | 2295 | 101 | 2422 | 10 | 5 | 0.157 | 0.6 | 0.428 | 5.2 |  |  |  |
| MLR-01\_23 | 213 | 32 | 3153 | 134 | 93 | 0.245 | 8.4 | 0.034 | 15.1 |  |  |  |
| MLR-01\_24 | 1975 | 56 | 2411 | 9 | 18 | 0.156 | 0.5 | 0.358 | 3.3 |  |  |  |
| MLR-01\_25 | 1973 | 62 | 2416 | 5 | 18 | 0.156 | 0.3 | 0.358 | 3.7 |  |  |  |
| MLR-01\_26 | 1615 | 253 | 2295 | 25 | 30 | 0.146 | 1.4 | 0.285 | 17.9 |  |  |  |
| MLR-01\_27 | 1426 | 122 | 2404 | 7 | 41 | 0.155 | 0.4 | 0.248 | 9.6 |  |  |  |
| MLR-01\_28 | 2342 | 56 | 2398 | 6 | 2 | 0.155 | 0.4 | 0.438 | 2.8 | -2.7 | -2.2 | 2800 |
| MLR-01\_29 | 2332 | 53 | 2441 | 4 | 4 | 0.159 | 0.2 | 0.436 | 2.7 | -6.5 | -7.0 | 2973 |
| MLR-01\_30 | 1904 | 28 | 2395 | 13 | 21 | 0.154 | 0.8 | 0.344 | 1.7 |  |  |  |
| MLR-01\_31 | 1064 | 218 | 2343 | 22 | 55 | 0.150 | 1.3 | 0.179 | 22.4 |  |  |  |
| MLR-01\_32 | 1284 | 130 | 2291 | 56 | 44 | 0.145 | 3.3 | 0.220 | 11.2 |  |  |  |
| MLR-01\_33 | 711 | 199 | 2334 | 55 | 70 | 0.149 | 3.2 | 0.117 | 29.8 |  |  |  |
| MLR-01\_34 | 717 | 27 | 2248 | 10 | 68 | 0.142 | 0.6 | 0.118 | 4.0 |  |  |  |
| MLR-01\_35 | 291 | 102 | 2372 | 88 | 88 | 0.152 | 5.2 | 0.046 | 35.9 |  |  |  |
| MLR-01\_36 | 2157 | 67 | 2403 | 5 | 10 | 0.155 | 0.3 | 0.397 | 3.7 |  |  |  |
| MLR-01\_37 | 2152 | 28 | 2432 | 4 | 12 | 0.158 | 0.2 | 0.396 | 1.5 |  |  |  |
| MLR-01\_38 | 1735 | 184 | 2460 | 14 | 29 | 0.160 | 0.9 | 0.309 | 12.2 |  |  |  |
| MLR-01\_39 | 798 | 197 | 1978 | 58 | 60 | 0.121 | 3.2 | 0.132 | 26.4 |  |  |  |
| MLR-01\_40 | 2092 | 71 | 2443 | 6 | 14 | 0.159 | 0.3 | 0.383 | 4.0 |  |  |  |
| MLR-01\_41 | 1367 | 90 | 2323 | 17 | 41 | 0.148 | 1.0 | 0.236 | 7.3 |  |  |  |

Table B-7. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | Err. | 206Pb | Err. | εHf(IA) | εHf(T) | Hf Model Age |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | (%) | 238U | (%) | \* | \*\* | (DM)a |
|  | age |  | age |  |  |  |  |  |  |  |  |  |
| MLR-01\_42 | 2133 | 103 | 2407 | 4 | 11 | 0.155 | 0.2 | 0.392 | 5.7 |  |  |  |
| MLR-01\_43 | 1742 | 119 | 2366 | 11 | 26 | 0.152 | 0.7 | 0.310 | 7.8 |  |  |  |
| MLR-01\_44 | 2383 | 46 | 2423 | 7 | 2 | 0.157 | 0.4 | 0.447 | 2.3 | -6.4 | -6.5 | 2956 |
| MLR-01\_45 | 1927 | 241 | 2308 | 44 | 17 | 0.147 | 2.5 | 0.348 | 14.6 |  |  |  |
| MLR-01\_46 | 2271 | 65 | 2403 | 11 | 5 | 0.155 | 0.6 | 0.422 | 3.4 | -5.0 | -11.6 | 2884 |
| MLR-01\_47 | 1336 | 168 | 2313 | 27 | 42 | 0.147 | 1.6 | 0.230 | 14.0 |  |  |  |
| MLR-01\_48 | 2077 | 50 | 2378 | 5 | 13 | 0.153 | 0.3 | 0.380 | 2.8 | -10.4 | -4.6 | 3065 |
| MLR-01\_49 | 2223 | 64 | 2399 | 9 | 7 | 0.155 | 0.5 | 0.412 | 3.4 |  |  |  |
| MLR-01\_50 | 1433 | 247 | 2280 | 47 | 37 | 0.144 | 2.7 | 0.249 | 19.4 |  |  |  |
| MLR-01\_51 | 306 | 103 | 1878 | 62 | 84 | 0.115 | 3.4 | 0.049 | 34.7 | -19.5 | -7.1 | 2982 |
| MLR-01\_52 | 1869 | 113 | 2390 | 6 | 22 | 0.154 | 0.4 | 0.336 | 7.0 |  |  |  |
| MLR-01\_53 | 935 | 62 | 2285 | 16 | 59 | 0.145 | 0.9 | 0.156 | 7.1 |  |  |  |
| MLR-01\_54 | 2447 | 61 | 2416 | 5 | -1 | 0.156 | 0.3 | 0.462 | 3.0 |  |  |  |
| MLR-01\_55 | 1054 | 160 | 2270 | 45 | 54 | 0.144 | 2.6 | 0.178 | 16.6 |  |  |  |
| MLR-01\_56 | 2054 | 151 | 2225 | 105 | 8 | 0.140 | 6.1 | 0.375 | 8.6 | -16.1 | -9.4 | 3144 |
| MLR-01\_57 | 1588 | 126 | 2400 | 11 | 34 | 0.155 | 0.7 | 0.279 | 9.0 |  |  |  |
| MLR-01\_58 | 2120 | 84 | 2416 | 5 | 12 | 0.156 | 0.3 | 0.389 | 4.7 | -7.4 | -7.3 | 2987 |
| MLR-01\_59 | 624 | 18 | 2271 | 19 | 73 | 0.144 | 1.1 | 0.102 | 3.1 |  |  |  |
| MLR-01\_60 | 2332 | 33 | 2440 | 5 | 4 | 0.158 | 0.3 | 0.436 | 1.7 |  |  |  |
| MLR-03\_01 | 2164 | 52 | 2840 | 20 | 24 | 0.202 | 1.2 | 0.399 | 2.9 |  |  |  |
| MLR-03\_02 | 2468 | 67 | 2989 | 8 | 17 | 0.221 | 0.5 | 0.466 | 3.3 |  |  |  |
| MLR-03\_03 | 202 | 8 | 2646 | 30 | 92 | 0.179 | 1.8 | 0.032 | 4.1 | -9.2 | -1.4 | 3288 |
| MLR-03\_04 | 2711 | 63 | 2768 | 9 | 2 | 0.193 | 0.6 | 0.523 | 2.9 | -6.9 | -1.9 | 3314 |
| MLR-03\_05 | 3008 | 67 | 2987 | 7 | -1 | 0.221 | 0.4 | 0.595 | 2.8 | -0.6 | -0.2 | 3241 |
| MLR-03\_06 | 2991 | 63 | 3024 | 6 | 1 | 0.226 | 0.4 | 0.591 | 2.6 | 0.0 | -0.4 | 3248 |
| MLR-03\_07 | 2992 | 69 | 3004 | 6 | 0 | 0.223 | 0.4 | 0.591 | 2.9 | -3.1 | -3.0 | 3347 |
| MLR-03\_08 | 2977 | 73 | 2957 | 17 | -1 | 0.217 | 1.0 | 0.587 | 3.1 | -1.6 | -0.5 | 3250 |
| MLR-03\_09 | 2348 | 76 | 2746 | 19 | 14 | 0.190 | 1.2 | 0.439 | 3.9 |  |  |  |
| MLR-03\_10 | 2936 | 58 | 2928 | 7 | 0 | 0.213 | 0.4 | 0.577 | 2.4 |  |  |  |
| MLR-03\_11 | 2739 | 73 | 2746 | 21 | 0 | 0.190 | 1.3 | 0.529 | 3.3 | -5.1 | 0.7 | 3202 |
| MLR-03\_12 | 2704 | 94 | 2937 | 6 | 8 | 0.214 | 0.4 | 0.521 | 4.3 |  |  |  |
| MLR-03\_13 | 1257 | 148 | 2742 | 32 | 54 | 0.190 | 1.9 | 0.215 | 13.0 |  |  |  |
| MLR-03\_14 | 2860 | 36 | 2844 | 11 | -1 | 0.202 | 0.6 | 0.558 | 1.6 | -9.8 | -6.3 | 3482 |
| MLR-03\_15 | 2818 | 54 | 2807 | 6 | 0 | 0.198 | 0.4 | 0.548 | 2.4 |  |  |  |
| MLR-03\_16 | 2873 | 59 | 2921 | 7 | 2 | 0.212 | 0.4 | 0.562 | 2.5 | -1.6 | 0.3 | 3227 |
| MLR-03\_17 | 2948 | 70 | 2933 | 10 | -1 | 0.214 | 0.6 | 0.580 | 2.9 |  |  |  |
| MLR-03\_18 | 2199 | 96 | 2910 | 14 | 24 | 0.211 | 0.9 | 0.407 | 5.2 |  |  |  |
| MLR-03\_19 | 1003 | 73 | 2913 | 10 | 66 | 0.211 | 0.6 | 0.168 | 7.9 |  |  |  |
| MLR-03\_20 | 2439 | 245 | 2705 | 20 | 10 | 0.186 | 1.2 | 0.460 | 12.2 | -5.6 | 0.9 | 3199 |
| MLR-03\_21 | 2645 | 49 | 2858 | 12 | 7 | 0.204 | 0.8 | 0.507 | 2.3 |  |  |  |
| MLR-03\_22 | 1162 | 250 | 2761 | 54 | 58 | 0.192 | 3.3 | 0.198 | 23.7 |  |  |  |
| MLR-03\_23 | 2171 | 87 | 2875 | 10 | 24 | 0.206 | 0.6 | 0.400 | 4.7 |  |  |  |
| MLR-03\_24 | 2872 | 54 | 3022 | 3 | 5 | 0.226 | 0.2 | 0.561 | 2.3 | 1.2 | 0.9 | 3201 |
| MLR-03\_25 | 2815 | 47 | 3000 | 3 | 6 | 0.223 | 0.2 | 0.548 | 2.1 | -3.5 | -3.4 | 3375 |
| MLR-03\_26 | 2590 | 43 | 2758 | 4 | 6 | 0.192 | 0.3 | 0.495 | 2.0 |  |  |  |
| MLR-03\_27 | 2847 | 43 | 3006 | 8 | 5 | 0.224 | 0.5 | 0.555 | 1.9 | -1.5 | -1.5 | 3281 |

Table B-7. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | Err. | 206Pb | Err. | εHf(IA) | εHf(T) | Hf Model Age |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | (%) | 238U | (%) | \* | \*\* | (DM)a |
|  | age |  | age |  |  |  |  |  |  |  |  |  |
| MLR-03\_28 | 2317 | 59 | 2984 | 3 | 22 | 0.220 | 0.2 | 0.432 | 3.0 |  |  |  |
| MLR-03\_29 | 2681 | 40 | 2944 | 18 | 9 | 0.215 | 1.1 | 0.516 | 1.8 |  |  |  |
| MLR-03\_30 | 2536 | 38 | 2724 | 5 | 7 | 0.188 | 0.3 | 0.482 | 1.8 |  |  |  |
| MLR-03\_31 | 2590 | 31 | 2941 | 4 | 12 | 0.215 | 0.2 | 0.494 | 1.5 |  |  |  |
| MLR-03\_32 | 2779 | 29 | 3013 | 4 | 8 | 0.224 | 0.3 | 0.539 | 1.3 |  |  |  |
| MLR-03\_33 | 2553 | 37 | 2972 | 6 | 14 | 0.219 | 0.4 | 0.486 | 1.7 |  |  |  |
| MLR-03\_34 | 2403 | 29 | 2907 | 5 | 17 | 0.210 | 0.3 | 0.452 | 1.4 |  |  |  |
| MLR-03\_35 | 2626 | 94 | 2983 | 12 | 12 | 0.220 | 0.8 | 0.503 | 4.4 |  |  |  |
| MLR-03\_36 | 1678 | 25 | 2793 | 10 | 40 | 0.196 | 0.6 | 0.297 | 1.7 |  |  |  |
| MLR-03\_37 | 2764 | 46 | 3024 | 5 | 9 | 0.226 | 0.3 | 0.535 | 2.1 | -4.0 | -4.4 | 3411 |
| MLR-03\_38 | 1315 | 193 | 2893 | 25 | 55 | 0.208 | 1.5 | 0.226 | 16.4 |  |  |  |
| MLR-03\_39 | 2814 | 39 | 3010 | 9 | 6 | 0.224 | 0.6 | 0.547 | 1.7 |  |  |  |
| MLR-03\_40 | 2853 | 45 | 3008 | 3 | 5 | 0.224 | 0.2 | 0.557 | 2.0 |  |  |  |
| MLR-03\_41 | 2849 | 51 | 2997 | 3 | 5 | 0.222 | 0.2 | 0.556 | 2.2 | -3.3 | -3.2 | 3359 |
| MLR-03\_42 | 1326 | 101 | 2800 | 11 | 53 | 0.197 | 0.7 | 0.228 | 8.5 |  |  |  |
| MLR-03\_43 | 1597 | 60 | 2968 | 7 | 46 | 0.218 | 0.4 | 0.281 | 4.2 |  |  |  |
| MLR-03\_44 | 1797 | 94 | 2972 | 8 | 40 | 0.219 | 0.5 | 0.321 | 6.0 |  |  |  |
| MLR-03\_45 | 2749 | 33 | 2996 | 4 | 8 | 0.222 | 0.3 | 0.532 | 1.5 |  |  |  |
| MLR-03\_46 | 831 | 194 | 2801 | 19 | 70 | 0.197 | 1.2 | 0.138 | 25.1 |  |  |  |
| MLR-03\_47 | 2512 | 61 | 2943 | 21 | 15 | 0.215 | 1.3 | 0.477 | 2.9 |  |  |  |
| MLR-03\_48 | 2723 | 36 | 2950 | 3 | 8 | 0.216 | 0.2 | 0.526 | 1.6 | -4.8 | -3.6 | 3380 |
| MLR-03\_49 | 2178 | 65 | 2847 | 9 | 24 | 0.203 | 0.5 | 0.402 | 3.5 |  |  |  |
| MLR-03\_50 | 2177 | 181 | 2980 | 9 | 27 | 0.220 | 0.6 | 0.402 | 9.9 | 3.6 | 4.2 | 3069 |
| MLR-03\_51 | 2408 | 121 | 2845 | 16 | 15 | 0.202 | 1.0 | 0.453 | 6.1 | -3.7 | -0.1 | 3240 |
| MLR-03\_52 | 2700 | 74 | 2952 | 4 | 9 | 0.216 | 0.2 | 0.520 | 3.4 |  |  |  |
| MLR-03\_53 | 1739 | 103 | 2895 | 10 | 40 | 0.209 | 0.6 | 0.310 | 6.8 |  |  |  |
| MLR-03\_54 | 1637 | 67 | 2847 | 19 | 42 | 0.203 | 1.2 | 0.289 | 4.6 |  |  |  |
| MLR-03\_55 | 2751 | 44 | 2935 | 7 | 6 | 0.214 | 0.4 | 0.532 | 2.0 |  |  |  |
| MLR-03\_56 | 2667 | 59 | 2946 | 16 | 9 | 0.215 | 1.0 | 0.512 | 2.7 |  |  |  |
| MLR-03\_57 | 2689 | 37 | 2904 | 4 | 7 | 0.210 | 0.2 | 0.518 | 1.7 |  |  |  |
| MLR-03\_58 | 2876 | 39 | 3012 | 6 | 4 | 0.224 | 0.4 | 0.562 | 1.7 | 1.0 | 0.9 | 3189 |
| MLR-06\_01 | 973 | 37 | 2829 | 63 | 66 | 0.200 | 3.8 | 0.163 | 4.1 |  |  |  |
| MLR-06\_02 | 1687 | 69 | 2526 | 25 | 33 | 0.167 | 1.5 | 0.299 | 4.6 |  |  |  |
| MLR-06\_03 | 1970 | 105 | 2476 | 10 | 20 | 0.162 | 0.6 | 0.357 | 6.2 |  |  |  |
| MLR-06\_04 | 2383 | 48 | 2429 | 7 | 2 | 0.157 | 0.4 | 0.447 | 2.4 |  |  |  |
| MLR-06\_05 | 887 | 249 | 2659 | 89 | 67 | 0.181 | 5.4 | 0.147 | 30.3 |  |  |  |
| MLR-06\_06 | 2235 | 61 | 2414 | 14 | 7 | 0.156 | 0.8 | 0.467 | 2.7 |  |  |  |
| MLR-06\_07 | 2469 | 56 | 2418 | 4 | -2 | 0.156 | 0.2 | 0.455 | 2.4 |  |  |  |
| MLR-06\_08 | 2465 | 44 | 2411 | 7 | -2 | 0.156 | 0.4 | 0.445 | 2.7 | -7.7 | -7.5 | 2989 |
| MLR-06\_09 | 2137 | 64 | 2367 | 11 | 10 | 0.152 | 0.6 | 0.467 | 3.1 | -8.0 | -6.9 | 2983 |
| MLR-06\_10 | 2367 | 64 | 2396 | 5 | 1 | 0.154 | 0.3 | 0.426 | 4.0 |  |  |  |
| MLR-06\_11 | 1047 | 43 | 2394 | 23 | 56 | 0.154 | 1.4 | 0.176 | 4.4 |  |  |  |
| MLR-06\_12 | 2225 | 83 | 2400 | 9 | 7 | 0.155 | 0.5 | 0.459 | 3.2 |  |  |  |
| MLR-06\_13 | 1562 | 238 | 2491 | 24 | 37 | 0.163 | 1.4 | 0.274 | 17.3 |  |  |  |
| MLR-06\_14 | 1408 | 84 | 2388 | 8 | 41 | 0.154 | 0.4 | 0.244 | 6.6 |  |  |  |
| MLR-06\_15 | 2344 | 63 | 2616 | 53 | 10 | 0.176 | 3.2 | 0.439 | 3.2 |  |  |  |

Table B-7. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | Err. | 206Pb | Err. | εHf(IA) | εHf(T) | Hf Model Age |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | (%) | 238U | (%) | \* | \*\* | (DM)a |
|  | age |  | age |  |  |  |  |  |  |  |  |  |
| MLR-06\_16 | 2325 | 51 | 2430 | 7 | 4 | 0.158 | 0.4 | 0.455 | 3.7 |  |  |  |
| MLR-06\_17 | 2373 | 53 | 2383 | 5 | 0 | 0.153 | 0.3 | 0.412 | 4.4 |  |  |  |
| MLR-06\_18 | 1889 | 59 | 2738 | 47 | 31 | 0.190 | 2.8 | 0.340 | 3.6 |  |  |  |
| MLR-06\_19 | 1816 | 192 | 2451 | 7 | 26 | 0.160 | 0.4 | 0.325 | 12.2 |  |  |  |
| MLR-06\_20 | 998 | 81 | 2322 | 27 | 57 | 0.148 | 1.6 | 0.167 | 8.8 |  |  |  |
| MLR-06\_21 | 2362 | 39 | 2435 | 8 | 3 | 0.158 | 0.5 | 0.453 | 3.0 | -6.8 | -7.2 | 2979 |
| MLR-06\_22 | 1382 | 96 | 2462 | 6 | 44 | 0.161 | 0.3 | 0.239 | 7.7 |  |  |  |
| MLR-06\_23 | 1696 | 246 | 2367 | 14 | 28 | 0.152 | 0.8 | 0.301 | 16.7 |  |  |  |
| MLR-06\_24 | 2075 | 120 | 2462 | 20 | 16 | 0.161 | 1.2 | 0.380 | 6.8 | -6.0 | -7.1 | 2974 |
| MLR-06\_25 | 1657 | 32 | 2410 | 27 | 31 | 0.156 | 1.6 | 0.293 | 2.2 |  |  |  |
| MLR-06\_26 | 2434 | 65 | 2444 | 7 | 0 | 0.159 | 0.4 | 0.457 | 2.7 |  |  |  |
| MLR-06\_27 | 2456 | 62 | 2423 | 6 | -1 | 0.157 | 0.3 | 0.443 | 2.0 | -6.2 | -6.4 | 2953 |
| MLR-06\_28 | 2409 | 60 | 2428 | 5 | 1 | 0.157 | 0.3 | 0.445 | 4.1 | -8.9 | -9.1 | 3050 |
| MLR-06\_29 | 1015 | 159 | 2712 | 134 | 63 | 0.187 | 8.1 | 0.171 | 17.0 |  |  |  |
| MLR-06\_30 | 67 | 9 | 4334 | 91 | 98 | 0.532 | 6.2 | 0.010 | 12.9 |  |  |  |
| MLR-06\_31 | 2424 | 54 | 2421 | 9 | 0 | 0.157 | 0.6 | 0.450 | 2.7 |  |  |  |
| MLR-06\_32 | 2287 | 77 | 2397 | 5 | 5 | 0.155 | 0.3 | 0.425 | 4.1 | -10.5 | -10.0 | 3084 |
| MLR-06\_33 | 1729 | 55 | 2458 | 6 | 30 | 0.160 | 0.3 | 0.308 | 3.6 |  |  |  |
| MLR-06\_34 | 2383 | 71 | 2447 | 7 | 3 | 0.159 | 0.4 | 0.466 | 2.2 | -6.2 | -6.8 | 2966 |
| MLR-06\_35 | 2424 | 45 | 2414 | 6 | 0 | 0.156 | 0.4 | 0.444 | 3.3 | -7.2 | -7.2 | 2978 |
| MLR-06\_36 | 2472 | 63 | 2434 | 6 | -2 | 0.158 | 0.3 | 0.456 | 2.2 |  |  |  |
| MLR-06\_37 | 1552 | 147 | 2422 | 8 | 36 | 0.157 | 0.5 | 0.272 | 10.7 |  |  |  |
| MLR-06\_38 | 774 | 113 | 2488 | 54 | 69 | 0.163 | 3.2 | 0.128 | 15.5 |  |  |  |
| MLR-06\_39 | 2296 | 56 | 2409 | 6 | 5 | 0.156 | 0.3 | 0.427 | 2.3 |  |  |  |
| MLR-06\_40 | 2418 | 48 | 2382 | 5 | -2 | 0.153 | 0.3 | 0.393 | 3.5 | -8.7 | -7.9 | 3006 |
| MLR-06\_41 | 2059 | 47 | 2386 | 13 | 14 | 0.154 | 0.8 | 0.376 | 2.7 | -6.5 | -5.8 | 2928 |
| MLR-06\_42 | 2282 | 79 | 2414 | 4 | 5 | 0.156 | 0.3 | 0.447 | 5.2 |  |  |  |
| MLR-06\_43 | 1316 | 206 | 2705 | 61 | 51 | 0.186 | 3.7 | 0.226 | 17.5 |  |  |  |
| MLR-06\_44 | 1907 | 165 | 2437 | 8 | 22 | 0.158 | 0.5 | 0.344 | 10.0 |  |  |  |
| MLR-06\_45 | 2334 | 64 | 2376 | 11 | 2 | 0.153 | 0.7 | 0.389 | 7.6 | -10.0 | -9.1 | 3048 |
| MLR-06\_46 | 2382 | 102 | 2411 | 6 | 1 | 0.156 | 0.4 | 0.434 | 2.6 |  |  |  |
| MLR-06\_47 | 1066 | 61 | 2413 | 23 | 56 | 0.156 | 1.3 | 0.180 | 6.2 |  |  |  |
| MLR-06\_48 | 2418 | 75 | 2403 | 11 | -1 | 0.155 | 0.6 | 0.436 | 3.3 | -8.9 | -8.5 | 3029 |
| MLR-06\_49 | 2396 | 53 | 2402 | 4 | 0 | 0.155 | 0.3 | 0.428 | 2.9 |  |  |  |
| MLR-06\_50 | 2375 | 80 | 2432 | 6 | 2 | 0.158 | 0.3 | 0.447 | 3.6 | -5.5 | -5.9 | 2930 |
| MLR-06\_51 | 2117 | 136 | 2360 | 9 | 10 | 0.151 | 0.5 | 0.472 | 2.7 |  |  |  |
| MLR-06\_52 | 84 | 15 | 3954 | 181 | 98 | 0.412 | 12.1 | 0.013 | 17.6 |  |  |  |
| MLR-06\_53 | 2494 | 55 | 2426 | 7 | -3 | 0.157 | 0.4 | 0.455 | 2.7 |  |  |  |
| MLR-06\_54 | 2293 | 45 | 2439 | 7 | 6 | 0.158 | 0.4 | 0.464 | 3.1 |  |  |  |
| MLR-06\_55 | 1689 | 111 | 2537 | 33 | 33 | 0.168 | 2.0 | 0.300 | 7.5 |  |  |  |
| MLR-06\_56 | 213 | 18 | 2727 | 45 | 92 | 0.188 | 2.8 | 0.034 | 8.7 |  |  |  |
| MLR-06\_57 | 1930 | 71 | 2488 | 8 | 22 | 0.163 | 0.5 | 0.349 | 4.3 |  |  |  |
| MLR-06\_58 | 1174 | 294 | 2463 | 50 | 52 | 0.161 | 3.0 | 0.200 | 27.7 |  |  |  |
| MLR-06\_59 | 1112 | 123 | 2873 | 54 | 61 | 0.206 | 3.3 | 0.188 | 12.1 |  |  |  |
| MLR-06\_60 | 2415 | 53 | 2394 | 6 | -1 | 0.154 | 0.3 | 0.414 | 3.2 | -9.1 | -8.5 | 3028 |
| MLR-09\_01 | 2315 | 383 | 3217 | 27 | 28 | 0.255 | 1.7 | 0.432 | 20.0 |  |  |  |

Table B-7. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | Err. | 206Pb | Err. | εHf(IA) | εHf(T) | Hf Model Age |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | (%) | 238U | (%) | \* | \*\* | (DM)a |
|  | age |  | age |  |  |  |  |  |  |  |  |  |
| MLR-09\_02 | 2732 | 34 | 3135 | 6 | 13 | 0.242 | 0.4 | 0.528 | 1.5 |  |  |  |
| MLR-09\_03 | 3178 | 41 | 3191 | 7 | 0 | 0.251 | 0.4 | 0.637 | 1.6 |  |  |  |
| MLR-09\_04 | 2297 | 35 | 2840 | 28 | 19 | 0.202 | 1.7 | 0.428 | 1.8 | -6.6 | 1.8 | 3327 |
| MLR-09\_05 | 2395 | 48 | 3228 | 6 | 26 | 0.257 | 0.4 | 0.450 | 2.4 |  |  |  |
| MLR-09\_06 | 1683 | 85 | 3028 | 9 | 44 | 0.227 | 0.6 | 0.298 | 5.7 |  |  |  |
| MLR-09\_07 | 2642 | 153 | 2752 | 85 | 4 | 0.191 | 5.2 | 0.507 | 7.1 | -11.5 | -1.1 | 3437 |
| MLR-09\_08 | 3027 | 48 | 3153 | 8 | 4 | 0.245 | 0.5 | 0.599 | 2.0 |  |  |  |
| MLR-09\_09 | 2480 | 146 | 2798 | 40 | 11 | 0.197 | 2.4 | 0.469 | 7.1 | -7.3 | 2.2 | 3309 |
| MLR-09\_10 | 3038 | 59 | 3189 | 6 | 5 | 0.251 | 0.4 | 0.602 | 2.4 |  |  |  |
| MLR-09\_11 | 934 | 197 | 3014 | 24 | 69 | 0.225 | 1.5 | 0.156 | 22.8 |  |  |  |
| MLR-09\_12 | 2645 | 50 | 3181 | 9 | 17 | 0.249 | 0.5 | 0.507 | 2.3 |  |  |  |
| MLR-09\_13 | 3023 | 67 | 3194 | 6 | 5 | 0.251 | 0.4 | 0.598 | 2.8 |  |  |  |
| MLR-09\_14 | 2687 | 69 | 2987 | 16 | 10 | 0.221 | 1.0 | 0.517 | 3.2 | -6.6 | -1.6 | 3453 |
| MLR-09\_15 | 2964 | 55 | 3211 | 7 | 8 | 0.254 | 0.4 | 0.584 | 2.3 |  |  |  |
| MLR-09\_16 | 872 | 49 | 3062 | 20 | 72 | 0.231 | 1.2 | 0.145 | 6.1 |  |  |  |
| MLR-09\_17 | 1441 | 182 | 3046 | 17 | 53 | 0.229 | 1.0 | 0.250 | 14.2 |  |  |  |
| MLR-09\_18 | 2935 | 57 | 3202 | 15 | 8 | 0.253 | 1.0 | 0.577 | 2.4 |  |  |  |
| MLR-09\_19 | 1105 | 120 | 3039 | 36 | 64 | 0.228 | 2.3 | 0.187 | 11.8 |  |  |  |
| MLR-09\_20 | 2655 | 34 | 3255 | 8 | 18 | 0.261 | 0.5 | 0.510 | 1.6 | -0.4 | -1.6 | 3452 |
| MLR-09\_21 | 1283 | 213 | 3061 | 18 | 58 | 0.231 | 1.1 | 0.220 | 18.4 |  |  |  |
| MLR-09\_22 | 3216 | 79 | 3262 | 9 | 1 | 0.263 | 0.6 | 0.647 | 3.1 | 5.2 | 3.8 | 3252 |
| MLR-09\_23 | 3116 | 70 | 3193 | 6 | 2 | 0.251 | 0.3 | 0.622 | 2.8 |  |  |  |
| MLR-09\_24 | 3049 | 63 | 3151 | 10 | 3 | 0.245 | 0.7 | 0.605 | 2.6 |  |  |  |
| MLR-09\_25 | 1853 | 153 | 2688 | 25 | 31 | 0.184 | 1.5 | 0.333 | 9.5 | -12.2 | -0.4 | 3407 |
| MLR-09\_26 | 1044 | 39 | 3074 | 12 | 66 | 0.233 | 0.7 | 0.176 | 4.1 |  |  |  |
| MLR-09\_27 | 2615 | 76 | 3202 | 8 | 18 | 0.253 | 0.5 | 0.500 | 3.5 |  |  |  |
| MLR-09\_28 | 2933 | 64 | 3174 | 7 | 8 | 0.248 | 0.5 | 0.576 | 2.7 |  |  |  |
| MLR-09\_29 | 2637 | 79 | 2968 | 64 | 11 | 0.218 | 4.0 | 0.505 | 3.7 |  |  |  |
| MLR-09\_30 | 3184 | 65 | 3199 | 6 | 0 | 0.252 | 0.4 | 0.639 | 2.6 | 0.7 | 0.7 | 3366 |
| MLR-09\_31 | 2676 | 137 | 3016 | 53 | 11 | 0.225 | 3.3 | 0.515 | 6.3 |  |  |  |
| MLR-09\_32 | 728 | 65 | 3093 | 12 | 76 | 0.236 | 0.7 | 0.119 | 9.4 |  |  |  |
| MLR-09\_33 | 2106 | 169 | 2952 | 8 | 29 | 0.216 | 0.5 | 0.386 | 9.5 |  |  |  |
| MLR-09\_34 | 2189 | 80 | 2992 | 7 | 27 | 0.222 | 0.5 | 0.404 | 4.3 |  |  |  |
| MLR-09\_35 | 2819 | 95 | 3055 | 9 | 8 | 0.230 | 0.5 | 0.548 | 4.2 | -3.7 | -0.3 | 3403 |
| MLR-09\_36 | 2857 | 88 | 3113 | 15 | 8 | 0.239 | 0.9 | 0.558 | 3.8 |  |  |  |
| MLR-09\_37 | 2350 | 153 | 3155 | 8 | 25 | 0.245 | 0.5 | 0.440 | 7.8 |  |  |  |
| MLR-09\_38 | 1753 | 44 | 3180 | 6 | 45 | 0.249 | 0.4 | 0.312 | 2.9 |  |  |  |
| MLR-09\_39 | 1800 | 113 | 3122 | 34 | 42 | 0.240 | 2.1 | 0.322 | 7.2 |  |  |  |
| MLR-09\_40 | 2893 | 103 | 3220 | 6 | 10 | 0.256 | 0.4 | 0.566 | 4.5 |  |  |  |
| MLR-09\_41 | 1649 | 228 | 3137 | 28 | 47 | 0.243 | 1.8 | 0.292 | 15.8 |  |  |  |
| MLR-09\_42 | 2214 | 156 | 3179 | 6 | 30 | 0.249 | 0.4 | 0.410 | 8.4 |  |  |  |
| MLR-09\_43 | 3058 | 103 | 3172 | 7 | 4 | 0.248 | 0.5 | 0.607 | 4.2 | -2.6 | -2.0 | 3468 |
| MLR-09\_44 | 3144 | 55 | 3183 | 13 | 1 | 0.250 | 0.8 | 0.629 | 2.2 |  |  |  |
| MLR-09\_45 | 3287 | 76 | 3285 | 6 | 0 | 0.266 | 0.4 | 0.665 | 2.9 | 1.6 | -0.2 | 3418 |
| MLR-09\_46 | 3119 | 70 | 3209 | 7 | 3 | 0.254 | 0.4 | 0.622 | 2.8 | -2.0 | -2.2 | 3477 |
| MLR-09\_47 | 2667 | 44 | 3190 | 7 | 16 | 0.251 | 0.4 | 0.513 | 2.0 |  |  |  |

Table B-7. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | Err. | 206Pb | Err. | εHf(IA) | εHf(T) | Hf Model Age |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | (%) | 238U | (%) | \* | \*\* | (DM)a |
|  | age |  | age |  |  |  |  |  |  |  |  |  |
| MLR-09\_48 | 2958 | 64 | 3079 | 7 | 4 | 0.234 | 0.5 | 0.582 | 2.7 |  |  |  |
| MLR-09\_49 | 993 | 26 | 3025 | 7 | 67 | 0.226 | 0.4 | 0.166 | 2.8 |  |  |  |
| MLR-09\_50 | 2629 | 228 | 3201 | 6 | 18 | 0.253 | 0.4 | 0.504 | 10.7 |  |  |  |
| MLR-09\_51 | 2770 | 57 | 3095 | 8 | 11 | 0.236 | 0.5 | 0.537 | 2.5 | -0.3 | 2.1 | 3315 |
| MLR-09\_52 | 2565 | 103 | 3147 | 8 | 18 | 0.244 | 0.5 | 0.489 | 4.9 |  |  |  |
| MLR-09\_53 | 2982 | 85 | 3177 | 6 | 6 | 0.249 | 0.4 | 0.588 | 3.6 | -1.5 | -1.0 | 3429 |
| MLR-09\_54 | 2941 | 141 | 3233 | 30 | 9 | 0.258 | 1.9 | 0.578 | 6.0 |  |  |  |
| MLR-09\_55 | 1721 | 70 | 3167 | 16 | 46 | 0.247 | 1.0 | 0.306 | 4.6 |  |  |  |
| MLR-09\_56 | 2932 | 39 | 3270 | 7 | 10 | 0.264 | 0.4 | 0.576 | 1.7 |  |  |  |
| MLR-09\_57 | 2732 | 100 | 3267 | 8 | 16 | 0.263 | 0.5 | 0.528 | 4.5 | 2.2 | 0.7 | 3369 |
| MLR-09\_58 | 1907 | 186 | 3225 | 16 | 41 | 0.256 | 1.0 | 0.344 | 11.3 |  |  |  |
| MLR-09\_59 | 2058 | 160 | 3162 | 10 | 35 | 0.247 | 0.7 | 0.376 | 9.1 |  |  |  |
| MLR-09\_60 | 2033 | 371 | 3203 | 33 | 37 | 0.253 | 2.1 | 0.371 | 21.6 |  |  |  |
| MLR-09\_61 | 2693 | 206 | 3086 | 42 | 13 | 0.235 | 2.6 | 0.519 | 9.4 |  |  |  |
| MLR-10\_01 | 2814 | 51 | 3124 | 9 | 10 | 0.241 | 0.5 | 0.547 | 2.2 | -3.4 | -3.3 | 3448 |
| MLR-10\_02 | 2389 | 34 | 2779 | 10 | 14 | 0.194 | 0.6 | 0.449 | 1.7 | -9.4 | -1.2 | 3371 |
| MLR-10\_03 | 2248 | 27 | 3027 | 7 | 26 | 0.226 | 0.5 | 0.417 | 1.4 |  |  |  |
| MLR-10\_05 | 2678 | 57 | 3110 | 10 | 14 | 0.239 | 0.6 | 0.515 | 2.6 |  |  |  |
| MLR-10\_06 | 2075 | 27 | 3026 | 6 | 31 | 0.226 | 0.4 | 0.380 | 1.5 | -5.7 | -3.3 | 3449 |
| MLR-10\_07 | 2319 | 52 | 2737 | 5 | 15 | 0.189 | 0.3 | 0.433 | 2.7 | -6.1 | 3.1 | 3213 |
| MLR-10\_08 | 2387 | 86 | 3061 | 7 | 22 | 0.231 | 0.4 | 0.448 | 4.3 | -4.3 | -2.7 | 3427 |
| MLR-10\_09 | 2071 | 41 | 2734 | 4 | 24 | 0.189 | 0.3 | 0.379 | 2.3 | -7.6 | 1.6 | 3268 |
| MLR-10\_10 | 2678 | 78 | 3079 | 5 | 13 | 0.234 | 0.3 | 0.515 | 3.6 |  |  |  |
| MLR-10\_11 | 2632 | 53 | 3093 | 4 | 15 | 0.236 | 0.3 | 0.504 | 2.4 | -3.4 | -2.6 | 3420 |
| MLR-10\_12 | 2820 | 89 | 3097 | 7 | 9 | 0.237 | 0.4 | 0.549 | 3.9 | -4.4 | -3.7 | 3463 |
| MLR-10\_13 | 2122 | 51 | 3038 | 4 | 30 | 0.228 | 0.3 | 0.390 | 2.8 | -4.4 | -2.3 | 3410 |
| MLR-10\_14 | 1879 | 114 | 3038 | 11 | 38 | 0.228 | 0.7 | 0.339 | 7.0 |  |  |  |
| MLR-10\_15 | 2992 | 52 | 3176 | 4 | 6 | 0.249 | 0.3 | 0.591 | 2.2 | -1.9 | -3.0 | 3437 |
| MLR-10\_16 | 1345 | 24 | 2964 | 6 | 55 | 0.218 | 0.4 | 0.232 | 2.0 |  |  |  |
| MLR-10\_17 | 1556 | 140 | 2685 | 11 | 42 | 0.183 | 0.7 | 0.273 | 10.2 | -8.0 | 2.4 | 3238 |
| MLR-10\_18 | 2193 | 61 | 3038 | 6 | 28 | 0.228 | 0.4 | 0.405 | 3.3 |  |  |  |
| MLR-10\_19 | 2241 | 73 | 3064 | 4 | 27 | 0.232 | 0.3 | 0.416 | 3.9 | -3.8 | -2.3 | 3411 |
| MLR-10\_20 | 1354 | 42 | 2677 | 4 | 49 | 0.183 | 0.3 | 0.234 | 3.5 | -5.9 | 4.6 | 3155 |
| MLR-10\_21 | 2497 | 26 | 3072 | 7 | 19 | 0.233 | 0.5 | 0.473 | 1.3 |  |  |  |
| MLR-10\_22 | 2450 | 29 | 3047 | 4 | 20 | 0.229 | 0.3 | 0.462 | 1.4 | -4.8 | -2.9 | 3433 |
| MLR-10\_23 | 2512 | 50 | 3024 | 4 | 17 | 0.226 | 0.3 | 0.477 | 2.4 |  |  |  |
| MLR-10\_24 | 2564 | 21 | 3011 | 9 | 15 | 0.224 | 0.6 | 0.488 | 1.0 | -4.9 | -2.1 | 3404 |
| MLR-10\_25 | 2439 | 37 | 3078 | 4 | 21 | 0.234 | 0.2 | 0.460 | 1.8 |  |  |  |
| MLR-10\_26 | 2065 | 17 | 2997 | 10 | 31 | 0.222 | 0.6 | 0.378 | 1.0 |  |  |  |
| MLR-10\_27 | 2770 | 37 | 3132 | 5 | 12 | 0.242 | 0.3 | 0.537 | 1.7 | -3.0 | -3.1 | 3438 |
| MLR-10\_28 | 1672 | 94 | 3073 | 7 | 46 | 0.233 | 0.5 | 0.296 | 6.4 | -2.9 | -1.6 | 3384 |
| MLR-10\_29 | 2132 | 72 | 3011 | 4 | 29 | 0.224 | 0.3 | 0.392 | 4.0 |  |  |  |
| MLR-10\_30 | 2740 | 52 | 3115 | 5 | 12 | 0.239 | 0.3 | 0.530 | 2.3 |  |  |  |
| MLR-10\_31 | 1359 | 16 | 2992 | 10 | 55 | 0.222 | 0.6 | 0.235 | 1.3 | -6.8 | -3.7 | 3461 |
| MLR-10\_32 | 2473 | 78 | 3106 | 6 | 20 | 0.238 | 0.4 | 0.468 | 3.8 | -0.5 | 0.0 | 3325 |
| MLR-10\_33 | 1449 | 17 | 3069 | 6 | 53 | 0.232 | 0.4 | 0.252 | 1.3 |  |  |  |

Table B-7. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | Err. | 206Pb | Err. | εHf(IA) | εHf(T) | Hf Model Age |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | (%) | 238U | (%) | \* | \*\* | (DM)a |
|  | age |  | age |  |  |  |  |  |  |  |  |  |
| MLR-10\_34 | 2257 | 111 | 2957 | 6 | 24 | 0.217 | 0.4 | 0.419 | 5.9 |  |  |  |
| MLR-10\_35 | 2622 | 35 | 3076 | 5 | 15 | 0.234 | 0.3 | 0.502 | 1.6 |  |  |  |
| MLR-10\_36 | 2348 | 53 | 3047 | 5 | 23 | 0.229 | 0.3 | 0.440 | 2.7 |  |  |  |
| MLR-10\_37 | 2701 | 35 | 3072 | 5 | 12 | 0.233 | 0.3 | 0.521 | 1.6 |  |  |  |
| MLR-10\_38 | 2577 | 23 | 3103 | 4 | 17 | 0.237 | 0.3 | 0.492 | 1.1 |  |  |  |
| MLR-10\_39 | 2620 | 38 | 3067 | 4 | 15 | 0.232 | 0.3 | 0.502 | 1.7 |  |  |  |
| MLR-10\_40 | 2651 | 79 | 3101 | 7 | 15 | 0.237 | 0.4 | 0.509 | 3.6 | -3.8 | -3.2 | 3443 |
| MLR-10\_41 | 2099 | 71 | 3071 | 4 | 32 | 0.233 | 0.3 | 0.385 | 4.0 | -3.0 | -1.7 | 3387 |
| MLR-10\_42 | 2095 | 22 | 3055 | 5 | 31 | 0.230 | 0.3 | 0.384 | 1.2 |  |  |  |
| MLR-10\_43 | 2271 | 24 | 3042 | 11 | 25 | 0.229 | 0.7 | 0.422 | 1.2 |  |  |  |
| MLR-10\_44 | 2787 | 49 | 3132 | 8 | 11 | 0.242 | 0.5 | 0.541 | 2.2 |  |  |  |
| MLR-10\_45 | 1890 | 45 | 3058 | 7 | 38 | 0.231 | 0.4 | 0.341 | 2.8 |  |  |  |
| MLR-10\_46 | 2759 | 26 | 3128 | 6 | 12 | 0.241 | 0.4 | 0.534 | 1.2 |  |  |  |
| MLR-10\_47 | 2295 | 28 | 3081 | 5 | 26 | 0.234 | 0.3 | 0.428 | 1.5 |  |  |  |
| MLR-10\_48 | 2387 | 21 | 3045 | 12 | 22 | 0.229 | 0.7 | 0.448 | 1.1 |  |  |  |
| MLR-10\_49 | 1390 | 80 | 2953 | 13 | 53 | 0.216 | 0.8 | 0.241 | 6.5 |  |  |  |
| MLR-10\_50 | 1665 | 73 | 3000 | 4 | 45 | 0.223 | 0.3 | 0.295 | 5.0 |  |  |  |
| MLR-10\_51 | 1599 | 26 | 2973 | 4 | 46 | 0.219 | 0.2 | 0.282 | 1.8 |  |  |  |
| MLR-10\_52 | 2360 | 65 | 3055 | 4 | 23 | 0.230 | 0.3 | 0.442 | 3.3 |  |  |  |
| MLR-10\_53 | 2965 | 46 | 3158 | 4 | 6 | 0.246 | 0.3 | 0.584 | 1.9 | 2.4 | 1.7 | 3262 |
| MLR-10\_54 | 2636 | 40 | 3128 | 5 | 16 | 0.241 | 0.3 | 0.505 | 1.8 |  |  |  |
| MLR-10\_55 | 2511 | 24 | 3100 | 8 | 19 | 0.237 | 0.5 | 0.476 | 1.1 |  |  |  |
| MLR-10\_56 | 2664 | 39 | 3012 | 6 | 12 | 0.224 | 0.3 | 0.512 | 1.8 |  |  |  |
| MLR-10\_57 | 2414 | 32 | 3061 | 4 | 21 | 0.231 | 0.2 | 0.454 | 1.6 |  |  |  |
| MLR-10\_58 | 2295 | 28 | 3018 | 4 | 24 | 0.225 | 0.3 | 0.428 | 1.5 |  |  |  |
| MLR-10\_59 | 2161 | 37 | 2739 | 6 | 21 | 0.190 | 0.4 | 0.398 | 2.0 |  |  |  |
| MLR-10\_60 | 2527 | 34 | 3090 | 4 | 18 | 0.236 | 0.3 | 0.480 | 1.6 |  |  |  |
| MLR-13\_02 | 1929 | 33 | 2386 | 123 | 19 | 0.154 | 7.2 | 0.349 | 2.0 |  |  |  |
| MLR-13\_05b | 1220 | 156 | 2675 | 12 | 54 | 0.182 | 0.7 | 0.208 | 14.1 |  |  |  |
| MLR-13\_06 | 2093 | 42 | 2745 | 7 | 24 | 0.190 | 0.5 | 0.384 | 2.4 |  |  |  |
| MLR-13\_08 | 1588 | 231 | 2693 | 6 | 41 | 0.184 | 0.4 | 0.279 | 16.5 |  |  |  |
| MLR-13\_09 | 1086 | 238 | 2692 | 6 | 60 | 0.184 | 0.4 | 0.184 | 24.0 |  |  |  |
| MLR-13\_12 | 1852 | 45 | 2713 | 160 | 32 | 0.187 | 9.7 | 0.333 | 2.8 |  |  |  |
| MLR-13\_14 | 2291 | 54 | 2782 | 4 | 18 | 0.195 | 0.3 | 0.427 | 2.8 |  |  |  |
| MLR-13\_16 | 716 | 106 | 2792 | 6 | 74 | 0.196 | 0.4 | 0.117 | 15.7 |  |  |  |
| MLR-13\_17 | 1834 | 34 | 2618 | 117 | 30 | 0.176 | 7.0 | 0.329 | 2.1 |  |  |  |
| MLR-13\_18 | 2274 | 107 | 2641 | 21 | 14 | 0.179 | 1.3 | 0.423 | 5.6 |  |  |  |
| MLR-13\_19 | 1091 | 85 | 2816 | 9 | 61 | 0.199 | 0.5 | 0.184 | 8.5 |  |  |  |
| MLR-13\_21 | 2395 | 83 | 2756 | 7 | 13 | 0.192 | 0.4 | 0.450 | 4.1 |  |  |  |
| MLR-13\_23 | 2112 | 79 | 2804 | 7 | 25 | 0.197 | 0.4 | 0.388 | 4.4 | -12.9 | -13.1 | 3531 |
| MLR-13\_26 | 2270 | 227 | 2884 | 9 | 21 | 0.207 | 0.5 | 0.422 | 12.0 |  |  |  |
| MLR-13\_27 | 2408 | 43 | 2784 | 5 | 14 | 0.195 | 0.3 | 0.453 | 2.1 |  |  |  |
| MLR-13\_28 | 1495 | 150 | 2693 | 9 | 44 | 0.184 | 0.6 | 0.261 | 11.3 |  |  |  |
| MLR-13\_30 | 1518 | 129 | 2789 | 6 | 46 | 0.195 | 0.4 | 0.266 | 9.6 |  |  |  |
| MLR-13\_34 | 1014 | 138 | 2755 | 16 | 63 | 0.191 | 1.0 | 0.170 | 14.8 |  |  |  |
| MLR-13\_38 | 1835 | 252 | 2786 | 9 | 34 | 0.195 | 0.5 | 0.329 | 15.9 |  |  |  |

Table B-7. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | Err. | 206Pb | Err. | εHf(IA) | εHf(T) | Hf Model Age |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | (%) | 238U | (%) | \* | \*\* | (DM)a |
|  | age |  | age |  |  |  |  |  |  |  |  |  |
| MLR-13\_40 | 2375 | 142 | 2787 | 6 | 15 | 0.195 | 0.4 | 0.445 | 7.2 |  |  |  |
| MLR-13\_42 | 1352 | 153 | 2804 | 6 | 52 | 0.197 | 0.4 | 0.233 | 12.6 |  |  |  |
| MLR-13\_44 | 2000 | 32 | 2266 | 23 | 12 | 0.143 | 1.3 | 0.364 | 1.9 |  |  |  |
| MLR-13\_45 | 563 | 93 | 2750 | 24 | 80 | 0.191 | 1.4 | 0.091 | 17.3 |  |  |  |
| MLR-13\_47 | 2169 | 52 | 2700 | 5 | 20 | 0.185 | 0.3 | 0.400 | 2.8 |  |  |  |
| MLR-13\_50 | 2216 | 192 | 2770 | 11 | 20 | 0.193 | 0.7 | 0.410 | 10.3 |  |  |  |
| MLR-15\_01 | 2662 | 71 | 2780 | 5 | 4 | 0.194 | 0.3 | 0.511 | 3.2 |  |  |  |
| MLR-15\_02 | 2258 | 94 | 2737 | 5 | 18 | 0.189 | 0.3 | 0.419 | 4.9 |  |  |  |
| MLR-15\_03 | 2684 | 65 | 2782 | 5 | 4 | 0.195 | 0.3 | 0.516 | 3.0 |  |  |  |
| MLR-15\_04 | 2713 | 54 | 2765 | 5 | 2 | 0.193 | 0.3 | 0.523 | 2.4 |  |  |  |
| MLR-15\_05 | 2679 | 85 | 2767 | 9 | 3 | 0.193 | 0.5 | 0.515 | 3.9 |  |  |  |
| MLR-15\_06 | 1994 | 111 | 2474 | 146 | 19 | 0.162 | 8.7 | 0.362 | 6.5 |  |  |  |
| MLR-15\_07 | 2537 | 44 | 2757 | 6 | 8 | 0.192 | 0.4 | 0.482 | 2.1 |  |  |  |
| MLR-15\_08 | 2216 | 46 | 2759 | 6 | 20 | 0.192 | 0.3 | 0.410 | 2.5 |  |  |  |
| MLR-15\_09 | 2695 | 61 | 2773 | 5 | 3 | 0.194 | 0.3 | 0.519 | 2.8 | -14.6 | -14.5 | 3556 |
| MLR-15\_10 | 2684 | 51 | 2771 | 5 | 3 | 0.193 | 0.3 | 0.517 | 2.3 |  |  |  |
| MLR-15\_11 | 1640 | 57 | 2752 | 6 | 40 | 0.191 | 0.3 | 0.290 | 3.9 |  |  |  |
| MLR-15\_12 | 1713 | 111 | 1867 | 72 | 8 | 0.114 | 4.0 | 0.304 | 7.4 |  |  |  |
| MLR-15\_13 | 2748 | 73 | 2783 | 6 | 1 | 0.195 | 0.3 | 0.531 | 3.3 | -10.9 | -11.1 | 3434 |
| MLR-15\_14 | 2738 | 73 | 2779 | 6 | 1 | 0.194 | 0.3 | 0.529 | 3.3 |  |  |  |
| MLR-15\_15 | 2693 | 44 | 2694 | 10 | 0 | 0.185 | 0.6 | 0.518 | 2.0 | -9.8 | -7.9 | 3319 |
| MLR-15\_16 | 2661 | 72 | 2763 | 8 | 4 | 0.192 | 0.5 | 0.511 | 3.3 |  |  |  |
| MLR-15\_17 | 2335 | 247 | 2782 | 7 | 16 | 0.195 | 0.5 | 0.436 | 12.7 |  |  |  |
| MLR-15\_18 | 1677 | 78 | 2747 | 13 | 39 | 0.191 | 0.8 | 0.297 | 5.3 |  |  |  |
| MLR-15\_19 | 2263 | 89 | 2697 | 6 | 16 | 0.185 | 0.3 | 0.421 | 4.7 |  |  |  |
| MLR-15\_20 | 2598 | 84 | 2742 | 7 | 5 | 0.190 | 0.4 | 0.496 | 3.9 |  |  |  |
| MLR-15\_21 | 2754 | 47 | 2767 | 6 | 0 | 0.193 | 0.4 | 0.533 | 2.1 | -10.4 | -10.2 | 3399 |
| MLR-15\_22 | 2149 | 26 | 2559 | 7 | 16 | 0.170 | 0.4 | 0.396 | 1.4 |  |  |  |
| MLR-15\_23 | 2638 | 68 | 2785 | 6 | 5 | 0.195 | 0.4 | 0.506 | 3.1 | -12.1 | -12.4 | 3489 |
| MLR-15\_24 | 2262 | 118 | 2734 | 7 | 17 | 0.189 | 0.4 | 0.420 | 6.2 |  |  |  |
| MLR-15\_25 | 2775 | 56 | 2761 | 6 | -1 | 0.192 | 0.4 | 0.538 | 2.5 |  |  |  |
| MLR-15\_26 | 2412 | 49 | 2762 | 6 | 13 | 0.192 | 0.4 | 0.454 | 2.4 |  |  |  |
| MLR-15\_27 | 2620 | 66 | 2768 | 6 | 5 | 0.193 | 0.4 | 0.501 | 3.1 |  |  |  |
| MLR-15\_28 | 2617 | 42 | 2779 | 5 | 6 | 0.194 | 0.3 | 0.501 | 2.0 |  |  |  |
| MLR-15\_29 | 2690 | 54 | 2782 | 6 | 3 | 0.195 | 0.4 | 0.518 | 2.4 |  |  |  |
| MLR-15\_30 | 2596 | 66 | 2762 | 5 | 6 | 0.192 | 0.3 | 0.496 | 3.1 |  |  |  |
| MLR-15\_31 | 2388 | 69 | 2774 | 6 | 14 | 0.194 | 0.3 | 0.448 | 3.5 |  |  |  |
| MLR-15\_32 | 2600 | 64 | 2733 | 7 | 5 | 0.189 | 0.4 | 0.497 | 3.0 |  |  |  |
| MLR-15\_33 | 2460 | 86 | 2675 | 38 | 8 | 0.182 | 2.3 | 0.465 | 4.2 |  |  |  |
| MLR-15\_34 | 2667 | 59 | 2772 | 6 | 4 | 0.193 | 0.3 | 0.512 | 2.7 |  |  |  |
| MLR-15\_35 | 2121 | 94 | 2495 | 41 | 15 | 0.164 | 2.4 | 0.390 | 5.2 | -13.1 | -6.6 | 3268 |
| MLR-15\_36 | 1912 | 176 | 2752 | 8 | 31 | 0.191 | 0.5 | 0.345 | 10.7 |  |  |  |
| MLR-15\_37 | 2650 | 41 | 2711 | 6 | 2 | 0.186 | 0.4 | 0.509 | 1.9 |  |  |  |
| MLR-15\_38 | 2668 | 66 | 2727 | 6 | 2 | 0.188 | 0.4 | 0.513 | 3.0 | -10.1 | -9.0 | 3355 |
| MLR-15\_39 | 2733 | 63 | 2766 | 5 | 1 | 0.193 | 0.3 | 0.528 | 2.8 |  |  |  |
| MLR-15\_40 | 2705 | 70 | 2761 | 6 | 2 | 0.192 | 0.3 | 0.521 | 3.2 | -11.5 | -11.1 | 3440 |

Table B-7. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | Err. | 206Pb | Err. | εHf(IA) | εHf(T) | Hf Model Age |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | (%) | 238U | (%) | \* | \*\* | (DM)a |
|  | age |  | age |  |  |  |  |  |  |  |  |  |
| MLR-15\_41 | 2353 | 41 | 2558 | 10 | 8 | 0.170 | 0.6 | 0.441 | 2.1 | -14.6 | -9.6 | 3378 |
| MLR-15\_42 | 2776 | 59 | 2781 | 6 | 0 | 0.195 | 0.3 | 0.538 | 2.6 | -11.0 | -11.1 | 3437 |
| MLR-15\_43 | 1792 | 121 | 2170 | 146 | 17 | 0.135 | 8.4 | 0.320 | 7.8 | -23.6 | -9.6 | 3379 |
| MLR-15\_44 | 2493 | 139 | 2752 | 5 | 9 | 0.191 | 0.3 | 0.472 | 6.8 |  |  |  |
| MLR-15\_45 | 2589 | 92 | 2761 | 6 | 6 | 0.192 | 0.4 | 0.494 | 4.3 |  |  |  |
| MLR-15\_46 | 2526 | 127 | 2681 | 56 | 6 | 0.183 | 3.4 | 0.480 | 6.1 |  |  |  |
| MLR-15\_47 | 2469 | 61 | 2758 | 6 | 10 | 0.192 | 0.4 | 0.467 | 3.0 |  |  |  |
| MLR-15\_48 | 2681 | 50 | 2770 | 5 | 3 | 0.193 | 0.3 | 0.516 | 2.3 |  |  |  |
| MLR-15\_49 | 2491 | 55 | 2719 | 14 | 8 | 0.187 | 0.8 | 0.472 | 2.6 |  |  |  |
| MLR-15\_50 | 2638 | 57 | 2741 | 7 | 4 | 0.190 | 0.4 | 0.506 | 2.6 |  |  |  |
| MLR-15\_51 | 2728 | 67 | 2742 | 8 | 1 | 0.190 | 0.5 | 0.527 | 3.0 | -11.3 | -10.5 | 3415 |
| MLR-15\_52 | 1708 | 207 | 2776 | 7 | 38 | 0.194 | 0.4 | 0.303 | 13.9 |  |  |  |
| MLR-15\_53 | 2446 | 94 | 2704 | 11 | 10 | 0.186 | 0.7 | 0.461 | 4.6 |  |  |  |
| MLR-15\_54 | 2238 | 81 | 2738 | 6 | 18 | 0.190 | 0.4 | 0.415 | 4.3 |  |  |  |
| MLR-15\_55 | 1447 | 388 | 2802 | 12 | 48 | 0.197 | 0.7 | 0.252 | 30.4 | -8.9 | -9.5 | 3387 |
| MLR-15\_56 | 2588 | 65 | 2750 | 6 | 6 | 0.191 | 0.3 | 0.494 | 3.0 |  |  |  |
| MLR-15\_57 | 2671 | 83 | 2775 | 7 | 4 | 0.194 | 0.5 | 0.513 | 3.8 |  |  |  |
| MLR-15\_58 | 2650 | 55 | 2768 | 5 | 4 | 0.193 | 0.3 | 0.508 | 2.5 |  |  |  |
| MLR-15\_59 | 2619 | 61 | 2806 | 8 | 7 | 0.198 | 0.5 | 0.501 | 2.9 | -7.7 | -8.4 | 3347 |
| MLR-15\_60 | 2623 | 50 | 2778 | 6 | 6 | 0.194 | 0.4 | 0.502 | 2.3 |  |  |  |
| MLR-19\_01 | 2769 | 50 | 2803 | 5 | 1 | 0.197 | 0.3 | 0.537 | 2.2 |  |  |  |
| MLR-19\_02 | 2835 | 51 | 2795 | 5 | -1 | 0.196 | 0.3 | 0.552 | 2.2 |  |  |  |
| MLR-19\_03 | 2842 | 87 | 2801 | 5 | -1 | 0.197 | 0.3 | 0.554 | 3.8 |  |  |  |
| MLR-19\_04 | 2718 | 74 | 2788 | 5 | 2 | 0.195 | 0.3 | 0.525 | 3.3 |  |  |  |
| MLR-19\_05 | 2788 | 86 | 2790 | 5 | 0 | 0.196 | 0.3 | 0.541 | 3.8 | -9.1 | -9.1 | 3375 |
| MLR-19\_06 | 2683 | 55 | 2733 | 6 | 2 | 0.189 | 0.4 | 0.516 | 2.5 |  |  |  |
| MLR-19\_07 | 2762 | 56 | 2797 | 6 | 1 | 0.196 | 0.3 | 0.535 | 2.5 |  |  |  |
| MLR-19\_08 | 2214 | 137 | 2642 | 6 | 16 | 0.179 | 0.3 | 0.410 | 7.3 |  |  |  |
| MLR-19\_09 | 2761 | 63 | 2790 | 5 | 1 | 0.196 | 0.3 | 0.535 | 2.8 |  |  |  |
| MLR-19\_10 | 2755 | 62 | 2795 | 5 | 1 | 0.196 | 0.3 | 0.533 | 2.8 |  |  |  |
| MLR-19\_11 | 2769 | 55 | 2776 | 5 | 0 | 0.194 | 0.3 | 0.537 | 2.5 |  |  |  |
| MLR-19\_12 | 2705 | 44 | 2790 | 6 | 3 | 0.196 | 0.4 | 0.521 | 2.0 |  |  |  |
| MLR-19\_13 | 1089 | 51 | 2775 | 6 | 61 | 0.194 | 0.4 | 0.184 | 5.1 |  |  |  |
| MLR-19\_14 | 2749 | 50 | 2792 | 5 | 2 | 0.196 | 0.3 | 0.532 | 2.2 |  |  |  |
| MLR-19\_15 | 2747 | 55 | 2775 | 5 | 1 | 0.194 | 0.3 | 0.531 | 2.5 |  |  |  |
| MLR-19\_16 | 2741 | 58 | 2784 | 5 | 2 | 0.195 | 0.3 | 0.530 | 2.6 |  |  |  |
| MLR-19\_17 | 2867 | 55 | 2775 | 6 | -3 | 0.194 | 0.3 | 0.560 | 2.4 |  |  |  |
| MLR-19\_18 | 2751 | 50 | 2785 | 6 | 1 | 0.195 | 0.3 | 0.532 | 2.2 |  |  |  |
| MLR-19\_19 | 2453 | 64 | 2722 | 5 | 10 | 0.188 | 0.3 | 0.463 | 3.1 | -12.2 | -10.6 | 3435 |
| MLR-19\_20 | 2671 | 35 | 2788 | 5 | 4 | 0.195 | 0.3 | 0.513 | 1.6 |  |  |  |
| MLR-19\_21 | 2744 | 46 | 2771 | 6 | 1 | 0.193 | 0.4 | 0.531 | 2.1 | -8.7 | -8.3 | 3350 |
| MLR-19\_22 | 2675 | 38 | 2783 | 6 | 4 | 0.195 | 0.4 | 0.514 | 1.7 |  |  |  |
| MLR-19\_23 | 2749 | 61 | 2774 | 5 | 1 | 0.194 | 0.3 | 0.532 | 2.7 |  |  |  |
| MLR-19\_24 | 2103 | 109 | 2738 | 8 | 23 | 0.189 | 0.5 | 0.386 | 6.1 |  |  |  |
| MLR-19\_25 | 2773 | 52 | 2786 | 7 | 0 | 0.195 | 0.4 | 0.538 | 2.3 |  |  |  |
| MLR-19\_26 | 2736 | 74 | 2764 | 5 | 1 | 0.193 | 0.3 | 0.529 | 3.3 | -11.9 | -11.3 | 3452 |

Table B-7. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | Err. | 206Pb | Err. | εHf(IA) | εHf(T) | Hf Model Age |
| Number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | (%) | 238U | (%) | \* | \*\* | (DM)a |
|  | age |  | age |  |  |  |  |  |  |  |  |  |
| MLR-19\_27 | 2769 | 61 | 2776 | 5 | 0 | 0.194 | 0.3 | 0.536 | 2.7 |  |  |  |
| MLR-19\_28 | 2687 | 44 | 2785 | 7 | 4 | 0.195 | 0.4 | 0.517 | 2.0 |  |  |  |
| MLR-19\_29 | 2815 | 59 | 2788 | 6 | -1 | 0.195 | 0.4 | 0.548 | 2.6 |  |  |  |
| MLR-19\_30 | 2786 | 66 | 2792 | 6 | 0 | 0.196 | 0.4 | 0.541 | 2.9 |  |  |  |
| MLR-19\_31 | 2580 | 50 | 2769 | 7 | 7 | 0.193 | 0.4 | 0.492 | 2.3 |  |  |  |
| MLR-19\_32 | 2657 | 49 | 2810 | 7 | 5 | 0.198 | 0.4 | 0.510 | 2.3 |  |  |  |
| MLR-19\_33 | 2697 | 54 | 2796 | 5 | 4 | 0.196 | 0.3 | 0.520 | 2.5 |  |  |  |
| MLR-19\_34 | 2696 | 53 | 2798 | 5 | 4 | 0.197 | 0.3 | 0.519 | 2.4 |  |  |  |
| MLR-19\_35 | 2722 | 59 | 2811 | 6 | 3 | 0.198 | 0.4 | 0.525 | 2.6 | -12.4 | -12.9 | 3512 |
| MLR-19\_36 | 1059 | 20 | 2448 | 17 | 57 | 0.159 | 1.0 | 0.179 | 2.0 |  |  |  |
| MLR-19\_37 | 2633 | 43 | 2802 | 9 | 6 | 0.197 | 0.5 | 0.504 | 2.0 | -12.5 | -12.7 | 3514 |
| MLR-19\_38 | 2713 | 55 | 2810 | 6 | 3 | 0.198 | 0.4 | 0.523 | 2.5 |  |  |  |
| MLR-19\_39 | 2679 | 72 | 2786 | 6 | 4 | 0.195 | 0.4 | 0.515 | 3.3 |  |  |  |
| MLR-19\_40 | 2714 | 53 | 2798 | 5 | 3 | 0.197 | 0.3 | 0.523 | 2.4 |  |  |  |
| MLR-19\_41 | 2737 | 60 | 2801 | 6 | 2 | 0.197 | 0.4 | 0.529 | 2.7 |  |  |  |
| MLR-19\_42 | 2742 | 71 | 2791 | 5 | 2 | 0.196 | 0.3 | 0.530 | 3.2 |  |  |  |
| MLR-19\_43 | 2727 | 71 | 2791 | 6 | 2 | 0.196 | 0.4 | 0.527 | 3.2 |  |  |  |
| MLR-19\_44 | 2761 | 63 | 2792 | 5 | 1 | 0.196 | 0.3 | 0.535 | 2.8 |  |  |  |
| MLR-19\_45 | 2796 | 73 | 2797 | 6 | 0 | 0.196 | 0.4 | 0.543 | 3.2 | -8.7 | -8.8 | 3370 |
| MLR-19\_46 | 2516 | 59 | 2672 | 8 | 6 | 0.182 | 0.5 | 0.477 | 2.8 | -11.6 | -8.8 | 3370 |
| MLR-19\_47 | 2814 | 75 | 2803 | 5 | 0 | 0.197 | 0.3 | 0.547 | 3.3 | -8.8 | -9.0 | 3371 |
| MLR-19\_48 | 2802 | 63 | 2799 | 5 | 0 | 0.197 | 0.3 | 0.545 | 2.8 |  |  |  |
| MLR-19\_49 | 2485 | 71 | 2718 | 9 | 9 | 0.187 | 0.6 | 0.470 | 3.5 | -11.9 | -10.2 | 3413 |
| MLR-19\_50 | 2737 | 68 | 2801 | 6 | 2 | 0.197 | 0.4 | 0.529 | 3.1 | -10.1 | -10.3 | 3424 |
| MLR-19\_51 | 2698 | 54 | 2802 | 5 | 4 | 0.197 | 0.3 | 0.520 | 2.5 |  |  |  |
| MLR-19\_52 | 2559 | 71 | 2796 | 8 | 8 | 0.196 | 0.5 | 0.487 | 3.4 |  |  |  |
| MLR-19\_53 | 2759 | 67 | 2808 | 7 | 2 | 0.198 | 0.4 | 0.534 | 3.0 | -12.8 | -13.1 | 3542 |
| MLR-19\_54 | 2674 | 55 | 2802 | 6 | 5 | 0.197 | 0.3 | 0.514 | 2.5 |  |  |  |
| MLR-19\_55 | 2746 | 63 | 2797 | 5 | 2 | 0.196 | 0.3 | 0.531 | 2.8 |  |  |  |
| MLR-19\_56 | 2708 | 72 | 2793 | 8 | 3 | 0.196 | 0.5 | 0.522 | 3.2 |  |  |  |
| MLR-19\_57 | 2613 | 52 | 2798 | 6 | 7 | 0.197 | 0.4 | 0.500 | 2.4 |  |  |  |
| MLR-19\_58 | 2766 | 63 | 2794 | 5 | 1 | 0.196 | 0.3 | 0.536 | 2.8 | -14.3 | -14.4 | 3571 |
| MLR-19\_59 | 2721 | 57 | 2792 | 5 | 3 | 0.196 | 0.3 | 0.525 | 2.6 |  |  |  |
| MLR-19\_60 | 2730 | 57 | 2792 | 6 | 2 | 0.196 | 0.4 | 0.527 | 2.6 |  |  |  |

\*εHf(IA) calculated for individual zircon 207Pb/206Pb ages.

\*\*εHf(T) calculated for crystallization age (Table 4-5).

aDM model ages were calculated using the model of Mueller et al. (2008).

Table B-8. Schist and paragneiss samples from the Little Rocky Mountains, zircon LA-ICP-MS U-Pb data (Ma).

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | Err. | 206Pb | Err. | εHf(IA) | Hf model age |
| number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | (%) | 238U | (%) | \* | (DM)a |
|  | age |  | age |  |  |  |  |  |  |  |  |
| MLR-04\_01 | 1947 | 157 | 2541 | 7 | 23 | 0.168 | 0.4 | 0.353 | 9.4 |  |  |
| MLR-04\_02 | 1732 | 41 | 1783 | 7 | 3 | 0.109 | 0.4 | 0.308 | 2.7 | -16.0 | 2766 |
| MLR-04\_03 | 1738 | 59 | 2549 | 6 | 32 | 0.169 | 0.4 | 0.309 | 3.9 |  |  |
| MLR-04\_04 | 1408 | 157 | 2701 | 16 | 48 | 0.185 | 1.0 | 0.244 | 12.5 |  |  |
| MLR-04\_05 | 2402 | 49 | 2580 | 7 | 7 | 0.172 | 0.4 | 0.452 | 2.4 | -3.5 | 3005 |
| MLR-04\_06 | 2016 | 238 | 2572 | 19 | 22 | 0.171 | 1.1 | 0.367 | 13.9 |  |  |
| MLR-04\_07 | 1662 | 238 | 2859 | 10 | 42 | 0.204 | 0.6 | 0.294 | 16.4 |  |  |
| MLR-04\_08 | 1953 | 193 | 2577 | 34 | 24 | 0.172 | 2.0 | 0.354 | 11.5 |  |  |
| MLR-04\_09 | 1269 | 147 | 2615 | 17 | 51 | 0.176 | 1.0 | 0.217 | 12.9 |  |  |
| MLR-04\_10 | 1327 | 224 | 2643 | 7 | 50 | 0.179 | 0.4 | 0.229 | 18.9 |  |  |
| MLR-04\_11 | 871 | 130 | 2184 | 87 | 60 | 0.137 | 5.0 | 0.145 | 16.0 |  |  |
| MLR-04\_12 | 2574 | 82 | 2595 | 9 | 1 | 0.174 | 0.5 | 0.491 | 3.9 | 8.0 | 2565 |
| MLR-04\_13 | 1508 | 130 | 2512 | 8 | 40 | 0.165 | 0.5 | 0.264 | 9.7 |  |  |
| MLR-04\_14 | 2189 | 152 | 2577 | 7 | 15 | 0.172 | 0.4 | 0.404 | 8.2 |  |  |
| MLR-04\_15 | 718 | 83 | 2596 | 8 | 72 | 0.174 | 0.5 | 0.118 | 12.3 |  |  |
| MLR-04\_16 | 1462 | 62 | 1874 | 8 | 22 | 0.115 | 0.4 | 0.255 | 4.7 |  |  |
| MLR-04\_17 | 2407 | 74 | 2547 | 8 | 5 | 0.169 | 0.5 | 0.453 | 3.7 | -0.6 | 2852 |
| MLR-05\_01 | 1648 | 23 | 2596 | 42 | 36 | 0.174 | 2.5 | 0.291 | 1.6 |  |  |
| MLR-05\_02 | 1913 | 80 | 2425 | 7 | 21 | 0.157 | 0.4 | 0.345 | 4.8 |  |  |
| MLR-05\_03 | 921 | 53 | 1909 | 15 | 52 | 0.117 | 0.8 | 0.154 | 6.2 | -13.1 | 2770 |
| MLR-05\_04 | 2161 | 30 | 2341 | 181 | 8 | 0.150 | 10.6 | 0.398 | 1.6 | -5.5 | 2854 |
| MLR-05\_06 | 1931 | 55 | 2358 | 18 | 18 | 0.151 | 1.0 | 0.349 | 3.3 |  |  |
| MLR-05\_07 | 2055 | 46 | 2396 | 24 | 14 | 0.154 | 1.4 | 0.375 | 2.6 |  |  |
| MLR-05\_08 | 1850 | 62 | 2194 | 11 | 16 | 0.137 | 0.6 | 0.332 | 3.9 | -9.2 | 2871 |
| MLR-05\_09 | 892 | 37 | 2091 | 33 | 57 | 0.129 | 1.9 | 0.148 | 4.4 | -14.5 | 2995 |
| MLR-05\_10 | 596 | 45 | 2839 | 165 | 79 | 0.202 | 10.1 | 0.097 | 7.8 | -3.9 | 3244 |
| MLR-05\_11 | 1214 | 81 | 2586 | 8 | 53 | 0.173 | 0.5 | 0.207 | 7.3 | -0.7 | 2883 |
| MLR-05\_12 | 1292 | 49 | 2204 | 8 | 41 | 0.138 | 0.5 | 0.222 | 4.2 | -10.6 | 2945 |
| MLR-05\_13 | 1938 | 47 | 2399 | 43 | 19 | 0.155 | 2.5 | 0.351 | 2.8 | -5.7 | 2914 |
| MLR-05\_14 | 1105 | 22 | 2378 | 12 | 54 | 0.153 | 0.7 | 0.187 | 2.2 |  |  |
| MLR-05\_15 | 1372 | 23 | 1902 | 19 | 28 | 0.116 | 1.0 | 0.237 | 1.9 | -14.4 | 2815 |
| MLR-05\_16 | 1966 | 53 | 2420 | 24 | 19 | 0.157 | 1.4 | 0.357 | 3.1 |  |  |
| MLR-05\_17 | 2653 | 50 | 2610 | 7 | -2 | 0.175 | 0.4 | 0.509 | 2.3 | -1.5 | 2936 |
| MLR-05\_18 | 1663 | 114 | 2606 | 36 | 36 | 0.175 | 2.1 | 0.294 | 7.8 | -9.7 | 3241 |
| MLR-05\_19 | 2022 | 68 | 2442 | 8 | 17 | 0.159 | 0.5 | 0.369 | 3.9 |  |  |
| MLR-05\_20 | 2291 | 56 | 2287 | 32 | 0 | 0.145 | 1.8 | 0.427 | 2.9 | -4.0 | 2749 |
| MLR-05\_21 | 1086 | 75 | 1850 | 8 | 41 | 0.113 | 0.4 | 0.184 | 7.5 | -25.4 | 3188 |
| MLR-05\_22 | 1321 | 19 | 2042 | 43 | 35 | 0.126 | 2.4 | 0.227 | 1.6 |  |  |
| MLR-05\_23 | 2382 | 20 | 2570 | 8 | 7 | 0.171 | 0.5 | 0.447 | 1.0 | -2.6 | 2945 |
| MLR-05\_24 | 1882 | 67 | 2294 | 29 | 18 | 0.146 | 1.7 | 0.339 | 4.1 | -7.9 | 2895 |
| MLR-05\_25 | 2045 | 81 | 2288 | 37 | 11 | 0.145 | 2.1 | 0.373 | 4.6 | -5.5 | 2801 |
| MLR-05\_26 | 1830 | 62 | 2318 | 20 | 21 | 0.148 | 1.2 | 0.328 | 3.9 |  |  |
| MLR-05\_27 | 3066 | 44 | 3204 | 9 | 4 | 0.253 | 0.6 | 0.609 | 1.8 | -1.1 | 3437 |
| MLR-05\_28 | 1640 | 80 | 2498 | 74 | 34 | 0.164 | 4.4 | 0.290 | 5.6 |  |  |

Table B-8. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | Err. | 206Pb | Err. | εHf(IA) | Hf model age |
| number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | (%) | 238U | (%) | \* | (DM)a |
|  | age |  | age |  |  |  |  |  |  |  |  |
| MLR-05\_29 | 538 | 56 | 2370 | 56 | 77 | 0.152 | 3.3 | 0.087 | 11.0 |  |  |
| MLR-05\_30 | 799 | 45 | 1980 | 21 | 60 | 0.122 | 1.2 | 0.132 | 6.0 | -12.5 | 2798 |
| MLR-05\_31 | 1760 | 27 | 2396 | 16 | 27 | 0.154 | 0.9 | 0.314 | 1.7 |  |  |
| MLR-05\_32 | 2258 | 60 | 2557 | 7 | 12 | 0.170 | 0.4 | 0.419 | 3.1 | 2.2 | 2753 |
| MLR-05\_33 | 1765 | 73 | 2183 | 72 | 19 | 0.136 | 4.1 | 0.315 | 4.8 | -16.2 | 3127 |
| MLR-05\_34 | 1851 | 74 | 2306 | 36 | 20 | 0.147 | 2.1 | 0.333 | 4.6 |  |  |
| MLR-05\_35 | 2029 | 17 | 2384 | 15 | 15 | 0.153 | 0.9 | 0.370 | 1.0 | -8.6 | 3011 |
| MLR-05\_36 | 2175 | 53 | 2397 | 11 | 9 | 0.155 | 0.7 | 0.401 | 2.9 | -6.2 | 2936 |
| MLR-05\_37 | 724 | 61 | 2297 | 44 | 68 | 0.146 | 2.6 | 0.119 | 9.0 |  |  |
| MLR-05\_38 | 2231 | 33 | 2599 | 21 | 14 | 0.174 | 1.2 | 0.413 | 1.8 | -2.5 | 2964 |
| MLR-05\_39 | 2254 | 20 | 2369 | 25 | 5 | 0.152 | 1.4 | 0.419 | 1.1 | -7.1 | 2948 |
| MLR-05\_40 | 1769 | 18 | 2340 | 24 | 24 | 0.150 | 1.4 | 0.316 | 1.2 |  |  |
| MLR-05\_41 | 1317 | 83 | 2362 | 12 | 44 | 0.151 | 0.7 | 0.227 | 7.0 | -0.6 | 2686 |
| MLR-08\_01 | 1292 | 214 | 2696 | 75 | 52 | 0.185 | 4.6 | 0.222 | 18.5 |  |  |
| MLR-08\_02 | 784 | 42 | 3089 | 35 | 75 | 0.235 | 2.2 | 0.129 | 5.7 |  |  |
| MLR-08\_03 | 2989 | 56 | 3198 | 8 | 7 | 0.252 | 0.5 | 0.590 | 2.3 |  |  |
| MLR-08\_04 | 2503 | 53 | 2890 | 40 | 13 | 0.208 | 2.5 | 0.474 | 2.5 | -7.0 | 3384 |
| MLR-08\_05 | 1889 | 183 | 3031 | 13 | 38 | 0.227 | 0.8 | 0.340 | 11.2 |  |  |
| MLR-08\_06 | 1739 | 187 | 3126 | 20 | 44 | 0.241 | 1.2 | 0.310 | 12.4 |  |  |
| MLR-08\_07 | 2320 | 67 | 3198 | 11 | 27 | 0.252 | 0.7 | 0.433 | 3.5 |  |  |
| MLR-08\_08 | 1799 | 60 | 3129 | 26 | 43 | 0.241 | 1.6 | 0.322 | 3.9 |  |  |
| MLR-08\_09 | 1678 | 44 | 2573 | 20 | 35 | 0.172 | 1.2 | 0.297 | 3.0 |  |  |
| MLR-08\_10 | 3043 | 47 | 3181 | 8 | 4 | 0.249 | 0.5 | 0.603 | 1.9 | 1.8 | 3309 |
| MLR-08\_11 | 2380 | 182 | 3108 | 11 | 23 | 0.238 | 0.7 | 0.447 | 9.2 |  |  |
| MLR-08\_12 | 2699 | 116 | 3121 | 10 | 14 | 0.240 | 0.6 | 0.520 | 5.3 | -3.2 | 3440 |
| MLR-08\_13 | 2054 | 86 | 3101 | 8 | 34 | 0.237 | 0.5 | 0.375 | 4.9 |  |  |
| MLR-08\_14 | 2376 | 253 | 3128 | 17 | 24 | 0.241 | 1.1 | 0.446 | 12.9 |  |  |
| MLR-08\_15 | 1857 | 82 | 3157 | 8 | 41 | 0.246 | 0.5 | 0.334 | 5.1 |  |  |
| MLR-08\_16 | 434 | 84 | 3197 | 12 | 86 | 0.252 | 0.8 | 0.070 | 20.0 |  |  |
| MLR-08\_17 | 420 | 38 | 3092 | 16 | 86 | 0.236 | 1.0 | 0.067 | 9.3 |  |  |
| MLR-08\_18 | 1226 | 274 | 3131 | 14 | 61 | 0.242 | 0.9 | 0.210 | 24.8 |  |  |
| MLR-08\_19 | 1508 | 36 | 3051 | 9 | 51 | 0.230 | 0.6 | 0.264 | 2.7 |  |  |
| MLR-08\_20 | 2026 | 192 | 3123 | 15 | 35 | 0.240 | 1.0 | 0.369 | 11.1 |  |  |
| MLR-08\_21 | 921 | 22 | 3113 | 28 | 70 | 0.239 | 1.7 | 0.154 | 2.6 |  |  |
| MLR-08\_22 | 1638 | 190 | 3118 | 17 | 47 | 0.240 | 1.1 | 0.289 | 13.2 |  |  |
| MLR-08\_23 | 1253 | 27 | 3095 | 13 | 60 | 0.236 | 0.8 | 0.215 | 2.4 |  |  |
| MLR-08\_24 | 2971 | 35 | 3176 | 8 | 6 | 0.249 | 0.5 | 0.586 | 1.5 | -1.9 | 3441 |
| MLR-08\_25 | 814 | 33 | 3043 | 11 | 73 | 0.229 | 0.7 | 0.135 | 4.3 |  |  |
| MLR-08\_26 | 1110 | 105 | 3051 | 16 | 64 | 0.230 | 1.0 | 0.188 | 10.3 |  |  |
| MLR-08\_27 | 3278 | 55 | 3189 | 11 | -3 | 0.251 | 0.7 | 0.663 | 2.1 |  |  |
| MLR-08\_28 | 3148 | 85 | 3197 | 19 | 2 | 0.252 | 1.2 | 0.630 | 3.4 | 2.3 | 3302 |
| MLR-08\_29 | 1088 | 73 | 3090 | 28 | 65 | 0.236 | 1.8 | 0.184 | 7.3 |  |  |
| MLR-08\_30 | 2185 | 97 | 2881 | 45 | 24 | 0.207 | 2.8 | 0.403 | 5.2 |  |  |
| MLR-08\_31 | 1223 | 44 | 3043 | 39 | 60 | 0.229 | 2.4 | 0.209 | 4.0 |  |  |
| MLR-08\_32 | 1041 | 136 | 3111 | 26 | 67 | 0.239 | 1.7 | 0.175 | 14.2 |  |  |
| MLR-08\_33 | 3224 | 41 | 3190 | 9 | -1 | 0.251 | 0.5 | 0.649 | 1.6 | -0.4 | 3399 |

Table B-8. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | Err. | 206Pb | Err. | εHf(IA) | Hf model age |
| number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | (%) | 238U | (%) | \* | (DM)a |
|  | age |  | age |  |  |  |  |  |  |  |  |
| MLR-08\_34 | 1312 | 99 | 3047 | 16 | 57 | 0.229 | 1.0 | 0.226 | 8.4 |  |  |
| MLR-08\_35 | 1003 | 36 | 3147 | 12 | 68 | 0.244 | 0.8 | 0.168 | 3.9 |  |  |
| MLR-08\_36 | 3200 | 129 | 3315 | 12 | 3 | 0.272 | 0.7 | 0.643 | 5.1 | 5.6 | 3281 |
| MLR-08\_37 | 2827 | 58 | 3157 | 17 | 10 | 0.246 | 1.1 | 0.550 | 2.5 |  |  |
| MLR-08\_38 | 2741 | 195 | 3136 | 8 | 13 | 0.242 | 0.5 | 0.530 | 8.8 |  |  |
| MLR-08\_39 | 2735 | 43 | 3156 | 8 | 13 | 0.245 | 0.5 | 0.529 | 1.9 | -0.1 | 3355 |
| MLR-08\_40 | 3063 | 31 | 3278 | 8 | 7 | 0.265 | 0.5 | 0.608 | 1.3 | 1.9 | 3388 |
| MLR-08\_41 | 3312 | 62 | 3235 | 9 | -2 | 0.258 | 0.6 | 0.672 | 2.4 |  |  |
| MLR-08\_42 | 1336 | 72 | 3175 | 9 | 58 | 0.248 | 0.5 | 0.230 | 6.0 |  |  |
| MLR-08\_43 | 2906 | 146 | 3162 | 13 | 8 | 0.246 | 0.8 | 0.570 | 6.3 | -1.0 | 3405 |
| MLR-08\_44 | 2999 | 39 | 3008 | 61 | 0 | 0.224 | 3.8 | 0.592 | 1.6 | -4.9 | 3406 |
| MLR-08\_45 | 2532 | 58 | 3144 | 8 | 19 | 0.244 | 0.5 | 0.481 | 2.8 |  |  |
| MLR-08\_46 | 3178 | 99 | 3189 | 8 | 0 | 0.251 | 0.5 | 0.637 | 3.9 | -0.1 | 3387 |
| MLR-08\_47 | 2785 | 95 | 3107 | 9 | 10 | 0.238 | 0.6 | 0.540 | 4.2 | -0.9 | 3343 |
| MLR-08\_48 | 3099 | 58 | 3128 | 8 | 1 | 0.241 | 0.5 | 0.617 | 2.4 | 1.5 | 3274 |
| MLR-08\_49 | 2373 | 39 | 2614 | 88 | 9 | 0.176 | 5.3 | 0.445 | 2.0 |  |  |
| MLR-08\_50 | 3222 | 83 | 3162 | 8 | -2 | 0.246 | 0.5 | 0.648 | 3.3 | -0.3 | 3366 |
| MLR-08\_51 | 3179 | 37 | 3295 | 12 | 4 | 0.268 | 0.8 | 0.637 | 1.5 |  |  |
| MLR-08\_52 | 837 | 45 | 2977 | 14 | 72 | 0.220 | 0.8 | 0.139 | 5.7 |  |  |
| MLR-08\_53 | 641 | 61 | 2681 | 37 | 76 | 0.183 | 2.2 | 0.105 | 9.9 |  |  |
| MLR-08\_54 | 981 | 32 | 2478 | 44 | 60 | 0.162 | 2.6 | 0.164 | 3.5 | -15.6 | 3350 |
| MLR-08\_55 | 1705 | 59 | 3108 | 8 | 45 | 0.238 | 0.5 | 0.303 | 3.9 | -1.1 | 3350 |
| MLR-08\_56 | 1279 | 108 | 3117 | 41 | 59 | 0.240 | 2.6 | 0.220 | 9.3 |  |  |
| MLR-13\_01 | 2828 | 48 | 2786 | 5 | -1 | 0.195 | 0.3 | 0.551 | 2.1 |  |  |
| MLR-13\_04 | 2736 | 52 | 2791 | 4 | 2 | 0.196 | 0.2 | 0.529 | 2.3 |  |  |
| MLR-13\_05a | 2492 | 36 | 2757 | 8 | 10 | 0.192 | 0.5 | 0.472 | 1.8 |  |  |
| MLR-13\_10 | 2700 | 87 | 2794 | 4 | 3 | 0.196 | 0.3 | 0.520 | 4.0 |  |  |
| MLR-13\_11 | 2840 | 66 | 2804 | 4 | -1 | 0.197 | 0.3 | 0.553 | 2.9 | -12.3 | 3505 |
| MLR-13\_15 | 2758 | 50 | 2795 | 4 | 1 | 0.196 | 0.3 | 0.534 | 2.2 | -12.6 | 3512 |
| MLR-13\_20d | 2741 | 35 | 2780 | 4 | 1 | 0.194 | 0.3 | 0.530 | 1.6 | -7.7 | 3315 |
| MLR-13\_20l | 2370 | 95 | 2644 | 10 | 10 | 0.179 | 0.6 | 0.444 | 4.8 | -13.3 | 3407 |
| MLR-13\_22 | 2662 | 44 | 2704 | 6 | 2 | 0.186 | 0.4 | 0.511 | 2.0 |  |  |
| MLR-13\_25 | 2766 | 69 | 2794 | 5 | 1 | 0.196 | 0.3 | 0.536 | 3.1 |  |  |
| MLR-13\_29 | 2793 | 63 | 2802 | 5 | 0 | 0.197 | 0.3 | 0.542 | 2.8 | -12.1 | 3497 |
| MLR-13\_31 | 2748 | 68 | 2759 | 5 | 0 | 0.192 | 0.3 | 0.532 | 3.1 |  |  |
| MLR-13\_32 | 2697 | 72 | 2767 | 5 | 3 | 0.193 | 0.3 | 0.519 | 3.3 |  |  |
| MLR-13\_33 | 2696 | 48 | 2825 | 21 | 5 | 0.200 | 1.3 | 0.519 | 2.2 | -9.8 | 3427 |
| MLR-13\_35 | 2782 | 60 | 2790 | 5 | 0 | 0.196 | 0.3 | 0.540 | 2.6 |  |  |
| MLR-13\_36 | 2823 | 50 | 2796 | 4 | -1 | 0.196 | 0.3 | 0.549 | 2.2 | -11.9 | 3480 |
| MLR-13\_37 | 2563 | 54 | 2729 | 6 | 6 | 0.188 | 0.3 | 0.488 | 2.6 |  |  |
| MLR-13\_39 | 2534 | 68 | 2776 | 6 | 9 | 0.194 | 0.4 | 0.482 | 3.2 |  |  |
| MLR-13\_41 | 2666 | 33 | 2732 | 32 | 2 | 0.189 | 1.9 | 0.512 | 1.5 |  |  |
| MLR-13\_43 | 2676 | 48 | 2748 | 4 | 3 | 0.191 | 0.2 | 0.515 | 2.2 | -12.6 | 3463 |
| MLR-13\_46 | 2708 | 62 | 2764 | 4 | 2 | 0.193 | 0.3 | 0.522 | 2.8 | -11.3 | 3429 |
| MLR-13\_48 | 2497 | 104 | 2755 | 6 | 9 | 0.191 | 0.4 | 0.473 | 5.1 |  |  |
| MLR-13\_49 | 2615 | 65 | 2774 | 9 | 6 | 0.194 | 0.6 | 0.500 | 3.0 |  |  |

Table B-8. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | Err. | 206Pb | Err. | εHf(IA) | Hf model age |
| number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | (%) | 238U | (%) | \* | (DM)a |
|  | age |  | age |  |  |  |  |  |  |  |  |
| MLR-17\_01 | 1673 | 104 | 2746 | 5 | 39 | 0.190 | 0.3 | 0.296 | 7.1 |  |  |
| MLR-17\_02 | 2698 | 31 | 2800 | 4 | 4 | 0.197 | 0.2 | 0.520 | 1.4 | -12.5 | 3515 |
| MLR-17\_03 | 2632 | 23 | 2771 | 4 | 5 | 0.193 | 0.2 | 0.504 | 1.1 |  |  |
| MLR-17\_04 | 2891 | 66 | 2807 | 4 | -3 | 0.198 | 0.2 | 0.566 | 2.8 |  |  |
| MLR-17\_05 | 2788 | 56 | 2810 | 4 | 1 | 0.198 | 0.2 | 0.541 | 2.5 |  |  |
| MLR-17\_06 | 2721 | 68 | 2737 | 8 | 1 | 0.189 | 0.5 | 0.525 | 3.1 | -16.2 | 3595 |
| MLR-17\_07 | 2772 | 43 | 2805 | 3 | 1 | 0.197 | 0.2 | 0.537 | 1.9 |  |  |
| MLR-17\_08 | 2781 | 68 | 2758 | 4 | -1 | 0.192 | 0.2 | 0.539 | 3.0 |  |  |
| MLR-17\_09 | 2512 | 242 | 2779 | 5 | 10 | 0.194 | 0.3 | 0.476 | 11.7 | -8.4 | 3337 |
| MLR-17\_10 | 2697 | 66 | 2684 | 5 | 0 | 0.183 | 0.3 | 0.519 | 3.0 | -15.1 | 3512 |
| MLR-17\_11 | 2807 | 54 | 2793 | 5 | -1 | 0.196 | 0.3 | 0.546 | 2.4 | -12.2 | 3497 |
| MLR-17\_12 | 2728 | 60 | 2761 | 5 | 1 | 0.192 | 0.3 | 0.527 | 2.7 | -10.4 | 3401 |
| MLR-17\_13 | 2969 | 57 | 2807 | 5 | -6 | 0.198 | 0.3 | 0.585 | 2.4 |  |  |
| MLR-17\_14 | 2872 | 61 | 2798 | 3 | -3 | 0.197 | 0.2 | 0.561 | 2.6 |  |  |
| MLR-17\_15 | 2920 | 63 | 2808 | 3 | -4 | 0.198 | 0.2 | 0.573 | 2.7 |  |  |
| MLR-17\_16 | 2906 | 103 | 2802 | 4 | -4 | 0.197 | 0.2 | 0.570 | 4.4 |  |  |
| MLR-17\_17 | 2807 | 68 | 2736 | 4 | -3 | 0.189 | 0.2 | 0.546 | 3.0 |  |  |
| MLR-17\_18 | 2790 | 61 | 2813 | 3 | 1 | 0.198 | 0.2 | 0.542 | 2.7 |  |  |
| MLR-17\_19 | 2804 | 69 | 2807 | 3 | 0 | 0.198 | 0.2 | 0.545 | 3.0 | -16.6 | 3685 |
| MLR-17\_20 | 2738 | 56 | 2801 | 3 | 2 | 0.197 | 0.2 | 0.529 | 2.5 |  |  |
| MLR-17\_21 | 2798 | 60 | 2819 | 3 | 1 | 0.199 | 0.2 | 0.544 | 2.6 | -10.8 | 3460 |
| MLR-17\_22 | 2734 | 57 | 2795 | 4 | 2 | 0.196 | 0.2 | 0.528 | 2.6 |  |  |
| MLR-17\_23 | 2778 | 41 | 2804 | 5 | 1 | 0.197 | 0.3 | 0.539 | 1.8 |  |  |
| MLR-17\_24 | 2826 | 38 | 2796 | 3 | -1 | 0.196 | 0.2 | 0.550 | 1.7 |  |  |
| MLR-17\_25 | 2826 | 50 | 2788 | 4 | -1 | 0.195 | 0.2 | 0.550 | 2.2 |  |  |
| MLR-17\_26 | 2804 | 58 | 2835 | 6 | 1 | 0.201 | 0.4 | 0.545 | 2.6 | -13.8 | 3603 |
| MLR-17\_27 | 2751 | 65 | 2817 | 6 | 2 | 0.199 | 0.4 | 0.532 | 2.9 |  |  |
| MLR-17\_28 | 2779 | 65 | 2825 | 6 | 2 | 0.200 | 0.3 | 0.539 | 2.9 |  |  |
| MLR-17\_29 | 2525 | 57 | 2724 | 7 | 7 | 0.188 | 0.4 | 0.480 | 2.7 |  |  |
| MLR-17\_30 | 2777 | 58 | 2817 | 7 | 1 | 0.199 | 0.4 | 0.539 | 2.6 | -6.9 | 3318 |
| MLR-17\_31 | 2608 | 57 | 2811 | 6 | 7 | 0.198 | 0.4 | 0.499 | 2.7 | -12.9 | 3539 |
| MLR-17\_32 | 2689 | 61 | 2788 | 6 | 4 | 0.195 | 0.4 | 0.518 | 2.8 |  |  |
| MLR-17\_33 | 2638 | 60 | 2764 | 6 | 5 | 0.193 | 0.3 | 0.506 | 2.8 |  |  |
| MLR-17\_34 | 2518 | 73 | 2814 | 8 | 10 | 0.199 | 0.5 | 0.478 | 3.5 |  |  |
| MLR-17\_35 | 2728 | 54 | 2807 | 6 | 3 | 0.198 | 0.4 | 0.527 | 2.4 |  |  |
| MLR-17\_36 | 2633 | 60 | 2778 | 6 | 5 | 0.194 | 0.4 | 0.504 | 2.8 |  |  |
| MLR-17\_37 | 2546 | 83 | 2724 | 18 | 7 | 0.188 | 1.1 | 0.484 | 4.0 | -9.2 | 3319 |
| MLR-17\_38 | 1948 | 151 | 2744 | 13 | 29 | 0.190 | 0.8 | 0.353 | 9.0 |  |  |
| MLR-17\_39 | 2741 | 64 | 2803 | 6 | 2 | 0.197 | 0.4 | 0.530 | 2.9 |  |  |
| MLR-17\_40 | 2359 | 52 | 2569 | 8 | 8 | 0.171 | 0.5 | 0.442 | 2.7 | -18.5 | 3534 |
| MLR-17\_41 | 2747 | 61 | 2797 | 6 | 2 | 0.196 | 0.4 | 0.531 | 2.7 |  |  |
| MLR-17\_42 | 2634 | 55 | 2753 | 10 | 4 | 0.191 | 0.6 | 0.505 | 2.5 |  |  |
| MLR-17\_43 | 2713 | 71 | 2766 | 10 | 2 | 0.193 | 0.6 | 0.523 | 3.2 |  |  |
| MLR-17\_44 | 2664 | 59 | 2761 | 6 | 4 | 0.192 | 0.4 | 0.512 | 2.7 |  |  |
| MLR-17\_45 | 1943 | 70 | 3443 | 92 | 44 | 0.295 | 5.9 | 0.352 | 4.2 |  |  |
| MLR-17\_46 | 2717 | 66 | 2778 | 6 | 2 | 0.194 | 0.4 | 0.524 | 3.0 | -15.2 | 3596 |

Table B-8. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | Err. | 206Pb | Err. | εHf(IA) | Hf model age |
| number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | (%) | 238U | (%) | \* | (DM)a |
|  | age |  | age |  |  |  |  |  |  |  |  |
| MLR-17\_47 | 2681 | 58 | 2793 | 6 | 4 | 0.196 | 0.4 | 0.516 | 2.7 |  |  |
| MLR-17\_48 | 2634 | 54 | 2781 | 6 | 5 | 0.195 | 0.4 | 0.505 | 2.5 |  |  |
| MLR-17\_49 | 2647 | 47 | 2794 | 6 | 5 | 0.196 | 0.4 | 0.508 | 2.2 |  |  |
| MLR-17\_50 | 2629 | 45 | 2795 | 6 | 6 | 0.196 | 0.4 | 0.504 | 2.1 |  |  |
| MLR-17\_51 | 2659 | 44 | 2782 | 6 | 4 | 0.195 | 0.4 | 0.511 | 2.0 |  |  |
| MLR-17\_52 | 2617 | 47 | 2792 | 6 | 6 | 0.196 | 0.4 | 0.501 | 2.2 |  |  |
| MLR-17\_53 | 2636 | 43 | 2792 | 6 | 6 | 0.196 | 0.4 | 0.505 | 2.0 |  |  |
| MLR-17\_54 | 2624 | 47 | 2792 | 7 | 6 | 0.196 | 0.4 | 0.502 | 2.2 |  |  |
| MLR-17\_55 | 2537 | 40 | 2755 | 13 | 8 | 0.192 | 0.8 | 0.482 | 1.9 |  |  |
| MLR-18\_01 | 2544 | 95 | 2778 | 7 | 8 | 0.194 | 0.4 | 0.484 | 4.6 |  |  |
| MLR-18\_02 | 2623 | 74 | 2766 | 13 | 5 | 0.193 | 0.8 | 0.502 | 3.4 |  |  |
| MLR-18\_03 | 718 | 43 | 2840 | 15 | 75 | 0.202 | 0.9 | 0.118 | 6.3 |  |  |
| MLR-18\_04 | 2254 | 51 | 2813 | 7 | 20 | 0.198 | 0.4 | 0.419 | 2.7 |  |  |
| MLR-18\_05 | 2208 | 69 | 2805 | 7 | 21 | 0.197 | 0.4 | 0.409 | 3.7 |  |  |
| MLR-18\_06 | 1751 | 68 | 2693 | 12 | 35 | 0.184 | 0.7 | 0.312 | 4.5 | -13.8 | 3463 |
| MLR-18\_07 | 2046 | 112 | 2780 | 6 | 26 | 0.194 | 0.4 | 0.373 | 6.4 |  |  |
| MLR-18\_08 | 2602 | 56 | 2797 | 10 | 7 | 0.196 | 0.6 | 0.497 | 2.6 |  |  |
| MLR-18\_09 | 2844 | 77 | 2794 | 7 | -2 | 0.196 | 0.4 | 0.554 | 3.4 |  |  |
| MLR-18\_10 | 1859 | 77 | 2797 | 6 | 34 | 0.196 | 0.4 | 0.334 | 4.8 |  |  |
| MLR-18\_11 | 2058 | 132 | 2772 | 7 | 26 | 0.194 | 0.4 | 0.376 | 7.5 |  |  |
| MLR-18\_12 | 2732 | 43 | 2794 | 6 | 2 | 0.196 | 0.4 | 0.528 | 1.9 | -11.9 | 3481 |
| MLR-18\_13 | 2057 | 44 | 2773 | 7 | 26 | 0.194 | 0.4 | 0.376 | 2.5 | -11.8 | 3460 |
| MLR-18\_14 | 2849 | 71 | 2787 | 6 | -2 | 0.195 | 0.4 | 0.556 | 3.1 |  |  |
| MLR-18\_15 | 1030 | 153 | 2830 | 10 | 64 | 0.200 | 0.6 | 0.173 | 16.1 | -11.2 | 3488 |
| MLR-18\_16 | 2816 | 62 | 2779 | 6 | -1 | 0.194 | 0.4 | 0.548 | 2.7 | -12.9 | 3508 |
| MLR-18\_17 | 2471 | 104 | 2722 | 7 | 9 | 0.188 | 0.4 | 0.467 | 5.1 |  |  |
| MLR-18\_18 | 2209 | 92 | 2762 | 7 | 20 | 0.192 | 0.4 | 0.409 | 4.9 |  |  |
| MLR-18\_19 | 1523 | 22 | 2763 | 6 | 45 | 0.192 | 0.4 | 0.267 | 1.6 |  |  |
| MLR-18\_20 | 2846 | 69 | 2799 | 6 | -2 | 0.197 | 0.4 | 0.555 | 3.0 |  |  |
| MLR-18\_21 | 2185 | 66 | 2784 | 5 | 22 | 0.195 | 0.3 | 0.403 | 3.6 |  |  |
| MLR-18\_22 | 2716 | 69 | 2793 | 3 | 3 | 0.196 | 0.2 | 0.524 | 3.1 | -12.8 | 3521 |
| MLR-18\_23 | 1946 | 118 | 2704 | 9 | 28 | 0.186 | 0.5 | 0.352 | 7.1 |  |  |
| MLR-18\_24 | 1405 | 253 | 2767 | 5 | 49 | 0.193 | 0.3 | 0.244 | 20.3 |  |  |
| MLR-18\_25 | 2270 | 42 | 2799 | 8 | 19 | 0.197 | 0.5 | 0.422 | 2.2 | -8.5 | 3357 |
| MLR-18\_26 | 2797 | 76 | 2778 | 3 | -1 | 0.194 | 0.2 | 0.543 | 3.4 | -14.3 | 3557 |
| MLR-18\_27 | 1198 | 84 | 2770 | 8 | 57 | 0.193 | 0.5 | 0.204 | 7.7 |  |  |
| MLR-18\_28 | 2143 | 30 | 2676 | 5 | 20 | 0.183 | 0.3 | 0.394 | 1.7 |  |  |
| MLR-18\_29 | 1342 | 119 | 2738 | 5 | 51 | 0.189 | 0.3 | 0.231 | 9.9 |  |  |
| MLR-18\_30 | 1562 | 42 | 2654 | 8 | 41 | 0.180 | 0.5 | 0.274 | 3.1 | -14.0 | 3442 |
| MLR-18\_31 | 2612 | 56 | 2774 | 8 | 6 | 0.194 | 0.5 | 0.500 | 2.6 | -11.5 | 3444 |
| MLR-18\_32 | 2658 | 31 | 2799 | 3 | 5 | 0.197 | 0.2 | 0.510 | 1.4 | -12.9 | 3529 |
| MLR-18\_33 | 1793 | 144 | 2732 | 6 | 34 | 0.189 | 0.4 | 0.321 | 9.3 |  |  |
| MLR-18\_34 | 2489 | 93 | 2773 | 7 | 10 | 0.194 | 0.4 | 0.471 | 4.5 |  |  |
| MLR-18\_35 | 1519 | 44 | 2763 | 4 | 45 | 0.192 | 0.2 | 0.266 | 3.2 |  |  |
| MLR-18\_36 | 553 | 47 | 2843 | 26 | 81 | 0.202 | 1.6 | 0.090 | 8.9 | -12.9 | 3576 |
| MLR-18\_37 | 2564 | 51 | 2775 | 4 | 8 | 0.194 | 0.2 | 0.488 | 2.4 |  |  |

Table B-8. Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grain | 206Pb | Err. | 207Pb | Err. | Disc. | 207Pb | Err. | 206Pb | Err. | εHf(IA) | Hf model age |
| number | 238U | 2σ | 206Pb | 2σ | (%) | 206Pb | (%) | 238U | (%) | \* | (DM)a |
|  | age |  | age |  |  |  |  |  |  |  |  |
| MLR-18\_38 | 2207 | 180 | 2709 | 8 | 19 | 0.186 | 0.5 | 0.408 | 9.7 |  |  |
| MLR-18\_39 | 1161 | 21 | 2715 | 4 | 57 | 0.187 | 0.3 | 0.197 | 2.0 |  |  |
| MLR-18\_40 | 1925 | 82 | 2812 | 3 | 32 | 0.198 | 0.2 | 0.348 | 4.9 |  |  |
| MLR-18\_41 | 2612 | 149 | 2792 | 3 | 6 | 0.196 | 0.2 | 0.500 | 7.0 |  |  |
| MLR-18\_42 | 2646 | 35 | 2751 | 6 | 4 | 0.191 | 0.4 | 0.507 | 1.6 | -11.8 | 3445 |
| MLR-18\_43 | 1191 | 63 | 2777 | 4 | 57 | 0.194 | 0.2 | 0.203 | 5.8 |  |  |
| MLR-18\_44 | 2705 | 51 | 2784 | 3 | 3 | 0.195 | 0.2 | 0.521 | 2.3 | -11.0 | 3437 |
| MLR-18\_45 | 2607 | 71 | 2763 | 6 | 6 | 0.192 | 0.3 | 0.498 | 3.3 |  |  |
| MLR-18\_46 | 2605 | 49 | 2776 | 4 | 6 | 0.194 | 0.2 | 0.498 | 2.3 |  |  |
| MLR-18\_47 | 2042 | 207 | 2796 | 15 | 27 | 0.196 | 0.9 | 0.373 | 11.9 |  |  |
| MLR-18\_48 | 1945 | 23 | 2709 | 8 | 28 | 0.186 | 0.5 | 0.352 | 1.4 |  |  |
| MLR-18\_49 | 2855 | 114 | 2779 | 4 | -3 | 0.194 | 0.2 | 0.557 | 5.0 |  |  |
| MLR-18\_50 | 2691 | 79 | 2781 | 5 | 3 | 0.195 | 0.3 | 0.518 | 3.6 |  |  |
| MLR-18\_51 | 892 | 117 | 2753 | 4 | 68 | 0.191 | 0.3 | 0.148 | 14.2 |  |  |
| MLR-18\_52 | 2555 | 74 | 2834 | 17 | 10 | 0.201 | 1.0 | 0.486 | 3.5 | -12.9 | 3565 |
| MLR-18\_53 | 1409 | 82 | 2801 | 4 | 50 | 0.197 | 0.2 | 0.244 | 6.5 |  |  |
| MLR-18\_54 | 2725 | 67 | 2776 | 4 | 2 | 0.194 | 0.2 | 0.526 | 3.0 | -12.8 | 3494 |
| MLR-18\_55 | 2724 | 54 | 2764 | 4 | 1 | 0.193 | 0.2 | 0.526 | 2.4 | -12.1 | 3466 |
| MLR-18\_56 | 2819 | 56 | 2775 | 5 | -2 | 0.194 | 0.3 | 0.548 | 2.5 | -16.0 | 3625 |
| MLR-18\_57 | 2669 | 63 | 2784 | 5 | 4 | 0.195 | 0.3 | 0.513 | 2.9 |  |  |
| MLR-18\_58 | 2463 | 23 | 2729 | 5 | 10 | 0.189 | 0.3 | 0.465 | 1.1 |  |  |
| MLR-18\_59 | 2550 | 53 | 2702 | 3 | 6 | 0.185 | 0.2 | 0.485 | 2.5 |  |  |
| MLR-18\_60 | 907 | 36 | 2745 | 5 | 67 | 0.190 | 0.3 | 0.151 | 4.2 |  |  |

\*εHf(IA) calculated for individual zircon 207Pb/206Pb ages.

aDM model ages were calculated using the model of Mueller et al. (2008).

Table B-9. Little Rocky Mountain sample locations.

|  |  |  |
| --- | --- | --- |
| Sample | Latitude | Longitude |
| LRM-1 | 47.9280 | -108.5467 |
| LRM-3 | 47.9280 | -108.5467 |
| LRM-5 | 47.9280 | -108.5467 |
| LRM-6 | 47.9280 | -108.5467 |
| LRM-7 | 47.9280 | -108.5467 |
| LRMGM-01 | 47.9299 | -108.5475 |
| LRMGM-02 | 47.9299 | -108.5475 |
| LRMGM-03 | 47.9299 | -108.5475 |
| LRMGM-04 | 47.9299 | -108.5475 |
| LRMGM-05 | 47.9299 | -108.5475 |
| LRMGM-06 | 47.9393 | -108.5579 |
| LRMGM-07 | 47.9393 | -108.5579 |
| LRMGM-08 | 47.9393 | -108.5579 |
| LRMGM-09 | 47.9299 | -108.5475 |
| LRMPG-01 | 47.9118 | -108.5839 |
| LRMPG-02 | 47.9118 | -108.5839 |
| LRMPG-03 | 47.9068 | -108.5518 |
| MLR-01 | 47.9353 | -108.6172 |
| MLR-02 | 47.9353 | -108.6172 |
| MLR-03 | 47.9353 | -108.6172 |
| MLR-04 | 47.9353 | -108.6172 |
| MLR-05 | 47.9353 | -108.6172 |
| MLR-06 | 47.9353 | -108.6172 |
| MLR-07 | 47.9358 | -108.5635 |
| MLR-08 | 47.9354 | -108.5625 |
| MLR-09 | 47.9354 | -108.5625 |
| MLR-10 | 47.9354 | -108.5625 |
| MLR-11 | 47.9354 | -108.5625 |
| MLR-12 | 47.9280 | -108.5467 |
| MLR-13 | 47.9280 | -108.5467 |
| MLR-14 | 47.9280 | -108.5467 |
| MLR-15 | 47.9280 | -108.5467 |
| MLR-16 | 47.9280 | -108.5467 |
| MLR-17 | 47.9280 | -108.5467 |
| MLR-18 | 47.9280 | -108.5467 |
| MLR-19 | 47.9280 | -108.5467 |