|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Supplemental Table 1. Zircon (U-Th)/He data for the Beaver Dam Mountains | | | | | | | | | | | | | | |
| Sample | L (mm) | W (mm) | Mass (mg) | Ft\* | U (ppm) | Th (ppm) | Sm (ppm) | [U]e | Th/U | He (nmol/g) | Corrected Age (Ma) | err. (Ma) | Mean age (Ma) | St.Dev.† (Ma) |
| **95BR102** | **185.12** | **80.85** | **5.88** | **0.77** | **573.5** | **35.7** | **1.1** | **581.8** | **0.06** | **45.6** | **-** | **1.5** | **18.8** | **1.7** |
| z95BR102-1 | 162.14 | 69.41 | 3.63 | 0.74 | 636.3 | 46.3 | 1.7 | 647.0 | 0.07 | 47.1 | 18.3 | 1.5 |  |  |
| z95BR102-2 | 197.10 | 73.16 | 4.91 | 0.76 | 775.8 | 43.7 | 1.1 | 785.8 | 0.06 | 66.1 | 20.6 | 1.7 |  |  |
| z95BR102-3 | 196.10 | 99.99 | 9.12 | 0.81 | 308.5 | 17.2 | 0.6 | 312.5 | 0.06 | 23.6 | 17.4 | 1.4 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **95BR103** | **187.06** | **79.41** | **5.59** | **0.76** | **613.3** | **216.6** | **1.4** | **663.2** | **0.32** | **49.1** | **-** | **1.5** | **18.2** | **1.6** |
| z95BR103-1 | 191.77 | 75.88 | 5.13 | 0.76 | 498.4 | 126.1 | 0.8 | 527.5 | 0.25 | 43.0 | 19.9 | 1.6 |  |  |
| z95BR103-2 | 171.74 | 72.11 | 4.15 | 0.74 | 851.3 | 416.6 | 2.0 | 947.2 | 0.49 | 67.3 | 17.8 | 1.4 |  |  |
| z95BR103-3 | 197.67 | 90.25 | 7.49 | 0.79 | 490.2 | 107.2 | 1.3 | 514.9 | 0.22 | 37.1 | 16.9 | 1.4 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **95BR104** | **158.58** | **69.80** | **3.58** | **0.74** | **724.8** | **22.6** | **1.6** | **730.0** | **0.03** | **49.9** | **-** | **1.4** | **17.1** | **1.9** |
| z95BR104-1 | 173.75 | 67.33 | 3.66 | 0.74 | 762.1 | 25.7 | 1.5 | 768.0 | 0.03 | 60.2 | 19.8 | 1.6 |  |  |
| z95BR104-2 | 164.60 | 70.79 | 3.84 | 0.74 | 675.9 | 15.4 | 1.2 | 679.4 | 0.02 | 44.8 | 16.5 | 1.3 |  |  |
| z95BR104-3 | 137.38 | 71.27 | 3.25 | 0.74 | 736.4 | 26.6 | 2.1 | 742.6 | 0.04 | 44.6 | 15.2 | 1.2 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **95BR105** | **164.93** | **73.62** | **4.18** | **0.75** | **324.6** | **81.8** | **2.0** | **343.4** | **0.25** | **91.7** | **-** | **5.8** | **72.6** | **26.5** |
| z95BR105-1 | 172.99 | 71.15 | 4.07 | 0.74 | 449.9 | 123.9 | 1.2 | 478.5 | 0.28 | 59.7 | 31.1 | 2.5 |  |  |
| z95BR105-2 | 166.82 | 79.11 | 4.85 | 0.76 | 274.3 | 69.4 | 1.3 | 290.3 | 0.25 | 101.4 | 84.8 | 6.8 |  |  |
| z95BR105-3 | 139.04 | 73.00 | 3.45 | 0.74 | 205.5 | 43.9 | 1.0 | 215.6 | 0.21 | 82.1 | 95.2 | 7.6 |  |  |
| z95BR105-4 | 188.63 | 78.06 | 5.34 | 0.76 | 415.8 | 93.6 | 1.8 | 437.3 | 0.23 | 116.6 | 64.5 | 5.2 |  |  |
| z95BR105-5 | 160.78 | 69.32 | 3.59 | 0.73 | 233.0 | 47.4 | 1.1 | 243.9 | 0.20 | 98.9 | 101.8 | 8.1 |  |  |
| z95BR105-6 | 161.32 | 71.10 | 3.79 | 0.74 | 369.1 | 112.6 | 5.5 | 395.1 | 0.31 | 91.4 | 57.9 | 4.6 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **95BR106** | **153.67** | **77.03** | **4.27** | **0.75** | **263.19** | **58.10** | **1.29** | **276.57** | **0.23** | **80.66** | **-** | **6.1** | **75.7** | **58.5** |
| z95BR106-1 | 135.80 | 86.16 | 4.69 | 0.77 | 325.0 | 39.4 | 0.9 | 334.0 | 0.12 | 49.4 | 35.7 | 2.9 |  |  |
| z95BR106-2 | 157.98 | 75.13 | 4.15 | 0.75 | 248.3 | 52.7 | 1.3 | 260.4 | 0.21 | 45.4 | 43.1 | 3.4 |  |  |
| z95BR106-3 | 126.49 | 73.12 | 3.14 | 0.73 | 264.7 | 54.7 | 1.2 | 277.3 | 0.21 | 67.4 | 61.3 | 4.9 |  |  |
| z95BR106-4 | 167.74 | 67.81 | 3.59 | 0.73 | 279.6 | 87.9 | 1.1 | 299.8 | 0.31 | 77.8 | 65.7 | 5.3 |  |  |
| z95BR106-5 | 160.09 | 74.58 | 4.14 | 0.75 | 220.6 | 63.6 | 2.2 | 235.2 | 0.29 | 185.1 | 192.8 | 15.4 |  |  |
| z95BR106-6 | 173.92 | 85.37 | 5.89 | 0.78 | 241.0 | 50.2 | 1.0 | 252.6 | 0.21 | 58.8 | 55.5 | 4.4 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **95BR109** | **212.60** | **78.98** | **6.27** | **0.77** | **450.45** | **91.54** | **2.93** | **471.54** | **0.20** | **105.70** | **-** | **4.5** | **56.5** | **21.0** |
| z95BR109-1 | 169.63 | 73.38 | 4.25 | 0.75 | 332.0 | 53.1 | 2.1 | 344.2 | 0.16 | 130.1 | 93.1 | 7.4 |  |  |
| z95BR109-2 | 255.64 | 83.34 | 8.26 | 0.78 | 586.3 | 96.5 | 3.8 | 608.5 | 0.16 | 105.2 | 40.8 | 3.3 |  |  |
| z95BR109-3 | 211.92 | 89.57 | 7.91 | 0.79 | 329.5 | 36.7 | 2.1 | 338.0 | 0.11 | 64.9 | 44.8 | 3.6 |  |  |
| Sample | L (mm) | W (mm) | Mass (mg) | Ft\* | U (ppm) | Th (ppm) | Sm (ppm) | [U]e | Th/U | He (nmol/g) | Corrected Age (Ma) | err. (Ma) | Mean age (Ma) | St.Dev.† (Ma) |
| z95BR109-4 | 230.43 | 73.99 | 5.87 | 0.76 | 577.4 | 152.9 | 2.7 | 612.6 | 0.26 | 134.5 | 53.5 | 4.3 |  |  |
| z95BR109-5 | 195.37 | 74.60 | 5.06 | 0.75 | 427.0 | 118.5 | 3.9 | 454.3 | 0.28 | 93.9 | 50.6 | 4.0 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **95BR110** | **164.36** | **73.79** | **4.19** | **0.75** | **420.29** | **85.58** | **1.57** | **440.00** | **0.21** | **112.36** | **-** | **6.0** | **74.7** | **43.4** |
| z95BR110-1 | 127.11 | 68.58 | 2.78 | 0.72 | 417.4 | 109.3 | 1.8 | 442.6 | 0.26 | 102.4 | 59.4 | 4.8 |  |  |
| z95BR110-2 | 148.73 | 69.46 | 3.34 | 0.73 | 499.4 | 132.8 | 2.5 | 530.0 | 0.27 | 98.4 | 47.0 | 3.8 |  |  |
| z95BR110-3 | 158.03 | 83.57 | 5.13 | 0.77 | 400.0 | 64.7 | 1.0 | 414.9 | 0.16 | 83.0 | 48.2 | 3.9 |  |  |
| z95BR110-4 | 174.78 | 76.19 | 4.72 | 0.76 | 233.7 | 51.0 | 1.0 | 245.4 | 0.22 | 159.0 | 157.4 | 12.6 |  |  |
| z95BR110-5 | 189.29 | 67.70 | 4.03 | 0.73 | 289.4 | 73.7 | 1.3 | 306.3 | 0.25 | 119.9 | 98.1 | 7.8 |  |  |
| z95BR110-6 | 174.76 | 74.82 | 4.55 | 0.75 | 387.8 | 49.8 | 1.4 | 399.3 | 0.13 | 137.5 | 84.3 | 6.7 |  |  |
| z95BR110-7 | 177.79 | 76.21 | 4.80 | 0.76 | 714.5 | 117.7 | 2.0 | 741.6 | 0.16 | 86.5 | 28.5 | 2.3 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **95BR111** | **197.37** | **67.98** | **4.25** | **0.74** | **664.3** | **250.5** | **11.7** | **722.0** | **0.36** | **53.9** | **-** | **1.5** | **18.8** | **1.9** |
| z95BR111-1 | 210.74 | 69.04 | 4.67 | 0.74 | 722.4 | 397.0 | 18.5 | 813.9 | 0.55 | 55.1 | 17.0 | 1.4 |  |  |
| z95BR111-2 | 192.94 | 69.44 | 4.33 | 0.74 | 543.7 | 65.6 | 2.0 | 558.8 | 0.12 | 42.0 | 18.7 | 1.5 |  |  |
| z95BR111-3 | 188.41 | 65.45 | 3.75 | 0.72 | 726.8 | 289.0 | 14.5 | 793.4 | 0.40 | 64.5 | 20.7 | 1.7 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **95BR112** | **203.6** | **74.9** | **5.4** | **0.8** | **498.6** | **78.2** | **6.4** | **516.6** | **0.2** | **104.1** | **-** | **4.7** | **59.1** | **32.3** |
| z95BR112-1 | 186.08 | 76.70 | 5.09 | 0.76 | 360.3 | 69.4 | 4.7 | 376.3 | 0.19 | 83.1 | 53.8 | 4.3 |  |  |
| z95BR112-2 | 219.89 | 72.26 | 5.34 | 0.75 | 192.2 | 54.6 | 1.4 | 204.8 | 0.28 | 102.0 | 121.7 | 9.7 |  |  |
| z95BR112-3 | 148.69 | 74.03 | 3.79 | 0.74 | 577.2 | 83.6 | 6.2 | 596.4 | 0.14 | 157.5 | 65.5 | 5.2 |  |  |
| z95BR112-4 | 239.24 | 78.52 | 6.86 | 0.77 | 583.5 | 82.9 | 1.2 | 602.6 | 0.14 | 113.0 | 44.9 | 3.6 |  |  |
| z95BR112-5 | 189.93 | 68.58 | 4.15 | 0.74 | 336.4 | 55.9 | 1.1 | 349.2 | 0.17 | 99.7 | 71.3 | 5.7 |  |  |
| z95BR112-6 | 203.79 | 72.95 | 5.04 | 0.75 | 560.5 | 79.1 | 15.3 | 578.8 | 0.14 | 68.1 | 28.9 | 2.3 |  |  |
| z95BR112-7 | 237.38 | 81.27 | 7.29 | 0.78 | 880.2 | 121.6 | 15.0 | 908.2 | 0.14 | 105.3 | 27.6 | 2.2 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **95BR113** | **182.0** | **71.9** | **4.4** | **0.7** | **635.6** | **94.1** | **4.3** | **657.2** | **0.2** | **90.7** | **-** | **3.0** | **38.0** | **11.9** |
| z95BR113-1 | 183.77 | 81.32 | 5.65 | 0.77 | 1155.9 | 144.1 | 13.1 | 1189.2 | 0.12 | 115.7 | 23.4 | 1.9 |  |  |
| z95BR113-2 | 190.33 | 73.02 | 4.72 | 0.75 | 499.3 | 86.6 | 3.5 | 519.3 | 0.17 | 74.0 | 35.1 | 2.8 |  |  |
| z95BR113-3 | 173.49 | 73.55 | 4.36 | 0.75 | 671.8 | 100.1 | 4.1 | 694.9 | 0.15 | 81.9 | 29.1 | 2.3 |  |  |
| z95BR113-4 | 175.78 | 69.14 | 3.91 | 0.74 | 620.5 | 85.7 | 2.2 | 640.3 | 0.14 | 101.8 | 39.8 | 3.2 |  |  |
| z95BR113-5 | 169.67 | 67.14 | 3.56 | 0.73 | 776.8 | 115.7 | 2.5 | 803.5 | 0.15 | 111.7 | 35.2 | 2.8 |  |  |
| z95BR113-6 | 179.59 | 65.91 | 3.63 | 0.73 | 443.0 | 75.6 | 3.4 | 460.4 | 0.17 | 77.0 | 42.4 | 3.4 |  |  |
| z95BR113-7 | 201.49 | 72.95 | 4.99 | 0.75 | 281.5 | 51.0 | 1.3 | 293.2 | 0.18 | 72.7 | 60.8 | 4.9 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sample | L (mm) | W (mm) | Mass (mg) | Ft\* | U (ppm) | Th (ppm) | Sm (ppm) | [U]e | Th/U | He (nmol/g) | Corrected Age (Ma) | err. (Ma) | Mean age (Ma) | St.Dev.† (Ma). |
| **95BR115** | **198.0** | **75.3** | **5.3** | **0.8** | **416.6** | **66.2** | **3.4** | **431.8** | **0.2** | **105.2** | **-** | **5.0** | **62.3** | **12.7** |
| z95BR115-1 | 200.17 | 69.93 | 4.55 | 0.74 | 338.4 | 71.1 | 2.8 | 354.8 | 0.21 | 82.8 | 58.0 | 4.6 |  |  |
| z95BR115-2 | 136.84 | 81.85 | 4.26 | 0.76 | 360.7 | 46.7 | 2.9 | 371.4 | 0.13 | 120.4 | 78.9 | 6.3 |  |  |
| z95BR115-3 | 178.85 | 69.58 | 4.03 | 0.74 | 471.5 | 88.1 | 1.9 | 491.7 | 0.19 | 125.5 | 63.7 | 5.1 |  |  |
| z95BR115-4 | 202.05 | 76.03 | 5.43 | 0.76 | 290.6 | 43.8 | 3.2 | 300.7 | 0.15 | 72.3 | 58.4 | 4.7 |  |  |
| z95BR115-5 | 255.63 | 84.01 | 8.39 | 0.79 | 321.7 | 56.9 | 3.0 | 334.9 | 0.18 | 103.3 | 72.4 | 5.8 |  |  |
| z95BR115-6 | 214.22 | 70.28 | 4.92 | 0.75 | 716.5 | 90.8 | 6.7 | 737.4 | 0.13 | 126.9 | 42.5 | 3.4 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **95BR116** | **203.52** | **83.97** | **6.86** | **0.76** | **121.3** | **218.1** | **7.0** | **171.6** | **1.98** | **238.9** | **-** | **27.2** | **340.2** | **91.1** |
| z95BR116-1 | 243.42 | 90.48 | 9.27 | 0.79 | 257.8 | 308.6 | 9.6 | 328.9 | 1.20 | 354.1 | 248.1 | 19.8 |  |  |
| z95BR116-2 | 208.31 | 74.21 | 5.33 | 0.74 | 110.4 | 219.6 | 9.3 | 161.0 | 1.99 | 284.6 | 426.4 | 34.1 |  |  |
| z95BR116-3 | 190.24 | 79.42 | 5.58 | 0.75 | 70.9 | 166.0 | 4.5 | 109.2 | 2.34 | 192.5 | 420.5 | 33.6 |  |  |
| z95BR116-4 | 191.73 | 98.53 | 8.66 | 0.79 | 51.8 | 117.8 | 1.6 | 78.9 | 2.27 | 91.6 | 265.8 | 21.3 |  |  |
| z95BR116-5 | 179.61 | 72.61 | 4.40 | 0.73 | 111.8 | 195.6 | 2.7 | 156.9 | 1.75 | 234.0 | 366.0 | 29.3 |  |  |
| z95BR116-6 | 218.46 | 98.90 | 9.94 | 0.80 | 131.8 | 213.7 | 12.2 | 181.0 | 1.62 | 346.0 | 429.4 | 34.4 |  |  |
| z95BR116-7 | 192.88 | 73.63 | 4.86 | 0.74 | 114.7 | 305.1 | 9.1 | 185.0 | 2.66 | 169.3 | 225.0 | 18.0 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **95BR119** | **184.73** | **99.08** | **8.93** | **0.79** | **99.8** | **55.9** | **5.8** | **112.7** | **0.98** | **163.8** | **-** | **35.6** | **445.1** | **318.8** |
| z95BR119-1 | 165.86 | 92.32 | 6.57 | 0.78 | 168.1 | 105.2 | 21.2 | 192.4 | 0.63 | 183.2 | 222.1 | 17.8 |  |  |
| z95BR119-2 | 182.01 | 102.32 | 8.86 | 0.80 | 105.8 | 57.1 | 13.1 | 119.0 | 0.54 | 133.1 | 253.7 | 20.3 |  |  |
| z95BR119-3 | 208.52 | 128.51 | 16.01 | 0.83 | 21.6 | 46.4 | 0.8 | 32.3 | 2.15 | 177.2 | 1118.2 | 89.5 |  |  |
| z95BR119-4 | 192.46 | 88.10 | 6.95 | 0.77 | 23.0 | 35.3 | 1.6 | 31.1 | 1.54 | 39.1 | 293.8 | 23.5 |  |  |
| z95BR119-5 | 221.02 | 114.44 | 13.46 | 0.82 | 29.8 | 27.0 | 0.6 | 36.1 | 0.90 | 97.1 | 579.3 | 46.3 |  |  |
| z95BR119-6 | 160.70 | 77.61 | 4.50 | 0.75 | 51.6 | 43.0 | 1.2 | 61.5 | 0.83 | 84.1 | 330.8 | 26.5 |  |  |
| z95BR119-7 | 162.52 | 90.25 | 6.15 | 0.78 | 298.6 | 77.2 | 2.3 | 316.4 | 0.26 | 432.7 | 317.3 | 25.4 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **95BR120** | **144.88** | **68.95** | **3.21** | **0.72** | **403.6** | **170.2** | **9.1** | **442.9** | **0.49** | **392.2** | **-** | **22.1** | **276.3** | **134.7** |
| z95BR120-1 | 148.64 | 72.06 | 3.59 | 0.73 | 88.8 | 58.7 | 1.6 | 102.4 | 0.66 | 166.4 | 400.3 | 32.0 |  |  |
| z95BR120-2 | 151.40 | 67.42 | 3.20 | 0.72 | 523.0 | 204.1 | 10.3 | 570.0 | 0.39 | 670.0 | 295.6 | 23.6 |  |  |
| z95BR120-3 | 134.60 | 67.38 | 2.84 | 0.72 | 599.1 | 247.8 | 15.4 | 656.2 | 0.41 | 340.2 | 133.0 | 10.6 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **95BR122** | **209.67** | **83.41** | **6.80** | **0.78** | **252.5** | **90.7** | **2.3** | **273.4** | **0.41** | **293.4** | **-** | **21.2** | **265.2** | **52.0** |
| z95BR122-1 | 190.35 | 81.98 | 5.95 | 0.77 | 309.1 | 87.5 | 3.2 | 329.2 | 0.28 | 321.9 | 231.4 | 18.5 |  |  |
| z95BR122-2 | 213.89 | 82.80 | 6.82 | 0.78 | 315.7 | 100.5 | 1.9 | 338.8 | 0.32 | 345.2 | 239.2 | 19.1 |  |  |
| z95BR122-3 | 224.77 | 85.44 | 7.63 | 0.78 | 132.8 | 84.0 | 1.9 | 152.2 | 0.63 | 213.3 | 325.1 | 26.0 |  |  |
| Sample | L (mm) | W (mm) | Mass (mg) | Ft\* | U (ppm) | Th (ppm) | Sm (ppm) | [U]e | Th/U | He (nmol/g) | Corrected Age (Ma) | err. (Ma) | Mean age (Ma) | St.Dev.† (Ma) |
| **95BR124** | **215.11** | **105.59** | **11.28** | **0.81** | **59.16** | **32.49** | **0.73** | **66.64** | **0.54** | **208.26** | **-** | **51.9** | **649.1** | **350.4** |
| z95BR124-1 | 223.59 | 112.68 | 13.20 | 0.82 | 52.9 | 13.6 | 0.6 | 56.0 | 0.26 | 95.7 | 372.8 | 29.8 |  |  |
| z95BR124-2 | 234.77 | 106.35 | 12.35 | 0.81 | 61.0 | 45.5 | 0.5 | 71.5 | 0.75 | 174.1 | 531.1 | 42.5 |  |  |
| z95BR124-3 | 186.96 | 97.76 | 8.31 | 0.79 | 63.6 | 38.3 | 1.0 | 72.4 | 0.60 | 354.9 | 1043.3 | 83.5 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **11TS01** | **161.3** | **69.3** | **3.7** | **0.7** | **181.2** | **118.5** | **0.8** | **208.5** | **0.7** | **168.2** | **-** | **17.4** | **217.9** | **87.1** |
| z11TS01-1 | 187.41 | 75.14 | 4.92 | 0.75 | 124.7 | 117.8 | 1.3 | 151.8 | 0.94 | 196.0 | 312.9 | 25.0 |  |  |
| z11TS01-2 | 144.53 | 54.71 | 2.01 | 0.67 | 199.5 | 125.6 | 0.4 | 228.4 | 0.63 | 166.6 | 199.1 | 15.9 |  |  |
| z11TS01-3 | 151.91 | 77.92 | 4.29 | 0.75 | 219.5 | 112.0 | 0.6 | 245.3 | 0.51 | 141.9 | 141.7 | 11.3 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **11TS02** | **231.1** | **96.9** | **10.3** | **0.8** | **296.8** | **111.3** | **1.0** | **322.5** | **0.4** | **309.0** | **-** | **17.8** | **222.9** | **31.7** |
| z11TS02-1 | 205.12 | 88.36 | 7.45 | 0.78 | 214.2 | 96.1 | 1.3 | 236.3 | 0.45 | 264.4 | 259.5 | 20.8 |  |  |
| z11TS02-2 | 243.25 | 113.24 | 14.50 | 0.83 | 292.8 | 138.3 | 1.2 | 324.7 | 0.47 | 299.2 | 203.4 | 16.3 |  |  |
| z11TS02-3 | 244.82 | 89.13 | 9.04 | 0.79 | 383.5 | 99.5 | 0.4 | 406.4 | 0.26 | 363.5 | 205.9 | 16.5 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ***11TS04*** | ***265.3*** | ***113.6*** | ***16.8*** | ***0.8*** | ***853.0*** | ***300.8*** | ***5.7*** | ***922.3*** | ***0.4*** | ***36.5*** | ***-*** | ***0.7*** | ***8.8*** | ***0.4*** |
| §*z11TS04-1* | *223.62* | *93.91* | *9.17* | *0.80* | *1043.2* | *339.7* | *6.4* | *1121.4* | *0.33* | *44.4* | *9.2* | *0.7* |  |  |
| §*z11TS04-2* | *350.95* | *126.88* | *26.27* | *0.85* | *437.7* | *188.7* | *5.6* | *481.2* | *0.43* | *18.5* | *8.4* | *0.7* |  |  |
| §*z11TS04-3* | *221.23* | *120.09* | *14.84* | *0.83* | *1078.2* | *374.0* | *4.9* | *1164.3* | *0.35* | *46.6* | *8.9* | *0.7* |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ***11TS06*** | ***214.4*** | ***73.4*** | ***5.4*** | ***0.8*** | ***1086.5*** | ***492.9*** | ***2.2*** | ***1200.0*** | ***0.5*** | ***54.6*** | ***-*** | ***0.9*** | ***11.2*** | ***0.2*** |
| §*z11TS06-1* | *232.38* | *77.90* | *6.56* | *0.77* | *1342.3* | *412.5* | *2.0* | *1437.3* | *0.31* | *67.4* | *11.3* | *0.9* |  |  |
| §*z11TS06-2* | *218.27* | *71.90* | *5.25* | *0.75* | *925.0* | *406.8* | *1.9* | *1018.7* | *0.44* | *46.3* | *11.2* | *0.9* |  |  |
| §*z11TS06-3* | *192.57* | *70.29* | *4.42* | *0.74* | *992.1* | *659.5* | *2.6* | *1143.9* | *0.66* | *50.2* | *11.0* | *0.9* |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **11TS08** | **226.6** | **83.7** | **7.4** | **0.8** | **129.6** | **61.6** | **1.3** | **143.8** | **0.5** | **199.3** | **-** | **27.8** | **347.6** | **171.7** |
| z11TS08-1 | 241.26 | 84.87 | 8.08 | 0.78 | 99.6 | 57.5 | 1.6 | 112.8 | 0.58 | 266.3 | 537.3 | 43.0 |  |  |
| z11TS08-2 | 228.69 | 88.11 | 8.26 | 0.79 | 167.1 | 83.8 | 1.2 | 186.4 | 0.50 | 162.7 | 202.6 | 16.2 |  |  |
| z11TS08-3 | 209.80 | 78.24 | 5.97 | 0.76 | 122.2 | 43.6 | 1.1 | 132.3 | 0.36 | 168.9 | 302.9 | 24.2 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **11TS09** | **213.0** | **87.6** | **8.2** | **0.8** | **808.7** | **330.2** | **1.9** | **884.7** | **0.5** | **53.4** | **-** | **2.8** | **34.9** | **45.3** |
| §*z11TS09-1* | *262.44* | *104.68* | *13.37* | *0.82* | *1556.6* | *540.9* | *3.4* | *1681.1* | *0.35* | *60.6* | *8.1* | *0.7* |  |  |
| §*z11TS09-2* | *222.11* | *85.99* | *7.64* | *0.78* | *699.3* | *327.5* | *1.9* | *774.7* | *0.47* | *30.8* | *9.4* | *0.8* |  |  |
| z11TS09-3 | 154.32 | 72.07 | 3.73 | 0.73 | 170.2 | 122.2 | 0.3 | 198.3 | 0.72 | 68.9 | 87.2 | 7.0 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **96BR003** | **135.81** | **67.14** | **2.83** | **0.71** | **282.63** | **156.01** | **7.88** | **318.58** | **0.49** | **68.31** | **-** | **6.26** | **78.3** | **45.8** |
| z96BR003-1 | 116.41 | 82.40 | 3.68 | 0.75 | 150.7 | 49.3 | 2.4 | 162.0 | 0.33 | 81.7 | 124.1 | 9.9 |  |  |
| Sample | L (mm) | W (mm) | Mass (mg) | Ft\* | U (ppm) | Th (ppm) | Sm (ppm) | [U]e | Th/U | He (nmol/g) | Corrected Age (Ma) | err. (Ma) | Mean age (Ma) | St.Dev.† (Ma) |
| z96BR003-3 | 128.81 | 62.57 | 2.35 | 0.69 | 583.9 | 394.2 | 21.2 | 674.8 | 0.68 | 41.0 | 16.2 | 1.3 |  |  |
| z96BR003-4 | 158.80 | 62.66 | 2.90 | 0.71 | 269.2 | 110.0 | 6.2 | 294.5 | 0.41 | 109.3 | 96.4 | 7.7 |  |  |
| z96BR003-5 | 139.21 | 60.94 | 2.40 | 0.69 | 126.7 | 70.5 | 1.7 | 143.0 | 0.56 | 41.2 | 76.4 | 6.1 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **96BR005** | **181.09** | **77.46** | **5.03** | **0.76** | **309.7** | **85.5** | **2.4** | **329.42** | **0.28** | **70.0** | **-** | **4.4** | **54.9** | **23.3** |
| z96BR005-1 | 184.79 | 76.42 | 5.02 | 0.76 | 310.8 | 66.2 | 2.6 | 326.0 | 0.21 | 65.8 | 49.2 | 3.9 |  |  |
| z96BR005-2 | 195.33 | 67.61 | 4.15 | 0.73 | 343.7 | 116.2 | 2.8 | 370.4 | 0.34 | 45.9 | 31.2 | 2.5 |  |  |
| z96BR005-3 | 195.24 | 73.51 | 4.91 | 0.75 | 352.0 | 93.7 | 2.8 | 373.6 | 0.27 | 56.6 | 37.3 | 3.0 |  |  |
| z96BR005-4 | 161.54 | 89.26 | 5.98 | 0.78 | 181.7 | 64.3 | 1.6 | 196.5 | 0.35 | 72.4 | 87.3 | 7.0 |  |  |
| z96BR005-5 | 168.54 | 80.51 | 5.08 | 0.76 | 360.4 | 87.3 | 2.3 | 380.5 | 0.24 | 109.3 | 69.4 | 5.6 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **96BR006** | **165.4** | **75.3** | **4.5** | **0.7** | **377.1** | **170.8** | **3.8** | **416.4** | **0.5** | **75.9** | **-** | **6.8** | **85.1** | **149.4** |
| z96BR006-1 | 196.73 | 87.77 | 7.05 | 0.78 | 404.7 | 219.3 | 7.3 | 455.3 | 0.54 | 45.9 | 23.9 | 1.9 |  |  |
| z96BR006-2 | 101.93 | 71.71 | 2.44 | 0.71 | 306.7 | 127.6 | 3.0 | 336.1 | 0.42 | 45.1 | 34.8 | 2.8 |  |  |
| z96BR006-3 | 203.54 | 80.50 | 6.13 | 0.77 | 799.2 | 238.8 | 5.3 | 854.2 | 0.30 | 48.4 | 13.6 | 1.1 |  |  |
| z96BR006-4 | 139.59 | 73.10 | 3.47 | 0.73 | 135.8 | 96.0 | 1.9 | 157.9 | 0.71 | 249.5 | 389.8 | 31.2 |  |  |
| z96BR006-5 | 178.35 | 68.22 | 3.86 | 0.73 | 309.2 | 135.2 | 2.8 | 340.4 | 0.44 | 32.3 | 24.0 | 1.9 |  |  |
| z96BR006-6 | 172.22 | 70.29 | 3.96 | 0.73 | 307.0 | 208.0 | 2.5 | 354.9 | 0.68 | 34.5 | 24.5 | 2.0 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **96BR008** | **168.38** | **70.34** | **3.93** | **0.73** | **303.5** | **134.5** | **3.0** | **334.43** | **0.44** | **28.7** | **-** | **1.7** | **21.6** | **1.0** |
| z96BR008-1 | 170.35 | 81.11 | 5.21 | 0.76 | 292.5 | 135.8 | 3.2 | 323.8 | 0.46 | 29.8 | 22.3 | 1.8 |  |  |
| z96BR008-2 | 163.01 | 63.56 | 3.06 | 0.71 | 325.1 | 153.2 | 3.7 | 360.3 | 0.47 | 30.7 | 22.1 | 1.8 |  |  |
| z96BR008-3 | 171.78 | 66.36 | 3.52 | 0.72 | 292.8 | 114.6 | 2.0 | 319.2 | 0.39 | 25.6 | 20.5 | 1.6 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **96BR009** | **175.87** | **72.97** | **4.35** | **0.75** | **442.0** | **85.2** | **15.5** | **461.68** | **0.19** | **25.1** | **-** | **1.1** | **13.4** | **1.0** |
| z96BR009-1 | 182.71 | 69.00 | 4.04 | 0.74 | 431.8 | 41.4 | 7.8 | 441.3 | 0.10 | 24.0 | 13.6 | 1.1 |  |  |
| z96BR009-2 | 134.18 | 75.20 | 3.53 | 0.74 | 409.4 | 105.9 | 33.5 | 434.0 | 0.26 | 21.4 | 12.4 | 1.0 |  |  |
| z96BR009-3 | 210.72 | 74.72 | 5.47 | 0.76 | 484.7 | 108.4 | 5.1 | 509.7 | 0.22 | 29.7 | 14.2 | 1.1 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **96BR010** | **161.67** | **67.99** | **3.58** | **0.73** | **532.7** | **48.5** | **3.8** | **543.83** | **0.09** | **29.9** | **-** | **1.1** | **13.9** | **0.8** |
| z96BR010-1 | 208.06 | 74.58 | 5.38 | 0.76 | 545.6 | 87.6 | 7.6 | 565.8 | 0.16 | 34.1 | 14.7 | 1.2 |  |  |
| z96BR010-2 | 129.91 | 66.78 | 2.69 | 0.72 | 547.1 | 22.9 | 0.9 | 552.4 | 0.04 | 29.6 | 13.8 | 1.1 |  |  |
| z96BR010-3 | 147.05 | 62.60 | 2.68 | 0.71 | 505.3 | 34.9 | 2.8 | 513.3 | 0.07 | 25.9 | 13.1 | 1.1 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **96BR011** | **219.1** | **90.9** | **8.5** | **0.8** | **125.9** | **115.1** | **4.5** | **152.4** | **1.1** | **50.9** | **-** | **7.8** | **97.4** | **76.8** |
| z96BR011-1 | 252.99 | 85.53 | 8.61 | 0.78 | 241.0 | 157.1 | 3.0 | 277.2 | 0.65 | 59.4 | 50.5 | 4.0 |  |  |
| z96BR011-2 | 181.64 | 92.41 | 7.21 | 0.78 | 71.1 | 122.7 | 6.0 | 99.4 | 1.73 | 102.9 | 241.1 | 19.3 |  |  |
| Sample | L (mm) | W (mm) | Mass (mg) | Ft\* | U (ppm) | Th (ppm) | Sm (ppm) | [U]e | Th/U | He (nmol/g) | Corrected Age (Ma) | err. (Ma) | Mean age (Ma) | St.Dev.† (Ma) |
| z96BR011-4 | 246.26 | 89.02 | 9.07 | 0.79 | 104.7 | 138.4 | 11.8 | 136.6 | 1.32 | 42.8 | 73.3 | 5.9 |  |  |
| z96BR011-5 | 215.64 | 88.44 | 7.84 | 0.78 | 77.2 | 78.3 | 3.3 | 95.3 | 1.01 | 48.4 | 119.2 | 9.5 |  |  |
| z96BR011-6 | 259.82 | 102.83 | 12.78 | 0.81 | 68.2 | 63.2 | 1.4 | 82.7 | 0.93 | 27.2 | 74.5 | 6.0 |  |  |
| z96BR011-7 | 158.12 | 87.26 | 5.60 | 0.77 | 193.4 | 130.8 | 1.7 | 223.5 | 0.68 | 24.4 | 26.2 | 2.1 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **96BR012** | **168.2** | **78.5** | **4.9** | **0.8** | **146.7** | **47.5** | **4.0** | **157.7** | **0.4** | **16.2** | **-** | **2.0** | **24.7** | **10.9** |
| z96BR012-1 | 160.60 | 87.98 | 5.78 | 0.78 | 209.4 | 36.9 | 3.9 | 217.9 | 0.18 | 15.9 | 17.4 | 1.4 |  |  |
| z96BR012-2 | 169.26 | 83.38 | 5.47 | 0.77 | 163.0 | 75.9 | 6.8 | 180.5 | 0.47 | 36.6 | 48.8 | 3.9 |  |  |
| z96BR012-3 | 159.60 | 79.75 | 4.72 | 0.76 | 168.0 | 19.0 | 4.5 | 172.4 | 0.11 | 15.3 | 21.6 | 1.7 |  |  |
| z96BR012-4 | 132.70 | 71.07 | 3.12 | 0.73 | 216.2 | 60.2 | 1.6 | 230.0 | 0.28 | 19.0 | 20.9 | 1.7 |  |  |
| z96BR012-5 | 135.45 | 69.69 | 3.06 | 0.72 | 77.6 | 42.4 | 5.9 | 87.4 | 0.55 | 6.8 | 19.8 | 1.6 |  |  |
| z96BR012-6 | 220.47 | 85.75 | 7.54 | 0.78 | 114.9 | 47.3 | 3.5 | 125.8 | 0.41 | 13.3 | 24.9 | 2.0 |  |  |
| z96BR012-7 | 199.38 | 72.18 | 4.83 | 0.74 | 78.1 | 51.1 | 2.0 | 89.9 | 0.65 | 7.0 | 19.3 | 1.5 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **96BR014** | **150.3** | **72.5** | **3.7** | **0.7** | **292.2** | **48.9** | **6.7** | **303.5** | **0.2** | **21.1** | **-** | **1.4** | **17.2** | **3.1** |
| z96BR014-1 | 128.07 | 78.33 | 3.65 | 0.75 | 333.2 | 67.1 | 2.2 | 348.7 | 0.20 | 24.2 | 17.2 | 1.4 |  |  |
| z96BR014-2 | 150.90 | 60.35 | 2.56 | 0.70 | 436.5 | 41.3 | 18.8 | 446.1 | 0.09 | 22.8 | 13.4 | 1.1 |  |  |
| z96BR014-3 | 170.64 | 60.29 | 2.88 | 0.71 | 237.4 | 42.1 | 19.1 | 247.2 | 0.18 | 16.6 | 17.5 | 1.4 |  |  |
| z96BR014-4 | 148.77 | 73.08 | 3.69 | 0.74 | 162.6 | 43.4 | 0.5 | 172.6 | 0.27 | 12.1 | 17.6 | 1.4 |  |  |
| z96BR014-5 | 138.01 | 85.50 | 4.69 | 0.76 | 332.2 | 66.2 | 1.4 | 347.4 | 0.20 | 22.9 | 15.9 | 1.3 |  |  |
| z96BR014-6 | 186.79 | 76.51 | 5.08 | 0.76 | 408.8 | 49.6 | 4.4 | 420.3 | 0.12 | 40.3 | 23.3 | 1.9 |  |  |
| z96BR014-7 | 128.99 | 73.26 | 3.22 | 0.73 | 135.0 | 32.3 | 0.3 | 142.4 | 0.24 | 8.8 | 15.6 | 1.2 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **96BR016** | **177.04** | **73.55** | **4.49** | **0.75** | **394.3** | **80.3** | **2.7** | **412.8** | **0.20** | **23.2** |  | **1.1** | **14.3** | **2.1** |
| z96BR016-1 | 178.21 | 74.24 | 4.57 | 0.75 | 309.5 | 58.1 | 2.4 | 322.8 | 0.19 | 23.0 | 17.5 | 1.4 |  |  |
| z96BR016-2 | 173.84 | 72.36 | 4.23 | 0.75 | 364.0 | 75.6 | 5.4 | 381.5 | 0.21 | 24.5 | 16.0 | 1.3 |  |  |
| z96BR016-3 | 179.94 | 82.29 | 5.67 | 0.77 | 516.4 | 119.7 | 1.9 | 544.0 | 0.23 | 28.3 | 12.5 | 1.0 |  |  |
| z96BR016-4 | 160.63 | 63.23 | 2.99 | 0.72 | 419.0 | 73.9 | 1.9 | 436.0 | 0.18 | 22.7 | 13.5 | 1.1 |  |  |
| z96BR016-5 | 188.82 | 69.80 | 4.28 | 0.74 | 293.8 | 71.1 | 1.4 | 310.2 | 0.24 | 19.2 | 15.5 | 1.2 |  |  |
| z96BR016-6 | 213.98 | 76.01 | 5.75 | 0.76 | 323.8 | 63.4 | 3.4 | 338.4 | 0.20 | 18.6 | 13.4 | 1.1 |  |  |
| z96BR016-7 | 143.85 | 76.88 | 3.95 | 0.75 | 533.8 | 100.0 | 2.8 | 556.9 | 0.19 | 25.9 | 11.5 | 0.9 |  |  |
| Notes: See text for discussion of analytical procedures and errors; samples in italics were not used in the calculation of mean ages  \*Ft is the alpha ejection correction of Farley et al. (1996).  †St. Dev.—standard deviation.  §Sample with zircon date younger than apatite (U-Th)/He age for sample | | | | | | | | | | | | | | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Supplemental Table 2. Apatite (U-Th)/He data | | | | | | | | | | | | | | |
| Sample | L (um) | W (um) | Mass (mg) | Ft\* | U (ppm) | Th (ppm) | Sm (ppm) | [U]e | Th/U | He (nmol/g) | Corrected Age (Ma) | err. (Ma) | Mean age (Ma) | St.Dev.† (Ma) |
| **11TS02** | **137.80** | **90.82** | **2.35** | **0.67** | **6.2** | **5.3** | **36.4** | **7.6** | **0.98** | **0.6** | **-** | **1.9** | **24.0** | **7.3** |
| 11TS02-1 | 153.97 | 102.90 | 3.28 | 0.71 | 3.3 | 3.1 | 15.6 | 4.1 | 0.95 | 0.3 | 19.4 | 1.5 |  |  |
| 11TS02-2 | 145.83 | 86.87 | 2.22 | 0.66 | 3.6 | 4.7 | 76.9 | 5.1 | 1.28 | 0.6 | 32.3 | 2.6 |  |  |
| 11TS02-3 | 113.61 | 82.70 | 1.56 | 0.64 | 11.8 | 8.2 | 16.7 | 13.7 | 0.70 | 1.0 | 20.2 | 1.6 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **11TS03** | **120.22** | **81.65** | **1.64** | **0.63** | **29.1** | **52.0** | **57.3** | **41.4** | **1.54** | **3.6** | **-** | **2.0** | **25.0** | **1.5** |
| 11TS03-1 | 121.52 | 90.99 | 2.03 | 0.66 | 45.7 | 90.3 | 67.7 | 66.9 | 1.98 | 5.7 | 23.9 | 1.9 |  |  |
| *11TS03-2* | *165.60* | *92.40* | *2.85* | *0.68* | *4.3* | *16.2* | *14.2* | *8.1* | *3.72* | *0.0* | *0.2* | *0.0* |  |  |
| 11TS03-3 | 118.93 | 72.30 | 1.25 | 0.61 | 12.5 | 13.8 | 46.8 | 15.9 | 1.10 | 1.4 | 26.0 | 2.1 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **11TS06** | **101.41** | **77.52** | **1.26** | **0.60** | **6.7** | **12.4** | **43.1** | **9.8** | **2.06** | **1.0** | **-** | **2.2** | **27.6** | **6.2** |
| 11TS06-1 | 117.66 | 87.71 | 1.82 | 0.65 | 2.9 | 5.2 | 13.6 | 4.2 | 1.78 | 0.3 | 19.9 | 1.6 |  |  |
| 11TS06-2 | 96.14 | 77.12 | 1.15 | 0.60 | 17.9 | 29.5 | 111.4 | 25.2 | 1.65 | 2.8 | 33.7 | 2.7 |  |  |
| 11TS06-3 | 83.11 | 71.27 | 0.85 | 0.56 | 3.2 | 12.9 | 33.2 | 6.3 | 4.09 | 0.6 | 31.5 | 2.5 |  |  |
| 11TS06-4 | 108.73 | 73.97 | 1.20 | 0.61 | 2.8 | 2.0 | 14.3 | 3.3 | 0.70 | 0.3 | 25.3 | 2.0 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **11TS07** | **80.45** | **49.86** | **0.39** | **0.45** | **6.3** | **7.3** | **32.2** | **8.2** | **1.91** | **0.3** | **-** | **1.3** | **16.0** | **3.7** |
| 11TS07-1 | 60.68 | 55.33 | 0.37 | 0.47 | 3.3 | 2.3 | 17.8 | 3.9 | 0.69 | 0.2 | 21.1 | 1.7 |  |  |
| 11TS07-2 | 76.24 | 50.36 | 0.39 | 0.44 | 1.5 | 7.6 | 62.8 | 3.5 | 5.23 | 0.1 | 13.1 | 1.0 |  |  |
| 11TS07-3 | 125.22 | 45.10 | 0.51 | 0.46 | 15.6 | 15.9 | 39.2 | 19.5 | 1.01 | 0.8 | 16.4 | 1.3 |  |  |
| 11TS07-4 | 59.68 | 48.63 | 0.28 | 0.43 | 5.0 | 3.4 | 8.9 | 5.8 | 0.69 | 0.2 | 13.4 | 1.1 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **11TS09** | **72.17** | **45.85** | **0.30** | **0.41** | **10.7** | **18.0** | **33.5** | **15.0** | **3.01** | **0.6** | **-** | **1.4** | **18.0** | **2.7** |
| 11TS09-1 | 90.77 | 40.70 | 0.30 | 0.38 | 7.5 | 35.3 | 12.1 | 15.7 | 4.72 | 0.5 | 15.2 | 1.2 |  |  |
| 11TS09-2 | 64.46 | 46.78 | 0.28 | 0.42 | 25.2 | 18.8 | 46.9 | 29.8 | 0.74 | 1.4 | 19.8 | 1.6 |  |  |
| 11TS09-3 | 65.46 | 49.05 | 0.32 | 0.41 | 2.1 | 12.1 | 50.9 | 5.1 | 5.83 | 0.2 | 20.7 | 1.7 |  |  |
| 11TS09-4 | 67.99 | 46.88 | 0.30 | 0.43 | 8.0 | 5.9 | 24.0 | 9.5 | 0.74 | 0.4 | 16.3 | 1.3 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **96BR004** | **119.60** | **84.14** | **1.91** | **0.63** | **3.7** | **3.4** | **40.6** | **4.7** | **1.17** | **0.2** | **-** | **1.1** | **13.8** | **2.2** |
| 96BR004-1 | 85.30 | 70.22 | 0.85 | 0.58 | 5.5 | 3.3 | 45.7 | 6.5 | 0.59 | 0.3 | 12.2 | 1.0 |  |  |
| *96BR004-2* | *113.35* | *93.57* | *2.00* | *0.66* | *1.1* | *2.1* | *45.5* | *1.8* | *1.83* | *1.6* | *219.6* | *17.6* |  |  |
| 96BR004-3 | 153.89 | 98.06 | 2.98 | 0.69 | 2.0 | 3.5 | 35.4 | 2.9 | 1.75 | 0.2 | 15.3 | 1.2 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sample | L (um) | W (um) | Mass (mg) | Ft\* | U (ppm) | Th (ppm) | Sm (ppm) | [U]e | Th/U | He (nmol/g) | Corrected Age (Ma) | err. (Ma) | Mean age (Ma) | St.Dev.† (Ma) |
| **96BR005** | **117.32** | **74.10** | **1.29** | **0.61** | **7.8** | **6.2** | **40.0** | **9.46** | **0.82** | **0.47** | **-** | **0.9** | **14.6** | **0.5** |
| 96BR005-1 | 123.41 | 64.25 | 1.03 | 0.58 | 8.3 | 7.2 | 58.4 | 10.3 | 0.87 | 0.5 | 14.4 | 0.9 |  |  |
| 96BR005-2 | *126.48* | *75.09* | 1.44 | 0.62 | 10.5 | 7.4 | 35.3 | 12.4 | 0.70 | 0.6 | 15.2 | 0.9 |  |  |
| 96BR005-3 | *102.07* | *82.96* | 1.41 | 0.63 | 4.6 | 4.1 | 26.2 | 5.7 | 0.90 | 0.3 | 14.4 | 0.9 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **96BR006** | **82.68** | **37.83** | **0.24** | **0.39** | **15.2** | **2.2** | **99.4** | **16.24** | **0.14** | **0.46** | **-** | **0.8** | **13.4** | **-** |
| *96BR006-1* | *119.46* | *57.54* | *0.80* | *0.56* | *12.9* | *3.3* | *149.0* | *14.4* | *0.25* | *3.2* | *70.7* | *4.2* |  |  |
| *96BR006-2* | *85.14* | *38.71* | *0.26* | *0.38* | *6.3* | *3.4* | *124.0* | *7.7* | *0.54* | *2.6* | *154.4* | *9.3* |  |  |
| 96BR006-3 | 82.68 | 37.83 | 0.24 | 0.39 | 15.2 | 2.2 | 99.4 | 16.2 | 0.14 | 0.5 | 13.4 | 0.8 |  |  |
| *96BR006-4* | *138.13* | *46.08* | *0.59* | *0.48* | *9.9* | *3.6* | *116.1* | *11.3* | *0.37* | *2.2* | *72.0* | *4.3* |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **96BR009** | **110.15** | **89.68** | **1.78** | **0.66** | **16.14** | **5.23** | **22.66** | **17.45** | **0.32** | **0.92** | **-** | **0.8** | **13.7** | **2.2** |
| 96BR009-1 | 103.85 | 92.65 | 1.79 | 0.67 | 6.1 | 2.0 | 20.1 | 6.7 | 0.32 | 0.3 | 12.1 | 0.7 |  |  |
| 96BR009-2 | 116.46 | 86.71 | 1.76 | 0.66 | 26.2 | 8.5 | 25.2 | 28.2 | 0.32 | 1.5 | 15.2 | 0.9 |  |  |
| *96BR009-3* | *92.88* | *70.28* | *0.92* | *0.59* | *7.4* | *2.9* | *53.2* | *8.4* | *0.38* | *0.5* | *18.9* | *1.1* |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **96BR010** | **76.47** | **67.94** | **0.72** | **0.55** | **4.8** | **3.1** | **55.5** | **5.83** | **0.65** | **0.22** | **-** | **0.7** | **12.1** | **0.2** |
| *96BR010-1* | *87.19* | *67.92* | *0.81* | *0.57* | *6.5* | *3.3* | *36.7* | *7.4* | *0.52* | *1.0* | *41.8* | *2.5* |  |  |
| 96BR010-2 | 79.22 | 73.45 | 0.86 | 0.58 | 5.1 | 2.8 | 48.4 | 5.9 | 0.55 | 0.2 | 12.2 | 0.7 |  |  |
| 96BR010-3 | *73.72* | *62.44* | 0.58 | 0.53 | 4.6 | 3.5 | 62.6 | 5.7 | 0.76 | 0.2 | 11.9 | 0.7 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **96BR013** | **94.97** | **82.61** | **1.30** | **0.64** | **7.6** | **1.4** | **9.1** | **7.98** | **0.18** | **0.29** | **-** | **0.6** | **10.5** | **-** |
| 96BR013-1 | 94.97 | 82.61 | 1.30 | 0.64 | 7.6 | 1.4 | 9.1 | 8.0 | 0.18 | 0.3 | 10.5 | 0.6 |  |  |
| *§96BR013-2* | *108.96* | *52.65* | *0.61* | *0.52* | *11.9* | *3.3* | *20.0* | *12.8* | *0.28* | *0.6* | *16.6* | *1.0* |  |  |
| *§96BR013-3* | *133.98* | *62.28* | *1.05* | *0.58* | *8.6* | *2.7* | *12.7* | *9.3* | *0.31* | *0.5* | *18.5* | *1.1* |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **96BR014** | **98.23** | **66.88** | **0.90** | **0.57** | **3.2** | **3.7** | **7.8** | **4.0** | **1.35** | **0.1** | **-** | **0.4** | **7.6** | **2.5** |
| 96BR014-1 | 85.24 | 67.27 | 0.78 | 0.55 | 3.6 | 5.4 | 6.8 | 4.9 | 1.48 | 0.1 | 7.3 | 0.4 |  |  |
| 96BR014-2 | 93.67 | 60.36 | 0.69 | 0.54 | 4.2 | 2.5 | 7.2 | 4.8 | 0.58 | 0.1 | 5.3 | 0.3 |  |  |
| 96BR014-3 | 115.79 | 73.00 | 1.24 | 0.60 | 1.6 | 3.2 | 9.4 | 2.4 | 2.00 | 0.1 | 10.2 | 0.6 |  |  |
| Notes: See text for discussion of analytical procedures and errors; samples in italics were not used in the calculation of mean ages.  \*Ft is alpha ejection correction of Farley et al. (1996).  †St. Dev.—standard deviation.  §Sample excluded due to large number of reextractions during laser degassing | | | | | | | | | | | | | | |