**Supplementary Table 1.** Summary of U/Th dates including measured uranium and thorium concentrations and uranium isotope ratios. Corrected age takes into account initial thorium using an atom ratio of $^{230}Th/^{232}Th = 80\pm80$.

$\delta^{234}Ui$ is initial $\delta^{234}U$ corrected using measured age. Both raw and corrected ages are in yr since 1950.

| Name | Depth | Lab code | U-series Code | $^{238}U$ | ± | $^{232}Th$ | ± | $\delta^{234}Um$ | ± | $^{230}Th/^{238}U$ | ± | Age raw | age corr | ± | $\delta^{234}Ui$ | ± |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | ppb | | ppt | | ‰ | | Activity | | years BP | years BP | | ‰ | |
| TN228-J2-386-1223-0515-04-1000-001 | 1000 | SH_SOI_I05 | SHAM_06 | 3676.8 | 2.2 | 335.2 | 2.7 | 143.47 | 0.68 | 0.1617 | 0.0002 | 16527 | 16485 | 50 | 150.34 | 0.72 |
| TN228-J2-386-1223-0515-04-1000-002 | 1000 | SH_SOI_I03 | SHAM_03 | 4144.9 | 3.6 | 870.8 | 4.2 | 144.28 | 0.73 | 0.1615 | 0.0003 | 16495 | 16398 | 102 | 151.16 | 0.77 |
| TN228-J2-386-1223-0515-04-1000-003 | 1000 | SH_SOI_I01 | SHAM_01 | 4212.4 | 3.9 | 620.2 | 4.5 | 141.70 | 0.70 | 0.1510 | 0.0003 | 15380 | 15312 | 76 | 147.99 | 0.73 |
| TN228-J2-386-1223-0515-04-1000-007 | 1000 | SH_SOI_I04 | SHAM_05 | 3817.6 | 2.8 | 558.2 | 3.6 | 145.74 | 0.62 | 0.1686 | 0.0003 | 17256 | 17189 | 73 | 153.02 | 0.65 |
| TN228-J2-386-1223-0515-04-1000-008 | 1000 | SH_SOI_I02 | SHAM_02 | 3721.4 | 2.4 | 812.6 | 3.3 | 143.68 | 0.60 | 0.1549 | 0.0002 | 15849 | 15683 | 104 | 150.22 | 0.63 |
| TN228-J2-385-1220-2749-01-1240-001 | 1240 | SH_SOI_K10 | SHAN_16 | 3650.3 | 2.4 | 1173.6 | 5.2 | 143.60 | 0.59 | 0.1980 | 0.0002 | 20619 | 20471 | 147 | 152.18 | 0.63 |
| TN228-J2-389-0101-0330-01-1428-007 | 1428 | SH_SOI_I06 | SHAM_07 | 5338.6 | 4.4 | 2460.2 | 3.8 | 146.99 | 0.95 | 0.0896 | 0.0002 | 8799 | 8587 | 216 | 150.62 | 0.98 |
| TN228-J2-389-0101-0330-01-1428-010 | 1428 | SH_SOI_I07 | SHAM_09 | 4198.1 | 3.7 | 3613.1 | 5.6 | 149.68 | 0.61 | 0.1089 | 0.0003 | 10783 | 10387 | 399 | 154.17 | 0.65 |
| TN228-J2-389-0101-0330-01-1428-010 | 1428 | SH_SOI_I07-2 | SHAO_05 | 3729.2 | 12.2 | 852.5 | 6.1 | 146.14 | 0.92 | 0.0923 | 0.0002 | 9151 | 8981 | 107 | 149.93 | 0.94 |
| TN228-J2-393-0112-0730-13-1442-001 | 1442 | SH_SOI_A07 | SHAM_15 | 4166.4 | 4.2 | 693.5 | 5.4 | 139.58 | 0.48 | 0.1732 | 0.0004 | 17881 | 17805 | 88 | 146.81 | 0.50 |
| TN228-J2-393-0112-0730-13-1442-002 | 1442 | SH_SOI_J01 | SHAM_12 | 3828.7 | 2.9 | 1713.8 | 3.9 | 145.57 | 0.70 | 0.1663 | 0.0003 | 17010 | 16804 | 202 | 152.68 | 0.74 |
| TN228-J2-393-0112-0730-13-1442-003 | 1442 | SH_SOI_J02 | SHAM_14 | 4243.8 | 3.0 | 4845.6 | 5.1 | 143.87 | 0.44 | 0.1642 | 0.0002 | 16805 | 16279 | 523 | 150.68 | 0.51 |
| TN228-J2-393-0112-0730-13-1442-003 | 1442 | SH_SOI_J02-2 | SHAO_06 | 4750.9 | 9.04 | 671.2 | 3.4 | 140.50 | 0.71 | 0.1485 | 0.0002 | 15121 | 15056 | 67 | 146.63 | 0.74 |
| TN228-J2-393-0112-0730-13-1442-007 | 1442 | SH_SOI_A02 | SHAM_11 | 3455.3 | 3.6 | 1960.6 | 5.8 | 143.39 | 0.59 | 0.1334 | 0.0004 | 13444 | 13183 | 264 | 148.86 | 0.62 |
| TN228-J2-393-0112-0730-13-1442-008 | 1442 | SH_SOI_A01 | SHAM_10 | 4515.8 | 3.4 | 1251.6 | 3.5 | 142.78 | 0.77 | 0.1229 | 0.0002 | 12333 | 12205 | 131 | 147.82 | 0.80 |
| TN228-J2-387-1226-2330-25-1448-001 | 1448 | SH_SOI_J03 | SHAM_16 | 4246.7 | 2.4 | 606.0 | 2.7 | 144.55 | 0.54 | 0.1201 | 0.0002 | 12017 | 11951 | 67 | 149.54 | 0.56 |
| TN228-J2-387-1226-2330-25-1448-002 | 1448 | SH_SOI_J04 | SHAN_01 | 3612.5 | 2.3 | 1020.1 | 6.1 | 145.55 | 0.56 | 0.1287 | 0.0002 | 12977 | 12782 | 134 | 150.93 | 0.58 |
| TN228-J2-395-0114-0134-10-1454-004 | 1454 | SH_SOI_J05 | SHAN_02 | 4514.9 | 5.5 | 1867.5 | 10.7 | 145.52 | 0.55 | 0.1037 | 0.0003 | 10340 | 10084 | 192 | 149.76 | 0.57 |
| TN228-J2-383-1217-1320-05-1460-005 | 1460 | SH_SOI_E01 | SHAG_01 | 4558.6 | 3.7 | 761.1 | 12.7 | 130.37 | 0.92 | 0.3357 | 0.0002 | 38138 | 38061 | 93 | 145.20 | 1.03 |
| TN228-J2-383-1217-1320-05-1460-007 | 1460 | SH_SOI_E02 | SHAG_02 | 4568.6 | 5.6 | 303.0 | 11.5 | 135.11 | 1.81 | 0.2036 | 0.0002 | 21439 | 21408 | 57 | 143.57 | 1.92 |
| TN228-J2-383-1217-1320-05-1460-008 | 1460 | SH_SOI_E03 | SHAG_03 | 4426.3 | 4.5 | 475.1 | 15.3 | 138.06 | 1.25 | 0.1858 | 0.0002 | 19323 | 19274 | 57 | 145.81 | 1.32 |
| TN228-J2-383-1217-1320-05-1460-009 | 1460 | SH_SOI_E04 | SHAG_05 | 4543.4 | 4.2 | 542.1 | 13.7 | 137.45 | 1.11 | 0.1875 | 0.0002 | 19538 | 19483 | 61 | 145.26 | 1.17 |
| TN228-J2-395-0114-0057-09-1500-001 | 1500 | SH_SOI_E05 | SHAG_06 | 4100.8 | 3.2 | 2812.5 | 14.3 | 129.70 | 0.71 | 0.3113 | 0.0002 | 34906 | 34588 | 322 | 143.04 | 0.79 |
| TN228-J2-395-0114-0057-09-1500-002 | 1500 | SH_SOI_E06 | SHAG_07 | 3576.8 | 2.7 | 535.4 | 12.3 | 136.23 | 0.86 | 0.2206 | 0.0002 | 23408 | 23338 | 75 | 145.55 | 0.92 |
| TN228-J2-395-0114-0057-09-1500-003 | 1500 | SH_SOI_E07 | SHAG_09 | 4237.6 | 3.1 | 1725.4 | 12.6 | 132.47 | 0.80 | 0.2815 | 0.0002 | 30956 | 30767 | 190 | 144.53 | 0.88 |
| TN228-J2-395-0114-0057-09-1500-005 | 1500 | SH_SOI_E08 | SHAF_01 | 3039.6 | 2.1 | 572.8 | 10.6 | 138.54 | 0.61 | 0.3280 | 0.0003 | 36764 | 36678 | 98 | 153.70 | 0.68 |
| TN228-J2-395-0114-0057-09-1500-005 | 1500 | SH_SOI_E08 | SHAG_10 | 3697.6 | 3.5 | 468.6 | 17.3 | 130.30 | 0.86 | 0.3274 | 0.0003 | 37017 | 36958 | 77 | 144.68 | 0.95 |
| TN228-J2-395-0114-0057-09-1500-006 | 1500 | SH_SOI_E09 | SHAG_11 | 5460.3 | 5.0 | 1712.1 | 9.6 | 129.58 | 1.32 | 0.2743 | 0.0002 | 30147 | 30002 | 155 | 141.07 | 1.44 |
| TN228-J2-395-0114-0057-09-1500-008 | 1500 | SH_SOI_E10 | SHAG_12 | 4492.0 | 3.4 | 2011.1 | 14.1 | 132.10 | 0.67 | 0.2392 | 0.0001 | 25733 | 25526 | 209 | 142.01 | 0.72 |
| TN228-J2-395-0114-0057-09-1500-009 | 1500 | SH_SOI_E11 | SHAG_14 | 4112.8 | 3.1 | 1355.1 | 11.8 | 131.46 | 0.94 | 0.3487 | 0.0002 | 39854 | 39702 | 158 | 147.09 | 1.06 |
| TN228-J2-395-0114-0057-09-1500-010 | 1500 | SH_SOI_E12 | SHAG_15 | 4400.5 | 4.0 | 1308.0 | 12.2 | 133.92 | 1.21 | 0.2363 | 0.0002 | 25336 | 25198 | 144 | 143.84 | 1.30 |
| TN228-J2-382-1216-1350-03-1523-002 | 1523 | SH_SOI_F01 | SHAG_16 | 3695.0 | 3.3 | 1046.0 | 14.6 | 145.87 | 1.04 | 0.1336 | 0.0001 | 13436 | 13306 | 130 | 151.49 | 1.08 |
| TN228-J2-382-1216-1350-03-1523-002 | 1523 | SH_SOI_F01-2 | SHAO_01 | 4443.0 | 8.7 | 808.0 | 3.7 | 144.04 | 3.66 | 0.1265 | 0.0001 | 12764 | 12615 | 86 | 149.29 | 0.85 |
| TN228-J2-382-1216-1350-03-1523-003 | 1523 | SH_SOI_F02 | SHAH_01 | 5581.2 | 3.7 | 1955.0 | 8.9 | 136.47 | 0.69 | 0.2076 | 0.0002 | 21932 | 21704 | 164 | 145.13 | 0.73 |
| TN228-J2-382-1216-1350-03-1523-004 | 1523 | SH_SOI_F03 | SHAH_02 | 4548.0 | 3.0 | 1053.3 | 9.7 | 120.54 | 0.54 | 0.5225 | 0.0003 | 67587 | 67480 | 134 | 145.89 | 0.66 |
| TN228-J2-382-1216-1350-03-1523-005 | 1523 | SH_SOI_F04 | SHAH_03 | 5663.8 | 3.6 | 2238.5 | 8.7 | 135.82 | 0.66 | 0.2050 | 0.0002 | 21582 | 21399 | 183 | 144.31 | 0.71 |
| TN228-J2-382-1216-1350-03-1523-005 | 1523 | SH_SOI_F04-2 | SHAO_07 | 6048.8 | 7.9 | 1919.9 | 3.2 | 135.42 | 1.18 | 0.2041 | 0.0002 | 21491 | 21344 | 153 | 143.87 | 1.26 |
| TN228-J2-382-1216-1350-03-1523-006 | 1523 | SH_SOI_F05 | SHAH_05 | 4427.0 | 2.8 | 996.2 | 9.2 | 136.58 | 0.55 | 0.1955 | 0.0002 | 20471 | 20367 | 109 | 144.70 | 0.58 |
| TN228-J2-382-1216-1350-03-1523-007 | 1523 | SH_SOI_F06 | SHAH_06 | 3958.0 | 2.3 | 222.7 | 8.2 | 140.36 | 0.53 | 0.1776 | 0.0002 | 18359 | 18333 | 38 | 147.86 | 0.56 |
| TN228-J2-382-1216-1350-03-1523-008 | 1523 | SH_SOI_F07 | SHAH_07 | 3521.7 | 1.9 | 157.1 | 7.3 | 147.10 | 0.54 | 0.1269 | 0.0002 | 12703 | 12682 | 33 | 152.50 | 0.56 |
| TN228-J2-382-1216-1350-03-1523-010 | 1523 | SH_SOI_F08 | SHAH_09 | 3723.7 | 2.4 | 3025.0 | 10.0 | 139.98 | 0.51 | 0.2443 | 0.0003 | 26144 | 25769 | 378 | 150.58 | 0.57 |
| **TN228-J2-382-1216-1350-03-1523-010** | **1523** | **SH_SOI_F08-2** | **SHAO_09** | **3855.9** | **9.2** | **2732.1** | **7.8** | **141.42** | **0.74** | **0.2406** | **0.0003** | **25650** | **25324** | **333** | **151.94** | **0.81** |
| TN228-J2-383-1217-0852-03-1548-005 | 1548 | SH_SOI_F09 | SHAH_10 | 4656.1 | 2.7 | 483.6 | 8.8 | 130.49 | 0.46 | 0.2799 | 0.0002 | 30819 | 30771 | 58 | 142.37 | 0.50 |
| TN228-J2-383-1217-0725-01-1575-001 | 1575 | SH_SOI_A05 | SHAF_02 | 2214.2 | 1.6 | 394.0 | 11.6 | 127.75 | 0.60 | 0.2540 | 0.0003 | 27661 | 27579 | 92 | 138.13 | 0.65 |
| TN228-J2-383-1217-0725-01-1575-002 | 1575 | SH_SOI_A06 | SHAH_11 | 3594.0 | 3.1 | 8764.4 | 15.4 | 136.97 | 0.55 | 0.3083 | 0.0004 | 34250 | 33122 | 1122 | 150.44 | 0.77 |
| TN228-J2-383-1217-0725-01-1575-003 | 1575 | SH_SOI_A03 | SHAH_12 | 4983.4 | 2.5 | 1353.0 | 7.6 | 129.05 | 0.45 | 0.3033 | 0.0002 | 33889 | 33763 | 128 | 141.99 | 0.50 |
| TN228-J2-383-1217-0725-01-1575-004 | 1575 | SH_SOI_A10 | SHAH_14 | 4122.4 | 2.6 | 1607.5 | 9.6 | 131.56 | 0.45 | 0.3237 | 0.0003 | 36477 | 36297 | 190 | 145.80 | 0.51 |
| TN228-J2-383-1217-0725-01-1575-005 | 1575 | SH_SOI_A08 | SHAH_15 | 5136.6 | 2.9 | 1122.7 | 8.4 | 125.36 | 0.46 | 0.3588 | 0.0002 | 41544 | 41443 | 109 | 140.96 | 0.51 |
| TN228-J2-383-1217-0725-01-1575-006 | 1575 | SH_SOI_A04 | SHAH_16 | 4143.4 | 2.9 | 500.4 | 10.8 | 138.25 | 0.54 | 0.1755 | 0.0003 | 18157 | 18102 | 65 | 145.53 | 0.57 |
| TN228-J2-383-1217-0725-01-1575-007 | 1575 | SH_SOI_F10 | SHAI_01 | 4577.8 | 2.9 | 1602.0 | 13.5 | 131.35 | 0.60 | 0.2850 | 0.0002 | 31449 | 31286 | 166 | 143.52 | 0.66 |
| TN228-J2-383-1217-0725-01-1575-008 | 1575 | SH_SOI_F11 | SHAI_02 | 5415.9 | 3.2 | 1845.6 | 11.1 | 129.38 | 0.72 | 0.2651 | 0.0002 | 29055 | 28832 | 163 | 140.39 | 0.78 |
| TN228-J2-383-1217-0725-01-1575-009 | 1575 | SH_SOI_F12 | SHAI_03 | 5486.5 | 3.4 | 1378.6 | 12.6 | 131.81 | 0.62 | 0.2923 | 0.0002 | 32363 | 32247 | 120 | 144.42 | 0.68 |
| TN228-J2-383-1217-0725-01-1575-010 | 1575 | SH_SOI_F13 | SHAI_05 | 4539.3 | 3.5 | 905.7 | 16.6 | 134.09 | 0.60 | 0.2507 | 0.0002 | 27072 | 26980 | 96 | 144.74 | 0.65 |
| TN228-J2-383-1217-0725-01-1575-012 | 1575 | SH_SOI_G01 | SHAI_06 | 4911.3 | 2.8 | 873.1 | 11.2 | 128.66 | 0.62 | 0.2893 | 0.0002 | 32088 | 32006 | 88 | 140.87 | 0.67 |
| TN228-J2-383-1217-0725-01-1575-013 | 1575 | SH_SOI_G02 | SHAI_07 | 3766.6 | 2.7 | 747.1 | 15.4 | 131.85 | 0.63 | 0.2861 | 0.0002 | 31561 | 31469 | 99 | 144.15 | 0.69 |
| TN228-J2-383-1217-0725-01-1575-014 | 1575 | SH_SOI_G03 | SHAI_09 | 5638.1 | 3.1 | 2073.4 | 10.4 | 130.31 | 0.65 | 0.2947 | 0.0002 | 32724 | 32554 | 171 | 142.89 | 0.72 |
| TN228-J2-383-1217-0725-01-1575-016 | 1575 | SH_SOI_G04 | SHAI_10 | 3897.8 | 2.3 | 895.9 | 11.9 | 133.79 | 0.61 | 0.2781 | 0.0002 | 30491 | 30385 | 108 | 145.82 | 0.67 |

**Supplementary Table 1.** Continued.

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TN228-J2-383-1217-0725-01-1575-017 | 1575 | SH_SOI_G05 | SHAI_11 | 4124.1 | 3.0 | 422.7 | 14.9 | 134.74 | 0.68 | 0.2440 | 0.0002 | 26238 | 26191 | 57 | 145.12 | 0.73 |
| TN228-J2-383-1217-0725-01-1575-018 | 1575 | SH_SOI_G06 | SHAI_12 | 4067.3 | 2.3 | 662.4 | 11.8 | 132.05 | 0.61 | 0.2930 | 0.0002 | 32442 | 32367 | 82 | 144.72 | 0.67 |
| TN228-J2-383-1217-0725-01-1575-020 | 1575 | SH_SOI_G07 | SHAI_14 | 4340.3 | 3.2 | 2307.0 | 16.0 | 132.07 | 0.62 | 0.2801 | 0.0002 | 30800 | 30554 | 244 | 144.01 | 0.68 |
| TN228-J2-383-1217-0725-01-1575-021 | 1575 | SH_SOI_G08 | SHAI_15 | 4870.8 | 3.1 | 3169.9 | 13.9 | 131.55 | 0.60 | 0.3070 | 0.0002 | 34270 | 33969 | 302 | 144.83 | 0.67 |
| TN228-J2-383-1217-0725-01-1575-022 | 1575 | SH_SOI_G09 | SHAI_16 | 4598.6 | 2.8 | 1329.3 | 12.2 | 127.58 | 0.64 | 0.4442 | 0.0002 | 54037 | 53903 | 146 | 148.60 | 0.75 |
| TN228-J2-383-1217-0725-01-1575-023 | 1575 | SH_SOI_G10 | SHAJ_01 | 5628.4 | 4.0 | 2197.2 | 13.8 | 141.39 | 0.52 | 0.1920 | 0.0001 | 19969 | 19789 | 185 | 149.55 | 0.56 |
| TN228-J2-383-1217-0725-01-1575-023 | 1575 | SH_SOI_G10-2 | SHAO_10 | 6284.6 | 8.5 | 1368.0 | 2.6 | 137.25 | 1.29 | 0.1877 | 0.0002 | 19557 | 19457 | 108 | 145.04 | 1.36 |
| TN228-J2-383-1217-0725-01-1575-024 | 1575 | SH_SOI_G11 | SHAJ_02 | 4773.8 | 2.8 | 1067.4 | 10.0 | 135.43 | 0.60 | 0.2932 | 0.0002 | 32411 | 32243 | 105 | 148.38 | 0.66 |
| TN228-J2-383-1217-0725-01-1575-025 | 1575 | SH_SOI_G12 | SHAJ_03 | 4940.0 | 3.5 | 3820.8 | 14.2 | 132.33 | 0.43 | 0.2979 | 0.0002 | 33130 | 32707 | 364 | 145.18 | 0.50 |
| TN228-J2-387-1226-1635-23-1599-001 | 1599 | SH_ACR_01 | SH_ACR_01 | 4443.6 | 4.0 | 1344.8 | 8.0 | 144.21 | 1.47 | 0.1385 | 0.0001 | 13992 | 13852 | 139 | 149.99 | 1.53 |
| TN228-J2-387-1226-1635-23-1599-002 | 1599 | SH_ACR_02 | SH_ACR_02 | 4436.3 | 4.1 | 582.8 | 7.4 | 142.08 | 1.55 | 0.1372 | 0.0001 | 13878 | 13817 | 63 | 147.77 | 1.62 |
| TN228-J2-387-1226-1635-23-1599-003 | 1599 | SH_ACR_03 | SH_ACR_03 | 4392.4 | 4.5 | 698.9 | 9.9 | 142.29 | 1.61 | 0.1355 | 0.0001 | 13693 | 13620 | 79 | 147.90 | 1.68 |
| TN228-J2-387-1226-1635-23-1599-004 | 1599 | SH_ACR_04 | SH_ACR_04 | 4791.9 | 3.8 | 676.5 | 5.7 | 143.29 | 1.35 | 0.1327 | 0.0001 | 13376 | 13311 | 70 | 148.81 | 1.40 |
| TN228-J2-387-1226-1635-23-1599-005 | 1599 | SH_ACR_05 | SH_ACR_05 | 4489.1 | 3.3 | 1267.3 | 6.6 | 143.03 | 1.19 | 0.1479 | 0.0001 | 15028 | 14898 | 132 | 149.21 | 1.24 |
| TN228-J2-387-1226-1635-23-1599-014 | 1599 | SH_SOI_G13 | SHAJ_05 | 3864.5 | 2.3 | 158.9 | 11.1 | 148.34 | 0.55 | 0.1332 | 0.0001 | 13366 | 13347 | 25 | 154.07 | 0.57 |
| TN228-J2-387-1226-1635-23-1599-016 | 1599 | SH_SOI_G14 | SHAJ_06 | 4356.0 | 2.8 | 742.3 | 12.3 | 141.17 | 0.55 | 0.1426 | 0.0001 | 14468 | 14390 | 80 | 147.06 | 0.58 |
| TN228-J2-387-1226-1635-23-1599-020 | 1599 | SH_SOI_G15 | SHAJ_07 | 4612.3 | 3.4 | 2364.9 | 14.5 | 141.73 | 0.53 | 0.1417 | 0.0002 | 14371 | 14134 | 240 | 147.53 | 0.56 |
| TN228-J2-387-1226-1635-23-1599-020 | 1599 | SH_SOI_G15-2 | SHAO_02 | 4895.4 | 7.0 | 813.5 | 2.6 | 143.29 | 0.76 | 0.1385 | 0.0001 | 14064 | 13922 | 79 | 149.07 | 0.79 |
| TN228-J2-387-1226-1507-22-1616-004 | 1616 | SH_SOI_G16 | SHAJ_08 | 4170.4 | 2.2 | 285.6 | 9.1 | 140.22 | 0.54 | 0.1461 | 0.0001 | 14863 | 14831 | 35 | 146.25 | 0.57 |
| TN228-J2-393-0112-0124-06-1657-001 | 1657 | SH_SOI_B02 | SHAJ_10 | 4120.4 | 3.0 | 655.4 | 14.3 | 134.67 | 0.48 | 0.2876 | 0.0002 | 31663 | 31590 | 79 | 147.28 | 0.52 |
| TN228-J2-393-0112-0124-06-1657-003 | 1657 | SH_SOI_G17 | SHAJ_11 | 4798.2 | 3.3 | 1390.9 | 13.7 | 132.57 | 0.43 | 0.2774 | 0.0002 | 30445 | 30311 | 137 | 144.46 | 0.48 |
| TN228-J2-393-0112-0124-06-1657-004 | 1657 | SH_SOI_B03 | SHAJ_12 | 5344.2 | 3.4 | 1270.4 | 12.8 | 126.33 | 0.45 | 0.3218 | 0.0002 | 36436 | 36325 | 115 | 140.01 | 0.50 |
| TN228-J2-393-0112-0124-06-1657-007 | 1657 | SH_SOI_B01 | SHAJ_14 | 4722.7 | 3.3 | 671.5 | 13.3 | 132.33 | 0.55 | 0.2767 | 0.0002 | 30359 | 30294 | 71 | 144.19 | 0.59 |
| TN228-J2-393-0112-0124-06-1657-010 | 1657 | SH_SOI_B04 | SHAJ_15 | 4772.2 | 2.8 | 2137.5 | 11.4 | 130.37 | 0.40 | 0.3076 | 0.0002 | 34397 | 34190 | 208 | 143.62 | 0.45 |
| TN228-J2-393-0112-0124-06-1657-011 | 1657 | SH_SOI_G18 | SHAJ_16 | 4295.4 | 3.6 | 1260.1 | 16.6 | 125.69 | 0.59 | 0.3279 | 0.0002 | 37278 | 37141 | 142 | 139.62 | 0.66 |
| TN228-J2-393-0112-0124-06-1657-013 | 1657 | SH_SOI_G19 | SHAJ_17 | 5689.1 | 3.8 | 1406.6 | 13.3 | 126.53 | 0.46 | 0.2738 | 0.0002 | 30175 | 30060 | 119 | 137.78 | 0.50 |
| TN228-J2-393-0112-0124-06-1657-015 | 1657 | SH_SOI_G20 | SHAK_01 | 4032.2 | 3.1 | 362.6 | 34.8 | 130.53 | 0.81 | 0.2770 | 0.0006 | 30523 | 30417 | 92 | 142.27 | 0.89 |
| TN228-J2-382-1216-1010-01-1680-003 | 1680 | SH_SOI_B09 | SHAF_05 | 3054.5 | 2.4 | 316.1 | 12.7 | 145.79 | 0.62 | 0.1436 | 0.0002 | 14512 | 14464 | 52 | 151.90 | 0.64 |
| TN228-J2-387-1226-1148-20-1680-004 | 1680 | SH_SOI_B07 | SHAK_02 | 4700.2 | 16.4 | 1665.2 | 168.0 | 139.63 | 3.04 | 0.1362 | 0.0025 | 13800 | 13636 | 318 | 145.15 | 3.17 |
| TN228-J2-387-1226-1148-20-1680-005 | 1680 | SH_SOI_H01 | SHAK_03 | 4994.9 | 3.4 | 846.2 | 30.4 | 147.00 | 0.79 | 0.1337 | 0.0004 | 13496 | 13354 | 90 | 152.68 | 0.82 |
| TN228-J2-387-1226-1148-20-1680-009 | 1680 | SH_SOI_C03 | SHAK_06 | 3698.8 | 2.9 | 266.9 | 34.2 | 145.23 | 0.89 | 0.1353 | 0.0007 | 13626 | 13593 | 78 | 150.94 | 0.93 |
| TN228-J2-387-1226-1148-20-1680-013 | 1680 | SH_SOI_H02 | SHAK_07 | 4195.0 | 2.8 | 344.6 | 28.9 | 143.43 | 0.76 | 0.1421 | 0.0005 | 14385 | 14347 | 66 | 149.39 | 0.79 |
| TN228-J2-387-1226-1148-20-1680-017 | 1680 | SH_SOI_H03 | SHAK_08 | 3333.0 | 2.5 | 288.5 | 30.6 | 147.19 | 0.88 | 0.1447 | 0.0006 | 14617 | 14578 | 80 | 153.40 | 0.92 |
| TN228-J2-387-1226-1148-20-1680-08 | 1680 | SH_SOI_C02 | SHAK_05 | 5670.3 | 4.0 | 855.7 | 32.4 | 140.82 | 0.74 | 0.1403 | 0.0004 | 14231 | 14161 | 82 | 146.59 | 0.77 |
| TN228-J2-382-1216-1010-01-1689-001 | 1689 | SH_SOI_H04 | SHAK_10 | 4890.9 | 3.1 | 940.9 | 30.5 | 119.13 | 0.63 | 0.4463 | 0.0005 | 54924 | 54834 | 128 | 139.12 | 0.74 |
| TN228-J2-382-1216-1010-01-1689-002 | 1689 | SH_SOI_H05 | SHAK_11 | 4189.8 | 3.0 | 187.9 | 31.5 | 142.92 | 0.80 | 0.1635 | 0.0005 | 16743 | 16722 | 64 | 149.86 | 0.84 |
| TN228-J2-382-1216-1010-01-1689-004 | 1689 | SH_SOI_H06 | SHAK_12 | 3867.6 | 3.1 | 691.4 | 35.2 | 141.14 | 0.87 | 0.1688 | 0.0006 | 17361 | 17279 | 109 | 148.23 | 0.92 |
| TN228-J2-382-1216-1010-01-1689-007 | 1689 | SH_SOI_H07 | SHAK_14 | 5018.7 | 3.3 | 1595.6 | 31.0 | 125.33 | 0.67 | 0.3070 | 0.0005 | 34509 | 34362 | 163 | 138.13 | 0.74 |
| TN228-J2-382-1216-1010-01-1689-008 | 1689 | SH_SOI_H08 | SHAK_15 | 4997.6 | 3.0 | 1560.2 | 28.4 | 125.60 | 0.60 | 0.3663 | 0.0004 | 42587 | 42443 | 158 | 141.64 | 0.68 |
| TN228-J2-382-1216-1010-01-1689-009 | 1689 | SH_SOI_H09 | SHAK_16 | 4593.2 | 3.1 | 1502.5 | 29.6 | 138.45 | 0.77 | 0.1720 | 0.0005 | 17759 | 17608 | 164 | 145.54 | 0.81 |
| TN228-J2-382-1216-1010-01-1689-010 | 1689 | SH_SOI_H10 | SHAK_17 | 4494.9 | 2.4 | 1279.9 | 24.8 | 130.97 | 0.59 | 0.3075 | 0.0004 | 34422 | 34225 | 145 | 144.29 | 0.65 |
| TN228-J2-382-1216-1010-01-1689-010 | 1689 | SH_SOI_H10-2 | SHAO_03 | 5043.0 | 7.3 | 705.1 | 2.4 | 127.83 | 1.25 | 0.3023 | 0.0003 | 33860 | 33730 | 91 | 140.64 | 1.37 |
| TN228-J2-387-1226-0615-017-01748-01 | 1748 | SH_SOI_C05 | SHAN_10 | 4229.1 | 3.4 | 632.2 | 6.8 | 138.83 | 0.50 | 0.1688 | 0.0002 | 17397 | 17328 | 74 | 145.83 | 0.53 |
| TN228-J2-387-1226-0615-017-1748-004 | 1748 | SH_SOI_C12 | SHAN_11 | 3473.9 | 4.3 | 308.0 | 10.7 | 140.48 | 0.51 | 0.1748 | 0.0004 | 18042 | 18001 | 65 | 147.84 | 0.53 |
| TN228-J2-387-1226-0615-017-1748-005 | 1748 | SH_SOI_C10 | SHAN_17 | 4187.2 | 3.6 | 473.4 | 7.0 | 142.27 | 0.63 | 0.1381 | 0.0002 | 13969 | 13916 | 59 | 148.01 | 0.66 |
| TN228-J2-387-1226-0615-017-1748-007 | 1748 | SH_SOI_C08 | SHAN_03 | 3991.4 | 4.6 | 258.8 | 9.9 | 142.64 | 0.54 | 0.1414 | 0.0003 | 14318 | 14289 | 48 | 148.55 | 0.57 |
| TN228-J2-387-1226-0615-17-1748-009 | 1748 | SH_SOI_C09 | SHAF_09 | 2713.6 | 1.6 | 290.4 | 9.2 | 142.13 | 0.56 | 0.1468 | 0.00018 | 14918 | 14869 | 53 | 148.25 | 0.58 |
| TN228-J2-387-1226-0615-17-1748-009 | 1748 | SH_SOI_C09-2 | SHAO_11 | 5054.7 | 22.4 | 598.1 | 7.9 | 143.65 | 0.94 | 0.1498 | 0.0002 | 15227 | 15172 | 62 | 149.97 | 0.98 |
| TN228-J2-387-1226-0615-17-1748-014 | 1748 | SH_SOI_K05 | SHAN_07 | 5474.6 | 4.6 | 710.8 | 6.7 | 139.45 | 0.67 | 0.1554 | 0.0002 | 15897 | 15837 | 65 | 145.86 | 0.70 |
| TN228-J2-387-1226-0615-17-1748-015 | 1748 | SH_SOI_K03 | SHAN_05 | 4341.5 | 4.2 | 639.7 | 8.2 | 140.93 | 0.57 | 0.1593 | 0.0003 | 16306 | 16238 | 76 | 147.58 | 0.60 |
| TN228-J2-387-1226-0615-17-1748-016 | 1748 | SH_SOI_K06 | SHAN_08 | 4260.4 | 3.2 | 345.8 | 6.3 | 138.91 | 0.50 | 0.1662 | 0.0002 | 17103 | 17065 | 46 | 145.80 | 0.52 |
| TN228-J2-387-1226-0615-17-1748-020 | 1748 | SH_SOI_K04 | SHAN_06 | 3996.7 | 3.4 | 560.5 | 7.0 | 139.91 | 0.65 | 0.1581 | 0.0003 | 16194 | 16129 | 71 | 146.46 | 0.68 |
| TN 228-J2-387-1225-1253-11-1898-001 | 1898 | SH_SOI_K08 | SHAN_14 | 5011.2 | 3.5 | 401.1 | 4.8 | 142.60 | 0.86 | 0.1407 | 0.0002 | 14247 | 14210 | 43 | 148.47 | 0.90 |
| TN 228-J2-387-1225-1253-11-1898-002 | 1898 | SH_SOI_K07 | SHAN_12 | 3511.8 | 3.2 | 490.1 | 7.5 | 144.34 | 0.63 | 0.1382 | 0.0003 | 13955 | 13891 | 72 | 150.15 | 0.66 |
| TN228-J2-395-0113-1830-5-1947-003 | 1947 | SH_SOI_K09 | SHAN_15 | 4878.4 | 3.3 | 348.1 | 5.2 | 143.04 | 0.63 | 0.1314 | 0.0002 | 13232 | 13199 | 39 | 148.51 | 0.66 |

** Light grey samples are flagged for high 232Th ( > 2000 ppt)

** Dark grey samples are flagged for non-marine d234U (where marine is defined as 147±7 pre-17 kyr and 141.7±7.8 post-17 kyr by IntCal09)

** Bold samples miss both criteria