

APPENDIX 4

SHRIMP U-Pb analytical data for detrital zircon grains from EEC conglomerate, Kaplonosy borehole, depth 1809 m

| Spot | ²⁰⁶ Pb/ ²³⁸ U | ²⁰⁷ Pb/ ²³⁵ Pb | ²⁰⁶ Pb/ ²³⁸ U | ²⁰⁷ Pb/ ²³⁵ Pb | ²⁰⁶ Pb/ ²³⁸ U | ²⁰⁷ Pb/ ²³⁵ Pb | % ²⁰⁶ Pb | (1) ²⁰⁶ Pb/ ²³⁸ U | (2) ²⁰⁶ Pb/ ²³⁸ U | (3) ²⁰⁶ Pb/ ²³⁸ U | (1) ²⁰⁷ Pb/ ²³⁵ Pb | % Discordant | (1) ²⁰⁶ Pb/ ²³⁸ U | (1) ²⁰⁷ Pb/ ²³⁵ Pb | (1) ²⁰⁶ Pb/ ²³⁸ U | (1) ²⁰⁷ Pb/ ²³⁵ Pb | err corr | | |
|-------------|-------------------------------------|--------------------------------------|-------------------------------------|--------------------------------------|-------------------------------------|--------------------------------------|------------------------|--|--|--|---|-----------------|--|---|--|---|-------------|-----|------|
| Ka1809.1.1 | -2.7E-4 | 36 | 0.0934 | 1.2 | 0.334 | 1.1 | | 1399 | 438 | 1362 | 411 | +11 | 4.080 | 2.8 | 3.28 | 3.3 | 0.2451 | 2.8 | 0.85 |
| Ka1809.44.1 | -3.7E-4 | 37 | 0.0967 | 1.4 | 0.278 | 1.0 | | 1417 | 430 | 1397 | 432 | +15 | 4.009 | 2.4 | 3.41 | 3.3 | 0.2498 | 2.4 | 0.72 |
| Ka1809.2.1 | -2.4E-4 | 90 | 0.0936 | 0.8 | 0.361 | 5.1 | 0.04 | 1413 | 440 | 1413 | 437 | +4 | 4.064 | 2.7 | 3.13 | 3.2 | 0.2461 | 2.7 | 0.61 |
| Ka1809.24.1 | -4.7E-5 | 56 | 0.0945 | 0.8 | 0.246 | 0.8 | | 1434 | 429 | 1400 | 432 | +7 | 4.013 | 2.3 | 3.27 | 2.4 | 0.2492 | 2.3 | 0.94 |
| Ka1809.18.1 | -4.8E-4 | 30 | 0.0940 | 1.4 | 0.292 | 1.3 | | 1438 | 432 | 1387 | 436 | +14 | 4.001 | 2.5 | 3.47 | 3.4 | 0.2499 | 2.5 | 0.73 |
| Ka1809.11.1 | 5.8E-6 | 300 | 0.0932 | 2.6 | 0.306 | 1.4 | 0.01 | 1440 | 431 | 1435 | 434 | +4 | 3.996 | 2.4 | 3.21 | 3.5 | 0.2502 | 2.4 | 0.68 |
| Ka1809.47.2 | -7.9E-5 | 46 | 0.0925 | 2.0 | 0.269 | 4.1 | | 1435 | 438 | 1412 | 441 | +8 | 3.995 | 2.7 | 3.23 | 3.4 | 0.2503 | 2.7 | 0.81 |
| Ka1809.42.1 | 4.8E-4 | 32 | 0.0944 | 1.5 | 0.271 | 1.5 | 0.88 | 1442 | 452 | 1418 | 459 | -5 | 3.990 | 4.0 | 3.03 | 5.0 | 0.2506 | 4.0 | 0.80 |
| Ka1809.44.2 | 1.3E-4 | 55 | 0.0943 | 1.2 | 0.315 | 1.2 | 0.23 | 1445 | 430 | 1442 | 433 | +3 | 3.980 | 2.3 | 3.21 | 2.8 | 0.2512 | 2.3 | 0.92 |
| Ka1809.13.1 | -2.0E-4 | 41 | 0.0933 | 1.2 | 0.281 | 1.2 | | 1446 | 433 | 1437 | 436 | +7 | 3.976 | 2.6 | 3.33 | 3.0 | 0.2515 | 2.6 | 0.84 |
| Ka1809.23.2 | 2.5E-4 | 69 | 0.0899 | 2.4 | 0.549 | 1.7 | 0.50 | 1448 | 435 | 1457 | 438 | -8 | 3.970 | 2.7 | 3.00 | 4.6 | 0.2519 | 2.7 | 0.59 |
| Ka1809.3.1 | -7.6E-5 | 67 | 0.0936 | 1.2 | 0.314 | 1.1 | | 1454 | 430 | 1448 | 433 | +5 | 3.951 | 2.3 | 3.30 | 2.7 | 0.2531 | 2.3 | 0.86 |
| Ka1809.7.1 | 2.6E-4 | 40 | 0.0952 | 1.3 | 0.295 | 1.3 | 0.48 | 1454 | 436 | 1454 | 440 | +5 | 3.951 | 2.8 | 3.19 | 3.5 | 0.2531 | 2.8 | 0.80 |
| Ka1809.10.1 | 1.9E-4 | 39 | 0.0916 | 1.1 | 0.285 | 1.1 | 0.34 | 1458 | 431 | 1463 | 433 | -4 | 3.939 | 2.3 | 3.12 | 2.8 | 0.2539 | 2.3 | 0.82 |
| Ka1809.6.1 | -3.6E-4 | 40 | 0.0919 | 1.6 | 0.322 | 1.5 | | 1461 | 433 | 1451 | 435 | +7 | 3.933 | 2.5 | 3.39 | 3.6 | 0.2543 | 2.5 | 0.89 |
| Ka1809.9.1 | -1.3E-4 | 52 | 0.0941 | 1.2 | 0.285 | 1.2 | | 1454 | 433 | 1416 | 435 | +6 | 3.929 | 2.3 | 3.37 | 2.8 | 0.2545 | 2.3 | 0.84 |
| Ka1809.5.1 | 2.3E-4 | 46 | 0.0935 | 1.5 | 0.381 | 1.3 | 0.43 | 1462 | 432 | 1465 | 435 | -2 | 3.927 | 2.4 | 3.17 | 3.3 | 0.2546 | 2.4 | 0.73 |
| Ka1809.22.1 | -2.7E-5 | 106 | 0.0937 | 1.1 | 0.276 | 1.1 | | 1465 | 434 | 1464 | 437 | +3 | 3.919 | 2.6 | 3.31 | 2.9 | 0.2552 | 2.6 | 0.91 |
| Ka1809.47.1 | -1.5E-4 | 48 | 0.0946 | 1.2 | 0.316 | 1.2 | | 1467 | 431 | 1458 | 433 | +7 | 3.913 | 2.3 | 3.41 | 2.8 | 0.2556 | 2.3 | 0.83 |
| Ka1809.37.2 | -2.0E-4 | 37 | 0.0947 | 1.1 | 0.317 | 1.7 | | 1467 | 438 | 1457 | 441 | +5 | 3.912 | 2.9 | 3.43 | 3.3 | 0.2558 | 2.9 | 0.90 |
| Ka1809.25.2 | -4.0E-4 | 31 | 0.0937 | 1.3 | 0.380 | 1.1 | | 1468 | 441 | 1455 | 444 | +10 | 3.909 | 3.1 | 3.60 | 3.8 | 0.2558 | 3.1 | 0.83 |
| Ka1809.10.2 | -2.4E-4 | 35 | 0.0925 | 1.2 | 0.355 | 1.0 | | 1470 | 441 | 1467 | 444 | +3 | 3.903 | 3.1 | 3.55 | 3.5 | 0.2562 | 3.1 | 0.87 |
| Ka1809.37.1 | -3.1E-4 | 37 | 0.0966 | 1.3 | 0.277 | 1.4 | | 1478 | 447 | 1462 | 451 | +11 | 3.882 | 3.6 | 3.59 | 4.1 | 0.2576 | 3.6 | 0.87 |
| Ka1809.3.2 | -1.1E-4 | 51 | 0.0943 | 1.1 | 0.284 | 1.1 | | 1479 | 431 | 1472 | 433 | +5 | 3.879 | 2.3 | 3.41 | 2.7 | 0.2578 | 2.3 | 0.86 |
| Ka1809.16.1 | 3.8E-4 | 49 | 0.0925 | 2.0 | 0.415 | 1.7 | 0.69 | 1480 | 436 | 1433 | 444 | -9 | 3.875 | 2.7 | 3.10 | 4.6 | 0.2581 | 2.7 | 0.59 |
| Ka1809.31.1 | -2.9E-4 | 33 | 0.0952 | 1.9 | 0.539 | 0.9 | | 1481 | 432 | 1481 | 434 | +9 | 3.873 | 2.4 | 3.53 | 3.3 | 0.2582 | 2.4 | 0.73 |
| Ka1809.32.1 | 2.4E-4 | 39 | 0.0944 | 1.2 | 0.321 | 1.2 | 0.44 | 1482 | 438 | 1485 | 441 | -3 | 3.869 | 2.9 | 3.24 | 3.5 | 0.2585 | 2.9 | 0.83 |
| Ka1809.28.1 | 5.3E-4 | 40 | 0.0946 | 1.4 | 0.334 | 1.3 | 0.98 | 1482 | 438 | 1493 | 442 | -10 | 3.869 | 2.9 | 3.07 | 4.2 | 0.2585 | 2.9 | 0.88 |
| Ka1809.4.1 | -1.3E-4 | 55 | 0.0937 | 1.3 | 0.335 | 1.2 | | 1483 | 431 | 1478 | 434 | +4 | 3.865 | 2.4 | 3.41 | 2.8 | 0.2587 | 2.4 | 0.82 |
| Ka1809.25.1 | -1.0E-4 | 44 | 0.0940 | 0.9 | 0.278 | 0.9 | | 1485 | 441 | 1441 | 445 | +4 | 3.861 | 3.1 | 3.41 | 3.3 | 0.2590 | 3.1 | 0.94 |
| Ka1809.43.1 | -6.0E-5 | 73 | 0.0952 | 2.1 | 0.286 | 2.6 | | 1487 | 431 | 1481 | 434 | +5 | 3.856 | 2.3 | 3.44 | 3.2 | 0.2594 | 2.3 | 0.74 |
| Ka1809.17.1 | -3.7E-4 | 28 | 0.0931 | 1.1 | 0.283 | 1.1 | | 1489 | 435 | 1437 | 438 | +7 | 3.850 | 2.6 | 3.52 | 3.2 | 0.2597 | 2.6 | 0.82 |
| Ka1809.49.1 | 3.7E-4 | 25 | 0.0943 | 1.0 | 0.641 | 0.7 | 0.67 | 1494 | 433 | 1502 | 436 | -7 | 3.833 | 2.4 | 3.21 | 3.0 | 0.2609 | 2.4 | 0.81 |
| Ka1809.23.1 | -8.0E-4 | 36 | 0.0883 | 2.2 | 0.794 | 1.3 | | 1496 | 436 | 1484 | 438 | +8 | 3.829 | 2.7 | 3.57 | 5.0 | 0.2611 | 2.7 | 0.54 |
| Ka1809.4.2 | -0.09E4 | 30 | 0.0924 | 1.0 | 0.619 | 0.9 | | 1497 | 442 | 1492 | 438 | +6 | 3.827 | 2.6 | 3.46 | 3.0 | 0.2613 | 2.6 | 0.87 |
| Ka1809.17.2 | 1.7E-4 | 40 | 0.0946 | 1.1 | 0.244 | 1.2 | 0.31 | 1499 | 441 | 1501 | 445 | -2 | 3.821 | 3.1 | 3.33 | 3.4 | 0.2617 | 3.1 | 0.89 |
| Ka1809.36.1 | 1.3E-4 | 50 | 0.0940 | 2.0 | 0.332 | 1.1 | | 1499 | 437 | 1501 | 441 | -2 | 3.821 | 2.8 | 3.33 | 3.6 | 0.2617 | 2.8 | 0.78 |
| Ka1809.20.1 | 3.4E-4 | 47 | 0.0934 | 1.8 | 0.425 | 2.9 | 0.62 | 1500 | 434 | 1510 | 437 | -8 | 3.816 | 2.5 | 3.20 | 4.1 | 0.2621 | 2.5 | 0.62 |
| Ka1809.33.1 | -3.8E-4 | 32 | 0.0935 | 1.3 | 0.291 | 2.2 | | 1501 | 438 | 1444 | 443 | +7 | 3.814 | 2.8 | 3.57 | 3.5 | 0.2622 | 2.8 | 0.80 |
| Ka1809.30.1 | -6.1E-4 | 33 | 0.0925 | 1.6 | 0.256 | 1.6 | | 1504 | 433 | 1493 | 435 | +8 | 3.807 | 2.4 | 3.60 | 3.6 | 0.2627 | 2.4 | 0.67 |
| Ka1809.39.1 | -1.0E-4 | 57 | 0.0931 | 1.2 | 0.441 | 1.0 | | 1509 | 439 | 1508 | 443 | +1 | 3.792 | 2.9 | 3.44 | 3.3 | 0.2637 | 2.9 | 0.89 |
| Ka1809.21.1 | -4.5E-4 | 24 | 0.0951 | 1.9 | 0.357 | 0.9 | | 1513 | 430 | 1499 | 440 | +9 | 3.791 | 3.1 | 3.70 | 3.1 | 0.2645 | 3.1 | 0.86 |
| Ka1809.52.1 | -4.5E-6 | 212 | 0.0939 | 1.0 | 0.312 | 1.0 | | 1514 | 433 | 1514 | 434 | -1 | 3.778 | 2.3 | 3.43 | 2.5 | 0.2647 | 2.3 | 0.91 |
| Ka1809.35.1 | -1.9E-4 | 50 | 0.0949 | 1.4 | 0.377 | 1.2 | | 1517 | 433 | 1453 | 439 | +4 | 3.768 | 2.4 | 3.57 | 3.1 | 0.2654 | 2.4 | 0.79 |
| Ka1809.45.1 | 3.2E-4 | 60 | 0.0923 | 2.3 | 0.389 | 2.0 | 0.59 | 1527 | 446 | 1542 | 451 | -12 | 3.740 | 3.4 | 3.24 | 5.2 | 0.2674 | 3.4 | 0.65 |
| Ka1809.51.1 | 6.8E-5 | 39 | 0.0960 | 0.6 | 0.424 | 1.2 | 0.12 | 1530 | 437 | 1469 | 446 | +5 | 3.734 | 2.8 | 3.51 | 2.9 | 0.2678 | 2.8 | 0.96 |
| Ka1809.27.1 | -8.8E-5 | 122 | 0.0903 | 2.5 | 0.410 | 2.0 | | 1530 | 437 | 1537 | 441 | -6 | 3.733 | 2.7 | 3.30 | 4.0 | 0.2679 | 2.7 | 0.68 |
| Ka1809.49.2 | -2.5E-4 | 51 | 0.0913 | 1.3 | 0.686 | 0.9 | 0.68 | 1532 | 433 | 1543 | 436 | -10 | 3.729 | 2.4 | 3.30 | 3.0 | 0.2682 | 2.4 | 0.80 |
| Ka1809.41.1 | 7.9E-5 | 61 | 0.0938 | 1.1 | 0.298 | 1.1 | 0.14 | 1539 | 435 | 1534 | 432 | +4 | 3.723 | 2.7 | 3.43 | 2.7 | 0.2686 | 2.7 | 0.86 |
| Ka1809.48.1 | 2.7E-4 | 38 | 0.0925 | 1.3 | 0.389 | 1.9 | 0.50 | 1542 | 437 | 1552 | 447 | -11 | 3.710 | 3.1 | 3.29 | 3.7 | 0.2695 | 3.1 | 0.82 |
| Ka1809.29.1 | -1.2E-4 | 60 | 0.0947 | 1.3 | 0.355 | 1.2 | | 1543 | 433 | 1542 | 436 | +1 | 3.698 | 2.4 | 3.59 | 2.9 | 0.2704 | 2.4 | 0.82 |
| Ka1809.51.2 | -3.2E-4 | 27 | 0.0922 | 1.0 | 0.361 | 0.9 | | 1550 | 435 | 1549 | 438 | +1 | 3.679 | 2.5 | 3.62 | 3.0 | 0.2718 | 2.5 | 0.85 |
| Ka1809.46.1 | -1.8E-3 | 26 | 0.0938 | 2.4 | 0.449 | 1.8 | | 1563 | 439 | 1519 | 440 | +21 | 3.644 | 2.8 | 4.48 | 6.2 | 0.2744 | 2.8 | 0.46 |
| Ka1809.38.1 | 2.2E-5 | 150 | 0.0969 | 1.4 | 0.359 | 2.3 | 0.04 | 1565 | 434 | 1565 | 438 | -0 | 3.641 | 2.4 | 3.66 | 2.9 | 0.2747 | 2.4 | 0.85 |
| Ka1809.53.1 | 6.5E-5 | 49 | 0.1113 | 0.8 | 0.131 | 1.2 | 0.12 | 1569 | 440 | 1560 | 438 | +13 | 3.596 | 2.6 | 4.27 | 2.7 | 0.2805 | 2.6 | 0.95 |
| Ka1809.50.1 | -4.1E-4 | 33 | 0.0951 | 1.4 | 0.404 | 1.2 | | 1640 | 440 | 1655 | 445 | -2 | 3.453 | 2.8 | 4.02 | 3.6 | 0.2896 | 2.8 | 0.78 |
| Ka1809.14.2 | -5.0E-3 | 22 | 0.0937 | 5.8 | 0.532 | 2.5 | | 1652 | 453 | 1532 | 448 | +36 | 3.424 | 3.6 | 6.32 | 9.6 | 0.2921 | 3.6 | 0.38 |
| Ka1809.26.1 | 1.4E-4 | 33 | 0.1095 | 0.7 | 0.739 | 3.3 | 0.26 | 1784 | 438 | 1772 | 444 | -2 | 3.137 | 2.4 | 4.73 | 2.6 | 0.3188 | 2.4 | 0.93 |
| Ka1809.40.1 | 1.1E-4 | 42 | 0.1096 | 0.8 | 0.177 | 1.1 | | 1810 | 436 | 1816 | 442 | -1 | 3.086 | 2.3 | 4.83 | 2.5 | 0.3241 | 2.3 | 0.91 |
| Ka1809.19.1 | 4.3E-4 | 25 | 0.1157 | 1.0 | 0.131 | 1.6 | 0.78 | 1819 | 455 | 1822 | 463 | -1 | 3.068 | 3.5 | 4.94 | 3.9 | 0.3260 | 3.5 | 0.90 |
| Ka1809.12.1 | 4.1E-5 | 77 | 0.1209 | 0.9 | 0.135 | 1.5 | 0.08 | 1822 | 451 | 1821 | 459 | +4 | 2.931 | 3.1 | 5.66 | 3.3 | 0.3412 | 3.1 | 0.95 |
| Ka1809.10.1 | -3.7E-4 | 33 | 0.095 | 1.3 | 0.372 | 1.2 | | 1466 | 458 | 1452 | 462 | +11 | 3.9 | 4.4 | 3.5 | 4.9 | 0.255 | 4.4 | 0.9 |
| Ka1809.18.2 | 2.9E-4 | 45 | 0.096 | 1.5 | 0.280 | 1.6 | | 1477 | 461 | 1451 | 469 | -1 | 3.9 | 4.6 | 3.3 | 5.3 | 0.257 | 4.6 | 0.9 |
| Ka1809.15.1 | 3.4E-4 | 30 | 0.096 | 1.2 | 0.382 | 1.0 | 0.54 | 1483 | 456 | 1433 | 466 | -2 | 3.9 | 4.2 | 3.3 | 4.7 | 0.259 | 4.2 | 0.9 |
| Ka1809.6.1 | -1.0E-4</ | | | | | | | | | | | | | | | | | | |