

UWA DATA LOG: SHRIMP ZIRCON U-Pb

| | | | |
|---------|---------------|---------------|-------------|
| Date | UWA Mount No. | Whose sample? | Operator(s) |
| 15/6/99 | 99-12 | UFR | IF+MD |

Indicate any change to the following:

| | | | | | | | | | | |
|---------------------|--------------------|--------|---------|--------|--------|--------|-------|-------|-----|-----|
| | 196 | 204 | bkg | 206 | 207 | 208 | 238 | 248 | 254 | 270 |
| Precambrian | Count time (secs): | 2 - 10 | 10 - 10 | 10/20* | 30/10* | 10 - 5 | 5 - 5 | 2 - 2 | | |
| Phanerozoic* | Delay time (secs): | 8 - 3 | 1 - 1 | 2 | 1 | 1 - 3 | 2 - 2 | 2 - 2 | | |

expected 196-204 = 8.170 amu expected 204-bkg = 0.045 amu Dead-time = 32 nanosecs
 actual 196-204 = 8.170 actual 204-bkg = 0.043 expected resolution = >4200
 actual 206-207 = 1.000 actual 206-208 = 1.000 actual resolution = 5451

Primary = 1.2 nA PESABM = 24 pA actual Primary : PESABM (≈ 50:1) = 50
 Raster time (mins): 3 Raster aperture (microns): 100 No. of scans: 6

Comments: 70 μm aperture; very clean spot.
Sensitivity = 20

Standard : ppm c. 7 standards. removed those with incorrect offsets relating to instability on 196 (196 errors).

| Rejection over-ride | Sample/Std ID | Time - printout | UO/U Kcps | 196 Kcps | 206 cps | U ppm | 204Pb ppb | f206 % | Age ±1σ (Ma) 206/238 | 207/206 | Offsets OK? |
|---------------------|-------------------|-----------------|-----------|----------|---------|-------|-----------|--------|----------------------|-----------|--------------------|
| | C2.3-1 | 14:47 | 6.40 | 9.4 | 870 | - | 0.3 | .02 | - | 600 | ✓ |
| | C2.3-2 | 15:06 | 6.42 | 9.4 | 874 | 219 | 0.3 | .03 | 571 | 635 | ✓ |
| | C.2-2 | 15:30 | 6.52 | 9.1 | 211 | 443 | -ve | - | 70 | - | ✓ |
| | C.2-3 | 15:52 | 6.58 | 9.1 | 231 | 435 | 0.5 | .12 | 82 | - | ✓ |
| | C.2-4 | 16:25 | 6.02 | 9.7 | 228 | 290 | -ve | - | 138 ± 1 | - | ✓ |
| | C2.3-3 | 16:48 | 6.09 | 10.1 | 845 | 232 | -ve | - | 574 ± 1 | 593 ± 28 | ✓ |
| | C.2-5 | 17:10 | 6.18 | 9.5 | 215 | 430 | 0.6 | .2 | 82 ± 1 | - | ✓ |
| | C.4-2 | 17:34 | 6.29 | 9.9 | 52 | 143 | 0.6 | .67 | 55 ± 1 | - | ✓ |
| | C.5-3 | 17:59 | 6.69 | 9.3 | 282 | 697 | .80 | .25 | 54 ± 1 | - | ✓ |
| | C.6-2 | | | | | | | | | | |
| | C2.3-4 | 18:08 | 5.30 | 13.05 | 55 | 202 | -ve | - | 56 ± 1 | 117 ± 132 | x (-0.02 / 206/78) |
| | C2.3-4 | 18:55 | 6.03 | 9.7 | 765 | 235 | -ve | .02 | 55 ± 1 | 607 ± 31 | x (-0.04 / 206/78) |

1 min raster
1 min raster

reverted to 2 ppm on table

Mount/sample No: 99-12

Date: 16-6-99

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| Rejection over-ride | Sample/ Std ID | Time - printout | UO/U | 196 Kcps | 206 cps | U ppm | 204Pb ppb | f206 % | Age ±1σ (Ma) 206/238 | 207/206 | Offsets OK? |
|---------------------|----------------|-----------------|------|----------|---------|-------|-----------|--------|----------------------|---------|-------------|
|---------------------|----------------|-----------------|------|----------|---------|-------|-----------|--------|----------------------|---------|-------------|

| | | | | | | | | | | | |
|----------------------------|--------|-------|------|-------|-------------|-----|-----|------|---------|-----------|-------------------------------------|
| C2-3-5 | C2-3-5 | 20.36 | 5.97 | 11.60 | 780 | 209 | 1.1 | 0.02 | 547 ± 1 | 530 ± 32 | ✓ |
| * | C6-3 | 21.17 | 6.09 | 17.0 | 423 | 287 | 1.1 | 0.3 | 142 ± 1 | 116 ± 92 | ✓ |
| | C6-4 | 21.40 | 6.8 | 8.11 | 125 | 165 | 0.4 | 0.2 | 109 ± 1 | 325 ± 180 | ✓ |
| | C7-2 | 21.49 | 6.91 | 8.36 | 169 | 678 | 0.6 | 0.2 | 33 ± 1 | — | ✓ |
| | C23-6 | 22.27 | 6.20 | 9.55 | 8.15 | 729 | 0.4 | 0.01 | 560 ± 1 | 665 ± 29 | ✓ |
| | C8-2 | 22.54 | 6.46 | 8.82 | 432 | 339 | 0.9 | 0.2 | 195 ± 1 | 136 ± 49 | ✓ |
| | C9-2 | 23.15 | 6.01 | 9.21 | 63 | 253 | 3.6 | 2.6 | 46 ± 1 | — | ✓ |
| | C10-2 | 23.39 | 6.26 | 9.05 | 38 | 204 | 0.8 | 1.2 | 30 ± 1 | — | ✓ |
| | C10-3 | 00.04 | 6.00 | 10.51 | 35 | 158 | — | — | 37 ± 1 | 379 ± 160 | ✓ |
| | C10-4 | 00.29 | 6.25 | 9.40 | 117 | 108 | — | 0.01 | 174 ± 1 | — | X (0.03/206/718) |
| | C23-7 | 00.58 | 6.19 | 9.8 | 826 | 273 | -ve | — | 570 ± 1 | — | X " |
| | C23-8 | 61.25 | 6.30 | 8.93 | 830 | 226 | -ve | — | 586 ± 1 | 543 ± 30 | X " |
| | C23-9 | 2.03 | 6.11 | 10.01 | 795 | 216 | -ve | — | 578 ± 1 | 539 ± 31 | ✓ <small>rework 2pm Solberg</small> |
| | C12-2 | 2.25 | 6.16 | 9.20 | 44 | 207 | 0.1 | 0.21 | 37 ± 1 | 67 ± 252 | ✓ |
| | C13-1 | 2.48 | 6.54 | 9.60 | 202 | 162 | 0.5 | 0.22 | 170 ± 1 | 210 ± 112 | ✓ |
| | C21-1 | 3.15 | 6.36 | 9.52 | 556 | 477 | -ve | — | 145 ± 1 | 227 ± 41 | ✓ |
| | C21-2 | 3.37 | 6.22 | 9.80 | 173 1264 | 184 | 0 | — | 187 ± 1 | 204 ± 75 | ✓ |
| increase to 100um aperture | C23-10 | 3.59 | 6.29 | 9.75 | 788 | 207 | 0.5 | 0.02 | 550 ± 1 | 665 ± 30 | ✓ |
| | C23-11 | 4.38 | 6.53 | 19.95 | 1036 | 214 | -ve | — | 606 ± 1 | 470 ± 19 | ✓ |
| | a5-1 | 5.14 | 6.43 | 21.89 | 1153 | 239 | 0 | — | 302 ± 1 | 293 ± 28 | ✓ |
| | a5-2 | 5.34 | 6.12 | 21.78 | 1320 | 324 | 0 | — | 298 ± 1 | 36 ± 1 | ✓ |
| | a6-2 | 6.01 | 6.41 | 21.28 | 364 | 26 | -ve | — | 857 ± 4 | 876 ± 40 | ✓ |
| | C23-12 | 6.29 | 6.54 | 20.34 | 2164 | 226 | 0.6 | 0.05 | 595 ± 1 | — | ✓ |
| | a7-2 | 6.37 | 7.06 | 16.49 | 1520 | 294 | -ve | — | 328 ± 1 | 336 ± 24 | ✓ |
| | a8-2 | 7.13 | 7.06 | 16.13 | 3239 | 420 | 0.3 | 0.02 | 486 ± 1 | 442 ± 17 | ✓ |

