

UWA DATA LOG: SHRIMP ZIRCON U-Pb

Date: 27/1/96 UWA Mount No. 95-42 Whose sample? McN - Kromondouk Operator(s) IRE/McN/Marcus

| Indicate any change to the following: | | 196 | 204 | bkg | 206 | 207 | 208 | 238 | 248 | 254 |
|---------------------------------------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Precambrian | Count time (secs): | 2 | 10 | 10 | 10 | 30 | 10 | 5 | 5 | 2 |
| | Delay time (secs): | 7 | 3 | 1 | 2 | 1 | 1 | 3 | 2 | 2 |
| Phanerozoic | Count time (secs): | 2 | 10 | 10 | 10 | 10 | 10 | 5 | 5 | 2 |
| | Delay time (secs): | 7 | 3 | 1 | 2 | 1 | 1 | 3 | 2 | 2 |

expected 196-204 = 8.170 amu expected 204-bkg = 0.040 amu Dead-time = 32 nanosecs
 actual 196-204 = 8.158 actual 204-bkg = 0.045 expected resolution = >4200
 Primary = 1.8 nA PESABM = 3.7 pA actual resolution = 4585
 expected Primary : PESABM ≈ 50:1 actual Primary : PESABM = 48.6

Comments:

Calibra² Ave: n=12 An = 19
 Zr/U = 1.81160 bn = 8
 UO/U = 6.0852
 Pb^x/U = ~~0.185857~~
 0.187504
 Calibra² Error = 1.288%

| Rejection over-ride | Sample/Std ID | Time - printout | UO/U | 196 cps (K) | 206 cps | U ppm | 204Pb ppb | f ₂₀₆ % | Age ±1σ (Ma) 206/238 | 207/206 | Corr. | |
|---------------------|------------------------------------|-----------------|------|-------------|---------|-------|-----------|--------------------|----------------------|---------|-------|--|
| | RASTER = 3 mins @ 100μ | | | | | | | | | | | |
| (delete 1st ThO) | 306, 248 std 3-1 | 12:29 | 6.15 | 14.1 | 1503 | 220 | 4.4 | .21 | 571±1 | 590±19 | 208 | |
| | 196, 206, 238, 248, 254 std 3-2 | 12:55 | 6.07 | 13.6 | 1466 | 220 | 2.7 | .15 | 571±1 | 493±20 | 208 | |
| | RASTER = 3 mins @ 120μ | | | | | | | | | | | |
| | 207, 208, 248, 254 A 1-1 | 13:23 | 6.14 | 15.2 | 3029 | 69.4 | 366 | 13.20 | 2409±10 | 2966±23 | 204 | |
| (delete 1st ThO) | 196, 206, 238, 254 std 3-3 | 13:53 | 5.95 | 15.0 | 1511 | 227 | 0.9 | .16 | 551±1 | 575±19 | 208 | |
| | 196, 238, 248, 254 A 2-1 | 14:15 | 5.99 | 15.0 | 1987 | 45.0 | 4.0 | .20 | 2948±12 | 2927±8 | 204 | |
| | 196, 207, 208, 238, 254 A 3-1 | 14:37 | 6.37 | 13.9 | 3.6K | 85 | 60.0 | 1.86 | 2561±8 | 2945±9 | 204 | |
| | 196, 206, 207, 238, 254 std 3-4 | 14:59 | 6.15 | 13.7 | 1472 | 218 | 0.9 | .15 | 551±1 | 567±19 | 208 | |
| | 196, 206, 207, 248, 254 A 4-1 | 15:35 | 6.13 | 14.2 | 5.2K | 156 | 35.8 | .71 | 2275±5 | 2944±6 | 204 | |
| | 208, 248 A 5-1 | 15:58 | 6.23 | 13.3 | 4.2K | 97.5 | 2.6 | .06 | 2862±8 | 2936±5 | 204 | |
| | 196, 206, 207, 248 A 5-2 | 16:19 | 6.04 | 13.9 | 2.8K | 69.2 | 2.2 | .07 | 2857±10 | 2948±6 | 204 | |
| | 254 std 3-5 | 16:42 | 6.16 | 13.0 | 1437 | 220 | 3.7 | .12 | 559±1 | 619±19 | 208 | |

| Rejection over-ride | Sample/ Std ID | Time - printout | UO/U | 196 cps (K) | 206 cps | U ppm | 204Pb ppb | f206 % | Age ±1σ (Ma) 206/238 | 207/206 | Corr. |
|--|----------------|-----------------|----------------------------|-------------|---------|-------|-----------|--------|----------------------|----------|-------|
| 196, 208, 238, 248, 254 | A. 6-1 | 17:04 | 6.02 | 13.0 | 4.9K | 133 | 59.5 | 1.05 | 2833±7 | 2943±6 | 204 |
| 196, 206, 208, 254 | A. 6-2 | 17:26 | 6.17 | 13.4 | 4.0K | 89.3 | 265 | 6.47 | 2861±10 | 2975±14 | 204 |
| 196, 254 | A. 7-1 | 17:54 | 6.19 | 13.3 | 2.3K | 60.4 | 28.5 | 1.21 | 2633±10 | 2937±10 | 204 |
| 196, 206, 208, 238, 254 | A. 8-1 | 18:16 | 5.94 | 13.4 | 3.8K | 114 | 34.9 | .80 | 2602±7 | 2938±7 | 204 |
| 196, 206, 207, 254 | std 3-6 | 18:39 | 5.97 | 12.8 | 1376 | 231 | 2.7 | .12 | 572±1 | 606±20 | 208 |
| 196 | A. 8-2 | 19:01 | 5.56 | 14.3 | 1047 | 47.4 | 16.8 | 1.19 | 2108±10 | 2921±14 | 204 |
| — | A. 9-1 | — | Aborted - high common lead | | | | | | | | |
| 204, 206, 207, 208, 248 | A. 10-1 | 19:35 | 5.92 | 13.5 | 2797 | 73.8 | 1.1 | 0.03 | 2915±10 | 2951±6.0 | 204 |
| 196, 204, 206, 207, 208, 238, 248, 254 | A. 11-1 | 20:00 | 6.40 | 12.1 | 7662 | 293 | 28.3 | 0.36 | 1889±3 | 2951±4 | 204 |
| delete last scan for 206 → 254 delete 1st scan for ThO - | SP542.3-7 | 20:26 | 5.99 | 12.1 | 1292 | 231 | 2.1 | 0.14 | 557±1 | 606±21 | 208 |
| 196, 204, 206, 207, 208 | 4542A.12-1 | 20:52 | 6.13 | 13.4 | 4113 | 101 | 3.9 | 0.09 | 2828±8 | 2935±5 | 204 |
| 204, 206, 254 | A. 12-2 | 21:15 | 6.15 | 13.3 | 4111 | 99 | 5.4 | 0.12 | 2882±8 | 2944±5 | 204 |
| — | A. 13-1 | — | Aborted - high common lead | | | | | | | | |
| — | A. 14-1 | — | " " " " " " | | | | | | | | |
| 196, 206, 207, 238, 248, 254 | A. 15-1 | 21:56 | 6.30 | 12.3 | 5192 | 130 | 174 | 3.2 | 2712±7 | 2946±9 | 204 |
| 196, 206, 207, 238, 254 | A. 16-1 | 22:23 | 6.27 | 14.0 | 2057 | 44 | 26.2 | 1.38 | 2881±12 | 2936±11 | 204 |
| 238, 248, 254 | SP542.3-8 | 22:49 | 6.11 | 12.9 | 1291 | 214 | 0.7 | 0.16 | 532±1 | 613±20 | 208 |
| — | B. 1-1 | — | Aborted - high common lead | | | | | | | | |
| — | B. 2-1 | — | Aborted - high common lead | | | | | | | | |
| 196, 248, 254 | B. 3-1 | 23:40 | 6.31 | 12.3 | 12008 | 500 | 218 | 1.95 | 1777±2 | 2263±7 | 204 |
| — | B. 4-1 | — | Aborted - high common lead | | | | | | | | |
| — | B. 5-1 | — | " " " " " " | | | | | | | | |
| — | B. 6-1 | — | " " " " " " | | | | | | | | |
| 196, 204, 248 | B. 7-1 | 00:34 | 6.22 | 12.8 | 6984 | 138 | 501 | 6.70 | 3174±8 | 3159±9 | 204 |
| 196, 207, 248 | SP542.3-9 | 00:57 | 6.20 | 12.3 | 1308 | 208 | 2.7 | 0.18 | 553±1 | 633±20 | 208 |

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

| Rejection over-ride | Sample/Std ID | Time - printout | UO/U | 196 cps | 206 cps | U ppm | 204Pb ppb | f206 % | Age ±1σ (Ma) 206/238 207/206 | Corr. |
|--------------------------|--|-----------------|----------------------------|---------|---------|-------|-----------|--------|------------------------------|-------|
| | 208 SL542 B.8-1 | 01:24 | 6.36 | 12.1 | 18332 | 681 | 239 | 1.4 | 1960±2 2261±5 | 204 |
| 18 → | 208 2.11A B.9-1 | | Aborted - high common lead | | | | | | | |
| | B.10-1 | | " | " | " | " | " | " | | |
| 5 min - RAISED | B.11-1 | | " | " | " | " | " | " | | |
| 196, 238, 254 | B.12-1 | 02:50 | 6.36 | 18.3 | 10482 | 297 | 134 | 2.09 | 1723±3 2290±8 | 204 |
| 196, 208, 238, 254 | B.13-1 | 03:25 | 6.09 | 18.0 | 8290 | 172 | 28.1 | 0.41 | 2599±5 3212±4 | 204 |
| 196, 206, 254 | SL542.51 | 03:51 | 6.30 | 16.0 | 1702 | 198 | 1.6 | 0.15 | 553±1 584±27 | 208 |
| 3 min. again! | B.14-1 | | Aborted - High common lead | | | | | | | |
| 196, 204, 238, 254 | B.15-1 | 04:26 | 6.37 | 17.0 | 15384 | 344 | 288 | 2.6 | 2230±3 2719±5 | 204 |
| 196, 206, 207, 238, 254. | B.16-1 | 04:50 | 6.43 | 18.6 | 6072 | 87.2 | 248 | 6.1 | 2817±8 3126±10 | 204 |
| | B.17-1 | | Aborted High common lead | | | | | | | |
| 196 | B.18-1 | 05:31 | 5.84 | 14.4 | 21867 | 1216 | 755 | 3.54 | 1477±1 1864±9 | 204 |
| 196, 206, 208, 238 | 2.1 → 2.54A std.5-2 | 06:03 | 6.00 | 24.4 | 2172 | 194 | 1.2 | 0.11 | 557±1 546±21 | 204 |
| | B.19-1 | | Aborted High c Pb | | | | | | | |
| | B.20-1 | | " | " | " | " | " | " | | |
| | B.21-1 | | " | " | " | " | " | " | | |
| | B.22-1 | | " | " | " | " | " | " | | |
| Change file | 196, 206, 207, 208, 238, 254 → A.17-1 | 07:17 | 6.24 | 24.1 | 4776 | 69 | 42.0 | 1.61 | 2556±7 2952±7 | 204 |
| | 206, 207, 208, 254 A.18-1 | 07:44 | 5.74 | 26.4 | 5652 | 88 | 46.6 | 1.24 | 2828±7 2955±6 | 204 |
| 206, 207, 238 | std.5-4 | 08:08 | 6.04 | 22.7 | 2127 | 206 | 0.3 | 0.08 | 537±1 612±15 | 208 |