

UWA DATA LOG: SHRIMP ZIRCON U-Pb

Date: 1/4/96 UWA Mount No. 96-10 Whose sample? Pellard Operator(s) McV & SB.

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            |
| <del>Phanerozoic</del> | <del>Count time (secs): 2</del> | <del>10</del> | <del>10</del> | <del>10</del> | <del>10</del> | <del>10</del> | <del>5</del> | <del>5</del> | <del>2</del> |
|                        | <del>Delay time (secs): 7</del> | <del>3</del>  | <del>1</del>  | <del>2</del>  | <del>1</del>  | <del>1</del>  | <del>3</del> | <del>2</del> | <del>2</del> |

expected 196-204 = 8.170 amu      expected 204-bkg = 0.040 amu      Dead-time = 32 nanosecs  
 actual 196-204 = 8.166      actual 204-bkg = 0.040      expected resolution = >4200  
 Primary = 3.6 nA      PESABM = 58 pA      actual resolution = 4873  
 expected Primary : PESABM ≈ 50:1      actual Primary : PESABM = 61.5

Comments: Raster = 2 mins / 120 μ  
 Scans = 6

A = LCFO2  
 B = LCD17

\* Magnet glitch → had to cycle + centre before proceeding

| Rejection over-ride | Sample/ Std ID | Time - printout | UO/U | 196 cps (K) | 206 cps | U ppm | 204Pb ppb | f <sub>206</sub> % | Age ±1σ (Ma) 206/238 207/206 | Corr. |
|---------------------|----------------|-----------------|------|-------------|---------|-------|-----------|--------------------|------------------------------|-------|
|                     | std. 1-1       | 10:15           | 5.53 | 26.5        | 2270    | 220   | -0.8      | -                  | 572 ± 1 538 ± 15             | -     |
|                     | std. 1-2       | 10:33           | 5.72 | 24.8        | 2275    | 220   | -0.5      | -                  | 572 ± 1 561 ± 15             | -     |
| * →                 | A. 1-1         | 10:52           | 5.75 | 26.1        | 7.4K    | 230   | 1.9       | .02                | 1538 ± 2 1547 ± 7            | 204   |
|                     | std. 1-3       | 11:43           | 5.61 | 23.9        | 2091    | 222   | -0.1      | -                  | 581 ± 1 491 ± 16             | -     |
|                     | A. 2-1         | 12:01           | 5.94 | 28.4        | 13.3K   | 407   | 15.3      | .27                | 1310 ± 1 1459 ± 7            | 204   |
|                     | std. 1-4       | 12:22           | 5.64 | 26.1        | 2292    | 223   | -0.6      | .004               | 568 ± 1 628 ± 16             | 208   |
|                     | A. 3-1         | 12:41           | 5.65 | 25.8        | 9.7K    | 383   | 5.4       | .10                | 1330 ± 2 1472 ± 6            | 204   |
|                     | A. 3-2         | 12:59           | 5.75 | 25.1        | 9.5K    | 298   | 2.2       | .04                | 1584 ± 2 1518 ± 6            | 204   |
|                     | A. 4-1         | 13:17           | 5.66 | 25.3        | 11.3K   | 416   | 2.1       | .03                | 1436 ± 2 1504 ± 5            | 204   |
|                     | std. 1-5       | 13:36           | 5.49 | 25.9        | 2224    | 234   | -0.2      | -                  | 585 ± 1 578 ± 15             | -     |
|                     | A. 5-1         | 13:55           | 5.61 | 26.8        | 8.8K    | 338   | 5.5       | .11                | 1339 ± 2 1483 ± 7            | 204   |

| 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. |
|---------------------|---------------------|------------------|-----------------|-------------|---------|-------|-----------|--------|----------------------|---------|-------|
|                     | A. 6-1              | 14:12            | 5.65            | 26.9        | 6.3K    | 212   | 3.5       | .10    | 1479±2               | 1528±8  | 204   |
|                     | A. 6-2              | 14:31            | 5.49            | 27.7        | 1577    | 56.4  | -0.1      | —      | 1495±4               | 1517±13 | —     |
|                     | A. 7-1              | 14:49            | 5.67            | 27.1        | 6.6K    | 209   | 4.5       | .13    | 1525±2               | 1496±8  | 204   |
| Delete 1st TLO      | std. 1-6            | 15:08            | 5.85            | 24.6        | 2412    | 218   | 0.3       | .03    | 572±1                | 570±25  | 204   |
|                     | A. 8-1              | 15:26            | 5.83            | 25.1        | 8.4K    | 250   | -0.2      | —      | 1576±2               | 1526±6  | —     |
|                     | A. 9-1              | 15:46            | 5.55            | 29.2        | 10.4K   | 359   | 8.4       | .15    | 1416±2               | 1511±7  | 204   |
|                     | A. 10-1             | 16:04            | 5.74            | 28.4        | 10.5K   | 258   | 10.0      | .20    | 1313±1               | 1440±7  | 204   |
|                     | A. 1-2              | 16:23            | 5.44            | 25.6        | 12.1K   | 440   | 3.3       | .04    | 1626±2               | 1549±5  | 204   |
|                     | std. 1-7            | 16:42            | 5.76            | 24.8        | 2296    | 220   | 0.1       | .005   | 585±1                | 583±16  | 204   |
|                     | A. 11-1             | 17:00            | 5.75            | 24.7        | 7.7K    | 261   | 4.7       | .11    | 1498±2               | 1509±7  | 204   |
|                     | A. 12-1             | 17:17            | 5.92            | 25.5        | 7.6K    | 275   | 2.1       | .06    | 1251±2               | 1453±7  | 204   |
|                     | A. 13-1             | 17:35            | 6.00            | 27.6        | 6.9K    | 289   | 5.5       | .19    | 972±1                | 1288±9  | 204   |
|                     | A. 14-1             | 17:55            | 5.77            | 25.2        | 9.0K    | 333   | 15.7      | .33    | 1338±2               | 1461±8  | 204   |
|                     | <del>std. 1-8</del> |                  |                 |             |         |       |           |        |                      |         |       |
|                     | <del>std. 1-8</del> |                  |                 |             |         |       |           |        |                      |         |       |
|                     | A. 15-1             | 18:14            | 5.64            | 27.3        | 10.7    | 313   | 4.1       | .07    | 1656±2               | 1568±6  | 204   |
|                     | std. 1-8            | 18:32            | 5.72            | 24.9        | 2379    | 224   | 0.4       | .04    | 582±1                | 510±26  | 204   |
|                     | A. 16-1             | 18:50            | 5.89            | 25.0        | 14.0K   | 380   | 6.3       | .09    | 1678±2               | 1578±4  | 204   |
|                     | A. 17-1             | 19:08            | 5.51            | 26.5        | 5.8K    | 248   | 0.6       | .02    | 1312±2               | 1455±8  | 204   |
|                     | A. 18-1             | 19:25            | 5.81            | 25.3        | 6.8K    | 260   | 1.1       | .03    | 1280±2               | 1443±8  | 204   |
|                     | A. 19-1             | 19:44            | 5.79            | 26.0        | 7.5K    | 264   | 13.2      | .34    | 1344±2               | 1510±9  | 204   |
|                     | <del>std. 2-1</del> | <del>20:03</del> | <del>5.64</del> |             |         |       |           |        |                      |         |       |
|                     | <del>A. 20-1</del>  |                  |                 |             |         |       |           |        |                      |         |       |
|                     | A. 20-1             | 20:03            | 5.64            | 25.8        | 2359    | 226   | 0.8       | .07    | 580±1                | 570±18  | 204   |
|                     | A. 20-1             | 20:26            | 5.55            | 27.0        | 5.6K    | 201   | 1.6       | .05    | 1480±2               | 1507±8  | 204   |
|                     | A. 21-1             | 20:48            | 5.72            | 26.8        | 7.8K    | 292   | 0.2       | .004   | 1296±2               | 1458±7  | 204   |

SB.

| 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 | Corr. |
|---------------------|--------------------|-----------------|------|----------|---------|-------|-----------|--------|----------------------|---------|-------|
|                     | A22-1              | 21:12           | 5.85 | 27.7     | 5.9K    | 220   | 4.1       | .15    | 1176±2               | 1432±9  | 204   |
|                     | A23-1              | 21:40           | 5.44 | 30.6     | 14.2K   | 607   | 6.9       | .09    | 1193±1               | 1446±5  | 204   |
|                     | A24-1              | 22:02           | 5.90 | 30.1     | 7.2K    | 182   | 1.9       | .06    | 1494±2               | 1492±8  | 204   |
|                     | <del>Std</del> 2-2 | 22:26           | 5.58 | 27.1     | 2320    | 227   | 1.6       | .13    | 565±1                | 505±22  | 204   |
|                     | B.1-1              | 22:50           | 5.34 | 29.5     | 3.1K    | 113   | 1.8       | .10    | 1519±3               | 1516±12 | 204   |
|                     | B.1-2              | 23:12           | 5.43 | 28.4     | 4.2K    | 146   | 2.3       | .10    | 1529±3               | 1505±9  | 204   |
|                     | B.2-1              | 23:36           | 5.17 | 29.5     | 6.9K    | 460   | 23.7      | .50    | 978±1                | 1447±11 | 204   |
|                     | B.3-1              | 0:01            | 5.63 | 26.4     | 6.9K    | 237   | 0.7       | .02    | 1499±2               | 1509±7  | 204   |
|                     | B.3-2              | 0:41            | 5.53 | 27.5     | 5.9K    | 204   | 0.0       | —      | 1500±3               | 1518±7  | —     |
|                     | B.4-1              | 1:03            | 5.55 | 27.5     | 4.9K    | 163   | 0.6       | .02    | 1532±3               | 1517±8  | 204   |
|                     | <del>B.4-2</del>   | 1:25            | 5.75 | 28.0     | 2.9K    | 120   | 0.8       | .05    | 1144±2               | 1450±13 | 204   |
|                     | Std. 2-3           | 1:46            | 5.56 | 27.2     | 2.3K    | 223   | 0.7       | .06    | 586±1                | 511±22  | 204   |
|                     | B.5-1              | 2:10            | 5.41 | 26.7     | 1.4K    | 56    | 0.3       | .03    | 1462±5               | 1512±17 | 204   |
|                     | B.6-1              | 2:35            | 5.34 | 26.3     | 5.2K    | 213   | 0.9       | .02    | 1529±3               | 1516±8  | 204   |
|                     | B.7-1              | 2:57            | 5.35 | 28.5     | 5.2K    | 239   | 20.8      | 0.63   | 1272±2               | 1456±13 | 204   |
|                     | B.8-1              | 3:17            | 5.82 | 24.6     | 8.2K    | 281   | 3.7       | .08    | 1437±2               | 1505±7  | 204   |
|                     | Std 2-4            | 3:53            | 5.55 | 25.8     | 2.3K    | 237   | 0.9       | .07    | 575±1                | 522±18  | 204   |
|                     | B.9-1              | 4:22            | 5.62 | 26.0     | 2.1K    | 70    | 0.8       | .07    | 1534±4               | 1509±14 | 204   |
|                     | B.10-1             | 4:48            | 5.66 | 26.9     | 2.9K    | 96    | 0.5       | .03    | 1521±4               | 1526±13 | 204   |
|                     | B.11-1             | 5:19            | 5.60 | 28.1     | 3.6K    | 154   | 1.3       | .07    | 1171±2               | 1512±11 | 204   |
|                     | B.12-1             | 5:42            | 5.58 | 26.2     | 4.7K    | 164   | —         | —      | 1536±3               | 1516±8  | 204   |
|                     | Std. 2-5           | 6:03            | 5.71 | 28.4     | 2.4K    | 207   | —         | —      | 561±1                | 569±15  | —     |
|                     | B.13-1             | 6:25            | 5.38 | 28.1     | 2.9K    | 109   | 4.9       | .27    | 1510±3               | 1419±16 | 204   |
|                     | B.14-1             | 6:49            | 6.49 | 26.2     | 4.9K    | 153   | 2.2       | .13    | 1074±2               | 1452±10 | 204   |
|                     | B.15-1             | 7:03            | 5.30 | 27.9     | 2.4K    | 100   | 2.5       | .16    | 1465±4               | 1518±14 | 204   |

Pop B.

Delete 1st ThO

Stage locked ep. →

Near scratches in mount → poor conductivity.

