

### UWA DATA LOG: SHRIMP ZIRCON U-Pb

Date: 1/6/08 UWA Mount No.: 98-19 Whose sample?: Joss Operator(s): IF + JD

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*	10 /	5 /	5 /	2 /
Phanerozoic*	Delay time (secs):	8	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 = 8.169      actual 204-bkg = 0.045      expected resolution = >4200  
 actual 206-207 = 1.000      actual 206-208 = 2.000      actual resolution = 5462  
 Primary = 2.4 nA    PESABM = 31 pA    actual Primary : PESABM (≈ 50:1) = 77  
 Raster time (mins): 1 → 2    Raster aperture (microns): 120    No. of scans: 6

Comments: Sensitivity = 12.3  
Ⓢ Change to 2 min raster.  
Also change 206 to "centre once" and set centring to 5 sec. for each spot

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.
	<u>sl. 6-1</u>	<u>10:09</u>	<u>6.54</u>	<u>8.7</u>	<u>911</u>	<u>-</u>	<u>0.3</u>	<u>-</u>	<u>550</u>	<u>-</u>
	<u>sl. 6-2</u>	<u>10:27</u>	<u>6.69</u>	<u>8.8</u>	<u>962</u>	<u>215</u>	<u>-ve</u>	<u>-</u>	<u>574</u>	<u>615</u>
	<u>u.A. 00-1</u>	<u>10:48</u>	<u>6.13</u>	<u>9.6</u>	<u>578</u>	<u>31</u>	<u>3.6</u>	<u>3.4</u>	<u>770<sup>±14</sup></u>	<u>?</u> 204
	<u>A. 99-1</u>	<u>11:06</u>	<u>6.49</u>	<u>9.4</u>	<u>52</u>	<u>8</u>	<u>-ve</u>	<u>-</u>	<u>831<sup>±8</sup></u>	<u>983</u>
	<u>A. 98a-1</u>	<u>11:24</u>	<u>6.63</u>	<u>9.4</u>	<u>88</u>	<u>14</u>	<u>-ve</u>	<u>-</u>	<u>790<sup>±6</sup></u>	<u>926</u>
	<u>sl. 6-3</u>	<u>11:42</u>	<u>6.28</u>	<u>10.0</u>	<u>925</u>	<u>220</u>	<u>2.6</u>	<u>0.04</u>	<u>575</u>	<u>625</u> 208
	<u>A. 97-1</u>	<u>12:06</u>	<u>6.38</u>	<u>9.5</u>	<u>21</u>	<u>4</u>	<u>-ve</u>	<u>-</u>	<u>790<sup>±11</sup></u>	<u>792</u>
	<u>A. 95-1</u>	<u>12:26</u>	<u>6.24</u>	<u>9.5</u>	<u>34</u>	<u>6</u>	<u>1.9</u>	<u>3.2</u>	<u>790<sup>±20</sup></u>	<u>-</u> 204
	<u>A. 94-1</u>	<u>12:47</u>	<u>6.31</u>	<u>9.5</u>	<u>23</u>	<u>4</u>	<u>0.4</u>	<u>1.2</u>	<u>828<sup>±17</sup></u>	<u>836</u> 204
	<u>sl. 3-1</u>	<u>13:15</u>	<u>6.51</u>	<u>9.4</u>	<u>937</u>	<u>212</u>	<u>4.9</u>	<u>0.02</u>	<u>576</u>	<u>577</u> 208
	<u>A. 91-1</u>	<u>13:38</u>	<u>6.23</u>	<u>9.6</u>	<u>45</u>	<u>8</u>	<u>2.4</u>	<u>3.1</u>	<u>782<sup>±13</sup></u>	<u>782</u> 204

206 concentrated  
? centring after 1st scan?  
Ⓢ

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.
	A.90-1	13:57	6.25	9.5	42	7	-ve	-	850 <sup>±9</sup>	970	-
	A.88-1	14:17	6.67	8.6	56	9	1.2	1.7	795 <sup>±15</sup>	817	204
	sl. 3-2	14:37	6.44	9.4	926	214	0.5	0	580 <sup>±10</sup>	508	208
	A.87-1	15:01	6.00	9.7	35	7	-ve	-	857 <sup>±10</sup>	861	-
	A.86-1	15:23	6.22	9.3	57	11	1.7	2.3	783 <sup>±17</sup>	-	204
	A.85-1	15:45	6.07	9.0	18	4	1.4	3.7	780 <sup>±38</sup>	-	204
	sl. 3-3	16:05	6.26	9.3	842	225	-ve	-	557 <sup>±12</sup>	601	-
	A.89-1	16:27	5.90	9.9	23	4	-ve	-	862 <sup>±12</sup>	1110	-
	A.84-1	16:51	6.46	9.5	52	8	6.1	7.4	784 <sup>±18</sup>	-	204
	A.82-1	17:15	5.83	10.2	29	6	1.9	4.3	837 <sup>±28</sup>	-	204
	A.82-2	17:37	6.38	9.6	33	6	1.6	2.9	761 <sup>±23</sup>	-	204
	sl. 4-1	17:59	6.74	9.2	996	213	2.0	.18	562 <sup>±18</sup>	542	"
	A.80-1	18:22	6.16	10.3	45	8	-	-	807 <sup>±8</sup>	874	"
	A.75-1	18:45	6.07	10.3	20	3.5	-	-	815 ± 11	1104	"
	A.74-1	19:05	6.13	10.2	50	8.3	0.1	.17	840 ± 9	790	"
	A.73-1	19:26	6.16	10.4	27	4.3	1.0	2.17	828 ± 36	-	"
	sl. 4-2	19:47	6.51	9.9	984	216	2.7	.23	568 ± 1	587	208
	A.71-1	20:14	6.09	10.1	52	9.3	-	-	823 ± 7	1033	204
	A.70-1	20:44	6.28	7.5	14	3.3	3.4	11.3	662	-	204
	sl. 4-3	22:02	5.24	25.4	1305	?	?	.02	568	-	204
	sl. 4-4	22:27	5.42	22.6	1158	220	0.2	.02	572 ± 5	589	204
	A.67-1	22:51	5.66	24.0	96	7.7	0.4	.55	1039 ± 13	851	204
	A.67-2	23:13	5.94	23.7	41	3.0	2.3	6.4	938 ± 31	-	204
	A.92-1	23:37	5.99	23.6	149	10.0	-	-	1041 ± 5	775	-
	sl. 4-5	23:57	5.40	22.6	1244	216	0.1	.01	630 ± 1	625	204

10 dropped to 1.8 ± 1.5  
 computer crashed - restarted with different settings  
 10 = 4.15 - 4.7  
 Recal

Rejection over-ride	Sample/ Std ID	Time - printout	UO/U	196 $\mu$ cps	206 cps	U ppm	204pb ppb	f206 %	Age $\pm 1\sigma$ (Ma) 206/238	207/206	Corr.
	sl. 4-6	00:18	5.44	22.0	1194	224	-	-	589 $\pm$ 1	556	-
	A. 92-2	00:40	5.78	22.0	48	3.8	0.9	2.4	1047 $\pm$ 29	-	204
	A. 93-1	01:05	5.98	21.5	41	2.9	-	-	1670 $\pm$ 10	-	-
	A. 93-2	01:24	6.18	20.4	202	13.7	1.3	.91	1073 $\pm$ 10	-	204
	sl. 4-7	01:46	5.35	21.2	1261	232	1.9	.13	656 $\pm$ 1	498	204
	A. 96-1	02:10	6.05	21.6	95	6.7	0.4	.54	1046 $\pm$ 13	-	204
	A. 96-2	02:31	5.73	22.7	46	3.7	-	-	1064 $\pm$ 9	961	-
	C. 50-1	02:53	6.06	21.8	5.4 K	108	2.1	.04	3082	2463 $\pm$ 6	204
	C. 50-2	03:15	5.73	24.3	4.0 K	114	0.5	.01	2517	2387 $\pm$ 6	204
	sl. 5-1	03:37	5.76	19.3	1.5 K	208	0.5	.04	746 $\pm$ 1	545	204
	C. 49-1	03:56	6.01	21.1	4.3 K	86	0.8	.02	3261	2521 $\pm$ 6	204
	C. 48-1	04:17	6.01	23.5	9.6 K	185	0.2	-	3073	2610 $\pm$ 4	204
	C. 47-1	04:37	6.13	20.9	3.8 K	94	1.3	.04	2607	2255 $\pm$ 7	204
	C. 43-1	04:59	6.08	21.1	6.2 K	128	0.9	.02	3063	2471 $\pm$ 5	204
	sl. 5-2	05:20	5.49	21.1	1428	217	2.4	.17	721 $\pm$ 1	418	"
	C. 43-2	05:39	6.18	20.2	7.5 K	149	0.9	.01	3162	2450 $\pm$ 5	"
	C. 41- <del>A</del>	05:59	6.03	20.7	3.1 K	82	0.9	.03	2611	2340 $\pm$ 8	"
	C. 40-1	06:19	5.92	21.2	2.3 K	31	1.3	.06	-	2558 $\pm$ 9	"
	C. 39-1	06:39	6.09	21.4	4.9 K	112	0.7	.02	2813	2379 $\pm$ 6	"
	sl. 5-3	06:57	5.57	18.6	1328	223	-	-	705 $\pm$ 1	485	"
	C. 34-1	07:19	6.23	20.6	17.8 K	368	1.1	.01	2941	2400 $\pm$ 3	"
	B. 34b-1	07:38	6.08	20.8	23.6 K	492	1.5	.01	3094	2460 $\pm$ 3	"
	C. 38-1	07:57	6.20	20.3	19.0 K	337	1.9	.02	2802	2415 $\pm$ 3	"
	C. 40-2	08:16	5.61	20.6	707	34	0.4	.04	1960	2097	"
	sl. 5-4	08:35	5.21	20.5	1205	244	-	-	685 $\pm$ 1	673	-

unuseable (if that's a word!)