

UWA DATA LOG: SHRIMP ZIRCON U-Pb

Date: *28/10/97* UWA Mount No.: *97-21* Whose sample?: *Ballarat* Operator(s): *MUN + FB*

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): *76* 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 = *8.166* actual 204-bkg = *0.040* expected resolution = >4200

actual 206-207 = *1.000* actual 206-208 = *1.999* actual resolution = *4678*

Primary = *3.9* nA PESABM = *65* pA actual Primary : PESABM (≈ 50:1) = *60*

Raster time (mins): *1* Raster aperture (microns): *100* No. of scans: *6*

Comments: *C = BH 16/10*

High 204 = #1,2,

** 10 noisy + slow drift down during analysis
 (sl. 4-1) or up (C. 3-2)*

Rejection over-ride	Sample/ Std ID	Time - printout	UO/U	196 Kcps	206 cps	U ppm	204Pb ppb	f ₂₀₆ %	Age ±1σ (Ma)		Corr.
									206/238	207/206	
	<i>sl. 5-7</i>	<i>10:58</i>	<i>5.69</i>	<i>25.0</i>	<i>2322</i>	<i>220</i>	<i>1.6</i>	<i>-14</i>	<i>571±1</i>	<i>575±34</i>	<i>204</i>
	<i>sl. 5-8</i>	<i>11:14</i>	<i>5.51</i>	<i>24.3</i>	<i>2216</i>	<i>241</i>	<i>-0.6</i>	<i>-</i>	<i>577±1</i>	<i>598±25</i>	<i>-</i>
	<i>C. 3-1</i>	<i>11:46</i>	<i>5.76</i>	<i>24.8</i>	<i>455</i>	<i>63.6</i>	<i>0.3</i>	<i>-12</i>	<i>380±1</i>	<i>313±135</i>	<i>204</i>
	<i>* sl. 4-1</i>	<i>12:00</i>	<i>5.55</i>	<i>23.8</i>	<i>2295</i>	<i>245</i>	<i>-0.7</i>	<i>-</i>	<i>584±1</i>	<i>527±25</i>	<i>-</i>
	<i>* C. 3-2</i>	<i>12:16</i>	<i>5.75</i>	<i>23.9</i>	<i>575</i>	<i>84.3</i>	<i>0.3</i>	<i>.09</i>	<i>380±2</i>	<i>295±197</i>	<i>204</i>
	<i>C. 5-1</i>	<i>12:31</i>	<i>6.13</i>	<i>23.1</i>	<i>942</i>	<i>116</i>	<i>-0.9</i>	<i>-</i>	<i>376±1</i>	<i>324±43</i>	<i>-</i>
	<i>C. 6-1</i>	<i>12:47</i>	<i>5.79</i>	<i>23.7</i>	<i>1379</i>	<i>215</i>	<i>12.2</i>	<i>1.8</i>	<i>344±1</i>	<i>1±103</i>	<i>"</i>
	<i>sl. 4-2</i>	<i>13:02</i>	<i>5.56</i>	<i>24.8</i>	<i>2239</i>	<i>226</i>	<i>2.3</i>	<i>-19</i>	<i>587±1</i>	<i>498±35</i>	<i>"</i>
	<i>* 5-6 scan rejected C. 10-1</i>	<i>13:22</i>	<i>7.02</i>	<i>19.8</i>	<i>39K</i>	<i>528</i>	<i>8.8</i>	<i>.47</i>	<i>267±1</i>	<i>3429±7</i>	<i>"</i>
	<i>C. 11-1</i>	<i>13:38</i>	<i>5.60</i>	<i>24.4</i>	<i>965</i>	<i>184</i>	<i>11.8</i>	<i>2.29</i>	<i>307±1</i>	<i>246±134</i>	<i>"</i>
	<i>C. 12-1</i>	<i>13:52</i>	<i>5.70</i>	<i>24.9</i>	<i>1872</i>	<i>273</i>	<i>14.8</i>	<i>1.59</i>	<i>373±1</i>	<i>321±74</i>	<i>"</i>

*(° drift
 high 204 for
 last 2 scans!)
 V. noisy*

Rejection over-ride	Sample/ Std ID	Time - printout	UO/U Kcps	196 cps	206 cps	U ppm	²⁰⁴ Pb ppb	f ₂₀₆ %	Age ±1σ (Ma) 206/238	207/206	Corr.
	sl. 4-3	14:08	5.68	23.9	2297	219	0.1	-0.1	599 ± 1	510 ± 29	204
	G. 14-1	14:28	5.82	23.6	2373	340	4.5	.39	377 ± 1	361 ± 44	204
	C. 14-2	14:44	5.54	23.8	702	115	1.8	.45	386 ± 1	299 ± 125	"
	C. 15-1	14:59	5.86	23.3	2342	339	12.9	1.14	366 ± 1	362 ± 57	"
	sl. 4-4	15:14	5.49	23.4	2074	236	0.4	.03	576 ± 1	624 ± 33	"
	C. 22-1	15:39	5.65	23.9	1974	295	2.3	.22	392 ± 1	480 ± 26	"
	C. 23-1	15:54	5.91	23.6	2283	310	0.4	.03	376 ± 1	387 ± 63	"
	C. 26-1	16:13	5.74	24.8	2478	354	43.4	3.5	368 ± 1	489 ± 78	"
	sl. 3-1	16:29	5.85	23.2	2359	213	1.7	.15	583 ± 1	541 ± 36	"
	C. 27-1	16:44	5.37	23.6	2078	374	15.1	1.1	395 ± 1	339 ± 61	"
	C. 31-1	16:59	5.31	23.2	334	69	1.0	.45	368 ± 2	153 ± 206	"
	C. 3-3	17:14	5.85	22.9	554	78	0.2	.08	385 ± 1	361 ± 84	"
	C. 32-1	17:29	5.45	24.1	1311	245	4.4	.55	356 ± 1	393 ± 68	"
	sl. 3-2	17:43	5.55	23.2	2206	240	-0.2	-	582 ± 1	527 ± 25	-
	C. 28-1	17:59	5.47	22.0	567	106	-0.3	-	366 ± 1	473 ± 52	-
	sl. 3-3	18:35	5.81	24.1	2401	218	0.8	.07	577 ± 1	578 ± 30	204
	A. 1-1	18:50	6.15	20.8	2111	279	-0.8	-	383 ± 1	388 ± 28	-
	A. 1-2	19:04	5.88	23.9	773	108	1.8	.50	366 ± 1	243 ± 101	204
	A. 41-1	19:19	5.96	23.2	1056	141	0.0	-	377 ± 1	394 ± 39	-
	A. 42-1	19:33	6.12	23.2	3143	377	-0.8	-	385 ± 1	382 ± 23	-
	sl. 3-4	19:49	5.75	23.4	2298	220	1.5	.12	582 ± 1	473 ± 32	204
*	A. 6-1	20:04	6.03	19.8	11799	1812	4.6	.08	371 ± 1	376 ± 13	204
	A. 43-1	20:19	5.36	21.1	566	128	0.3	.06	362 ± 1	478 ± 478	"
	A. 8-1	20:34	5.79	22.0	3646	584	0.0	-	368 ± 1	389 ± 21	-
	A. 10-1	20:48	5.82	23.4	1727	243	-0.1	-	386 ± 1	388 ± 30	-

¹⁰ drifted up during analysis.
¹⁰ at same level at C. 14-1.

Pb loss with 204

5 grains with very high 204

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Rejection over-ride	Sample/ Std ID	Time - printout	UO/U μ cps	196 cps	206 cps	U ppm	204Pb ppb	f206 %	Age $\pm 1\sigma$ (Ma) 206/238	207/206	Corr.
	S/ 3-5	21:03	5.71	23.9	2345	225	0.3	.03	580 \pm 1	613 \pm 30	204
	A. 9-1	21:18	5.74	23.9	376	56	0.5	.27	373 \pm 1	347 \pm 119	"
	A. 44-1	21:33	5.66	23.7	490	76	-0.7	-	381 \pm 1	448 \pm 55	-
	A. 45.1	21:48	6.16	21.8	1337	168	2.1	.36	383 \pm 1	298 \pm 59	204
	A. 46-1	22:02	5.84	23.5	783	111	1.2	.31	377 \pm 1	251 \pm 99	"
	S/ 3-6	22:17	5.86	23.2	2379	215	0.2	.02	583 \pm 1	524 \pm 28	"
	A. 18-1	22:33	5.87	22.8	2477	362	-0.4	-	371 \pm 1	374 \pm 26	"
	A. 11-1	22:47	6.06	22.4	2457	321	0.6	.06	380 \pm 1	370 \pm 30	"
	A. 14-1	23:05	6.04	22.4	1007	140	0.3	.07	361 \pm 1	331 \pm 61	"
	A. 47.1	23:20	5.88	22.8	3597	518	-0.1	-	375 \pm 1	396 \pm 21	"
	S/ 3-7	23:35	5.80	24.0	2359	217	-0.5	-	573 \pm 1	597 \pm 24	-
	A. 15-1	23:50	6.27	23.2	6338	702	0.5	.02	386 \pm 1	355 \pm 18	204
	A. 15-2	00:05	5.91	22.3	349	50	-1.1	-	379 \pm 1	466 \pm 64	-
	A. 48-1	00:20	6.01	22.4	1972	261	0.6	.06	385 \pm 1	370 \pm 40	204
	A. 20-1	00:35	5.72	23.8	1155	174	2.1	.36	374 \pm 1	274 \pm 62	"
	S/ 3-8	00:50	5.66	24.3	2312	226	-1.5	-	580 \pm 1	563 \pm 25	-
	A. 20-2	01:05	5.93	21.7	2262	69.7	0.4	.03	1613 \pm 4	1762 \pm 18	204
	A. 49-1	01:19	5.79	23.7	730	106	0.2	.07	375 \pm 1	430 \pm 46	"
	A. 23-1	01:34	5.89	22.7	499	71.5	0.8	.31	373 \pm 1	361 \pm 95	"
	A. 50-1	01:49	5.51	21.6	391	74.4	2.1	.85	372 \pm 1	232 \pm 152	"
	S/ 3-9	02:04	5.79	23.8	2391	219	0.1	.01	583 \pm 1	557 \pm 56	"
	A. 24-1	02:19	5.76	23.2	1613	239	-0.5	-	383 \pm 1	411 \pm 31	-
	A. 24-2	02:34	5.59	23.5	542	89.5	1.4	.46	375 \pm 1	163 \pm 107	204
	A. 51-1	02:48	5.86	23.4	452	63.3	0.6	.26	377 \pm 2	464 \pm 155	"
	A. 52-1	03:03	5.82	23.5	405	58	0.3	.14	381 \pm 1	481 \pm 60	"

0 min diff

reject !

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Mount/sample No: 97-21

Date: 29-10-97

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Rejection over-ride	Sample/ Std ID	Time - printout	UO/U	196 cps	206 cps	U ppm	²⁰⁴ Pb ppb	f ²⁰⁶ %	Age ±1σ (Ma)		Corr.
									206/238	207/206	
	sl. 3-10	03:18	5.78	23.2	2303	221	-0.2	-	576 ± 1	559 ± 25	-
	A. 25-1	03:33	5.70	21.3	3170	551	0.1	.01	370 ± 1	370 ± 24	204
	A. 25-2	03:47	5.60	22.6	313	52	1.0	.56	383 ± 3	239 ± 241	204
	A. 28-1	04:03	5.64	20.7 20.4	5084	927	0.6	.02	377 ± 1	392 ± 20	"
	A. 53-1	04:18	5.84	23.6 23.6	516.8	73	-1.0	-	377 ± 1	368 ± 55	-
	sl. 3-11	04:32	5.68	23.8	2314	228	1.1	.09	579 ± 1	523 ± 31	204
	A. 29-1	04:47	5.98	22.7	2525	345	-0.8	-	375 ± 1	407 ± 25	-
	A. 54-1	05:01	5.93	23.1	307	43	0.0	-	368 ± 1	468 ± 69	-
	A. 55-1	05:16	6.14	22.9	4031	477	9.2	.55	390 ± 1	305 ± 32	204
	A. 33-1	05:31	5.93	22.9	566	80	0.7	.26	370 ± 1	294 ± 97	"
	sl. 2-1	05:47	5.78	23.8	2352	217	-0.4	-	580 ± 1	618 ± 24	-
	A. 56-1	06:02	6.19	22.1	1475	182	0.8	.13	380 ± 1	365 ± 48	204
	A. 38-1	06:17	5.68	22.8	1356	220	0.1	.01	373 ± 1	432 ± 41	"
	A. 39-1	06:32	5.73	23.1	582	93	1.3	.43	363 ± 1	293 ± 110	"
	A. 40-1	06:46	6.01	22.8	3269	434	-0.8	-	377 ± 1	405 ± 22	"
	sl. 2-2	07:01	5.80	23.6	2296	214	0.5	.04	578 ± 1	551 ± 29	204
	A. 57-1	07:15	5.69	24.2	2128	123	-1.9	-	939 ± 2	1190 ± 20	"
	A. 58-1	07:30	5.94	22.8	604	78	4.9	1.7	392 ± 2	358 ± 145	"
	A. 59-1	07:44	5.78	23.1	970	146	-0.4	-	374 ± 1	456 ± 40	-
	A. 60-1	07:59	5.8	23.6	387	56	0.8	.44	376 ± 2	295 ± 168	204
	sl. 2-3	08:14	5.92	22.4	2369	211	-0.9	-	591 ± 1	565 ± 24	-
	sl. 2-4	08:28	5.63	23.0	2140	230	0.8	.07	568 ± 1	590 ± 40	204
	A. 61-1	08:43	5.60	23.5	584	95	-0.1	-	380 ± 1	382 ± 52	-

1° d. 16/6/1997