

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

Date	UWA Mount No.	Whose sample?	Operator(s)
30/6/98	98-29	Joas	JD

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Indicate any change to the following:

	196	204	bkg	206	207	208	238	248	254	
<b>Precambrian</b>	Count time (secs):	2	10	10	10	30/10*	10	5	5	2
<b>Phanerozoic*</b>	Delay time (secs):	3	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 = 8.168 .....      actual 204-bkg = 0.045 .....      expected resolution = >4200  
 actual 206-207 = 1.000 .....      actual 206-208 = 2.000 .....      actual resolution = .....

Primary = 3.1 nA      PESABM = 4.1 pA      actual Primary : PESABM (= 50:1) = .....  
 Raster time (mins): 1 .....      Raster aperture (microns): .....      No. of scans: 6 .....

Comments:  
 follow on from C85b (sample B)  
 Joas → D = 21337      11:30pm

Rejection over-ride	Sample/ Std ID	Time - printout	UO/U	196 k cps	206 cps	U ppm	204Pb ppb	f <sub>206</sub> %	Age ±1σ (Ma) 206/238 207/206	196-204 206-207 206-208 Corr.
	sl. 6-1	00:19	5.87	17.2	1855	-	-	-	618	8.168 1.000 1.000
	sl. 6-2	00:36	5.89	16.8	1867	220	0.9	.07	572 530	"
	D. 1-1	00:55	5.71	17.4	3001	94	0.6	.02	2067 3210	8.167 1.000 1.000
	D. 2-1	01:13	5.85	17.6	3111	107	1.8	.08	1749 2579	"
	D. 3-1	01:33	5.89	17.4	4930	186	1.1	.03	1601 2254	8.167 ✓ "
	sl. 5-1	01:52	5.85	17.3	1881	222	-	-	568 599	"
	D. 18-1	02:11	5.76	17.0	1745	51	0.9	.06	2186 2546	"
	test B.25	02:31	5.70	16.5	1549	192	2.4	.21	624 664	"
	D. 28-1	02:51	5.84	17.3	4621	160	0.1	.00	1776 2144	"

abnormally high # of artef. rejections. 10% extremely stable, 2% well tuned. None on stds. They all fit earlier curve too. No problem finding peaks + centering o.k.  
 Moving to different area on mount. Still same problem  
 moved to grain done earlier + generally fine. only 3 artef. back to another area in mount. still no good.

Can't figure it out at all. Don't want to waste rest of night. I'm out of here.

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

Date: 30/6/98      UWA Mount No.: 98-29      Whose sample?: Jan J (+ Janis K)      Operator(s): IF + JD

Indicate any change to the following:    196    204    bkg    206    207    208    238    248    254

Precambrian    Count time (secs):    2<sup>-</sup>    10<sup>-</sup>    10<sup>-</sup>    20<sup>-</sup>    30/10\*<sup>20</sup>    10<sup>-</sup>    5<sup>-</sup>    5<sup>-</sup>    2<sup>-</sup>

Phanerozoic\*    Delay time (secs):    8<sup>-</sup>    3<sup>-</sup>    1<sup>-</sup>    2<sup>-</sup>    1<sup>-</sup>    1<sup>-</sup>    3<sup>-</sup>    2<sup>-</sup>    2<sup>-</sup>

expected 196-204 = 8.170 amu      expected 204-bkg = 0.040 amu      Dead-time = 32 nanosecs

actual 196-204 = 8.168      actual 204-bkg = 0.045      expected resolution = >4200

actual 206-207 = 1.000      actual 206-208 = 2.000      actual resolution = 5462

Primary = 3.1 nA    PESABM = 41 pA    actual Primary : PESABM (≈ 50:1) =

Raster time (mins): 1    Raster aperture (microns): 120    No. of scans: 6

Comments: Sensitivity = 18

B = C85b

Rejection over-ride	Sample/ Std ID	Time - printout	UO/U	196 k cps	206 cps	U ppm	204Pb ppb	f <sub>206</sub> %	Age ±1σ (Ma) 206/238    207/206	196-204 206-207 Corr. 206-208
	sl-7-8	13:07	5.91	16.8	1852	-	0.7	.06	-    521	✓
	sl-7-9	13:29	5.96	16.8	1816	214	1.1	.10	559    511	8.168 1.000 2.000
	B-7-1	13:52	5.92	16.2	459	50	1.1	.37	633    530	- " -
	B-8-1	14:10	6.07	16.4	1436	157	3.3	.38	581    560	- " -
	B-9-1	14:28	6.10	15.3	1327	141	0.8	.10	626    585	- " -
	sl-7-10	14:45	6.00	16.0	1795	219	0.2	.01	558    563	- " -
	B-10-1	15:04	6.16	16.7	1813	204	1.4	.14	530    615	- " -
	B-11-1	15:21	6.05	16.1	1828	194	1.5	.07	618    574	- " -
	B-13-1	15:40	5.87	16.8	2193	246	7.4	.52	613±1    615	"
	B-13-2	15:58	6.14	17.8	2233	213	60.9	5.1	562±2    776	"
	sl-7-11	16:18	5.99	17.3	1865	213	-	-	555    581	"

Start - 14:00

Rejection over-ride	Sample/ Std ID	Time - printout	UO/U K cps	196 cps	206 cps	U ppm	<sup>204</sup> Pb ppb	f <sub>206</sub> %	Age ±1σ (Ma) 206/238 207/206		Corr.
	B.14-1	16:41	5.86	17.4	1543	164	2.2	.22	631	638	"
	B.15-1	17:00	5.80	17.2	1034	117	0.5	.07	624	644	"
	B.15-2	17:19	5.88	17.1	887	99	0.8	.14	607	624	"
<i>change 16 → 18</i>	B.18-1	17:39	5.78	17.5	1348	151	1.5	.16	627	635	"
	<i>sl. 9-2</i>	<i>17:58</i>	<i>5.85</i>	<i>17.5</i>	<i>1911</i>	<i>227</i>	<i>1.3</i>	<i>.11</i>	<i>567</i>	<i>532</i>	"
	B.22-1	18:17	5.76	17.5	1000	140	2.3	.34	509	704	"
	B.24-1	18:36	5.94	16.9	8406	374	2.6	.05	<u>1400</u>	1379	"
	B.25-1	18:55	5.97	17.4	1594	165	6.9	.73	608	598	"
<i>should have aborted!</i>	B.26-1	19:12	5.97	17.1	3427	260	<u>358.5</u>	17.2	700	629	"
	<i>sl. 9-3</i>	<i>19:30</i>	<i>5.81</i>	<i>17.4</i>	<i>1833</i>	<i>230</i>	<i>—</i>	<i>—</i>	<i>554</i>	<i>635</i>	"
	B.27-1	19:51	5.63	17.6	879	98	10.0	1.57	677	694	"
<i>delete B.30,</i>	B.28-1	20:10	5.87	17.9	1657	170	6.8	.68	629	538	"
	B.30-1	20:40	6.03	17.5	2332	231	2.1	.16	614	654	"
	B.32-1	20:58	5.85	17.1	541	60	1.1	.32	622	574	"
	<i>sl. 9-4</i>	<i>21:16</i>	<i>5.88</i>	<i>17.0</i>	<i>1885</i>	<i>228</i>	<i>0.2</i>	<i>.02</i>	<i>568</i>	<i>566</i>	"
	B.33-1	21:38	5.72	17.4	821	97	0.2	.03	620	616	"
	B.34-1	21:58	6.28	18.3	1291	131	8.7	1.40	499	666	"
	B.35-1	22:16	6.20	17.1	1685	139	42.4	4.63	659	767	"
	B.36-1	22:36	5.83	17.8	2087	228	6.8	.52	612	580	"
	<i>sl. 9-5</i>	<i>22:54</i>	<i>5.83</i>	<i>17.1</i>	<i>1844</i>	<i>231</i>	<i>—</i>	<i>—</i>	<i>560</i>	<i>583</i>	"

