

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

Date	UWA Mount No.	Whose sample?	Operator(s)
16/2/98	98-04	Yumin	1F+YQ

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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 ✓	20 ✓	20 ✓	10 ✓	5 ✓	5 ✓	2 ✓
<b>Phanerozoic*</b>	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 = 8.170      actual 204-bkg = 0.044      expected resolution = >4200  
 actual 206-207 = 1.000      actual 206-208 = 2.000      actual resolution = 4774  
 Primary = 3.8 nA    PESABM = 54 pA    actual Primary : PESABM (≈ 50:1) = 70  
 Raster time (mins): 12    Raster aperture (microns): 120    No. of scans: 5

Comments: Sensitivity = 16  
① Change from 1 to 2 min raster  
Nstd = 11    % error = 1.10    Default  
% error = 1.09    Actual Slope = 1.99

*this table in early runs (improved ~ 2 min). Later on, still had occasional steps and twitches.*

Rejection over-ride	Sample/ Std ID	Time - printout	UO/U	196 cps	206 cps	U ppm	204Pb ppb	f <sub>206</sub> %	Age ±1σ (Ma)		Corr.
									206/238	207/206	
	sl. 5-1	12:11	5.72	18.2	1957	-	-ve	-	-	635	-
	sl. 5-2	12:30	5.83	19.0	2110	207	04	09	582	625	208
	A. 1-1	12:48	6.03	18.1	1325	471	13.	2.0	153	<del>114</del>	209
	A. 2-1	13:05	7.62	12.7	3808	1316	71.	5.4	108	246	204
	sl. 5-3	13:23	5.44	19.5	1951	231	-ve	02	603	570	208
	A. 3-1	13:42	5.89	17.5	456	128	0.7	0.28	219	387	204
	A. 4-1	13:59	6.54	15.5	3239	1145	36.	2.6	138	178	204
	A. 5-1	14:15	6.09	17.7	3601	1209	0.9	0.05	163	213	204
①	A. 7-1	14:32	6.61	16.2	2752	1033	47.	4.2	120	-	204
	sl. 5-4	14:55	5.65	20.9	2146	216	01	01	578	582	204
	A. 8-1	15:12	6.17	16.6	860	68	4.5	0.85	679	2422	204

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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.

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. 10-1	15:30	5.88	19.7	1611	530	1.5	.20	168 180	204
	A. 11-1	15:46	7.04	18.0	3894	1105	53.	4.5	117 185	204
	A. 24-1	16:02	4.56	17.2	442	463	104.	15.	148	204
? delete scan?	SL-6-1	16:19	5.63	21.4	2174	220	0.9	.08	570 536	204
	A. 21-1	16:35	5.85	19.9	969	235	0.1	.02	229 231	204
Possible u/pb problem	A. 32-1	16:52	5.92	19.7	234	98	-ve	-	159 251	-
	A. 41-1	17:08	5.68	20.7	393	179	4.7	1.7	128	204
Spot overlaps a bit (?)	A. 42-1	17:25	5.69	17.5	344	180	12.	4.4	128	204
	SL-6-2	17:41	5.78	20.6	2262	215	0.9	.02	572 555	208
Spot overlaps ~50%	A. 43-1	17:57	4.82	17.3	408	212	9.6	1.9	258 355	204
	AB-1	18:16	5.77	22.5	1913	677	5.8	.6	160 85	204
del scan 5 for 208, 238, 248, 254	A15-1	18:35	6.17	19.	1801	479	64.8	8.3	169 0.7	204
1 dumped (44-1) !! from 4.0 to 2.5	SL6-3	18:57	6.33	13.3	1628	183	1.2	.1	553 477	204
	A44-R	18:57	6.73	11.8	214	1013	14.6	1.3	124 301	204
	A46-1	20:19	5.51	13.4	547	323	41.3	10.6	156	208
	A45-1	19:30	5.95	12.6	919	354	177.	23.7	165	208
	A47-1	20:37	6.78	14.6	2636	1249	31.4	2.2	124 080	208
	A48-1	20:53	6.31	14.9	2333	863	7.7	1.5	157 302	208
	SL6-6	20:10	5.32	10.9	<del>1450</del> 263	<del>305</del> 0.4	0.4	.01	571 518	
	A49-1	21:27	6.19	13.9	1987	842	3.1	.3	156 163	204
	A50-1	21:45	5.22	12.0	799	626	48.7	9.5	172	208
	A51-1	22:08	5.55	14.5	669	357	4.0	.74	171 71	204
	A52-1	22:25	6.06	14.7	2403	905	8.1	.66	155 148	204
	SL6-5	22:42	6.01	15.2	1842	204	0.1	.03	582 523	208
B = B2H2 B22-1 !!	A22-1	23:05	5.83	15.4	1490	474	2.8	.29	228 236	204

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.
	B22a	23:22	6.04	16.1	425	121	1.9	.8	216 28	204
2° dropped 1/2 way. (del scan 3) exclude from pop <sup>n</sup>	<del>B23a</del>	23:42	6.08	13.4	995	292	100.6	4.3	236 <del>235</del>	208
1° jumped to 4°	B24-1	21:59	<del>5.7</del> 20.7	453	113	0.3	.1	228	108	204
	B19a	0:18	6.38	19.8	2369	538	19.2	2.2	182 166	206
	B19b	0:35	5.84	19.99	1938	470	38.	2.8	223 646	208
	SL5-6	0:51	5.5	23.6	2213	221	1.8	.15	571 511	204
	B20a	1:08	6.	21.1	1627	418	9.5	1.4	185 210	206
	B20b	1:25	5.73	20.4	1422	<del>341</del> 276	281	<del>1.8</del> 1.8	<del>218</del> 860	208
1° dropped	B21-1	2:11	6.02	13.99	566	197	7.7	2.2	252 116	204
	B18a	2:29	6.16	15.97	1932	541	12.3	1.2	257 222	204
	B18b	2:46	6.11	14.3	1666	530	6.	.25	210 345	208
	SL5-7	3:04	5.54	16.8	1662	230	2.3	1.002	565 580	208
	B18c	3:20	5.82	16.6	890	263	9.1	.77	229 518	208
	B16a	3:40	5.77	19.6	939	220	53.1	4.1	243 1769	208
	B16b	3:56	6.	20.5	287	465	234.	2.7	192 930	208
	B14a	4:47	5.69	22.5	1067	259	0.8	.2	223 210	204
1° dropped alot of failed, small error bars	B14b	5:03	5.85	16.8	817	243	1.0	.2	221 158	204
	SL5-8	5:21	5.99	14.1	1687	207	1.7	.02	558 553	208
delete scan 4 for 206 → 254 1° dropped del scans A	B12a	5:39	6.52	12.5	1425	448	3.5	.5	198 302	208
	B11a	5:55	5.92	21.9	561	122	2.1	.9	220 106	204
	B8a	6:16	5.96	21.9	1439	433	44.	5.5	150 1029	208
	B8b	6:33	6.82	20.9	3348	834	17.5	1.8	129 237	204
	B2-1	6:53	5.84	23.	1740	366	8.4	.7	227 415	208
	B1-1	7:09	5.54	23.9	1185	305	6.	1.	215 188	204