

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

Date: 24/10/97      UWA Mount No. 97-21      Whose sample? Ballarat      Operator(s) McN + FB

Indicate any change to the following:

	196	204	bkg	206	207	208	238	248	254
<del>Precambrian</del> Count time (secs):	2	10	10	10	30/10*	10	5	5	2
Phanerozoic* Delay time (secs):	78	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 = 0.040      expected resolution = >4200  
 actual 206-207 = 1.000      actual 206-208 = 1.999      actual resolution = 4990  
 Primary = 3.6 nA      PESABM = 5.7 pA      actual Primary : PESABM (≈ 50:1) = 61  
 Raster time (mins): 1      Raster aperture (microns): 100      No. of scans: 6

Comments: A = NUAD-13 } Nuggetty Reef  
 B = NR 9/10 }  
 C = BH 16/10 }  
 D = FOI }



Rejection over-ride	Sample/ Std ID	Time - printout	UO/U	196 kcps	206 cps	U ppm	204Pb ppb	f206 %	Age ±1σ (Ma)		Corr.
									206/238	207/206	
	sl. 6-1	9:19	5.52	23.2	2292	220	-0.2	—	572±1	591±25	—
	sl. 6-2	9:34	5.51	23.0	2311	220	-0.8	—	583±1	582±25	—
	B. 4-1	9:50	5.48	22.7	199	30.6	1.6	1.17	376±2	—	204
	B. 4-2	10:06	5.80	20.6	2341	325	1.6	-1.5	378±1	314±45	"
	sl. 6-3	10:21	5.55	22.2	2289	219	1.3	.11	587±1	523±33	"
	B. 5-1	10:37	5.50	23.5	601	90.1	5.6	1.89	364±1	263±152	"
	B. 5-2	10:52	5.54	22.1	1020	155	0.6	.12	377±1	324±70	"
	B. 3-1	11:08	5.54	21.7	1976	306	0.6	-0.6	378±1	356±41	"
	sl. 6-4	11:23	5.57	21.9	2244	217	-1.0	—	582±1	616±25	—
	B. 2-1	11:39	5.86	22.0	1813	223	0.7	-0.9	386±1	351±44	"
	B. 1-1	11:55	6.08	19.9	7.7k	925	2.1	.06	386±1	385±17	"

\* Count from low U to high U zone during analysis

Mount/sample No: 97-21 Date: 24/10/97 Page No: 2

Rejection over-ride	Sample/ Std ID	Time - printout	UO/U	196 Kcps	206 cps	U ppm	<sup>204</sup> Pb ppb	f <sub>206</sub> %	Age ±1σ (Ma) 206/238 207/206		Corr.
	B. 51-1	12:09	5.81	21.7	2456	321	10.8	.99	375 ± 1	328 ± 57	204
	B. <del>6-3</del>	12:29	5.63	21.9	1264	180	10.8	1.71	379 ± 1	516 ± 85	"
	<b>sl. 6-5</b>	12:44	5.52	22.2	2259	222	0.2	.02	583 ± 1	510 ± 36	"
* 6x pb	B. 6-2	13:00	5.44	21.8	878	108	55.7	10.83	448 ± 3	815 ± 227	"
* 6x pb	B. <del>6</del> -3	13:16	5.45	21.2	1630	253	40.4	4.22	393 ± 1	632 ± 104	"
	B. 7- <del>1</del>	13:31	5.71	21.2	2.6K	379	-1.6	-	376 ± 1	383 ± 25	-
	B. 7-2	13:46	5.53	21.8	352	54.3	0.5	.26	381 ± 1	316 ± 130	204
	<b>sl. 6-6</b>	14:01	5.50	21.2	2156	227	0.0	.003	580 ± 1	565 ± 26	"
	B. 8-1	14:17	5.59	22.4	839	122	-1.4	-	379 ± 1	348 ± 45	-
	B. 9-1	14:32	5.84	21.1	3.8K	512	0.5	.03	374 ± 1	416 ± 24	204
	B. 10-1	-	-	-	high	204	-	-	-	-	-
	B. 11-1	14:56	5.35	20.5	1343	263	0.5	.06	363 ± 1	377 ± 51	204
	B. 11-2	15:11	5.55	21.9	450	68.5	1.2	.52	379 ± 1	255 ± 132	"
	<b>sl. 6-7</b>	15:26	5.70	21.7	2277	208	-0.3	-	571 ± 1	615 ± 24	+
	B. 12-1	15:43	5.84	21.6	2053	259	2.8	0.31	383 ± 1	296 ± 43	"
	B. 12-2	16:00	5.84	20.2	502	68	1.2	0.5	383 ± 1	147 ± 127	"
	B. 13-1	16:16	5.46	22.2	2660	435	0.8	.06	369 ± 1	369 ± 31	"
	B. 14-1	16:32	5.81	21.3	363	47	-0.1	-	384 ± 1	321 ± 65	-
	<b>sl. 7-1</b>	16:49	5.55	23.2	2265	209	0.8	.07	577 ± 1	499 ± 31	"
	B. 15-1	17:07	5.74	20.9	1261	178	1.0	.16	379 ± 1	358 ± 48	"
	B. 16-1	17:24	5.62	22.5	283	40	1.6	1.17	350 ± 2	106 ± 237	"
	B. 15-1	17:40	5.76	21.1	914	121.6	-0.2	-	343 ± 1	387 ± 42	-
	B. 14-1	17:57	5.73	22.2	3465	457	-0.1	-	382 ± 1	350 ± 22	-
	<b>sl. 7-2</b>	18:13	5.69	22.7	2292	198	1.1	0.1	577 ± 1	553 ± 32	"
	B. 14-2	18:31	5.87	20.1	314	42	1.3	0.41	382 ± 2	0.2 ± 229	"

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.
	B.19-3	18:46	5.57	21.2	667	1075	0.3	.09	365 ± 1	390 ± 95	204
	B.20-1	19:01	5.96	21.7	1084	126.7	0.8	1.79	386 ± 1	363 ± 62	"
	B.21-1	19:17	5.72	22.1	756	103	-0.1	-	376 ± 1	270 ± 47	-
	<b>S1.7-3</b>	<b>19:32</b>	<b>5.60</b>	<b>22.2</b>	<b>2317</b>	<b>2099</b>	<b>0.6</b>	<b>.05</b>	<b>597 ± 1</b>	<b>509 ± 28</b>	"
	B.47-1	19:48	5.88	19.6	654	89.2	1.7	.55	383 ± 1	30 ± 101	"
	B.22-1	20:04	5.98	21.5	2453	280	0.5	.05	395 ± 1	353 ± 40	"
	B.22-2	20:20	5.63	21.0	415	63.7	2.3	1099	369 ± 1	118 ± 158	"
	B.23-1	20:37	5.74	20.7	304	43.9	1.5	1.03	374 ± 3	73 ± 264	"
	<b>S1.7-4</b>	<b>20:52</b>	<b>5.75</b>	<b>21.2</b>	<b>2276</b>	<b>2013</b>	<b>-0.2</b>	<b>-</b>	<b>584 ± 1</b>	<b>579 ± 25</b>	-
	B.23-2	21:07	5.49	21.4	772.9	116.4	0.1	.02	408 ± 1	357 ± 70	"
	<b>B.25-1</b>	21:30	3.91	23.8 <sup>-3</sup>	3.2	325	620	4.7	285 ± 14	0.0	"
	B.26-1			Light		204					
	B.28-1	21:54	5.55	21.5	804	117.5	1.7	.41	399 ± 1	39 ± 94	"
	B.29-1	22:11	5.23	21.5	352.9	56.6	1.9	.79	453 ± 2	322 ± 190	"
	<b>S1.7-5</b>	<b>22:26</b>	<b>5.62</b>	<b>21.3</b>	<b>2211</b>	<b>2096</b>	<b>0.2</b>	<b>.021</b>	<b>586 ± 1</b>	<b>630 ± 27</b>	"
	B.30-1	22:41	5.84	18.7	436.9	62.9	1.2	.54	388 ± 1	314 ± 129	"
	B.31-1	23:00	5.87	20.2	1259	165.9	8.8	1.5	376 ± 1	348 ± 87	"
	B.32-1	23:15	5.67	19.2	3118	474	0.5	.03	398 ± 1	347 ± 29	"
	B.33-1	23:31	5.63	17.1	823	150.3	21	3.9	370 ± 2	700 ± 123	"
	<b>S1.7-6</b>	<b>23:47</b>	<b>5.68</b>	<b>22.2</b>	<b>2246</b>	<b>2016</b>	<b>0.6</b>	<b>.05</b>	<b>574 ± 1</b>	<b>579 ± 32</b>	"
	B.52-1	00:03	5.45	17.2	560	113.9	1.0	.25	386 ± 1	255 ± 82	"
	B.38-1	00:20	5.60	20.6	2258	352	1.7	.14	381 ± 1	403 ± 34	"
	B.39-1	00:35	5.71	20.7	2839	402	0.6	.04	387 ± 1	366 ± 27	"
	B.53-1	00:50	5.66	19.9	813	124.8	<del>0.2</del>	0.26	393 ± 1	271 ± 81	"
	<b>S1.7-7</b>	<b>01:06</b>	<b>5.67</b>	<b>21.9</b>	<b>2184</b>	<b>204</b>	<b>0.5</b>	<b>.05</b>	<b>563 ± 1</b>	<b>599 ± 38</b>	"

primary: drop to 3.2uA  
 → flat line: back to 3.6uA!

10: 3.4uA \*  
 lost 20...

1° spike rejected

1° rejected

reject

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.
	B.40-1	01:21	5.70	21.7	4346	61.3	0.7	.34	371 ± 1	538 ± 57	204
	B.41-1	01:37	5.74	21.9	6328	57.8	0.3	.11	551 ± 2	463 ± 96	"
	B.42-1	01:53	5.65	21.5	568	80.7	0.1	.03	387 ± 1	439 ± 489	"
	B.42-2	02:08	5.63	21.7	283	41.1	1.3	.91	377 ± 2	122 ± 23	"
	SI.5-1	02:24	5.72	21.1	2207	198.9	0.6	0.57	584 ± 1	554 ± 29	"
	B.54-1	02:40	5.83	20.9	576.7	74.9	0.8	.29	388 ± 1	315 ± 109	"
1 <sup>st</sup> cycle rejected	B.45-1	02:56	5.73	21.4	2670	369	0.0	.001	379 ± 1	402 ± 24	"
4 <sup>th</sup> cycle rejected	B.48-1	03:12	5.84	21.5	2544	329	4.2	.37	379 ± 1	361 ± 39	"
	B.55-1	03:27	5.66	22.5	2822	105.8	-0.2	-	1296 ± 3	2291 ± 12	-
	SI.5-2	03:42	5.86	20.4	2235	189.8	0.3	.029	590 ± 1	594 ± 30	"
	D.1-1	03:59	5.36	20.7	1596	306	4.5	.45	363 ± 1	423 ± 47	"
	D.1-2	04:13	5.74	19.8	4657	679	-0.3	-	387 ± 1	408 ± 19	-
	D.2-1	04:29	5.68	21.1	3606	529	2.8	.15	375 ± 1	387 ± 28	"
1 <sup>st</sup> cycle rejected	D.2-2	04:43	6.10	20.3	5685	642.4	1.0	.04	396 ± 1	379 ± 19	"
	SI.5-3	04:58	5.68	22.2	2173	192.9	0.4	.03	578 ± 1	632 ± 29	"
	B.56-1	05:15	5.61	21.5	592	87.4	-0.5	-	383 ± 1	397 ± 59	-
	B.57-1	05:30	5.60	21.6	841.6	125.6	0.2	.03	380 ± 1	324 ± 67	"
	B.58-1	05:45	5.67	21.4	1489	213.9	0.4	.06	379 ± 1	338 ± 44	"
	B.59-1	06:00	5.83	17.7	1126	170.3	0.6	.10	394 ± 1	332 ± 50	"
	SI.5-4	06:16	5.67	22.1	2224	199.2	-0.2	-	580 ± 1	548 ± 25	-
	B.60-1	06:31	5.80	19.4	3515	4010	0.0	-	397 ± 1	350 ± 22	-
	B.61-1	06:46	5.63	19.7	3004	475.7	0.1	.005	383 ± 1	378 ± 38	"
	B.63-1	07:09	5.83	20.4	344	46	-0.3	-	388 ± 1	502 ± 64	-
1 <sup>st</sup> cycle rejected	B.64-1	07:28	5.74	20.6	3822	53.2	-0.3	-	389 ± 1	585 ± 59	-
	SI.5-5	07:43	5.75	21.8	2255	191.4	0.3	.03	589 ± 1	520 ± 28	"
	B.65-1	08:03	5.95	19.6	1411	183.8	-0.4	-	387 ± 1	417 ± 33	-
	B.66-1	08:18	5.77	20.5	643	29.6	1.7	.52	1094 ± 5	917 ± 72	"
	B.67-1	08:38	5.79	21.0	552	73.5	0.1	.02	387 ± 1	391 ± 56	"
	SI.5-6	08:53	5.78	21.9	2237	188	0.3	.03	583 ± 1	551 ± 28	"
	B.68-1	09:08	5.72	22.3	1061	137.2	0.1	.02	392 ± 1	304 ± 304	"