

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

Date: 1/4/98 UWA Mount No.: 98-01 Whose sample?: Blake/MEB Operator(s): McN/AP

---

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
<del>Phanerozoic*</del> Delay time (secs):	<u>7</u>	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 = 8.172      actual 204-bkg = 0.045      expected resolution = >4200  
 actual 206-207 = 1.002      actual 206-208 = 2.003      actual resolution = 5439

Primary = 3.2 nA    PESABM = 40 pA    actual Primary : PESABM (= 50:1) = 80  
 Raster time (mins): 1    Raster aperture (microns): 100    No. of scans: 5

Comments: A = U931/1     $N_{std} = 18$     error % = 1.35    (= 1.34 Actual slope 2.14)

① lowered  $1^\circ$  to  $\sim 2.6^\circ$  to try & reduce  $1^\circ$  fluctuations  $\rightarrow 1^\circ$  stable on steel  $\therefore$  thin gold coat?  
 \* Primary dropped during analysis

Rejection over-ride	Sample/ Std ID	Time - printout	UO/U	196 Kcps	206 cps	U ppm	204Pb ppb	f <sub>206</sub> %	Age $\pm 1\sigma$ (Ma)	206/238	207/206	Corr.
	* S1.4-1	11:03	6.75	14.2	1285	220	0.4	.07	572 $\pm$ 1	557 $\pm$ 24	208	
	* S1.4-2	11:17	6.59	14.2	1342	227	-0.4	.04	619 $\pm$ 1	563 $\pm$ 23	"	
	S1.4-3	11:45	6.64	11.8	1064	223	-0.1	.005	591 $\pm$ 1	555 $\pm$ 26	"	
	S1.4-4	12:00	6.50	11.3	974	228	-1.8	/	589 $\pm$ 1	605 $\pm$ 26	/	
	A.1-1	12:15	6.51	10.9	1491	62.5	2.4	.09	2828 $\pm$ 13	2708 $\pm$ 12	204	
	A.1-2	12:29	6.61	11.5	1485	56.2	3.3	.14	2820 $\pm$ 14	2677 $\pm$ 12	"	
	S1.4-5	12:43	6.63	11.4	1093	236	0.8	.06	592 $\pm$ 1	507 $\pm$ 39	"	
	A.1-3	12:57	6.79	11.3	1612	59.3	1.1	.05	2759 $\pm$ 14	2733 $\pm$ 11	"	
	A.1-4	13:11	6.78	11.2	1550	56.7	3.1	.14	2792 $\pm$ 14	2701 $\pm$ 11	"	
	A.1-5	13:25	6.69	9.9	1443	59.1	4.8	.19	2907 $\pm$ 16	2700 $\pm$ 13	"	
	S1.4-6	13:40	6.54	12.5	1060	219	0.5	-.015	591 $\pm$ 1	542 $\pm$ 26	208	

del scan 2 for 238, 248, 254

①  $\rightarrow$

Primary lower than normal!  
 QUIT  $\rightarrow$   
 PD.1

Rejection over-ride Sample/Std ID Time - printout UO/U K cps 196 cps 206 cps U ppm 204Pb ppb f206 % Age ±1σ (Ma) 206/238 207/206 Corr.

2.4nA  
3nA  
2.8nA

Rejection over-ride	Sample/Std ID	Time - printout	UO/U K cps	196 cps	206 cps	U ppm	204Pb ppb	f206 %	Age ±1σ (Ma) 206/238	207/206	Corr.
	A.2-1	13:57	6.66	11.7	2707	97.9	3.8	0.09	2845±11	2695±8	204
	A.2-2	14:13	6.67	11.4	1632	61.7	4.2	.17	2795±14	2706±11	✓
	A.3-1	14:27	6.79	11.6	3360	118	-	-	2793±10	2704±7	-
	A.4-1	14:44	6.48	13.6	3171	109	1.2	0.03	2805±10	2702±7	204
	sl.4-7	14:59	6.62	13.0	1196	232	2.5	0.009	581±1	561±25	208
	A.5-1	15:15	6.78	12.0	7551	258	2.7	0.03	2804±6	2704±5	204
	A.5-2	15:29	6.77	12.0	5496	196	4.6	0.06	2715±7	2695±6	204
	A.6-1	15:43	6.68	12.0	2366	85.0	-	0.02	2772±11	2706±9	208
	A.7-1	16:09	6.68	12.4	3911	137	1.9	0.04	2764±9	2724±7	204
	A.7-2	16:22	6.77	11.8	4203	149	0.4	0.006	2771±9	2724±7	204
	sl.4-8	16:37	6.60	9.9	941	234	-	-	600±1	517±26	-
	sl.4-9	16:55	6.58	12.4	1164	242	0.1	0.03	590±1	630±24	205
	A.8-1	17:10	6.57	12.4	2871	102	-	-	2842±11	2728±7	-
	A.8-2	17:24	6.57	11.7	2775	105	-	-	2827±11	2733±7	-
	A.9-1	17:39	6.87	11.9	2517	86.9	0.6	0.02	2701±11	2698±8	204
	A.9-2	17:52	6.55	12.1	2694	99	-	-	2850±11	2697±8	-
	A.9-3	18:05	6.64	12.6	3007	104	1.0	0.08	2802±10	2704±8	208
	sl.6-1	18:19	6.76	12.2	1173	229	-3.4	0.03	578±1	611±25	208
	A.10-1	18:34	6.77	11.9	2963	103	1.5	0.04	2786±10	2713±8	204
	A.10-2	18:48	6.69	11.9	2976	108	0.7	0.02	2779	2712	204
	A.11-1	19:01	6.62	11.8	1464	53.1	0.9	0.04	2862±15	2705±13	204
	A.11-2	19:17	6.71	11.8	1622	56.1	-	-	2878±14	2715±10	-
	A.12-1	19:31	6.73	12.1	2832	98.8	0.2	0.006	2776±10	2714±8	204
	sl.6-2	19:45	6.76	12.3	1192	231	-0.2	0.01	594±1	578±24	208
	A.13-1	19:59	6.78	11.8	3593	125	2.1	0.04	2785±9	2702±7	204

(pnt in sample bk) delayed start →

PD.2 QUIT →  
1° fell out.

del scan 2 for 288, 246, 254  
del scan 3 for 196.

PD.3 QUIT ✓ →

Mount/sample No: 98-01

Date: 1/4/98

Page No: 3

Rejection over-ride	Sample/ Std ID	Time - printout	UO/U	196 cps (K)	206 cps	U ppm	204Pb ppb	f206 %	Age $\pm 1\sigma$ (Ma)		Corr.
									206/238	207/206	
	A 14-1	20:13	6.79	11.4	2407	82.4	1.7	0.05	2794 $\pm 11$	2706 $\pm 9$	204
	A 14-2	20:27	6.69	12.5	2743	96.3	-	-	2730 $\pm 10$	2717 $\pm 7$	-
	A 15-1	20:43	6.64	11.9	1756	63.6	2.4	0.10	2819 $\pm 13$	2704 $\pm 11$	204
	A 16-1	20:56	6.73	11.9	2744	97.5	0.1	0.03	2769 $\pm 10$	2726 $\pm 8$	204
	sl 6-3	21:11	6.83	11.7	1159	225	1.7	0.04	593 $\pm 1$	532 $\pm 25$	208
	A 17-1	21:24	6.92	11.4	3197	106	1.1	0.03	2834 $\pm 10$	2715 $\pm 8$	204
	A 18-1	21:40	6.73	11.7	1653	58.4	1.6	0.07	2832 $\pm 14$	2675 $\pm 11$	204
	A 19-1	21:53	6.73	11.9	2268	78.7	0.8	0.02	2840 $\pm 12$	2718 $\pm 10$ <del>2810</del>	204
	A 20-1	22:06	6.83	11.5	1153	39.2	1.5	0.09	2850 $\pm 17$	2696 $\pm 15$	204
	A 20-2	22:19	6.72	11.7	1745	61.1	-0.6	0.14	2850 $\pm 14$	2711 $\pm 11$	208
	sl 6-4	22:34	6.83	12.1	1141	219	-0.2	0.08	578 $\pm 1$	571 $\pm 25$	208
	A 23-1	22:48	6.76	11.8	1608	57.3	9.4	0.42	2743 $\pm 14$	2711 $\pm 13$	208
	A 24-1	23:02	6.67	12.0	2826	101	0.6	0.01	2810 $\pm 11$	2705 $\pm 8$	204
	A 25-1	23:15	6.65	11.9	2576	93.6	2.2	0.06	2809 $\pm 11$	2712 $\pm 8$	204
	A 26-1	23:28	6.98	11.4	3526	115	2.9	0.06	2819 $\pm 10$	2723 $\pm 7$	204
	A 21-1	23:43	6.57	12.2	589	20.6	-2.0	0.04	2926 $\pm 24$	2731 $\pm 16$	204
	sl 6-5	23:58	6.72	12.1	1197	233	1.1	0.02	597 $\pm 1$	581 $\pm 25$	208
	A 22-1	24:13	6.68	12.2	3891	138	0.3	0.005	2768 $\pm 9$	2730 $\pm 6$	204
	A 27-1	24:26	6.82	11.8	3550	129	0.5	0.01	2644 $\pm ?$	2725 $\pm ?$	204
	A 27-2	24:39	6.60	12.7	2953	103	-	-	2801 $\pm 10$	2719 $\pm 7$	-
	A 28-1	24:54	6.70	11.9	3330	122	-	-	2784 $\pm 10$	2727 $\pm 7$	-
	A 29-1	1:07	6.50	10.2	19.17	75.5	6.0	0.17	3131 $\pm 15$	2684 $\pm 10$	204
	A 30-1	1:27	6.61	12.2	1089	38.8	-0.8	0.03	2831 $\pm 17$	2705 $\pm 14$	208
	sl 6-6	1:37	6.61	12.4	1172	240	-0.2	0.02	580 $\pm 1$	584 $\pm 25$	208
	C.1-1	1:50	6.35	12.5	755	28.0	0.7	0.05	2974 $\pm 22$	2751 $\pm 16$	204

2.8na

A

PD4

PD5

2.8na

1<sup>o</sup> unstable  
 $\pm 2na$ 

2.8na

del scan 3 207-224  
del scan 4 196

exclude

exclude

B



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.
---------------------	----------------	-----------------	------	---------	---------	-------	-----------	--------	----------------------	---------	-------

PD6

del 254 scan 4 del scan 5 A

Full in 10 → alot failed lines OK  
funstable

PD7

PD8

del scan 2 254 del scan 4 196

	C2-1	2:04	6.69	12.5	846	27.5	2.9	0.25	2879±20	2742±18	204
	C3-1	2:21	6.48	12.3	546	19.9	2.6	0.31	2900±25	2737±24	204
	C4-1	2:35	6.60	12.2	892	32.1	-2.4	0.04	2827±19	2745±16	208
	C5-1	2:49	6.44	10.8	1200	46.8	4.5	0.21	3102±19	2733±13	20x
	sl 6-7	3:03	6.67	13.1	1205	223	-0.4	0.01	593±1	558±25	208
	C6-1 (K)	3:17	6.62	10.9	562	21.4	0.1	0.01	2936±25	2754±17	20x
	C7-1 (C)	3:32	6.76	12.2	967	31.8	1.3	0.1	2864±19	2730±14	20x
	C7-2	3:45	6.76	11.7	690	22.8	0.5	0.05	2943±23	2757±18	20x
	C8-1	3:59	6.46	12.3	1089	38.5	-	-	2994±18	2750±12	-
	C9-1	4:13	6.62	12.5	1036	34.5	-	-	2912±18	2745±12	-
	sl 6-8	4:27	6.70	13.3	1251	225	1.1	0.09	592±1	598±32	204
	C10-1	4:42	6.63	12.7	1427	47.9	1.5	0.08	2850±15	2743±12	204
	C11-1	4:55	6.57	12.7	1148	39.3	-	-	2872±17	2774±11	-
	C12-1	5:12	6.68	13.1	949	30.6	0.3	0.02	2826±18	2751±14	204
	C13-1	5:27	6.81	12.8	1142	44.8	1.2	0.07	2825±15	2762±11	204
	C14-1	5:41	6.61	12.6	880	29.0	0.2	0.02	2926±	2759±	204
	sl 6-9	6:17	6.72	13.3	1237	221	1.1	0.02	590±1	580±24	208
	C15-1	6:31	6.35	13.3	1109	41.0	2.2	0.13	2839±17	2734±14	204
	C16-1	6:45	6.56	13.5	970	31.6	2.3	0.18	2855±18	2737±14	204
	C17-1	6:59	6.72	12.4	1256	39.8	-	-	2941±17	2741±11	-
	C18-1	7:12	6.76	12.7	879	28.0	2.1	0.18	2837±19	2773±15	204
	C19-1	7:25	6.80	12.8	745	22.8	7.4	0.79	2579±22	2668±21	204
	sl 6-10	7:41	6.58	13.5	1241	230	0.0	0.002	600±	539±	204
	C20-1	7:56	6.38	11.9	1152	46.3	0.4	0.02	2872±17	2784±12	204
	C21-1	8:10	6.03	11.8	322	15.3	-	0.08	2918±32	2741±26	208
	C22-1	8:23	6.60	12.7	1106	36.3	-	-	2933±18	2756±12	-
	sl 6-11	8:38	6.59	13.2	1235	237	1.9	0.008	587±1	558±24	208