

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

Date	UWA Mount No.	Whose sample?	Operator(s)
11/5/99	98-76	AMIRA/AGSO	IF+AR

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Indicate any change to the following: <sup>200</sup> 196 204 bkg 206 207 208 238 248 254 270

<b>Precambrian</b>	Count time (secs):	2	10	10	10/20*	30/10*	10	5	5	5	5
<del>Phanerozoic*</del>	Delay time (secs):	8	3	1	2	1	1	3	24	2	3

expected 196-204 = 8.170 amu      expected 204-bkg = 0.045 amu      Dead-time = <sup>32</sup>..... nanosecs  
 actual 196-204 = <sup>4.134</sup>.....      actual 204-bkg = <sup>0.043</sup>.....      expected resolution = >4200  
 actual 206-207 = <sup>1.000</sup>.....      actual 206-208 = <sup>2.000</sup>.....      actual resolution = <sup>5336</sup>.....

Primary = <sup>4.0 of 100</sup>..... nA      PESABM = ..... pA      actual Primary : PESABM (= 50:1) = .....  
 Raster time (mins): <sup>3</sup>.....      Raster aperture (microns): <sup>100</sup>.....      No. of scans: <sup>6</sup>.....

Comments:   
 ⊗ finished raster time  
 ⊙ changed I duo

Sensitivity ~ 17

Rejection over-ride	Sample/ Std ID	Time - printout	UO/UO <sup>200</sup>		206 cps	UO <sub>2</sub> ppm kcps	204Pb ppb cps	f206 %	Age ±1σ (Ma)		Offsets OK?
			196 Kcps	204 Kcps					206/238	207/206	
	Kh.1-1	11:27	0.75	2.7	2331	19.3	0.7	0.48	0.121	490	-
⊙	Kh.1-2	11:46	0.73	2.6	1911	16.2	0.5	0.45	0.118	642	✓
⊗	A.1-1	12:08	.79	3.2	898	1.2	1.8	2.9	.751	2637	-
	A.2-1	12:27	.80	3.3	1061	1.5	1.6	2.1	.725	2624	✓
	A.3-1	12:48	.79	3.0	790	1.0	1.3	2.3	.775	2702	✓
	Kh.1-3	13:08	.74	2.6	2301	19.1	0.7	0.47	0.121	477	✓
	A.4-1	13:35	.79	2.8	774	1.0	1.4	2.6	.776	2675	✓
	A.5-1	13:56	.80	3.0	1078	1.3	2.5	3.2	.766	2624	✓
	A.6-1	14:18	.81	3.0	1006	1.3	2.5	3.3	.748	2602	✓
	A.7-1	14:44	.80	3.1	908	1.2	1.9	2.7	.775	2670	✓
	Kh.1-4	15:04	.78	2.8	2427	19.9	0.9	0.57	0.122	500	✓

Rejection over-ride	Sample/ Std ID	Time - printout	U <sup>206</sup> /U <sup>208</sup> Kcps	206 cps	U <sup>202</sup> ppm	204Pb -ppb	f <sup>206</sup> %	Age ±1σ (Ma)	Offsets OK?		
			<sup>200</sup>					206/208 270			
	A-8-1	15:25	.82	3.1	930	1.2	2.1	2.8	.765	2644	✓
	A-21-1	15:45	.78	3.0	1037	1.4	1.9	2.4	.761	2645	✓
	A-22-1	16:04	.82	3.3	812	1.1	1.9	2.9	.767	2635	✓
	A-23-1	16:24	.75	3.3	799	1.1	1.6	2.5	.754	2684	✓
	kh1-5	16:44	.78	2.5	2429	19.3	1.1	.66	.126	446	✓
	A-24-1	17:04	.83	3.4	838	1.1	1.9	3.0	.770	2646	✓
	A-9-1	17:24	.78	3.2	894	1.1	2.8	4.1	.785	2563	✓
	A- <del>28</del> -1	17:44	.82	3.3	857	1.1	2.0	3.0	.764	2648	✓
	A-25-1	18:04	.82	3.2	1146	1.5	2.3	2.7	.767	2623	✓
	kh1-6	18:24	.80	2.0	2734	22.4	1.6	.95	.122	534	✓
	A-11-1	18:45	.84	3.4	934	1.2	2.4	3.4	.758	2651	✓
	A-26-1	19:06	.81	2.8	440	.6	2.1	6.2	.760	2604	✓
	A-17-1	19:27	.82	3.3	853	1.1	2.0	3.1	.769	2635	✓
①	A-27-1	19:46	.82	3.0	1955	2.6	2.7	1.8	.749	2561	✓
	kh1-7	20:06	.76	2.5	2440	19.2	0.8	.47	.127	496	✓
	A-16-1	20:26	.83	3.1	866	1.2	1.5	2.3	.746	2694	✓
Scan 3	A-15-1	20:45	.80	3.2	841	1.1	2.4	3.8	.742	2564	✓
	A-28-1	21:05	.79	3.2	844	1.1	1.6	2.5	.763	2683	✓
②	A-29-1	21:25	.80	2.9	968	1.3	1.7	2.3	.773	2673	✓
③ last scan	kh1-8	21:45	.75	2.7	2751	21.2	1.0	.50	.120	553	✓
Noisy	kh1-9	22:33	.79	2.4	2384	20.2	0.8	.47	.118	512	✓
	A-12-1	22:53	.81	3.0	814	1.1	2.3	3.7	.767	2562	✓
	A-30-1	23:17	.80	3.2	1224	1.6	2.2	2.3	.763	2644	✓
	A-13-1	23:37	.78	3.2	810	1.1	1.8	2.8	.753	2680	✓
	kh2-2	23:59	.76	2.9	2665	21.6	0.9	.52	.123	511	✓

- ① Decreased I° with <sup>Köhler</sup> lens. ② Primary sprking, increased pressure slightly (400 to 460)  
 ③ Horrible downward spikes, re-adjusted ducts after analysis and re-did std - still not stabilizing increased I° with Köhler



Rejection over-ride	Sample/ Std ID	Time - printout	UO/UO <sup>200</sup> 196 Kcps	206 cps	UO <sub>2</sub> ppm Kcps	204Pb ppb cps	f206 %	Age ±1σ (Ma) 206/238-270	207/206	Offsets OK?	
	A14-1	00:22	.82	3.1	804	1.1	1.7	2.8	.746	2654	✓
	A19-1	00:43	.80	3.0	671	.88	1.8	3.4	.758	2770	✓
	A20-1	1:03	.80	2.8	824	1.1	1.8	2.9	.780	2623	✓
	A18-1	1:24	.80	3.1	797	1.0	1.9	3.0	.775	2632	✓
	Kh2-3	1:44	.77	2.6	2589	20.8	1.0	.58	.125	445	✓
1st scan	C1-1	2:08	.77	2.4	3461	4.3	1.9	.71	.798	2607	✓
2nd scan	C2-1	2:27	.82	2.4	6349	6.3	102	23.6	1.002	2163	✓
	<del>C1-1</del>	2:48	.77	2.3	2340	3.0	1.0	.54	.778	2622	✓
	C22-1	3:07	.78	2.9	2409	3.2	1.5	.79	.758	2580	✓
①	Kh2-4	3:26	.74	2.8	2107	205	1.0	.60	.127	548	✓
	D1-1	3:49	.81	3.0	667	.88	2.1	4.1	.759	2642	✓
	D4-1	4:11	.82	3.1	738	.94	2.5	4.7	.788	2599	✓
	D5-1	4:30	.77	3.4	962	1.3	1.8	2.5	.759	2791	✓
	Kh2-5	4:51	.75	2.6	2654	212	0.9	.49	.125	514	✓
	B1-1	5:12	.79	3.1	988	1.2	5.1	7.0	.826	2648	✓
	B2-1	5:32	.82	3.0	1150	1.4	2.7	3.2	.803	2611	✓
	B3-1	5:51	.82	3.1	1491	1.9	2.1	1.9	.792	2654	✓
	B4-1	6:11	.79	2.9	1169	1.4	2.4	2.7	.799	2657	✓
	Kh2-6	6:30	.74	2.7	2588	214	1.0	.59	.121	467	✓
	B5-1	6:51	.81	3.1	1088	1.4	1.9	2.3	.796	2700	✓
	B31-1	7:12	.80	3.0	1027	1.3	2.3	3.1	.814	2673	✓
noisy ②	B6-1	7:33	.80	3.0	1763	2.2	2.1	1.6	.815	2657	✓
③	Kh2-7	7:53	.73	2.6	2729	218	0.9	.50	.125	482	✓
1st scan ②	B7-1	8:19	.79	2.9	2080	2.5	1.8	1.2	.820	2686	✓
902	Primary to unstable - shut down.										

① 1° erratically dropping during analysis ② 1° erratically dropped during analysis, ③ - not as bad as B6-1, but paired of rejects