UWA SHRIMP LOG SHEET

Date	UWA mount no(s)	Mineral(s)	Whose sample?	Operator(s)
30/4/06	06-30	ZR	SS	MeN + SS

Notes: Masses in **bold** = peak centred; others = offset from lower mass centred peak (see offsets below).

Zircon/Badd.	**196**	204	204.1	**206**	207	208	**238**	**248**	**254**
Count time (secs)	2	10	10	10/20	30/10	10	5	5	2
Delay time (secs)	8	3	1	4	2	1	~~3~~ 4	2	~~2~~ 3
Centring (secs)	3	-	-	~~3~~ 4	-	-	~~3~~ 2	3	2

Titanite/Perovskite	**200**	204	204.1	**206**	207	208	**248**	**254**	**270**
Count time (secs)	2	10	10	10/20	30/10	10	5	5	7
Delay time (secs)	8	3	1	4	2	1	4	2	3
Centring (secs)	3	-	-	4	-	-	4	3	3

Monazite (SHB)	**202**	**203**	204	204.1	**206**	207	**208**	**232**	**254**	**264**	**270**
Count time (secs)	2	2	10	10	10/20	30/10	5	5	2	2	2
Delay time (secs)	8	1	1	1	4	2	2	4	3	3	2
Centring (secs)	1	2	-	-	4	-	2	2	2	2	2
Cup in/out (SHA) out									in	out	in

Xenotime (SHB)	**194**	(196)	204	204.1	**206**	207	208	**238**	**248**	**254**
Count time (secs)	2	(5)	10	10	10/20	30/10	5	5	5	2
Delay time (secs)	8	(2)	3	1	4	2	1	3	2	2
Centring (secs)	1	-	-	-	4	-	-	4	3	2

MASS OFFSETS (record setup offsets for session, and **check them after each analysis**).
Note: Setup offsets are different for SHRIMP A and B: i.e. 206-207 = 1.001 for A and 1.005 for B.

Zircon/Badd.	196-204	204-204.1	204-206	206-207	206-208	
Expected offsets:	8.170	0.045	~2.001/9	1.001/5	2.001/9	
Setup offsets:	8.161	0.045	~2.005	1.004	2.006	
~~**Titanite/Perovsk.**~~	~~200-204~~	~~204-204.1~~	~~204-206~~	~~206-207~~	~~206-208~~	
Expected offsets:	4.136	0.045	~2.001/9	1.001/5	2.001/9	
Setup offsets:	.....	.....	.....	.....	.....	
Monazite (SHB)	202-203	203-204	204-204.1	204-206	206-207	206-208
Expected offsets:	~1.000	1.110	0.045	~2.001/9	1.001/5	~2.001/9
Setup offsets:	.....	.....	.....	.....	.....	.....
Xenotime (SHB)	(194-196)	194-204	204-204.1	204-206	206-207	206-208
Expected offsets:	1.998	10.143	0.045	~2.001/9	1.001/5	2.001/9
Setup offsets:	.....	.....	.....	.....	.....	.....

Deadtime 24 ns **Kohler aperture** 100 **Retard** 4957.4 volts **Resoln** 5582

Primary on Steel: O^- ..... bits & nA O_2^- ..... bits & nA

Primary O_2^- on: epoxy = 2.3 nA; standard = 3.2 nA; **PESABM** on std = 60 pA

Raster: Time (mins): 2.0 Aperture: 130 **No. of scans:** 5

Useful information
CZ3 = 564 Ma & 551 ppm U
Temora 2 = 417 Ma & ~130 ppm U
Khan = 518 Ma & 700 ppm U
SDA : 7/6 age = 3578+/-4 Ma

MONAZITE
French = 514 Ma & 1000 ppm U
PD95 7/6 age = 1698(?) Ma
Z2908 7/6 age = 1795(?) Ma
QMa = 505(?) Ma

XENOTIME
MG1 = 490(?) Ma
BS1 = 507(?) Ma
Xeno1 = 994 Ma & 7/6 age = 997 Ma

BR ⇒ 15

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Note: Bold = constant for stds & unknowns.....check after each analysis; also check offsets.

Sample/ Std ID	Time on printout	**UO/U 254/238**	**196 (zr) Kcps**	206 cps	U ppm	f_{206} %	Sensit.	Age+/-1σ (Ma) 206/238	207/206	Offsets OK?
Alternative		***UO2/UO 270/254***	***194 (xt) 200 (tnt) 203 (mz)***	*206 cps*	*254 270 Kcps*	*204 cps*	*196/194 264 Kcps*	*206/238 206/254 206/270*		*Check after each!!!*
0630 BR.1-1	10:09	6.15	20	3700	903	0.01	20.2	569±3	570±24	✓
BR.1-2	10:30	6.21	19	3700	908	0.05	20.3	572±3	569±18	✓
SDA.1-1	10.53	6.21	18	1200	384	0.006	20.0	3568±18	3585±4	✓
B.1-1	11.11	6.04	21	7200	226	0.45	21.7	3337±35	3341±6	✓
B.2-1	~	abor	ted	1st	scan	high	204	~		
B.2-2	11.34	6.15	17	2700	133.5	0.007	17.9	2637	2548±1	✓
B.3-1	11.52	6.6	18	8100	592	1.25	23.1	1657	2298±11	✓
B.4-1	12.16	6.55	16	7500	532	0.49	21.3	1931±10	2433±9	✓
BR.1-3	12.33	6.40	17	3500	879	0.03	21.6	601±4	581±21	
A.1-1	12.44	~	abor	ted	high ^{204}Pb	~				
A.1-2	13.02	6.42	17	6300	266	0.87	21.2	2888±18	3251±38	✓
A.2-1	13.19	6.07	17	3500	128	0.09	19.8	3559±5	3345±9	✓
A.3-1	13.39	6.24	17	3900	152	0.15	20.7	3263±3	3190±8	✓
A.4-1	13.55	6.24	17	2200	83	0.10	20.2	3370±3	3290±11	✓
BR.1-4	14.12	6.24	16	3300	923	0.00	20.7	573±	573	✓
B.5-1	14.32	6.11	17	3800	161	0.20	20.5	3094±29	3001±8	✓
B.6-1	14.50	6.31	16	5500	304	0.03	19.7	2543	2546±8	✓
B.7-1	15.08	6.35	19	6000	335	0.28	22.4	2206±15	2485±9	✓
B.8-1	15.30	6.42	18	3100	149	0.41	21.9	2558±29	2520±15	✓
BR.1-5	15.47	6.07	19	3500	893	0.06	22.3	571±3	550±16	✓
A.5-1	16.09	6.72	16	1400	534.2	0.17	20.1	3281±20	3291±4	✓

Date 30/4/06 **UWA mount no(s)** 06-30 **Page no.** 2

Note: Bold = constant for stds & unknowns.....check after each analysis; also check offsets.

Sample/ Std ID	Time on printout	UO/U 254/238	196 (zr) Kcps	206 cps	U ppm	f_{206} %	Sensit.	Age+/-1σ (Ma) 206/238	207/206	Offsets OK?
Alternative		*UO2/UO 270/254*	*194 (xt) 200 (tnt) 203 (mz)*	*206 cps*	*254 270 Kcps*	*204 cps*	*196/194 264 Kcps*	*206/238 206/254 206/270*	*207/206*	*Check after each!!!*
06-30										
A.6-1	16.26	6.12	18	3400	127	0.03	20.6	3251±30	3190±8	✓
A.7-1	16.43	6.15	19	6200	224	0.018	21.6	3254±25	3193±5	✓
A.8-1	17.00	6.17	16	2500	98.6	0.019	18.1	3419±18	3314±13	✓
BR.1-6	17.20	6.08	20	3700	876	0.05	20.8	593±5	578±17	✓
B.9-1	17.42	6.03	20	7400	252	6.41	21.5	3101±37	3237±8	* high ^{204}Pb
B.10-1	17.52	~	aborted		high	^{204}Pb	~	~	~	
B.10-2	17.58	~	aborted	~	~	~	~	~	~	
B.10.3		~	aborted	~	~	~	~	~	~	
B.11-1	18.28	6.2	20	6500	248	1.48	22.9	2746±21	3283±9	✓
BR.1-7	18.45	6.10	19	3700	912	0.02	20.9	577±4	600±18	✓
a.9-1	19.10	6.37	20	4000	174	0.19	22.0	2586±25	2606±8	✓
a.10-1	19.27	6.09	19	4500	217	0.98	19.7	2508±33	3266±9	✓
a.11-1	19.43	6.10	19	1900	93	0.26	19.6	2527	2597±12	✓
a.12-1	19.59	6.63	19	1400	499	@1.35	21.9	2979±21	3297±6	✓
BR.1-8	20.18	6.05	20	3800	899	0.03	20.5	586±3	573±21	✓
b.12-1	20.38	6.41	20	7400	376	1.33	21.4	2202±18	2781±12	✓
b.13-1	20.55	6.34	18	7500	806	1.41	21.1	1245±8	2505±11	✓
b.14-1	21.12	6.10	20	4200	190	1.42	20.6	2557±26	2544±18	✓
b.15-1	21.29	6.25	20	2200	82	4.67	22.1	2755±49	2941±29	✓
b.16-1	21.47	5.82	20	2100	89	5.6	20.2	2710±52	3236±20	✓
BR.1-9	22.03	6.19	19	3800	911	0.002	21.1	581±	590	✓

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Note: Bold = constant for stds & unknowns.....check after each analysis; also check offsets.

Sample/ Std ID	Time on printout	**UO/U 254/238**	**196 (zr) Kcps**	206 cps	U ppm	f_{206} %	Sensit.	Age+/-1σ (Ma) 206/238	207/206	Offsets OK?
Alternative		***UO2/UO 270/254***	***194 (xt) 200 (tnt) 203 (mz)***	*206 cps*	*254 270 Kcps*	*204 cps*	*196/194 264 Kcps*	*206/238 206/254 206/270*	*207/206*	*Check after each!!!*
06-30										
a.13-1	22.21	5.75	17	2900	132	0.32	17.3	3078±42	3261±10	✓
a.14-1	22.38	6.38	16	2700	145	0.15	18.0	2559±27	2610±11	✓
a.15-1	22.54	6.14	18	6500	250	0.11	19.1	3170±37	3279±6	✓
a.16-1	23.11	6.88	19	8000	298	0.78	23.6	2734±26	3143±8	✓
a.17-1	23.27	6.33	20	9800	381	1.26	22.0	2763±18	3434±6	✓
BR.1-10	23.43	6.19	20	3800	890	0.03	21.3	595±4	561±20	✓
b.17-1	00.01	6.46	17	1700	52	0.10	20.7	3643±49	3423±11	✓
b.18-1	00.19	6.43	16	6500	309	0.38	18.4	2776±26	3204±7	✓
b.19-1	00.36	6.33	18	4500	172	0.18	19.5	3182±32	3016±9	✓
BR.1-11	00.52	6.08	20	3800	919	0.003	20.1	566	586	✓
BR.1-12	1:40	6.08	25	4300	812	0.04	24.0	588±3	568±23	✓ * duo OFF, Turned on again.
BR 1-13	1:56	5.99	23	4100	856	0.02	21.9	572±2	576±23	✓
BR.1-14	2.12	5.96	25	4300 ~~3800~~	821	0.009	24.0	587±3	542±17	✓
BR.1-15	2.28	5.92	21	3700	890	0.001	20.0	564	553	✓
a.18-1	2.48	6.29	22	1800	51	0.01	23.9	3386	3306±96	✓
a.19-1	2.54	aborted			high 204Pb					
a.19-2	3.11	6.23	22	5800	210	1.01	22.6	2831±24	3376±11	✓
a.20-1	3.28	6.22	24	4200	119	0.03	25.5	3150±38	3202±9	✓
a.21-1	3.47	6.42	23	5900	273	2.19	25.1	2115±22	2559±15	✓
BR.2-1	4.05	6.30	22	4300	887	0.07	24.2	579±4	553±19	✓
b.20-1	4.14	aborted			high 204Pb					

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Sample/ Std ID	Time on printout	**UO/U 254/238**	**196 (zr) Kcps**	206 cps	U ppm	f_{206} %	Sensit.	Age+/-1σ (Ma) 206/238	207/206	Offsets OK?
Alternative		***UO2/UO 270/254***	***194 (xt) 200 (tnt) 203 (mz)***	*206 cps*	*254 270 Kcps*	*204 cps*	*196/194 264 Kcps*	*206/238 206/254 206/270*	*207/206*	*Check after each!!!*
0630										
b.21-1	4.32	6.10	22	3700	123	0.07	23.4	3065±38	3014±10	✓
b.22-1	4.49	6.19	22	6600	183	0.02	23.3	3457±27	3339±5	✓
b.23-1	5.07	6.16	23	7008	306	0.79	24.7	2327	2510	✓
b.24-1	5.24	6.36	20	2300	76	0.021	22.4	3108±4	3022±11	✓
BR.2-2	5.40	6.27	21	4000	922	0.018	23.0	555±3	560±16	✓
a.22-1	5.56	6.18	20	5300	196	0.15	21.4	2984±2	3268±7	✓
a.23-1	6.22	6.26	22	6900	209	0.104	23.3	3280±29	3260±7	✓
a.24-1	6.41	6.40	21	4900	139	0.042	24.8	3375±40	3334±5	✓
a.25-1	6.58	5.98	20	4200	157	0.039	21.2	3107±25	3255±7	✓
BR.2-3	7.15	5.95	23	4000	866	0.013	22.9	577±19	587±28	✓
b.25-1	7.35	6.10	21	3700	156	0.045	22.4	2636±21	2543±8	✓
b.26-1	7.53	5.94	22	8200	246	0.064	22.9	3370±30	3398±6	✓
b.27-1	8.11	6.36	21	5400	212	0.028	24.2	2646±26	2545±7	✓
BR.2-4	8.27	6.10	22	4100	887	0.05	23.4	581±3	563±21	✓