UWA SHRIMP LOG SHEET

Date	UWA mount no(s)	Mineral(s)	Whose sample?	Operator(s)
30/9/05	05-67	ZR	KMcC	NMcN + KMcC

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~~ 60	30/~~10~~	10	5	5	2
Delay time (secs)	8	3	1	~~4~~ 3	2	1	~~3~~ 4	~~2~~ 3	~~2~~ 3
Centring (secs)	3	-	-	~~3~~ 5	-	-	~~3~~ 2	~~3~~ 2	~~2~~ 1

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:	~~8.172~~	~~0.045~~	~~2.002~~	~~1.001~~	~~2.002~~	
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 ~~25~~ ns **Kohler aperture** 100 **Retard** .....volts **Resoln** ~~4496~~

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

Primary O_2^- on: epoxy = ~~3.4~~ nA; standard = ~~4.8~~ nA; **PESABM on std** = ~~95~~ pA

Raster: Time (mins): ~~3.0~~ Aperture: 120 **No. of scans:** ~~7~~

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

Comments:

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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!!!
CZ.1-1	9:57	5.14	31	3300	551	.05	20.1	564±4	530±27	✓
Tem.1-1	10:27	4.84	34	430	96	.002	19.8	419	449	✓
Tem.2-1	10:55	5.20	33	540	113	.003	21.0	421	490	✓
d.1-1	11:26	3.42	20	3.3	552	0.13	6.9	1.41	1.51	✓
Mg Cyc.										
d.2-1	11:58	5.41	29	541	2683	0.30	19.3	1.4	1.44	✓
Mg. Cyc.										
d.3-1	12:29	5.37	29	260	2030	0.09	19.2	1.15	1.24	✓
Tem.3-1	12:56	5.17	31	850	198	0.001	19.8	407	380	✓
d.4-1	13:23	5.30	29	3.4	257	0.004	19.7	1.3	1.26	✓
Mg. Cyc.										
d.5-1	13:54	5.44	27	10	879	-0.07	18.6	1.3	1.2	✓
Mg. Cyc.										
d.1-2	14:25	~~3.57~~	17	9	197.4	-1.61	7.6	1.17	1.14	✓
Tem.4-1	14:52	5.14	29	560	138	.001	18	422	389	✓
d.6-1	15:19	5.34	29	7.4	585	0.12	20	1.1	1.19	✓
Mg. Cyc.										
d.6-2	15:49	5.36	29	2.8	208	-0.1	20.6	1.39	1.18	✓
Mg. Cyc.										
d.7-1	16:19	5.30	29	9.9	812	0.17	19.1	1.20	1.17	✓
Tem.5-1	16:48	5.19	29	680	170	.0068	18.3	406	460	✓

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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!!!
d.8-1	17:13	4.73	33	1700	917	0.001	18.4	191	196	✓
Mg. Cyc.										
d.9-1	15:45	4.82	29	62	582	0.12	17.4	1.07	1.68	✓
Mg. Cyc.										
d.10-1	18:15	5.02	32	2.6	177	0.5	19.7	1.4	1.3	✓
Tem.6-1	18:43	4.82	31	410	105	.004	17.3	412	308	✓
d.10-2	19:09	4.61	33	6.3	217	0.58	17.8	1.27	1.43	✓
Mag. Cyc.										
d.11-1	19:40	5.29	30	1100	5026	.0002	19.3	221	194	✓
Mg. Cyc.										
d.11-2	20:09	4.98	33	1700	543	.0005	19.9	296	956	✓
Tem.7-1	20:36	5.20	32	540	123	.0008	20.3	406	460	✓
d.12-1	21:03	4.81	31	1600	1678	-.0029	17.4	160	196	✓
Mag. Cyc.										
d.13-1	21:34	4.60	25	610	526	.0036	13.7	161	94	✓
Mag. Cyc.										
d.14-1	22:11	5.04	35	5600	295	-.0002	21.4	1512	1776	✓
Tem.8-1	22:38	5.37	31	1500	240	-.0003	20.2	402	420	✓
d.14-2	23:05	4.70	38	3.0	129	0.76	22.0	1.09	1.26	✓
Mg. Cyc.										
c.1-1	23:39	5.33	31	7300	2829.8	0.0006	19.9	243.5	183	✓

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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!!!
Mg. Cyc.										
c.1-2	00:09	4.55	35	1600	806	.009	17.9	209	210	✓
Tem.9-1	00:37	5.29	20	390	132	-0003	13.0	423	568	✓
c.2-1	01:06	5.49	25	8.9	767	026	17.3	096	118	✓
Mg. Cyc.										
c.3-1	Multiplier Tripped Out — Unmeasureable									
Tem.10-1	02:47	5.26	30	390	90	-0002	19.2	418	503	✓
c.4-1	03:16	4.87	34	1400	579	0001	19.2	236	266	✓
Mg. Cyc.										
c.4-2	03:46	4.96	31	110	194	.006	18.3	61	61	✓
Mg. Cyc.										
c.5-1	04:17	4.81	33	280	315	.002	18.6	92	92	✓
Tem.11-1	04:44	5.32	29	810	197	.003	19.1	402	358	✓
a.1-1	05:14	4.98	31	33	2176	.03	18.4	1.53	1.54	
Mg. Cyc.										
a.1-2	05:44	5.03	31	3.1	177	0.2	19.3	1.2	1.51	✓
Mg. Cyc.										
a.2-1	06:10	5.17	28	87	6154	.021	17.7	1.51	1.53	✓