UWA SHRIMP LOG SHEET

Date	UWA mount no(s)	Mineral(s)	Whose sample?	Operator(s)
9/10/06	05-89 06-23	ZR	JK	McN+CD

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	5	2
Delay time (secs)	8	3	1	4	2	1	~~34~~	2	~~23~~
Centring (secs)	3	-	-	~~34~~	-	-	~~32~~	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	~2.008	1.004	2.007
~~**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** 14 volts **Resoln** 5347

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

Primary O_2^- on: epoxy = 3.1 nA; standard = 4.15 nA; **PESABM** on std = 74 pA

Raster: Time (mins): 2.0 Aperture: 100 **No. of scans:** 4

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
BR266 : 559 Ma & 903 ppm U

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

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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!!!*
05-89										
CZ.1-1	10:47	4.84	28	2700	551	.003	17.3	564±3	553±19	✓
TEM.1-1	11:07	4.91	26	490	143	.09	16.0	423±6	367±44	✓
TEM.1-2	11:20	5.03	26	500	142	—	16.5	423±6	402±52	✓
TEM.1-3	11:33	4.78	29	490	137	.40	17.6	418±5	320±107	✓
A.28-1	11:48	4.74	28	1500	39	.08	16.3	3626±49	3665±12	✓
A.29-1	12:04	4.75	28	4900	118	.11	17.5	3831±29	3821±7	✓
A.30-1	12:18	4.96	28	1900	42	.14	19.1	3805±65	3869±13	✓
A.31-1	12:40	4.81	25	2300	198.5	.07	15.6	3566±23	3621±4	✓
A32-1	12:57	4.85	28	10000	309	—	19.1	3161±23	3586±4	✓
TEM.2-1	13:10	4.95	26	2600	71.6	.81	17.9	425±9	607±150	✓
A.33-1	13:24	4.39	27	2600	135.5	.05	15.3	2257±32	3220±9	✓
A34-1	13:41	4.73	28	5700	148.4	.02	19.3	3546±29	3663±8	✓
A35-1	13:54	4.83	25	8800	242.7	.02	16.4	3670±19	3655±4	✓
A36-1	14:10	5.01	26	9200	227.7	.05	19.0	3707±32	3736±6	✓
TEM.1-4	14:26	5.29	22	3900	125.2	.49	16.5	418±6	178±177	✓
A37-1	14:40	4.36	20	8000	43.3	.55	11.7	2921±85	3600±21	✓
A38-1	14:55	5.07	24	8900	258.6	.00	15.8	3510±19	3681±4	✓
A39-1	15:12	4.49	28	4800	178.3	.06	17.4	2894±26	3599±9	✓
A40-1	15:27	5.14	27	4900	122.9	.007	20.5	3591±27	3644±9	✓
A41-1	15:43	5.16	25	5900	102.3	.06	18.8	3660±31	3625±6	✓
TEM.16-1	15:59	5.15	25	3800	110.5	.24	18.7	418±7	311±100	✓

misplaced

Date ..... **UWA mount no(s)** ..... **Page no.** .....

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!!!*
A42-1	16:19	5.24	25	6100	160.1	.01	19.8	3562±31	3684±5	✓
A43-1	16:45	4.52	22	7500	267	.02	13.5	3625±90	3752±31	✓
A44-1	17:01	4.67	24	8000	233.5	.001	15.8	3699±23	3763±7	✓
A45-1	17:13	4.75	25	4700	143	.05	17.1	3464±25	3705±6	✓
A46-1	17:26	4.89	26	8500	270.6	.00	18.8	3166±17	3625±4	✓
~~A47-1~~ name	17:40	5.05	26	1900	47.8	.09	18.7	3648±44	3642±9	✓
TEM.16-2	17:53	5.14	24	4400	134.7	.30	17.8	419±6	300±118	✓
A48-1	18:07	4.92	27	8900	234.9	.00	18.5	3518±22	3711±7	✓
A49-1	18:28	5.25	26	5000	123.8	.04	19.7	3540±35	3640±7	✓
A50-1	18:41	5.12	25	5400	142.7	.02	18.0	3518±28	3643±5	✓
A51-1	18:55	5.06	26	9900	249.2	.02	18.7	3617±23	3632±5	✓
TEM.17-1	19:09	4.91	25	410	125.2	.04	17.1	419±6	410±83	✓
A52-1	19:23	5.10	26	6600	185.2	.04	19.8	3311±36	3646±5	✓
A53-1	19:39	4.90	27	3800	123.7	.00	18.5	2975±39	3527±9	✓
A54-1	19:54	4.92	25	6500	181.5	.02	18.3	3558±22	3657±4	✓
~~A55-1~~ ATEM18-1	20:17	4.71	23	320	112.7	.31	16.5	418±6	348±134	✓
A55-1	20:44	5.03	27	7100	209.7	.007	18.8	3177±23	3591±7	✓
A56-1	20:59	4.94	28	6100	175.1	.01	19.4	3223±29	3569±5	✓
A57-1	21:12	4.88	27	3400	87.5	.07	17.6	3620±41	3729±8	✓
A58-1	21:40	4.87	26	9400	257.5	.009	17.7	3553±26	3659±5	✓
A59-1	21:56	4.81	26	2000	56.0	.06	17.8	3543±71	3650±11	✓

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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!!!*
TEM 19-1	22:11	5.00	26	590	176.4	.38	18.8	405±5	199±115	✓
A60-1	22:27	4.86	25	4700	129.1	.03	17.8	3698±41	3718±5	✓ *
A61-1	22:41	4.81	24	5400	198.7	.06	15.9	3685±39	3523±7	✓
A62-1	22:57	4.83	26	6900	193.4	.02	18.2	3562±25	3650±6	✓ *
TEM 19-2	23:21	5.12	21	260	92.5	.34	17.1	395±6	421±58	✓
A63-1	23:37	5.25	23	9700	297.3	.01	19.6	3273±17	3635±4	✓
A64-1	23:52	4.16	18	3300	146.0	.01	11.2	3748±30	3624±10	✓ *
A65-1	00:08	5.13	25	9600	292	.01	19.0	3190±30	3667±5	✓
A66-1	00:22	4.93	24	2100	59.4	.01	17.4	3641±41	3658±9	✓ *
A67-1	00:36	5.25	24	3100	80.6	.03	19.9	3712±45	3700±7	✓ *
TEM 20-1	00:49	5.05	26	200	62.2	.49	19.8	392±9	139±361	✓
A68-1	01:03	4.20	20	7000	282.6	.02	11.1	3721±21	3719±5	✓ *
A69-1	01:17	4.96	26	3500	92.6	.08	17.9	3587±40	3600±6	✓
A70-1	01:36	4.64	23	9300	269.5	.02	15.8	3924±27	3827±4	✓ *
A71-1	01:51	5.12	27	9300	264.0	.007	19.2	3225±18	3636±7	✓
A72-1	2:06	4.93	26	6300	164.6	.07	17.1	3627±24	2740±5	✓ *
A73-1	2:20	5.05	26	4400	110.8	.05	18.8	3635±30	3665±5	✓ *
TEM 21-1	2:33	5.18	25	450	131.9	.02	19.2	403±7	410±53	✓ (8.16094)
A74-1	2:52	5.01	24	1000	289.8	.02	17.4	3691±18	3645±4	✓ *
A75-1	3:05	4.85	26	6400	173.4	.02	18.2	3567±24	3654±6	✓ *
A76-1	3:17	5.05	26	6400	167.3	.001	19.3	3501±37	3719±7	✓

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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!!!*
A77-1	3:35	4.99	27	8600	153.1	.02	19.5	3395±26	3783±17	✓
A78-1	3:52	4.56	25	4500	134.9	.02	16.0	3679±26	3825±5	✓ *
A79-1	4:05	4.97	26	6800	219.6	.03	17.7	3040±19	3689±4	✓
TEM22-1	4:19	5.24	25	370	109.2	.02	20.6	398±5	431±48	✓
A80-1	4:41	5.20	25	8000	271	.01	19.3	3115±17	3571±7	✓
A81-1	4:54	4.81	25	7700	271.8	.02	16.8	3067±16	3451±5	✓
A82-1	5:07	4.35	19	7400	305.8	.002	11.9	3643±22	3660±4	✓ *
A83-1	5:23	4.78	25	8600	280.1	.02	16.8	3308±26	3744±25	✓
A84-1	5:37	5.24	19	1300	55.5	.14	14.8	3045±62	3837±14	✓
A85-1	5:53	5.02	25	2300	59.7	.02	19.2	3703±47	3753±8	✓ *
(same name) TEM22-2	6:08	5.18	25	400	122.6	.03	21.0	392±5	497±60	✓
A86-1	6:14	cancelled								✓
A87-1	6:27	5.05	23	3200	116.1	.02	16.6	3066±40	3625±12	✓
A88-1	6:40	5.10	25	2400	65.6	.04	20.8	3495±54	3763±7	✓
A89-1	6:54	4.89	21	8300	295.0	.006	15.1	3403±18	3545±4	✓
A90-1	7:07	5.25	24	4100	110.0	.03	19.0	3532±31	3869±7	✓
A91-1	7:19	4.88	24	7000	201.6	.01	18.5	3616±25	3646±6	✓
A92-1	7:40	5.33	23	5000	126.6	.001	18.8	3757±45	3842±6	✓
TEM23-1	7:54	5.18	25	1500	489.1	.07	19.9	388±3	388±45	✓ *
A93-1	8:08	4.63	16	1400	57.9	.003	10.6	3923±51	3860±12	✓
TEM24-1	8:21	4.92	23	570	185.6	.23	17.6	419±8	502±99	✓