

UWA SHRIMP LOG SHEET

Date 11/3/07 **UWA mount no(s)** 05-65
05-67 **Mineral(s)** ZR **Whose sample?** KMcC. **Operator(s)** McN+McC.

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

Zircon/Badd.	196	204	204.1	206⁶⁰	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	34	23	23		
Centring (secs)	3	-	-	35	-	-	3	3	23		
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:	8.164	0.045	~2.000	1.001	2.001	
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** 4942

Primary on Steel: O⁻ bits & nA O₂⁻ bits & nA

Primary O₂⁻ on: epoxy = 1.40 nA; standard = 1.86 nA; **PESABM** on std = 48 pA

Raster: Time (mins): 5 Aperture: 150 **No. of scans:** 7

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
 Xenol = 994 Ma & 7/6 age = 997 Ma

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 (int) 203 (mz)	206 cps	254 270 Kcps	204 cps	196/194 264 Kcps	206/238 206/254 206/270	207/206	Check after each!!!
0565 # CZ.1-1	10:07	7.99	7.4	1100	551	.30	16.3	563 ± 5	531 ± 38	✓
TEM. 1-1	10:41	7.67	7.6	360	262	.66	15.5	488 ± 4	381 ± 94	✓
TEM. 2-1	11:10	7.80	7.7	470	315	.45	16.0	431 ± 4	420 ± 76	✓
Tem 1 a. 10-1	11:52	7.64	7.8	4.6	245	58	15.9	2.4 ± 1.7	3919 ± 125	✓
Magn Cycle										
a. 11-1	12:34	7.34	7.7	3.6	283	129	15.2	-1.2 ± 1	6181 ± 144	✓
Tem. 2-2	13:06	7.23	7.1	340	271	.88	13.6	430 ± 5	348 ± 111	✓
Tem 3-1	13:38	7.35	7.4	930	695	.51	14.4	438 ± 4	518 ± 21	✓
Are Drop a. 12-1										
Tem. 4-1	14:49	7.5	7.4	130	94	2.2	15.1	445 ± 9	358 ± 297	✓
Tem 5-1	15:19	7.3	7.1	810	615	.50	13.3	451 ± 3	435 ± 88	✓
a. 12-1	15:54	7.1	7.9	3.1	175	146	14.5	-2.6 ± 2	5867 ± 144	✓
Magn Cycle										
a. 13-1	16:34	6.78	7.6	4.1	173	114	12.9	-1.2 ± 2.5	6702 ± 144	✓
Magn Cycle Printed stuff										
a. 14-1	17:21	7.3	8.1	5.3	188	89	15.4	0.86 ± 2	—	✓
Tem. 6-1	17:54	7.3	7.9	110	75	3.9	14.8	435 ± 12	372 ± 393	✓
b. 19-1	18:29	7.5	7.4	5.3	273	120	14.4	-1.3 ± 1.7	5942 ± 144	✓
Magn Cycle										
b. 19-2	19:11	7.6	8.0	3.9	144	87	15.8	1.04 ± 2	—	✓
Tem 21-1	19:43	7.7	7.9	3.8	391	90	0.2 ± 1	16.2	—	✓

