

UWA SHRIMP LOG SHEET

Date 6/3/05 **UWA mount no(s)** 04-90
 04-91 OS-15 **Mineral(s)** MZ **Whose sample?** NU **Operator(s)** MeN + RT

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	2	2
Centring (secs)	3	-	-	3	-	-	3	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	43	2	21	4	3	3	2
Centring (secs)	12	2	-	-	46	-	24	24	23	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:						
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:	~1.000	1.107	0.045	~2.006	1.005	~2.007
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 50? Retard 9940.2 volts Resoln 5873

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

Primary O₂⁻ on: epoxy = 0.407 nA; standard = 0.645 nA; PESABM on std = 33 pA

Raster: Time (mins): 2.0 Aperture: 120 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

Comments:

> 8 Frach
 > 15 PDQS
 > 2 QMa

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

Sample/ Std ID	Time on printout	<u>UO/U</u> 254/238	196 (zr) Keps	206 cps	U ppm	f²⁰⁶ %	Sensit.	Age +/- 1σ (Ma)		Offsets OK?
								206/238	207/206	

Alternative	<u>UO2/UO</u> <u>270/254</u>	194 (xt) 200 (tnt) 203 (mz) Kcts	<u>206</u> cps Kcts	254 270 Keps Kcts	204 cps cts	196/194 264 Keps Kcts	206/238 <u>206/254</u> <u>206/270</u>	<u>207/206</u> 3	Check after each!!!
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B.99. Fr. 1-1	10:10	1.316	6.7	18.4K	24.3	16	455	0.817	0.060	✓
Fr. 1-2	10:36	1.369	5.9	19.5K	24.4	16	463	0.803	0.055	✓
PD95. 1-1	11:01	1.252	5.9	1044K	353	23	569	2.957	0.104	✓
PD95. 1-2	11:24	1.262	5.7	1030K	345	25	591	2.986	0.104	✓
QMa. 1-1	11:48	1.422	6.4	16.4K	21.3	3	165	0.770	0.059	✓
Fr. 1-3	12:11	1.337	6.3	21.1K	26.6	9	502	0.794	0.060	✓
04-90. Cl. 1-1				high 204 → 1 scan + adjusted ppm						
Cl. 1-1b	12:42	1.624	6.2	11.9	2.5	9	4.2	4.86	0.182	✓
Cl. 1-1c	12:52	1.581	6.1	13.5	2.8	11	5.0	4.79	0.191	✓ Are dropped out → aborted.
Fr. 1-4	13:17	1.810	6.6	20.6	25.4	13	479	0.810	0.059	
C2. 1-1				high 204						
C2. 1-1B	13:55	1.448	2.9	5.6	1.2	19	12	4.565	0.219	
B1. 1-1				high 204						
B1. 1-1B	15:28	1.419	5.7	18.7	21.9	34				
B2. 1-1	15:28					28				
Fr. 1-5	15:28	1.419	5.7	18.7	21.9	10	405	0.857	0.060	
B3. 1-1				high 204						
B3. 1-1B				high 204						
B4. 1-1	16:21	1.404	5.4	10.4	2.2	23	11.8	4.661	0.202	
PD95. 1-3	16:45	1.248	5.8	1142	383	21	621	2.982	0.104	
D1. 1-1	17:13	1.461	5.9	11.9	2.4	26	20.5	5.046	0.197	

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 eps	U ppm	f₂₀₆ %	Sensit.	Age+/-1σ (Ma) 206/238	207/206	Offsets OK?
Alternative		<u>UO2/UO</u> <u>270/254</u>	194 (xt) 200 (trt) 203 (mz) Kcps	206 eps Kcps	254 270 Kcps	204 eps Cts	196/194 264 Kcps	206/238 206/254 206/270	207/206 3	Check after each!!!
E1.1-1			high	204						
L2.1-1			high	204						
L2.1-1B			high	204						
Fr.1-6	18:21	1.426	5.9	21.6	25.3	10	487	0.853	0.059	
K1.1-1			high	204						
J1.1-1			high	204						
PD95.2-1	19:16	1.222	6.3	1070	354	27	955	3.022	0.104	
A9.1-1			high	204						
A10.1-1	19:59	4.652	0.9	2.4	0.5	10	0.2	4.719	0.247	
A10.1-1B	20:18	0.727	2.7	2.6	0.7	7	0.7	3.746	0.216	
Fr.1-7	20:42	1.389	5.3	18.6	21.4	16	406	0.870 1.389	0.058	
Fr.1-7B	21:01	1.356	7.2	16.8	20.8	12	380	0.809	0.061	
A5.1-1			high	204						
A4.1-1			high	204						
QMa.2-1	21:56	1.428	6.2	15.4	18.9	2	185	0.817	0.059	
Sample change to 04-91										
Fr.2-1	22:47	1.339 5.8	5.6	20.1	25.9	12	509	0.779	0.061	
04-91/A1.1-1			high	204						
A3.1-1			high	204						
B1.1-1			high	204						
B3.1-1			high	204						

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

Sample/ Std ID	Time on printout	UO/U 254/238	196 (xt) Kcps	206 cps	U ppm	T₂₀₆ %	Sensit. 196/194 264 Kcps	Age+/-1σ (Ma) 206/238 207/206	Offsets OK?
Alternative		<u>UO2/UO</u> <u>270/254</u>	194 (xt) 200 (tnt) 203 (mz) Kcps	206 cps Kcps	254 270 Kcps	204 cps	196/194 264 Kcps	206/238 207/206	Check after each!!!
(04-91) D2.1-1	23:57	1.419	4.7	8.8	1.7	18	4.2	5.213	0.201
E1.1-1			high 204						
H1.1-1			high 204						
H1.1-1B	00:42	1.373	4.5	6.0	1.2	9	14.4	5.074	0.200
I1.1-1			high 204						
Fr.2-2	01:24	1.458	4.5	16.9	18.9	11	362	0.895	0.057
Fr.1-8	02:10	1.361	5.1	18.2	22.1	12	424	0.826	0.059
05-15 A1.1-1	02:37	1.504	5.3	25.6	5.0	1	105	5.142	0.173
A1.1-1B	02:56	1.420	8.0	22.8	4.7	4	98	4.840	0.177
Fr.1-9	03:19	1.404	5.6	19.2	22.5	10	425	0.851	0.059
Fr.1-9B	03:38	1.382	7.7	17.2	21.5	11	384	0.799	0.057
A1.1-2	04:03	1.476	4.8	21.6	4.3	8	95	4.977	0.185
A1.1-2B	04:23	1.376	6.7	19.5	4.3	9	93	4.580	0.185
A2.1-1	04:50	1.389	5.2	27.4	5.5	44	95	4.997	0.194
A3.1-1	05:15	1.499	4.3	30.9	6.0	17	117	5.124	0.181
A3.1-1B	05:34	1.402	6.3	32.2	6.4	51	126	5.029	0.200
Fr.2-3	05:58	1.416	5.2	18.4	22.6	11	435	0.816	0.061
Fr.2-3B	06:17	1.393	7.4	17.6	23.2	10	438	0.757	0.060
A4.1-1	06:41	1.425	5.4	27.0	5.5	10	103	4.947	0.180
A4.1-1B	07:00	1.345	7.2	24.2	5.4	39	96	4.512	0.189
A4.1-2	07:23	1.430	5.3	30.4	6.0	33	127	5.076	0.189

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

Sample/ Std ID Time on printout ~~UO/U~~ ~~196 (zr)~~ ~~Kcps~~ 206 cps ~~U~~ ppm ~~f₂₀₆~~ % Sensit. Age+/-1σ (Ma) ~~206/238~~ ~~207/206~~ Offsets OK?

Alternative UO2/UO 270/254 194 (xt) 206 cps 254 204 196/194 206/238 207/206 Check after each!!!
~~203 (mz)~~ 200 (tnt) 270 cps 264 206/254 206/270

Sample/ Std ID	Time on printout	UO2/UO	194 (xt)	206 cps	U ppm	f ₂₀₆ %	Sensit.	Age+/-1σ (Ma)	Offsets
05-15 A4.1-2B	07:42	1.411	8.1	27.6	6.0	13	134	4.575	0.180
PD95.3-1	08:11	1.178	5.3	848	277	25	817	3.055	0.104
Qma.3-1	08:33	1.404	5.3	14.2	17.9	2	193	0.796	0.059