

## UWA SHRIMP LOG SHEET

**Date** 8/3/06      **UWA mount no(s)** 06-07      **Mineral(s)** ZR      **Whose sample?** JK      **Operator(s)** Me N + NICK

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

Zircon/Badd.	<b>196</b>	204	204.1	<b>206</b>	207	208	<b>238</b>	<b>248</b>	<b>254</b>
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	<b>200</b>	204	204.1	<b>206</b>	207	208	<b>248</b>	<b>254</b>	<b>270</b>
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)	<b>202</b>	<b>203</b>	204	204.1	<b>206</b>	207	<b>208</b>	<b>232</b>	<b>254</b>	<b>264</b>	<b>270</b>
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)	<b>194</b>	(196)	204	204.1	<b>206</b>	207	208	<b>238</b>	<b>248</b>	<b>254</b>
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.

<b>Zircon/Badd.</b>	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:	8.152	0.045	~2.006	1.004	2.005	
<b>Titanite/Perovsk.</b>	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:	.....	.....	.....	.....	.....	
<b>Monazite (SHB)</b>	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:	.....	.....	.....	.....	.....	.....
<b>Xenotime (SHB)</b>	(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 .....volts    Resoln 25248

Primary on Steel: O<sup>-</sup> ..... bits & nA    O<sub>2</sub><sup>-</sup> ..... bits & nA

Primary O<sub>2</sub><sup>-</sup> on: epoxy = 2.05 nA; standard = 2.9 nA; PESABM on std = 37 pA

Raster: Time (mins): 2.0    Aperture: 120    No. of scans: 6

**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:**

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 <sub>206</sub> %	Sensit.	Age+/-1σ (Ma) 206/238	207/206	Offsets OK?
Alternative		<u>UO2/UO</u> <u>270/254</u>	<u>194 (xt)</u> <u>200 (tnt)</u> <u>203 (mz)</u>	206 cps	254 270 Kcps	204 cps	196/194 264 Kcps	206/238 206/254 206/270	207/206	Check after each!!!

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CZ.1-1	10:10	6.58	14	1900	551	-	20.4	564±6	566±19	✓	
tem. 1-1	10:34	7.13	13	990	378	.05	21.5	418±6	445±40	✓	DARK CL
tem. 1-2	10:55	6.92	14	780	301	.10	21.4	417±5	439±40	✓	" "
C.1-1	11:14	6.46	16	7200	566	.39	23.4	1675±18	2498±19	✓	
C.2-1			high		204					✓	
C.3-1			high		204					✓	
C.4-1	11:44	6.71	13	750	42	0	18.9	2677± <sup>50</sup> 2	2692±17	✓	
tem. 2-1	12:03	7.24	13	300	110	.44	22.5	415±6	394±100	✓	MED. CL
A.1-1	12:28	6.98	13	4100	783	.08	21.7	820±7	1764±11	✓	
A.2-1	12:46	7.27	13	760	204	.21	21.6	587±7	532±40	✓	
A.3-1	13:05	7.41	14	3200	770	.06	24.6	583±5	552±16	✓	
A.4-1	13:24	6.85	11	2400	509	.10	18.0	903±7	1921±17	✓	
tem. 2-2	13:43	6.98	13	370	150	.09	21.2	411±6	486±102	✓	MED. CL
B.1-1	14:03	6.19	<del>14</del> 14	960	158	.14	20.0	1016±11	2159±25	✓	
B.2-1	14:29	7.23	13	<del>195</del> 421	421	.18	22.3	70±1	258±139	✓	
B.3-1	14:58	7.38	15	2730	247	.04	26.2	1352±19	2338±11	✓	
B.3-2	15:23	6.93	13	1640	424	0	21	599±∞	626±NAN	✓	
tem. 3-1	15:45	7.03	12	475	170	.03	22.1	429±5	424±47	✓	
B.2-2	16:06	7.38	12	189	409	.92	23.4	70±1	—	✓	
B.1-2	16:26	5.97	13	5783	493	.02	19.1	1869±12	2568±6	✓	
B.1-3	16:45	6.58	13	2252	237	.10	20.7	1639±17	2421±10	✓	

Li-1

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 <sub>206</sub> %	Sensit.	Age+/-1σ (Ma)		Offsets OK?
								206/238	207/206	
<i>Alternative</i>		<i>UO2/UO 270/254</i>	<i>194 (xt) 200 (tnt) 203 (mz)</i>	<i>206 cps</i>	<i>254 270 Kcps</i>	<i>204 cps</i>	<i>196/194 264 Kcps</i>	<i>206/238 206/254 206/270</i>	<i>207/206</i>	<i>Check after each!!!</i>
tem. 3-2	17:05	7-23	12	622	219	-10	22	411±4	376±59	✓
A.5-1	17:28	6-45	14	2476	541	-07	21-7	628±5	955±23	✓
A.6-1	17:50	6-90	12	<del>17</del> 435	373	-14	21-3	594±7	576±27	✓
A.7-1	18:06	Aborted	wght	204						
A.8-1	18:28	6-78	12	1004	255	-12	20-8	587±8	546±32	✓
A.8-2	18:51	6-63	15	<del>2</del> 2424	141	-01	24-2	2367±37	2799±12	✓
A.9-1	19:11	7-00	14	2623	612	-04	26-1	586±6	616±17	✓
A.10-1	19:35	6-87	14	1624	299	-06	22-3	720±7	1391±25	✓
tem. 4-1	20:02	7-22	14	625	203	-07	23-9	415±6	492±69	✓
A.11-1	20:19	6-83	15	3844	174	-03	24-7	2348±27	2635±7	✓
A.11-2	20:40	7-44	14	691	113	-22	24-5	786±15	1501±36	✓
A.12-1	21:00	6-81	14	1047	262	-29	22-3	615±7	649±44	✓
A.13-1	21:22	6-84	16	4870	1097	-02	25-2	541±4	601±17	✓
A.14-1	21:43	6-71	14	2260	564	-01	23-1	589±5	732±21	✓
tem. 5-1	22:08	7-08	14	675	227	-16	22-6	419±5	343±55	✓
tem. 6-1	22:28	5-96	17	660	225	-14	22-0	414±4	465±49	✓
A.15-1	22:45	7-16	12	594	104	-07	19-7	423±14	1878±25	✓
A.16-1	23:20	6-92	15	1500	356	-05	23-5	578±5	562±22	✓
A.17-1	23:45	6-73	14	1580	130	-10	21-6	1665±22	2509±19	✓
A.18-1	00:05	7-04	<del>14</del>	4600	200	-10	23-6	2866±21	3134±8	✓
tem. 7-1	00:27	7-20	13	333	109	-11	23-0	415±6	436±81	✓

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 <sub>206</sub> %	Sensit.	Age+/-1σ (Ma)		Offsets OK?
								206/238	207/206	
<i>Alternative</i>		<b>UO2/UO</b> <b>270/254</b>	<b>194 (xt)</b> <b>200 (tnt)</b> <b>203 (mz)</b>	206 cps	254 270 Kcps	204 cps	196/194 264 Kcps	206/238 206/254 206/270	207/206	Check after each!!!
C.5-1	00:50	7.10	14	3700	187	.58	22.9	2465±23	2668±126	✓
C.6-1	01:12	6.92	14	3628	168	-.02	23.2	2693±34	2668±8	✓
C.7-1	01:36	6.99	15	10274	470	-.02	26	2603±13	2639±5	✓
<i>Tem.8-1</i>	<i>01:56</i>	<i>7.09</i>	<i>13</i>	<i>517</i>	<i>175</i>	<i>.10</i>	<i>22.7</i>	<i>421±5</i>	<i>442±51</i>	✓
C.8-1	02:06	high	20h,	aborted.						
C.9-1	02:28	6.61	17	7818	328	-.06	25.5	2568±23	2681±8	✓
C.10-1	02:49	6	18	7200	374	-.14	23.7	2193±13	2679±10	✓
C.11-1	03:09	7.63	13	8850	610	-.02	23.4	2644±13	2653±5	✓
C.12-1	03:29	7.32	13	2700	370	-.03	26.3	2676±20	2684±16	✓
C.12-2	03:48	7.21	13	1700	453	-.03	26.2	2693±23	2657±5	✓
C.13-1	04:13	6.04	12	3625	217	-.09	15.9	2636±29	2663±7	✓
<i>Tem.9-1</i>	<i>04:36</i>	<i>7.11</i>	<i>13</i>	<i>320</i>	<i>109</i>	<i>-.06</i>	<i>23</i>	<i>417±6</i>	<i>502±68</i>	✓
<i>Tem.10-1</i>	<i>04:54</i>	<i>7.18</i>	<i>13</i>	<i>156</i>	<i>52</i>	<i>-.16</i>	<i>23.3</i>	<i>416±8</i>	<i>505</i> <i>412±113</i>	✓
C.14-1	05:06	high	20h,	aborted.						
C.15-1	05:15	high	20h,	aborted.						
C.16-1	05:36	"	"	"						
C.17-1	05:56	7.32	13	6300	280	-.04	23.9	2698±22	2687±8	✓
C.18-1	06:07	high	20h,							
C.19-1	06:18	"	"	"						
C.20-1	06:41	7.12	14	2100	97	-.09	23.2	2693±29	2681±9	✓
C.21-1	—	high	20h							
C.22-1	—	"	"							
<i>tem.11-1</i>	<i>07:25</i>	<i>6.40</i>	<i>9.5</i>	<i>240</i>	<i>150</i>	<i>-.03</i>	<i>13.8</i>	<i>407±7</i>	<i>522±49</i>	✓

15g P. spike