

UWA SHRIMP LOG SHEET

SHRIMP A

Date **25/3/06** UWA mount no(s) **06-19**
06-20 Mineral(s) **ZR** Whose sample? **JK/McN** Operator(s) **McN + Nick**

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	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:	.....	.....	.....	.....	.....
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 **336** volts Resoln **4661**

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

Primary O₂⁻ on: epoxy = **2.5** nA; standard = **3.5** nA; PESABM on std = **64** pA

Raster: Time (mins): **2.05** Aperture: **130** No. of scans: **6**

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

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

06-19 ~~A~~ B } equal no. of good spots on each
06-19 C }
06-20 A }

BR266 -> 12-15

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?
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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!!!
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<u>06-19</u> C2.1-1	9:44	4.98	24	2200	130	.07	102.9	417±3	562±31	✓
C2.2-1	10:07	4.83	23	2000	551	0	16.5	564±4	554±17	✓
Tem.1-1	10:26	5.03	24	380	124	.22	19.1	419±6	468±163	✓
Tem.2-1	10:44	5.08	24	490	161	.01	18.8	420±6	475±91	✓
<u>(Br266)</u> BR.1-1	11:04	5.01	24	3800	903	.11	18.3	566±3	535±21	✓
B.1-1	11:23	5.38	22	3200	156	.04	18.9	2370±30	2610±9	✓
B.2-1	11:42	4.91	23	2300	107	.06	17.3	2637±29	2650±14	✓
B.3-1	12:01	5.13	23	1600	73	.18	18.4	2625±28	2629±20	✓
BR.1-2	12:20	5.01	24	3800	911	.05	18.3	571±3	480±23	✓
B.4-1	12:39	5.11	24	2700	117	.06	18.1	2661±23	2646±10	✓
C.1-1	13:01	4.83	25	2500	112	.10	18.3	2595±35	2641±13	✓
C.2-1	13:20	4.91	23	2350	99	.45	18.2	2699±28	2618±12	✓
BR.1-3	13:39	4.99	22	3800	915	.01	18.6	574±2	530±22	✓
0620 A.1-1	14:10	4.77	24	1300	57	.26	18	2623±32	2610±19	✓
0620 A.2-1	14:37	4.85	24	2800	120	.06	18.2	2586±18	269±8	✓
0620 A.3-1	14:58	5.03	23	1650	72	.26	18.8	2613±198	2676±50	✓
0620 BR.1-1	15:23	5.04	24	4000	906	.08	19.8	559±2	536±23	✓
0619 B.5-1	15:47	4.98	23	3500	149	.02	18.0	267±17	2657±8	✓
↓ B.6-1	16:07	4.98	23	1300	57	.38	19.5	2672±29	2651±18	✓
B.7-1	16:29	4.94	24	2000	85	.09	19.8	2675±34	2668±11	✓
BR.1-4	16:55	5.08	44	4000	893	.05	19.4	568±2.6	540±19	✓

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)		Offsets OK?
								206/238	207/206	
<i>Alternative</i>		<i>UO2/UO 270/254</i>	<i>194 (xt) 200 (tn) 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>
A.10-1	03:08	4.5-00	22	3300	137	.15	18.3	2619±24	2623±10	✓
BR.1-4	03:30	5-02	21	3900	932	.02	17.9	518±3	530±16	✓
A.11-1	03:51	4-98	22	1100	47	.31	14.7	2677±40	2614±21	✓
A.12-1	04:12	4-97	22 22	1600	68	.25	17.4	2622±43	2640±15	✓
A.13-1	04:32	4-75	23	2000	90	.12	17.9	2671±25	2639±10	✓
BR.1-5	4:52 5:06	5:06	23	4000	925	-.02	14.5	560±2	563±21	✓
0619. B.12-1	05:15	4-90	23	2800	123	-.09	18.4	2597±25	2653±12	✓
B.13-1	05:35	4-66	17 17	2100	119	.19	15.4	2606±34	2661±14	✓
B.14-1	05:55	4-98	22	2100	104	-.18	14.3	232±25	2610±13	✓
0619 BR.1-7	06:29	4-96	21	3600	912	.11	17.7	550±3	533±19	✓
C.10-1	06:50	4-79	20	1200	61	-.17	17.4	2661±30	2618±20	✓
C.11-1	07:13	4-73	22	2600	218	0.01	18.0	2634±19	2652±7	✓
C.12-1	07:36	4-90	22	2300	100	.19	18.9	2630±21	2656±13	✓
C.13-1	07:55	3-62	211	1000	114	1.5	8.0	258±40	2540±39	✓
0619 BR.1-8	08:15	4-93	21	3600	929	.02	17.3	568±3	580±23	✓

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?
<i>Alternative</i>		UO2/UO 270/254	194 (xt) 200 (tn) 203 (mz)	206 cps	254 270 Kcps	204 cps	196/194 264 Kcps	206/238 206/254 206/270	207/206	Check after each!!!
C.3-1	17:19	L-99	23	6800	287	.08	19.2	2687±13	2636±6	✓
C.4-1	17:50	S-03	24	5800	235	.05	19.3	2618±13	2668±7	✓
C.5-1	18:14	L-95	25	3950	165	.08	19.1	2598±16	2662±8	✓
BR.1-5	18:39	L-92	24	3800	876	.12	19	570±2	524±25	✓
A.6-1	19:09	L-87	26	1900	79	.17	18.9	2632±30	2665±14	✓
A.5-1	19:37	S-02	25	2090	83	.04	20.0	2595±23	2688±10	✓
A.6-1	19:59	L-96	24	4600	184	.04	129 (?)	2591±17	2653±8	✓
0620 BR.1-2	20:25	L-99	23	4000	925	.04	18.3	555±3	555±17	✓
0619 B.8-1	20:52	L-89	22	1600	72	.23	17.9	2596±27	2665±12	✓
0619 B.9-1	21:14	L-68	24	1900	84	.13	18.7	2390±37	2665±11	✓
0619 B.10-1	21:42	L-82	24	2300	100	.05	17.5	2671±21	2657±10	✓
0619 B.11-1	22:05	L-92	23	4500	199	.03	18.0	2588±14	2637±6	✓
0629 BR.1-6	22:33	L-85	22	3700	884	.03	17.9	565±2	570±19	✓
<small>mislabelled as 0620</small> C.6-1	23:00	S-06	23	3000	132	.17	18	2578±19	2632±9	✓
C.7-1	23:26	L-89	23	3600	147	.07	18.4	2651±18	2668±7	✓
C.8-1	23:50	L-83	23	1100	55	.37	18.4	2322±37	2598±30	✓
C.9-1	00:13	L-80	23	2600	114	.17	17.9	2599±25	2640±11	✓
0620 BR.1-3	00:33	L-98	23	3900	909	0	18.9	561±∞	585±New	✓
A.7-1	02:07	L-83	22	4700	22	.05	17.7	2570±17	2655±6	✓
A.8-1	02:28	S-09	22	2000	84	.19	19.4	268±34	2632±17	✓
A.9-1	02:48	S-06	22	1900	106	.05	18.5	2729±78	2655±225	✓