

**UWA SHRIMP LOG SHEET**

*move on sheet 29/10/05 (05-63)  
05-40  
05-09*

**Date** 28/10/05      **UWA mount no(s)** 05-59  
05-63      **Mineral(s)** Monazite      **Whose sample?** Berger      **Operator(s)** IF+

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

<b>Zircon/Badd.</b>	<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	2	2
Centring (secs)	3	-	-	3	-	-	3	3	2

<b>Titanite/Perovskite</b>	<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

<b>Monazite (SHB)</b>	<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	

<b>Xenotime (SHB)</b>	<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:	.....	.....	.....	.....	.....	
<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 <i>centred</i>
Expected offsets:	~1.000	1.110	0.045	~2.001/9	1.001/5	~2.001/9
Setup offsets:	<i>centred</i>	<i>1.108</i>	<i>0.045</i>	<i>~2.002</i>	<i>1.004</i>	<i>~2.007</i>
<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** 30      **Retard** 9962 volts      **Resoln** 5750

**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 = ..... nA; standard = 0.3 nA; **PESABM on std** = ..... pA

**Raster:** Time (mins): 2      Aperture: 70      No. of scans: 7

**Useful information**      **Comments:** *Stds on B-99*  
 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

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	$\epsilon_{206}$ %	Sensit.	Age +/- 1 $\sigma$ (Ma) 206/238 207/206	Offsets OK?
Alternative		UO2/UO 270/254	194 (xt) 200 (tnt) 203 (mz) Kcps	206 cps KcTs	254 270 Kcps KcTs	204 cps ~cps	196/194 264 Kcps	206/238 206/254 206/270	207/206 Check after each!!!
Fr. 1-1	12:04	1.37	2.4	6.9	9.9	5	193	0.192 0.059	✓
PD. 1-1	12:27	1.24	2.5	814.	305	10	228	0.660 0.104	✓
GSC. 1-1	12:55	1.33	1.9	36.	13.	2	38	0.746 0.109	✓
O559A.1-1	13:19	1.20	2.0	23	16	8	331	0.352 0.073	✓
O559B.1-1	13:43	1.35	2.0	17	12	2	81	0.393 0.074	✓
O559B.1-2	14:06	1.49	1.4	20	13	3	110	0.457 0.073	✓
Fr. 1-2	15:02	1.38	1.96	5.9	7.0 8.2	3	129	0.146 0.059	✓
GSC2908.2-1	15:29	1.33	1.4	52	18	2	45	0.76 0.11	✓
Fr. 1-3	16:20	1.39	1.4	4.7	6.5	4	122	0.202 0.058	✓
PD. 2-1	16:47	1.23	1.4	220	83	7	221	0.65 0.104	✓
GSC2908.3-1	17:12	1.39	1.45	244 226	15.6	1	43	0.79 0.11	✓
QMA284.2-1	17:39	1.42	1.66	3.6 2.4	5.4	1	56	0.2 0.057	✓
O563A.1-1	18:10	1.32	1.7	168	80	5	101	0.533 0.092	✓
O563C.1-1	18:41	1.41	1.3	152	87	4	93	0.49 0.08	✓
O563D.1-1	19:09	1.33	1.4	78	29	3	128	0.73 0.11	✓
O563E.1-1	19:36	1.35	1.5	183	65	2	96	0.76 0.11	✓
O563G.1-1	20:04	1.40	1.5	167	60	2	94	0.78 0.11	✓
Fr. 1-4	20:30	1.43	1.5	4.6	6.4	1	120	0.21 0.06	✓
O563H.1-1	20:59	1.30	3.5	232	87	4	143	0.688 0.105	✓
O563I.1-1	21:25	1.32	2.4	104	36	3	129	0.76 0.11	✓
O563K.1-1	21:49	1.34	2	68	26	2	103	0.698 0.11	✓

Fracture  
grain

Huge volume

LAST SCAN

Jump  
IN  
PRIMARY  
CURRENT





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		<b>UO2/UO 270/254</b>	<b>194 (xt) 200 (tnt) 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!!!
OS63W-1	22:22	1.35	1.78	183	65	4	147	0.76	1.088	✓
GSC2908W-1	22:48	1.39	1.7	50	18	2	48	0.78	0.11	✓
OS63A.1-2	23:13	1.32	1.7	273	97	2	104	0.74	0.11	✓
OS63C.1-2	23:39	1.33	1.6	162	58	4	126	0.74	0.11	✓
OS63D.1-2	00:03	1.34	1.5	189	68	4	99	0.75	0.11	✓
OS63E.1-2	00:28	1.34	1.4	118	42	3	96	0.75	0.11	✓
Fr. 1-5	00:53	1.41	1.6	4.5	6.4	3	120	0.20	0.061	✓
OS63G.1-2	1:18	1.36	1.4	99	35	2	116	0.76	0.11	✓
OS63H.1-2	1:41	1.35	1.5	119	40	2	108	0.79	0.11	✓
OS63J.1-2	2:06	1.32	1.6	68	24	3	83	0.74	0.11	✓
OS63K.1-2	2:30	1.36	1.6	64	22	2	88	0.78	0.11	✓
GSC2908S-1	2:55	1.40	1.3	48	17	2	43	0.77	0.11	✓
OS63L.1-2	3:20	1.32	1.6	105	37	3	113	0.74	0.11	✓
OS63A.1-3	3:45	1.34	1.5	231	97	3	101	0.64	0.10	✓ <small>204-206 = 2.0041?</small>
OS63C.1-3	4:08	1.34	1.7	158	59	4	96	0.72	0.11	✓
OS63D.1-3	4:33	1.32	1.4	129	46	3	116	0.74	0.11	✓
Fr. 1-6	4:57	1.41	1.6	<del>270</del> 26.6	26.6	3	128	0.21	0.06	✓
OS63E.1-3	5:25	1.29	1.5	96	35	5	127	0.71	0.11	✓
OS63G.1-3	5:46	1.31	1.6	183	65	3	110	0.75	0.11	✓
OS63H.1-3	6:12	1.31	1.5	124	43	3	112	0.75	0.11	✓
OS63J.1-3	5:35	1.33	1.6	75	26	2	85	0.76	0.11	✓

