

SHRIMP data acquisition logsheet

SHRIMP A or B

Mineral = TNT

Date	Sample/Mount(s)	Sample owner	SH operator	Night-runner(s)
<u>4/6/09</u>	<u>09-22</u> <u>09-08</u>	<u>McN</u>	<u>McN</u>	

Deadtime.....25.....ns Kohler aperture.....100?..... Retard.....6349volts Resoln.....4894

Primary on steel: O      Bits/nA O<sub>2</sub>      Bits/nA

Primary O<sub>2</sub> on: epoxy .....nA standard 3.3nA PostESA BM on std .....

Raster: Time (mins) 3 Aperture 120 No. of scans 6

Zircon/Badd.	196	204	Bk	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		
Peak centring time (secs)	3	-	-	3	-	-	3	3	2		
<b>Titanite/Perovskite</b>	200	204	Bk	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	<u>12</u>	4	<u>23</u>	<u>13</u>	4	2	3		
Peak centring time (secs)	3	-	-	4	-	-	2	3	3		
<b>Rutile</b>	192	204	Bk	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		
Peak centring time (secs)	3	-	-	4	-	-	2	3	3		
<b>Monazite</b>	202	203	204	Bk	206	207	208	232	254	264	270
Count time (secs)	2	10	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
Peak centring time (secs)	1	2	-	-	4	-	2	2	2	2	2
<b>Xenotime</b>	194	204	Bk	206	207	208	238	248	254		
Count time (secs)	2	10	10	10/20	30/10	5	5	5	2		
Delay time (secs)	8	3	1	4	2	1	3	2	2		
Peak centring time (secs)	1	-	-	3	-	-	4	3	2		

Offsets						
<b>Zircon/Badd.</b>	196-204	204-Bk	204-206	206-207	206-208	
Expected offset	8.170	0.045	2.001/9	1.001/5	2.001/9	
Setup offsets						
<b>Titanite/Perovskite</b>	200-204	204-Bk	204-206	206-207	206-208	
Expected offset	4.136	0.045	2.001/9	1.001/5	2.001/9	
Setup offsets	<u>4.138</u>	<u>0.045</u>	<u>~2.005</u>	<u>1.005</u>	<u>2.009</u>	
<b>Rutile</b>	192-204	204-Bk	204-206	206-207	206-208	
Expected offset	12.100	0.045	2.001/9	1.001/5	2.001/9	
Setup offsets						
<b>Monazite</b>	202-203	203-204	204-Bk	204-206	206-207	206-208
Expected offset	1.000	1.110	0.045	2.001/9	1.001/5	2.001/9
Setup offsets						
<b>Xenotime</b>	194-204	204-Bk	204-206	206-207	206-208	
Expected offset	10.143	0.045	2.001/9	1.001/5	2.001/9	
Setup offsets						

203.907  
4.136  
199.871

Whom = 522.2 Ma ± 584 ppm U.  
ORBA = 2687 ± 5 Ma ± 188 ppm U.

\* 206 cts = 30 + 207 cts = 10 → corrected at end of analysis

Note: peak centering used "sliding integral"

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0908

Bad 200 in run 6 + 204  
Mislabel! →

Filename	Time	UO/U	196 Kcps	206 -cps-	f206 (%)	$\delta$ ppm Kcps	Sensit- ivity SBM %	Age/Ma 206/238 Pb/Cr ratio 206/270	Age/Ma 207/206 207/206	Check offsets
A.1-1*			aborted							
A.2-1	11:47	0.74	250	2200	.57	17	-16.0	.129	466±38	✓
A.2-2	12:08	0.71	250	2200	.63	17	-10.7	.129	484±45	✓
A.2-3	12:27	0.71	250	2200	.56	17	-9.3	.129	479±51	✓
A.3-1	12:48	0.72	330	2800	9.86	18	-9.8	.156	427±102	✓
B.1-1	13:11	0.73	360	3300	1.02	4.1	-11.3	.805	2687±12	✓
B.1-2	13:31	0.74	300	3700	.91	4.6	-12.2	.804	2712±13	✓
B.2-1	13:53	0.79	450	3800	1.07	4.5	-13.1	.844	2678±13	✓
B.2-2	14:14	0.72	300	3100	.76	3.9	-13.7	.795	2690±14	X
A.3-2	14:37	0.68	280	2200	.63	17	-10.1	.129	728±151	✓
C.1-1	14:57	0.73	470	2600	.46	19	-10.8	.137	475±33	✓
C.2-1	15:16	0.73	440	2400	.72	19	-9.2	.126	550±37	✓
C.3-1	15:35	0.75	420	3200	11.16	21	-12.9	.152	280±242	✓
C.4-1	15:54	0.68	230	2100	.55	17	-10.6	.124	523±44	✓
B.3-1	16:14	0.81	590	3600	1.08	4.3	-14.6	.857	2681±13	✓
B.3-2	16:36	0.76	490	3300	1.33	4.1	-13.1	.805	2696±16	✓
B.4-1	16:56	0.79	420	4200	1.17	6.4	-23.6	.656	2692±13	✓
B.4-2			aborted			high 204				
B.5-1	17:24	0.76	490	4500	.91	5.3	-14.4	.849	2691±11	✓
A.3-3	17:44	0.74	400	2600	.50	20	-13.0	.130	452±34	✓
A.4-1	18:05	0.79	580	2000	3.06	15	-15.1	.133		✓
A.4-2	18:24	0.75	490	2000	1.15	15	-8.3	.133	489±53	✓
A.4-3	18:44	0.75	420	1900	1.03	15	-11.7	.127	462±85	✓
A.5-1	19:03	0.70	370	2600	0.67	19	-9.2	.137	406±46	✓
K.1-1	19:25	0.72	510	2900	0.57	21	-12.4	.138	452±41	✓
K.2-1	19:44	0.69	400	2600	0.74	20	-14.9	.130	442±38	✓
A.1-1	20:05	0.73	470	1500	1.22	19	-13.3	.789	2533±21	✓
A.1-2	20:24	0.76	530	1500	1.08	19	-14.8	.790	2505±17	✓
OR.1-1	20:43	0.80	560	3400	1.08	4.0	-17.3	.850	2686±13	✓
OR.1-2	21:02	0.74	470	3700	1.30	4.3	-13.5	.860	2651±17	✓
K.3-1	21:22	0.76	500	2900	0.37	21	-12.1	.132	568±34	✓
K.4-1	21:41	0.70	440	2900	0.81	21	-12.2	.138	386±45	✓
A.2-1	22:03	0.77	530	2700	0.67	3.4	-15.3	.79	2562±25.5	✓

0922

Offsets: 196-204 = 4.138 204-Bkg = 0.045 204-206 = 2.005 206-207 = 1.005 207-208 = 2.009

K 18+8 = 26  
ORBA 10+10 = 20  
A 3+9 = 12

0922

Filename	Time	UO/U	196	206	f206	U	Sensitivity	Age/Ma	Age/Ma	Check offsets
		254/238	Kcps	-cps-	(%)	ppm		206/238	207/206	
Alternatives		UO2/UO	Reference Kcps			254/270 Kcps	SABAN	Pb/U ratio 206/270	207/206	
A.2-2	22:22	0.71	390	3500	0.41	4.6	-11.4	0.76	2487±11	✓
OR 1-3	22:44	0.75	440	3500	0.41	4.1	-14.5	0.85	2702±14	✓
OR 1-4	23:42	0.68	260	2900	1.4	3.5	-17.6	0.82	2697±15.0	✓
K 5-1	00:01	0.78	550	3000	0.92	2.2	-15.8	1.36	487±41	✓
K 6-1	00:28	0.7	480	2600	1.36	1.9	-15.4	1.36	474±49	✓
A 3-1	00:47	0.73	360	1400	0.15	1.7	-11.8	0.82	2572±19	✓
A 3-2	1:07	0.78	500	1400	0.14	1.8	-14.7	0.77	2538±24	✓
OR 1-5	1:36	0.72	600	3100	0.86	3.7	-13.9	0.83	2707±17	✓
OR 1-6	2:28	0.69	220	2800	1.49	3.4	-9.4	0.83	2676±16	✓
K 6-2	2:48	0.7	470	2300	0.97	1.7	-16.1	1.35	526±44	✓
K 7-1	3:08	0.7	460	2800	0.48	2.0	-12.7	1.4	549±42	✓
A 4-1	3:29	0.76	440	4100	0.42	5.2	-12.7	0.78	2557±13	✓
A 5-1	3:49	0.7	340	1300	0.98	1.7	-12.5	0.76	2567±19	✓
OR 1-7	4:24	0.61	880	2200	1.43	2.7	-11	0.81	2673±14	✓
OR 2-8	4:44	0.71	350	3500	0.92	4.1	-16.7	0.85	2686±13	✓
K 7-2	5:04	0.7	300	2500	0.67	1.9	-12.6	1.31	435±37	✓
K 8-1	5:24	0.74	450	2700	0.08	2.0	-11.4	1.35	458±37	✓
A 6-1	5:44	0.75	470	2700	0.84	3.4	-11.6	0.79	2547±17	✓
A 7-1	6:06	0.78	480	2400	1.02	3.0	-13.4	0.8	2542±17	✓
OR 2-2	6:25	0.72	320	3200	0.096	3.9	-15.9	0.82	2692±10	✓
OR 2-3	6:44	0.72	330	3400	1.17	4.0	-14.8	0.82	2673±15	✓
K 8-2	7:05	0.7	390	2500	0.094	1.9	-10.8	1.31	469±42	✓
K 9-1		high	Pb 204		204=64					X
A 8-1	7:36	0.71	330	2100	0.73	2.7	-9.5	0.77	2559±15	✓
A 9-1	7:56	0.73	390	4300	0.38	5.4	-9.8	0.79	2562±12	✓
OR 2-4	8:16	0.75	380	3600	1.16	4.1	-12.9	0.878	2647±15	✓
OR 2-5	8:37	0.70	280	3200	1.07	3.8	-9.8	0.842	2691±12	✓
K 10-1	9:01	0.72	480	2600	0.43	1.8	-11.5	0.144	527±33	✓
K 10-2	9:19	0.76	470	2600	0.53	1.9	-8.4	0.137	473±39	✓
FINISHED SESSION										

Offsets: 196-204 = ..... 204-Bkg = ..... 204-206 = ..... 206-207 = ..... 207-208 = .....