

SHRIMP data acquisition logsheet

SHRIMP A or **B** Mineral = *Badd + ZR*

Date	Sample/Mount(s)	Sample owner	SH operator	Night-runner(s)
<i>25/9/08</i>	<i>08-14 to 08-19</i>	<i>Marco Brenna</i>	<i>McN</i>	<i>Arne + Marco</i>

Deadtime.....*25*.....ns Kohler aperture.....*50*..... Retard.....*14.2*.....volts Resoln.....*4838*.....

Primary on steel: O⁻ Bits/nA O₂⁻ Bits/nA

Primary O₂⁻ on: epoxy*0.34*.....nA standard*0.44*.....nA PostESA BM on std*8.8*.....nA.

Raster: Time (mins)*3.0*..... Aperture*100*..... No. of scans*7*.....

Zircon/Badd.	196	204	Bk	206	207	208	238	248	254		
Count time (secs)	2	10	10	<i>10/20</i>	<i>30/10</i>	10	5	5	2		
Delay time (secs)	8	3	<i>12</i>	4	<i>23</i>	<i>13</i>	3	2	2		
Peak centring time (secs)	3	-	-	<i>35</i>	-	-	3	3	2		
Titanite/Perovskite	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	1	4	2	1	4	2	3		
Peak centring time (secs)	3	-	-	4	-	-	2	3	3		
Rutile	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		
Monazite	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
Xenotime	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		

Mass Offsets

Zircon/Badd.	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	<i>8.155</i>	<i>0.045</i>	<i>2.009</i>	<i>1.003</i>	<i>2.005</i>	
Titanite/Perovskite	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						
Rutile	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						
Monazite	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						
Xenotime	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						

Note: Small spot !!

Filename	Time	UO/U 254/238	196 Kcps	206 -cps-	f206 (%)	U ppm	Sensit- ivity	Age/Ma 206/238	Age/Ma 207/206	Check offsets
Alternatives		UO2/UO 270/254	Reference Kcps			254/270 Kcps		Pb/U ratio	207/206	
BROBIS 1-1	10:46	7.93	2.4	400	.29	550	25.0	562±8	524±75	✓
" 1-2	11:09	8.40	2.4	410	.39	507	27.2	572±7	581±90	✓
" 1-3	11:33	8.13	2.4	390	.69	524	26.3	550±8	529±79	✓
0815* A.1-1	12:01	7.88	2.2	2600	.04	2879	22.9	750±6	748±19	✓ 2.7
" C.1-1	12:32	8.32	2.1	1300	.12	1348	24.3	744±12	758±28	✓ 2.8
" C.1-2	12:55	8.26	2.3	3100	.02	2930	25.9	795±6	748±14	✓ 3.8
" C.2-1	13:19	6.94	2.4	1400	.23	1639	20.9	733±6	750±34	✓ 5.1
BROBIS 2-1	13:46	7.82	2.5	390	.76	532	26.2	544±10	429±89	✓ .054
" 2-2	14:09	8.19	2.4	420	.56	523	26.1	587±8	496±80	✓ .054
" 2-3	14:31	8.08	2.3	410	.49	551	26.0	556±9	473±101	✓ .056
2R 0815 C.3-1	14:56	8.00	2.4	1900	.08	1815	25.5	793±7	730±22	✓ 1.6
BADD. " C.1-1	15:12	4.52	6.0	66	4.16	51	30.6	795±29	0±522	✓ .06
2R " G.1-1	15:38	8.06	2.2	1100	.26	1158	24.1	773±12	688±42	✓ 2.7
" G.1-2	16:01	7.97	2.2	2000	.03	2001	24.2	801±6	740±22	✓ 3.7
" G.2-1	16:24	7.81	2.2	1300	.38	1372	22.9	792±6	672±39	✓ 2.3
" G.1-3	16:48	8.15	2.3	2200	.05	2040	26.4	781±5	739±20	✓ 3.1
HV off	→ sample change									
BR0818 1-1	17:53	8.52	2.0	3700	.76	540	23.5	560±8	561±159	✓ 0.055
" 1-2	18:18	8.36	2.0	3700	.81	542	23.4	560±10	513±148	✓ 0.054
" 1-3	18:43	8.15	2.1	3800	.41	542	23.1	581±8	588±75	✓ 0.054
Mislabeled as K1-3 → 0818 K1-1	19:20	8.00	1.8	100	1.18	90	20.4	1099±44	1278±169	✓ 1.32
J1-1	19:55	8.448	2.0	3800	1.27	130	24.1	1110±55	997±129	✓ 1.48
F1-1	20:25	8.26	1.9	2200	3.80	72	20.7	1188±53	1097±367	✓ 1.20
F2-1	20:51	7.67	1.7	47	15.2	35.0	17.5	1220±88	1289±585	✓ 0.804
F3-1	21:24	8.67	2.1	93	2.54	58	25.1	1145±54	822±289	✓ 1.29
F4-1	21:51	7.95	2.1	95	5.20	62	22.0	1201±52	777±330	✓ 1.23
2-1	22:20	8.31	2.1	360	1.17	532	23.6	538±8	195±130	✓ 0.054
2-2	22:45	8.50	2.1	370	1.04	530	24.6	544±13	318±139	✓ 0.054
2-3	23:12	7.95	2.2	350	1.08	532	22.6	550±8	249±149	✓ 0.054
Mislabeled as FS-2 → F4-2	23:38	7.31	2.5	85	5.99	50.1	23.2	1232±59	961±517	✓ 1.3
E-1	00:13	8.21	2.0	430	0.33	305	23.1	1151±26	1144±59	✓ 1.2
D1-1	00:42	8.20	2.2	110	0.49	73	24.1	1204±46	1210±134	✓ 1.2
B1-1	01:15	8.37	2.0	2900	0.46	96	23.1	1179±46	1252±104	✓ 1.3

Date 26/09/08

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Filename	Time	UO/U	196	206	f206	U	Sensit-	Age/Ma	Age/Ma	Check	
		254/238	Kcps	-cps-	(%)	ppm	ivity	206/238	207/206	offsets	T _{1/2}
Alternatives		UO2/UO	Reference			254/270		Pb/U ratio	207/206		
		270/254	Kcps			Kcps					
3-1	01:41	4.34	3.9	96	3.39	47	19.7	1854±52	1838±156	✓	0.001
3-2	02:05	4.72	5.1	150	2.66	43	27.5	2182±53	1863±116	✓	0.009
3-3	02:30	4.64	5.1	150	4.52	43	27.4	2154±63	1586±224	✓	0.006
0818 C1-1	02:54	8.25	2.1	120	0.15	78	24.2	1178±44	1242±93	✓	1.25
C1-2	03:28	8.28	2.1	110	0.13	67	23.2	1267±45	1260±105	✓	1.25
" Badd " 0816 → " I1-1	04:26	23.8	2.0	1800	0.08	4306	8.8	892±84	1840±263	✓	8.87
" " D1-1	05:03	4.42	5.3	1700	6.10	134	25.9	426.6±13	0 ± 771	✓	0.051
" " B1-1	05:31	5.32	3.1	49	18.4	72	22.3	557±32	2178±468	✓	0.02
" " BROSIS B1-2	05:55	5.45	3.2	120	2.98	224	22.9	488±11	283 ± 32	✓	0.061
" " 3-4	6:23	4.52	4.8	90	1.63	33.2	22.9	1935±60	1979±142	✓	0.010
" " 3-5	6:47	4.89	5.3	14	1.53	35.0	28.8	2245±57	1984±96	✓	0.028
" " 3-6	7:12	4.79	5.4	370	1.09	97	28.8	2181±40	2020±45	✓	0.046
" " 0816 " FI-1	7:46	5.29	4.7	300	1.44	496	28.8	398±5	332±154	✓	0.221
" " E.1-1	8:20	4.29	5.0	26	6.05	50	24.7	409±17	872±645	✓	.036