

SHRIMP data acquisition logsheet

SHRIMP A or **(B)**

Mineral = **GALENA**

Date	Sample/Mount(s)	Sample owner	SH operator	Night-runner(s)
15/5/09	09-16	McN (MD)	McN	Arne

Deadtime... 25 ns Kohler aperture..... Retard.....volts Resoln.....

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

Primary O₂⁻ on: epoxy 0.05 nA standard 0.5 nA PostESA BM on std

Raster: Time (mins) 2 Aperture 11080 No. of scans 76

GALENA

Zircon/Badd.	196	204	Bk	206	207	208	238	248	254		
Count time (secs)	8	10	10	10/20	30/10	10.5	5	5	2		
Delay time (secs)	8	3	1.2	4	2	1.2	3	2	2		
Peak centring time (secs)	8	15	-	3	3	2	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		

GALENA

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		0.065	~2.004			
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						

After 09-16, proceed to 09-14 + 09-15 (both MD)

* Wound 1° down a bit. + 6 scans + 80 µm Raster
 * Changed 204-Bkg offset from 0.045 to 0.065

Date 15/5/09 Mount 09-16 Page no. 1

Filename	Time	204/206	±%	207/206	±	208/206	±	206/204	207/204	208/204	
		UO/U	196	206	f206	U	Sensit-	Age/Ma	Age/Ma	Check	
Alternatives		254/238	Kcps	-cps-	(%)	ppm	ivity	206/238	207/206	Check	
		UO2/UO	Reference			254/270		Pb/U ratio	207/206	offsets	
		270/254	Kcps			Kcps					
0916. G.N. Std	1-1	9:34	.073	.27%	1.079	.19%	2.44	.23%	-	-	
NBS	1-1	9:52	.059	3.10%	0.915	1.19%	2.18	1.15%	16.84	15.40	36.74
* → G.N.	1-2	10:08	.073	.67%	1.078	.40%	2.44	.52%	13.66	14.73	33.30
"	2-1	10:22	.074	.51%	1.078	.19%	2.44	.29%	13.60	14.66	33.16
"	2-2	10:35	.073	.30%	1.078	.19%	2.44	.27%	13.64	14.71	33.25
0916	E. 1-1	10:52	.067	.74%	.996	.21%	2.29	.31%	14.94	14.88	34.26
* → G.N.	1-3	10:05	.073	.59%	1.077	.20%	2.44	.21%	13.66	14.72	33.32
	3-1	11:18	.074	.29%	1.076	.19%	2.43	.34%	13.57	14.61	32.99
	E. 1-2	11:51	.066	.48%	1.000	.31%	2.31	.43%	15.18	15.17	35.00
EM tripped @ scan 5	E. 2-1	12:05	.054	.45%	.886	.46%	1.56	.71%	12.86	13.69	23.90
Std - G.N.	E. 2-1B			tripped EM ∴ aborted							
	3-2	12:22	.074	.44%	1.077	.27%	2.43	.56%	13.57	14.61	33.00
	G. *1-1	12:39	.066	.94%	1.016	.39%	2.39	8.4%	15.13	15.37	36.14
	G. 2-1	12:53	.066	.54%	1.000	.22%	2.29	1.37%	15.22	15.22	34.87
**	H. 1-1			tripped							
G.N.	3-3	13:35	.073	.43%	1.078	.12%	2.43	.23%	13.65	14.72	33.22
	A. 1-1	13:50	.066	.92%	.998	.13%	2.33	.13%	15.11	15.08	35.22
⊕	C. 1-1	14:10	.063	2.82%	1.03	1.60%	1.92	5%	15.80	16.28	29.91
low cts; partly off gn	C. 2-1	14:29	.067	6.3%	1.008	2.3%	2.35	3.6%	14.91	15.04	35.15
@	D. 1-1	14:44	0.65	5.7%	1.017	3.4%	1.93	44%	15.39	15.69	28.86
G.N.	3-4	14:57	.073	.65%	1.078	.25%	2.43	.26%	13.64	14.71	33.22
CO TO 09-14 + 09-15											
								13.656	14.773	33.419	

Note:
Ho std (1994)

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

** tripped EM three times → moved spot slightly + restarted → low cts probably because spot partly on non-G.N. → still tripped EM ⇒ ABORTED

⊕ EM tripped in Scan 5.

@ appears to have hit Pb-rich inclusion in last scan