SHRIMP data acquisition logsheet **SHRIMP A or (B)** **Mineral = ZR**

Date	Sample/Mount(s)	Sample owner	SH operator	Night-runner(s)
6/10/09	09-20 09-21	MCN M. WALTER	MCN	SE

Deadtime 25 ns Kohler aperture 100 Retard 14.2 volts Resoln. 4932

Primary on steel: O^- ..... Bits/nA O_2^- ..... Bits/nA

Primary O_2^- on: epoxy 1.35 nA standard 1.9 nA PostESA BM on std 29

Raster: Time (mins) 2.5 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	2	4	2	2	3	2	2		
Peak centring time (secs)	3	-	-	3	-	-	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		

Offsets								
Zircon/Badd.	196-204	204-Bk	204-206	206-207	206-208		BR266	
Expected offset	8.170	0.045	2.001/9	1.001/5	2.001/9		6/38 = 559	
Setup offsets	8.157	0.045	2.007	1.004	2.005		903 ppm U	
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		Khan	
Setup offsets							6/38 = 522.2	
							584 ppm U	
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		WH	WH
Setup offsets							6/38 = 2625	7/6 = 2642
							164 ppm U	
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								

Date 6/10/09 Mount 09-20 Page no. 1

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*		SBM
0920 BR.2-7	9:51	5.93	10	2200	.06	903	19.9	559±4	575±25	✓	+2.3
" BR.2-8	10:11	5.95	10	2100	.09	891	19.7	564±4	539±25	✓	+1.4
" OGC.1-1	10:33	5.63	9.6	2800	.05	171	17.5	3445±31	3453±7	✓	+1.4
" BR.2-9	10:52	5.90	10	2100	.05	895	19.5	563±4	541±23	✓	+2.2
" OGC.2-1	11:12	5.77	11	5100	.07	266	19.7	3506±39	3455±6	✓	+2.5
" OGC.3-1	11:31	4.50	10	2100	.02	154	13.3	3561±58	3457±11	✓	+1.9
" OGC.3-2	11:52	4.27	7.4	1300	.08	131	9.2	3696±43	3451±10	✓	−1.2
" BR.2-10	12:12	5.85	11	2200	.06	882	20.6	561±4	546±23	✓	+1.9
" B.8-2	12:34	5.77	10	2900	.04	360	18.9	1740±91	1860±43	✓	+2.2
" B.6-2	12:54	6.07	10	1200	.09	136	20.3	1791±24	1770±21	✓	+2.2
" B.8-3	13:13	5.71	11	4700	.07	554	19.4	1777±15	1804±9	✓	+0.7
" BR.2-11	13:33	6.03	11	2300	.04	871	21.3	564±3	526±21	✓	+1.1
" B.9-2	13:52	6.11	9.6	1200	[illegible]	144	19.5	1816±22	1776±17	✓	+1.7
" B.10-2	14:13	6.14	9.4	3400	.08	415	19.3	1787±12	1784±12	✓	+1.0
" B.11-2	14:33	6.30	8.9	5000	.20	662	19.1	1688±12	1801±16	✓	+0.9
" BR.2-12	14:53	5.96	10	2200	.14	900	20.5	559±4	492±25		
" B.12-2	15:17	5,91	10	450	.12	60	19.6	1622±35	1580±35	✓	+0.7
" B.13-2	15:42	6,45	8.9	2000	.64	415	19.6	1121±22	1211±48	✓	+1.2
" B.17-2	16:05	6,18	9,8	2800	.34	316	20.5	1845±15	1762±15	✓	+1.2
" BR.1-7	16:27	5,97	10	2200	.05	904	20.3	564±3	553±20	✓	+1.3
" B.18-2	16:48	5,79	9,1	860	.15	117	17.5	1780±23	1801±19	✓	+1,1
" B.19-2	17:12	5,92	10	1300	.11	151	19.8	1804±33	1784±24	✓	+0,8
" B.20-2	17:35	6,10	9,6	1700	.10	195	20.3	1825±17	1782±15	✓	+1,2
" BR.1-8	17:58	5,85	9,8	2100	.03	901	19.2	568±5	569±19	✓	+0,8
" B.23-2	18:21	5,88	10	1900	.03	227	20.2	1809±17	1793±16	✓	+0,9
" B.24-2	18:43	6,25	9,5	840	.12	102	20,5	1740±23	1755±21	✓	+0,8
" B.28-2	19:04	6,22	9,3	3300	.01	398	20.1	1821±14	1801±10	✓	+2,4
" BR.1-9	19:24	5,87	9,2	2000	0,8	925	18.2	569±4	566±21	✓	+0,7
" B.30-2	19:47	5,98	9,1	1100	0,3	150	18.6	1766±26	1790±17	✓	+0,9
" A.2-2	20:17	6,19	8,0	890	0.34	125	17.4	1807±24	1855±27	✓	+0,9
" A.6-2	20:40	5,7	10	1400	0.17	171	19.4	1872±18	1860±16	✓	+0,9
" B.1-10	21:03	5,9	8,9	2000	−0.3	936	18.3	567±5	575±24	✓	3,4
" A.8-2	21:25	5,98	9,3	2300	0	292	19.2	1790±15	1800±10	✓	+0,9

Offsets: 196-204 = 8.157 204-Bkg = 0.045 204-206 = ~2.007 206-207 = 1.004 207-208 = 1.001

OGC 7/6 age = 3467 ± 3 Ma

Date ..... Mount ..... Page no. .....

Filename	Time	UO/U 254/238 UO2/UO 270/254	196 Kcps Reference Kcps	206 -cps-	f206 (%)	U ppm 254/270 Kcps	Sensit-ivity	Age/Ma 206/238 Pb/U ratio	Age/Ma 207/206	Check offsets	
Alternatives											
0920 A.1-2	21:25	5,98	9,3	2300	0	292	19.2	1750	1800	✓	
A1-2	21:48	5,8	10	2500	1.8	167	19.9	2896±30	3083±13	✓	+2
A3-2	22:13	6,2	9,6	8700	0.11	657	20.8	2626±16	3161±7	✓	+1
BR 1-11	22:34	6,03	9,3	2100	.06	923	19.1	565±4	543±25	✓	+0
A.4-2	22:55	5,73	9,8	2000	.06	172	18.6	2483±25	2445±10	✓	+0
A.5-2	23:16	5,88	11	9100	.15	520	22.1	3029±18	3181±5	✓	+2
A7-3										✗	
B.3-2	23:52	6,33	8,4	3400	.31	281	18.8	2662±23	2665±11	✓	+0,1
BR.2-13	00:14	6,09	9,8	2200	.05	897	20.5	566±5	548±23	✓	+1,4
B.5-2	00:35	5,70	10	3500	.29	461	19.6	1672±14	1680±15	✓	+7
B.7-2	00:55	5,83	9,9	4800	.003	269	19.3	3456±24	3471±5	✓	+1
B.14-2	01:19	6,15	9,6	7200	.41	774	20.5	1946±15	2599±8	✓	+1
BR.3-1	01:41	6,16	10	2100	.05	834	21.4	564±5	562±24	✓	+1,7
B.16-2										✗	
B.21-2	02:24	5,51	12	1300	.02	136	21.8	1829±20	1840±17	✓	+1,0
B.22-2	02:46	5,81	11	1100	.13	152	20.7	1575±164	1553±101	✓	+12
B.25-2	03:09	5,92	9,9	940	.08	133	19.8	1688±21	1642±21	✓	+0,6
BR.3-2	03:30	6.16	10	2100	.08	825	21.3	563±4	544±21	✓	+0,7
B.26-2	03:53	5,72	9,6	810	.32	95	18.3	1977±27	1962±27	✓	+2,0
B.27-2	04:14	6,34	9,4	1100	.25	81	20.8	2660±36	2662±13	✓	+0,9
B.29-2	04:37	5,79	10	300	.17	61	19.4	1160±24	1198±74	✓	+2,3
BR.3-3	04:58	6,05	10	2000	.03	829	20.8	564±3	555±21	✓	+1,0
0921 BR.1-6	05:26	6.08	10	2100	.09	840	21.8	560±4	518±24	✓	+0,9
BR.1-7	05:46	5.95	11	2100	.04	840	20.9	558±4	582±20	✓	+1,0
A.7-1	06:14	6,24	10	740	.0	93	22.1	1578±21	1603±17	✓	+0,8
A.7-2	06:35	6,30	9,7	860	.07	112	21.2	1590±23	1596±28	✓	+1,1
BR.1-7	06:58	6,25	9,2	2100	.10	939	20.0	543±5	556±22	✓	+0,5
A.8-1	07:18	6,05	11	760	.03	94	21,6	1618±27	1583±22	✓	+0,8
A.9-1	09:40	6,03	11	690	.24	89	22,2	1542±33	1544±36	✓	+1,6
A.10-1	08:01	6.09	9.5	720	.19	105	20.0	1538±20	1540±26	✓	+0.8
BR.2-1	08:21	6.25	10	2100	.02	856	21.8	542±2	555±22	✓	+0.8
A.8-2	08:42	5.95	9.8	1200	.02	171	19.8	1553±23	1598±17	✓	+0.7

Offsets: 196-204 = 8.157 204-Bkg = 0.045 204-206 = ~2.007 206-207 = 1.004 207-208 = 1.001

0209