

UWA DATA LOG: SHRIMP ZIRCON U-Pb

Date: 19/5/196 UWA Mount No.: 96-22 Whose sample?: MEB/Burma Operator(s): McN + April P.

Indicate any change to the following:

	196	204	bkg	206	207	208	238	248	254
Precambrian Count time (secs):	2	10	10	10	30/10 ²⁰	10	5	5	2
Phanerozoic* Delay time (secs):	7	3	1	2	1	1	3	2	2

expected 196-204 = 8.170 amu expected 204-bkg = 0.040 amu Dead-time = 32 nanosecs
 actual 196-204 = 8.165 actual 204-bkg = 0.040 expected resolution = >4200
 actual 206-207 = 1.0010 actual 206-208 = 2.0000 actual resolution = 4885
 Primary = 1.8 nA PESABM = 26 pA actual Primary : PESABM (= 50:1) = 69.2
 Raster time (mins): 2 Raster aperture (microns): 100 No. of scans: 6

Comments: 9:30 → done ~ 360 (NB: 64V O²⁻ beam)

B = YESIN - UB0690 kill
 * 11:48 = changed 206 count time from 10 sec to 20 sec. std = 19 % = 1.19
 (Actual slope = 2.37 % = 0.96)

NB: Data shows that std 2-4 are 20 cps for 207: omit data before std 2-5!

Rejection over-ride	Sample/ Std ID	Time - printout	UO/U	196 cps	206 cps	U ppm	204Pb ppb	f ₂₀₆ %	Age ±1σ (Ma) 206/238	207/206	Corr.
-	std 2-1	10:41	7.13	8586	1269	220	0.4	.03	572 ± 1	585 ± 34	208
196, 208, 254	std 2-2	10:58	6.82	9677	1301	220	0.8	.06	572 ± 1	552 ± 35	208
206, 207	B. 1-1	11:18	6.85	10.4	17.4	66.7	1.7	1.40	24 ± 1	-	208
206, 248	std 2-3	11:35	7.10	10.2	1458	214	-0.2	-	554 ± 1	668 ± 30	-
-	B. 2-1	11:52	8.24	-	-	-	NOT	2R	-	-	-
196, 206, 238	std 2-4	12:10	6.77	11.2	1433	220	-	-	553 ± 1	558 ± 31	-
248	B. 1-2	12:32	7.03	10.9	46.7	84.2	1.0	2.32	44 ± 1	-	204
196, 238, 254, 248	B. 2-1	12:50	6.67	12.0 85.3	331	0.9	1.88	22 ± 1	-	-	208
del 1 st 206	std 2-5	13:08	6.56	12.9	1530	226	-0.2	^{0.1} 1m	554 ± 1	600 ± 31	208 m
del 1 st 206 →	B. 2-2	13:26	7.04	12.1	198	637	-1.5	1.24	23 ± 1	-	208
	B. 3-1	13:43	6.62	13.2	1313	190	1.2	.58	534 ± 1	269 ± 42	208

1σ = 2.1
2.2 m

O
M
T

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Rejection over-ride	Sample/ Std ID	Time - printout	UO/U	196 cps (K)	206 cps	U ppm	204Pb ppb	f ₂₀₆ %	Age ±1σ (Ma) 206/238 207/206	Corr.	
196, 207	B. 4-1	14:01	6.63	13.4	611	118	0.2	0.04	399 ± 1 1177 ± 40	204	2.1
206,	std 2-6	14:19	6.94	12.8	1778	217	0.5	.04	570 ± 1 557 ± 30	204	
207, 208, 238, 248, 254	B. 4-2	14:37	6.72	12.9	1884	322	2.3	.17	448 ± 1 944 ± 27	204	2.3
248, 254	B. 5-1	14:54	6.91	12.6	125	415	0.9	.80	22 ± 1 —	204	
196	B. 6-1	15:12	6.81	13.0	1072	96	0	1.48	783 ± 3 1282 ± 34	208	
196, 206, 238	std 2-7	15:30	6.63	14.1	1685	222	0.7	.01	548 ± 1 645 ± 29	208	
del 4 th scan → 207, 208	B. 7-1	15:49	6.59	13.4	55.3	84	2.8	3.13	51 ± 1 —	208	2.4
254	B. 8-1	16:11	6.79	13.8	874	1031	59.1	12.0	53 ± 1 —	208	
208, 254	B. 8-2	16:28	6.86	13.1	827	1043	58.3.8	11.7	51 ± 1 —	208	2.4
196, 206	std 2-8	16:46	6.89	13.2	1778	214	-0.4	.03	568 ± 1 513 ± 30	208	
206, 238, 248, 254	B. 9-1	17:03	6.88	13.4	160	232	0.3	.34	48 ± 1 162 ± ?	204	
del 1 st 00 →	B. 10-1	17:21	7.03	13.1	14.6	42.4	0.8	4.5	22 ± 1 —	208	2.3
del 1 st 206 →	B. 10-2	17:38	6.96	13.3	16.3	47.9	0.7	1.89	23 ± 1 —	208	
206	std 3-1	17:55	6.67	13.8	1704	223	1.0	.02	554 ± 1 594 ± 29	208	2.3
206, 238, 254	B. 11-1	18:13	6.54	14.0	145	241	-0.1	.22	47 ± 1 —	208	
206, 208, 238, 248, 254	B. 12-1	18:35	6.75	13.3	722	260	0.3	2.86	201 ± 1 —	208	2.3
206, 208, 254	B. 13-1	18:52	6.87	13.0	410	464	13.8	5.14	61 ± 1 265 ± 109	208	
206, 208	std 3-2	19:08	6.97	13.2	1.8K	215	0.0	.04	568 ± 1 564 ± 28	208	
206, 207, 248, 254	B. 14-1	19:27	6.72	14.0	1343	250	2.9	2.18	372 ± 1 —	208	2.3
196, 238, 254	B. 15-1	19:46	6.99	13.3	56.6	87.9	0.0	-ve	44 ± φ —	—	
196, 238, 254	B. 16-1	20:06	6.80	12.9	198	685	0.3	0.27	22 ± φ —	204	
del 1 st ThD.	std 3-3	20:28	6.79	14.1	1838	221	-ve	0.01	559 ± 1 575 ± 28	208	
196, 238, 248, 254	B. 16-2	20:49	6.85	13.6	128	416	-ve	0.69	22 ± φ —	204	2.3
del 2 nd 206 →	B. 17-1	20:07	6.69	13.7	103	110	0.8	0.91	70 ± 1 —	204	
del 1 st ThD	std 3-4	21:24	6.74	13.3	1699	224	0.9	0.02	553 ± 1 551 ± 30	208	

Rejection over-ride	Sample/ Std ID	Time - printout	UO/U	196 cps (k)	206 cps	U ppm	204Pb ppb	f ₂₀₆ %	Age ±1σ (Ma) 206/238	207/206	Corr.
-	U622C.F1	21:47	7.02	12.2	60.1	26.0	0.4	0.75	167 ± 1	-	204
-	C.2-1	22:04	6:87	12.9	144	112	-ve	1.17	93 ± φ	-	208
-	C.3-1	22:22	6:81	13.1	184	148	1.2	1.54	91 ± φ	-	208
196	SL3-S	22:40	6:63	13.4	1651	226	0.8	0.07	554 ± 1	569 ± 36	204
del last 206 → 196, 206	C.4-1	22:58	6.71	13.3	80.5	32.6	0.3	0.44	187 ± 1	-	204
(messy 206)	196, 204	C.5-1	23:17	6.71	63.5	32.1	2.3	0.41	145 ± 3	-	204
207, 248	C.6-1	23:34	6.80	13.2	169.6	125	2.3	1.44	93 ± φ	-	208
206	SL36-1	23:52	6.96	13.0	1743	208	-ve	-ve	568 ± 1	506 ± 29	-
196, 248	C.6-2	24:10	6.80	13.3	102.9	80.2	-ve	0.28	94 ± φ	296 ± 200	208
-	C.7-1	24:28	6.93	12.7	58.7	23.4	0.4	0.83	181 ± 3	-	204
(messy 206)	196	C.8-1	24:46	6.91	49.4	20.8	0.4	0.99	168 ± 2	-	204
206, 238, 254	SL36-2	1:05	6.83	13.5	1696	216	-ve	0.02	546 ± 1	574 ± 29	208 (2.3)
196	C.9-1	1:22	6.67	13.6	107.4	87.6	0.6	1.18	92 ± φ	-	208
248	C.10-1	1:40	6.51	13.8	95.1	81.7	0.5	0.31	94 ± φ	202 ± 200	208
248	C.11-1	1:58	6.69	13.9	58.0	29.2	1.9	3.80	141 ± 2	-	204
196, 207	SL36-3	2:15	6.70	13.3	1641	219	0.1	0.00	555 ± 1	570 ± 30	208 (2.4)
196, 248	C.12-1	2:33	6.79	12.2	294	280	-ve	0.10	88 ± φ	126 ± 120	208
del 1st UO & last Pb 206	196, 206, U	C.13-1	2:52	6.59	13.9	89.2	0.3	0.44	242 ± 2	-	204
206	196, 207	C.14-1	3:11	6.65	13.9	61.8	1.3	2.44	144 ± 2	-	204
196, 206	SL36-4	3:29	6.79	13.1	1604	209	0.7	0.07	555 ± 1	-	208
del 1st UO & del 4th 206	206, 254	C.15-1	3:49	6.93	13.3	77.3	0.7	0.18	159 ± 2	-	204
238	C.16-1	4:05	6.80	13.4	277	215	0.6	0.01	94 ± φ	160 ± 110	208
del 1st ThO →	196, 248	C.17-1	4:22	6.86	13.3	68.3	0.6	1.34	94 ± φ	-	208
196, 206, 238	SL36-5	4:39	6.62	13.3	1535	214	-ve	-ve	553 ± 1	518 ± 3	208
254	C.18-1	4:56	6.82	13.1	230.9	178	1.3	0.95	95 ± φ	-	208

31
2

12.5

(2.3)

(2.4)

1
18.210

Rejection over-ride	Sample/ Std ID	Time - printout	UO/U	196 cps	206 cps	U ppm	204Pb ppb	f206 %	Age ±1σ (Ma) 206/238	207/206	Corr.	
	248	C 19-1	5:15	6.80	13.1	71.8	36.0	0.1	0.14	149 ± 1	—	204
	248	C 20-1	5:33	7.06	12.8	86.2	63.0	1.2	1.66	93 ± 0	—	208
	206	SL 3b-6	5:51	6.82	12.4	1609	216	0.4	0.04	564 ± 1	488 ± 36	204 (24)
del 1 st U & UO → 2 & last 206	206, 238, 248, 254	C 21-1	6:09	6.67	13.1	86.7	27.4	0.3	0.43	246 ± 2	—	204 (ran)
	196, 248	C 22-1	6:27	6.72	12.9	54.0	28.9	-ve	-ve	147 ± 0	—	—
	196	C 23-1	6:45	6.74	12.6	61.9	41.3	0.4	0.71	119 ± 1	—	204
	196, 208	SL 3b-7	7:04	6.63	12.1	1470	224	1.6	0.14	549 ± 1	458 ± 37	204
	196, 206	C 24-1	7:21	6.81	12.1	91.8	79.5	-ve	-ve	93 ± 0	—	—
	—	C 25-1	7:39	6.67	11.9	58.1	27.3	0.2	0.31	183 ± 2	—	204
del 2 nd 206 →	196, 206, 207	C 26-1	7:56	6.80	11.9	23.5	20.0	0.7	1.74	95 ± 1	—	208
	196, 206	SL 4-1	8:13	6.88	11.4	1527	221	-ve	0.01	556 ± 1	590 ± 31	208
	—	C 27-1	8:32	6.71	11.7	58.6	37.8	2.1	3.60	129 ± 2	—	208
del 2 nd & 5 th 206 →	206, 248	C 28-1	8:51	6.69	11.7	64.2	42.1 0.3	0.52 ³ 0.52	0.52	133 ± 1	—	204
	206, 208, 248, 254	SL 4-2	9:10	6.74	11.0	1408	227	1.0	0.01	544 ± 1	576 ± 32	208

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