

UWA DATA LOG: SHRIMP ZIRCON U-Pb

Date: 2/2/96 UWA Mount No.: 96-6 Whose sample?: Arne Operator(s): McW - Demi - Frak

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	5	5	2
Precambrian Delay time (secs):	7	3	1	2	1	1	3	2	2
Phanerozoic Count time (secs):	2	10	10	10	10	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 = 36 nanosecs
 actual 196-204 = 8.170 actual 204-bkg = 0.040 expected resolution = >4200
 Primary = 2.1 nA PESABM = 43 pA actual resolution = 4686
 expected Primary : PESABM ≈ 50:1 actual Primary : PESABM = 48.9

Comments: B = G542-13 Raster = 3 mins @ 120μm
 C = G542-06
 A = G542-12

Rejection over-ride	Sample/ Std ID	Time - printout	UO/U	196 cps (K)	206 cps	U ppm	204Pb ppb	f206 %	Age ±1σ (Ma) 206/238	207/206	Corr.
	std 5-1	10:58	6.15	16.1	1783	220	-0.2	-	572 ± 1	640 ± 26	NONE
	std 5-2	11:17	6.28	15.6	1802	214	0.1	-	589 ± 1	529 ± 27	none
	B. 1-1	11:37	6.40	15.6	819	142	-0.3	-	374 ± 1	386 ± 41	none
	std 5-3	11:58	6.18	16.1	1797	218	1.1	-	567 ± 1	593 ± 26	-
	B. 2-1	12:20	6.22	15.9	260	49	1.2	0.7	365 ± 1	96 ± 171	204
	B. 3-1	12:41	6.63	15.1	2067	450	26	1.9	273 ± 1	518 ± 31	208
	B. 4-1	13:01	6.19	15.3	1181	232	0.3	.04	374 ± 1	-	208
	std 5-4	13:21	6.27	15.3	1793	217	0.6	0.02	568 ± 0.6	569 ± 26	208
10% drop in 1st 2 cycles	B. 5-1	13:44	6.25	15.6	1178	227	5.1	0.5	362 ± 0.3	665 ± 39	208
	B. 6-1	14:06	5.96	15.8	355	77	0.8	0.3	369 ± 0.8	-	208
	B. 7-1	14:31	6.12	16.4	478	89	1.9	.61	381 ± .7	-	208

Rejection over-ride Sample/Std ID Time - printout UO/U 196 cps (K) 206 cps U ppm 204Pb ppb f206 % Age ±1σ (Ma) 206/238 207/206 Corr.

Rejection over-ride	Sample/Std ID	Time - printout	UO/U	196 cps (K)	206 cps	U ppm	204Pb ppb	f206 %	Age ±1σ (Ma) 206/238	207/206	Corr.
	B. 8-1	14:51	6.13	16.0	562	111	-0.6	-	367±.3	372±.51	NONE
	<u>std 5-5</u>	<u>15:13</u>	<u>6.27</u>	<u>15.4</u>	<u>1746</u>	<u>217</u>	<u>-0.2</u>	<u>0.1</u>	<u>556±.1</u>	<u>602±.27</u>	<u>208</u>
	B. 7-2	15:34	6.40	16.0	1699	619	67.8	4.8	168±.2	919±.36	208
	B. 7-3	15:54	5.99	16.2	1043	219	3.3	0.1	365±0.3	437±.38	208
	B. 9-1	16:16	6.17	16.3	318	58	-0.5	-	381±.5	249±.71	NONE
	B. 10-1	16:36	6.20	16.1	928	169	0.8	-	381±.3	375±.39	- " -
	<u>std 5-6</u>	<u>16:57</u>	<u>6.12</u>	<u>16.7</u>	<u>1796</u>	<u>218</u>	<u>1.1</u>	<u>0.09</u>	<u>563±0.7</u>	<u>598±.32</u>	<u>208</u>
	B. 11-1	17:17	6.38	16.3	844	147	1.0	0.2	357±0.5	-	208
	B. 12-1	17:38	6.33	15.2	845	158	12.1	1.9	359±0.4	-	208
	B. 12-2	17:58	6.31	16.4	1578	301	7.2	1.1	334±0.3	162±.44	208
	B. 13-1	18:00	6.13	16.9	1535	284	3.5	0.16	369±.3	503±.35	208
	B. 13-2	18:33	6.13	16.9	1535	284	3.5	0.16	369±.3	503±.35	208
	B. 13-3	18:55	6.19	16.2	1836	219	1.1	0.0	569±.7	-	208
	B. 14-1	19:18	6.33	17.4	1275	225	9.0	0.3	346±.3	579±.38	208
	B. 15-1	19:39	6.33	13.7	759	159	1.0	0.1	364±.6	-	208
	B. 15-2	19:58	6.15	10.4	453	83	3.2	1.2	580±1.7	434±.85	208
	B. 16-1	20:24	6.08	17.8	634	118	4.3	1.1	355±.4	393±.59	208
	std 5-8	20:45	6.56	10.0	1163	212	-0.1	-	507±.1	538±.52	-
	std 5-9	21:56	6.31	15.4	1813	213	1.3	0.1	567±.1	509±.36	204
	B. 16-2	22:18	6.88	15.3	1333	183	-0.5	-	386±.1	326±.33	none
	std 5-10	22:39	6.18	15.9	1701	213	1.1	-	559±.1	571±.27	none
	B. 17-1	23:00	5.94	18.0	347	73	3.1	1.3	336±.1	357±.87	208
	B. 18-1	23:26	6.10	15.6	1218	242	3.9	0.1	378±.1	521±.41	208
	B. 19-1	23:47	6.10	17.0	678	134	1.5	0.6	348±.1	391±.58	208
	std 5-11	00:08	6.24	15.1	1698	216	0.1	-	560±.1	639±.30	none

↑ 1° dropped ~10% near end!

Drop in 1° at level ~10%

Erratic primary

40% drop in 1° at last two cycles
1° very erratic!
1° still erratic

reduced P to ~380° to stabilize 1° new calibration req.?

3rd wo

1° twitchy

1° dropped ~10% at last 2 cycles

x
x
x
+ 1.5° tilted?

T = 27.3°C

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.

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.
	9668.20-1	00:29	6.17	15.7	355	69	1.4	.03	370 ± 1	504 ± 72	208	
	B.20-2	00:50	5.94	16.3	462	100	0.3	.04	366 ± 1	361 ± 66	208	
	B.21-1	01:14	6.10	16.2	1425	32	-1.1	-	2656 ± 12	2697 ± 13	none	
	B.22-1	01:36	6.29	15.9	240	44	0.5	0.3	365 ± 1	282 ± 162	204	
	B.23-1	01:56	6.31	16.1	782	142	1.0	0.2	360 ± 1	257 ± 70	204	
	S/966.6-1	02:12	6.40	15.5	1805	205	-0.1	-	565 ± 1	556 ± 26	none	
	S/966.6-2	02:37	6.31	15.7	1756	210	0.3	-	555 ± 1	616 ± 29	204	
	C.1-1	02:58	6.32	16.0	696	116	1.6	0.4	394 ± 1	260 ± 71	204	
	C.1-2	03:17	6.01	16.3	1169	226	1.9	0.2	392 ± 1	390 ± 36	208	
	C.2-1	03:38	6.09	15.1	387	79	0.8	0.3	382 ± 1	379 ± 67	208	
	C.3-1	04:01	5.49	12.6	697	172	0.9	0.1	539 ± 1	374 ± 60	204	
	S/966.6-3	04:21	6.23	15.9	1844	219	1.1	0.03	573 ± 1	636 ± 26	208	
	C.4-1	04:41	5.98	16.8	1018	127	1.0	0.1	592 ± 1	586 ± 44	204	
	C.4-2	05:00	6.49	12.3	919	128	1.6	0.2	556 ± 1	496 ± 55	204	
	C.5-1	05:22	5.87	16.1	220	24	0.1	24.5	564 ± 18	-	208	
	S/966.6-4	05:43	6.36	15.1	1715	208	0.3	-	553 ± 1	575 ± 27	208	
	C.6-1	06:04	6.84	14.4	815	128	0.5	0.1	366 ± 1	419 ± 43	208	
	C.7-1	06:25	6.00	17.9	988	192	0.6	0.1	357 ± 1	387 ± 49	204	
	C.8-1	06:45	6.26	16.8	1859	283	12.2	1.6	416 ± 1	228 ± 41	208	
	C.9-1	07:06	6.21	17.1	3269	113	24	1.0	1678 ± 4	1853 ± 18	204	
	S/966.6-5	07:26	6.35	16.1	1853	210	0.8	-	558 ± 1	502 ± 31	204	
	S/966.6-6	07:45	6.23	16.0	1780	219	0.4	-	550 ± 1	595 ± 27	208	
	A.1-1	08:09	6.38	15.4	548	98	0.8	0.2	371 ± 1	396 ± 69	204	
	A.2-1	08:31	6.15	15.2	197	20	-0.2	-	372 ± 1	442 ± 80	none	
	A.3-1	08:54	6.15	15.2	1332	273	1.1	0.12	366 ± 0.4	-	208	
	A.4-1	09:15	6.04	16.2	4105	141	0.5	0.28	1856 ± 4	-	208	

std. 6-7 9:35 6.19 16.5 1.8K 215 -1.0 .00 564 ± 1 567 ± 27 208

CONTINUED ON NEW SHEET → 9/2/96

minutely dropped during 6th cycle (~50%) 1-5 ok!
 last register
 1° linear drift off peak (~50%)
 1° somewhat erratic...
 1° on the run...

ripples
 !?
 though rates ok!

core with rim