

UWA DATA LOG: SHRIMP ZIRCON U-Pb

Date: 15/2/96 UWA Mount No.: 96-9 Whose sample?: Arme²/S. Brown Operator(s): McN + Dennis + Frank.

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
	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
	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 = 8.164 actual 204-bkg = 0.040 expected resolution = >4200
 Primary = 2.9 nA PESABM = 55 pA actual resolution = 4885
 expected Primary : PESABM ≈ 50:1 actual Primary : PESABM = 52.7

Comments: Raster = 2 mm @ 120 μm
 ① adjusted posn of 204 peak slightly
 ② on wrong peak?

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.
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<u>Take out</u>	<u>std 2-1</u>	<u>10:02</u>	<u>5.85</u>	<u>21.2</u>	<u>1996</u>	<u>220</u>	<u>-0.5</u>	<u>-</u>	<u>572 ± 5</u>	<u>504 ± 26</u>	<u>NONE</u>
	<u>std 2-2</u>	<u>10:20</u>	<u>5.99</u>	<u>20.2</u>	<u>2032</u>	<u>213</u>	<u>0.0</u>	<u>-</u>	<u>583 ± 5</u>	<u>545 ± 25</u>	<u>NONE</u>
	<u>std 2-3</u>	<u>10:56</u>	<u>6.16</u>	<u>19.1</u>	<u>2034</u>	<u>209</u>	<u>0.2</u>	<u>.03</u>	<u>573 ± 5</u>	<u>668 ± 25</u>	<u>208</u>
	<u>D. 1-1</u>	<u>11:20</u>	<u>6.16</u>	<u>20.2</u>	<u>1119</u>	<u>122</u>	<u>0.5</u>	<u>.08</u>	<u>516 ± 1</u>	<u>511 ± 58</u>	<u>204</u>
	<u>D. 2-1</u>	<u>11:40</u>	<u>6.17</u>	<u>20.0</u>	<u>1017</u>	<u>136</u>	<u>1.1</u>	<u>0.18</u>	<u>420 ± 1</u>	<u>313 ± 40</u>	<u>208</u>
	<u>std 2-4</u>	<u>12:04</u>	<u>6.23</u>	<u>19.2</u>	<u>2136</u>	<u>201</u>	<u>0.9</u>	<u>0.0</u>	<u>594 ± 1</u>	<u>1601 ± 27</u>	<u>204</u>
	<u>std 2-5</u>	<u>12:24</u>	<u>6.16</u>	<u>19.8</u>	<u>2038</u>	<u>194</u>	<u>1.2</u>	<u>0.1</u>	<u>592 ± 1</u>	<u>430 ± 30</u>	<u>208</u>
	<u>D. 3-1</u>	<u>12:53</u>	<u>6.16</u>	<u>19.8</u>	<u>301</u>	<u>34</u>	<u>1.0</u>	<u>0.6</u>	<u>511 ± 1.4</u>	<u>482 ± 88</u>	<u>208</u>
	<u>D. 4-1</u>	<u>13:32</u>	<u>4.50</u>	<u>2.71</u>	<u>705</u>	<u>245</u>	<u>12.0</u>	<u>1.1</u>	<u>426 ± 1</u>	<u>417 ± 50</u>	<u>208</u>
	<u>std 2-6</u>	<u>14:41</u>	<u>6.16</u>	<u>1.91</u>	<u>2047</u>	<u>220</u>	<u>0.8</u>	<u>0.0</u>	<u>572 ± 1</u>	<u>522 ± 7</u>	<u>208</u>
	<u>D. 4-1</u>	<u>15:03</u>	<u>4.30</u>	<u>0.47</u>	<u>20</u>	<u>671</u>	<u>0.0</u>	<u>0.4</u>	<u>316 ± 2</u>	<u>704 ± 326</u>	<u>204</u>

506 in primary
 ② take out

Poor conductivity
 ② take out

Firs ± 12-1 hill moved to over written accidentally; moved to.

Rejection over-ride	Sample/ Std ID	Time - printout	UO/U 4 cps	196 cps	206 cps	U ppm	204Pb ppb	f206 %	Age ±1σ (Ma) 206/238 207/206	Corr.	
	D.5-1	15:53	5.97	1.97	1044	137	0.1	0.0	512 ± 1	408 ± 36	None
	D.6-1	16:15	5.94	2.15	1807	188	0.6	0.0	593 ± 1	579 ± 32	204
	D.7-1	16:40	6.12	1.92	4766	117	0.1	0.1	2233 ± 5	2436 ± 9	204 *
	D.7-1	16:49	6.46	1.91	2250	207	0.2	0.0	578 ± 1	570 ± 23	208
	D.8-1	17:28	5.90	2.24	7177	305	9.2	0.2	1359 ± 2	1444 ± 11	204
	D.9-1	17:49	6.04	2.11	6666	30	1.8	0.4	1232 ± 5	1113 ± 49	204
	D.10-1	18:17	6.06	2.03	1986	62	0.9	0.0	1783 ± 7	1994 ± 5	204
	D.11-1	18:36	6.06	1.94	1810	272	0.6	0.0	431 ± 1	308 ± 35	204
	D.11-1	19:02	6.28	1.94	2049	209	0.0	-	559 ± 1	577 ± 24	None
	D.12-1	19:54	6.43	1.77	1242	125	0.2	0.0	580 ± 1	539 ± 31	204
	D.13-1	20:14	6.33	20.6	1445	177	0.6	0.0	432 ± 1	691 ± 36	204
	D.14-1	20:35	5.57	18.4	800	137	11.8	1.2	524 ± 1	605 ± 53	208
	D.15-1	20:54	6.13	20.3	3679	345	2.1	0.0	627 ± 1	725 ± 19	208
	D.15-1	21:12	6.21	20.8	2186	212	0.9	0.0	570 ± 1	501 ± 28	204
	D.16-1	21:31	6.20	20.9	4507	224	1.0	0.0	1068 ± 1	1763 ± 11	204
	D.17-1	21:50	6.02	20.8	764	59	0.3	0.0	780 ± 3	659 ± 99	204
	D.18-1	22:10	6.28	19.8	1389	207	5.3	0.7	377 ± 1	261 ± 59	204
	D.19-1	22:35	6.20	20.8	1277	151	0.2	0.0	474 ± 1	537 ± 38	204
	D.19-1	22:54	5.91	21.4	2010	221	0.4	0.0	574 ± 1	546 ± 34	204
	D.20-1	23:14	6.04	20.4	1208	189	0.3	0.0	398 ± 1	417 ± 63	204
	D.21-1	23:33	6.42	21.1	832	99	1.2	0.3	417 ± 1	276 ± 62	204 T=22%
	D.22-1	23:52	6.44	18.7	706	82	0.3	0.0	474 ± 1	487 ± 75	204
	D.22-2	00:11	5.96	21.0	802	105	0.7	0.1	482 ± 1	496 ± 58	204
	D.22-2	00:29	6.05	20.7	2115	224	0.7	0.0	568 ± 1	556 ± 27	204
	D.23-1	00:48	5.97	21.7	2018	298	1.0	0.0	413 ± 1	335 ± 31	204

* in 10%
1st cycle
2 cycles
3rd cycle
large swings
in primary

Drop in
1°

1° somewhat shaky...

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.	
	D.24-1	01:07	6:13	20.6	2405	129	1.8	0.1	1050±2	1054±21	204
last cycle	D.25-1	01:25	6.22	19.9	1107	195	1.9	0.3	331±1	223±60	204
	D.26-1	01:45	6.19	20.4	611	71	0.5	0.1	491±1	434±70	204
	std. 1-6	02:05	5.99	20.4	2071	230	0.8	0.0	568±1	507±28	204
1° dropped (~10%) momentarily	D.27-1	02:24	6.37	19.3	1253	162	2.5	0.4	427±1	290±49	204
	D.28-1	02:42	6.37	19.4	4392	238	-0.1	0.0	976±1	1049±14	none
	D.29-1	03:03	6.03	22.9	1189	181	1.0	0.1	368±1	390±45	204
4th 206Pb	D.30-1	03:22	6.39	17.3	1715	400	3.6	0.3	265±1	300±45	204
	std. 1-7	03:41	6.01	21.8	2183	223	0.1	0.0	575±1	506±25	204
core rim	D.31-1	04:00	6.2	19.6	4585	647	16.0	0.4	420±1	401±27	204
1st uO	D.31-2	04:20	5.8	21.4	407	71	0.9	0.3	389±1	238±124	204
	D.32-1	04:38	6.0	20.5	717	85	0.3	0.0	526±2	507±102	204
	D.33-1	04:57	5.92	20.8	1315	205	6.0	0.3	418±1	417±38	208
1st cycle	std. 1-8	05:15	6.01	21.2	2121	221	1.2	0.0	577±1	594±28	204
7th cycle	D.34-1	05:35	5.99	20.08	4401	106	1.7	0.0	2324±6	2420±9	204
1st 206Pb	D.35-1	05:55	5.93	16.8	631	90	1.1	0.2	554±1	502±62	204
	D.36-1	06:13	6.18	17.6	3306	187	-0.5	-	1121±2	1132±15	none
	D.37-1	06:32	5.91	19.5	2582	337	31	1.0	528±1	703±30	208
1st 2nd 1st u	std. 1-9	06:51	6.07	20.7	2144	270	0.1	0.0	581±1	474±25	204
	D.38-1	07:09	5.96	20.2	536	34	0.2	0.0	988±4	1021±47	204
	D.39-1	07:29	6.14	18.8	3006	105	1.0	0.0	1667±4	1631±14	204
	D.5-2	07:47	6.12	19.3	728	99	0.6	0.1	461±1	403±66	204
	std. 1-3	08:05	6.09	20.1	2014	216	0.8	0.0	568±1	525±30	204
1° dropped (~30%) during 3rd cycle	D.40-1	08:24	6.16	17.8	561	75	0.6	0.2	498±1	418±66	208