

UWA DATA LOG: SHRIMP ZIRCON U-Pb

Date: 22/3/96 UWA Mount No.: 96-13 Whose sample?: Carl 3 Operator(s): IF + CB

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 = 8.167 actual 204-bkg = 0.045 expected resolution = >4200
 Primary = 2.8 nA PESABM = 41 pA actual resolution = 4783
 expected Primary : PESABM ≈ 50:1 actual Primary : PESABM = 68

Comments:

Rejection over-ride	Sample/ Std ID	Time - printout	UO/U	196 kcps	206 cps	U ppm	204Pb ppb	f206 %	Age ±1σ (Ma) 206/238 207/206	Corr.		
<u>Del 248-1</u>	<u>206 238</u>	<u>sl 613.1-1</u>	<u>11:51</u>	<u>5.99</u>	<u>16.8</u>	<u>1722</u>	<u>-</u>	<u>0.2</u>	<u>.02</u>	<u>-</u>	<u>602</u>	<u>208</u>
	<u>196 206</u>	<u>sl 1-2</u>	<u>12:11</u>	<u>6.10</u>	<u>15</u>	<u>1651</u>	<u>216</u>	<u>1.8</u>	<u>.03</u>	<u>584</u>	<u>564</u>	<u>208</u>
	<u>u</u>	<u>B.1-1</u>	<u>high 204</u>	<u>— abandon</u>								
	<u>196 207 206 238</u>	<u>B.2-1</u>	<u>12:36</u>	<u>5.98</u>	<u>16.8</u>	<u>6108</u>	<u>111</u>	<u>1.6</u>	<u>.03</u>	<u>3250</u>	<u>3241</u>	<u>204</u>
	<u>207</u>	<u>B.3-1</u>	<u>12:55</u>	<u>5.89</u>	<u>17.0</u>	<u>3766</u>	<u>71</u>	<u>2.6</u>	<u>.07</u>	<u>3239</u>	<u>3244</u>	<u>204</u>
	<u>196</u>	<u>sl 1-3</u>	<u>13:15</u>	<u>5.81</u>	<u>16.8</u>	<u>1709</u>	<u>234</u>	<u>0.1</u>	<u>.01</u>	<u>589</u>	<u>562</u>	<u>204</u>
	<u>u</u>	<u>B.4-1</u>	<u>high 204</u>	<u>— abandon</u>								
	<u>196 206 207 208 238 254</u>	<u>B.5-1</u>	<u>13:39</u>	<u>6.30</u>	<u>16.6</u>	<u>17K</u>	<u>756</u>	<u>200</u>	<u>1.7</u>	<u>1281</u>	<u>2275</u>	<u>204</u>
	<u>238</u>	<u>B.6-1</u>	<u>13:57</u>	<u>5.86</u>	<u>17.1</u>	<u>8750</u>	<u>170</u>	<u>20</u>	<u>0.2</u>	<u>3188</u>	<u>3241</u>	<u>204</u>
	<u>238 248 254</u>	<u>B.7-1</u>	<u>14:18</u>	<u>6.24</u>	<u>16.2</u>	<u>12K</u>	<u>247</u>	<u>194</u>	<u>1.9</u>	<u>2668</u>	<u>3141</u>	<u>204</u>
	<u>196 207</u>	<u>sl 1-4</u>	<u>14:36</u>	<u>5.92</u>	<u>17.2</u>	<u>1778</u>	<u>227</u>	<u>1.7</u>	<u>.01</u>	<u>583</u>	<u>618</u>	<u>208</u>

High 204, but let run

Tried ~5 248 grains looking for u < 200 ppm

Too weak go to 196.

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Rejection over-ride Sample/Std ID Time - printout UO/U 196 Kcps 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 Kcps	206 cps	U ppm	204Pb ppb	f206 %	Age ±1σ (Ma) 206/238	207/206	Corr.
	u B.8-1	—	high	204	—	abandon	—	—	—	—	—
206, 207 206 238, 254 196, 206	B.9-1	15:07	6.01	16.3	13.5K	302	58	0.4	2781	3181	204
207, 208, 248 196, 206	W-1	—	high	204	—	—	—	—	—	—	—
207, 208 206, 238 248, 254	B.11-1	15:34	6.12	18.1	7878	186	47	0.8	2308	3042	204
196, 204, 206 207, 238, 254	B.12-1	15:56	5.98	16.8	9865	165	30	0.3	3370	3143	204
206, 248 254	B.13-1	16:15	6.89	14.2	24K	678	23	0.2	1790	2477	204
196 207 238	sl B.1-5	16:34	5.97	16.4	1780	226	0.8	0.01	596	628	208
207, 238 248, 254	B.14-1	16:53	5.88	17.6	11K	20.1	6.8	-0.6	3285	3232	204
206, 209 238, 248	B.15-1	17:19	5.65	17.2	10.6K	223	2.2	0.02	3288	3240	204
254	B.16-1	18:00	6.00	16.8	5.78	102	2.9	0.02	3274	3235	204
196, 238 248, 254	B.17-1	18:28	5.70	18.1 18.2	3.58	187.2	13.0	0.19	2419	3160 2844	204
196, 206 238, 254	B.18-1	18:54	5.86	16.5	4.87	95.7	1.5	0.03	3264	3250	204
206	S 613B21	19:15	5.97	16.99	1.75	218.4	1.7	0.01	584	589	208
196 238	A1-1	19:35	6.05	16.5	394	69.7	1.2	0.03	3257	3246	204
206	A2-1	19:57	5.90	16.8	6.36	144.7	15.4	0.03	2817	3240 3070	204
196	A3-1	20:21	5.80	16.8	8.95 8.9	79.1	0.9	0.02	3262	3245	204
196 ZERO 254	A4-1	20:42	5.84	16.9	5.36	102.5	-0.5	—	3325	3241	—
206, 248 254	A5-1	21:16	5.80	16.8	6.32	125.4	0.8	0.01	3300	3242	204
206 207	SI A2-2	21:36	5.97	16.6	1.74	223.4	0.5	0.02	582	599	208
206 254	A6-1	21:58	5.86	16.9	4.40	82.8	1.0	0.02	3315	3235	204
196 254	A7-1	22:18	5.93	17.1	9.05	164.8	6.8	0.08	3268	3235	204
196 204	A7-2	22:37	6.05	17.1	7.08	126	13.7	0.21	3159	3239	204
196 207	A8-1	22:59	5.98	17.3	7.45	129.5	1.1	0.02	3282	3228	204
196	A9-1	23:21	5.80	18.4	5.84	102.7	11.9	0.21	3120	3236	204
—	S 613A23	23:40	5.87	16.9	1.63	218.5	0.3	0.05	579	593	208

See printout for notes

Remove B from file labeled

check

Close to the edge of the grain.

Manual Shutdown Saving Data

5 18.

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.
	2340	-									
	¹⁹⁶ 207 A10-1	00:04	5.84	16.5	7.70	115	1.2	0.02	3236	3220	204
	¹⁹⁶ A11-1	00:26	6.01	17.0	4.02	70.7	0.1	0.002	3251	3241	204
	¹⁹⁶ ²⁴⁸ A12-1	00:47	5.89	16.8	6.62	123.9	0.7	0.01	3297	3243	204
	¹⁹⁶ ²⁴⁸ A13-1	^{1:08} 00:55	6.03	17.6	4.56	84.4	13.2	0.32	3002	3238	204
	¹⁹⁶ ²⁰⁶ A14-1	^{01:19} 01:27	6.07	16.5	9.95	171.8	0.2	0.002	3303	3233	204
X	²⁰⁶ S1A2-4	01:48	5.72	16.7	1.64	240.3	2.1	0.05	5866	634.2	208
	^{196, 206} ^{207, 208} ^{238, 248, 254} A15-1	02:09	5.91	16.8	4.75	87.7	1.4	0.03	3299	3242	204
	¹⁹⁶ ^{206, 207} ^{238, 248, 254} A16-1	02:28	6.00	16.9	7.40	130.6	0.9	0.01	3280	3238	204
	^{207, 208} A17-1	02:47	5.95	17.1	12.67	231.6	2.9	0.02	3227	3234	204
	— A18-1	03:09	5.94	16.9	4.74	87.0	2.6	0.06	3265	3240	204
	— A19-1	03:30	5.98	16.6	3.32	60.5	1.7	0.05	3265	3241	204
X	^{196, 238} ²⁰⁶ ²⁰⁷ S12-5	03:50	5.91	17.1	1.76	226.6	0.8	0.06	583	584	204
	^{196, 207} ^{204, 208} ^{238, 248, 254} <u>A20-1</u>	4:11	6.07	16.9	10.35	331	3.3	0.04	1945	2982	204
	B19-1	4:46	6.01	16.3	9.13	166.1	5.1	0.06	3280	3239	204
	²⁰⁴ B21-1	05:09	5.99	16.7	7.09	129.8	4.3	0.06	3233	3236	204
	^{196, 204} B22-1	05:28	5.93	18.1	5.58	102.9	34.2	0.676	3070	3235	204
	^{196, 206} ²⁵⁴ B23-1	05:49	5.96	17.1	6.58	115.7	5.5	0.09	3311	3239	204
X	²³⁸ S1B2-6	06:08	5.79	16.7	1.68	236.8	1.2	0.08	584	547	208
	^{196, 206} ^{238, 248, 254} B24-1	6:31	6.28	16.1	9.24	142.4	11.6	0.15	3369	3262	204
	^{196, 206} ^{208, 248} B25-1	6:51	5.88	17.3	7.91	146.7	-0.2	—	3260	3241	—
	^{196, 206, 207} ^{208, 248} B26-1	07:10	5.94	17.5	6.51	119.9	42.3	0.70	3153	3209	204
	^{196, 206} ^{208, 238, 248} B27-1	07:32	5.81	16.9	9.48	179.8	55.8	0.56	3353	3232	204
X	^{196, 238} ²⁵⁴ B16-2	07:52	5.61	17.9	2.34	54.6	34.2	1.31	2977	3237	204
X	^{206, 207} ^{238, 254} S1B2-7	08:11	5.94	16.4	1.77	229.2	0.2	0.03	591	547	208
	²⁰⁴ ²⁰⁸ B19-2										

Is it possible for ~~population~~ ^{SAMPLE} B that an entire population of zircons is too U rich to analyse and consequently a possibly younger population has been missed??