

UWA DATA LOG: SHRIMP ZIRCON U-Pb

Date: 25/5/99 UWA Mount No.: 99-12 Whose sample?: MEB Operator(s): RF+MD

Indicate any change to the following:

	196	204	bkg	206	207	208	238	248	254	270
Precambrian	Count time (secs):	2	10	10	²⁰ 10/20*	30/10*	10	5	5	2
Phanerozoic*	Delay time (secs):	8	3	1	2	1	1	3	2	2

expected 196-204 = 8.170 amu expected 204-bkg = 0.045 amu Dead-time = 32 nanosecs
 actual 196-204 = 8.169 actual 204-bkg = 0.043 expected resolution = >4200
 actual 206-207 = 1.000 actual 206-208 = 2.000 actual resolution = 5090
 Primary = 1.2 (nA) nA PESABM = 25 pA actual Primary : PESABM (≈ 50:1) = 48
 Raster time (mins): Raster aperture (microns): 100 No. of scans: 6

Comments: 70 μm Kohler aperture
Sensitivity ~ 15

Standards n = 8

Error = 3-45

Rejection over-ride	Sample/ Std ID	Time - printout	UO/U Kcps	196 cps	206 cps	U ppm	204Pb ppb	f ₂₀₆ %	Age ±1σ (Ma) 206/238	207/206	Offsets OK?
	<u>10 drop printing</u>										
	<u>CZ.10-1</u>	<u>11:29</u>	<u>5.86</u>	<u>8.2</u>	<u>724</u>	<u>-</u>	<u>0.2</u>	<u>0</u>	<u>-</u>	<u>462</u>	<u>✓</u>
	<u>10 min wait in air 2 scans</u>										
	<u>CZ.10-2</u>	<u>11:46</u>	<u>5.94</u>	<u>8.8</u>	<u>716</u>	<u>197</u>	<u>1.7</u>	<u>.16</u>	<u>561</u>	<u>531</u>	<u>✓</u>
	<u>C.1-1</u>	<u>12:08</u>	<u>6.02</u>	<u>7.8</u>	<u>178</u>	<u>183</u>	<u>2.1</u>	<u>.59</u>	<u>167</u>	<u>-</u>	<u>✓</u>
	<u>C.2-1</u>	<u>12:29</u>	<u>5.56</u>	<u>7.6</u>	<u>131</u>	<u>205</u>	<u>1.6</u>	<u>.61</u>	<u>148 ± 1</u>	<u>-</u>	<u>✓</u>
	<u>C.3-1</u>	<u>12:49</u>	<u>6.00</u>	<u>8.1</u>	<u>70</u>	<u>376</u>	<u>1.7</u>	<u>1.2</u>	<u>32 ± 1</u>	<u>-</u>	<u>✓</u>
	<u>CZ.10-3</u>	<u>13:14</u>	<u>5.92</u>	<u>9.4</u>	<u>748</u>	<u>198</u>	<u>-</u>	<u>.03</u>	<u>551 ± 1</u>	<u>644 ± 42</u>	<u>✓</u>
	<u>C.3-2</u>	<u>13:37</u>	<u>5.78</u>	<u>8.5</u>	<u>83</u>	<u>443</u>	<u>-</u>	<u>-</u>	<u>34 ± 1</u>	<u>279 ± 138</u>	<u>✓</u>
	<u>C.4-1</u>	<u>13:59</u>	<u>5.85</u>	<u>8.0</u>	<u>278</u>	<u>435</u>	<u>1.8</u>	<u>.41</u>	<u>118 ± 1</u>	<u>17 ± 167</u>	<u>✓</u>
	<u>C.5-1</u>	<u>14:28</u>	<u>6.25</u>	<u>6.8</u>	<u>299</u>	<u>1052</u>	<u>1.8</u>	<u>.30</u>	<u>50 ± 1</u>	<u>-</u>	<u>✓</u>
	<u>C.5-2</u>	<u>14:48</u>	<u>5.58</u>	<u>8.6</u>	<u>207</u>	<u>842</u>	<u>-</u>	<u>-</u>	<u>51 ± 1</u>	<u>222 ± 92</u>	<u>✓</u>
	<u>CZ 10-4</u>	<u>15:10</u>	<u>5.72</u>	<u>8.9</u>	<u>759</u>	<u>219</u>	<u>-</u>	<u>-</u>	<u>598 ± 1</u>	<u>521 ± 42</u>	<u>✓</u>

1 sec read for + 20 for set-up time

2 min read for Th/U 10/6

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Rejection over-ride	Sample/ Std ID	Time - printout	UO/U Kcps	196 Kcps	206 cps	U ppm	204Pb ppb	f206 %	Age ± 1σ (Ma) 206/238	207/206	Offsets OK?
	C.6-1	15:34	5.22	8.4	91	289	2.4	.85	84 ± 1	—	✓
	C.7-1	15:56	6.01	7.8	209	965	0.3	.09	38 ± 1*	77 ± 135	✓
	C.8-1	16:21	5.58	9.6	375	380	3.1	.52	180 ± 1	94 ± 114	✓
	C.9-1	16:43	5.59	9.3	54	207	0.0	—	49 ± 1	134 ± 178	✓
	C.10-5	17:09	5.46	8.6	689	237	1.0	.07	616 ± 2	—	✓
	C.10-1	17:38	5.78	9.6	39	146	1.2	1.7	42 ± 1*	—	✓
	C.11-1	18:06	5.25	10.2	172	183	7.7	1.8	199 ± 1	—	✓
	C.11-2	18:39	5.49	9.6	86	98	5.9	3.1	165 ± 2 170 ± 1	—	✓
	C.12-1	19:06	5.32	9.6	50	250	—	—	44 ± 1* 44 ± 1	—	✓
	C.29-1	19:30	5.82	9.3	788	201	1.1	.03	591 ± 1	650 ± 41	✓
	C.14-1	19:54	5.77	8.8	84	473	2.6	1.5	31 ± 1	—	✓
	C.15-1	20:19	5.50	10.0	40	149	0.5	.06	49 ± 1 _{INF}	—	✓
	C.14-2	20:43	6.00	9.3	68	62	—	—	159 ± 1	463 ± 140	✓
	C.29-2	20:53	5.54	9.9	796	234	—	—	592 ± 1	564 ± 21	✓
	C.17-1	21:19	5.81	9.6	239	213	—	—	176 ± 1	67 ± 90	✓
	C.17-2	21:52	5.84	9.9	817	203	1.1	0.01	582 ± 1	475 ± 43	✓
	C.27-2	22:39	5.90	9.0	857	214	1.7	0.01	607 ± 2	752 ± 50	✓
	C.27-3	23:08	5.84	11.7	1086	212	4.0	0.3	615 ± 2	508 ± 53	✓
	A.9-1	23:36	5.43	11.2	244	42	2.7	.69	932 ± 6	641 ± 128	✓
	A.7-1	00:00	5.82	10.4	830	378	0.5	0.05	315 ± 1	383 ± 68	✓
	A.8-1	00:28	5.86	9.7	1558	434	—	—	528 ± 1	387 ± 32	✓
	C.27-4	00:59	5.82	7.2	688	215	1.3	0.01	644 ± 2	147 ± 70	✓
	C.210-6	Ortec errors x									

Initial spike

Stage Run + 8.25pm Spike on P-value

Increased aperture & IDU; 9p 10pms

Significant -ve drift

+8-spiking

Primary all over place. Modified with no det. error