

UWA DATA LOG: SHRIMP ZIRCON U-Pb

Date 4/8/96 UWA Mount No. 96-44 Whose sample? J. Smith Operator(s) J. Smith

Indicate any change to the following:	196	204	bkg	206	207	208	238	248	254
Precambrian Count time (secs):	2	10	10	10	<u>30/10*</u>	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 = <u>32</u> nanoseconds						
actual 196-204 = <u>8.1702</u>	actual 204-bkg = <u>0.0445</u>		expected resolution = >4200						
actual 206-207 = <u>1.00137</u>	actual 206-208 = <u>1.99858</u>		actual resolution = <u>4980</u>						
Primary = <u>1.3</u> nA	PESABM = <u>24</u> pA		actual Primary : PESABM (= 50:1) = <u>54</u>						
Raster time (mins): <u>2</u>	Raster aperture (microns): <u>3100</u>		No. of scans: <u>7</u>						

Comments: 50µ aperture

C : N3162
 after c3.1 returned 1° after quitting to save screen. Voltages jumped down & 1° intensity increased. to 1.8 nA. (after increase Matching lens)
 During 11.1 1° voltages jumped up so returned deflections and adjusted matching lens to get 1.1 nA signal.

Rejection over-ride	Sample/Std ID	Time - printout	UO/U	196 cps	206 cps	U ppm	204Pb ppb	f206 % (204)	Age ±1σ (Ma) 206/238 (208)	207/206 (204)	Comments
				<u>1.1</u>							Calib.
<u>12</u>	<u>SL644.1-1</u>	<u>2321</u>	<u>6.99</u>	<u>6.4</u>	<u>709</u>	<u>220</u>	<u>0.0</u>	<u>-</u>	<u>571</u>	<u>-</u>	<u>248#1</u>
<u>12</u>	<u>SL644.1-2</u>	<u>2346</u>	<u>7.05</u>	<u>7.3</u>	<u>890</u>	<u>220</u>	<u>3.2</u>	<u>0.27</u>	<u>572</u>	<u>467</u>	Calib No Outliers
<u>22</u>	<u>U644C1.1</u>	<u>0013</u>	<u>7.13</u>	<u>7.3</u>	<u>1329</u>	<u>55</u>	<u>0.4</u>	<u>0.01</u>	<u>-</u>	<u>2911</u>	No Outliers
<u>12</u>	<u>SL644.1-3</u>	<u>0037</u>	<u>7.16</u>	<u>7.4</u>	<u>897</u>	<u>215</u>	<u>0.4</u>	<u>0.03</u>	<u>-</u>	<u>510</u>	No Outliers
<u>43</u>	<u>U644C2.1</u>	<u>0100</u>	<u>7.04</u>	<u>7.7</u>	<u>2069</u>	<u>79</u>	<u>1.0</u>	<u>0.03</u>	<u>-</u>	<u>2941</u>	No Outliers
<u>22</u>	<u>U644C3.1</u>	<u>0123</u>	<u>6.98</u>	<u>7.6</u>	<u>1144</u>	<u>48</u>	<u>0.6</u>	<u>0.02</u>	<u>-</u>	<u>2925</u>	No Outliers
<u>85</u>	<u>U644C4.1</u>	<u>0154</u>	<u>6.82</u>	<u>10.7</u>	<u>3988</u>	<u>122</u>	<u>213</u>	<u>4.06</u>	<u>2785</u>	<u>2909</u>	No Outliers
<u>12</u>	<u>SL644.1-4</u>	<u>0218</u>	<u>6.75</u>	<u>10.3</u>	<u>1098</u>	<u>228</u>	<u>-0.5</u>	<u>-</u>	<u>552</u>	<u>-</u>	No Outliers
<u>54</u>	<u>U644C5.1</u>	<u>0250</u>	<u>6.64</u>	<u>11.1</u>	<u>3122</u>	<u>101</u>	<u>1.9</u>	<u>0.04</u>	<u>-</u>	<u>2924</u>	No Outliers
<u>33</u>	<u>U644C6.1</u>	<u>0315</u>	<u>6.65</u>	<u>10.7</u>	<u>2166</u>	<u>73</u>	<u>4.8</u>	<u>0.15</u>	<u>2834</u>	<u>2941</u>	No Outliers
<u>63</u>	<u>U644C7.1</u>	<u>0340</u>	<u>6.77</u>	<u>10.1</u>	<u>4450</u>	<u>151</u>	<u>2.6</u>	<u>0.40</u>	<u>2838</u>	<u>2937</u>	No Outliers

10 tune
 (voltages jumped)

Rejection over-ride	Sample/ Std ID	Time - printout	UO/U	196 cps	206 cps	U ppm	204Pb ppb	f206 % (204)	Age ±1σ (Ma) 206/238 (208)	207/206 (204)	Comments
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Th ppm 45	U644C8-1	0405	6.78	10.0	2413	82	0.0	0.00	2829	2939	No Outliers
12	S1644-1-5	0429	6.85	9.0	1055	218	0.3	0.02	556	601	No Outliers
110	U644C9-1	0454	6.84	9.6	4553	155	2.4	0.03	-	2930	No Outliers
26	U644C10-1	0520	6.73	10.1	2199	74	3.7	0.11	-	2917	No Outliers

~~U644C11-1~~

Retune ~~U644C11-1~~ 1° settings jumped, retuned deflections and matching lens

11	S1644-1-6	0624	7.34	5.2	616	208	1.9	0.18	528	500	No Outliers
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Precambrian Count time (secs):	2	10	10	10	<u>30/30</u>	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 = <u>32</u> nanosecs						
actual 196-204 = <u> </u>	actual 204-bkg = <u> </u>		expected resolution = >4200						
actual 206-207 = <u> </u>	actual 206-208 = <u> </u>		actual resolution = <u>5100</u>						
Primary = <u>22</u> nA	PESABM = <u>32</u> pA		actual Primary : PESABM (= 50:1) = <u> </u>						
Raster time (mins): <u>2</u>	Raster aperture (microns): <u>100</u>		No. of scans: <u>7</u>						

Follow from 96-39 11/8/96

Comments: C:N3162 12 → (spots) Kohler 100

Th (ppm)

Rejection over-ride	Sample/Std ID	Time - printout	UO/U	196 cps (K)	206 cps	U ppm	204Pb ppb	f206 % (204)	Age ±1σ (Ma) 206/238 (208)	207/206 (204)	Comments outliers
calib											Counts decay over scans 2° settings had drifted
12	<u>s/644.5-1</u>	<u>0849</u>	<u>6.93</u>	<u>3.5</u>	<u>459</u>	<u>220</u>	<u>1.3</u>	<u>0.11</u>	<u>572</u>	<u>526</u>	
36	<u>u644C12.1</u>	<u>0914</u>	<u>6.86</u>	<u>10.8</u>	<u>2659</u>	<u>69</u>	<u>2</u>	<u>0.07</u>	<u>—</u>	<u>2899</u>	None
26	<u>u644C13.1</u>	<u>0935</u>	<u>6.71</u>	<u>11.7</u>	<u>3037</u>	<u>76</u>	<u>2</u>	<u>0.05</u>	<u>—</u>	<u>2936</u>	None
65	<u>u644C14.1</u>	<u>1019</u>	<u>6.81</u>	<u>11.5</u>	<u>2901</u>	<u>74</u>	<u>131</u>	<u>4.11</u>	<u>2843</u>	<u>2931</u>	None
11	<u>s/644.5-2</u>	<u>0957</u>	<u>6.77</u>	<u>11.5</u>	<u>1328</u>	<u>204</u>	<u>2</u>	<u>0.20</u>	<u>580</u>	<u>521</u>	None
48	<u>u644C15.1</u>	<u>1039</u>	<u>6.89</u>	<u>11.3</u>	<u>4172</u>	<u>99</u>	<u>66</u>	<u>1.49</u>	<u>2954</u>	<u>2901</u>	None
27	<u>u644C16.1</u>	<u>1100</u>	<u>6.89</u>	<u>11.4</u>	<u>2184</u>	<u>52</u>	<u>1.3</u>	<u>0.05</u>	<u>—</u>	<u>2928</u>	None
11	<u>s/644.5-3</u>	<u>1123</u>	<u>6.8</u>	<u>11.4</u>	<u>1338</u>	<u>206</u>	<u>1.3</u>	<u>0.11</u>	<u>584</u>	<u>546</u>	None