

**UWA DATA LOG: SHRIMP ZIRCON U-Pb**

Date: 29/6/99      UWA Mount No.: 99-21      Whose sample?: Orsted      Operator(s): McN + OS

Indicate any change to the following:    196   204   bkg   206   207   208   238   248   254   ~~270~~

**Precambrian**    Count time (secs):    2    10    10    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 = ..... 8.166 .....      actual 204-bkg = ..... 0.045 .....      expected resolution = >4200  
 actual 206-207 = ..... 1.000 .....      actual 206-208 = ..... 1.999 .....      actual resolution = ..... 5336 .....  
 epoxy 2.0  
 Primary = ..... 2.8 ..... nA    PESABM = ..... 29 ..... pA    actual Primary : PESABM (= 50:1) = .....  
 Raster time (mins): ..... 1 .....    Raster aperture (microns): ..... 120 .....    No. of scans: ..... 6 .....

Comments: A = PIT / zircon + columbite + corund.

Rejection over-ride	Sample/ Std ID	Time - printout	<sup>206</sup> U/ <sup>206</sup> Pb	196 Kcps	206 cps	U ppm	<sup>204</sup> Pb ppb	f <sub>206</sub> %	Age ±1σ (Ma) 206/238	207/206	Offsets OK?
	sl.6-1	11:40	7.01	9.3	1074	220	1.1	.03	572±1	608±23	✓
	sl.6-2	11:58	6.97	9.6	1115	218	-0.6	.02	591±1	530±24	✓
	A.1-2	12:25	7.27	8.9	744	44.6	44.2	5.18	1606±10	1687±77	✓
	sl.6-3	12:43	6.91	9.8	1082	218	-0.7	.09	575±1	561±24	✓
	A.4-2	13:02	6.97	9.9	1292	66.8	-1.5	.04	1938±8	1898±17	✓
	A.4-3	13:19	7.43	9.1	883	41.8	0.9	.10	1920±10	1850±19	✓
	sl.5-1	13:37	7.34	9.0	1094	195	0.6	.03	594±1	529±24	✓
	A.8-2	13:56	7.00	9.7	922	128	3.0	.31	794±2	747±43	✓ TRASH
SWITCHED TO COLUMBITE											
	cl.27-1*				counts						too low → rubbish

→ reloaded, run table, ~~waited~~ peak centred on zircon, searched for higher U-grain, increased peak centre time

Changed ~~196~~ position to 197 = TaO → label = 2n20!!

ZIRCONS

Rejection over-ride Sample/ Std ID Time - printout UO/U 196 Kcps 206 cps U ppm <sup>204</sup>Pb ppb f<sub>206</sub> % Age ±1σ (Ma) 206/238 207/206 Offsets OK?

Rejection over-ride	Sample/ Std ID	Time - printout	UO/U	196 Kcps	206 cps	U ppm	<sup>204</sup> Pb ppb	f <sub>206</sub> %	Age ±1σ (Ma) 206/238	207/206	Offsets OK?
	<i>o/27-2</i>										
	<i>d/27-3</i>										
	CS12-1	16:06	2.32	?	416	-	-	-	1831±14	1752±39	OK
	CSA12-2	16:32	6.90	9.50	324	20	0.8	0.2	1786±4	1790±38	OK
	A.12-3	16:51	7.19	9.11	359	20	0.9	0.21	1791±14	1759±32	OK
	SL5-2	17:19	7.08	9.75	1099	208	0.7	0.06	577±1	612±28	OK
	A.1-3	17:36	6.58	10.9	561	34	4.3	0.6	1813±12	1811±49	OK
	G.3-1	18:02	7.15	9.5	441	85	1.6	0.36	562±1	553±5	OK TRASH
	E.13-1	18:33	7.42	8.6	467	23	/	/	1945±14	1918±21	OK
	E.12-1	18:51	7.34	9.4	654	31	1.2	0.17	1933±12	1849±28	OK
	SL4-8	19:35	6.99	9.6	1041	208	1.1	0.10	577±1	554±34	OK
	E.11-1	19:54	7.06	9.2	577	31	1.1	0.16	1957±12	1879±22	OK
	E.10-1	20:12	7.11	9.1	596	32	1.2	0.17	1909±12	1877±24	OK
	E.9-1	20:31	7.14	9.6	716	37	0.4	0.04	1890±11	1911±19	OK
	E.8-1	20:51	7.27	9.03	833	41	0.9	0.09	1955±11	1896±22	OK
	E.7-1	21:09	7.24	9.2	511	25	0.6	0.11	1972±14	1920±29	OK
	E.17-1	21:33	6.90	8.4	560	37	/	/	1874±11	1930±19	OK
	SL3-1	21:52	6.70	9.8	1060	227	0.9	0.07	591±1	573±33	OK
	E.15-1	22:11	6.94	9.7	1261	66	2.9	0.18	1964±8	1846±18	OK
	E.4-1	22:29	7.13	9.6	410	21	1.6	0.33	1897±14	1850±38	OK
	G.11-1	23:04	6.70	8.9	2141	136	2.4	0.08	1960±6	1809±11	OK
	G.16-1	23:24	6.79	9.8	871	46	2.9	0.25	2033±11	1950±22	OK
	G.17-1	23:43	7.04	9.5	1586	74	3.5	0.18	2133±9	2130±14	OK
	G.18-1	00:04	7.14	9.6	3117	149	2.4	0.07	2002±6	1940±9	OK
	SL3-2	00:23	6.64	9.6	964	219	1.8	0.15	573±1	502±35	OK

*1<sup>o</sup> dropped during run*

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	Offsets OK?	
	G.19-1	0:45	6.76	9.9	1098	60	0.1	0.01	1989±9	1883±14	OK	
	G.20-1	0:10	7.06	9.8	1927	96	5.0	0.24	1864±6	1860±14	OK	
	G.21-1	1:29	6.96	9.1	1468	96	1.3	0.06	1996±7	1985±14	OK	
	pk.101-1	1:49	3.97	14.3	267	101	/	/	2193±19	2068±27	OK	
	pk.101-2	2:08	4.05	19.5	407	90	2.1	0.28	2275±17	2017±32	OK	
	H.4-1	2:28	4.00	12.0	466	216	7.5	1.4	2041±13	1822±51	OK	
	H.3-1	2:42	4.16	9.7	398	129	14.9	3.6	2479±22	1816±83	OK	
	pk.101-3	3:04	3.91	20.9	1392	397	9.8	0.09	2284±9	2054±14	OK	
	MOVE TO 99-17 →											
	← BACK FROM 99-17											
	E.19-1	7:00	7.16	9.8	671	18	1.3	0.33	1831±1	1873±24	OK	
	SL.3-3	7:21	6.81	10.1	1142	127	/	/	541±1	568±21	OK	
	E.3-1	7:41	7.04	9.9	762	20	0.7	0.15	1869±10	1874±20	OK	
	E.18-1	7:59	6.71	10.4	580	17	/	/	1875±11	1897±19	OK	
	G.13-1	8:33	6.61	10.2	1312	38	1.4	0.15	1985±9	2008±14	OK	
	G.12-1	8:51	6.96	10.1	1015	27	0.4	0.06	188±9	1952±18	OK	