

UWA DATA LOG: SHRIMP ZIRCON U-Pb

Date: 21/5/96 UWA Mount No.: 95-38 Whose sample?: Pellard + Pillbara Anorth. Operator(s): IRF, McN, April

Indicate any change to the following: <sup>200</sup>196 204 bkg 206 207 208 238 248 254

Precambrian Count time (secs): ~~5.2~~ 10 10 10 30/10 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 = <sup>32</sup> nanosecs  
 actual <sup>200</sup>196-204 = 4.1414 actual 204-bkg = 0.040 expected resolution = >4200  
 actual 206-207 = 1.000 actual 206-208 = 2.000 actual resolution = 4686

Primary = <sup>2.2</sup> nA PESABM = pA actual Primary : PESABM (= 50:1) =  
 Raster time (mins): <sup>3</sup> Raster aperture (microns): 100/120 No. of scans: <sup>7</sup>

Comments: NB: am → 2pm = Baddeleyite ⇒ Mark Alvin  
 3pm → = titanite

Sample A = EHD4 (Pellard) → non-mag 3 min rasters.  
 " B = " " → mag  
 " C = Pillbara anorthosite screen locked-up at 8pm.  
 New calibra<sup>n</sup> = kh1-7 onwards.

Require Focusing between samples (mount tilted?)

Rejection over-ride	Sample/Std ID	Time - printout	UO/U	<sup>200</sup> 196 cps	206 cps	U ppm	204Pb ppb	f <sub>206</sub> %	Age ±1σ (Ma) 206/238	207/206	Corr.
	KHAN.1-1	15:14	17.92	1450	2037	102	7.3	1.35	565±3	455±48	204
	Khan. 1-2	15:37	18.21	1411	1957	101	4.9	.93	551±3	570±40	204
	Khan 1-3	16:11	16.11	1456	2027	101	3.5	.65	564±3	512±37	204
X	A. 1-1	16:41	37.69	1522	311	90.6	5.0	.54	947±38	1613±51	204
	Khan 1-4	17:08	18.23	1456	2060	101	2.4	.47	549±3	585±31	204
X	A. 1-2	17:33	37.68	1837	364	90.6	3.9	.40	993±37	1699±45	204
X	A. 2-1	18:02	31.47	1892	723	92.4	4.3	.35	1227±30	1642±29	204
X	A. 3-1	18:26	39.24	1790	371	90.2	1.1	.12	952±35	1690±39	204
	Khan 1-5	18:48	18.08	1453	2008	101	4.0	.76	557±3	492±37	204
X	A. 4-1	19:35	40.81	1949	420	89.9	12.3	1.22	1032±39	1593±53	204
X	A. 5-1	19:59	179.5	1889	432	84.0	0.8	0.35	256±14	1664±35	204

↑ 238 visible?

100µm RASTER ↑  
 120µm " ↓



Rejection over-ride	Sample/ Std ID	Time - printout	UO/U	<sup>200</sup> U / <sup>196</sup> cps	206 cps	U ppm	<sup>204</sup> Pb ppb	f <sub>206</sub> %	Age ±1σ (Ma) 206/238	207/206	Corr.
	kh. 1-6										
	NOT CALIBRATED										
	kh. 1-7	21:06	17.55	1583	2121	-	-	0.51	569 ± 3	532 ± 31	204
	kh. 1-8	21:27	17.68	1595	2124	-	-	0.69	572 ± 3	486 ± 35	204
del 1 <sup>st</sup> UO →	UA 6-1	22:01	39.38	3012	381.7	-	-	0.36	984 ± 37	1654 ± 44	204
	kh. 1-9	22:23	17.91	1639	2150	-	-	0.12	571 ± 3	666 ± 29	208
del 1 <sup>st</sup> ThO →	UA 7-1	22:50	37.34	1346	290.0	-	-	-ve	890 ± 35	1623 ± 27	2-
check Braun →	kh. 1-10	23:14	17.09	1429	1990	-	-	0.64	542 ± 3	538 ± 35	204
	UA 8-1	23:48	18.41	1399	436	-	-	0.18	1603 ± 38	1674 ± 38	204
	kh 2-1	24:21									
	NOT CALIBRATED										
	kh. 1-11	24:44	17.62	1506	2042	-	-	0.56	569 ± 3	515 ± 33	204
Del 1 <sup>st</sup> 206	UA 8-2	1:08	15.45	591	261.5	-	-	-	1484 ± 33	1662 ± 29	2-
	UA 9-1	1:31	18.36	1854	410.5	-	-	0.11	1797 ± 41	1642 ± 26	204
	kh. 1-12	1:54	17.63	1488	2030	-	-	0.61	563 ± 3	494 ± 35	204
del 1 <sup>st</sup> UO →	UA 10-1	2:17	17.61	1586	362	-	-	0.06	1724 ± 40	1697 ± 38	204
	UA 11-1	2:40	20.32	1880	459	-	-	0.30	1722 ± 40	1639 ± 34	204
	UA 12-1	3:03	18.48	1804	426	-	-	0.09	1746 ± 39	1678 ± 30	204
	kh. 1-13	3:26	18.40	1533	2036	-	-	0.74	573 ± 3	493 ± 37	204
	UA 13-1	3:51	16.66	1317	263	-	-	1.04	1564 ± 39	1566 ± 72	204
	KA 13-14	4:15	17.19	1396	1971	-	-	0.64	554 ± 3	497 ± 36	204
del 1 <sup>st</sup> UO →	UA 13-2	4:38	17.88	1521	521	-	-	0.03	1607 ± 31	1649 ± 22	204
	UA 14-1	5:01	17.67	1452	288	-	-	0.62	1625 ± 41	1649 ± 59	204
	UA 15-1	5:23	19.97	1801	343	-	-	0.08	1848 ± 50	1652 ± 38	204
	kh. 1-15	5:47	18.47	1567	2104	-	-	0.53	553 ± 3	552 ± 32	204
	UA 16-1	6:10	17.10	1088	478	-	-	0.39	1619 ± 30	1623 ± 39	204
	kh. 1-16	6:3	17.24	1379	1960	-	-	0.64	552 ± 3	505 ± 36	204

↑  
238 usable?

JP  
2.8  
centre  
235 auto centre  
off.  
235 auto centre  
off.  
JP  
2.25

Mount/sample No: 95-38

Date: 21/5/96

Page No: 3

Rejection over-ride    Sample/ Std ID    Time - printout    UO/U    196 cps    206 cps    U ppm    204Pb ppb    f<sub>206</sub> %    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	f <sub>206</sub> %	Age ± 1σ (Ma) 206/238	207/206	Corr.
✓	<del>U.A.6</del> <sup>17-1</sup>	6:56	17.99	174	878	-	-	0.08	1738 ± 26	1648 ± 18	204
✓	U.A.18-1	7:18	21.14	189	385	-	-	0.22	1585 ± 39	1694 ± 39	204
	kh. 2-2	7:40	18.22	1385	1954	-	-	0.75	<sup>low</sup> 521 ± 3	512 ± 38	204
✓	UB1-1	8:06	18.57	1860	365	-	-	0.28	1776 ± 43	1688 ± 45	204
✓	UB2-1	8:28	18.28	1684	363	-	-	0.56	1747 ± 42	1578 ± 42	204
	kh. 1-17	8:51	17.63	1584	2081	-	-	0.71	576 ± 3	496 ± 34	204

2-2

↑ 238 usable?