

UWA DATA LOG: SHRIMP ZIRCON U-Pb

Date: 1/3/96 UWA Mount No.: 95-41 Whose sample?: R. BARRIX Operator(s): Ian + Alfred

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 = 3.2 nanosecs
 actual 196-204 = 8.168 actual 204-bkg = 0.045 expected resolution = >4200
 Primary = 2.8 nA PESABM = 47 pA actual resolution =
 expected Primary : PESABM ≈ 50:1 actual Primary : PESABM =

Comments: NOTE only 6 scans/spot

ARC dropped out 22:30.
 1° stable.

Ave calibra²: n=12
 Zr/U = 1.95247
 Uo/U = 6.18972
 Pb²⁰⁷/U = 0.186325

% error
 1.2298%

Rejection over-ride Sample/Std ID Time - printout UO/U 196 k cps 206 cps U ppm 204Pb ppb f₂₀₆ % Age ±1σ (Ma) 206/238 207/206 Corr.

	sl 541.2-1	11:26	5.81	19	1647	-	0.4	.04	-	581	204 ✓
196; 238; 248; 254	2-2	-	Primary drifted 100%		- abandon						
	2-3	12:29	6.35	15	1574	-	0.4	.03	-	558	204 ✓
196; 206; 207; 238; 254	2-4	12:48	6.38	16	1562	218	0.3	.01	560	654	208 ✓
206; 207	u D.1-1	13:10	6.20	16	121K	232	-ve	-	3313	3241	-
208; 238; 248; 254	u D.2-1	13:29	6.36	16	8835	167	-ve	-	3246	3231	-
206; 207; 208; 238	D.3-1	13:48	6.37	16	9055	170	-ve	-	3246	3250	-
196; 206; 207; 208	sl 3-1	14:13	6.16	17	1610	222	1.1	.09	574	537	204 ✓
196; 248; 254	D.4-1	14:34	6.06	17	6617	138	0-	-	3204	3240	-
196; 248; 254	D.5-1	14:54	6.46	17	8042	143	1.7	.02	3187	3238	204
206; 207; 208 238; 248	D.6-1	15:14	6.27	17	101K	189	0.2	.00	3172	3246	204

check 206-207-208 spacing (OK)

Dn = 16
 A2n = 4
 An = 21

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.
196; 206; 207; 248	D.7-1	15:36	6.01	18	6307	129	0.8	.01	3272 3242	204
196; 207; 208; 238; 248	D.8-1	15:55	6.22	17	8381	155	-ve	-	3283 3237	-
196; 206; 238; 248	SL 5-1	16:16	6.20	18	1689	223	0.7	.01	569 595	204 ✓
207; 248	D.9-1	16:37	6.11	17	5495	109	-ve	-	3247 3245	-
	D.10-1	—	I _p dropped 10 ⁹ u		—		abandon		—	
196; 208; 254	D.11-1	17:10	6.06	17	6482	138	0.9	.01	3240 3232	204
196;	D.12-1	17:27	6.31	16	13K	251	0.7	.00	3185 3231	204
	D.13-1	17:46	6.19	17	11K	222	-ve	-	3234 3236	-
del 1 st 248 → 238	SL 5-2	18:09	6.18	18	1670	220	0.5	0.04	575 515	204 ✓
206; 248	D.14-1	18:31	6.16	17	11K	215	0.6	0.01	3268 3233	204
206; 207; 248;	D.15-1	18:56	6.42	16	6388	118	-ve	-	3230 3242	-
	A 1-1	19:19	6.16	17	6820	132	0.9	0.01	3327 3313	204
	A 2-1	19:41	7.5	12	18K	827	956.9	0.07	1180 2876	204
	A 3-1	20:01	8.0	10	9404	793	574	0.08	696 2831	204
	A 4-1	20:21	7.01	13	23K	890	47.5	0.25	1714 2417	204
207	SL 5-3	20:42	6.42	12	1252	221	0.6 0.6	0.05	560 514	208 - I _p dropped ✓
206	SL 5-4	21:13	6.17	16	1531	219	0.7	0.06	574 497	204 ✓
	A 5-1	21:36	6.16	16	1930	405	-ve	-	3317 3323	-
	A 6-1	22:00	6.26	16	8455	164	-ve	-	3327 3312	-
	A 7-1	22:23	7.19	13	28K	923	129	0.6	794 2583	204
	A 8-1	—	Arc dropped out		—		—		—	
196; 206 238; 254	SL 5-5	23:53	6.10	14	1307	230	-ve	-	564 585	- ✓
	A 9-1	00:17	6.28	15	8191	185	5.3	0.06	3114 3313	204
	A 10-1	00:41	6.05	16	3203	75.7	1.7	0.05	3130 3328	204
discard * 207; 238; 248; 254	A 11-1	1:03	4.32	34	1514	58	3.3	0.09	3682 3316	204

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.
	U541A.12-1	1:24	4.25	33	1934	82	2.2	0.04	3726	3322	204
	A.13-1	1:43	4.3	34	1782	69	2.4	0.06	3690	3309	204
	sL5-6	2:05	4.2	35	1023	331	2.4	0.03	631	550	208
	A.14-1	2:28	4.3	34	1167	44.8	1.9	0.07	3649	3323	204
	A15-1	2:49	7.0	15	5912	395	80.4	0.8	844	3172	204
	A16-1	3:14	6.2	16	1585	32.3	0.7	0.04	3281	3325	204
	A16-2	3:31	6.0	16	3121	69.3	2.5	0.06	3318	3331	204
	A.17-1	3:51	6.4	16	2535	50.0	4.1	0.16	3097	3319	204
	sL5-7	4:11	6.1	16	1456	224.5	0.4	0.03	563	527	204
	A.18-1	4:32	7.64	11	7K	1917	408	0.8	2028	2331	204
	A.19-1	4:52	6.8	16	9002	166	13.2	0.19	2790	3186	204
	A20-1	5:13	6.1	15	2616	69	3.1	0.01	2880	3301	204
	A20-2	5:32	6.1	16	1711	37.5	-ve	-	3320	3316	-
	A21-2	5:54	6.4	15	4051	79.3	11.9	0.3	3208	3306	204
*	sL1-1	6:17	2.6	3993 ^{cps}	148	-ve	-ve	-	1201	444	- shit!
	A22-1	6:40	7.2	11	22K	811	155.8	0.8	1875	2558	204
	sL2-5	7:00	6.1	15	1479	228	0.6	0.13	580	496	208
	A23-1	7:22	6.2	16	2242	45.6	1.8	0.07	3294	3314	204
	D.16-1	7:48	6.4	16	6713	129	1.6	0.02	3216	3233	204
	D.17-1	8:08	6.1	16	4720	106	0.4	0.01	3178	3235	204
*	sL1-2	8:29	2.8	2893 ^{cps}	137	-ve	0	-	899	451	-
*	sL1-3	8:53	2.4	2460	104	-ve	0	-	2143	713	-
	sL3-2	9:19	6.3	15.9	1524	214	0.9	0.02	554	555	208

discards

* Chip 1 no good → bad conductivity ??