

UWA DATA LOG: SHRIMP ZIRCON U-Pb

Date: 3/6/96 UWA Mount No.: 96-24 Whose sample?: Operator(s): IF + A

Indicate any change to the following:

	196	204	bkg	206	207	208	238	248	254
Precambrian	Count time (secs):	2	10	10	10 ²⁰	30/10*	10 ✓	5	2
Phanerozoic*	Delay time (secs):	7	3	1	2 ✓	1 ✓	1 ✓	3	2

expected 196-204 = 8.170 amu expected 204-bkg = 0.040 amu Dead-time = 32 nanoseconds
 actual 196-204 = 8.168 actual 204-bkg = 0.042 expected resolution = >4200
 actual 206-207 = 1.000 actual 206-208 = 2.000 actual resolution = 4990

Primary = 2.432-4 nA PESABM = 37 pA actual Primary : PESABM (= 50:1) = 70
 Raster time (mins): 3 Raster aperture (microns): 100 No. of scans: 6

Comments: *Early problems with beam instability - several discarded and test data sets will be still in files*
 ① *Increased duo P to 900. Ip down to ~2.0 nA*
In some places there are lots of scratches in the gold. ? from ? gloves ? tissue ?
(Wien at 38) NB: only 1 standard! 3 min Raster.

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.	
	<i>Delete all data before sl. 1-3</i>											
	196	sl 624.1-3	14:10	6.77	15.3	1827	X	0.1	-	?	509	-
	196, 238	1-4	14:28	6.50	15.9	1652	X	1.1	109	?	571	204
	238, 248, 254	u 624B.1-1	14:48	6.83	15.5	377	?300	0	-	?81	170	-
	196, 204, 248	B.2-1	15:06	6.32	17.1	2229	?200	8.1	0.5	?750	1000	204
	del 6 scan A → 196, 238, 248, 254	B.3-1	15:23	6.40	17.1	4760	?250	-ve	-	?1200	1175	-
	(Recal.) 196	sl 1-5	15:42	6.94	14.3	1716	(-)	0.1	102	(-)	534	208
	248	B.4-1	16:24	6.57	12.8	823	979	1.0	13	84	169	204
	-	B.5-1	16:44	6.89	12.5	164	171	1.7	1.0	85	0	204
	196, 206, 248	B.6-1	17:04	6.60	12.8	1023	77	1.1	0.12	1199±5	1200±44	204
	196, 206, 238, 248, 254	sl 1-6	17:27	6.24	13.5	1226	241	-ve	0.02	546±1	571	208

wrong peak?

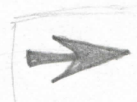
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Rejection over-ride	Sample/ Std ID	Time - printout	UO/U	196 cps (K)	206 cps	U ppm	204Pb ppb	f206 %	Age ±1σ (Ma) 206/238	207/206	Corr.
196, 206, 248, 254	u. B 7-1	17:52	6.99	12.1	116	134	0.6	0.76	76 ± 0.2	0	208
196, 206	SL 1-7	18:12	6.33	13.1	1299	247	-ve	0.04	557 ± 1.1	560 ± 34	208
del 1 st 206	196 B 8-1	18:32	7.01	12.3	104	103	0.8	0.95	86 ± 0.4	52	208
196, 238, 248, 254	B 9-1	18:52	6.85	11.9	210	243	0.2	0.10	82 ± 0.3	131	208
196, 238, 248, 254	B 10-1	19:10	6.67	12.1	70.9	84.5	0.9	3.66	83 ± 0.5	0	208
206, 238, 248, 254	B 11-1	19:29	6.70	11.6	63.4	77.6	0.7	1.49	84 ± 0.4	0	208
238, 248, 254	B 12-1	19:50	7.27	10.8	1210	1187	0.9	0.10	91 ± 0.1	22	208
196, 207	B 13-1	20:10	6.91	11.4	414	475	0.3	0.09	84 ± 0.1	244	208
del 1 st 248 →	196 SL 1-8	20:30	6.92	11.7	1378	219	0.9	0.08	570 ± 1.2	588 ± 33	208
196, 207, 208	B 14-1	20:49	6.82	12.1	324	354	0.6	0.45	87 ± 0.1	0	208
196, 208, 248, 254	B 15-1	21:10	6.89	10.4	202	266	-ve	0.83	80 ± 0.2	0	208
196, 254	B 16-1	21:29	6.81	12.0	99.7	121	-ve	-	79 ± 0.2	42	-
196, 206, 207	B 17-1	21:49	6.87	11.8	312	42.9	1.4	0.29	657 ± 3	671 ± 83	208
196, 206, 248	B 18-1	22:08	6.93	11.8	62.7	59.8	-ve	-	97 ± 0.3	0	2-
-	B 19-1	22:31	7.03	11.5	87.4	99.7	0.3	2.17	78 ± 0.4	0	208
208, 254	SL 1-9	22:51	6.49	13.4	1344	236	0.7	0.06	547 ± 1	614 ± 33	208
196, 206, 254, 238	B 20-1	23:13	6.77	12.4	74.8	87.6	-ve	-	80 ± 0.2	45	-
208, 248, 254	B 21-1	23:33	7.11	11.6	144	161	0.4	2.08	77 ± 0.3	0	208
196, 206, 248	B 22-1	23:52	7.34	11.1	53.8	49.2	0.4	0.19	91 ± 0.8	0	208
248	B 23-1	24:14	6.66	12.3	93.0	118	-ve	1.41	78 ± 0.4	0	208
del last scan A →	196 B 24-1	24:34	7.06	11.8	267	289	-ve	0.47	81 ± 0.3	0	208
del 5 th scan A (caused by 1 st flicker) →	B 25-1	24:58	6.48	12.6	320	396	1.6	0.37	85 ± 0.3	69.2	208
196, 206, 254	SL 1-10	1:18	6.59	12.8	1379	235	-ve	0.02	560 ± 1.1	574 ± 33	208
206, 207	B 26-1	1:37	6.82	11.3	176	217	0.5	0.32	82 ± 0.3	-	208
196, 206, 207, 248	B 20-2	1:57	6.56	12.8	49.5	59.3	1.0	1.43	83 ± 0.5	0	208

* 1st ↓ during rastering - brought back up to 1.9 - 1.95 1 - stable.



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

Rejection over-ride	Sample/Std ID	Time - printout	UO/U	196 cps	206 cps	U ppm	²⁰⁴ Pb ppb	f ²⁰⁶ %	Age ±1σ (Ma)	206/238	207/206	Corr.
	238, 248, 254	B. 27-1	2:17	6.88	12.0	392	446	0.8	0.07	82 ± 0.1	145 ± 84	208
	248, 254	B. 28-1 (nm)	2:36	6.82	11.7	602	713	0.3	0.09	81 ± 0.1	148 ± 68	208
del 1 st 238 →	196	B. 28-2 (core?)	2:54	6.61	12.4	132	162	3.4	2.41	80 ± 0.2	0	208
A:	196, 206, 248, 254	A. 1-1 ± core (nm.)	3:14	7.88	8.6	16.7K	15408	3.8	0.03	97 ± 0	—	208
	208, 238	A. 2-2 (core?)	3:33	8.17	8.3	17.8K	14661	15.6	0.14	101 ± 0	60 ± 12	208
	196, 206, 248, 254	A. 2-1				Hi 204						
del 1 st 206 →	206, 207	SL 1-11	4:07	6.46	13.4	1162	237	1.3	0.13	477 ± 1	768 ± 33	208
	196, 238, 254	A 3-1 (nm)	4:29	7.13	12.1	307	401	1.8	0.94	63 ± 0.2	20.3	208
	196, 238, 254	A 3-2 (core?)	4:47	7.00	11.9	365	519	5.4	2.00	62 ± 0.1	0	208
		A 4-1 (nm)	5:05	6.99	12.1	379	518	11.2	4.54	62 ± 0.2	0	208
	238, 238	A 4-2 (core?)	5:23	6.64	13.2	119	207	19.7	21.7	42 ± 0.4	0	208
	196, 207, 238, 248	A 5-1	5:48	7.05	11.5	596	840	9.3	1.66	63 ± 0.1	158	208
	248	A 6-1	6:17	6.76	12.1	132	197	8.8	7.73	60 ± 0.3	0	208
	206, 238, 248	A 7-1	6:40	7.53	11.7	1622	1706	21.4	1.96	69 ± 0.1	125	208
del 1 st 238	206	SL 1-12	6:58	6.97	11.8	1382	218	-ve	—	558 ± 13	528 ± 32	208
	0, 206, 207, 208, 238, 248	A. 8-1 (nm)	7:19	6.98	12.0	3250	4036	72.1	2.83	70 ± 0	133	208
del 1 st 206 →	238, 248, 254	A. 8-2 (core?)	7:39	7.09	11.8	299 401	1401	19.2	2.66	60 ± 0.2	0	208
	196, 248, 254	A. 9-1 (nm)	7:57	7.30	11.0	84.6	119	0.1	1.38	61 ± 0.5	0	208
	196, 248	A. 9-2	8:15	6.96	11.6	94.9	149	-ve	0.87	59 ± 0.5	0	208

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