

nstd = 9.5% (slope 2) = 1.23% (no rjns & no exclusions.)

(Actual <1.96> = 1.23%)

UWA DATA LOG: SHRIMP ZIRCON U-Pb

Date	UWA Mount No.	Whose sample?	Operator(s)
1/3/99	99-81	Aprils	IF/AP

  

Indicate any change to the following:

	196	204	bkg	206	207	208	238	248	254	270
<b>Precambrian</b> Count time (secs):	2	10	10	10/20*	30/10*	10	5	5	2	
<b>Phanerozoic*</b> 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 = 8.170      actual 204-bkg = 0.045      expected resolution = >4200  
 actual 206-207 = 1.000      actual 206-208 = 2.000      actual resolution = 4980  
 Primary = 3.2 nA    PESABM = 48 pA    actual Primary : PESABM (= 50:1) = 67  
 Raster time (mins): 3    Raster aperture (microns): 100    No. of scans: 7

Comments: Conductivity problems with mount part, unk A & C. Try larger / zircon  
 NB: Au coat is 3x thicker of normal. eg B & D.

NB: Majority of stds have either (a) fallen out  
 (b) heavily "spotted"  
 (c) have little -> no Au coat!  
 Thus late of stds here! 1st two analysis have wrong 204-206 offsets.

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?
	C2. b-2	13:56	6.88	17.8	1739	220	0.3	0.02	572 ± 1	555 ± 26	But 196-204 0.480 = 10.01 206-207-208 ok
	C2. 1-8	14:37	6.88	19.0	1701	236	0.4	0.03	571 ± 1	547 ± 23	"
	C2. 1-9	15:56	6.84	17.4	1661	220	-ve	-ve	572 ± 1	607 ± 14	offsets ok.
	B 1-1	16:21	6.94	16.9	1636	42	0.8	0.06	2483 ± 10	2456 ± 9	✓
	B. 2-1	16:46	6.56	18.2	3325	93	-ve	-	2511 ± 7	2481 ± 6	✓
	<u>B. 3-1</u>	17:13	6.70	18.4	179	31	0.7	0.55	441 ± 2	314 ± 188	✓ ??
	C2. 6-3	17:38	6.87	18.0	1803	220	0.0	-	591 ± 1	548 ± 14	✓
	B. 4-1	18:01	6.71	17.9	1954	51	0.5	0.03	2550 ± 9	2459 ± 8	✓
	B. 5-1	18:25	6.71	18.7	1923	48	-ve	-	2554 ± 9	2479 ± 7	✓
	B. 6-1	18:48	6.88	17.4	1729	41	0.7	0.05	2667 ± 10	2470 ± 9	✓
	B. 7-1	19:12	6.69	18.2	4947	138	0.3	0.006	2391 ± 5	2438 ± 5	✓

contaminant?

alot of failures

Rejection over-ride Sample/Std ID Time - printout UO/U 196 Kcps 206 cps U ppm <sup>204</sup>Pb ppb f<sup>206</sup> % 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 <sup>206</sup> %	Age ± 1σ (Ma) 206/238	207/206	Offsets OK?
	CZ 6-4	19:35	6.94	17.3	1764	218	1.4	0.12	587 ± 1	485 ± 25	✓
	B. 8-1	20:01	6.79	18.2	1667	41	0.3	0.02	2564 ± 10	2465 ± 10	✓
	B. 9-1	20:24	6.72	18.7	3770	95	0.5	0.02	2526 ± 6	2463 ± 5	✓
	B. 10-1	20:47	7.04	17.6	3982	91	0.5	0.02	2560 ± 7	2461 ± 6	✓
	B. 11-1	21:11	7.42	16.4	1960	42	0.0	0.003	2517 ±	2466 ±	✓
	B. 12-1	21:42	7.14	18.2	7531	161	2.0	0.04	2549 ± 5	2455 ± 4	✓
	B. 13-1	22:16	6.83	18.8	2512	60	-ve	-	2532 ± 8	2504 ± 6	✓
	B. 14-1	22:47	6.99	17.6	2272	54	0.6	0.03	2539 ± 9	2474 ± 7	✓
	CZ 6-5	23:14	6.70	17.6	1693	229	-	-	589 ± 1	512 ± 15	✓
	B. 15-1	23:38	5.10	16.0	1629	145	-ve	-	2225 ± 7	2435 ± 8	✓ dis
	B. 16-1	24:01	7.12	17.5	1773	40	0.2	0.01	2563 ± 10	2461 ± 8	✓
	B. 17-1	24:25	5.96	19.0	4260	164	3.2	0.06	2401 ± 5	2437 ± 5	✓ OK.
	B. 18-1	24:54	7.02	17.3	7462	181	2.8	0.05	2486 ± 5	2451 ± 4	✓
	B. 19-1	1:17	6.38	19.4	1244	35	0.9	0.07	2521 ± 11	2465 ± 11	✓
	B. 20-1	1:41	6.68	18.6	1474	38	1.2	0.09	2547 ± 10	2477 ± 10	✓
	B. 21-1	2:03	5.51	15.0	2550	180	-ve	-	2216 ± 6	2455 ± 6	✓ dis
	B. 22-1	2:26	6.63	18.8	1880	49	0.2	0.01	2540 ± 9	2463 ± 8	✓
	CZ 6-6	2:50	6.44	16.8	1562	249	-ve	-	589 ± 1	577 ± 15	✓
	B. 23-1	3:12	6.66	17.9	1983	52	0.8	0.05	2596 ± 9	2473 ± 8	✓
	B. 24-1	3:35	6.82	17.7	4129	140	0.1	0.004	2542 ± 6	2475 ± 5	✓
	B. 25-1	3:58	7.08	17.2	3834	88	0.9	0.03	2580 ± 7	2466 ± 5	✓
	B. 26-1	4:24	6.80	18.0	826	21	0.3	0.05	2512 ± 14	2449 ± 12	✓
	B. 27-1	4:48	6.81	17.6	4032	103	-ve	-	2517 ± 6	2468 ± 5	✓
	B. 28-1	5:10	6.15	21.4	6288	208	7.0	0.12	2247 ± 4	2399 ± 5	✓
	B. 21-10	5:10	6.95	17.5	1782	217	0.4	0.04	589 ± 1	511 ± 22	✓

alot of failures 206 → UO

1° ↓ ≈ 30%

NB: v. close to earlier spots.

cps okay!

cps okay!

cps a little low.

UO/U slightly ↓

Mount/sample No: 99-81

Date: 2/3/00

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Rejection over-ride	Sample/ Std ID	Time - printout	UO/U Kcps	196 cps	206 cps	U ppm	204Pb ppb	f206 %	Age ±1σ (Ma) 206/238	207/206	Offsets OK?
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	B.29-1	5:56	5.51	15.6	2404	166	-ve	-	2171 ± 6	2445 ± 7	✓
	B.30-1	6:19	6.27	19.8	2609	75	1.1	0.04	2577 ± 8	2478 ± 8	✓
	B.31-1	6:52	6.51	18.4	4891	144	0.2	0.004	2428 ± 5	2465 ± 5	✓
	B.32-1	7:15	7.56	16.1	1758	38	0.0	0.001	2439 ±	2480 ±	✓
	B.33-1	7:39	6.88	17.4	2848	68	0.6	0.03	2618 ± 8	2467 ± 6	✓
	B.34-1	8:01	6.89	16.6	2852	75	-ve	-	2521 ± 7	2473 ± 6	✓
	B.35-1	8:25	6.61	18.3	2328	62	2.4	0.11	2554 ± 8	2440 ± 8	✓
	C2 1-11	8:48	6.72	17.0	1630	229	0.0	-	581 ± 1	544 ± 15	✓

cps appears okay! if slightly down a lot of failures

cps slightly down. OK. a lot of failures

cps slightly down

dis

2