

UWA DATA LOG: SHRIMP ZIRCON U-Pb

Date	UWA Mount No.	Whose sample?	Operator(s)
13/798	98-11	Frank B.	IF + FB

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 ✓	5 ✓	2 ✓
Phanerozoic*	Delay time (secs):	8	3 ✓	1 ✓	2 ✓	1 ✓	3 ✓	2 ✓	2 ✓	

expected 196-204 = 8.170 amu expected 204-bkg = 0.040 amu Dead-time = 32 nanosecs
 actual 196-204 = 8.167 actual 204-bkg = 0.043 expected resolution = >4200
 actual 206-207 = 1.000 actual 206-208 = 2.000 actual resolution = 5560
 Primary = 4.0 nA PESABM = 45 pA actual Primary : PESABM (≈ 50:1) = 89
 Raster time (mins): 1 Raster aperture (microns): 100 No. of scans: 6

Comments: Sensitivity ~ 12

Rejection over-ride	Sample/ Std ID	Time - printout	UO/U	196 cps	206 cps	U ppm	204Pb ppb	f ₂₀₆ %	Age ±1σ (Ma) 206/238 207/206	204-196 Corr. 207-206
	sl. 8-1	10:45	6.65	15.3	1583	220	0.7	.02	572 ± 1 532 ± 92	8.1676 1.000
	sl. 8-2	11:00	6.65	13.5	1344	232	1.1	.01	581 ± 1 605 ± 31	- " -
	sl. 8-3	11:27	6.62	14.9	1555	220	-0.1	-	572 ± 1 584 ± 29	- " -
	C. 1-1	11:45	6.62	13.9	520	126	0.3	-.07	420 ± 1 435 ± 53	- " -
	C. 61-1	12:01	6.62	14.2	1411	263	9.9	1.2	396 ± 1 699 ± 30	- " -
	C. 2-7	12:07	6.62	13.2	957	176	-1.3	-	402 ± 1 460 ± 39	- " -
	sl. 8-4	12:33	6.62	13.2	1535	208	0.1	.01	579 ± 1 590 ± 29	- " -
	C. 3-1	12:49	6.62	14.3	1317	271	2.8	.29	396 ± 1 413 ± 34	- " -
	C. 6-1	13:05	6.62	11.6	287	127	-0.2	-	333 ± 1 506 ± 69	- " -
	C. 10-1	13:20	6.62	13.9	455	92.9	1.2	.1	395 ± 1 476 ± 56	- " -
	sl. 8-5	13:36	6.62	14.2	1491	219	0.2	.01	569 ± 1 546 ± 30	- " -

Pb loss? → loss of Pb through
PD ✓

Rejection over-ride	Sample/ Std ID	Time - printout	UO/U μ cps	196 cps	206 cps	U ppm	204pb ppb	f206 %	Age $\pm 1\sigma$ (Ma) 206/238	207/206	204-196 Corr- 207-206
	C-11-1	13:59	6.62	14.7	119	22.5	0.9	1.1	419 \pm 2	751 \pm 96	R.167 1.000
	C-12-1	14:09	6.62	14.5	1356	258	3.0	.33	383 \pm 1	525 \pm 33	-"-
	C-13-1	14:25	6.62	14.4	1572	333	0.7	.07	387 \pm 1	396 \pm 31	-"-
	sl. 7-1	14:40	6.62	14.6	1524	206	0.5	.05	551 \pm 1	551 \pm 30	-"-
	C-14-1	14:55	6.62	13.4	850	178	0.9	.15	394 \pm 1	409 \pm 42	-"-
	C-15-1	15:10	6.62	14.1	773	148	-0.7	-	400 \pm 1	376 \pm 45	-"-
	C-71-1	15:26	6.62	14.5	912	187	0.1	.01	387 \pm 1	460 \pm 40	-"-
	sl. 7-2	15:41	6.62	14.9	1554	204	-0.5	-	561 \pm 1	587 \pm 29	-"-
	C-72-1	15:56	6.62	14.7	1152	242	0.4	.05	404 \pm 1	447 \pm 36	-"-
	C-73-1	16:12	6.62	13.7	155	30.9	0.7	.03	410 \pm 2	431 \pm 96	-"-
	C-74-1	16:27	6.62	14.0	1810	368	-0.3	-	402 \pm 1	349 \pm 30	-"-
	sl. 7-3	16:42	6.62	14.9	1582	207	0.6	.06	572 \pm 1	577 \pm 29	-"-
	C-75-1	16:58	6.62	14.4	1375	253	6.3	.68	401 \pm 1	664 \pm 30	-"-
	C-76-1	17:19	6.62	14.1	1537	298	0.5	.26	391 \pm 1	355 \pm 32	-"-
	C-76-2	17:34	6.62	14.6	664	125	0.7	.04	401 \pm 1	470 \pm 47	-"-
	sl. 7-4	17:49	6.62	13.6	1641	207	0.1	.03	576 \pm 1	517 \pm 29	-"-
	C-16-1	18:05	6.62	15.3	381	71.2	3.6	1.3	410 \pm 1	862 \pm 53	-"-
	C-77-1	18:20	6.62	14.5	727	160	0.8	.15	389 \pm 1	471 \pm 45	-"-
	C-78-1	18:36	6.62	14.6	927	185	1.5	.23	395 \pm 1	428 \pm 40	-"-
	sl. 7-5	18:51	6.62	15.0	1530	199	1.3	.12	580 \pm 1	555 \pm 30	-"-
reject 10	C-17-1	19:06	6.62	14.4	1317	256	1.8	.20	395 \pm 1	564 \pm 32	-"-
	C-18-1	19:21	6.62	14.1	1667	311	1.6	.15	395 \pm 1	576 \pm 29	-"-
(-rounded grain)	C-19-1	19:36	6.62	14.3	241	47.2	1.5	.81	428 \pm 2	415 \pm 78	-"-
	sl. 7-6	19:51	6.62	13.9	1531	205	0.1	.001	576 \pm 1	594 \pm 29	-"-
	C-20-1	20:06	6.62	14.4	1320	223	0.0	0.02	388 \pm 1	387 \pm 34	-"-

round core!

PD 2 ✓

reject 10

(-rounded grain)

PD 3 ✓

↓
labeled 79-1

Rejection over-ride	Sample/ Std ID	Time - printout	UO/U cps	196 cps	206 cps	U ppm	204Pb ppb	f206 %	Age ±1σ (Ma) 206/238 207/206	204-176 Corr. 207-206	
	^{20-1 MSB} C-79-1	20:23	6.62	13.9	2010	385	-0.6	-	406 ± 1	319 ± 29	8167 1.000
	C-21-1	20:38	6.62	15.0	361	78.8	0.9	.4	326 ± 1*	580 ± 59	-"-
	sl. 7-7	20:53	6.62	14.9	1534	203	0.6	.06	573 ± 1	554 ± 30	-"-
	C-22-1	21:08	6.62	14.5	1084	192	10.1	1.4	406 ± 1	758 ± 33	-"-
	C-23-1	21:23	6.62	14.1	1086	215	0.6	.08	387 ± 1	477 ± 37	-"-
	C-25-1	21:39	6.62	14.1	869	176	2.0	.17	380 ± 1	437 ± 41	-"-
	sl. 7-8	21:53	6.62	15.5	1567	206	0.5	.005	581 ± 1	472 ± 31	-"-
	C-26-1	22:08	6.62	14.3	1333	256	1.1	.05	395 ± 1	467 ± 33	-"-
	fixed b C-27-1	22:23	6.62	14.0	838	148	-0.4	-	376 ± 1	345 ± 43	-"-
	C-28-1	22:39	6.62	14.9	779	165	0.6	.01	408 ± 1	353 ± 45	-"-
	sl. 3-1	22:54	6.62	14.2	1559	206	0.6	.06	564 ± 1	531 ± 30	-"-
	C-80-1	23:10	6.62	14.7	486	922	0.3	.10	390 ± 1	452 ± 55	-"-
	C-29-1	23:25	6.62	13.7	1092	208	0.3	.04	407 ± 1	381 ± 38	-"-
	10 a tad flaky (RMA) C-30-1	23:42	6.62	13.7	1195	279	0.7	.08	407 ± 1	399 ± 36	-"-
	sl. 3-2	23:57	6.62	13.5	432	80.8	0.6	.22	413 ± 1	507 ± 57	-"-
	PD 5 ✓ (CORE) C-30-2	00:12	6.62	14.0	1511	213	-0.9	-	545 ± 1	606 ± 29	-"-
	C-81-1	00:27	6.62	14.4	967	188	0.1	.10	392 ± 1	467 ± 39	-"-
	C-82-1	00:43	6.62	15.2	3984	130	0.6	.32	2217 ± 7	2574 ± 9	-"-
	C-83-1	00:58	6.62	14.1	817	150	1.7	.32	393 ± 1	544 ± 41	-"-
	sl. 3-3	01:13	6.62	14.9	1516	212	-0.8	-	552 ± 1	693 ± 28	-"-
	C-34-1	01:29	6.62	14.1	697	112	31.4	7.4	410 ± 1	1987 ± 25	-"-
	C-34-2	01:44	6.62	13.7	1460	268	0.3	.03	387 ± 1	426 ± 50	-"-
	C-39-1	02:00	6.62	14.7	393	76.5	0.0	-	384 ± 1	322 ± 64	-"-
	primary dropped 5-16-5-6! sl. 3-4	02:15	6.62	14.8	1506	182	1.5	.15	615 ± 1	67 ± 36	-"-
	PD 6 ✓ C-40-1	02:31	6.62	15.8	1124	220	-0.8	-	395 ± 2	452 ± 36	-"-

Rejection over-ride	Sample/ Std ID	Time - printout	UO/U k cps	196 cps	206 cps	U ppm	204Pb ppb	f206 %	Age $\pm 1\sigma$ (Ma) 206/238 207/206		204-196 Gerr. 207-206
	A.1-1	02:54	6.62	15.4	945	177	2.0	0.33	385 ± 1	498 ± 39	8.167 1.000
	A.2-1	03:09	6.62	15.5	426	79.6	-0.7	-	390 ± 1	267 ± 63	-"-
	A.4-1	03:25	6.62	14.2	254	41	0.2	.54	508 ± 2	497 ± 74	-"-
	sl.3-5	03:42	6.62	15.0	1692	213	-0.5	-	591 ± 1	512 ± 29	-"-
	A.5-1	04:01	6.62	14.6	807	139	0.2	.03	428 ± 1	405 ± 53	-"-
	A.6-1	04:18	6.62	15.0	1236	87.3	2.6	.18	1031 ± 4	1082 ± 27	-"-
<i>reject 1°</i>	A.8-1	04:35	6.62	14.8	599	137	2.4	.18	345 ± 1	384 ± 51	-"-
	A.13-1	04:51	6.62	15.8	1408	153	2.3	.22	702 ± 2	915 ± 2	-"-
	sl.3-6	05:06	6.62	16.4	1660	213	0.0	-	558 ± 1	571 ± 29	-"-
	A.9-1	05:22	6.62	15.0	804	68.5	2.4	.11	863 ± 3	913 ± 36	-"-
<i>reject 6°</i>	A.14-1	05:41	6.62	15.6	1860	358	3.2	.25	399 ± 1	436 ± 28	-"-
PD 7(10) ✓	A.7-1	05:59	6.62	16.3	14303	343	9.7	.01	2219 ± 4	2465 ± 5	-"-
	sl.3-7	06:16	6.62	17.1	1635	214	-0.9	-	562 ± 1	493 ± 30	-"-
	C.46-1	06:35	6.62	15.1	972	170	9.1	1.1	385 ± 1	460 ± 33	-"-
	C.47-1	06:53	6.62	15.0	1011	191	-0.3	-	404 ± 1	398 ± 39	-"-
	C.50-1	07:09	6.62	15.0	1144	205	-0.7	-	386 ± 1	401 ± 37	-"-
<i>reject 5°</i>	sl.3-8	07:24	6.62	15.5	1513	208	-1.1	-	539 ± 1	483 ± 31	-"-
	C.51-1	07:39	6.62	15.1	807	140	-0.9	-	406 ± 1	352 ± 44	-"-
<i>>usped.</i>	C.52-2	07:54	6.62	11.7	1533	615	-1.0	-	378 ± 1	385 ± 31	-"-
	C.52-1	08:09	6.62	14.4	1479	354	1.2	-	375 ± 1	-	-"-
<i>reject 5.6°</i>	sl.3-9	08:25	6.62	16.3	1378	259	-1.4	-	644 ± 1	770 ± 30	-"-

PD 8

error on 22 standards 1.69 %
 error on 17 standards 1.70 %