

UWA SHRIMP DATA LOG

Date: 16/1/00 UWA Mount No. 99-61 Whose sample? Nval Operator(s) McV + AP

Indicate any change to the following: 196 204 bkg 206 207 208 238 248 254 270
 Precambrian Count time (secs): 2 7 7 10/20 30/10 5 5 2
 Phanerozoic* Delay time (secs): 8 3 1 2 1 1 3 2 2

Steel: Wein volts / nA = 64V/14.0 for O⁻; = 42V/1.1 for O₂⁻; = 32V/2.5 for NO⁻
 dead-time = 32 nanosecs expected resolution = >4200 actual resolution = 4678
 aperture = ? microns retardation lens = volts

Expected offsets (amu): 196-204 = 8.170; 204-bkg = 0.045; 204-206 = 2.000; 206-207 = 1.000; 206-208 = 2.000
 Actual: 196-204 = 8.170 204-bkg = 0.045 204-206 = 2.000
 206-207 = 1.000 206-208 = 2.000

NO₂ Primary-epoxy = 2.0 nA Primary-CZ3 = 2.9 nA PESABM-CZ3 = 54 pA
 Raster time (mins): 1 Raster aperture (microns): 120 No. of scans: 4

Comments: Note → using NO₂ peak!
 Proc. note 23/2/00
 3 cal shift when I dido changed.
 - Delete data up to 13:00 hrs.
 (or process separately)

* Ap offset -0.01

Rejection override	Sample/ Std ID	Time - printout	UO/U	196 Kcps	206 cps	U ppm	204Pb ppb	f ₂₀₆ %	Age ±1σ (Ma) 206/238	207/206	Offsets OK?
	S1.4-1	11:10	4.88	36.9	1378	220	-3.0	/	572 ± 1	602 ± 24	✓
	S1.4-2	11:23	5.01	37.8	1417	206	2.1	.20	547 ± 1	538 ± 38	✓
	B.30-1	11:38	5.03	35.9	3.3K	91.3	79.1	2.45	2485 ± 10	2697 ± 18	✓
	B.110-1	11:50	4.93	36.3	3.1K	93.3	10.0	.32	2501 ± 10	2544 ± 11	✓
	S1.3-1	12:02	4.92	38.3	1412	213	0.8	.07	560 ± 1	541 ± 39	✓
	B.111-1	12:14	4.77	38.3	2188	66.3	-1.7	/	2716 ± 13	2564 ± 10	✓
	B.31-1	12:25	4.76	37.6	2.5K	84.7	-0.1	/	2571 ± 11	2579 ± 9	✓
	B.112-1	12:37	4.73	37.6	3.3K	106	3.6	.09	2697 ± 10	2569 ± 9	✓

bx ThO

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?

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?
	B.112-2	12:48	4.89	40.8	3.0K	83.8	-0.8	/	2512 ± 10	2574 ± 8	✓
	sl.3-2	13:00	4.90	40.5	1430	218	0.1	.01	537 ± 1	532 ± 25	✓
	<i>Turned up arc current to try + stabilize 10 → one dropped out</i>										
	sl.3-3	13:41	4.83	38.9	1416	228	-0.1	/	565 ± 1	562 ± 24	✓
	sl.3-4	13:53	4.77	38.6	1332	236	-0.6	/	545 ± 1	603 ± 24	✓
	B.113-1	14:05	4.81	37.5	2766	87	1.7	.06	2585 ± 11	2557 ± 11	✓
	B.114-1	14:18	4.76	38.3	2227	69	1.9	-0.7	2685 ± 12	2648 ± 11	✓
	B.115-1	14:35	4.79	37.8	2534	67	4.4	.14	3028 ± 14	3017 ± 9	✓
	B.116-1	14:48	4.77	38.2	2085	67	0.9	.04	2590 ± 12	2566 ± 11	✓
	sl.3-5	15:00	4.83	37.8	1349	229	-ve	-ve	549 ± 1	565 ± 24	✓
	B.117-1	15:17	4.79	37.1	2748	91	14.6	.46	2551 ± 11	2558 ± 13	✓
	B.118-1	15:30	4.76	37.5	3786	104	-ve	-ve	2625 ± 10	2571 ± 8	✓
	B.119-1	15:41	4.77	37.1	2206	72	5.2	0.20	2609 ± 12	2546 ± 12	✓
	B.120-1	15:52	4.78	37.3	2916	96	6.4	.19	2587 ± 10	2572 ± 11	✓
	sl.3-6	16:08	4.82	38.8	1367	229	3.0	.06	547 ± 1	470 ± 52	✓
	B.121-1	16:21	4.80	38.0	1319	42	-ve	-ve	2569 ± 15	2660 ± 12	✓
	B.122-1	16:33	4.76	38.7	3413	110	7.1	.18	2574 ± 9	2561 ± 9	✓
	B.123-1	16:44	4.72	39.0	1162	38	1.7	-.12	2628 ± 17	2597 ± 15	✓
	B.124-1	16:56	4.78	39.7	960	29	3.0	-.28	2640 ± 19	2653 ± 21	✓
	B.125-1	17:08	4.76	40.3	2276	70	8.0	.32	2580 ± 12	2657 ± 11	✓
	sl.1-1	17:20	4.92	36.8	1348	215	4.0	.37	551 ± 1	406 ± 57	✓
	B.126-1	17:39	4.79	38.7	2493	73	-ve	-ve	2718 ± 12	2638 ± 9	✓
	B.127-1	17:51	4.72	38.8	1724	54	3.1	.15	2734 ± 15	2656 ± 14	✓
	B.36-1	18:02	4.76	37.1	676	21	2.7	.33	2798 ± 24	2676 ± 24	✓
	B.37-1	18:14	4.83	37.6	1614	49	2.4	-.14	2629 ± 14	2556 ± 12	✓

NO
I^o = 2.8

I^o = 2.6-2.7

I^o = 2.7 v. stable

I^o stable/fairly

Rejection over-ride	Sample/ Std ID	Time - printout	UO/U Kcps	196 cps	206 cps	U ppm	204Pb ppb	f ₂₀₆ %	Age ±1σ (Ma) 206/238	207/206	Offsets OK?
	SL1-2	18:28	4.80	38.3	1315	230	1.0	.09	547 ± 1	468 ± 48	✓
	B.38-1	18:40	4.83	37.1	2682	79	4.1	.14	2695 ± 11	2662 ± 10	✓
	B.40-1	18:52	4.76	37.3	1273	40	0.6	.04	2689 ± 17	2760 ± 13	✓
	B.128-1	19:04	4.81	36.7	2171	69	3.3	.13	2625 ± 12	2574 ± 12	✓
	B.129-1	19:16	4.77	37.2	1709	57	2.2	.11	2810 ± 15	2754 ± 12	✓
	SL1-3	19:29	4.81	36.3	1265	231	-ve	-ve	545 ± 1	519 ± 26	✓
	B.42-1	19:41	4.84	37.0	1742	52	-ve	-ve	2667 ± 14	2674 ± 11	✓
	B.130-1	19:52	4.87	37.2	1239	38	0.1	.006	2554 ± 15	2597 ± 13	✓
	B.43-1	20:04	4.82	35.0	728	22	-ve	-ve	2790 ± 23	2651 ± 17	✓
	B.131-1	20:17	4.23	36.4	1989	91	2.0	.04	3405 ± 22	2642 ± 10	✓
	SL1-4	20:37	4.76	37.6	1284	225	1.5	.13	571 ± 1	508 ± 55	✓
	B.132-1	20:54	4.85	36.0	4140	109	3.8	.08	2984 ± 11	2999 ± 7	✓
	B.45-1	21:11	4.83	35.2	1230	41	6.9	.48	2575 ± 16	2529 ± 21	✓
	B.133-1	21:23	4.82	34.9	1944	61	1.7	.07	2729 ± 14	2682 ± 11	✓
	B.134-1	21:34	4.99	34.2	2366	74	2.4	.10	2471 ± 11	2602 ± 12	✓
	B.135-1	21:52	4.80	35.0	2901	97	3.7	.10	2631 ± 11	2650 ± 10	✓
	SL10-1	22:05	4.81	35.3	1211	225	-ve	-ve	546 ± 1	599 ± 25	✓
	B.135-2	22:16	4.85	34.2	2718	86	4.3	0.13	2682 ± 11	2605 ± 10	✓
	B.52-1	22:30	4.97	34.9	1480	43	0.4	.03	2587 ±	2690 ±	✓
	B.136-1	22:42	4.74	34.8	2871	103	3.3	0.09	2614 ± 10	2578 ± 9	✓
	B.136-2	22:54	4.74	37.8	2274	75	-ve	-ve	2619 ± 12	2577 ± 10	✓
	B.137-1	23:07	4.86	38.3	2308	66	2.3	.09	2648 ± 12	2665 ± 11	✓
	SL10-2	23:19	4.84	38.9	1395	230	-ve	-ve	549 ± 1	573 ± 24	✓
	B.49-1	23:33	4.81	38.5	1384	42	3.1	.22	2611 ± 15	2645 ± 15	✓
	B.138-1	23:45	4.66	37.9	1779	59	4.3	.19	2771 ± 15	2696 ± 14	✓

1° stepping

centring went
bunk for scan 4 * last scan
U, Th, UO.

1 min raster = 230 cps Pb204
+ 2 min raster = ~3 cps Pb204!

stepping

1° fluctuate
2.5-2.8 nA! → last scan
resp during scan 4.
1° spiky 2.7-2.8 →

Rejection override	Sample/ Std ID	Time - printout	UO/U	196 Kcps	206 cps	U ppm	204Pb ppb	f ₂₀₆ %	Age ±1σ (Ma) 206/238 207/206		Offsets OK?
	B.139-1	24:01	4.89	37.2	2822	84	5.4	.18	2567 ± 10	2558 ± 11	✓
	B.140-1	24:13	4.81	36.5	1864	100	3.6	.19	<u>1677 ± 6</u>	<u>1638 ± 23</u>	✓
	B.141-1	24:25	4.78	38.7	2876	84	4.2	.13	2741 ± 11	2735 ± 9	✓
	SL.10-3	24:39	4.74	38.4	1283	234	-ve	-ve	551 ± 1	581 ± 25	✓
	B.142-1	24:56	4.81	39.4	1863	57	7.9	.40	2559 ± 13	2554 ± 15	✓
	B.143-1	1:08	4.76	40.3	1137	35	10.0	.79	2568 ± 17	2636 ± 21	✓
	B.144-1	1:20	4.64	29.2	2478	87	5.6	.17	2634 ± 12	2713 ± 10	✓
	B.145-1	1:32	4.82	37.9	2893	84	19.0	.59	2701 ± 11	2731 ± 12	✓
	B.146-1	1:44	4.80	35.9	3643	120	0.9	.02	2597 ± 9	2577 ± 8	✓
	SL.11-1	1:56	4.78	37.4	231	2.7	2.70	.22	562 ± 1	466 ± 53	✓
	B.147-1	2:08	4.79	37.5	2188	70	3.1	.12	2604 ± 12	2581 ± 11	✓
	B.148-1	2:20	4.77	36.6	1464	47	0.4	.03	2681 ± 15	2660 ± 13	✓
	B.149-1	2:31	4.87	35.0	2744	90	8.6	.28	2515 ± 10	2560 ± 11	✓
	B.53-1	2:43	4.77	34.8	1526	57	4.0	.20	2698 ± 15	2647 ± 15	✓
	B.150-1	2:55	4.81	36.6	3062	102	6.8	.19	2513 ± 10	2550 ± 11	✓
	SL.11-2	3:08	4.76	36.2	1279	242	3.0	.25	550 ± 1	411 ± 58	✓
	B.54-1	3:21	4.75	38.0	1269	41	4.1	.27	2613 ± 16	2628 ± 15	✓
	B.151-1	3:34	4.75	36.7	1768	61	-ve	-ve	2581 ± 13	2578 ± 11	✓
	B.152-1	3:47	4.81	34.9	1901	65	0.3	.01	2547 ± 12	2567 ± 11	✓
	B.153-1	3:59	4.81	34.3	2441	84	2.7	.09	2600 ± 11	2554 ± 10	✓
	B.58-1	4:32	4.83	35.4	1485	46	5.4	.31	2729 ± 16	2649 ± 15	✓
	SL.11-3	4:45	4.79	33.8	1293	244	2.4	.18	574 ± 1	477 ± 50	✓
	B.154-1	4:58	4.86	35.3	1608	49	1.1	.06	2691 ± 15	2647 ± 12	✓
	B.154-2	5:09	4.75	36.1	2461	82	-ve	-ve	2690 ± 12	2668 ± 9	✓
	B.155-1	5:21	4.85	35.3	1878	51	2.7	.12	2985 ± 16	2984 ± 10	✓

let ThO

1° noisy

⊖

⊖

⊖

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61

⊖

Rejection over-ride	Sample/ Std ID	Time - printout	UO/U	196 Kcps	206 cps	U ppm	204Pb ppb	f206 %	Age $\pm 1\sigma$ (Ma)		Offsets OK?
									206/238	207/206	

	B.156-1	05:34	4.98	35.5	1853	55	1.0	.05	2508 ± 12	2566 ± 12	✓
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pecks disappeared

	B.157-1	05:45	4.84	34.8	3082	107	7.4	.21	2491 ± 9	2542 ± 10	✓
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	SLS-1	6:22	4.81	35.5	1275	237	0.6	.05	547 \pm	542 \pm	✓
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FOLLOW ON WITH POP C. SEE NEW SHEET 1 DIFF. RUN TABLE