

UWA SHRIMP DATA LOG

Date: 11/2/02 UWA Mount No.: B-93 Whose sample?: NK Operator(s): McNV + NK

Indicate any change to the following: 196 204 bkg 206 207 208 238 248 254 270 ^{196 HfO₂ 2 8}

Precambrian Count time (secs): 2 10 10 10/20* 30/10* 10 5 5 2
Phanerozoic* Delay time (secs): 8 3 1 2 1 1 3 2 2

Steel: Wein volts / nA = 375/914/1.7 for O₂⁻; = 264/644/4.3 for O₂²⁻; = 218/52/14 for NO₂

dead-time = 32 nanosecs expected resolution = >4200 actual resolution = 4456

aperture = 100 microns retardation lens = 0 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 ± 10

206-207 = 1.000 206-208 = 2.000

Primary-epoxy = 3.8 nA Primary-CZ3 = 5.3 nA PESABM-CZ3 = 91 pA

Raster time (mins): 1 Raster aperture (microns): 60 No. of scans: 5

Comments:

when process → remember

Rejection over-ride	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?
	<u>C2.1-1</u>	<u>9:46</u>	<u>5.94</u>	<u>33</u>	<u>3300</u>	<u>238</u>	<u>0.3</u>	<u>.03</u>	<u>572 ± 3</u> <u>559 ± 22</u>	<u>✓</u>
	<u>C2.1-2</u>	<u>10:03</u>	<u>5.98</u>	<u>34</u>	<u>3300</u>	<u>242</u>	<u>0.3</u>	<u>.03</u>	<u>579 ± 5</u> <u>512 ± 28</u>	<u>✓</u>
	C2.1-2									
	<u>C2.1-3</u>	<u>10:18</u>	<u>5.96</u>	<u>34</u>	<u>3400</u>	<u>241</u>	<u>0.3</u>	<u>-.02</u>	<u>580 ± 7</u> <u>575 ± 23</u>	<u>✓</u>
	<u>1-1</u>	<u>10:34</u>	<u>6.01</u>	<u>35</u>	<u>7100</u>	<u>73</u>	<u>2.8</u>	<u>.013</u>	<u>3162 ± 20</u> <u>3151 ± 5</u>	<u>✓</u>
	<u>2-1</u>	<u>10:49</u>	<u>6.47</u>	<u>33</u>	<u>3300</u>	<u>37</u>	<u>0.7</u>	<u>.05</u>	<u>2801 ± 25</u> <u>2982 ± 9</u>	<u>✓</u>
	<u>3-1</u>	<u>11:05</u>					<u>rubbish</u>			
	C2.1-4									

207 = 20secs
changed 207 to 30secs

1° dropped off during scan 3 → had to adjust Det γ + Deflection γ + 2 deg 1° back close to original!

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?
	²⁸⁹³ CZ-1-4	11:30	6.07	3.2	3.2	235.8	2.5	0.00213	570 ± 2.8	537 ± 22.5	✓
	CZ-1-5	11:46	6.01	3.2	3.2	235.2	-0.2	-ve	568 ± 5.7	598 ± 42	✓
UB93	again UB93-3-1	12:00	5.37	3.5	1.9	23.9	15.0	0.01985	2950 ± 30	3068 ± 19	✓
	UB93-4-1	12:21	6.10	3.1	5.0	56.1	3.0	0.00160	3101 ± 90	3134 ± 42	✓
	UB93-5-1	12:36	5.90	3.0	2.7	35.7	1.8	0.00166	2919 ± 28	2944 ± 16	✓
	6-1	12:51	6.17	3.1	4.0	45.5	2.2	0.00146	3074 ± 33	3050 ± 17	✓
	CZ-1-6	13:07	6.04	3.1	5.8	69.6	1.3	0.00060	2976 ± 24	2911 ± 10	✓
	CZ-1-6	13:22	6.03	3.1	3.1	237.6	1.0	0.00087	568 ± 2.8	579 ± 21	✓
	8-1	13:37	5.97	2.8	4.0	54.2	2.1	0.00127	2986 ± 31	2897 ± 8	✓
	9-1	13:52	6.03	3.1	7.9	93.8	3.5	0.00120	2979 ± 149	2998 ± 43	✓
	10-1	14:07	6.03	3.1	2.7	40.5	1.6	0.00112	3205 ± 26	3144 ± 68	✓
	11-1	14:22	5.97	3.1	2.5	30.8	1.7	0.00171	2964 ± 34	2934 ± 98	✓
HIGHLY DISCORDANT	12-1	14:42	6.18	2.9	5.4	53.8	207.5	0.09752	3289 ± 369	2583 ± 666	✓
	13-1	14:57	6.11	3.2	2.4	27.8	0.1	0.00017	3016 ± 38	3037 ± 7	✓
	CZ-1-7	15:12	5.97	3.1	3.0	235.6	0.2	0.00014	561 ± 3.6	614 ± 22.6	✓
	14-1	15:27	5.88	3.2	2.9	34	2.5	0.00220	3092 ± 28	3063 ± 12.7	✓
	15-1	15:43	6.01	3.1	4.4	52.5	3.8	0.00230	2990 ± 24	2904 ± 7.6	✓
	16-1	15:58	6.02	3.1	1.2	148.9	3.4	0.00074	2942 ± 15	3044 ± 5.7	✓
	17-1	16:13	6.02	2.8	1.4	17.6	1.9	0.00330	3073 ± 53	3098 ± 13	✓
	18-1	16:28	6.04	3.0	4.9	61.6	1.3	0.00070	2931 ± 97	2923 ± 36	✓
	19-1	16:42	6.03	3.1	2.6	30.2	0.5	0.00053	3011 ± 52	3086 ± 28	✓
	CZ-1-8	16:57	6.07	3.2	3.1	232.5	1.2	0.00109	561 ± 7	528 ± 25	✓
	20-1	17:13	6.13	3.1	3.3	40	3.0	0.00248	2876 ± 29	2920 ± 14.7	✓
V. YOUNG! →	21-1	17:28	6.30	3.2	7.8	111.7	2.9	0.00108	2384 ± 21	2808 ± 21	✓
	22-1	17:43	6.14	3.1	3.9	46.4	2.0	0.00137	2971 ± 78	2930 ± 6.8	✓

B85
B99

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?
	23-1	17.58	5.85	3.0	1.8	20.4	1.6	.00226	3214 ± 43	3106 ± 10	✓
	24-1	18.13	5.95	3.1	3.0	34	3.1	.00262	3186 ± 32	3125 ± 11	✓
	25-1	18.38	6.02	3.0	5.2	65.5	5.1	.00250	2952 ± 21	2906 ± 12	✓
	C21-9	18.52	5.95	3.2	3.1	231.5	-0	-ve	575 ± 6	621 ± 27	✓
	26-1	19.09	6.03	3.1	9.5	123.2	3.7	.00104	2789 ± 35	2897 ± 12	✓
	27-1	19.24	6.14	3.1	4.6	58.6	1.5	.00098	2819 ± 19	2886 ± 7.2	✓
	28-1	19.39	6.09	3.0	5.2	64.9	1.5	.00076	2930 ± 27	2917 ± 8	✓
	29-1	19.54	6.14	2.9	6.1	76.2	1.4	.00059	2960 ± 18	2901 ± 5	✓
	30-1	20.09	5.95	3.1	2.8	33.3	1.7	.00159	3036 ± 30	3064 ± 15	✓
	C2.2-1	20.24	6.09	3.1	3.1	234.4	2.0	.00169	571 ± 34	472 ± 39	✓
	31-1	20.39	6.02	3.1	3.0	36	1.2	.00104	3041 ± 29	3080 ± 8	✓
	32-1	20.54	5.94	3.1	2.1	24	0.3	.00040	3064 ± 36	3090 ± 14	✓
	33-1	21.08	6.05	3.0	2.2	26.3	0.7	.00079	3090 ± 39	3074 ± 9	✓
	34-1	21.24	6.01	3.0	2.9	35.9	1.5	.00131	2969 ± 32	2917 ± 15	✓
	35-1	21.39	5.88	2.9	2.3	31.2	-0.2	-ve	28.51	2927	✓
	36-1	21.54	6.12	3.0	4.8	61.4	1.9	.00103	2868 ± 30	2921 ± 17	✓
	C2.2-2	22.08	6.02	3.1	3.0	226.9	-0.4	-ve	574 ± 4.2	590 ± 25	✓
	37-1	22.24	6.07	3.1	1.4	170.5	1.0	.00020	2813 ± 17	2893 ± 9	✓
	38-1	22.38	6.18	3.0	3.8	44.6	3.0	.00210	2983 ± 26	3088 ± 7.8	✓
	39-1	22.53	5.91	3.1	3.1	38	1.8	.00145	3027 ± 27	3070 ± 6.7	✓
	40-1	23.08	6.26	3.0	1.9	21.8	2.9	.00410	3032 ± 41	3060 ± 13	✓
	41-1	23.23	5.94	2.9	4.2	56.3	1.4	.00080	2879 ± 22	2928 ± 6	✓
	42-1	23.38	6.06	3.1	3.8	46.9	1.2	.00085	2932 ± 25	2908 ± 6	✓
	C2.2-3	23.53	6.02	3.1	3.0	230	0.3	.00025	568 ± 7	614 ± 39	✓
	43-1	00.08	6.02	3.1	3.5	39	1.4	.00102	3171 ± 25	3139 ± 8	✓

Rejection over-ride	Sample/ Std ID	Time - printout	UO/U Kcps	196 Kcps	206 cps	U ppm	204Pb ppb	f206 %	Age ±1σ (Ma) 206/238	207/206	Offsets OK?
	44-1	00:24	6.12	3.1	2.9	33.8	2.4	0.00220	3052 ± 29	3038 ± 8.8	✓
	45-1	00:39	5.84	3.0	3.7	49.5	2.1	0.00139	2863 ± 22	2918 ± 6.8	✓
	46-1	00:54	6.03	3.1	4.0	44.3	0.9	0.00062	3167 ± 31	3161 ± 6.5	✓
	47-1	01:09	5.91	3.1	2.3	26.5	2.1	0.00243	3103 ± 52	3102 ± 22	✓
	48-1	i-24	5.88	3.0	1.4	17.8	2.8	0.00501	2980 ± 37	3058 ± 19	✓
	C2-2-4	1.39	6.07	3.0	2.9	230.1	1.3	0.00118	558 ± 3	629 ± 27	✓
	49-1	1.56	5.99	3.1	2.1	25.5	0.3	0.00044	2941 ± 87	2936 ± 38	✓
	50-1	2.10	6.14	3.0	7.9	99.2	2.8	0.00092	2994 ± 25	2919 ± 13.5	✓
	51-1	2.25	5.96	3.1	6.6	8.6	1.0	0.00040	2873 ± 17	2921 ± 6	✓
	52-1	2.40	5.98	3.0	2.6	32.9	2.9	0.00272	3013 ± 30	3075 ± 20	✓
	53-1	2.55	5.83	3.0	3.7	41.9	2.2	0.00151	3250 ± 524	3049 ± 173	✓
	54-1	3.11	5.97	3.0	4.2	51.5	2.4	0.00142	3038 ± 30	3063 ± 6	✓
	C2-2-5	3.26	5.95	3.1	2.9	226.7	-0.0	-ve	561 ± 3	600 ± 20	✓
	55-1	3.41	6.08	3.0	6.2	77.8	1.1	0.00047	2897 ± 21	2921 ± 8.6	✓
	56-1	3.56	5.92	3.0	9.3	118.9	3.3	0.00088	2975 ± 36	3000 ± 15	✓
	57-1	4.10	6.07	3.0	1.2	14.7	3.6	0.00747	3036 ± 52	3027 ± 21	✓
	58-1	4.26	5.99	2.9	3.2	38.9	0.5	0.00043	3067 ± 28	3066 ± 9	✓
	59-1	4.40	6.01	3.1	6.4	81.1	2.3	0.00090	2857 ± 26	2921 ± 14	✓
	60-1	4.56	5.84	3.2	8.1	104.8	2.0	0.00064	2847 ± 19	2921 ± 9.7	✓
	C2-2-6	5.10	5.99	3.1	2.8	221.7	0.2	0.00018	560 ± 7	614 ± 34	✓
	61-1	5.27	5.94	3.2	2.8	34.7	1.6	0.00155	2701 ± 58	3007 ± 8	✓
	62-1	5.41	5.90	2.8	2.0	27.4	2.1	0.00251	2934 ± 41	3077 ± 9	✓
	63-1	5.56	6.12	3.0	2.6	32.4	1.2	0.00125	2913 ± 53	2911 ± 11	✓
	64-1	6.11	6.23	2.9	7.7	112.9	5.2	0.00173	2582 ± 22	2814 ± 5	✓
	65-1	6.26	5.97	3.0	2.3	28	1.4	0.00159	3015 ± 35	3054 ± 16	✓
	66-1	6.41	6.15	2.9	5.0	63.3	0.7	0.00034	2937 ± 20	2909 ± 7	✓
	C2-2-7	6.56	5.96	3.1	2.8	221.3	1.6	0.00147	555 ± 3	555 ± 24	✓