

UWA SHRIMP DATA LOG

Date: 7/10/99 UWA Mount No.: 99-15 Whose sample?: Mustard Operator(s): McN + AR

Indicate any change to the following: 196 204 bkg 206 207 208 238 248 254 ~~270~~

~~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 = 34V/8.0 for O⁻; 43V/5.5 for O₂⁻; 66V/25.0 for NO⁻

dead-time = 32 nanosecs expected resolution = >4200 actual resolution = 5090

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
 206-207 = 1.000 206-208 = 2.000

Primary-epoxy = 4.8 nA Primary-CZ3 = 6.7 nA PESABM-CZ3 = 64 pA

Raster time (mins): 1 Raster aperture (microns): 120 No. of scans: 6

Comments: D = RMO242
A = RMO251

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>sl. 11-1</u>	<u>10:40</u>	<u>6.86</u>	<u>26.4</u>	<u>3239</u>	<u>220</u>	<u>0.3</u>	<u>.03</u>	<u>572 ± 1</u>	<u>587 ± 27</u>	<u>✓</u>
	<u>sl. 11-2</u>	<u>10:57</u>	<u>7.18</u>	<u>25.1</u>	<u>3342</u>	<u>210</u>	<u>-0.4</u>	<u>.03</u>	<u>571 ± 1</u>	<u>575 ± 15</u>	<u>✓</u>
	<u>D. 1-1</u>	<u>11:15</u>	<u>6.78</u>	<u>25.0</u>	<u>854</u>	<u>149</u>	<u>3.5</u>	<u>1.07</u>	<u>247 ± 1</u>	<u>180 ± 99</u>	<u>✓</u>
	<u>D. 2-1</u>	<u>11:33</u>	<u>6.71</u>	<u>25.7</u>	<u>440</u>	<u>758</u>	<u>0.9</u>	<u>.52</u>	<u>253 ± 1</u>	<u>85 ± ></u>	<u>✓</u>
	<u>sl. 11-3</u>	<u>11:50</u>	<u>6.92</u>	<u>25.6</u>	<u>3273</u>	<u>222</u>	<u>0.6</u>	<u>.05</u>	<u>575 ± 1</u>	<u>533 ± 20</u>	<u>✓</u>
<u>last scan</u>	<u>D. 3-1</u>	<u>12:15</u>	<u>6.85</u>	<u>25.6</u>	<u>141</u>	<u>23.3</u>	<u>-0.4</u>	<u>/</u>	<u>250 ± 1</u>	<u>391 ± 77</u>	<u>✓</u>
	<u>D. 4-1</u>	<u>12:32</u>	<u>6.71</u>	<u>26.2</u>	<u>1787</u>	<u>299</u>	<u>0.8</u>	<u>.12</u>	<u>255 ± 1</u>	<u>233 ± 22</u>	<u>✓</u>
	<u>D. 6-1</u>	<u>12:50</u>	<u>6.80</u>	<u>26.0</u>	<u>585</u>	<u>95.9</u>	<u>1.2</u>	<u>.57</u>	<u>252 ± 1</u>	<u>/</u>	<u>✓</u>

⊛ I^o dropped from 6.6 to 6.2 nA between analyses. Couldn't recover with Duo tuning! → Dropped off during D.7-1 !!

Mount/sample No: 99-15 Date: 7/10/99 Page No: 2

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?

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?
	S1.11-4	13:08	6.96	25.6	3267	218	-0.3	/	574±1	581±15	✓
	D.7-1	13:26	7.07	25.1	642	91.9	0.1	.05	268±1	259±53	✓
	D.7-2	13:58	6.86	25.6	486	79	0.4	.23	253±1	188±84	✓
	D.8-1	14:16	6.93	24.3	613	104	1.6	.54	247±1	0±0	✓
	S1.11-5	14:35	6.92	25.8	3083	212	3.7	.33	563±1	507±30	✓
	D.9-1	14:53	6.94	24.3	1792	297	0.5	.07	252±3	207±37	✓
	D.10-1	15:12	6.60	24.8	390	75	2.1	1.3	242±1	-	✓
	D.28-1	15:29	6.88	26.5	659	101	1.1	.49	256±1	192±100	✓
	S1.11-6	15:46	6.98	25.8	3401	222	-ve	-ve	577±1	529±15	✓
	A.1-1	16:05	6.73	24.9	2138	404	0.7	.08	237±1.3	272±41	✓
	A.3-1	18:27	7.13	25.3	3487	532	0.8	.07	244±1.2	244±22	✓
	A.4-1	16:46	8.29	6.8	704	329	-ve	-ve	222±1.3	0±0	✓
	A.5-1	17:08	8.12	9.9	953	265	0.0	-ve	239±1.3	283±31	✓
	S1.11-7	17:27	5.73	13.0	1933	357	5.6	.22	746±1.2	694±29	✓
	S1.11-8	17:46	6.9	22.0	2834	221	0.5	.04	587±1	535±20	✓
	A.6-1	18:07	6.9	21.2	2451	486	0.2	.02	240±1.2	259±27	✓
	A.7-1	18:26	7.12	21.6	1506	280	0.4	.07	246±1.3	245±39	✓
	A.9-1	18:51	6.86	23.0	1289	242	-ve	-ve	244±1.2	320±26	✓
	A.10-1	19:10	6.70	22.5	1444	302	0.2	.04	240±1.2	228±32	✓
	S1.11-9	19:28	6.98	23.1	2995	216	0.9	.08	582±1	542±21	✓
	A.11-1	19:47	7.01	23.7	595	103	0.7	.30	240±1	217±7.3	✓
	A.12-1	20:06	6.59	22.1	1582	356	0.9	.12	238±1	198±41	✓
	A.13-1	20:24	6.42	23.9	1583	367	0.7	.09	233±1.2	260±36	✓
	A.14-1	20:49	7.34	21.5	2334	371	8.6	1.03	251±1.4	187±5.8	✓
	C2.12-1	21:07	6.95	24.4	3097	223	-ve	-ve	563±1.8	636±15	✓

→ ^{run 3 scans}

D
A

delete

- ①
- ②
- ③
- ④ ^{low scan}

fast ThO

①. lost I^o (down to 1.5 nA) during analysis (4.15 pm). ②. Analysis running at 20 nA & sporadically increasing. ③. I^o up to 4 nA and down to 2 nA and back up again (5 pm). ④. Stable I^o of ~5 nA.

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

	A16-1	21:26	6.79	22.8	1689	333	0.3	.04	242±4	219±64	✓	
	A17-1	21:46	6.81	23.4	1256	237	1.6	.32	243±3	232±53	✓	
	A18-1	22:03	6.75	23.8	1587	300	1.5	.23	245±3	214±40	✓	
	A19-1	22:21	6.51	24.5	1533	307	0.3	.05	242±3	224±43	✓	
	sl.12-2	22:39	6.86	24.8	3074	274	0.7	.06	568±8	570±20	✓	
<i>Delet</i>	A20-1	22:57	6.91	18.8	1025	282	0.2	.03	200±2	208±39	✓	
	A21-1	23:16	7.71	16.8	3215	586	5.1	.40	247±2	232±30	✓	
<i>st. 110</i>	sl.12-3	23:33	7.01	17.8	2339	228	1.3	.11	556±1	535±23	✓	
	A22-1	23:51	6.90	18.0	1728	416	3.0	.34	238±3	208±45	✓	
<i>Delet</i>	A23-1	00:09	7.75	10.6	1919	516	2.6	.28	195±2	753±33	✓	
	A28-1	00:27	6.26	20.1	994	283	4.0	.67	241±5	7±80	✓	
<i>low scan</i>	A24-1	00:46	7.26	20.0	2081	397	0.2	.03	236±2	287±31	✓	
<i>deleted</i>	sl.12-4	1:11	6.79	14.4	1601	233	-ve	-ve	506±1	552±21	✓	
	A28-1	1:33	7.13	17.4	1381	327	1.0	.15	229±3	241±47	✓	
<i>1st 12 Th</i>	sl.12-5	1:51	6.81	21.3	2486	222	1.4	.12	550±1	544±24	✓	
<i>2nd 12</i>	A25-1	2:09	7.30	19.2	1475	287	0.4	.07	236±2	318±33	✓	
	A26-1	2:28	6.68	19.7	1641	384	1.1	.14	247±2	203±38	✓	
<i>A</i>	<i>1st 12</i>	A27-1	2:47	7.13	18.4	1158	244	0.1	.03	243±2	276±31	✓
<i>D</i>	<i>Delet</i>	D11-1	3:10	7.00	133	288	86	0.9	.41	282±13	579±130	✓
<i>5nd</i>	sl.12-6	3:28	6.86	26.0	3100	216	0.8	.07	566±1	556±20	✓	
	D12-1	3:47	6.92	23.3	514	92	0.9	.45	246±7	98±113	✓	
	D28-1	4:04	6.75	24.3	870	159	-	-	248±2	302±31	✓	
	D13-1	4:21	6.93	23.0	1493	262	0.8	.14	253±3	296±40	✓	
<i>Noisy</i>	D14-1	4:41	7.31	22.8	1237	187	-ve	-	255±2	284±27	✓	
<i>-"</i>	sl.12-7	4:58	6.81	25.7	3130	221	0.3	.02	577±8	552±22	✓	

①. Drop in I° during analysis from 6uA to 4.5uA (10:15pm) ②. I° dropped during analysis (erratically) from 4.5-30uA (11:30pm)
 ③. Drop in I° during analysis to 1.8uA from 4.5uA (12 midnight) ④. Erratic drops between 4 and 2uA (12:30pm) ⑤. Stable I° at 4uA (1:00am) ⑥. 2:00am erratic I°

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?
	D.15-1	5:16	6.88	24.3	1173	201	0.1	.02	251 ± .3	293 ± 44	✓
	D.17-1	5:35	6.71	24.5	860	154	1.5	.44	255 ± .6	178 ± 82	✓
	D.18-1	5:52	6.30	24.2	909	199	-ve	-ve	257 ± .2	193 ± 32	✓
	D.19-1	6:10	6.94	24.4	1213	202	1.2	.27	250 ± .3	179 ± 48	✓
	sl.12-8	6:34	6.93	14.6	1993	247	1.1	.09	550 ± 1	554 ± 25	✓
	D.20-1	6:57	6.70	16.4	231	74	1.3	.92	215 ± 1	416 ± 164	✓
	D.20-2	7:18	6.37	23.7	436	95	-ve	-ve	253 ± .3	313 ± 44	✓
	D.21-1	7:38	6.98	25.1	634	95	-ve	-ve	267 ± .4	253 ± 37	✓
	D.22-1	7:57	6.70	26.7	73	121	1.1	.39	256 ± .4	199 ± 64	✓
	sl.12-9	8:17	7.11	12.7	1518	218	1.2	.12	507 ± 1	709 ± 30	✓
	sl.12-10	8:39	6.33	11.8	1564	255	1.0	.06	672 ± 1.4	947 ± 22	✓
	sl.2-2										→ aborted, 1° still erratic ← end of session

1st scan
 2nd scan
 3rd scan
 4th scan

① 5:45 am drop in 1° before std from 6 to 4 uA. ② 6:30 am 1° erratic during analysis ③ 7:20 pm 1° dropped to 3.5 uA (from 6 uA) and erratic ④ Erratic 1°