RUTILE

UWA SHRIMP DATA LOG

Date	UWA Mount No.	Whose sample?	Operator(s)
14/10/99	99-40	Gawin E.	McN + AR

Indicate any change to the following: ~~196~~ 207.8, 204, bkg, 206, 207, 208, ~~238~~, 248, 254, ~~270~~ 270

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

Steel: Wein volts / nA = 72V/2.7 for O^-; = 47V/1.7 for O_2^-; = 38V/2.5 for NO^-

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

aperture = 150 microns retardation lens = 100/14 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~~ 207.8-204 = 3.837 204-bkg = 0.045 204-206 = 2.004

206-207 = 1.000 206-208 = 2.000

150 µ apert → Primary-epoxy = 2.87 nA Primary-CZ3= 3.5 nA PESABM-CZ3 = 58 pA

70 µ apert Raster time (mins): 2 Raster aperture (microns): 100 No. of scans: 6

Comments:

1° ~ 0.9 nA.

Rutile std = WH = 2642 Ma → Windmill Hill

Rejection over-ride	Sample/ Std ID	Time - printout	UO/UO_2	~~196~~ 207.8 Kcps	206 cps	UO_2 ppm cps	204/206 ~~204~~Pb ppb	~~f206~~ %	~~Age ±1σ (Ma)~~ 206/238 270	207/206	Offsets OK?
	wh.3-1	12:38	1.60	3313	6323	5392	0.9×10^{-4}		1.131	.1792	✓
	wh.3-2	12:58	1.55	3338	6119	4820	0.5×10^{-4}		1.27	.1816	✓
	Changed from 150 to 70 µ aperture										
	wh.3-3	13:48	1.44	1205	2059	1691	1.1×10^{-4}		1.22	.1798	✓
	R1-1	14:11	✓	~900	~60	~40	✓		✓		–
	wh.3-4	14:29	1.39	1249	2199	1852	1.8×10^{-4}		1.19	.1809	✓
	R1-2	14:57	✓	389	25	17	✓		✓		–
	R2-1	15:21	✓	878	92	✓	81×10^{-4}		✓	.1343	✓

3.837 offset

Mount/sample No: 99-40 **Date:** 14/10/99 **Page No:** 2

Rejection over-ride	Sample/ Std ID	Time - printout	UO/U	207.8 cps	206 cps	UO_2 ppm cps	204/206 ^{204}Pb ppb	^{206} %	206/238 270	207/206	Offsets OK?
	wh.3-5	15:41	1.40	1256	1987	1692	2.0×10^{-4}		1.17	.1827	✓
	R2-2	16:05	.95	576	125	179	8.8×10^{-3}		—	.3360	✓
	R2-3	16:29	.52	450	0.1	9.1	—		—	.3634	✓
	wh.3-6	16:49	1.42	1212	2040	1765	1.4×10^{-4}		1.16	.1814	✓
	R.2-4	17:15	.68	922	53	9.2	0.7×10^{-3}		5.78(?)	.2256	✓
	R.2-5	17:40	1.11	624/204	248	204	1.3×10^{-3}		1.22	.3710	✓
	wh.3-7	17:49	1.37	1216	2267	1942	1.7×10^{-4}		1.17	.1831	✓
	R.2-6	18:24	—	453	—	20	—	—	—	—	✓
	wh.1-4	18:52	.68	867	1036	1034	3.9×10^{-4}		1.00	.1797	✓
	R.3-1	19:36	.70	523	22	7.4	4.5×10^{-3}		2.97(?)	.3182	✓
	wh.1-5	19:56	.66	1350	1193	1175	1.6×10^{-4}		1.02	.1819	✓
	R.3-2	20:28	1.34	308	95	254	7.4×10^{-3}		.374	.2582	off
	R5-1	20:56	.35	1186	79	21	1.0×10^{-2}		3.71(?)	.2750	✓
	wh.1-6	21:16	.59	855	933	855	3.2×10^{-4}		1.09	.1822	✓
	R.5-2	21:38	.55	1430	84	39	7.1×10^{-3}		2.14	.2754	✓
	R.5-3	21:57	1.07	899	852	990	1.0×10^{-4}		.293	.3404	✓