

TITANITE

UWA SHRIMP DATA LOG

29/10/99

Date: ~~9/10/99~~ 29/10/99
 UWA Mount No.: 99-24
 Whose sample?: AGSO
 Operator(s): McN + AR

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

Precambrian Count time (secs): 2 10 10 10/20* 30/10* 10 5 5 2 2 ~~5~~
Phanerozoic* Delay time (secs): 8 3 1 2 1 1 3 2.5 2 5 ~~5~~

Steel: Wein volts / nA = ¹²271/18.5 for O⁻; = 175/3.2 for O₂⁻; = ~~140~~140/6.2 for NO⁻

dead-time = ³² nanosecs expected resolution = >4200 actual resolution = ~~4997~~ 5042

aperture = ¹⁰⁰ microns retardation lens = ⁹ 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: ²⁰⁰ 196-204 = ^{4.137} 4.137 204-bkg = ^{0.045} 0.045 204-206 = ^{1.997} 1.997

206-207 = ^{1.000} 1.000 206-208 = ^{1.999} 1.999

Primary-epoxy = ^{22.9} 22.9 nA Primary-CZ3 = ^{kh} 3.6 nA PESABM-CZ3 = ^{kh} 5.9 pA

Raster time (mins): ¹ 1 Raster aperture (microns): ⁵⁵ 55 No. of scans: ⁶ 6

Comments:

Processing note: *I explicitly high baseline counts - do not use data.*

⊕ Raster aperture = 45µm → increased to 55µm after 1st std.
 * 1° drops slowly from about halfway thru analysis

Rejection over-ride	Sample/ Std ID	Time - printout	← Last scan →		U	204Pb	f ₂₀₆	Last scan		Offsets OK?	
			UO/U	196 Kcps				206 cps	Age 206/238		Age 207/206
⊕	* Kh.4-1	11:47	.877	973	1530	238	6.9	.59	.1336	467 ± 111	✓
*	* Kh.4-2	12:09	.889	1009	1543	244	7.4	.61	.1318	461 ± 154	✓
*	* E.1-1	12:33	.892	1038	3.0K	75.3	11.5	.44	.837	2664 ± 25	✓
*	* Kh.4-3	12:54	.861	957	1557	253	7.9	.63	.1371	499 ± 143	✓
*	* E.1-2	1:20	.870	863	2506	74.6	19.1	.81	.806	2622 ± 24	✓
*	* E.1-3	1:43	.875	962	2775	74.9	5.1	.20	.847	2667 ± 18	✓
*	* E.1-4	2:06	.905	972	1409	73	5.7	.35	.821	2667 ± 24	✓
*	* Kh.4-4	2:30	.895	1098	112	254	-1ve	-1ve	.1349	652 ± 191	✓

Rejection over-ride	Sample/Std ID	Time - printout	UO/U ²⁰⁰ 196 Kcps	206 cps	U ppm	204Pb ppb	f206 %	Age ±1σ (Ma)	Offsets OK?		
								1st scan 206/238 270	207/206 age		
*	E2-1	2:54	.874	1012	1234	241	2.6	.67	.8259	26387±30	✓
*	E2-2	3:29	.927	920	222	28	5.5	.76	.7581	2650±68	NO!
*	E2-3	3:51	.940	1050	194	22	16	3.10	.8382	2521±100	✓
*	Kh4-5	4:13	.886	993	108	247	15	1.3	.8314	306±24	✓
*	E3-1	4:43	.968	1018	1170	71	611	.86	.8357	2606±30	✓
*	E4-1	5:07	.918	999	2304	81	122	1.8	.8297	2566±51	✓
→ computer failure, no programs available on restart, and collector/stack counter stuck at 107 ←											

①

②

10pm

①. Secondary beam dropped during the second scan. Post ESA ok. Re-ran scan, problem fixed itself. ②. 5:30: Secondary screen froze after deleting a point, choose to quit program from. Can't find "Global 1". Also collector position "stuck" at "107".