

Xenotime.

UWA SHRIMP DATA LOG FOR TITANITE

Date: 26/1/04 UWA Mount No. C-70 + 04-04 Whose sample? MB Operator(s) IRF + MB

Indicate any change to the following: ¹⁹⁴200 204 bkg 206 207 208 ²⁵⁸248 254 ~~270~~

Precambrian Count time (secs): 2.5 10 10 10/20* 30/10* 10 5 3 5
 Phanerozoic* Delay time (secs): 8 3 1 2 1 1 4 2 3

Steel: Wein volts / nA = for O⁻; = for O₂⁻; = for NO⁻
 dead-time = ²⁵..... nanosecs expected resolution = >4200 actual resolution = ^{>5900}.....

aperture = ³⁰..... microns retardation lens = ^{1.007}..... volts

Expected offsets (amu): 200-204 = 4.136; 204-bkg = 0.045; 204-206 ~ 2.000; 206-207 = 1.000; 206-208 = 2.000

Actual: 200-204 = 204-bkg = ^{0.045}..... 204-206 = ^{2.007}.....

206-207 = ^{1.004}..... 206-208 = ^{2.007}.....

Primary-epoxy = nA Primary-khan = ^{MG1} 0.38 nA PESABM-khan = pA

Raster time (mins): ³..... Raster aperture (microns): ⁵⁰..... No. of scans: ⁷.....

Comments:

SM-B
 SM on SPS-2

STDS
 6x MG1
 2x BSI
 5x Xenol if ok.
 7/6 = 997

Rejection over-ride	Sample/ Std ID	Time - printout	²³⁰ 270/254 UO/UO2	¹⁹⁴ 200 cps	206 cps	²³⁴ 270 cps	204Pb cps	f ₂₀₆ %	Measured 206/270 206/254	Age±1σ 207/206	Offsets OK?
	MG1.1-1	11:42	9.79	42	390	6.1	0	(-)	0.0714	555±34	✓
	BSI.1-1	12:03	10.34	35	200	2.6	0	0.12	0.0826	412±72	✓
	Xenol.1-1	12:24	10.67	36	12000	72	0	0.002	0.1832	1006±85	✓
	HL01.1-1	12:48	10.14	39	15000	32	0	(-)	0.4943	2742±18	✓
	4L01.1-2	13:15	9.60	41	5700	18	0	(-)	0.4818	2786±22	✓
	MG1.1-2	13:37	10.56	41	410	6.1	0	0	0.0748	545±49	✓
	Xenol.1-2	13:58	10.60	34	12000	74	0.5	0.006	0.1776	1005±39	✓
	HL01.4-1	14:21	10.44	35	8000	17	0	0.014	0.4933	2723±30	✓

Aborted 1 analysis here

Rejection over-ride	Sample/ Std ID	Time - printout	UO/U Kcps	198 Kcps	206 cps	UO ppm Kcps	204Pb ppb cps	f206 %	Age ±1σ (Ma) 206/238 206/254	207/206	Offsets OK?
	HL01.4-2	14:41	9.99	38	5800	13	0.6	0.007	0.4839	2767±18	✓
	HL01.4-3	15:02	9.53	39	5800	14	0	0.02	0.4640	2746±19	✓
	MG1.1-3	15:23	10.53	43	460	6.8	0	(-)	0.0734	498±69	✓
	HL01.6-1	15:46	10.0	39	10000	23	0	(-)	0.5092	2768±21	✓
	HL01.6-2	16:06	9.92	42	6300	14	0	0.007	0.4781	2733±49	✓
	HL01.6-3	16:26	10.27	36	24000	50	0	0.001	0.5530	2754±65	✓
	Xen01.1-3	16:47	10.83	35	12000	73	0	0.004	0.1825	997±37	✓
	HL01.8-1	17:10	10.07	38	14000	30	0	(-)	0.5490	2744±26	✓
	HL01.8-2	17:31	10.15	39	19000	41	0	0.003	0.5042	2746±26	✓
	HL01.8-3	17:51	10.15	39	20000	42	0	(-)	0.5379	2745±35	✓
	MG1.1-4	18:11	10.35	43	450	6.7	0.08	0.26	0.0747	340±63	✓
	HL01.16-1	18:35	9.89	35	5600	13	0	(-)	0.4859	2747±14	✓
	HL01.16-2	18:55	9.99	37	4800	11	0	0.004	0.4784	2726±7	✓
	HL01.16-3	19:17	9.53	37	4300	10	0	0.01	0.4705	2752±7	✓
	Xen01.1-4	19:39	10.74	38	13000	77	0	(-)	0.1840	1005±38	✓
	HL01.16-4	20:00	10.48	35	12000	26	0	0.004	0.4855	2738±45	✓
	HL01.16-5	20:20	10.19	37	7500	17	0	0.006	0.4981	2771±20	✓
	MG1.1-5	20:42	10.16	44	550	8.4	0	(-)	0.0704	385±40	✓
	BS1.1-2	21:02	9.92	39	210	3	0	0.002	0.0789	447±66	✓
	MG1.1-6	21:53	10.42	45	480	7.2	0	0.006	0.0767	497±49	✓
	Xen01.1-5	22:14	10.52	39	14000	84	0	0.005	0.1800	998±40	✓
	MG1.1-7	22:34	10.35	45	450	6.6	0	0.05	0.0741	488±45 488±45	✓
	HL01.7-1	22:56	9.88	38	13000	31	6.15	0.02	0.4929	2724±5	✓
	HL01.9-1	23:18	9.44	42	8200	21	0	0.008	0.4829	2743±40	✓
	HL01.13-1	23:40	10.33	31	13000	27	0	0.005	0.5245	2739±5	✓

computer error (machine shutdown itself and rebooted)

Not happy with this analysis so repeated here

* ^{6/38} age of MG1 is much higher after computer crash. No apparent change in 1° during shutdown/reboot.

Rejection over-ride	Sample/ Std ID	Time - printout	UO/U Kcps	196 Kcps	206 cps	U ²³² ppm Kcps	204Pb ppb cps	f ²⁰⁶ %	Age ±1σ (Ma) 206/238 254	207/206	Offsets OK?
	Xenol.1-6	00:01	10.80	37	13000	78	0	0.004	0.1803	1014 ± 34	✓
	HL01.13-2	00:23	9.87	31	13000	28	0	0.007	0.5069	2741 ± 4	✓
	HL01.14-1	00:46	10.19	32	12000	27	0	0.002	0.4871	2753 ± 8	✓
	HL01.14-2	01:07	9.46	35	3300	8.3	0	0.009	0.4838	2697 ± 55	✓
	Mt.1-8	01:28	10.30	44	390	5.7	0	NaN	0.07411	443 ± 38	✓
	HL01.3-1	01:53	9.85	39	12000	28	0	0.008	0.4658	2750 ± 33	✓
	HL01.10-1	02:17	10.46	26	15000	43	1.0	1.07	0.3656	2622 ± 54	✓
	HL01.10-2	02:39	10.49	27	16000	41	1.2	1.24	0.4048	2634 ± 48	✓
	Xenol.1-7	03:00	10.63	38	13000	79	0	0.003	0.1828	1016 ± 35	✓
	HL01.2-1	03:25	9.82	22	12000	33	7.6	1.04	0.3708	2721 ± 73	✓
	HL01.2-2	03:47	9.05	24	7200	44	8.8	1.95	0.1633	2681 ± 113	✓
	Mt.1-9	04:10	10.34	47	550	8.6	0	0.04	0.0688	452 ± 45	✓
	Xenol.1-7	04:31	10.50	41	13000	81	0	0.002	0.1807	1005 ± 34	✓
	HL01.13-3	04:54	9.66	34	6400	16	0.24	0.06	0.4496	2736 ± 27	✓
	HL01.5-1	05:18	9.63	36	23000	54	2.8	0.19	0.5052	2759 ± 43	✓
	Mt.1-10	05:40	10.34	48	510	7.8	0	0.05	0.0715	487 ± 51	✓
	HL01.7-3	06:17	10.07	35	13000	34	0.6	0.07	0.4359	2724 ± 13	✓
	Xenol.1-8	06:39	10.87	39	12000	80	0	(-)	0.1719	1037 ± 17	✓

Computer crashed again! →