

ZIRCON
UWA SHRIMP DATA LOG FOR TITANITE

Date: 24/1/04 UWA Mount No.: 04-01 / 03-S1 Whose sample?: DV Operator(s): McN + DV

Indicate any change to the following: ¹⁹⁶200 204 bkg 206 207 208 ²³⁸248 ²⁴⁸254 ²⁵⁴270

Precambrian Count time (secs): 82 10 10 10/20 ~~30/10~~ 10 5 5 52
 Phanerozoic* Delay time (secs): 8 82 1 2 1 1 43 2 3

Steel: Wein volts / nA = ²4504/21.3 for O⁻; = 3161/7.8 for O₂⁻; = _____ for NO⁻

dead-time = ²⁵25 nanosecs expected resolution = >4200 actual resolution = 5644

aperture = ^{30?}30? microns retardation lens = 100 volts

Expected offsets (amu): ¹⁹⁶200-204 = 4.136; 204-bkg = 0.045; 204-206 ~ 2.000; 206-207 = 1.000; 206-208 = 2.000

Actual: ¹⁹⁶200-204 = 8.161 204-bkg = 0.045 204-206 = ~2.006 ± 6

206-207 = 1.003 206-208 = 2.006

Primary-epoxy = 2.3 nA Primary-khan = ^{c23}3.2 nA PESABM-khan = ^{c23}2883 pA

Raster time (mins): 1.5 Raster aperture (microns): 70 No. of scans: 7 * 5

Comments: * 04-01 sharon: for 03-S1, change to 207 = 30secs + Scans = 5

Sids - 04-01 → 8-12 sids (c23) + 2 Bkgs for (5-10 unknowns) (1:3)
 03-S1 → 8-12 " " (20-40 " ") (1:5)

Rejection over-ride	Sample/ Std ID	Time - printout	^{254/238} 270/254 ¹⁹⁶ 200 cps	206 cps	²⁵⁴ 270 cps	204Pb cps	f ₂₀₆ %	Measured 206/270	Age±1σ 207/206	Offsets OK?	
	c2.1-1	10:09	5.73	21	1900	57	0.09	0.06	572±4	539±25	✓
	c2.1-2	10:30	5.81	20	1800	55	0.14	0.07	556±5	594±27	✓
	Ph.1-1	10:54	3.76	36	860	10	0.14	0.07	2003±19	2043±21	✓
	0401A.1-1	11:16	5.78	20	4500	39	0.09	0.01	1802±12	1836±6	✓
	0401A.1-6	11:35	5.45	23	3900	45	0.3	0.05	1494±10	1842±10	✓
	0401A.1-2	11:55	6.1	17	4100	35	0.13	0.02	1742±15	1831±19	✓
	0401A.1-3	12:15	6.01	16	4100	35	0.3	0.09	1745±17	1827±11	✓
	0401A.3-1	12:40	5.75	18	2100	19	0.13	0.05	1701±6	1822±13	✓

0401

196 - 204 = 8.161

Rejection over-ride	Sample/ Std ID	Time - printout	^{254/238} U-238 196 Kcps	206 cps	²⁵⁴ ppm 204pb cps	f206 %	Age ±1σ (Ma) 206/238 207/206	Offsets OK?
	c21.1-3	13:00	5.8 19	1700	54	0.09 0.01	548.6 610	✓
	0401A4-1	13:21	5.86 18	3800	33	0.09 0.02	1740±96 1849±64	✓
	0401A4-2	13:42	6.59 16	6900	54	0.11 0.08	1755±230 1826±146	✓
	0401B2-1	14:04	6.07 19	5600	78	0.5 0.1	1130±27 1796±10	✓
	0401B2-2	14:26	5.95 22	4900	74	0.1 0.3	1072±41 1796±40	✓
	0401B2-1	14:53	6.5 19	4600	47	0.3 0.07	1401±9 1818±10	✓
	0401B2-2	15:16	6.2 18	7200	59	0.1 0.002	1776±10 1835±5	✓
	0401B2-3	15:38	6.1 18	5500	48	0.1 0.02	1702±11 1824±7	✓
	c21.1-4	15:57	5.86 19	1900	56	0.1 0.02	566±4 549.995±22	✓
	0401B14-1	16:19	5.9 18	5300	49	0.1 0.02	1664±22 1820±6	✓
	0401B17-1	16:43	6.05 18	6300	53	0.09 0.005	1763±29 1829±24	✓
	0401B17-2	17:02	6.1 17	6200	53	0.09 0.009	1743±14 1837±9	✓
	0401B18-1	17:23	6.3 18	9400	76	0.2 0.03	1782±10 1836±7	✓
	0401B18-2	17:43	5.78 19	5700	51	0.06 0.01	1755±18 1816±7	✓
	0401B3-1	18:05	5.87 19	7100	70	0.6 0.01	1575±40 1838±7	✓
	c21.1-5	18:25	5.8 20	1900	59	0.1 0.04	556±5 567±26	✓
	0401B3-2	18:46	5.6 22	4500	41	0.6 0.18	1745±11 1822±11	✓
	0401B3-3	19:05	6.0 20	4400	37	0.3 0.09	1794±12 1838±7	✓ lowered 208 from 208.00818 to 208.00718
	0401B3-4	19:25	5.8 21	6000	53	0.08 0.009	1766±8 1834±7	✓
	0401B9-1	19:48	5.9 20	5900	51	0.1 0.007	1750±12 1831±10	✓ lowered 207 from 207.00678 to 207.00578
	0401B9-2	20:08	5.3 20	5900	58	0.6 0.14	1740±12 1842±11	✓
	0401B9-3	20:28	5.59 20	6400	56	0.6 0.13	1834±10 1830±9	✓
	c21.1-6	20:47	5.85 17	1700	52	0.1 0.07	553±5 5367±22	✓
	c21.1-7	21:26	5.83 21	1900	60	0.1 0.01	544±3 560±26	✓
	0401B8-1	21:47	5.1 20	5000	52	0.4 0.09	1702±16 1837±9	✓ lowered 207

Labelled it 0401B3-4 ←

Labelled it 0401B9-3 ←

254/238
 254
 Rejection over-ride Sample/Std ID Time-printout ~~196~~ 196 Kcps 206 cps ~~204Pb~~ 204Pb ~~f206~~ f206 % Age ±1σ (Ma) 206/238 207/206 Offsets OK?

Rejection over-ride	Sample/Std ID	Time-printout	196 Kcps	206 cps	204Pb f206 %	Age ±1σ (Ma)	206/238	207/206	Offsets OK?
	0401B131	22:08	6.24 18	2500 20	0.1 0.02	1817 ± 15	1820 ± 9		✓
	0401B1-1	22:29	5.23 23	4600 43	0.5 0.15	1818 ± 11	1803 ± 10	change 207	✓
	0401B1-2	22:54	5.57 19	3400 30	0.15 0.04	1813 ± 14	1831 ± 9		✓
	0401B1-3	23:15	6.00 21	7400 68	0.2 0.01	1664 ± 13	1843 ± 14		✓
	0401B1-1	23:36	6.25 19	6300 52	0.1 0.005	1754 ± 14	2937 ± 480		✓
	C22-1								✓
	C22-2	00:18	5.95 20	1900 56	0.1 0.06	553 ± 4	601 ± 26		✓
	C22-3	00:37	5.6 18	1600 52	0.1 0.03	536 ± 4	584 ± 26		✓
	0401C1-1	00:58	5.8 15	3000 28	0.06 0.008	1668 ± 11	1841 ± 10		✓
	0401C1-2	01:19	5.9 22	4200 44	0.7 0.23	1482 ± 17	1823 ± 13		✓
	0401C2-1	01:39	6.34 19	5200 45	0.3 0.04	1679 ± 19	1819 ± 9		✓
	0401C2-2	01:59	6.1 18	4100 33	0.2 0.03	1819 ± 15	1819 ± 10		✓
	0401B7-4	02:20	5.9 16	4900 53	0.08 0.006	1452 ± 18	1811 ± 11		✓
	C22-4	02:41	5.99 20	1900 57	0.05 0.008	554 ± 5	607 ± 23		✓
	0401B8-1	05:03	5.57 19	4100 38	0.06 0.02	1744 ± 11	1836 ± 8		✓
	0401B18-3	303:21	5.8 21	8400 74	0.1 0.001	1771 ± 16	1832		✓
	0401B17-3	03:47	5.78 19	300 28	0.07 0.03	1724 ± 16	1838 ± 85		✓
	C22-5	04:06	5.9 20	1900 57	0.1 0.03	560 ± 4	576 ± 27		✓
	C22-9	04:45	5.7 19	1800 57	0.1 0.05	558 ± 5	583 ± 28		✓
	Ph.1-2	04:26	3.6 25	5700 74	0.1 0.4	1879 ± 19	2057 ± 18		✓
	C21-1	05:24	5.8 23	1800 59	0.06 0.02	598 ± 8	-552 ± 36		✓
	C21-2	05:38	5.8 17	1700 52	0.06 0.03	625 ± 7	604 ± 28		✓
	03561-1	06:00	5.9 16	1400 69	0.9 0.09	3103 ± 14	3285 ± 4		✓
	03562-1	06:29	5.4 17	1400 85	0.1 0.06	2828 ± 34	2691 ± 15		✓
	035d1-1	06:46	6.3 15	5100 34	0.6 0.16	2331 ± 18	2469		✓

207 AMU
 Placed by
 up

labelled
 if c22-3

Should
 not be c22-5

change to
 03-51
 change
 Acquisition
 window

computer
 froze +
 restarted
 it

