

Table 5: Depth-profile U-Pb isotopic data from vein selvage sample A-3-1

Analysis description	Depth (μm) <sup>a</sup>	Ages (Ma)			% radiogenic <sup>206</sup> Pb/ <sup>238</sup> U <sup>b</sup>	Corrected atomic ratios			Concentrations (ppm) <sup>c</sup>			Correlation of ellipses						
		<sup>206</sup> Pb/ <sup>238</sup> U ±	<sup>207</sup> Pb/ <sup>235</sup> U ±	<sup>207</sup> Pb/ <sup>206</sup> Pb ±		<sup>206</sup> Pb/ <sup>238</sup> U ±	<sup>207</sup> Pb/ <sup>235</sup> U ±	<sup>207</sup> Pb/ <sup>206</sup> Pb ±	U	Th	<sup>206</sup> Pb							
jabs_mt2_A-3-1																		
Cycle 1	0.00	443	6.7	471	64.9	613	349.0	82.8	0.0711	0.0011	0.5905	0.1017	0.0603	0.0097	3128	233	2.451	0.71066
Cycle 2	0.08	442	6.2	481	61.8	666	323.8	80.7	0.0711	0.0010	0.6052	0.0977	0.0618	0.0093	3650	344	3.291	0.73162
Cycle 3	0.15	435	6.4	425	69.1	372	423.0	77.1	0.0698	0.0011	0.5203	0.1035	0.0540	0.0101	3624	384	4.155	0.74641
Cycle 4	0.23	468	7.1	529	71.7	800	340.0	74.9	0.0753	0.0012	0.6832	0.1189	0.0658	0.0107	3243	408	4.504	0.76649
Cycle 5	0.31	505	8.9	650	73.7	1192	277.8	74.0	0.0815	0.0015	0.8971	0.1378	0.0798	0.0112	2498	355	4.084	0.72563
Cycle 6	0.39	579	10.5	623	95.7	789	402.1	73.1	0.0940	0.0018	0.8479	0.1742	0.0654	0.0125	1928	316	3.699	0.75204
Cycle 7	0.46	604	12.7	687	102.4	967	387.6	72.9	0.0983	0.0022	0.9665	0.1982	0.0713	0.0135	1523	271	3.188	0.71836
Cycle 8	0.54	695	16.1	756	112.9	940	402.0	74.6	0.1138	0.0028	1.1046	0.2340	0.0704	0.0138	1092	214	2.475	0.67279
Cycle 9	0.62	748	19.6	940	106.8	1419	301.1	75.8	0.1231	0.0034	1.5225	0.2653	0.0897	0.0141	827	182	1.950	0.65543
Cycle 10	0.69	837	21.3	1131	102.4	1749	243.8	77.1	0.1386	0.0038	2.0446	0.3071	0.1070	0.0143	666	154	1.589	0.68246
Cycle 11	0.77	958	26.1	1366	97.7	2079	197.6	77.5	0.1602	0.0047	2.8397	0.3695	0.1286	0.0144	533	133	1.435	0.68085
Cycle 12	0.85	1040	29.8	1520	89.8	2271	165.6	79.6	0.1751	0.0054	3.4671	0.3950	0.1436	0.0138	449	129	1.195	0.66606
Cycle 13	0.93	1175	37.0	1649	100.6	2320	177.4	77.0	0.2000	0.0069	4.0745	0.5027	0.1478	0.0153	358	117	1.282	0.67137
Cycle 14	1.00	1309	41.8	1706	113.2	2236	201.1	75.8	0.2252	0.0079	4.3684	0.5984	0.1407	0.0164	306	105	1.278	0.67193
Cycle 15	1.08	1392	45.5	1888	97.3	2489	157.6	77.3	0.2410	0.0084	5.4198	0.6150	0.1631	0.0153	285	94	1.161	0.67777
Cycle 16	1.16	1595	49.5	2072	89.3	2586	136.9	79.0	0.2807	0.0098	6.6939	0.6764	0.1730	0.0142	253	103	1.070	0.66582
Cycle 17	1.23	1591	48.5	2097	88.1	2638	133.3	78.4	0.2799	0.0096	6.8844	0.6841	0.1784	0.0143	267	95	1.135	0.67573
Cycle 18	1.31	1624	51.1	2081	89.7	2571	137.5	78.5	0.2865	0.0102	6.7671	0.6862	0.1713	0.0141	265	98	1.211	0.66274
Cycle 19	1.39	1688	50.7	2124	88.4	2578	134.9	78.6	0.2992	0.0102	7.0979	0.7049	0.1720	0.0139	268	96	1.210	0.66482
Cycle 20	1.47	1786	51.9	2271	73.6	2743	105.4	81.2	0.3192	0.0106	8.3653	0.6787	0.1901	0.0122	263	99	1.099	0.66415
Cycle 21	1.54	1834	51.7	2281	71.3	2711	102.8	82.3	0.3290	0.0107	8.4575	0.6641	0.1864	0.0116	270	93	1.054	0.65465
Cycle 22	1.62	1801	51.5	2200	79.6	2595	119.5	80.5	0.3223	0.0106	7.7259	0.6844	0.1739	0.0125	263	95	1.138	0.65239
Cycle 23	1.70	1858	53.7	2360	63.9	2827	87.8	83.9	0.3340	0.0111	9.2137	0.6431	0.2001	0.0108	258	95	0.963	0.66337
Cycle 24	1.78	1899	51.1	2345	64.6	2760	91.2	83.7	0.3425	0.0107	9.0704	0.6411	0.1921	0.0107	286	106	1.026	0.65385
Cycle 25	1.85	1832	50.7	2171	75.1	2510	114.7	82.2	0.3287	0.0105	7.4865	0.6277	0.1652	0.0113	284	111	1.157	0.63472
Cycle 26	1.93	1937	52.3	2243	72.6	2534	109.3	82.5	0.3505	0.0110	8.1027	0.6506	0.1677	0.0109	281	109	1.168	0.63316
Cycle 27	2.01	1932	54.4	2314	65.5	2671	93.6	83.7	0.3495	0.0114	8.7678	0.6301	0.1820	0.0103	274	107	1.099	0.64689
Cycle 28	2.08	1920	52.9	2295	64.4	2647	92.6	83.8	0.3470	0.0111	8.5817	0.6072	0.1794	0.0100	288	107	1.144	0.64489
Cycle 29	2.16	1925	52.9	2371	56.8	2780	77.6	85.5	0.3480	0.0111	9.3263	0.5781	0.1944	0.0092	303	112	1.069	0.66211
Cycle 30	2.24	1996	50.5	2364	58.1	2698	82.3	85.1	0.3629	0.0107	9.2540	0.5865	0.1850	0.0092	306	112	1.105	0.64252
Cycle 31	2.32	1950	49.1	2317	57.9	2659	83.1	85.3	0.3531	0.0103	8.7979	0.5586	0.1807	0.0091	327	119	1.142	0.63962
Cycle 32	2.39	1952	54.4	2273	61.4	2577	88.7	85.1	0.3536	0.0114	8.3832	0.5675	0.1719	0.0091	302	111	1.137	0.64186
Cycle 33	2.47	1939	58.8	2354	56.0	2736	74.2	86.4	0.3509	0.0123	9.1597	0.5602	0.1893	0.0085	296	111	1.041	0.6843
Cycle 34	2.55	2008	51.0	2344	54.8	2650	77.6	86.5	0.3655	0.0108	9.0563	0.5423	0.1797	0.0084	319	118	1.065	0.6412
Cycle 35	2.62	2031	51.3	2383	54.2	2700	75.7	86.1	0.3703	0.0109	9.4524	0.5576	0.1822	0.0085	345	124	1.207	0.647
Cycle 36	2.70	1990	56.3	2327	56.6	2637	78.6	86.4	0.3616	0.0119	8.8887	0.5509	0.1783	0.0084	319	126	1.127	0.65873
Cycle 37	2.78	1934	58.7	2261	58.7	2572	82.0	86.2	0.3500	0.0123	8.2719	0.5362	0.1714	0.0084	317	115	1.139	0.66545
Cycle 38	2.86	2029	54.3	2378	53.4	2692	73.2	86.7	0.3699	0.0115	9.4024	0.5473	0.1844	0.0082	326	115	1.126	0.65981
Cycle 39	2.93	1921	62.7	2345	54.2	2738	68.5	87.6	0.3471	0.0131	9.0687	0.5377	0.1895	0.0079	323	126	1.062	0.71634
Cycle 40	3.01	2055	53.2	2403	50.5	2712	68.8	87.7	0.3754	0.0114	9.6560	0.5304	0.1865	0.0078	333	107	1.058	0.65999
Cycle 41	3.09	1989	56.9	2325	53.7	2634	73.3	87.3	0.3614	0.0120	8.8687	0.5223	0.1780	0.0078	332	121	1.100	0.6714
Cycle 42	3.16	1969	59.1	2387	50.3	2767	63.7	88.3	0.3571	0.0124	9.4988	0.5205	0.1929	0.0075	337	117	1.036	0.70986
Cycle 43	3.24	1997	59.6	2373	50.4	2714	64.6	88.6	0.3632	0.0126	9.3550	0.5136	0.1868	0.0073	332	122	1.000	0.70479
Cycle 44	3.32	1917	66.2	2308	54.0	2674	66.7	88.3	0.3464	0.0138	8.7096	0.5166	0.1824	0.0074	322	124	1.019	0.73642
Cycle 45	3.40	1970	57.2	2317	50.8	2638	67.4	88.4	0.3575	0.0120	8.7941	0.4899	0.1784	0.0072	353	134	1.065	0.69011
Cycle 46	3.47	1956	58.6	2370	49.0	2748	61.4	88.7	0.3544	0.0123	9.3185	0.4976	0.1907	0.0071	359	139	1.058	0.71827
Cycle 47	3.55	1944	60.2	2335	51.6	2697	65.8	87.9	0.3519	0.0126	8.9724	0.5070	0.1849	0.0074	351	142	1.126	0.71311

<sup>a</sup> No pre-sputtering of zircon surface prior to commencement of analysis

<sup>b</sup> Maximum pit depth measured with MicroXAM scanning interferometer at Yale University. Depth increments calculated by assuming constant ionization rate throughout analysis.

<sup>c</sup> Uncertainties listed at the 1σ level.

<sup>d</sup> Correction for common Pb made using the measured <sup>206</sup>Pb/<sup>238</sup>U ratio.

<sup>e</sup> Semi-quantitative estimates based on <sup>U</sup>/<sup>Th</sup>/<sup>Zr</sup><sub>2</sub>O<sub>5</sub>, <sup>Th</sup>/<sup>Zr</sup><sub>2</sub>O<sub>5</sub>, and <sup>206</sup>Pb/<sup>207</sup>Pb/<sup>Zr</sup><sub>2</sub>O<sub>5</sub> relative to that of newly measured (Table 2) and previously published (Paces and Miller, 1993) concentrations for AS3 standard.

Table 5 (continued): Depth-profile U-Pb isotopic data from vein selvage sample A-15-1

Analysis description	Depth (µm) <sup>a</sup>	Ages (Ma)				% radiogenic <sup>206</sup> Pb/ <sup>238</sup> U <sup>c</sup>	Corrected atomic ratios			Concentrations (ppm) <sup>d</sup>			Correlation of ellipses
		<sup>206</sup> Pb/ <sup>238</sup> U ± <sup>b</sup>	<sup>207</sup> Pb/ <sup>235</sup> U ± <sup>b</sup>	<sup>207</sup> Pb/ <sup>206</sup> Pb ±	<sup>207</sup> Pb/ <sup>206</sup> Pb ±		<sup>206</sup> Pb/ <sup>238</sup> U ±	<sup>207</sup> Pb/ <sup>235</sup> U ±	<sup>207</sup> Pb/ <sup>206</sup> Pb ±	U	Th	<sup>206</sup> Pb	
jabs_mt2_A-15-1													
Cycle 1	0.00	880 23.0	890 58.9	915 185.8	95.4	0.1462 0.0041	1.4021 0.1394	0.0695 0.0063	557 98	0.243	0.45316		
Cycle 2	0.08	897 23.7	923 52.9	987 159.8	96.7	0.1493 0.0042	1.4830 0.1294	0.0720 0.0057	485 91	0.149	0.45337		
Cycle 3	0.17	954 24.9	996 52.1	1090 147.8	97.1	0.1595 0.0045	1.6668 0.1369	0.0758 0.0056	420 90	0.118	0.4534		
Cycle 4	0.25	916 29.0	873 63.8	765 208.4	96.6	0.1527 0.0052	1.3627 0.1486	0.0647 0.0064	376 86	0.130	0.4402		
Cycle 5	0.33	919 30.9	939 54.7	985 159.9	97.6	0.1533 0.0055	1.5208 0.1357	0.0720 0.0057	343 86	0.085	0.47978		
Cycle 6	0.41	925 31.0	957 54.3	1007 157.1	97.8	0.1562 0.0056	1.5661 0.1373	0.0727 0.0056	312 81	0.069	0.47311		
Cycle 7	0.50	918 36.1	992 48.3	1159 125.0	98.6	0.1530 0.0065	1.6562 0.1263	0.0785 0.0049	271 81	0.041	0.56332		
Cycle 8	0.58	927 34.6	949 59.9	1000 173.6	97.7	0.1546 0.0062	1.5452 0.1501	0.0725 0.0062	263 77	0.062	0.4799		
Cycle 9	0.66	908 35.9	888 64.8	839 202.4	97.6	0.1513 0.0064	1.3986 0.1530	0.0671 0.0065	253 83	0.064	0.46498		
Cycle 10	0.74	921 38.3	944 55.6	998 157.0	98.4	0.1535 0.0069	1.5332 0.1386	0.0724 0.0056	227 72	0.039	0.51955		
Cycle 11	0.83	910 41.8	918 53.2	937 149.4	98.8	0.1516 0.0075	1.4695 0.1295	0.0703 0.0051	209 73	0.028	0.56203		
Cycle 12	0.91	918 39.6	893 63.2	831 194.3	98.1	0.1530 0.0071	1.4087 0.1498	0.0668 0.0062	210 69	0.043	0.48467		
Cycle 13	0.99	938 37.2	904 66.6	824 207.6	97.9	0.1565 0.0067	1.4363 0.1598	0.0665 0.0066	211 78	0.048	0.45349		
Cycle 14	1.07	947 39.4	933 58.2	901 170.7	98.5	0.1583 0.0071	1.5073 0.1437	0.0691 0.0057	207 81	0.035	0.49622		
Cycle 15	1.16	909 42.3	913 56.7	923 162.6	98.7	0.1514 0.0076	1.4569 0.1372	0.0698 0.0055	203 81	0.031	0.54242		
Cycle 16	1.24	942 40.2	992 48.3	1104 124.9	99.1	0.1573 0.0072	1.6559 0.1263	0.0763 0.0048	209 85	0.020	0.57369		
Cycle 17	1.32	939 41.1	928 54.3	902 156.2	98.9	0.1567 0.0074	1.4932 0.1333	0.0691 0.0052	210 94	0.027	0.52872		
Cycle 18	1.40	920 44.5	950 62.3	1021 172.0	98.3	0.1535 0.0080	1.5497 0.1565	0.0732 0.0062	207 88	0.042	0.54072		
Cycle 19	1.49	930 45.5	907 61.0	850 179.0	98.6	0.1553 0.0082	1.4427 0.1468	0.0674 0.0058	192 85	0.032	0.5329		
Cycle 20	1.57	922 43.3	908 50.9	875 144.4	99.2	0.1538 0.0077	1.4463 0.1227	0.0682 0.0048	186 85	0.017	0.57007		
Cycle 21	1.65	951 41.9	1019 43.7	1168 105.9	99.6	0.1589 0.0075	1.7278 0.1174	0.0788 0.0042	188 80	0.009	0.6218		
Cycle 22	1.73	890 47.4	967 48.3	1146 113.5	99.5	0.1480 0.0084	1.5908 0.1232	0.0780 0.0045	165 72	0.009	0.67839		
Cycle 23	1.82	937 44.1	967 54.1	1036 145.2	99.1	0.1564 0.0079	1.5913 0.1380	0.0738 0.0053	169 73	0.017	0.59575		
Cycle 24	1.90	887 49.7	956 51.5	1117 123.5	99.4	0.1475 0.0089	1.5629 0.1300	0.0768 0.0048	159 72	0.011	0.66996		
Cycle 25	1.98	940 45.9	925 48.7	889 133.6	99.5	0.1569 0.0082	1.4863 0.1193	0.0687 0.0044	160 70	0.009	0.59493		
Cycle 26	2.06	940 45.5	980 47.5	1071 119.8	99.6	0.1570 0.0082	1.6257 0.1229	0.0751 0.0045	160 62	0.008	0.6185		
Cycle 27	2.15	924 48.2	945 55.5	995 148.5	99.2	0.1540 0.0086	1.5361 0.1387	0.0723 0.0053	149 70	0.014	0.58805		
Cycle 28	2.23	916 45.6	934 52.2	979 141.7	99.3	0.1527 0.0081	1.5098 0.1290	0.0717 0.0050	149 62	0.011	0.58262		
Cycle 29	2.31	887 46.9	898 58.1	924 165.0	99.0	0.1475 0.0083	1.4207 0.1384	0.0699 0.0056	150 64	0.016	0.56604		
Cycle 30	2.39	882 46.0	858 56.1	795 168.9	99.2	0.1467 0.0082	1.3278 0.1287	0.0656 0.0053	158 63	0.015	0.55673		
Cycle 31	2.48	931 46.7	968 46.5	1053 115.6	99.7	0.1553 0.0084	1.5937 0.1188	0.0744 0.0043	158 68	0.006	0.64282		
Cycle 32	2.56	874 51.6	876 62.7	883 179.0	98.9	0.1452 0.0092	1.3702 0.1463	0.0685 0.0059	146 69	0.020	0.58542		
Cycle 33	2.64	859 48.5	884 54.5	947 148.6	99.3	0.1425 0.0086	1.3878 0.1282	0.0707 0.0051	152 60	0.013	0.6197		
Cycle 34	2.72	905 44.0	947 48.1	1047 126.1	99.5	0.1507 0.0079	1.5423 0.1204	0.0742 0.0046	158 68	0.008	0.60217		
Cycle 35	2.81	888 47.6	886 55.0	880 156.3	99.3	0.1477 0.0085	1.3926 0.1296	0.0684 0.0052	148 69	0.012	0.5847		
Cycle 36	2.89	890 50.5	892 47.7	896 121.5	99.7	0.1481 0.0090	1.4068 0.1131	0.0689 0.0041	148 67	0.005	0.68447		
Cycle 37	2.97	887 49.5	946 49.0	1086 117.2	99.6	0.1475 0.0088	1.5385 0.1225	0.0756 0.0044	158 71	0.007	0.68246		
Cycle 38	3.05	891 49.3	938 54.2	1049 139.2	99.3	0.1482 0.0088	1.5178 0.1345	0.0743 0.0051	152 68	0.012	0.62773		
Cycle 39	3.14	864 48.5	872 60.7	893 175.4	98.9	0.1435 0.0086	1.3612 0.1410	0.0688 0.0058	152 69	0.019	0.57232		
Cycle 40	3.22	851 48.4	821 61.9	739 194.1	98.9	0.1411 0.0086	1.2437 0.1368	0.0639 0.0059	145 67	0.018	0.55192		
Cycle 41	3.30	878 52.3	984 46.4	1228 93.3	99.9	0.1460 0.0093	1.6354 0.1204	0.0813 0.0039	136 62	0.001	0.77005		
Cycle 42	3.38	905 50.4	980 46.9	1153 105.0	99.8	0.1507 0.0090	1.6259 0.1214	0.0782 0.0041	137 58	0.004	0.7109		
Cycle 43	3.47	859 53.1	912 46.5	1045 101.4	99.9	0.1425 0.0094	1.4562 0.1125	0.0741 0.0037	134 62	0.001	0.76484		
Cycle 44	3.55	886 51.8	897 49.6	925 125.9	99.7	0.1473 0.0092	1.4197 0.1183	0.0699 0.0043	135 56	0.005	0.68092		
Cycle 45	3.63	860 53.8	921 56.7	1072 140.5	99.4	0.1426 0.0095	1.4775 0.1384	0.0751 0.0053	126 58	0.010	0.66665		

<sup>a</sup> No pre-sputtering of zircon surface prior to commencement of analysis

<sup>b</sup> Maximum pit depth measured with MicroXAM scanning interferometer at Yale University. Depth increments calculated by assuming constant ionization rate throughout analysis.

<sup>c</sup> Uncertainties listed at the 1σ level.

<sup>d</sup> Correction for common Pb made using the measured <sup>206</sup>Pb/<sup>206</sup>Pb ratio.

<sup>e</sup> Semi-quantitative estimates based on U/<sup>238</sup>U, Th/<sup>232</sup>Th, and <sup>206</sup>Pb/<sup>206</sup>Pb relative to that of newly measured (Table 2) and previously published (Paces and Miller, 1993) concentrations for AS3 standard.

Table 5 (continued): Depth-profile U-Pb isotopic data from vein selvage sample C-3-1

Analysis description	Depth (µm) <sup>a</sup>	Ages (Ma)			% radiogenic <sup>206</sup> Pb/ <sup>238</sup> U <sup>b</sup>	Corrected atomic ratios			Concentrations (ppm) <sup>c</sup>			Correlation of ellipses						
		<sup>206</sup> Pb/ <sup>238</sup> U ±	<sup>207</sup> Pb/ <sup>235</sup> U ±	<sup>207</sup> Pb/ <sup>206</sup> Pb ±		<sup>206</sup> Pb/ <sup>238</sup> U ±	<sup>207</sup> Pb/ <sup>235</sup> U ±	<sup>207</sup> Pb/ <sup>206</sup> Pb ±	U	Th	<sup>206</sup> Pb							
<i>jabs_mt2_C-3-1</i>																		
Cycle 1	0.00	438	8.7	431	24.6	390	143.1	95.5	0.0704	0.0015	0.5284	0.0370	0.0545	0.0035	3371	1440	0.689	0.44139
Cycle 2	0.08	459	9.3	506	19.1	724	86.8	97.2	0.0738	0.0015	0.6461	0.0309	0.0635	0.0026	3553	2053	0.468	0.52517
Cycle 3	0.16	498	8.8	573	16.9	881	67.0	98.0	0.0803	0.0015	0.7577	0.0292	0.0684	0.0024	3297	2250	0.333	0.54541
Cycle 4	0.23	543	9.6	674	15.9	1140	51.0	98.5	0.0879	0.0016	0.9426	0.0304	0.0777	0.0020	3016	2615	0.245	0.60855
Cycle 5	0.31	581	11.3	759	16.2	1325	42.7	98.8	0.0943	0.0019	1.1108	0.0336	0.0854	0.0019	2666	2511	0.181	0.68565
Cycle 6	0.39	616	9.8	812	15.8	1396	43.1	98.8	0.1003	0.0017	1.2252	0.0347	0.0886	0.0020	2453	2511	0.177	0.60727
Cycle 7	0.47	616	13.2	867	17.3	1580	37.0	99.1	0.1002	0.0022	1.3494	0.0401	0.0977	0.0019	2011	2298	0.117	0.74613
Cycle 8	0.54	672	15.0	960	18.7	1693	35.8	99.2	0.1099	0.0026	1.5733	0.0473	0.1038	0.0020	1616	1884	0.095	0.76405
Cycle 9	0.62	722	16.4	1068	19.9	1863	34.8	99.1	0.1185	0.0028	1.8625	0.0561	0.1140	0.0022	1335	1608	0.087	0.7689
Cycle 10	0.70	818	20.6	1255	22.9	2060	33.9	99.1	0.1353	0.0036	2.3736	0.0761	0.1272	0.0024	1009	1228	0.076	0.80165
Cycle 11	0.78	1073	26.0	1521	24.4	2216	33.5	99.2	0.1811	0.0048	3.4713	0.1076	0.1391	0.0027	717	782	0.063	0.78514
Cycle 12	0.85	1227	32.3	1704	26.7	2353	32.6	99.4	0.2096	0.0061	4.3531	0.1408	0.1506	0.0029	565	559	0.043	0.81111
Cycle 13	0.93	1319	40.4	1817	31.4	2448	34.0	99.3	0.2271	0.0077	4.9854	0.1849	0.1592	0.0032	485	477	0.054	0.84328
Cycle 14	1.01	1507	41.9	1972	29.7	2503	33.6	99.4	0.2633	0.0082	5.9750	0.2041	0.1646	0.0033	422	354	0.042	0.81694
Cycle 15	1.09	1647	46.2	2102	30.8	2583	33.8	99.3	0.2910	0.0092	6.9242	0.2403	0.1726	0.0035	398	321	0.053	0.81752
Cycle 16	1.16	1541	42.6	1994	30.3	2503	34.5	99.1	0.2701	0.0084	6.1291	0.2124	0.1646	0.0034	447	303	0.068	0.81064
Cycle 17	1.24	1446	38.8	1944	28.9	2526	33.1	99.2	0.2515	0.0075	5.7854	0.1933	0.1668	0.0033	525	486	0.072	0.8124
Cycle 18	1.32	1330	35.1	1836	29.1	2470	35.1	98.6	0.2292	0.0067	5.0995	0.1745	0.1614	0.0034	568	576	0.120	0.79582
Cycle 19	1.40	1244	34.1	1771	30.7	2463	37.6	97.8	0.2129	0.0064	4.7182	0.1729	0.1607	0.0036	634	839	0.195	0.79502
Cycle 20	1.47	1232	32.5	1739	30.4	2417	39.2	97.5	0.2106	0.0061	4.5432	0.1662	0.1564	0.0036	711	982	0.251	0.77528
Cycle 21	1.55	1173	35.2	1715	31.6	2459	35.2	98.0	0.1996	0.0066	4.4114	0.1682	0.1603	0.0033	714	659	0.199	0.83768
Cycle 22	1.63	1228	33.0	1742	29.5	2430	35.8	98.0	0.2099	0.0062	4.5596	0.1615	0.1576	0.0033	684	508	0.191	0.80307
Cycle 23	1.71	1382	37.7	1860	28.8	2447	31.7	99.0	0.2391	0.0072	5.2470	0.1772	0.1591	0.0030	621	355	0.099	0.83463
Cycle 24	1.79	1477	41.5	1970	29.4	2535	29.7	99.4	0.2575	0.0081	5.9565	0.2016	0.1678	0.0030	568	277	0.062	0.8553
Cycle 25	1.86	1625	51.9	2072	34.1	2551	31.8	99.1	0.2867	0.0103	6.6922	0.2584	0.1693	0.0032	452	209	0.081	0.87272
Cycle 26	1.94	1773	62.8	2169	38.3	2567	33.1	99.1	0.3166	0.0128	7.4628	0.3195	0.1710	0.0034	392	173	0.084	0.88825
Cycle 27	2.02	1880	66.6	2282	38.3	2665	31.0	99.6	0.3386	0.0138	8.4663	0.3570	0.1813	0.0034	378	186	0.038	0.89868
Cycle 28	2.10	1980	60.8	2307	34.2	2610	32.4	99.4	0.3594	0.0128	8.6940	0.3265	0.1754	0.0034	365	156	0.049	0.86043
Cycle 29	2.17	1891	68.5	2265	39.4	2623	32.8	99.4	0.3409	0.0142	8.3066	0.3607	0.1768	0.0035	366	172	0.050	0.89385
Cycle 30	2.25	1913	72.2	2272	40.9	2613	32.9	99.5	0.3454	0.0151	8.3704	0.3772	0.1758	0.0035	346	164	0.041	0.90119
Cycle 31	2.33	1882	80.1	2253	45.6	2609	33.6	99.6	0.3391	0.0166	8.1970	0.4128	0.1753	0.0035	316	164	0.034	0.91793
Cycle 32	2.41	1914	80.4	2251	45.3	2573	34.4	99.5	0.3457	0.0168	8.1795	0.4091	0.1716	0.0035	311	170	0.042	0.91296
Cycle 33	2.48	1941	76.8	2298	42.7	2632	33.0	99.7	0.3513	0.0161	8.6101	0.4041	0.1778	0.0035	313	155	0.022	0.90884
Cycle 34	2.56	1878	79.0	2265	44.9	2635	32.8	99.8	0.3382	0.0164	8.3037	0.4110	0.1781	0.0035	317	150	0.016	0.91904
Cycle 35	2.64	1890	80.3	2262	45.4	2619	33.2	99.8	0.3407	0.0167	8.2815	0.4146	0.1763	0.0035	310	157	0.019	0.91904
Cycle 36	2.72	1926	73.7	2274	41.4	2604	33.5	99.7	0.3482	0.0154	8.3901	0.3825	0.1747	0.0035	314	142	0.028	0.90041
Cycle 37	2.79	1879	78.6	2261	45.0	2627	34.3	99.5	0.3384	0.0163	8.2670	0.4107	0.1772	0.0037	316	149	0.042	0.91149
Cycle 38	2.87	1784	77.8	2193	46.4	2601	34.8	99.3	0.3189	0.0159	7.6723	0.3959	0.1745	0.0036	333	151	0.056	0.91618
Cycle 39	2.95	1829	74.6	2224	43.9	2611	34.8	99.3	0.3281	0.0154	7.9384	0.3864	0.1755	0.0037	339	180	0.064	0.90483
Cycle 40	3.03	1736	74.7	2156	45.7	2583	35.1	99.2	0.3091	0.0152	7.3550	0.3757	0.1726	0.0036	360	179	0.075	0.91259
Cycle 41	3.10	1717	72.0	2135	44.3	2566	35.0	99.2	0.3051	0.0146	7.1859	0.3571	0.1708	0.0036	351	164	0.062	0.90872
Cycle 42	3.18	1762	70.4	2190	42.5	2618	33.7	99.4	0.3144	0.0143	7.6423	0.3614	0.1763	0.0036	351	153	0.048	0.90552
Cycle 43	3.26	1761	78.0	2169	47.0	2581	35.6	99.2	0.3142	0.0159	7.4701	0.3923	0.1724	0.0037	338	160	0.071	0.91509
Cycle 44	3.34	1709	74.5	2146	46.1	2595	35.3	99.1	0.3036	0.0151	7.2756	0.3755	0.1738	0.0037	349	154	0.075	0.91327
Cycle 45	3.41	1663	76.3	2106	48.2	2573	36.1	98.9	0.2943	0.0153	6.9590	0.3774	0.1715	0.0037	357	174	0.093	0.91821
Cycle 46	3.49	1687	76.7	2105	47.5	2543	35.2	99.3	0.2991	0.0155	6.9498	0.3717	0.1685	0.0035	350	166	0.063	0.93209
Cycle 47	3.57	1659	72.5	2091	45.5	2548	34.6	99.3	0.2934	0.0145	6.8398	0.3514	0.1691	0.0035	362	155	0.058	0.91706

<sup>a</sup> No pre-sputtering of zircon surface prior to commencement of analysis

<sup>b</sup> Maximum pit depth measured with MicroXAM scanning interferometer at Yale University. Depth increments calculated by assuming constant ionization rate throughout analysis.

<sup>c</sup> Uncertainties listed at the 1σ level.

<sup>d</sup> Correction for common Pb made using the measured <sup>206</sup>Pb/<sup>206</sup>Pb ratio.

<sup>e</sup> Semi-quantitative estimates based on U/<sup>238</sup>Zr, Th/<sup>232</sup>Zr, and <sup>206</sup>Pb/<sup>206</sup>Zr relative to that of newly measured (Table 2) and previously published (Paces and Miller, 1993) concentrations for AS3 standard.

Table 6. Depth-profile U-Pb isotopic data from little-altered schist sample D-6-1

Analysis description	Depth (µm) <sup>f</sup>	Ages (Ma)				% radiogenic <sup>206</sup> Pb/ <sup>238</sup> U <sup>g</sup>	Corrected atomic ratios				Concentrations (ppm) <sup>h</sup>			Correlation of ellipses				
		<sup>206</sup> Pb/ <sup>238</sup> U ± <sup>b</sup>	<sup>207</sup> Pb/ <sup>235</sup> U ± <sup>b</sup>	<sup>207</sup> Pb/ <sup>206</sup> Pb ±	<sup>207</sup> Pb/ <sup>206</sup> Pb ±		<sup>206</sup> Pb/ <sup>238</sup> U ±	<sup>207</sup> Pb/ <sup>235</sup> U ±	<sup>207</sup> Pb/ <sup>206</sup> Pb ±	<sup>207</sup> Pb/ <sup>206</sup> Pb ±	U	Th	<sup>206</sup> Pb					
<i>jabp_m12_D-6-1</i>																		
Cycle 1	0.00	1568	41.0	2015	39.2	2511	57.2	96.7	0.2754	0.0081	6.2758	0.2812	0.1653	0.0056	420	555	0.196	0.65082
Cycle 2	0.09	1962	56.2	2288	36.5	2594	45.8	98.4	0.3558	0.0118	8.5225	0.3427	0.1737	0.0048	346	376	0.095	0.73567
Cycle 3	0.18	2142	61.2	2382	37.0	2595	46.6	98.5	0.3941	0.0132	9.4444	0.3808	0.1738	0.0049	302	347	0.089	0.72811
Cycle 4	0.27	2208	60.8	2394	35.2	2556	46.4	99.0	0.4084	0.0133	9.5642	0.3662	0.1699	0.0047	273	302	0.058	0.70557
Cycle 5	0.35	2297	75.8	2477	39.2	2628	42.8	99.6	0.4281	0.0168	10.4640	0.4423	0.1773	0.0046	264	259	0.024	0.80245
Cycle 6	0.44	2273	76.6	2465	40.1	2627	44.3	99.5	0.4228	0.0169	10.3330	0.4470	0.1773	0.0047	249	232	0.023	0.79787
Cycle 7	0.53	2148	64.0	2394	36.5	2610	48.0	99.4	0.3955	0.0139	9.5671	0.3796	0.1755	0.0051	214	222	0.027	0.70838
Cycle 8	0.62	2217	77.4	2418	41.7	2592	50.0	99.6	0.4104	0.0169	9.8202	0.4447	0.1736	0.0052	188	200	0.016	0.76375
Cycle 9	0.71	2323	95.4	2459	49.8	2573	57.1	99.4	0.4338	0.0212	10.2650	0.5522	0.1716	0.0059	146	187	0.017	0.78237
Cycle 10	0.80	2234	93.5	2402	54.1	2547	69.7	98.8	0.4143	0.0205	9.6467	0.5669	0.1689	0.0070	118	177	0.028	0.71774
Cycle 11	0.89	2161	93.9	2434	52.3	2671	67.6	99.6	0.3983	0.0204	9.9925	0.5667	0.1820	0.0074	98	161	0.009	0.71806
Cycle 12	0.97	2093	95.9	2337	58.0	2557	78.4	99.1	0.3836	0.0206	8.9861	0.5704	0.1699	0.0080	88	153	0.016	0.69219
Cycle 13	1.06	2199	110.6	2460	61.1	2684	75.2	99.4	0.4065	0.0241	10.2780	0.6789	0.1834	0.0083	79	138	0.009	0.74204
Cycle 14	1.15	2122	107.0	2346	63.9	2547	84.0	99.0	0.3899	0.0231	9.0803	0.6345	0.1689	0.0085	78	136	0.014	0.71002
Cycle 15	1.24	2201	115.5	2404	70.5	2580	93.8	98.4	0.4070	0.0252	9.6701	0.7408	0.1723	0.0097	66	112	0.022	0.69197
Cycle 16	1.33	2284	124.0	2452	65.9	2595	81.1	99.5	0.4251	0.0274	10.1880	0.7266	0.1738	0.0085	67	112	0.006	0.74783
Cycle 17	1.42	2058	105.4	2380	60.9	2668	81.3	99.6	0.3761	0.0225	9.4201	0.6253	0.1817	0.0089	63	121	0.005	0.70164
Cycle 18	1.50	2217	118.4	2377	70.8	2517	96.5	98.7	0.4105	0.0259	9.3922	0.7250	0.1659	0.0095	59	113	0.016	0.6818
Cycle 19	1.59	2193	116.3	2401	66.4	2582	89.0	99.2	0.4051	0.0254	9.6372	0.6954	0.1725	0.0092	61	111	0.010	0.69568
Cycle 20	1.68	2306	126.0	2463	67.7	2596	87.1	99.4	0.4300	0.0280	10.3110	0.7546	0.1739	0.0091	58	112	0.008	0.72002
Cycle 21	1.77	2110	114.4	2312	74.8	2495	106.0	98.2	0.3872	0.0246	8.7446	0.7179	0.1638	0.0103	53	107	0.021	0.65351
Cycle 22	1.86	2365	134.3	2499	72.0	2609	91.5	99.2	0.4431	0.0301	10.7130	0.8304	0.1753	0.0096	55	101	0.010	0.72184
Cycle 23	1.95	2214	123.5	2437	70.0	2629	93.5	99.2	0.4098	0.0270	10.0210	0.7603	0.1774	0.0100	50	108	0.009	0.69344
Cycle 24	2.04	2090	119.0	2393	68.2	2661	90.6	99.5	0.3830	0.0255	9.5544	0.7091	0.1809	0.0099	49	109	0.006	0.70341
Cycle 25	2.12	2352	134.0	2470	76.5	2568	101.8	98.5	0.4404	0.0299	10.3890	0.8584	0.1711	0.0104	52	107	0.017	0.68889
Cycle 26	2.21	2248	126.5	2484	68.5	2683	89.8	99.5	0.4172	0.0278	10.5420	0.7792	0.1833	0.0099	51	112	0.006	0.70635
Cycle 27	2.30	2235	128.9	2431	72.7	2600	97.9	99.1	0.4144	0.0283	9.9605	0.7848	0.1743	0.0102	47	111	0.010	0.6893
Cycle 28	2.39	2144	125.5	2360	74.2	2553	101.6	98.9	0.3946	0.0271	9.2198	0.7472	0.1695	0.0103	45	98	0.012	0.6836

No pre-sputtering of zircon surface prior to commencement of analysis

<sup>a</sup> Maximum pit depth measured with MicroXAM scanning interferometer at Yale University. Depth increments calculated by assuming constant ionization rate throughout analysis.

<sup>b</sup> Uncertainties listed at the 1σ level.

<sup>c</sup> Correction for common Pb made using the measured <sup>206</sup>Pb/<sup>206</sup>Pb ratio.

<sup>d</sup> Semi-quantitative estimates based on U/<sup>238</sup>Zr, Th/<sup>232</sup>Zr, and <sup>206</sup>Pb/<sup>206</sup>ZrO relative to that of newly measured (Table 2) and previously published (Paces and Miller, 1993) concentrations for AS3 standard.

Table 6 (continued). Depth-profile U-Pb isotopic data from little-altered schist sample D-6-3:

Analysis description	Depth (µm) <sup>a</sup>	Ages (Ma)				% radiogenic <sup>206</sup> Pb/ <sup>238</sup> U <sup>b</sup>	Corrected atomic ratios				Concentrations (ppm) <sup>c</sup>			Correlation of ellipses				
		<sup>206</sup> Pb/ <sup>238</sup> U ±	<sup>207</sup> Pb/ <sup>235</sup> U ±	<sup>207</sup> Pb/ <sup>206</sup> Pb ±	<sup>206</sup> Pb/ <sup>207</sup> Pb ±		<sup>206</sup> Pb/ <sup>238</sup> U ±	<sup>207</sup> Pb/ <sup>235</sup> U ±	<sup>207</sup> Pb/ <sup>206</sup> Pb ±	U	Th	<sup>206</sup> Pb						
<i>jahp_m12_D-6-3</i>																		
Cycle 1	0.00	2295	113.5	2416	83.9	2520	108.5	91.8	0.4276	0.0251	9.8008	0.8926	0.1663	0.0107	317	360	0.507	0.70771
Cycle 2	0.08	2324	108.5	2461	75.3	2576	95.4	93.7	0.4341	0.0241	10.2880	0.8369	0.1719	0.0098	292	326	0.371	0.71272
Cycle 3	0.17	2389	115.9	2424	86.0	2454	115.9	92.5	0.4487	0.0260	9.8864	0.9215	0.1598	0.0109	269	295	0.427	0.68048
Cycle 4	0.25	2439	119.8	2518	80.4	2583	102.6	93.9	0.4598	0.0271	10.9430	0.9460	0.1726	0.0106	236	266	0.310	0.70738
Cycle 5	0.33	2399	111.7	2453	86.5	2499	120.4	92.8	0.4508	0.0251	10.2030	0.9545	0.1642	0.0117	205	215	0.336	0.64659
Cycle 6	0.42	2427	109.2	2558	74.0	2665	97.9	94.8	0.4571	0.0247	11.4240	0.9057	0.1813	0.0107	189	215	0.232	0.667
Cycle 7	0.50	2683	145.2	2616	85.6	2564	105.2	94.7	0.5161	0.0342	12.1470	1.1083	0.1707	0.0107	182	189	0.224	0.72438
Cycle 8	0.58	2194	100.9	2440	73.1	2653	100.0	95.2	0.4054	0.0220	10.0590	0.7960	0.1800	0.0108	160	180	0.199	0.64887
Cycle 9	0.67	2522	117.7	2489	81.0	2462	113.5	95.0	0.4788	0.0270	10.6050	0.9255	0.1606	0.0108	158	159	0.198	0.63848
Cycle 10	0.75	2333	107.2	2428	79.5	2509	113.4	94.8	0.4361	0.0239	9.9508	0.8556	0.1652	0.0111	152	163	0.209	0.62236
Cycle 11	0.83	2358	107.5	2474	77.2	2572	108.1	94.9	0.4416	0.0240	10.4380	0.8700	0.1715	0.0111	153	141	0.199	0.63109
Cycle 12	0.91	2364	109.6	2526	68.6	2658	91.9	96.7	0.4430	0.0245	11.0320	0.8124	0.1806	0.0100	142	142	0.130	0.66438
Cycle 13	1.00	2295	116.1	2513	68.3	2695	86.7	97.4	0.4276	0.0257	10.8850	0.8000	0.1846	0.0097	125	120	0.097	0.70839
Cycle 14	1.08	2410	107.9	2490	68.7	2557	94.8	96.6	0.4532	0.0243	10.6200	0.7857	0.1699	0.0096	142	121	0.129	0.64837
Cycle 15	1.16	2345	112.9	2465	73.4	2565	99.8	96.0	0.4388	0.0252	10.3290	0.8183	0.1707	0.0102	131	120	0.152	0.66108
Cycle 16	1.25	2241	115.9	2405	74.3	2548	98.2	96.3	0.4157	0.0255	9.8866	0.7821	0.1690	0.0099	136	125	0.152	0.69112
Cycle 17	1.33	2402	117.4	2510	66.3	2598	85.6	97.7	0.4515	0.0264	10.8440	0.7733	0.1742	0.0089	133	125	0.094	0.70404
Cycle 18	1.41	2438	111.7	2481	67.7	2517	92.6	97.0	0.4597	0.0253	10.5130	0.7676	0.1659	0.0091	138	133	0.121	0.66255
Cycle 19	1.50	2346	117.6	2450	70.5	2538	92.4	97.0	0.4389	0.0263	10.1710	0.7752	0.1681	0.0093	139	133	0.130	0.69631
Cycle 20	1.58	2299	120.0	2433	72.7	2547	93.8	97.6	0.4285	0.0266	9.9774	0.7858	0.1689	0.0095	136	130	0.141	0.70767
Cycle 21	1.66	2321	113.7	2442	69.1	2544	91.1	97.0	0.4333	0.0253	10.0750	0.7532	0.1686	0.0092	136	141	0.124	0.69223
Cycle 22	1.75	2290	118.6	2492	65.3	2661	78.6	98.3	0.4264	0.0262	10.6370	0.7478	0.1809	0.0086	136	131	0.072	0.74915
Cycle 23	1.83	2326	112.2	2518	62.4	2677	77.9	98.2	0.4345	0.0250	10.9430	0.7337	0.1827	0.0086	139	124	0.074	0.7246
Cycle 24	1.91	2218	127.5	2431	72.9	2613	86.0	97.6	0.4108	0.0279	9.9549	0.7869	0.1758	0.0091	120	124	0.096	0.76272
Cycle 25	2.00	2402	110.1	2480	63.8	2544	85.1	97.6	0.4516	0.0248	10.5010	0.7230	0.1686	0.0086	140	126	0.096	0.68441
Cycle 26	2.08	2235	126.6	2436	69.1	2608	79.4	98.5	0.4144	0.0278	10.0140	0.7493	0.1753	0.0084	129	126	0.065	0.77961
Cycle 27	2.16	2205	120.0	2462	64.3	2683	72.1	99.1	0.4078	0.0262	10.3030	0.7153	0.1833	0.0080	132	125	0.037	0.78974
Cycle 28	2.25	2234	129.2	2441	70.6	2619	80.5	98.3	0.4141	0.0283	10.0700	0.7701	0.1763	0.0085	120	104	0.068	0.7826
Cycle 29	2.33	2311	117.6	2484	64.4	2628	78.6	98.3	0.4312	0.0261	10.5440	0.7325	0.1773	0.0084	130	123	0.066	0.74333
Cycle 30	2.41	2244	123.7	2432	68.2	2594	80.1	98.3	0.4163	0.0272	9.9728	0.7374	0.1738	0.0083	124	119	0.068	0.76859
Cycle 31	2.50	2208	123.1	2447	67.4	2652	76.5	98.6	0.4085	0.0269	10.1320	0.7385	0.1799	0.0083	125	116	0.057	0.78369
Cycle 32	2.58	2186	131.6	2404	73.4	2594	82.4	98.1	0.4037	0.0286	9.6732	0.7712	0.1738	0.0086	120	119	0.080	0.79102
Cycle 33	2.66	2202	125.0	2443	68.1	2651	76.3	98.6	0.4071	0.0273	10.0910	0.7442	0.1798	0.0083	122	117	0.055	0.79032
Cycle 34	2.75	2232	136.3	2450	71.1	2636	74.9	99.1	0.4137	0.0299	10.1630	0.7816	0.1782	0.0080	113	105	0.035	0.81902
Cycle 35	2.83	2265	127.8	2474	68.2	2651	76.5	98.6	0.4210	0.0282	10.4380	0.7687	0.1798	0.0083	122	114	0.057	0.78861
Cycle 36	2.91	2200	131.4	2450	69.7	2664	74.1	99.1	0.4066	0.0287	10.1600	0.7661	0.1812	0.0081	114	104	0.037	0.81404
Cycle 37	2.99	2155	126.6	2390	70.5	2597	78.8	98.4	0.3969	0.0274	9.5264	0.7308	0.1741	0.0082	120	121	0.063	0.79463
Cycle 38	3.08	2274	129.3	2427	70.2	2559	81.1	98.2	0.4230	0.0285	9.9206	0.7551	0.1701	0.0082	124	115	0.075	0.77877
Cycle 39	3.16	2296	124.8	2486	65.8	2646	74.8	98.8	0.4278	0.0276	10.5710	0.7502	0.1792	0.0081	124	108	0.050	0.78278
Cycle 40	3.24	2274	132.1	2485	67.2	2662	71.0	99.5	0.4229	0.0292	10.5520	0.7640	0.1810	0.0078	117	111	0.020	0.81708
Cycle 41	3.33	2156	139.6	2335	75.2	2496	80.1	98.8	0.3972	0.0303	8.9748	0.7384	0.1639	0.0078	106	103	0.046	0.82261
Cycle 42	3.41	2347	131.3	2479	67.1	2588	75.5	99.0	0.4391	0.0293	10.4840	0.7593	0.1732	0.0078	112	94	0.039	0.79171
Cycle 43	3.49	2157	132.3	2385	71.5	2586	76.3	98.9	0.3973	0.0287	9.4697	0.7372	0.1729	0.0079	116	107	0.045	0.81705
Cycle 44	3.58	2125	140.1	2387	74.8	2618	74.5	99.2	0.3904	0.0302	9.4887	0.7727	0.1763	0.0079	110	106	0.031	0.84211
Cycle 45	3.66	2237	139.8	2442	72.7	2617	75.6	99.1	0.4149	0.0307	10.0750	0.7930	0.1761	0.0080	111	104	0.039	0.82462

<sup>a</sup> No pre-sputtering of zircon surface prior to commencement of analysis

<sup>b</sup> Maximum pit depth measured with MicroXAM scanning interferometer at Yale University. Depth increments calculated by assuming constant ionization rate throughout analysis.

<sup>c</sup> Uncertainties listed at the 1σ level.

<sup>d</sup> Correction for common Pb made using the measured<sup>206</sup>Pb/<sup>207</sup>Pb ratio.

<sup>e</sup> Semi-quantitative estimates based on U/<sup>235</sup>Zr, Th/<sup>235</sup>Zr, and <sup>206</sup>Pb/<sup>207</sup>Zr relative to that of newly measured (Table 2) and previously published (Paces and Miller, 1993) concentrations for AS3 standard.

Table 6 (continued). Depth-profile U-Pb isotopic data from little-altered schist sample D-6-4

Analysis description	Depth (µm) <sup>a</sup>	Ages (Ma)				% radiogenic <sup>206</sup> Pb/ <sup>238</sup> U <sup>c</sup>	Corrected atomic ratios			Concentrations (ppm) <sup>d</sup>			Correlation of ellipses					
		<sup>206</sup> Pb/ <sup>238</sup> U ±	<sup>207</sup> Pb/ <sup>235</sup> U ±	<sup>206</sup> Pb/ <sup>238</sup> U ±	<sup>207</sup> Pb/ <sup>235</sup> U ±		<sup>206</sup> Pb/ <sup>238</sup> U ±	<sup>207</sup> Pb/ <sup>235</sup> U ±	<sup>207</sup> Pb/ <sup>235</sup> U ±	U	Th	<sup>206</sup> Pb						
<i>jahp_m12_D-6-4</i>																		
Cycle 1	0.00	727	13.5	1073	28.1	1863	64.7	97.6	0.1194	0.0023	1.8756	0.0795	0.1139	0.0041	952	389	0.138	0.53929
Cycle 2	0.08	1057	20.5	1510	25.7	2220	46.5	98.8	0.1782	0.0038	3.4255	0.1120	0.1394	0.0037	535	225	0.063	0.57657
Cycle 3	0.15	1173	25.4	1690	25.2	2408	41.2	99.3	0.1996	0.0047	4.2799	0.1313	0.1555	0.0038	399	182	0.030	0.62899
Cycle 4	0.23	1302	30.9	1809	28.2	2456	43.9	99.2	0.2238	0.0059	4.9384	0.1652	0.1601	0.0042	338	168	0.035	0.64539
Cycle 5	0.31	1269	41.1	1814	34.9	2515	45.3	99.2	0.2175	0.0078	4.9692	0.2054	0.1657	0.0045	284	154	0.033	0.76451
Cycle 6	0.39	1331	41.3	1869	33.0	2524	43.7	99.6	0.2293	0.0079	5.3007	0.2050	0.1676	0.0044	262	150	0.016	0.75994
Cycle 7	0.46	1364	43.4	1913	33.0	2574	42.5	99.9	0.2357	0.0083	5.5800	0.2136	0.1717	0.0044	237	148	0.004	0.7643
Cycle 8	0.54	1378	52.7	1948	38.9	2623	44.8	99.9	0.2383	0.0101	5.8092	0.2611	0.1768	0.0048	199	137	0.003	0.81113
Cycle 9	0.62	1323	50.9	1869	39.5	2545	48.5	99.8	0.2279	0.0097	5.3010	0.2449	0.1687	0.0049	192	134	0.007	0.79025
Cycle 10	0.69	1335	51.4	1895	42.7	2580	56.8	99.1	0.2302	0.0098	5.4659	0.2719	0.1723	0.0059	163	132	0.021	0.73958
Cycle 11	0.77	1379	60.8	1914	47.0	2557	59.7	99.5	0.2386	0.0117	5.5884	0.3049	0.1699	0.0061	131	125	0.011	0.76779
Cycle 12	0.85	1401	65.0	1913	49.4	2524	64.8	99.6	0.2428	0.0125	5.5779	0.3200	0.1666	0.0064	108	112	0.007	0.75445
Cycle 13	0.93	1329	70.9	1913	54.6	2623	67.1	99.8	0.2289	0.0135	5.5787	0.3536	0.1767	0.0071	89	109	0.003	0.78472
Cycle 14	1.00	1394	70.6	1964	52.2	2632	68.9	100.0	0.2415	0.0136	5.9172	0.3558	0.1777	0.0074	80	99	0.000	0.74852
Cycle 15	1.08	1251	78.1	1848	62.2	2606	76.6	99.9	0.2142	0.0147	5.1686	0.3776	0.1750	0.0080	68	97	0.001	0.79711
Cycle 16	1.16	1256	68.4	1835	58.8	2574	84.0	99.9	0.2151	0.0129	5.0931	0.3530	0.1717	0.0086	69	92	0.005	0.70644
Cycle 17	1.23	1314	72.4	1943	61.7	2701	86.5	99.3	0.2262	0.0138	5.7774	0.4118	0.1853	0.0097	61	88	0.007	0.696
Cycle 18	1.31	1224	78.2	1746	66.4	2446	93.3	99.6	0.2090	0.0147	4.5840	0.3651	0.1591	0.0088	55	87	0.004	0.73635
Cycle 19	1.39	1193	85.1	1805	72.4	2609	92.4	99.5	0.2033	0.0159	4.9148	0.4216	0.1753	0.0097	51	88	0.004	0.77464
Cycle 20	1.47	1276	77.0	1887	63.7	2647	88.1	99.7	0.2189	0.0146	5.4126	0.4025	0.1794	0.0095	55	82	0.003	0.7211
Cycle 21	1.54	1214	85.0	1833	69.0	2634	88.0	100.0	0.2072	0.0159	5.0826	0.4133	0.1779	0.0094	48	86	0.000	0.77744
Cycle 22	1.62	1211	78.7	1784	64.4	2541	89.0	100.0	0.2066	0.0147	4.7948	0.3677	0.1683	0.0089	51	83	0.000	0.74491
Cycle 23	1.70	1179	88.8	1776	75.0	2573	96.3	99.7	0.2006	0.0165	4.7465	0.4242	0.1716	0.0099	44	88	0.002	0.77776
Cycle 24	1.77	1163	83.3	1721	75.6	2488	106.5	99.2	0.1977	0.0155	4.4461	0.4054	0.1631	0.0103	47	87	0.006	0.73213
Cycle 25	1.85	1152	85.6	1804	72.3	2671	91.7	100.0	0.1956	0.0159	4.9090	0.4207	0.1820	0.0101	44	88	0.000	0.78991
Cycle 26	1.93	1159	83.8	1690	72.3	2432	100.9	99.7	0.1970	0.0156	4.2845	0.3764	0.1578	0.0094	46	80	0.002	0.75039
Cycle 27	2.01	1162	89.4	1706	80.4	2460	112.1	99.2	0.1975	0.0166	4.3676	0.4250	0.1604	0.0106	43	82	0.006	0.74191
Cycle 28	2.08	1166	81.6	1734	71.0	2510	99.8	99.7	0.1983	0.0152	4.5176	0.3860	0.1653	0.0098	48	82	0.002	0.73691
Cycle 29	2.16	1233	85.2	1855	75.2	2648	104.1	99.2	0.2107	0.0160	5.2133	0.4603	0.1794	0.0113	46	81	0.006	0.71759
Cycle 30	2.24	1076	84.5	1691	78.2	2569	105.0	99.5	0.1817	0.0155	4.2874	0.4074	0.1712	0.0108	43	80	0.004	0.76237
Cycle 31	2.31	1105	87.6	1683	85.5	2504	121.2	98.7	0.1870	0.0161	4.2452	0.4414	0.1647	0.0119	42	87	0.010	0.72846
Cycle 32	2.39	1095	87.3	1723	77.3	2601	100.9	99.8	0.1852	0.0161	4.4548	0.4153	0.1744	0.0106	42	82	0.001	0.77596
Cycle 33	2.47	1147	83.2	1712	77.8	2495	113.4	99.2	0.1947	0.0154	4.3969	0.4133	0.1638	0.0110	44	79	0.006	0.71022
Cycle 34	2.55	1123	88.6	1689	85.9	2486	123.6	98.8	0.1903	0.0164	4.2754	0.4462	0.1629	0.0120	41	89	0.009	0.71907
Cycle 35	2.62	1097	84.7	1662	81.6	2474	118.4	99.1	0.1855	0.0156	4.1374	0.4130	0.1618	0.0114	43	79	0.006	0.72707
Cycle 36	2.70	1186	83.2	1785	71.4	2581	101.9	99.8	0.2019	0.0155	4.8005	0.4081	0.1724	0.0105	44	79	0.001	0.71997
Cycle 37	2.78	1089	83.8	1666	79.3	2496	114.0	99.3	0.1841	0.0154	4.1590	0.4029	0.1639	0.0111	42	76	0.004	0.72783
Cycle 38	2.85	1070	87.4	1659	81.3	2514	113.0	99.5	0.1805	0.0160	4.1224	0.4099	0.1656	0.0111	40	79	0.003	0.75044
Cycle 39	2.93	1150	85.7	1748	72.7	2564	100.0	100.0	0.1953	0.0159	4.5953	0.4004	0.1706	0.0102	42	78	0.000	0.75023
Cycle 40	3.01	1045	87.2	1646	81.2	2529	110.5	99.6	0.1760	0.0159	4.0564	0.4043	0.1671	0.0110	39	81	0.003	0.76424
Cycle 41	3.09	1152	83.3	1708	86.3	2479	123.4	99.1	0.1956	0.0173	4.3749	0.4567	0.1622	0.0119	39	81	0.007	0.72401
Cycle 42	3.16	1095	87.1	1698	77.6	2552	106.0	99.8	0.1851	0.0160	4.3228	0.4070	0.1694	0.0107	43	84	0.001	0.75757
Cycle 43	3.24	1118	83.8	1734	77.2	2585	109.7	99.5	0.1894	0.0155	4.5136	0.4190	0.1728	0.0114	45	83	0.003	0.72346
Cycle 44	3.32	1085	88.2	1693	79.2	2558	108.1	99.8	0.1833	0.0162	4.2992	0.4133	0.1701	0.0110	40	80	0.001	0.75778
Cycle 45	3.39	1062	87.1	1654	85.7	2476	125.1	99.1	0.1792	0.0159	3.9995	0.4220	0.1619	0.0120	40	78	0.006	0.72184
Cycle 46	3.47	1191	91.9	1700	85.7	2400	129.7	99.0	0.2030	0.0171	4.3341	0.4500	0.1549	0.0118	39	79	0.007	0.68869
Cycle 47	3.55	1060	89.6	1681	80.0	2578	106.8	100.0	0.1786	0.0164	4.2377	0.4126	0.1721	0.0110	37	88	0.000	0.72296
Cycle 48	3.63	1037	78.9	1668	72.5	2589	102.0	100.0	0.1745	0.0144	4.1673	0.3692	0.1732	0.0106	44	80	0.000	0.74637
Cycle 49	3.70	1086	85.1	1640	80.8	2447	119.6	99.4	0.1834	0.0156	4.0267	0.4001	0.1592	0.0113	40	82	0.004	0.71648
Cycle 50	3.78	1001	81.6	1467	94.8	2228	159.3	99.2	0.1680	0.0148	3.2413	0.3959	0.1399	0.0129	40	81	0.011	0.66067
Cycle 51	3.86	1056	83.2	1679	81.8	2580	117.6	99.3	0.1780	0.0152	4.2279	0.4212	0.1723	0.0121	41	87	0.005	0.72031
Cycle 52	3.93	1078	88.0	1669	84.7	2520	122.8	99.3	0.1820	0.0161	4.1726	0.4317	0.1663	0.0121	39	82	0.005	0.7208
Cycle 53	4.01	1045	88.8	1615	87.4	2466	128.4	99.2	0.1760	0.0162	3.9072	0.4222	0.1610	0.0122	37	77	0.005	0.72233
Cycle 54	4.09	1060	84.1	1653	81.3	2519	119.9	99.5	0.1787	0.0154	4.0933	0.4079	0.1661	0.0119	39	78	0.003	0.71393
Cycle 55	4.17	1083	89.8	1683	79.3	2542	111.1	100.0	0.1829	0.0165	4.2464	0.4099	0.1684	0.0112	35	78	0.000	0.7499
Cycle 56	4.24	981	91.6	1576	85.5	2501	116.8	100.0	0.1643	0.0165	3.7233	0.3976	0.1643	0.0114	31	71	0.000	0.77764
Cycle 57	4.32	1106	83.9	1702	73.9	2540	108.0	100.0	0.1872	0.0154	4.3434	0.3888	0.1683	0.0108	38	74	0.000	0.72226

No pre-sputtering of zircon surface prior to commencement of analysis

<sup>a</sup> Maximum pit depth measured with MicroXAM scanning interferometer at Yale University. Depth increments calculated by assuming constant ionization rate throughout analysis.

<sup>b</sup> Uncertainties listed at the 1σ level.

<sup>c</sup> Correction for common Pb made using the measured <sup>206</sup>Pb/<sup>238</sup>U ratio.

<sup>d</sup> Semi-quantitative estimates based on <sup>U</sup>/<sup>Pb</sup>Zr<sub>2</sub>O<sub>7</sub>, Th/<sup>U</sup>Zr<sub>2</sub>O<sub>7</sub>, and <sup>206</sup>Pb/<sup>208</sup>PbZr<sub>2</sub>O<sub>7</sub> relative to that of newly measured (Table 2) and previously published (Paces and Miller, 1993) concentrations for AS3 standard.

Table 6 (continued): Depth-profile U-Pb isotopic data from little-altered schist sample D-16-1

Analysis description	Depth (μm) <sup>a</sup>	Ages (Ma)				% radiogenic <sup>206</sup> Pb/ <sup>a</sup>	Corrected atomic ratios				Concentrations (ppm) <sup>f</sup>			Correlation of ellipses				
		<sup>206</sup> Pb/ <sup>238</sup> U ± <sup>b</sup>	<sup>207</sup> Pb/ <sup>235</sup> U ± <sup>b</sup>	<sup>207</sup> Pb/ <sup>206</sup> Pb ±	<sup>207</sup> Pb/ <sup>206</sup> Pb ±		<sup>206</sup> Pb/ <sup>a</sup> <sup>238</sup> U ±	<sup>207</sup> Pb/ <sup>a</sup> <sup>235</sup> U ±	<sup>207</sup> Pb/ <sup>a</sup> <sup>206</sup> Pb ±	<sup>207</sup> Pb/ <sup>a</sup> <sup>206</sup> Pb ±	U	Th	<sup>206</sup> Pb					
<i>jahp_m12_D-16-1</i>																		
Cycle 1	0.00	929	18.8	950	25.4	997	70.5	98.8	0.1550	0.0034	1.5478	0.0638	0.0724	0.0025	789	223	0.089	0.53871
Cycle 2	0.09	915	23.1	941	24.3	1001	60.2	99.3	0.1525	0.0041	1.5251	0.0604	0.0725	0.0021	757	217	0.056	0.66382
Cycle 3	0.17	923	21.8	980	21.5	1108	49.6	99.6	0.1540	0.0039	1.6240	0.0556	0.0765	0.0019	749	203	0.032	0.69025
Cycle 4	0.26	906	24.4	945	24.5	1035	57.8	99.3	0.1510	0.0044	1.5352	0.0613	0.0738	0.0021	726	207	0.047	0.69732
Cycle 5	0.35	886	28.6	911	26.9	970	60.0	99.4	0.1474	0.0051	1.4518	0.0648	0.0714	0.0021	671	177	0.044	0.75306
Cycle 6	0.43	888	26.8	953	24.4	1108	49.4	99.6	0.1476	0.0048	1.5566	0.0614	0.0765	0.0019	662	179	0.025	0.77999
Cycle 7	0.52	867	30.2	913	27.0	1025	53.9	99.6	0.1440	0.0054	1.4567	0.0652	0.0734	0.0020	633	175	0.029	0.80378
Cycle 8	0.60	863	29.8	918	27.6	1054	56.8	99.4	0.1432	0.0053	1.4704	0.0671	0.0745	0.0021	653	168	0.038	0.78612
Cycle 9	0.69	862	29.9	900	27.0	994	56.0	99.5	0.1431	0.0053	1.4261	0.0645	0.0723	0.0020	638	167	0.031	0.79364
Cycle 10	0.78	822	33.6	889	29.1	1059	50.5	99.7	0.1359	0.0059	1.3990	0.0687	0.0747	0.0019	645	171	0.021	0.85986
Cycle 11	0.86	851	30.4	908	26.1	1050	48.1	99.8	0.1411	0.0054	1.4462	0.0629	0.0743	0.0018	626	157	0.013	0.83654
Cycle 12	0.95	858	33.4	909	29.6	1035	58.0	99.6	0.1424	0.0059	1.4484	0.0714	0.0738	0.0021	570	162	0.025	0.81311
Cycle 13	1.04	855	33.3	922	29.6	1086	56.3	99.7	0.1418	0.0059	1.4787	0.0721	0.0756	0.0021	536	160	0.019	0.81844
Cycle 14	1.12	824	37.4	917	33.1	1148	57.0	99.6	0.1364	0.0066	1.4671	0.0804	0.0780	0.0022	471	167	0.019	0.85224
Cycle 15	1.21	827	34.4	890	31.4	1052	63.2	99.6	0.1369	0.0061	1.4033	0.0744	0.0744	0.0023	480	185	0.022	0.80656
Cycle 16	1.30	849	36.0	885	30.9	977	60.0	99.7	0.1408	0.0064	1.3915	0.0728	0.0717	0.0021	463	189	0.014	0.82751
Cycle 17	1.38	824	34.2	879	33.1	1020	73.6	99.3	0.1364	0.0060	1.3768	0.0776	0.0732	0.0027	471	209	0.032	0.76419
Cycle 18	1.47	830	36.1	859	34.8	937	80.3	99.3	0.1374	0.0064	1.3310	0.0798	0.0703	0.0028	436	212	0.033	0.75717
Cycle 19	1.55	825	36.3	894	32.9	1068	64.6	99.6	0.1365	0.0064	1.4109	0.0781	0.0750	0.0024	421	246	0.017	0.81518
Cycle 20	1.64	813	35.9	883	33.6	1063	69.4	99.5	0.1344	0.0063	1.3859	0.0790	0.0748	0.0026	410	243	0.021	0.79692
Cycle 21	1.73	827	35.5	887	33.8	1042	73.5	99.5	0.1368	0.0063	1.3962	0.0798	0.0740	0.0027	406	278	0.022	0.77103
Cycle 22	1.81	815	37.9	860	34.5	978	72.6	99.6	0.1347	0.0067	1.3322	0.0792	0.0717	0.0026	372	260	0.016	0.80103
Cycle 23	1.90	818	40.5	879	36.8	1035	74.0	99.6	0.1353	0.0071	1.3761	0.0862	0.0738	0.0027	344	253	0.017	0.81197
Cycle 24	1.99	800	43.3	893	40.2	1131	76.3	99.5	0.1322	0.0076	1.4104	0.0955	0.0774	0.0030	318	270	0.020	0.82507
Cycle 25	2.07	827	39.9	876	37.5	1001	81.9	99.5	0.1369	0.0070	1.3695	0.0875	0.0725	0.0029	324	260	0.019	0.77627
Cycle 26	2.16	833	42.0	905	37.7	1085	73.2	99.6	0.1379	0.0074	1.4377	0.0906	0.0756	0.0028	308	263	0.013	0.81606
Cycle 27	2.25	814	41.4	889	37.4	1080	72.9	99.7	0.1345	0.0073	1.3991	0.0885	0.0754	0.0027	300	269	0.011	0.81917
Cycle 28	2.33	804	45.2	835	44.2	918	104.0	99.1	0.1328	0.0079	1.2751	0.0991	0.0697	0.0035	269	268	0.027	0.75913
Cycle 29	2.42	816	44.5	844	42.7	920	98.8	99.3	0.1349	0.0078	1.2971	0.0965	0.0697	0.0034	270	266	0.023	0.76333
Cycle 30	2.50	859	40.7	920	37.2	1068	77.4	99.6	0.1426	0.0072	1.4738	0.0906	0.0750	0.0029	274	260	0.012	0.78059
Cycle 31	2.59	804	46.7	857	41.9	999	83.6	99.6	0.1328	0.0082	1.3260	0.0960	0.0724	0.0030	254	264	0.013	0.82321
Cycle 32	2.68	848	46.2	912	41.4	1070	81.0	99.6	0.1406	0.0082	1.4549	0.1000	0.0751	0.0030	245	262	0.012	0.81089
Cycle 33	2.76	825	46.3	921	39.8	1157	66.2	99.9	0.1366	0.0082	1.4761	0.0969	0.0784	0.0026	247	275	0.004	0.86245
Cycle 34	2.85	831	48.3	883	41.0	1017	74.9	99.8	0.1376	0.0085	1.3868	0.0965	0.0731	0.0027	226	263	0.006	0.84825

<sup>a</sup> No pre-sputtering of zircon surface prior to commencement of analysis

<sup>b</sup> Maximum pit depth measured with MicroXAM scanning interferometer at Yale University. Depth increments calculated by assuming constant ionization rate throughout analysis.

<sup>c</sup> Uncertainties listed at the 1σ level.

<sup>d</sup> Correction for common Pb made using the measured <sup>204</sup>Pb/<sup>206</sup>Pb ratio.

<sup>e</sup> Semi-quantitative estimates based on U/<sup>238</sup>Zr, Th/<sup>232</sup>Zr, and <sup>207</sup>Pb/<sup>206</sup>Pb relative to that of newly measured (Table 2) and previously published (Paces and Miller, 1993) concentrations for AS3 standard.