

Appendices

Appendix 1

Sample/ spot	[U] ppm	[Pb] ppm	[Th] ppm	Th/U meas.	$f_{206}\%$	$^{207}\text{Pb}/^{235}\text{U}$ $\pm 1\sigma$ error	$^{206}\text{Pb}/^{238}\text{U}$ $\pm 1\sigma$ error	Error corr.	Discordance (%)	$^{207}\text{Pb}/^{206}\text{Pb}$ $\pm 1\sigma(\text{Ma})$	$^{206}\text{Pb}/^{238}\text{U}$ $\pm 1\sigma(\text{Ma})$
DC01138 - Rooiputs Granophyre											
10a	132	33	114	0.869	0.71	1.8634 ± 2.8398	0.18549 ± 2.0720	0.73	9.4	1010 ± 39	1097 ± 21
10b	145	38	137	0.943	(0.08)	2.0085 ± 2.3101	0.19261 ± 1.9214	0.83	5.1	1085 ± 26	1136 ± 20
10c	137	34	123	0.895	(0.09)	2.0047 ± 2.2601	0.18717 ± 1.9109	0.85	-3.1	1139 ± 24	1106 ± 19
10d	139	35	124	0.889	0.16	1.9477 ± 2.2511	0.18731 ± 1.8968	0.84	2.7	1080 ± 24	1107 ± 19
17b	158	34	59	0.378	3.43	1.9978 ± 3.4824	0.18492 ± 2.0333	0.58	-5.8	1156 ± 55	1094 ± 20
20a	112	26	77	0.685	(0.17)	1.9027 ± 2.2390	0.18293 ± 1.8952	0.85	0.3	1080 ± 24	1083 ± 19
20b	113	26	77	0.689	(0.13)	1.9193 ± 2.2377	0.18340 ± 1.9264	0.86	-0.7	1092 ± 23	1086 ± 19
24a	103	23	67	0.655	(0.07)	1.9086 ± 2.3284	0.17811 ± 1.8956	0.81	-7.9	1140 ± 27	1057 ± 19
24b	106	24	70	0.664	(0.07)	1.8591 ± 2.2776	0.17821 ± 1.8953	0.83	-2.9	1086 ± 25	1057 ± 19
61a	349	74	72	0.207	(0.04)	1.9616 ± 2.0452	0.18733 ± 1.8955	0.93	1.3	1094 ± 15	1107 ± 19
17a*	462	104	27	0.058	0.06	2.2398 ± 1.9748	0.20443 ± 1.8987	0.96	1.4	1184 ± 11	1199 ± 21
64a*	391	87	23	0.059	(0.03)	2.2176 ± 1.7809	0.20223 ± 1.6486	0.93	0.2	1185 ± 13	1187 ± 18
62a	1075	175	6	0.005	2.89	1.5560 ± 2.2956	0.15061 ± 1.9055	0.83	-16.3	1067 ± 26	904 ± 16
47e	403	89	24	0.059	(0.04)	2.2061 ± 1.8035	0.20055 ± 1.6592	0.92	-1.2	1192 ± 14	1178 ± 18
30a	439	93	5	0.011	(0.00)	2.1121 ± 1.7579	0.19675 ± 1.6487	0.94	1.4	1143 ± 12	1158 ± 17
65a	113	57	111	0.980	(0.07)	5.5908 ± 1.8318	0.36478 ± 1.6491	0.90	11.9	1818 ± 14	2005 ± 28
69a	98	43	109	1.108	(0.04)	4.5445 ± 1.9836	0.30918 ± 1.7370	0.88	-0.4	1742 ± 17	1737 ± 26
72a	392	86	24	0.062	(0.03)	2.1869 ± 1.8291	0.19979 ± 1.6490	0.90	-0.7	1182 ± 16	1174 ± 18
DC01139 - Blauwbosch Granite											
19a	933	214	429	0.460	0.18	1.9744 ± 1.9891	0.18887 ± 1.9510	0.98	2.5	1090 ± 8	1115 ± 20
25a	110	30	132	1.208	(0.13)	1.9749 ± 2.1784	0.18869 ± 1.8951	0.87	2.2	1093 ± 21	1114 ± 19
6a	469	115	407	0.867	0.92	1.8948 ± 2.0624	0.18254 ± 1.8995	0.92	0.5	1076 ± 16	1081 ± 19
8a	240	59	191	0.795	0.35	1.9594 ± 2.1375	0.18580 ± 1.8952	0.89	-0.9	1108 ± 20	1099 ± 19
25b	78	20	90	1.150	(0.15)	1.9403 ± 2.4045	0.18299 ± 1.9958	0.83	-3.4	1119 ± 27	1083 ± 20
6b	621	135	353	0.568	0.39	1.7928 ± 2.0266	0.17383 ± 1.9401	0.96	-3.1	1063 ± 12	1033 ± 19
26a	54	14	64	1.180	(0.00)	1.9511 ± 2.3742	0.18233 ± 1.9113	0.81	-5.5	1137 ± 28	1080 ± 19
26b	340	76	261	0.767	3.21	1.6860 ± 2.7771	0.16678 ± 1.9488	0.70	-3.0	1023 ± 40	994 ± 18
47a	4124	263	2778	0.674	3.44	0.3789 ± 3.6886	0.04844 ± 1.8978	0.51	-37.5	482 ± 68	305 ± 6
47a2	3879	268	2670	0.688	7.77	0.4148 ± 5.5568	0.05115 ± 1.9197	0.35	-43.7	560 ± 110	322 ± 6
50a	441	101	414	0.938	0.38	1.7446 ± 2.0415	0.16830 ± 1.9107	0.94	-7.1	1073 ± 14	1003 ± 18
53a	171	37	82	0.477	0.63	1.8521 ± 2.2849	0.17626 ± 1.8971	0.83	-5.3	1101 ± 25	1047 ± 18
53b	364	82	266	0.730	0.08	1.8255 ± 2.0143	0.17435 ± 1.8958	0.94	-5.7	1093 ± 14	1036 ± 18
63a	544	130	621	1.143	1.56	1.7620 ± 2.1983	0.16594 ± 1.8966	0.86	-12.7	1121 ± 22	990 ± 17
DC0263 - Leeuwdraai Rhyolite, Koras Group											
18a	47	13	66	1.392	0.98	1.9097 ± 3.7424	0.18427 ± 2.2666	0.61	1.8	1073 ± 59	1090 ± 23
20b	80	21	79	0.983	(0.15)	1.9851 ± 3.9651	0.18828 ± 2.2532	0.57	0.5	1107 ± 64	1112 ± 23
21a	122	30	98	0.803	(0.16)	1.9638 ± 2.6587	0.18434 ± 2.2532	0.85	-3.6	1128 ± 28	1091 ± 23
21b	50	13	46	0.931	(0.13)	1.9747 ± 3.3270	0.18454 ± 2.2677	0.68	-4.3	1137 ± 48	1092 ± 23
25b	53	13	51	0.951	(0.11)	1.9693 ± 2.8585	0.18584 ± 2.2663	0.79	-1.8	1117 ± 34	1099 ± 23
27a	130	30	107	0.819	(0.10)	1.8713 ± 2.6013	0.17942 ± 2.2495	0.86	-2.2	1086 ± 26	1064 ± 22
2a	133	33	113	0.846	(0.09)	1.9471 ± 2.5831	0.18651 ± 2.2610	0.88	1.5	1088 ± 25	1102 ± 23
37a	126	33	145	1.148	0.18	1.9313 ± 2.5830	0.18585 ± 2.2566	0.87	2.1	1078 ± 25	1099 ± 23
39a	94	24	92	0.986	(0.11)	1.9632 ± 2.6225	0.18521 ± 2.2479	0.86	-2.2	1118 ± 27	1095 ± 23
3a	187	46	168	0.900	(0.05)	1.9460 ± 2.4565	0.18539 ± 2.2587	0.92	-0.2	1098 ± 19	1096 ± 23
44a	69	19	102	1.482	0.30	1.8412 ± 3.2562	0.17887 ± 2.3183	0.71	0.2	1059 ± 45	1061 ± 23
4a	138	35	157	1.139	0.39	1.8744 ± 2.6516	0.18143 ± 2.2442	0.85	0.8	1067 ± 28	1075 ± 22
7a	216	55	222	1.029	(0.06)	1.9567 ± 2.4826	0.18637 ± 2.2801	0.92	0.3	1099 ± 20	1102 ± 23
9a	138	34	137	0.991	(0.13)	1.9224 ± 2.5415	0.18308 ± 2.2583	0.89	-1.5	1099 ± 23	1084 ± 23
44a	201	47	159	0.793	0.18	1.8741 ± 2.5455	0.17804 ± 2.3090	0.91	-4.7	1104 ± 21	1056 ± 23
44b	45	11	44	0.970	(0.32)	1.9322 ± 3.0643	0.17685 ± 2.2923	0.75	-11.8	1178 ± 40	1050 ± 22
20a	168	38	150	0.895	(0.10)	1.7820 ± 2.7874	0.16876 ± 2.4810	0.89	-10.2	1110 ± 25	1005 ± 23
25a	119	29	131	1.104	3.10	1.4685 ± 4.4927	0.18913 ± 2.2483	0.50	153.0	465 ± 84	1117 ± 23
29a	156	36	151	0.967	0.32	1.7824 ± 2.7931	0.17590 ± 2.3843	0.85	1.8	1028 ± 29	1045 ± 23
38a	75	19	92	1.218	0.54	1.8255 ± 3.0642	0.18127 ± 2.2956	0.75	6.3	1015 ± 41	1074 ± 23
DC0380 - Swartkopsleegte Rhyolite, Koras Group											
7a	524	119	47	0.090	0.40	2.2578 ± 2.4076	0.20545 ± 2.2491	0.93	1.4	1190 ± 17	1205 ± 25
8a	458	103	34	0.075	(0.01)	2.2218 ± 2.3256	0.20297 ± 2.2467	0.97	0.9	1182 ± 12	1191 ± 24
9a	267	61	31	0.116	(0.03)	2.2493 ± 2.5620	0.20559 ± 2.2494	0.88	2.3	1181 ± 24	1205 ± 25
285	285	66	39	0.135	(0.00)	2.2557 ± 2.7565	0.20599 ± 2.3248	0.84	2.3	1183 ± 29	1207 ± 26
9c	208	47	44	0.213	(0.06)	2.1797 ± 2.4854	0.19941 ± 2.3071	0.93	-0.6	1179 ± 18	1172 ± 25
10a	392	94	141	0.359	(0.05)	2.2049 ± 2.3342	0.20237 ± 2.2448	0.96	1.4	1173 ± 13	1188 ± 24
14a	690	167	257	0.372	0.21	2.2233 ± 1.5917	0.20314 ± 1.5070	0.95	1.0	1182 ± 10	1192 ± 16
25b	67	16	38	0.571	0.75	2.0780 ± 2.4082	0.19190 ± 1.5063	0.63	-2.7	1160 ± 37	1132 ± 16
27b	966	224	437	0.452	1.47	2.0442 ± 1.6678	0.18998 ± 1.5090	0.90	-2.5	1148 ± 14	1121 ± 16
4a	508	127	193	0.380	0.06	2.2690 ± 2.3266	0.21013 ± 2.2481	0.97	7.1	1155 ± 12	1230 ± 25
44a	295	63	90	0.307	0.67	1.9820 ± 2.5222	0.18523 ± 2.2436	0.89	-4.0	1137 ± 23	1095 ± 23
43a	800	208	395	0.494	0.05	2.3038 ± 2.3769	0.21017 ± 2.2457	0.94	4.2	1185 ± 15	1230 ± 25
20a	896	222	298	0.332	0.05	2.2839 ± 2.3544	0.20977 ± 2.2579	0.96	5.3	1171 ± 13	1228 ± 25
24a	3196	239	1195	0.374	8.52	0.5098 ± 2.9022	0.06253 ± 2.2766	0.78	-32.6	572 ± 39	391 ± 9
43a	622	175	191	0.307	0.05	2.4896 ± 2.3916	0.22713 ± 2.2612	0.95	12.6	1185 ± 15	1319 ± 27
24a	1652	422	701	0.424	0.08	2.3103 ± 2.3039	0.21154 ± 2.2632	0.98	5.6	1177 ± 9	1237 ± 26
27a	278	65	110	0.394	(0.06)	2.1592 ± 2.5975	0.19492 ± 2.4901	0.96	-5.2	1205 ± 14	1148 ± 26
25a	154	44	168	1.090	0.13	2.1836 ± 1.8465	0.20298 ± 1.5064	0.82	4.2	1147 ± 21	1191 ± 16
26a	2392	335	472	0.198	2.93	1.2132 ± 1.7154	0.12296 ± 1.5115	0.88	-24.6	974 ± 16	748 ± 11
24b	1460	284	571	0.391	2.42	1.6811 ± 1.7400	0.16183 ± 1.5114	0.87	-11.1	1078 ± 17	967 ± 14
28a	1259	239	475	0.378	1.24	1.6758 ± 1.6449	0.15947 ± 1.5135	0.92	-14.3	1101 ± 13	954 ± 13
42a	388	93	65	0.166	0.22	2.2662 ± 1.6754	0.21226 ± 1.5063	0.90	10.5	1132 ± 15	1241 ± 17
DC0411 - Sandstone, Kalkpunt Formation, Koras Group											
7a	254	60	143	0.562	(0.03)	2.0043 ± 1.2708	0.18963 ± 1.1495	0.90	0.7	1112 ± 11	1119 ± 12
22a	173	79	136	0.788	0.08	5.4796 ± 1.2219	0.34242 ± 1.1450	0.94	0.1	1896 ± 8	1898 ± 19
24a	283	65	24	0.084	(0.03)	2.2809 ± 1.2476	0.20680 ± 1.1456	0.92	1.4	1197 ± 10	1212 ± 13
32a	292	66	42	0.144	(0.05)	2.2259 ± 1.2394	0.20325 ± 1.1456	0.92	0.9	1183 ± 9	1193 ± 12
46a	108	28	97	0.900	(0.11)	2.0259 ± 1.4116	0.19098 ± 1.1482	0.81	0.7	1120 ± 16	1127 ± 12
50a	217	65	181	0.832	(0.07)	2.5983 ± 1.2562	0.22461 ± 1.1449	0.91	1.4	1290 ± 10	1306 ± 14
9a	365	128	363	0.995	1.94	4.0226 ± 1.4581	0.26157 ± 1.2731	0.87	-20.0	1825 ± 13	1498 ± 17
23a	1141	219	101	0.088	2.04	1.8858 ± 1.7855	0.17355 ± 1.3315	0.75	-12.6	1167 ± 23	1032 ± 13
26a	456	78	30	0.067	3.07	1.6870 ± 1.6179	0.15665 ± 1.1888	0.73	-19.8	1150 ± 22	938 ± 10
53a	103	70	118	1.143	5.46	3.6994 ± 18.4155	0.52933 ± 2.2668	0.12	1379.1	227 ± 375	2739 ± 51

Sample/ spot	[U] ppm	[Pb] ppm	[Th] ppm	Th/U meas.	$f_{206}\%$	$^{207}\text{Pb}/^{235}\text{U} \pm 1\sigma$ error	$^{206}\text{Pb}/^{238}\text{U} \pm 1\sigma$ error	Error corr.	Discordanc e (%)	$^{207}\text{Pb}/^{206}\text{Pb}$ $\pm 1\sigma(\text{Ma})$	$^{206}\text{Pb}/^{238}\text{U}$ $\pm 1\sigma(\text{Ma})$
DC0415 - Quartzite, Leerkrans Formation, Wilgenhoutsdrif Group											
3a	238	112	138	0.578	1.31	6.4683 ± 2.4412	0.37790 ± 2.3299	0.95	2.9	2017 ± 13	2066 ± 41
13a	165	116	88	0.532	0.09	13.9303 ± 1.1605	0.52597 ± 1.1202	0.97	-1.6	2760 ± 5	2724 ± 25
15a	220	121	232	1.058	{0.04}	6.9786 ± 1.1562	0.38680 ± 1.1033	0.95	-0.1	2109 ± 6	2108 ± 20
18a	194	96	114	0.586	0.07	6.8605 ± 1.1684	0.38252 ± 1.1001	0.94	-0.6	2099 ± 7	2088 ± 20
17a	120	80	49	0.408	{0.04}	13.0256 ± 1.1632	0.51202 ± 1.1070	0.95	-1.3	2694 ± 6	2665 ± 24
26a	160	82	137	0.854	0.08	6.5050 ± 1.2288	0.37145 ± 1.1552	0.94	-1.2	2057 ± 7	2036 ± 20
26b	170	84	137	0.807	0.23	6.3926 ± 1.2106	0.36635 ± 1.1238	0.93	-2.2	2051 ± 8	2012 ± 19
28a	53	26	29	0.549	{0.15}	7.0073 ± 1.5105	0.38833 ± 1.2136	0.80	0.3	2110 ± 16	2115 ± 22
32a	134	91	66	0.497	0.08	13.4038 ± 1.2363	0.51611 ± 1.1853	0.96	-2.0	2728 ± 6	2683 ± 26
4a	141	60	67	0.474	0.43	6.1140 ± 2.5333	0.35066 ± 2.4442	0.96	-6.3	2049 ± 12	1938 ± 41
5a	694	90	402	0.580	3.99	3.4911 ± 1.2456	0.10134 ± 1.1347	0.91	-84.1	3184 ± 8	622 ± 7
6a	405	155	227	0.560	0.35	5.1259 ± 1.3717	0.30034 ± 1.3352	0.97	-18.0	2011 ± 6	1693 ± 20
10a	311	139	244	0.785	1.64	5.0297 ± 1.6631	0.33647 ± 1.2275	0.74	6.3	1773 ± 20	1870 ± 20
45b	139	64	116	0.839	3.74	6.1752 ± 2.0018	0.34117 ± 1.1004	0.55	-12.1	2115 ± 29	1892 ± 18
32b	256	160	88	0.346	0.26	12.6146 ± 1.1983	0.48937 ± 1.1692	0.98	-6.6	2716 ± 4	2568 ± 25
44a	100	20	97	0.977	2.76	2.4865 ± 1.7355	0.14531 ± 1.2865	0.74	-60.4	2016 ± 21	875 ± 11
DC0416 - Conglomerate, Leerkrans Formation, Wilgenhoutsdrif Group											
4a	301	146	211	0.701	0.24	6.3663 ± 2.2477	0.36976 ± 2.1835	0.97	0.1	2027 ± 9	2028 ± 38
9a	169	73	135	0.803	0.34	5.0708 ± 2.3427	0.32981 ± 2.1833	0.93	0.8	1824 ± 15	1837 ± 35
13a	302	214	104	0.346	0.27	15.5326 ± 2.2156	0.55021 ± 2.1850	0.99	-1.7	2864 ± 6	2826 ± 50
20a	173	93	126	0.725	0.30	7.6810 ± 2.3032	0.40687 ± 2.2027	0.96	0.6	2189 ± 12	2201 ± 41
28a	109	68	311	2.847	0.61	5.0630 ± 2.4920	0.33294 ± 2.1988	0.88	3.1	1804 ± 21	1853 ± 36
29a	266	125	110	0.414	0.32	6.8816 ± 2.2548	0.38294 ± 2.1850	0.97	-0.7	2102 ± 10	2090 ± 39
30a	146	70	184	1.259	0.18	5.1196 ± 2.3368	0.32873 ± 2.1832	0.93	-0.9	1847 ± 15	1832 ± 35
31a	291	124	141	0.483	0.12	5.5571 ± 2.2525	0.34128 ± 2.1826	0.97	-2.1	1928 ± 10	1893 ± 36
32a	132	70	134	1.015	0.57	6.7814 ± 2.4117	0.38741 ± 2.1815	0.90	3.1	2056 ± 18	2111 ± 39
33a	364	201	360	0.988	0.21	7.2063 ± 2.2422	0.39958 ± 2.1821	0.97	3.3	2109 ± 9	2167 ± 40
51a	368	241	201	0.546	0.10	12.0762 ± 2.2083	0.49951 ± 2.1815	0.99	0.1	2609 ± 6	2612 ± 47
64a	154	65	94	0.610	0.52	5.2620 ± 2.3979	0.33350 ± 2.1816	0.91	-1.0	1871 ± 18	1855 ± 35
65b	261	76	122	0.467	0.50	2.9064 ± 2.3840	0.24285 ± 2.1829	0.92	3.7	1356 ± 18	1401 ± 28
65a	417	119	132	0.316	0.20	2.8947 ± 2.2784	0.24422 ± 2.1824	0.96	5.9	1337 ± 13	1409 ± 28
DC0420 - Rhyolite at Ezelfontein, Koras Group											
96a	55	14	57	1.037	{0.10}	1.9394 ± 1.7082	0.18319 ± 1.1633	0.68	-3.0	1116 ± 25	1084 ± 12
97a	55	17	105	1.898	{0.21}	1.9830 ± 1.7250	0.19078 ± 1.1509	0.67	4.7	1079 ± 26	1126 ± 12
102b	53	14	55	1.046	{0.15}	1.9654 ± 1.7523	0.18838 ± 1.1452	0.65	2.6	1086 ± 26	1113 ± 12
102c	71	19	81	1.137	{0.09}	2.0252 ± 1.5762	0.18960 ± 1.1450	0.73	-1.4	1133 ± 21	1119 ± 12
104b	81	19	59	0.735	0.79	1.9678 ± 1.9040	0.18600 ± 1.1745	0.62	-1.4	1114 ± 30	1100 ± 12
9a	81	23	121	1.497	{0.10}	1.9341 ± 2.1136	0.18664 ± 1.8318	0.87	3.1	1073 ± 21	1103 ± 19
11a	96	27	138	1.440	{0.07}	1.9844 ± 2.0394	0.18739 ± 1.8248	0.89	-0.9	1116 ± 18	1107 ± 19
45a	64	17	71	1.111	0.31	1.9221 ± 2.2224	0.18629 ± 1.8328	0.82	3.8	1064 ± 25	1101 ± 19
58a	49	13	50	1.019	{0.20}	1.9290 ± 2.3995	0.18924 ± 1.8335	0.76	8.1	1040 ± 31	1117 ± 19
94a	130	39	80	0.617	{0.04}	2.7849 ± 1.3255	0.23452 ± 1.1488	0.87	1.4	1341 ± 13	1358 ± 14
96b	94	23	114	1.215	{0.19}	1.8057 ± 1.8680	0.17341 ± 1.1606	0.62	-5.2	1082 ± 29	1031 ± 11
99b	48	11	44	0.934	{0.26}	1.8110 ± 2.0195	0.17154 ± 1.1449	0.57	-8.7	1110 ± 33	1021 ± 11
21a	480	248	317	0.660	0.03	7.1009 ± 1.1767	0.39195 ± 1.1533	0.98	0.8	2117 ± 4	2132 ± 21
23a	260	62	92	0.352	{0.04}	2.2164 ± 1.3009	0.20016 ± 1.1778	0.91	-2.6	1205 ± 11	1176 ± 13
33a	119	35	171	1.433	0.34	2.0229 ± 1.6637	0.19790 ± 1.1449	0.69	12.4	1045 ± 24	1164 ± 12
49a	50	14	59	1.165	0.63	2.0143 ± 2.0888	0.19557 ± 1.1562	0.55	9.4	1060 ± 35	1151 ± 12
50a	1237	495	77	0.062	0.09	5.7726 ± 1.1661	0.35239 ± 1.1555	0.99	0.5	1938 ± 3	1946 ± 19
50b	395	175	152	0.386	{0.01}	6.0576 ± 1.2169	0.35774 ± 1.1449	0.94	-1.5	1997 ± 7	1971 ± 19
66a	316	77	129	0.410	{0.02}	2.2230 ± 1.2693	0.20303 ± 1.1665	0.92	0.9	1182 ± 10	1192 ± 13
66b	86	17	66	0.762	3.92	1.5868 ± 3.7238	0.15101 ± 1.1479	0.31	-18.9	1101 ± 69	907 ± 10
6a	69	18	87	1.267	1.62	1.6732 ± 3.3383	0.18174 ± 1.8666	0.56	32.2	831 ± 57	1076 ± 19
99a	276	123	435	1.575	2.05	4.3393 ± 2.1082	0.28385 ± 1.5459	0.73	-12.6	1814 ± 26	1611 ± 22
402a	78	20	107	1.370	{0.20}	1.8370 ± 1.7232	0.17384 ± 1.1666	0.68	-7.7	1112 ± 25	1033 ± 11
36a	48	12	43	0.896	0.79	1.9073 ± 2.7362	0.18885 ± 1.9317	0.71	10.1	1021 ± 39	1115 ± 20
402d	85	24	111	1.307	{0.12}	2.0005 ± 2.1273	0.19428 ± 1.8349	0.86	8.7	1060 ± 22	1144 ± 19
404a	433	95	19	0.045	{0.02}	2.2118 ± 1.2628	0.20198 ± 1.1500	0.91	0.3	1183 ± 10	1186 ± 12
DC0428 - Swanartz Gte gneiss											
41a	109	34	84	0.773	{0.05}	2.9038 ± 1.7316	0.23945 ± 1.4098	0.81	0.2	1381 ± 19	1384 ± 18
32a	180	55	115	0.641	{0.03}	2.8609 ± 1.5864	0.23976 ± 1.3809	0.87	2.9	1350 ± 15	1385 ± 17
6a	257	76	159	0.619	0.67	2.7909 ± 1.7234	0.23291 ± 1.3882	0.81	-0.7	1358 ± 20	1350 ± 17
85a	113	37	109	0.963	{0.06}	2.9193 ± 1.7360	0.24149 ± 1.4083	0.81	1.5	1375 ± 19	1394 ± 18
76a	183	56	130	0.712	{0.02}	2.8684 ± 1.6274	0.23605 ± 1.3864	0.85	-1.5	1385 ± 16	1366 ± 17
101a	57	17	44	0.764	{0.15}	2.7822 ± 2.0783	0.23152 ± 1.4379	0.69	-1.7	1364 ± 29	1342 ± 17
118a	133	43	116	0.873	{0.07}	2.8612 ± 1.8943	0.23954 ± 1.3819	0.73	2.6	1352 ± 25	1384 ± 17
85b	146	43	67	0.456	{0.05}	2.9073 ± 1.7740	0.23859 ± 1.3953	0.79	-0.9	1391 ± 21	1379 ± 17
404b	315	101	220	0.700	0.05	2.9685 ± 1.4996	0.24795 ± 1.3726	0.92	5.8	1357 ± 12	1428 ± 18
400a	888	217	626	0.704	0.30	2.1901 ± 1.7972	0.18941 ± 1.7278	0.96	-14.4	1289 ± 10	1118 ± 18
448b	156	46	66	0.426	0.44	2.8148 ± 1.8069	0.24553 ± 1.3840	0.77	12.5	1273 ± 22	1415 ± 18
406a	282	85	130	0.460	{0.04}	2.9693 ± 1.7062	0.24613 ± 1.3773	0.81	3.8	1371 ± 19	1418 ± 18
73a	66	15	8	0.116	0.57	2.2911 ± 2.3488	0.19935 ± 1.5591	0.66	-9.1	1278 ± 34	1172 ± 17
44b	317	97	140	0.441	1.73	2.6340 ± 2.4107	0.25788 ± 1.4225	0.59	46.7	1044 ± 39	1479 ± 19
40a	649	178	270	0.417	1.82	2.3769 ± 1.7950	0.23178 ± 1.3705	0.76	30.8	1052 ± 23	1344 ± 17
406b	47	12	22	0.463	0.89	2.2294 ± 2.9844	0.20030 ± 1.5932	0.53	-3.4	1215 ± 49	1177 ± 17

Sample/ Spot	[U] ppm	[Pb] ppm	[Th] ppm	Th/U meas.	$f_{206}\%$	$^{207}\text{Pb}/^{235}\text{U} \pm 1\sigma$ error	$^{206}\text{Pb}/^{238}\text{U} \pm 1\sigma$ error	Error corr.	Discordanc e (%)	$^{207}\text{Pb}/^{206}\text{Pb}$ $\pm 1\sigma(\text{Ma})$	$^{206}\text{Pb}/^{238}\text{U}$ $\pm 1\sigma(\text{Ma})$
DC0439 - Migmatite, Jannelsepan Formation, Areachap Group											
4a	1072	303	797	0.744	2.00	2.4543 ± 2.3651	0.21729 ± 2.2280	0.94	2.1	1244 ± 15	1268 ± 26
40a	691	202	547	0.791	5.18	2.4434 ± 9.0795	0.21860 ± 2.3505	0.26	4.6	1223 ± 163	1274 ± 27
40b	758	218	649	0.856	4.18	2.3889 ± 2.5414	0.20904 ± 2.2272	0.88	-3.7	1266 ± 24	1224 ± 25
76a	1139	320	1003	0.881	1.90	2.3549 ± 2.3330	0.20798 ± 2.2271	0.95	-2.7	1248 ± 14	1218 ± 25
56a	1634	458	1466	0.897	0.78	2.4192 ± 2.2784	0.21605 ± 2.2261	0.98	3.1	1227 ± 10	1261 ± 26
4b*	1553	321	146	0.094	0.32	2.0348 ± 2.2702	0.18783 ± 2.2260	0.98	-4.8	1161 ± 9	1110 ± 23
12a*	1791	398	120	0.067	0.29	2.1947 ± 2.2641	0.20319 ± 2.2261	0.98	3.5	1156 ± 8	1192 ± 24
71a*	1706	374	19	0.011	0.12	2.2054 ± 2.2543	0.20299 ± 2.2260	0.99	2.3	1167 ± 7	1191 ± 24
75a*	1856	389	23	0.012	0.56	2.0838 ± 2.2960	0.19103 ± 2.2265	0.97	-4.5	1175 ± 11	1127 ± 23
115a*	1587	349	24	0.015	0.03	2.2062 ± 1.3357	0.20326 ± 1.3004	0.97	2.6	1165 ± 6	1193 ± 14
439a	1832	366	247	0.135	0.13	1.9409 ± 1.3388	0.17841 ± 1.2988	0.97	-10.3	1170 ± 6	1058 ± 13
2a	1904	309	35	0.018	0.25	1.5708 ± 2.3070	0.15049 ± 2.2315	0.97	-18.1	1087 ± 12	904 ± 19
2b	2902	242	86	0.030	4.74	0.6651 ± 2.6702	0.07273 ± 2.2260	0.83	-46.2	817 ± 31	453 ± 10
44a	1187	268	523	0.440	4.26	2.0737 ± 2.5156	0.18490 ± 2.2261	0.88	-12.0	1230 ± 23	1094 ± 22
39a	1962	317	33	0.017	0.20	1.5872 ± 2.2664	0.14950 ± 2.2260	0.98	-21.3	1121 ± 8	898 ± 19
406a	1930	293	28	0.015	0.05	1.4942 ± 1.3435	0.14061 ± 1.3001	0.97	-26.1	1123 ± 7	848 ± 10
405a	1755	357	18	0.010	0.16	2.0512 ± 1.3439	0.18785 ± 1.3016	0.97	-6.2	1177 ± 7	1110 ± 13
440a	2795	211	55	0.020	0.27	0.6587 ± 1.3938	0.07004 ± 1.3095	0.94	-51.8	875 ± 10	436 ± 6
53a	1502	263	32	0.021	0.87	1.6621 ± 2.3143	0.16255 ± 2.2261	0.96	-7.7	1046 ± 13	971 ± 20
53b	2986	228	54	0.018	0.20	0.6779 ± 2.2866	0.07126 ± 2.2267	0.97	-52.4	899 ± 11	444 ± 10
74b	1793	339	29	0.016	0.16	1.8825 ± 2.2853	0.17533 ± 2.2279	0.97	-9.7	1144 ± 10	1041 ± 21
75b	2522	619	2604	1.032	0.72	2.0624 ± 2.2598	0.18651 ± 2.2263	0.99	-9.0	1202 ± 8	1102 ± 23
84a	1572	353	29	0.019	0.17	2.2433 ± 2.2601	0.20783 ± 2.2260	0.98	6.0	1154 ± 8	1217 ± 25
AP15-825 - Biotite Gneiss, Jannelsepan Formation, Areachap Group											
2c	290	67	45	0.154	0.08	2.26659 ± 1.6072	0.2060 ± 1.3345	0.83	1.4	1192 ± 18	1208 ± 15
1b	200	44	32	0.160	0.08	2.16089 ± 1.7632	0.1963 ± 1.3341	0.76	-3.4	1193 ± 23	1155 ± 14
1c	183	44	51	0.276	0.08	2.29214 ± 2.0407	0.2076 ± 1.3349	0.65	1.5	1199 ± 30	1216 ± 15
1a*	434	92	3	0.007	{0.03}	2.12399 ± 1.4905	0.1952 ± 1.3321	0.89	-1.9	1170 ± 13	1150 ± 14
2a*	337	73	2	0.007	0.06	2.14116 ± 1.5220	0.2000 ± 1.3325	0.88	3.5	1138 ± 15	1175 ± 14
2b*	312	67	4	0.012	0.08	2.12787 ± 1.6041	0.1993 ± 1.3325	0.83	3.8	1132 ± 18	1172 ± 14
S03-10 - Rhyolite, Leeuwdraai Formation, Koras Group											
10.1	111	101	0.93	0.15	1.9578 ± 3.7529	0.1787 ± 2.1308	0.57	-10.4	1060 ± 21	1184 ± 61	
10.2	63	60	0.97	0.63	1.9549 ± 3.9330	0.1877 ± 2.2090	0.56	2.4	1109 ± 23	1083 ± 65	
10.3	63	51	0.83	0.81	1.8698 ± 3.9625	0.1759 ± 2.2011	0.56	-7.1	1044 ± 21	1124 ± 66	
10.4	25	29	1.23	2.35	1.8274 ± 8.3010	0.1859 ± 2.6252	0.32	13.7	1099 ± 27	966 ± 161	
10.5	302	370	1.27	0.17	2.0044 ± 2.3670	0.1869 ± 2.0118	0.85	-3.2	1104 ± 20	1141 ± 25	
10.6	26	40	1.60	2.93	1.8118 ± 13.9696	0.1874 ± 2.7310	0.20	18.8	1107 ± 28	932 ± 281	
10.7	29	27	0.96	2.24	1.8361 ± 12.0168	0.1846 ± 2.6426	0.22	10.4	1092 ± 27	990 ± 238	
10.8	162	140	0.89	0.42	1.9565 ± 2.7856	0.1863 ± 2.0650	0.74	0.2	1101 ± 21	1099 ± 37	
10.9	83	73	0.90	0.45	1.9428 ± 3.1082	0.1858 ± 2.1440	0.69	0.7	1099 ± 22	1091 ± 45	
10.1	51	46	0.93	1.01	1.9852 ± 5.3844	0.1831 ± 2.3208	0.43	-6.8	1084 ± 23	1163 ± 96	
10.11	93	87	0.96	0.53	2.0575 ± 3.7566	0.1872 ± 2.1511	0.57	-7	1106 ± 22	1190 ± 61	
10.12	60	50	0.86	0.94	1.9384 ± 4.3568	0.1848 ± 2.2453	0.52	-0.3	1093 ± 23	1097 ± 75	
10.13	65	61	0.97	0.70	2.0046 ± 4.3281	0.1886 ± 2.2151	0.51	-0.9	1114 ± 23	1124 ± 74	
10.14	18	16	0.95	1.95	1.8919 ± 11.9583	0.1883 ± 2.9271	0.24	10.1	1112 ± 30	1010 ± 235	
10.15	110	111	1.05	0.84	1.8328 ± 3.7869	0.1843 ± 2.1199	0.56	10.2	1090 ± 21	989 ± 64	
10.16	78	118	1.58	3.33	1.3908 ± 8.3375	0.1831 ± 2.2259	0.27	160.7	1084 ± 22	416 ± 180	
10.17	69	94	1.42	0.75	1.9896 ± 4.5524	0.1870 ± 2.2082	0.49	-1.8	1105 ± 22	1125 ± 79	
10.18	13	17	1.31	4.62	1.8046 ± 19.5018	0.1863 ± 3.3567	0.17	17.7	1101 ± 34	935 ± 394	
10.19	93	86	0.96	0.50	2.0031 ± 3.5426	0.1870 ± 2.1488	0.61	-3	1105 ± 22	1139 ± 56	
10.2	107	95	0.91	0.42	1.9420 ± 3.3216	0.1874 ± 2.1254	0.64	3.2	1107 ± 22	1073 ± 51	

Unmarked data has been used for a group, magmatic or detrital population

Data indicated by* has been used for a group, metamorphic rim/overgrowth population.

Crossed out spots/data has not been used in isoplot concordia calculations

For detrital samples (DC0411, DC0415, DC0416) crossed out spots are either non-concordant and or they are duplicate spots from the same grain, and not represented in concordia or probability density plots, .

For sample DC01138 and DC0420 likely xenocrystic zircons are highlighted in their Pb-Pb age with bold text.

{ } indicates values close to decton limit

Discordance in % was calculated from the ratio between the 206Pb/238U age over the 207Pb/206Pb age, not including errors, where discordant data is given as negative values and reversed discordant spots as positive.

Appendix 2

Sample/ spot	[U] ppm	[Th] ppm	Th/U meas.	f ₂₀₆ %	²⁰⁷ Pb/ ²³⁵ U ±1σ error	²⁰⁶ Pb/ ²³⁸ U ±1σ error	Error corr.	Discordance (%)	²⁰⁷ Pb/ ²⁰⁶ Pb ±1σ(Ma)	²⁰⁶ Pb/ ²³⁸ U ±1σ (Ma)
DC0381 - Straussburg Granite										
114a	80	90	0.101	0.03	2.0373 ± 1.3831	0.1935 ± 1.2596	0.91	3.6	1104 ± 11	1131 ± 13
11a	529	556	0.130	0.29	1.8359 ± 0.9251	0.1750 ± 0.7347	0.79	-5.7	1097 ± 11	1044 ± 19
140a	700	725	0.431	0.08	2.0842 ± 1.4196	0.1981 ± 1.2570	0.89	6.1	1103 ± 13	1054 ± 19
4b	117	118	0.764	* 0.21	1.7434 ± 1.6800	0.1693 ± 0.7407	0.44	-5.2	1060 ± 30	1022 ± 7
104a	130	130	0.782	* 0.04	2.0040 ± 1.3916	0.1910 ± 1.2627	0.91	2.8	1098 ± 12	1047 ± 7
103a	83	83	0.841	* 0.05	1.9635 ± 1.6484	0.1861 ± 1.2795	0.78	-0.8	1108 ± 21	1026 ± 7
2a	167	162	0.852	0.38	1.7192 ± 1.6659	0.1694 ± 0.7384	0.44	-2.4	1031 ± 30	1097 ± 20
5a	136	125	0.858	0.15	1.7575 ± 1.2659	0.1714 ± 0.7408	0.59	-3.2	1051 ± 21	1031 ± 19
4e	110	98	0.881	1.43	1.9011 ± 3.1721	0.1872 ± 1.9674	0.62	7.8	1032 ± 49	1124 ± 14
105a	98	86	0.892	* 0.07	1.9557 ± 1.9928	0.1905 ± 1.3471	0.68	7.2	1054 ± 29	1106 ± 20
9b	165	141	0.919	3.37	1.7095 ± 4.1271	0.1734 ± 1.9585	0.47	6.6	972 ± 72	1020 ± 7
5a2	138	118	0.970	0.42	1.9274 ± 2.6671	0.1854 ± 1.9628	0.74	1.8	1079 ± 36	1009 ± 7
5b	150	126	0.999	0.29	1.7938 ± 2.0239	0.1726 ± 0.7832	0.39	-5.3	1079 ± 37	1100 ± 13
4a	466	365	1.000	* 0.14	1.8291 ± 1.3312	0.1764 ± 0.7363	0.55	-2.8	1074 ± 22	1127 ± 10
13a	85	65	1.007	0.37	1.7604 ± 2.0048	0.1718 ± 0.7379	0.37	-2.9	1050 ± 37	1008 ± 7
9c	540	233	1.035	0.45	1.8633 ± 2.0710	0.1777 ± 1.9585	0.95	-4.2	1097 ± 13	1165 ± 13
9a	816	106	1.050	0.31	1.8196 ± 2.1713	0.1757 ± 1.9589	0.90	-2.8	1071 ± 19	1040 ± 7
113a	788	80	1.124	* 0.13	2.0416 ± 2.0104	0.1918 ± 1.2876	0.64	0.5	1126 ± 30	1141 ± 13
DC0384 - Josling Granite										
20a1	223	116	0.519	* 0.05	2.4988 ± 1.2619	0.2186 ± 1.0027	0.79	0.6	1267 ± 15	1274 ± 12
47a	356	198	0.555	0.11	2.3964 ± 1.1908	0.2070 ± 1.0082	0.85	-6.6	1291 ± 12	1213 ± 11
50a	357	205	0.573	0.19	2.4968 ± 1.2355	0.2193 ± 0.9994	0.81	1.7	1259 ± 14	1278 ± 12
33b	355	191	0.539	* 0.04	2.6084 ± 1.1434	0.2270 ± 1.0005	0.87	3.6	1277 ± 11	1319 ± 12
33a	309	154	0.498	0.11	2.0915 ± 1.2258	0.1854 ± 1.0312	0.84	-12.6	1241 ± 13	1097 ± 10
32a	304	169	0.557	0.07	2.5738 ± 1.1732	0.2227 ± 1.0005	0.85	0.7	1288 ± 12	1296 ± 12
35a	316	170	0.538	* 0.03	2.5410 ± 1.1594	0.2225 ± 0.9990	0.86	2.7	1265 ± 11	1295 ± 12
37a1	395	247	0.626	* 0.04	2.6158 ± 1.1266	0.2266 ± 1.0004	0.89	2.6	1287 ± 10	1316 ± 12
30a	682	461	0.676	0.16	2.4962 ± 1.1036	0.2179 ± 1.0145	0.92	0.0	1271 ± 8	1271 ± 12
29a1	314	196	0.623	0.42	2.5389 ± 1.3221	0.2233 ± 1.0019	0.76	3.8	1256 ± 17	1299 ± 12
28a1	358	219	0.610	0.14	2.4166 ± 1.1999	0.2104 ± 1.0012	0.83	-3.9	1276 ± 13	1231 ± 11
31a1	548	270	0.493	0.14	2.0706 ± 1.1960	0.1821 ± 1.0302	0.86	-15.5	1257 ± 12	1078 ± 10
15a	341	213	0.623	0.06	2.6092 ± 1.2955	0.2253 ± 1.0029	0.77	1.5	1292 ± 16	1310 ± 12
2a	362	224	0.617	0.2	2.5579 ± 1.2133	0.2225 ± 1.0145	0.84	1.4	1278 ± 13	1295 ± 12
40a*	292	52	0.177	1.15	1.8866 ± 2.0378	0.1804 ± 1.6520	0.81	-2.2	1091 ± 24	1069 ± 16
40b*	353	84	0.236	0.98	2.0048 ± 1.9400	0.1912 ± 1.6088	0.83	3.2	1096 ± 22	1128 ± 17
12a*	343	19	0.057	0.91	1.2177 ± 2.0991	0.1211 ± 1.5934	0.76	-28.8	1012 ± 27	737 ± 11
DC0386 - Friersdale Charnockite										
2a	41	39	0.933	* 0.40	1.9689 ± 2.5988	0.1951 ± 1.2185	0.47	13.9	1019 ± 46	1105 ± 18
30a	42	39	0.922	* 0.34	1.8889 ± 2.5250	0.1894 ± 1.2032	0.48	13.4	995 ± 44	1077 ± 17
10a	44	43	0.985	* 0.14	2.0355 ± 2.6986	0.1895 ± 1.2038	0.45	-2.5	1145 ± 47	1127 ± 19
32a	47	48	1.023	* 0.30	1.9370 ± 2.3741	0.1878 ± 1.2030	0.51	4.7	1063 ± 41	1094 ± 16
15a	51	58	1.149	* 0.07	1.9373 ± 2.1436	0.1912 ± 1.2137	0.57	10.7	1027 ± 35	1094 ± 14
25a	53	53	1.003	* 0.13	1.8859 ± 2.5378	0.1846 ± 1.6022	0.63	4.9	1044 ± 39	1076 ± 17
24a	57	62	1.085	* 0.18	1.9445 ± 2.0763	0.1888 ± 1.2032	0.58	5.6	1060 ± 34	1097 ± 14
18a	60	67	1.117	* 0.13	1.9030 ± 2.4351	0.1848 ± 1.5954	0.66	3.3	1060 ± 37	1082 ± 16
33a	66	88	1.329	* 0.09	1.9650 ± 1.9841	0.1880 ± 1.2009	0.61	2.1	1090 ± 31	1104 ± 13
39a	69	67	0.964	0.51	2.0036 ± 2.2577	0.1979 ± 1.2068	0.53	14.8	1026 ± 38	1117 ± 15
28a	71	74	1.039	0.29	1.9611 ± 2.4610	0.1856 ± 1.5978	0.65	-1.3	1111 ± 37	1102 ± 17
19a	73	92	1.258	0.27	1.8663 ± 2.7178	0.1846 ± 1.5929	0.59	7.4	1023 ± 44	1069 ± 18
5a	73	117	1.596	* 0.10	1.9801 ± 2.1151	0.1913 ± 1.2064	0.57	5.9	1071 ± 35	1109 ± 14
10b	74	104	1.401	0.29	1.9070 ± 2.4332	0.1847 ± 1.6343	0.67	2.9	1065 ± 36	1084 ± 16
20a	78	111	1.419	* 0.19	2.0253 ± 1.8799	0.1911 ± 1.2026	0.64	0.9	1118 ± 29	1124 ± 13
6a	84	131	1.564	0.37	2.0103 ± 1.8954	0.1903 ± 1.2022	0.63	1.1	1112 ± 29	1119 ± 13
13a	85	129	1.510	0.98	2.1129 ± 3.3221	0.1940 ± 1.2331	0.37	-2.6	1172 ± 60	1153 ± 23
3a	99	88	0.881	0.31	1.8891 ± 1.8307	0.1833 ± 1.2681	0.69	2.4	1062 ± 26	1077 ± 12
48a	162	133	0.818	0.2	4.4638 ± 1.7775	0.3055 ± 1.6025	0.90	-0.9	1731 ± 14	1724 ± 15
44a	539	131	0.243	0.09	3.3253 ± 1.6499	0.2612 ± 1.5945	0.97	1.6	1474 ± 8	1487 ± 13
23a	1763	511	0.290	0.16	1.3645 ± 1.3256	0.1348 ± 1.2106	0.91	-21.9	1026 ± 11	874 ± 8
DC0387 - Dyasons Klip Granite										
27a	759	321	0.423	0.40	2.7767 ± 1.6116	0.2303 ± 1.4674	0.91	-2.8	1370 ± 13	1336 ± 18
7a	228	63	0.275	0.16	2.4244 ± 1.6307	0.2152 ± 1.4787	0.91	1.5	1239 ± 13	1256 ± 17
7b*	2077	61	0.029	0.81	1.3008 ± 1.5384	0.1249 ± 1.4659	0.95	-31.7	1083 ± 9	759 ± 10
8a	150	80	0.530	* 0.02	6.2734 ± 1.6202	0.3671 ± 1.5318	0.95	0.1	2014 ± 9	2016 ± 27
43a	143	52	0.360	7.30	1.7588 ± 6.9964	0.1518 ± 2.1908	0.31	-31.7	1294 ± 124	911 ± 19
14a	609	462	0.759	1.22	3.7027 ± 1.6256	0.2583 ± 1.4685	0.90	-14.2	1696 ± 13	1481 ± 19
17a	388	54	0.139	0.59	2.2374 ± 1.7122	0.2023 ± 1.4659	0.86	-1.3	1202 ± 17	1188 ± 16
48a*	791	48	0.061	3.13	1.4686 ± 2.0455	0.1356 ± 1.4755	0.72	-31.3	1161 ± 28	820 ± 11
30a	218	83	0.379	0.40	2.2597 ± 1.7980	0.2037 ± 1.4679	0.82	-1.2	1208 ± 20	1195 ± 16
32a	1759	607	0.345	2.60	2.0547 ± 1.7761	0.1552 ± 1.4847	0.84	-42.8	1548 ± 18	930 ± 13
33a	189	111	0.584	0.12	2.3405 ± 1.8090	0.2088 ± 1.4740	0.81	-0.6	1229 ± 20	1222 ± 16
39a	185	190	1.027	0.04	5.3688 ± 1.6126	0.3375 ± 1.4837	0.92	-0.7	1886 ± 11	1875 ± 24
50a*	1740	9	0.005	0.29	1.5396 ± 1.5266	0.1463 ± 1.4656	0.96	-21.7	1104 ± 9	880 ± 12
30a2	328	115	0.350	0.41	2.3519 ± 1.6514	0.2116 ± 1.4748	0.89	2.3	1212 ± 15	1237 ± 17
32b1*	8492	104	0.012	1.82	0.3110 ± 3.1460	0.0407 ± 1.4673	0.47	-40.7	428 ± 61	257 ± 4
48b*	2931	28	0.010	1.64	0.9877 ± 1.8358	0.0975 ± 1.1161	0.61	-43.6	1028 ± 29	599 ± 6
47b2*	1691	4	0.002	0.22	1.6255 ± 1.1823	0.1541 ± 1.1238	0.95	-17.8	1108 ± 7	924 ± 10
47b*	2034	10	0.005	0.64	1.5631 ± 1.2677	0.1452 ± 1.1004	0.87	-25.5	1149 ± 12	874 ± 9
21b*	3383	17	0.005	1.25	0.8511 ± 3.3779	0.0875 ± 1.2069	0.36	-44.4	943 ± 63	541 ± 6
15b*	1871	4	0.002	0.48	1.4762 ± 1.5383	0.1405 ± 1.4760	0.96	-24.6	1101 ± 9	847 ± 12
44b*	4797	29	0.006	1.78	0.6563 ± 1.5245	0.0739 ± 1.1341	0.74	-40.5	755 ± 21	460 ± 5
47b3*	1978	21	0.011	1.73	1.5050 ± 2.2648	0.1455 ± 1.6666	0.74	-19.4	1070 ± 31	875 ± 14

Sample/ spot	[U] ppm	[Th] ppm	Th/U meas.	$f_{206\%}$	$^{207}\text{Pb}/^{235}\text{U}$ $\pm 1\sigma$ error	$^{206}\text{Pb}/^{238}\text{U}$ $\pm 1\sigma$ error	Error corr.	Discordance (%)	$^{207}\text{Pb}/^{206}\text{Pb}$ $\pm 1\sigma(\text{Ma})$	$^{206}\text{Pb}/^{238}\text{U}$ $\pm 1\sigma$ (Ma)
DC0389 - Vaalputs Granite										
18a	522	185	0.355	0.53	2.5996 ± 2.3044	0.2218 ± 1.5102	0.66	-2.0	1315 ± 33	1291 ± 18
25a	165	57	0.347	0.73	4.6835 ± 1.5704	0.3123 ± 1.4086	0.90	-1.8	1779 ± 13	1752 ± 22
2a	409	229	0.559	0.18	5.2452 ± 1.5998	0.3365 ± 1.5504	0.97	1.3	1849 ± 7	1870 ± 25
36a	79	59	0.751	* 0.20	2.5788 ± 1.8157	0.2118 ± 1.3980	0.77	-12.0	1390 ± 22	1238 ± 16
18c*	797	80	0.100	3.37	1.4508 ± 1.9982	0.1417 ± 1.4059	0.70	-19.7	1048 ± 28	855 ± 11
1a*	278	88	0.317	1.04	1.7813 ± 1.9880	0.1711 ± 1.4989	0.75	-6.3	1082 ± 26	1018 ± 14
31a*	322	140	0.435	3.12	1.5639 ± 4.1077	0.1562 ± 1.5281	0.37	-7.3	1004 ± 76	935 ± 13
3a*	170	86	0.509	3.88	1.7117 ± 2.7401	0.1692 ± 1.4208	0.52	-1.8	1025 ± 47	1007 ± 13
20a*	134	175	1.307	0.27	1.9487 ± 1.8381	0.1899 ± 1.5186	0.83	7.1	1053 ± 21	1121 ± 16
34a*	2263	123	0.055	3.82	1.1017 ± 1.8636	0.1064 ± 1.5024	0.81	-41.1	1071 ± 22	652 ± 9
4b	811	188	0.231	0.06	1.9914 ± 1.5559	0.1839 ± 1.5037	0.97	-6.7	1160 ± 8	1088 ± 15
21a	54	61	1.145	* 0.18	2.0844 ± 2.3225	0.1979 ± 1.4983	0.65	5.8	1106 ± 35	1164 ± 16
21b	313	135	0.430	* 0.06	2.1098 ± 1.6817	0.1967 ± 1.4995	0.89	1.5	1142 ± 15	1157 ± 16
23a	533	86	0.162	0.66	2.0876 ± 1.7114	0.1971 ± 1.4982	0.88	4.2	1117 ± 16	1160 ± 16
DC0391 - Riemvasmaak Gneiss										
4a	1383	726.00	0.525	0.3	1.9396 ± 1.7397	0.1805 ± 1.6770	0.96	-7.2	1146 ± 9	1070 ± 17
7a	1896	947.00	0.500	0.19	1.8497 ± 1.7185	0.1739 ± 1.6715	0.97	-8.8	1125 ± 8	1033 ± 16
28a	352	197.00	0.559	0.09	2.2411 ± 1.8306	0.2067 ± 1.6788	0.92	4.5	1163 ± 14	1211 ± 19
28b	240	96.00	0.401	* 0.04	2.2099 ± 2.7523	0.2029 ± 2.7129	0.99	1.8	1172 ± 9	1191 ± 30
32a	532	189.00	0.356	1.87	1.9901 ± 2.1561	0.1857 ± 1.6751	0.78	-4.1	1140 ± 27	1098 ± 17
35a	3479	1757.00	0.505	0.78	0.4225 ± 1.8246	0.0522 ± 1.6708	0.92	-41.9	555 ± 16	328 ± 5
7b	258	121.00	0.468	0.56	2.1263 ± 2.1454	0.1925 ± 1.6846	0.79	-5.9	1200 ± 26	1135 ± 18
9a	223	87.00	0.390	0.16	2.2131 ± 1.9284	0.2054 ± 1.6837	0.87	5.2	1150 ± 19	1204 ± 19
9b	216	95.00	0.441	* 0.05	2.2328 ± 2.7839	0.2046 ± 2.7203	0.98	2.3	1176 ± 12	1200 ± 30
36a	227	76.00	0.334	0.15	2.1935 ± 1.9474	0.2049 ± 1.6898	0.87	6.2	1138 ± 19	1192 ± 19
43a	308	144.00	0.467	0.08	2.2628 ± 1.8380	0.2039 ± 1.6786	0.91	-1.1	1208 ± 15	1196 ± 18
5a	3247	399.00	0.123	1.41	0.8762 ± 1.8055	0.0903 ± 1.6709	0.93	-42.4	939 ± 14	567 ± 9
13a	613	218.00	0.356	0.31	2.0982 ± 1.8123	0.1975 ± 1.6712	0.92	3.8	1123 ± 14	1162 ± 18
43b	624	484.00	0.295	0.05	2.2063 ± 2.7446	0.2013 ± 2.7173	0.99	-0.3	1185 ± 8	1182 ± 28
41a	763	224.00	0.294	0.18	2.1678 ± 1.7617	0.2042 ± 1.6762	0.95	2.9	1164 ± 11	1182 ± 19
41b	406	140.00	0.343	* 0.04	2.2865 ± 2.7358	0.2092 ± 2.7132	0.99	4.3	1179 ± 7	1225 ± 30
42a	619	204.00	0.330	0.14	2.2079 ± 1.7889	0.2050 ± 1.6715	0.93	4.9	1150 ± 13	1202 ± 18
46a	786	149.00	0.190	0.27	2.1115 ± 1.7543	0.1954 ± 1.6724	0.95	-0.6	1157 ± 10	1150 ± 18
DC0392 - Riemvasmaak Gneiss										
3a	537	149	0.277	0.89	1.8616 ± 2.0241	0.1744 ± 1.5388	0.76	-9.2	1132 ± 26	1036 ± 15
5a	595	144	0.242	* 0.04	1.9872 ± 1.6013	0.1844 ± 1.4982	0.94	-5.7	1151 ± 11	1091 ± 15
10b	444	123	0.277	0.23	1.9731 ± 1.6567	0.1809 ± 1.5028	0.91	-9.4	1174 ± 14	1072 ± 15
24a	694	148	0.214	0.09	2.0640 ± 1.6326	0.1931 ± 1.4984	0.92	0.3	1135 ± 13	1138 ± 16
25a	479	139	0.289	0.2	2.0284 ± 1.7668	0.1864 ± 1.5033	0.85	-6.4	1171 ± 18	1102 ± 15
46a	462	134	0.290	0.06	1.9869 ± 1.6559	0.1808 ± 1.5004	0.91	-10.8	1190 ± 14	1071 ± 15
1a	410	109	0.265	0.46	1.7938 ± 1.7613	0.1684 ± 1.5088	0.86	-11.9	1128 ± 18	1003 ± 14
2a	462	190	0.411	* 0.02	2.0084 ± 1.7548	0.1874 ± 1.5095	0.86	-3.1	1139 ± 18	1107 ± 15
2b	621	294	0.473	0.17	1.9923 ± 2.9315	0.1846 ± 2.8710	0.98	-5.9	1154 ± 12	1092 ± 29
4a	327	122	0.374	0.12	2.1478 ± 2.9461	0.2004 ± 2.8685	0.97	3.6	1140 ± 13	1178 ± 31
15a	245	104	0.425	* 0.05	2.0752 ± 1.8080	0.1931 ± 1.5314	0.85	-0.7	1145 ± 19	1138 ± 16
15c	189	80	0.422	0.14	2.1947 ± 3.0241	0.2028 ± 2.8822	0.95	2.9	1159 ± 18	1190 ± 31
24a	627	171	0.272	* 0.03	2.0620 ± 1.5947	0.1898 ± 1.5035	0.94	-4.4	1167 ± 10	1120 ± 15
24b	405	147	0.363	0.14	2.0774 ± 2.9559	0.1951 ± 2.8666	0.97	2.2	1127 ± 14	1149 ± 30
31a	35	18	0.516	* 0.48	1.9289 ± 3.1569	0.1878 ± 1.5008	0.48	5.6	1055 ± 55	1109 ± 15
38a	412	122	0.296	0.14	1.9893 ± 1.6762	0.1854 ± 1.4985	0.89	-4.4	1143 ± 15	1096 ± 15
53a	58	19	0.323	0.73	1.6049 ± 3.2091	0.1569 ± 1.5000	0.47	-11.0	1046 ± 56	940 ± 13
1b*	997	35	0.035	1.03	1.5727 ± 1.6610	0.1510 ± 1.4982	0.90	-17.5	1083 ± 14	906 ± 13
10a*	2943	159	0.054	5.28	0.5272 ± 3.9672	0.0595 ± 1.5027	0.38	-51.7	750 ± 76	373 ± 5
17a*	2581	204	0.079	6.23	0.7223 ± 2.0709	0.0744 ± 1.4982	0.72	-52.7	941 ± 29	463 ± 7
25b*	1348	73	0.054	4.47	1.4918 ± 1.8893	0.1460 ± 1.5056	0.80	-17.0	1044 ± 23	879 ± 12
DC0396 - Banks Vlei Gneiss										
7a	583	899	1.542	0.15	2.2332 ± 1.2296	0.2064 ± 1.0376	0.84	4.9	1158 ± 13	1210 ± 11
21a	175	141	0.805	0.15	2.3093 ± 1.8630	0.2098 ± 1.5303	0.82	3.2	1193 ± 21	1228 ± 17
22a	2178	1293	0.594	0.08	1.5115 ± 1.5733	0.1432 ± 1.4995	0.95	-23.7	1109 ± 9	863 ± 12
29a	257	243	0.946	0.07	2.3179 ± 1.7573	0.2090 ± 1.5373	0.87	1.4	1208 ± 17	1223 ± 17
7c*	1785	76	0.043	0.10	1.3858 ± 1.6728	0.1394 ± 1.5628	0.93	-16.0	989 ± 12	841 ± 12
6c*	755	19	0.025	0.31	1.7205 ± 1.6371	0.1684 ± 1.4995	0.92	-4.3	1044 ± 13	1003 ± 14
30c*	1164	40	0.034	0.04	1.7626 ± 1.7727	0.1741 ± 1.6397	0.92	0.9	1026 ± 14	1035 ± 16
38c*	1483	111	0.075	0.43	1.7029 ± 1.6090	0.1672 ± 1.3985	0.87	-4.2	1037 ± 16	997 ± 13
36c2*	2071	166	0.080	5.29	0.7580 ± 2.3178	0.0802 ± 1.6466	0.71	-45.5	885 ± 33	497 ± 8
36c1*	1401	89	0.063	2.32	0.8951 ± 1.7923	0.0949 ± 1.4698	0.82	-35.3	882 ± 21	584 ± 8
58c*	1003	18	0.018	0.36	1.7887 ± 1.4897	0.1747 ± 1.3956	0.94	-1.1	1048 ± 10	1038 ± 13
24b	899	452	0.503	0.48	1.9752 ± 2.6283	0.1815 ± 1.6478	0.63	-8.9	1171 ± 40	1075 ± 16
50b2	497	421	0.847	0.07	2.2478 ± 1.5000	0.2060 ± 1.3981	0.93	3.0	1175 ± 11	1208 ± 15
29b*	592	326	0.551	0.22	2.2144 ± 1.7202	0.2003 ± 1.5994	0.93	-2.2	1202 ± 12	1177 ± 17
7b	550	375	0.682	0.06	2.3218 ± 1.2425	0.2108 ± 0.9973	0.80	3.5	1194 ± 15	1233 ± 11
39b	205	111	0.542	0.33	2.1572 ± 1.7422	0.1971 ± 1.3957	0.80	-2.0	1181 ± 20	1160 ± 15
44b	397	337	0.848	0.19	2.2346 ± 1.5232	0.2052 ± 1.3954	0.92	3.0	1172 ± 12	1203 ± 15
50b	1629	1320	0.810	2.02	1.1437 ± 2.6889	0.1150 ± 1.9028	0.71	-30.6	989 ± 38	702 ± 13
80b	291	223	0.766	0.09	2.2262 ± 1.5821	0.2061 ± 1.4018	0.89	5.0	1155 ± 14	1208 ± 15
58b	150	103	0.686	0.14	2.1693 ± 1.7511	0.1992 ± 1.3963	0.80	0.0	1171 ± 21	1171 ± 15
74b1	1234	338	0.274	0.64	1.4859 ± 1.5190	0.1455 ± 1.4122	0.93	-17.2	1044 ± 11	876 ± 11
74b2	155	54	0.351	0.61	1.5045 ± 2.0257	0.1427 ± 1.3950	0.69	-23.8	1107 ± 29	860 ± 12
74b	404	237	0.587	* 0.02	2.3028 ± 1.5142	0.2084 ± 1.3957	0.92	1.7	1201 ± 12	1220 ± 16

Sample/ spot	[U] ppm	[Th] ppm	Th/U meas.	f ₂₀₆ %	²⁰⁷ Pb/ ²³⁵ U ±1σ error	²⁰⁶ Pb/ ²³⁸ U ±1σ error	Error corr.	Discordance (%)	²⁰⁷ Pb/ ²⁰⁶ Pb ±1σ(Ma)	²⁰⁶ Pb/ ²³⁸ U ±1σ (Ma)
DC0397 - Coboop Gneiss										
5a	72	123	1.707	0.16	5.2798 ± 1.9307	0.3352 ± 1.6859	0.87	-0.2	1868 ± 17	1864 ± 27
40a	812	288	0.354	0.12	4.6887 ± 1.7048	0.3037 ± 1.6730	0.98	-7.6	1832 ± 6	1710 ± 25
24a	70	93	1.334	0.26	4.8838 ± 2.1175	0.3164 ± 1.6758	0.79	-3.7	1831 ± 23	1772 ± 26
28a	93	122	1.309	* 0.10	5.1316 ± 1.8823	0.3259 ± 1.6514	0.88	-3.0	1867 ± 16	1819 ± 26
28b	387	388	1.001	* 0.02	5.2022 ± 1.7010	0.3302 ± 1.6516	0.97	-1.8	1869 ± 7	1839 ± 26
36a	132	81	0.615	* 0.09	3.8020 ± 1.9263	0.2686 ± 1.6586	0.86	-9.3	1673 ± 18	1534 ± 23
42a	182	135	0.739	* 0.02	5.1295 ± 1.7514	0.3239 ± 1.6610	0.95	-4.2	1878 ± 10	1809 ± 26
4a	128	114	0.894	* 0.08	5.2945 ± 1.7834	0.3323 ± 1.6540	0.93	-2.4	1889 ± 12	1850 ± 27
426a	92	88	0.952	0.12	5.3448 ± 1.5369	0.3430 ± 1.3235	0.86	3.3	1848 ± 14	1901 ± 22
101a	296	364	1.231	0.04	5.3642 ± 1.4477	0.3399 ± 1.3760	0.95	0.9	1872 ± 8	1886 ± 23
105a	154	158	1.029	0.04	5.3443 ± 1.4184	0.3397 ± 1.3253	0.93	1.2	1865 ± 9	1885 ± 22
106a	82	81	0.989	0.08	5.4399 ± 1.4952	0.3437 ± 1.3212	0.88	1.7	1876 ± 13	1905 ± 22
409a	62	62	0.994	0.20	5.1802 ± 1.6174	0.3284 ± 1.3424	0.83	-2.5	1871 ± 16	1831 ± 21
109b	331	319	0.966	* 0.01	5.4587 ± 1.3696	0.3449 ± 1.3228	0.97	2.1	1877 ± 6	1910 ± 22
114a	169	157	0.927	0.04	5.4952 ± 1.4086	0.3460 ± 1.3196	0.94	2.0	1883 ± 9	1915 ± 22
444b	528	112	0.212	0.02	5.0297 ± 1.4109	0.3303 ± 1.3707	0.97	2.1	1807 ± 6	1840 ± 22
115a	113	148	1.303	0.06	5.4612 ± 1.5684	0.3463 ± 1.3199	0.84	2.9	1870 ± 15	1917 ± 22
125a	155	150	0.972	0.04	5.3778 ± 1.4190	0.3398 ± 1.3202	0.93	0.6	1876 ± 9	1886 ± 22
DC0398 - Beenbreek Gneiss										
49a	603	426	0.706	12.54	1.5430 ± 6.4694	0.1519 ± 1.5697	0.24	-12.5	1032 ± 122	912 ± 13
21b	234	128	0.545	2.96	2.0133 ± 2.0059	0.1911 ± 1.1471	0.57	2.0	1106 ± 33	1127 ± 12
44a	1940	1003	0.517	0.64	1.0738 ± 1.3610	0.1087 ± 1.2209	0.90	-33.6	977 ± 12	665 ± 8
48a	1504	480	0.319	1.9	1.0331 ± 1.7648	0.1057 ± 1.1472	0.65	-33.8	955 ± 27	648 ± 7
12b	377	120	0.319	3.28	1.9198 ± 1.8373	0.1842 ± 1.1474	0.62	0.5	1085 ± 29	1090 ± 12
42a	1180	288	0.244	1	1.3682 ± 1.3490	0.1310 ± 1.1492	0.85	-28.8	1089 ± 14	793 ± 9
42e	741	149	0.201	0.85	1.8202 ± 1.7656	0.1767 ± 1.1473	0.65	-1.2	1061 ± 27	1049 ± 11
21a	635	121	0.191	0.05	2.0256 ± 1.2342	0.1919 ± 1.1477	0.93	2.1	1110 ± 9	1132 ± 12
9a	810	130	0.160	0.92	1.9507 ± 1.4134	0.1841 ± 1.1471	0.81	-2.7	1117 ± 16	1089 ± 12
44a1	716	106	0.148	3.43	1.9893 ± 1.7395	0.1873 ± 1.1472	0.66	-1.4	1122 ± 26	1107 ± 12
22a	1029	102	0.099	0.04	2.0333 ± 1.2103	0.1919 ± 1.1472	0.95	1.4	1117 ± 8	1131 ± 12
44b	3003	293	0.098	16.15	0.6633 ± 5.0415	0.0725 ± 1.2882	0.26	-46.5	819 ± 99	451 ± 6
4a	1606	131	0.082	0.11	1.3553 ± 1.2400	0.1323 ± 1.1650	0.94	-25.1	1049 ± 9	801 ± 9
DC01140 - Guadom Formation										
94a ²	573	9	0.016	2.09	1.4850 ± 2.2665	0.1514 ± 2.0614	0.91	-5.8	961 ± 19	909 ± 17
99a ²	819	49	0.060	1.31	1.1864 ± 2.3315	0.1210 ± 2.1485	0.92	-24.8	961 ± 18	736 ± 15
99a ²	673	76	0.113	0.69	1.7920 ± 2.1585	0.1697 ± 2.0666	0.96	-9.7	1110 ± 12	1010 ± 19
42a ²	803	36	0.045	1.9	1.4849 ± 2.2033	0.1439 ± 2.0685	0.94	-19.9	1065 ± 15	867 ± 17
34a ²	1709	24	0.014	0.86	0.9643 ± 2.1330	0.1012 ± 2.0609	0.97	-32.5	901 ± 11	622 ± 12
35a ²	912	28	0.031	0.41	1.4550 ± 2.1088	0.1421 ± 2.0716	0.98	-19.5	1049 ± 8	857 ± 17
39a ²	773	37	0.048	3.06	1.6041 ± 1.15407	0.1507 ± 2.3864	0.21	-21.1	1126 ± 210	905 ± 20
40a ²	989	11	0.011	0.65	1.6862 ± 4.3950	0.1708 ± 4.3344	0.99	4.7	974 ± 15	1017 ± 41
40b ²	964	10	0.011	0.29	1.5273 ± 4.3496	0.1525 ± 4.3297	1.00	-9.5	1004 ± 8	915 ± 37
45a ²	929	7	0.008	0.41	1.4828 ± 4.3949	0.1501 ± 4.3401	0.99	-8.2	976 ± 14	901 ± 37
71a	234	267	1.140	0.6	4.5781 ± 4.3618	0.2979 ± 4.3231	0.99	-8.8	1823 ± 10	1681 ± 64
70a	89	94	1.062	* 0.12	4.8627 ± 4.3945	0.3132 ± 4.3241	0.98	-5.3	1842 ± 14	1756 ± 67
01b	187	194	1.040	2.6	4.1147 ± 4.4518	0.2731 ± 4.3242	0.97	-14.5	1787 ± 19	1557 ± 60
05a	288	365	1.264	0.31	4.3556 ± 4.3500	0.2816 ± 4.3240	0.99	-14.5	1835 ± 9	1599 ± 62
08b	301	321	1.065	0.96	3.9703 ± 4.3985	0.2719 ± 4.3501	0.99	-11.7	1730 ± 12	1550 ± 60
24a	138	147	1.061	1.09	4.4929 ± 4.4216	0.2958 ± 4.3379	0.98	-8.3	1802 ± 15	1670 ± 64
39b	292	277	0.946	2.11	3.5882 ± 4.6051	0.2607 ± 4.3256	0.94	-8.8	1621 ± 29	1493 ± 58
66a	110	159	1.450	0.61	5.1146 ± 4.4011	0.3322 ± 4.3253	0.98	1.4	1827 ± 15	1849 ± 70
88a	658	1524	2.317	0.17	5.2213 ± 2.2597	0.3302 ± 2.2266	0.99	-2.2	1875 ± 7	1839 ± 36
78a ²	944	37	0.039	3.51	1.5835 ± 2.7358	0.1623 ± 2.2262	0.81	2.1	951 ± 32	969 ± 20
77a ²	1342	11	0.009	1.16	1.3458 ± 2.4720	0.1409 ± 2.2261	0.90	-6.7	906 ± 22	850 ± 18
92a ²	950	60	0.064	2.89	1.7019 ± 2.6032	0.1709 ± 2.2261	0.86	2.6	993 ± 27	1017 ± 21
DC0770 - Guadom Formation										
3a	288	247	0.857	0.21	5.0541 ± 1.3241	0.3248 ± 1.2598	0.95	-2.1	1846 ± 7	1813 ± 20
62a	84	93	1.104	* 0.08	5.2118 ± 1.7552	0.3347 ± 1.3196	0.75	0.8	1847 ± 21	1861 ± 21
50a	150	204	1.361	0.06	5.3083 ± 1.4160	0.3393 ± 1.2009	0.85	1.7	1856 ± 13	1883 ± 20
25a	125	104	0.827	0.14	5.3793 ± 1.4841	0.3392 ± 1.2032	0.81	0.2	1880 ± 16	1883 ± 20
33e	113	86	0.762	0.19	4.3388 ± 1.5884	0.2927 ± 1.2211	0.77	-6.6	1758 ± 18	1655 ± 18
1b*	249	8	0.032	0.08	1.6628 ± 1.5946	0.1671 ± 1.4150	0.89	0.5	991 ± 15	996 ± 13
62b*	402	7	0.018	0.25	1.8043 ± 1.6786	0.1798 ± 1.2192	0.73	6.2	1008 ± 23	1066 ± 12
33b*	221	10	0.046	0.03	1.8252 ± 1.8579	0.1818 ± 1.3400	0.72	7.3	1009 ± 26	1077 ± 13
59b*	384	13	0.033	0.09	1.7955 ± 1.6941	0.1776 ± 1.3081	0.77	3.3	1023 ± 22	1054 ± 13
6b*	275	10	0.038	0.17	1.7742 ± 1.4677	0.1739 ± 1.2097	0.82	-0.8	1041 ± 17	1034 ± 12
25b*	394	4	0.010	* 0.01	1.7922 ± 1.3553	0.1751 ± 1.2139	0.90	-0.7	1047 ± 12	1040 ± 12
4c*	228	14	0.061	0.09	1.6816 ± 1.5278	0.1688 ± 1.2918	0.85	1.3	993 ± 16	1005 ± 12
2c*	158	17	0.108	0.34	1.8333 ± 1.9729	0.1837 ± 1.6186	0.82	9.8	997 ± 23	1087 ± 16
8c*	192	7	0.037	0.06	1.7391 ± 1.8662	0.1691 ± 1.6281	0.87	-5.2	1058 ± 18	1007 ± 15
4c2*	291	18	0.061	0.07	1.8396 ± 1.7453	0.1818 ± 1.6134	0.92	5.5	1025 ± 13	1077 ± 16
DC0447 - Polisiehoek Gneiss										
29a	2474	126	0.051	2.03	0.8372 ± 1.2574	0.0879 ± 0.9111	0.72	-41.5	902 ± 18	543 ± 5
44a	2186	92	0.042	1.34	1.0149 ± 1.0987	0.1026 ± 0.9129	0.83	-37.5	979 ± 12	629 ± 5
42a	1806	166	0.092	5.87	0.8829 ± 1.5543	0.0890 ± 0.9115	0.59	-46.1	985 ± 25	549 ± 5
454a	1926	211	0.110	6.66	1.1408 ± 1.6871	0.1106 ± 0.9102	0.54	-38.3	1063 ± 28	676 ± 6
26a	882	272	0.309	2.92	1.6034 ± 1.3287	0.1526 ± 0.9119	0.69	-18.0	1100 ± 19	916 ± 8
42a	750	373	0.497	10.1	1.6606 ± 2.1482	0.1576 ± 0.9106	0.42	-15.8	1106 ± 38	943 ± 8
95a	1898	134	0.071	9.05	1.0261 ± 3.1529	0.0966 ± 0.9142	0.29	-49.1	1121 ± 59	595 ± 5
464a	251	96	0.383	15.59	1.2185 ± 10.5853	0.1147 ± 1.0578	0.10	-39.8	1123 ± 197	700 ± 7
25a	647	396	0.611	12.88	1.7682 ± 2.9341	0.1644 ± 0.9425	0.32	-15.5	1146 ± 54	981 ± 9
23a	705	123	0.175	5.08	1.6920 ± 2.2239	0.1556 ± 0.9179	0.41	-21.8	1169 ± 40	932 ± 8
50a	217	204	0.938	0.6	2.2773 ± 1.3421	0.2070 ± 0.9318	0.69	1.9	1192 ± 19	1213 ± 10
43a	324	327	1.010	1.72	2.2163 ± 1.4385	0.2012 ± 0.9213	0.64	-1.1	1194 ± 22	1182 ± 10
20a	155	129	0.830	* 0.07	2.3087 ± 1.3291	0.2093 ± 0.9842	0.74	2.5	1197 ± 18	1225 ± 11
22a	331	148	0.447	* 0.02	6.4225 ± 0.9905	0.3724 ± 0.9171	0.93	0.6	2030 ± 7	2041 ± 16

Unmarked data has been used for a group, magmatic population

Data indicated by* has been used for a group, metamorphic rim/overgrowth population.

Crossed out spots/data has not been used in isoplot concordia calculations

For sample DC0387, DC0389, DC0447 and DC0386 likely xenocrystic zircons are highlighted in their Pb-Pb age with bold text.

*in the f₂₀₆%, indicates values close to or below detection limit

Discordance in % was calculated from the ratio between the 206Pb/238U age over the 207Pb/206Pb age, not including errors, where discordant data is given as negative values and reversed discordant spots as positive.

Appendix 3

Sample/Run ID# ^a	Power (W)	Ca/K	Cl/K	³⁶ Ar/ ³⁹ Ar	⁴⁰ Ar*/ ³⁹ Ar	³⁹ Ar (Mol-14)	% ³⁹ Ar ^c	Cum. % ³⁹ Ar	% ⁴⁰ Ar* ^d	Age (Ma)	± 2s
<i>DC0411, Run ID# 1542-02 (J = 0.009386 ± 0.000025):</i>											
1542-02A	1.6	-1004.9	0.01	0.052	2.595	0.0002	0.0	0.0	5.9	43.42	379.29
1542-02B	1.7	60.7	0.00	0.032	72.814	0.0044	1.0	1.0	91.0	939.63	12.64
1542-02C	1.8	10.4	0.00	0.004	91.851	0.0837	18.4	19.4	99.3	1121.62	1.08
1542-02D	•1.8	25.5	0.01	0.003	93.169	0.0291	6.4	25.8	100.0	1133.56	2.38
1542-02E	•1.9	14.6	0.01	0.001	93.274	0.0547	12.0	37.9	100.0	1134.51	1.75
1542-02F	•1.9	23.4	0.00	0.001	93.581	0.0135	3.0	40.8	100.0	1137.28	4.73
1542-02G	•2.1	8.1	1.22	0.000	92.163	0.0836	18.4	59.2	100.0	1124.46	1.16
1542-02H	•2.4	4.9	0.97	0.000	92.403	0.1031	22.7	81.9	100.0	1126.63	1.12
1542-02I	•3.5	11.5	0.00	0.002	93.010	0.0710	15.6	97.6	100.0	1132.12	1.65
1542-02J	•4.5	25.0	0.00	0.000	93.799	0.0111	2.4	100.0	100.0	1139.25	5.67
Integ. Age=										1126.00	5.00
(•) Plateau Age =							80.6			1129.00	6.00
<i>DC0441, Run ID# 1543-01 (J = 0.009386 ± 0.000025):</i>											
1543-01C	1.9	109.2	0.12	0.919	316.740	0.0008	0.7	0.7	53.3	2488.73	44.38
1543-01D	2	66.2	0.10	0.313	61.854	0.0009	0.7	1.4	39.9	825.87	35.78
1543-01E	2.2	2.8	0.03	0.062	48.186	0.0036	3.0	4.3	72.4	673.15	7.63
1543-01F	2.4	0.1	0.05	0.027	71.328	0.0113	9.2	13.5	89.9	924.62	2.89
1543-01G	2.6	1.0	1.00	0.007	81.593	0.0955	77.8	91.3	97.6	1025.84	0.93
1543-01H	3	0.6	0.03	0.017	73.952	0.0037	3.0	94.3	92.8	951.04	10.00
1543-01I	3.4	21.9	0.06	0.024	74.367	0.0042	3.4	97.7	92.1	955.18	9.12
1543-01J	4.5	2.3	0.04	0.015	61.091	0.0028	2.3	100.0	93.1	817.68	11.21
Integ. Age=										1012.00	5.00
<i>AP15-825, Run ID# 1182-01 (J = 0.01041 ± 0.000025):</i>											
1182-01A	1.3	-1.6	-0.11	0.080	38.899	0.0032	0.1	0.1	62.1	613.37	43.79
1182-01B	1.4	0.1	0.00	0.037	39.552	0.0134	0.3	0.4	78.4	622.08	6.95
1182-01C	1.5	0.2	0.02	0.019	60.927	0.0516	1.1	1.4	91.6	886.13	2.69
1182-01D	1.6	0.0	0.01	0.008	65.712	0.0608	1.3	2.7	96.4	940.30	2.25
1182-01E	1.7	0.0	0.01	0.007	68.949	0.1049	2.2	5.0	97.0	976.04	1.58
1182-01F	•1.7	0.1	0.01	0.004	69.616	0.1027	2.2	7.2	98.2	983.32	1.74
1182-01G	•1.8	0.0	0.01	0.002	69.863	0.0969	2.1	9.2	99.2	986.01	1.80
1182-01H	•1.9	0.0	0.01	0.005	69.875	0.2642	5.6	14.8	97.9	986.14	1.17
1182-01I	•2.0	0.1	0.01	0.003	69.483	0.0753	1.6	16.4	98.7	981.87	2.29
1182-01J	•2.1	0.0	0.01	0.001	69.926	0.1482	3.2	19.6	99.6	986.69	1.52
1182-01K	•2.2	0.0	0.01	0.001	69.651	0.1132	2.4	22.0	99.4	983.70	1.73
1182-01L	•2.4	0.0	0.01	0.001	69.764	0.3100	6.6	28.6	99.4	984.93	1.27
1182-01M	•2.6	0.0	0.00	0.001	69.751	0.5099	10.8	39.4	99.7	984.79	1.11
1182-01N	•2.8	0.0	0.00	0.001	69.756	0.5500	11.7	51.1	99.7	984.84	0.97
1182-01O	•3.1	0.0	0.00	0.001	69.776	0.8470	18.0	69.1	99.7	985.06	1.13
1182-01P	•3.4	0.0	0.00	0.000	69.734	1.4536	30.9	100.0	99.8	984.61	0.93
Integ. Age=										982.00	4.00
(•) Plateau Age =							95.0			985.00	4.00
<i>DC0388, Run ID# 1544-01 (J = 0.009386 ± 0.000025):</i>											
1544-01A	1.6	-67.3	0.05	0.235	37.199	0.0005	0.1	0.1	34.5	540.27	75.81
1544-01B	1.7	52.2	0.03	0.061	69.960	0.0079	0.9	1.0	81.3	910.69	5.36
1544-01C	1.8	13.1	0.00	0.005	74.149	0.0622	7.1	8.1	98.8	953.01	1.11
1544-01D	•1.9	3.7	0.97	0.001	75.753	0.1552	17.8	25.9	99.8	968.95	0.85
1544-01E	•2.0	2.1	0.97	0.001	75.777	0.2208	25.3	51.2	99.9	969.18	0.69
1544-01F	•2.2	1.5	0.97	0.001	75.591	0.2807	32.2	83.4	99.9	967.34	0.68
1544-01G	2.5	8.8	0.00	0.001	74.616	0.1108	12.7	96.0	100.0	957.66	0.77
1544-01H	3	30.1	0.00	0.001	77.529	0.0291	3.3	99.4	100.0	986.44	2.45
1544-01I	3.5	70.0	0.00	0.005	72.231	0.0054	0.6	100.0	100.0	933.75	10.11
Integ. Age=										966.00	4.00
(•) Plateau Age =							75.3			968.00	4.00

DC0392, Run ID# 1545-01 ($J = 0.009386 \pm 0.000025$):

1545-01A	1.9	503.6	0.39	0.133	55.907	0.0002	0.1	0.1	71.0	761.01	200.74
1545-01B	2.1	79.2	0.89	0.008	82.994	0.0005	0.2	0.3	100.0	1039.22	100.44
1545-01C	<i>•</i> 2.3	2.6	2.26	0.002	78.152	0.2082	69.2	69.4	99.6	992.54	0.68
1545-01D	<i>•</i> 2.4	19.8	2.27	0.002	79.107	0.0634	21.1	90.5	100.0	1001.84	1.56
1545-01E	<i>•</i> 3.0	34.2	2.26	0.002	80.131	0.0286	9.5	100.0	100.0	1011.76	2.72
Integ. Age=										996.00	4.00
(•) Plateau Age =							99.7			995.00	8.00

DC0443, Run ID# 1541-01 ($J = 0.009386 \pm 0.000025$):

1541-01A	1.7	12.3	0.02	0.187	69.076	0.0069	0.3	0.3	55.7	901.63	5.48
1541-01B	1.8	2.1	0.01	0.035	77.426	0.0436	1.9	2.2	88.2	985.43	1.23
1541-01C	1.9	1.1	0.01	0.022	76.515	0.1078	4.7	6.9	92.1	976.48	0.79
1541-01D	2	4.0	0.01	0.005	76.280	0.0572	2.5	9.3	98.1	974.16	1.34
1541-01G	<i>•</i> 2.4	0.1	0.00	0.000	75.019	0.5498	23.8	33.2	99.8	961.67	2.28
1541-01H	<i>•</i> 2.6	0.6	0.00	0.000	75.184	0.6168	26.7	59.9	100.0	963.30	0.49
1541-01I	<i>•</i> 2.8	0.0	0.00	0.000	75.123	0.3294	14.3	74.2	100.0	962.70	0.59
1541-01J	<i>•</i> 3.1	0.7	0.00	0.000	75.241	0.3874	16.8	91.0	100.0	963.88	0.43
1541-01K	<i>•</i> 3.5	0.1	0.00	0.000	75.183	0.2088	9.0	100.0	100.0	963.30	0.86
Integ. Age=										964.00	4.00
(•) Plateau Age =							90.7			963.00	4.00

DC0443, Run ID# 1541-02 ($J = 0.009386 \pm 0.000025$):

1541-02A	<i>•</i> 1.7	0.3	0.00	0.048	75.576	0.0552	7.3	7.3	84.1	967.20	1.25
1541-02B	<i>•</i> 1.8	0.0	0.00	0.005	75.386	0.3809	50.3	57.6	98.0	965.31	0.49
1541-02C	<i>•</i> 1.9	3.7	0.00	0.000	75.878	0.0446	5.9	63.5	100.0	970.19	2.14
1541-02D	<i>•</i> 2.0	1.3	0.00	0.000	75.634	0.0249	3.3	66.8	100.0	967.77	1.75
1541-02E	<i>•</i> 2.1	3.5	0.00	0.000	75.671	0.0307	4.1	70.9	100.0	968.14	1.78
1541-02F	<i>•</i> 2.2	0.5	0.00	0.004	75.573	0.1432	18.9	89.8	98.4	967.17	0.61
1541-02G	<i>•</i> 2.4	7.0	0.00	0.001	75.724	0.0143	1.9	91.7	100.0	968.66	2.17
1541-02H	<i>•</i> 2.6	2.6	0.00	0.000	75.692	0.0219	2.9	94.6	100.0	968.35	1.72
1541-02I	<i>•</i> 2.8	7.8	0.00	0.000	76.072	0.0128	1.7	96.3	100.0	972.10	3.16
1541-02J	<i>•</i> 3.1	1.4	0.00	0.000	75.252	0.0077	1.0	97.3	100.0	963.99	3.88
1541-02K	<i>•</i> 3.5	6.8	0.01	0.002	75.677	0.0080	1.1	98.4	99.6	968.19	3.77
1541-02L	<i>•</i> 4.5	2.3	0.00	0.000	75.757	0.0124	1.6	100.0	100.0	968.99	4.53
Integ. Age=										967.00	4.00
(•) Plateau Age =							100.0			967.00	4.00

DC0397, Run ID# 1179-01 ($J = 0.01041 \pm 0.000025$):

1179-01A	1.3	0.0	0.01	0.005	67.131	0.8781	16.7	16.7	97.7	956.05	0.65
1179-01B	<i>•</i> 1.4	0.0	0.01	0.001	67.763	0.6986	13.3	29.9	99.6	963.03	0.74
1179-01C	<i>•</i> 1.4	0.0	0.01	0.001	67.697	0.6674	12.7	42.6	99.6	962.30	0.85
1179-01D	<i>•</i> 1.5	0.0	0.01	0.000	67.622	0.6791	12.9	55.4	99.8	961.48	0.81
1179-01E	<i>•</i> 1.5	0.0	0.01	0.000	67.584	1.3261	25.2	80.6	99.9	961.05	0.81
1179-01F	<i>•</i> 1.6	0.0	0.01	0.001	67.766	0.4183	7.9	88.5	99.7	963.06	1.02
1179-01G	<i>•</i> 1.6	0.0	0.01	0.000	67.456	0.3965	7.5	96.1	99.8	959.64	1.10
1179-01H	1.7	0.0	0.01	0.001	67.000	0.1847	3.5	99.6	99.6	954.61	1.13
1179-01I	3	0.1	0.02	0.004	65.197	0.0231	0.4	100.0	98.0	934.55	5.10
Integ. Age=										960.00	4.00
(•) Plateau Age =							79.4			962.00	4.00

DC03105, Run ID# 1546-01 ($J = 0.009386 \pm 0.000025$):

1546-01A	1.9	21.5	0.09	0.038	55.546	0.0122	5.5	5.5	84.3	756.99	8.18
1546-01B	2.1	38.0	0.04	0.003	91.680	0.0098	4.5	10.0	100.0	1120.06	9.29
1546-01C	2.2	75.6	0.11	0.046	97.890	0.0100	4.5	14.5	90.1	1175.71	11.46
1546-01D	2.2	52.6	0.20	0.005	82.697	0.0220	10.0	24.5	100.0	1036.39	5.83
1546-01E	2.3	39.3	0.21	0.003	82.294	0.0250	11.3	35.8	100.0	1032.55	5.18
1546-01F	<i>•</i> 2.3	16.4	0.21	0.002	79.592	0.0535	24.3	60.1	100.0	1006.54	2.50
1546-01G	<i>•</i> 2.4	9.3	0.20	0.000	78.576	0.0486	22.0	82.2	100.0	996.67	1.68
1546-01H	<i>•</i> 2.5	17.9	0.21	0.001	78.832	0.0393	17.8	100.0	100.0	999.16	2.21
Integ. Age=										1009.00	5.00
(•) Plateau Age =							64.2			1000.00	7.00

Italic numbers indicates below detection limit.