

Table DR1. Zircon chemical abrasion IDTIMS U-Pb isotopic data

Compositional Parameters							Radiogenic Isotope Ratios							Isotopic Ages							
Sample	Th	<sup>206</sup> Pb*	mol %	Pb*	Pb <sub>c</sub>	<sup>206</sup> Pb	<sup>208</sup> Pb	<sup>207</sup> Pb	<sup>206</sup> Pb	<sup>207</sup> Pb	% err	<sup>206</sup> Pb	<sup>207</sup> Pb	% err	corr.	<sup>207</sup> Pb	±	<sup>207</sup> Pb	±	<sup>206</sup> Pb	±
(a)	(b)	x10 <sup>-13</sup>	(c)	(c)	(c)	(d)	(e)	(e)	(f)	(f)	(f)	(e)	(f)	(f)	coef.	(g)	(f)	(g)	(f)	(g)	(f)
PRI Partridge River intrusion (Duluth Complex layered series)																					
P2	0.665	20.7388	0.9995	599	0.91	34763	0.201	0.0761152	0.042	1.94565	0.084	0.185393	0.045	0.967		1098.10	0.84	1096.95	0.56	1096.37	0.45
z5	0.795	15.3708	0.9993	470	0.89	26480	0.241	0.0760872	0.042	1.94489	0.084	0.185388	0.045	0.974		1097.37	0.84	1096.68	0.56	1096.34	0.45
z1	0.714	21.4970	0.9992	415	1.38	23809	0.216	0.0760841	0.043	1.94467	0.085	0.185375	0.046	0.959		1097.29	0.87	1096.61	0.57	1096.27	0.46
z6	0.624	12.4836	0.9992	392	0.83	22979	0.189	0.0760958	0.039	1.94459	0.083	0.185339	0.045	0.991		1097.59	0.78	1096.58	0.56	1096.08	0.46
z4	0.610	11.0228	0.9988	272	1.05	15998	0.185	0.0761063	0.045	1.94483	0.087	0.185336	0.046	0.952		1097.87	0.91	1096.66	0.59	1096.06	0.47
z3	0.669	4.5808	0.9983	192	0.63	11152	0.203	0.0761323	0.055	1.94542	0.094	0.185329	0.048	0.898		1098.55	1.11	1096.87	0.63	1096.02	0.48
weighted mean 206Pb/238U age = 1096.19 ± 0.19 (0.36) [1.15] Ma (2s); MSWD = 0.45 (n=6)																					
weighted mean 207Pb/206Pb age = 1097.71 ± 0.36 [5.1] Ma (2s); MSWD = 1.00 (n=6)																					
FC-4b Forest Center anorthosite (Duluth Complex anorthositic series)																					
z10	0.732	8.7414	0.9986	233	1.01	13304	0.222	0.0760627	0.047	1.94330	0.089	0.185297	0.047	0.946		1096.72	0.94	1096.14	0.60	1095.85	0.47
z2	0.686	30.2158	0.9996	721	1.11	41626	0.208	0.0761076	0.041	1.94443	0.084	0.185295	0.046	0.968		1097.90	0.82	1096.53	0.56	1095.84	0.47
z4	0.705	20.9839	0.9995	610	0.92	35079	0.214	0.0761032	0.042	1.94413	0.085	0.185277	0.047	0.963		1097.79	0.83	1096.42	0.57	1095.74	0.48
z11	0.716	11.7511	0.9989	288	1.09	16503	0.217	0.0760929	0.045	1.94376	0.087	0.185266	0.046	0.954		1097.51	0.90	1096.30	0.58	1095.68	0.47
z3	0.637	48.5088	0.9998	1280	0.99	74775	0.193	0.0761148	0.040	1.94431	0.086	0.185265	0.051	0.957		1098.09	0.81	1096.48	0.58	1095.68	0.51
z1	0.630	18.1802	0.9994	548	0.87	32063	0.191	0.0760777	0.042	1.94321	0.084	0.185251	0.045	0.969		1097.12	0.84	1096.11	0.56	1095.60	0.46
z6	0.659	12.0405	0.9992	397	0.80	23077	0.199	0.0760863	0.044	1.94314	0.086	0.185223	0.047	0.955		1097.34	0.87	1096.08	0.58	1095.45	0.48
z5	0.467	9.6852	0.9988	256	0.95	15587	0.141	0.0761585	0.046	1.94327	0.088	0.185060	0.046	0.952		1099.24	0.92	1096.13	0.59	1094.56	0.47
weighted mean 206Pb/238U age = 1095.69 ± 0.18 (0.35) [1.14] Ma (2s); MSWD = 0.34 (n=7)																					
weighted mean 207Pb/206Pb age = 1097.51 ± 0.32 [5.1] Ma (2s); MSWD = 1.20 (n=7)																					
FC-1 Forest Center anorthosite (Duluth Complex anorthositic series)																					
z21	0.347	89.3479	0.9999	4055	0.54	254586	0.105	0.0761142	0.040	1.94544	0.086	0.185375	0.051	0.958		1098.08	0.80	1096.87	0.58	1096.27	0.51
z23	1.362	38.6752	0.9998	1969	0.60	97907	0.412	0.0761283	0.040	1.94564	0.086	0.185360	0.050	0.959		1098.45	0.81	1096.95	0.57	1096.19	0.51
z22	0.614	135.1333	1.0000	8332	0.42	489236	0.186	0.0760948	0.040	1.94434	0.086	0.185317	0.051	0.958		1097.56	0.80	1096.50	0.57	1095.96	0.51
z26	1.443	63.5688	0.9999	4620	0.43	225979	0.437	0.0761149	0.040	1.94485	0.084	0.185317	0.048	0.965		1098.09	0.80	1096.67	0.56	1095.96	0.48
z20	1.508	98.5654	0.9999	4740	0.66	228892	0.457	0.0761327	0.040	1.94529	0.093	0.185315	0.062	0.944		1098.56	0.80	1096.82	0.62	1095.95	0.63
z25	0.684	41.1099	0.9998	2139	0.51	123514	0.207	0.0761295	0.040	1.94493	0.083	0.185289	0.046	0.970		1098.48	0.80	1096.70	0.56	1095.81	0.47
z19	0.715	125.9011	0.9999	5523	0.61	316609	0.217	0.0761253	0.040	1.94446	0.085	0.185255	0.049	0.961		1098.37	0.80	1096.54	0.57	1095.62	0.50
z27	0.547	56.2585	0.9998	1614	0.89	96360	0.166	0.0761425	0.040	1.94490	0.084	0.185254	0.047	0.968		1098.82	0.81	1096.69	0.56	1095.62	0.47
z18	1.414	46.2410	0.9998	1865	0.77	91792	0.428	0.0761037	0.040	1.94366	0.084	0.185230	0.048	0.965		1097.80	0.81	1096.26	0.57	1095.49	0.48
z24	1.439	92.3175	0.9999	6768	0.43	331313	0.436	0.0761075	0.040	1.94349	0.085	0.185206	0.049	0.962		1097.90	0.80	1096.20	0.57	1095.35	0.50
weighted mean 206Pb/238U age = 1095.81 ± 0.16 (0.34) [1.14] Ma (2s); MSWD = 1.44 (n=10)																					
weighted mean 207Pb/206Pb age = 1098.21 ± 0.25 [5.0] Ma (2s); MSWD = 0.94 (n=10)																					
BEI Bald Eagle intrusion (Duluth Complex layered series)																					
z4	0.681	16.1663	0.9991	341.8	1.25	19772	0.206	0.0760969	0.044	1.94481	0.085	0.185357	0.044	0.966		1097.62	0.87	1096.66	0.57	1096.17	0.45
z6a	0.649	30.1146	0.9997	914	0.86	53261	0.197	0.0760783	0.045	1.94407	0.085	0.185332	0.045	0.942		1097.13	0.91	1096.40	0.57	1096.04	0.46
z6b	0.841	24.9060	0.9996	803	0.85	44740	0.255	0.0760813	0.039	1.94401	0.084	0.185319	0.048	0.974		1097.21	0.79	1096.38	0.56	1095.97	0.48
z5	0.652	4.7525	0.9983	186	0.67	10867	0.197	0.0760617	0.050	1.94340	0.090	0.185308	0.046	0.942		1096.70	0.99	1096.17	0.61	1095.91	0.46
z3	0.576	6.7271	0.9982	178	0.97	10592	0.174	0.0761041	0.052	1.94433	0.091	0.185294	0.046	0.928		1097.81	1.04	1096.49	0.61	1095.83	0.46
z1	0.523	5.9782	0.9981	159	0.96	9575	0.158	0.0761187	0.054	1.94367	0.095	0.185195	0.050	0.912		1098.19	1.07	1096.26	0.64	1095.29	0.50
weighted mean 206Pb/238U age = 1095.89 ± 0.19 (0.36) [1.15] Ma (2s); MSWD = 1.59 (n=6)																					
weighted mean 207Pb/206Pb age = 1097.40 ± 0.38 [5.1] Ma (2s); MSWD = 1.14 (n=6)																					
HCT Houghtaling Creek troctolite (Beaver Bay Complex)																					
z7	0.765	11.6934	0.9978	149	2.12	8437	0.232	0.0761478	0.055	1.94513	0.094	0.185263	0.046	0.920		1098.96	1.10	1096.77	0.63	1095.66	0.47
z6	0.666	4.7620	0.9968	101	1.24	5877	0.202	0.0760881	0.067	1.94350	0.106	0.185254	0.051	0.870		1097.39	1.34	1096.21	0.71	1095.61	0.52
z1	0.396	3.7022	0.9945	54	1.68	3382	0.120	0.0760085	0.099	1.94086	0.139	0.185196	0.060	0.784		1095.29	1.98	1095.30	0.93	1095.30	0.60
z10	0.719	3.5063	0.9965	94	1.00	5380	0.218	0.0761151	0.069	1.94320	0.108	0.185159	0.051	0.865		1098.10	1.39	1096.10	0.73	1095.10	0.51
z4	1.566	1.3175	0.9876	31	1.36	1502	0.474	0.0760216	0.210	1.93975	0.256	0.185058	0.083	0.671		1095.64	4.19	1094.91	1.71	1094.55	0.83
z9	1.053	4.8694	0.9980	173	0.81	9209	0.319	0.0760857	0.054	1.94068	0.094	0.184991	0.048	0.920		1097.33	1.07	1095.23	0.63	1094.18	0.48
z12	1.398	4.7973	0.9977	167	0.89	8245	0.424	0.0760778	0.057	1.93986	0.098	0.184932	0.050	0.902		1097.12	1.14	1094.95	0.66	1093.86	0.50
z11	0.687	2.1862	0.9947	61	0.95	3536	0.208	0.0760543	0.096	1.93912	0.135	0.184918	0.056	0.792		1096.50	1.93	1094.69	0.90	1093.79	0.57
z14	0.404	1.0610	0.9951	61	0.43	3817	0.122	0.0760529	0.086	1.93884	0.233	0.184895	0.202	0.932		1096.46	1.71	1094.60	1.56	1093.66	0.24
z8	2.079	1.5846	0.9926	57	0.97	2508	0.630	0.0761335	0.128	1.94009	0.247	0.184818	0.191	0.858		1098.58	2.57	1095.03	1.65	1093.24	1.92
z5	1.078	2.7707	0.9909	39	2.08	2053	0.327	0.0760109	0.152	1.93692	0.193	0.184814	0.066	0.724		1095.36	3.03	1093.94	1.29	1093.22	0.67
weighted mean 206Pb/238U age = 1095.44 ± 0.26 (0.40) [1.16] Ma (2s); MSWD = 1.13 (n=4)																					
weighted mean 207Pb/206Pb age = 1097.63 ± 0.48 [5.1] Ma (2s); MSWD = 1.62 (n=8)																					
WLFG Wilson Lake ferrogabbro (Beaver Bay Complex)																					
z2	1.225	3.6441	0.9967	111	0.98	5701	0.371	0.0759668	0.066	1.93316	0.105	0.184562	0.049	0.880		1094.20	1.32	1092.63	0.70	1091.85	0.49
z9	1.236	1.2015	0.9806	18	1.96	958	0.375	0.0760828	0.312	1.93604	0.383	0.184555	0.134	0.651		1097.25	6.25	1093.63	2.56	1091.81	1.35
z16	1.209	0.7717	0.9872	28	0.82	1452	0.366	0.0759981	0.205	1.93352	0.265	0.184521	0.114	0.685		1095.02	4.10	1092.76	1.77	1091.62	1.15
z26*	1.115	1.3194	0.9923	45	0.85	2401	0.338	0.0759428	0.131	1.93316	0.171	0.184473	0.064	0.743		1093.56	2.62	1092.10	1.15	1091.36	0.65
z19	2.350	0.3987	0.9715	15	0.96	652	0.712	0.0760519	0.419	1.93313	0.517	0.184353	0.155	0.724		1096.44	8.38	1092.62	3.46	1090.71	1.55
z27*	2.410	0.7114	0.9816	24	1.10	1010	0.730	0.0760187	0.290	1.92711	0.351	0.183859	0.110	0.666		1095.56	5.80	1090.54	2.35	1088.02	1.10
z21^	0.864	0.7751	0.9872	26	0.82	1456	0.262	0.0761744	0.207	1.92984	0.268	0.183743	0.116	0.681		1099.66	4.14	1091.48	1.79	1087.39	1.16
z28*	1.613	0.4676	0.9820	21	0.71	1031	0.489	0.0758794	0.298	1.92047	0.393	0.183562	0.194	0.676		1091.89	5.98	1088.23	2.62		