

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

Compositional Parameters										Radiogenic Isotope Ratios						Isotopic Ages					
Sample	Th	²⁰⁶ Pb*	mol %	Pb*	Pb _c	²⁰⁶ Pb	²⁰⁸ Pb	²⁰⁷ Pb	% err	²⁰⁷ Pb	% err	²⁰⁶ Pb	% err	corr.	²⁰⁷ Pb	±	²⁰⁷ Pb	±	²⁰⁶ Pb	±	
(a)	(b)	x10 ⁻¹³	(c)	(c)	(c)	(d)	(e)	(e)	(f)	(e)	(f)	(e)	(f)	(f)	(g)	(f)	(g)	(f)	(g)	(f)	
PRI Partridge River intrusion (Duluth Complex layered series)																					
PRI	z2	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 ²⁰⁶ Pb/ ²³⁸ U age = 1096.19 ± 0.19 (0.36) [1.15] Ma (2s); MSWD = 0.45 (n=6)																					
weighted mean ²⁰⁷ Pb/ ²⁰⁶ Pb age = 1097.71 ± 0.36 [5.1] Ma (2s); MSWD = 1.00 (n=6)																					
FC-4b Forest Center anorthosite (Duluth Complex anorthositic series)																					
FC-4b	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 ²⁰⁶ Pb/ ²³⁸ U age = 1095.69 ± 0.18 (0.35) [1.14] Ma (2s); MSWD = 0.34 (n=7)																					
weighted mean ²⁰⁷ Pb/ ²⁰⁶ Pb age = 1097.51 ± 0.32 [5.1] Ma (2s); MSWD = 1.20 (n=7)																					
FC-1 Forest Center anorthosite (Duluth Complex anorthositic series)																					
FC-1	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 ²⁰⁶ Pb/ ²³⁸ U age = 1095.81 ± 0.16 (0.34) [1.14] Ma (2s); MSWD = 1.44 (n=10)																					
weighted mean ²⁰⁷ Pb/ ²⁰⁶ Pb age = 1098.21 ± 0.25 [5.0] Ma (2s); MSWD = 0.94 (n=10)																					
BEI Bald Eagle intrusion (Duluth Complex layered series)																					
BEI	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 ²⁰⁶ Pb/ ²³⁸ U age = 1095.89 ± 0.19 (0.36) [1.15] Ma (2s); MSWD = 1.59 (n=6)																					
weighted mean ²⁰⁷ Pb/ ²⁰⁶ Pb age = 1097.40 ± 0.38 [5.1] Ma (2s); MSWD = 1.14 (n=6)																					
HCT Houghtaling Creek troctolite (Beaver Bay Complex)																					
HCT	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	1.93984	0.233	0.184895	0.202	0.932	1096.46	1.71	1094.60	1.56	1093.66	0.54
	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 ²⁰⁶ Pb/ ²³⁸ U age = 1095.44 ± 0.26 (0.40) [1.16] Ma (2s); MSWD = 1.13 (n=4)																					
weighted mean ²⁰⁷ Pb/ ²⁰⁶ Pb age = 1097.63 ± 0.48 [5.1] Ma (2s); MSWD = 1.62 (n=8)																					
WLFG Wilson Lake ferrogabbro (Beaver Bay Complex)																					
WLFG	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
	z19	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	1.82	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	1.93161	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												