

TABLE 1. U-PB ANALYTICAL DATA

Analysis [†]	Wt. [‡] (mg)	Concentration [§]		Pb _c (pg)	Atomic ratios ^{††}		²⁰⁶ Pb ²³⁸ U	²⁰⁷ Pb ²³⁵ U	²⁰⁷ Pb ²⁰⁶ Pb	Age (Ma) ^{§§}		Disc.##
		U (ppm)	Pb* (ppm)		²⁰⁶ Pb ²⁰⁴ Pb	²⁰⁸ Pb ²⁰⁶ Pb				²⁰⁷ Pb ²⁰⁶ Pb	²⁰⁷ Pb ²⁰⁶ Pb	
Middle of northern gneisses												
Homogeneous tonalitic gneiss—sample 1 (JC-130-99) (Figs. 7A, 7B) at lat. 65°10'21"N, long. 50°00'23"W												
Z1 cl, co, el	5	16	15.5	13	287	0.103	0.7774 ± 0.27	37.296 ± 0.25	0.34797 ± 0.14	3698.1 ± 4.2	-0.3	
Z2 cl, co, el	5	121	116.0	13	2072	0.106	0.7712 ± 0.17	36.991 ± 0.17	0.34789 ± 0.05	3697.8 ± 1.5	0.3	
Z3 cl, co, sbeq	3	174	166.2	16	1465	0.086	0.7747 ± 0.22	37.161 ± 0.22	0.34792 ± 0.06	3697.9 ± 1.8	0.0	
T1 (2), br	21	21	19.1	76	296	0.035	0.7437 ± 0.19	33.427 ± 0.19	0.32600 ± 0.07	3598.4 ± 2.1	0.4	
T2 (4), tn	24	34	29.6	95	413	0.033	0.7473 ± 0.13	33.761 ± 0.14	0.32766 ± 0.04	3606.2 ± 1.2	0.3	
T3 tn	10	21	18.4	50	210	0.021	0.7510 ± 0.33	33.884 ± 0.33	0.32724 ± 0.10	3604.2 ± 3.1	-0.2	
T4 (2), tn, fl	15	31	28.3	75	324	0.040	0.7501 ± 0.25	33.807 ± 0.25	0.32687 ± 0.08	3602.5 ± 2.4	-0.2	
Megacrystic granodiorite dike—sample 2 (JC-106-99) (Fig. 7A) at lat. 65°10'34"N, long. 50°00'02"W												
Z1 cl, co, tp	3	42	40.5	21	277	0.137	0.7696 ± 0.38	36.551 ± 0.38	0.34444 ± 0.10	3682.6 ± 3.1	0.1	
Z2 cl, co, fl	6	115	110.7	13	2482	0.103	0.7702 ± 0.17	36.512 ± 0.18	0.34384 ± 0.05	3679.9 ± 1.5	0.0	
Z3 (2), an, ylpk	23	265	264.5	28	10756	0.169	0.7736 ± 0.17	37.071 ± 0.18	0.34757 ± 0.03	3696.4 ± 0.9	0.1	
Z4 cl, pk	5	74	72.8	22	807	0.128	0.7784 ± 0.20	37.252 ± 0.20	0.34708 ± 0.05	3694.3 ± 1.6	-0.5	
Z5 cl, pk	29	59	57.2	22	3661	0.116	0.7749 ± 0.12	37.140 ± 0.12	0.34762 ± 0.04	3696.6 ± 1.1	0.0	
Z6 cl, co	9	32	32.0	28	542	0.151	0.7742 ± 0.22	36.981 ± 0.23	0.34643 ± 0.04	3691.4 ± 1.2	-0.1	
Diorite dike (Inaluk dike)—sample 3 (JC-133-99) (Figs. 7A, 7B) at lat. 65°10'21"N, long. 50°00'31"W												
Z1 cl, co, fg	3	87	85.5	20	597	0.170	0.7630 ± 0.21	35.692 ± 0.20	0.33927 ± 0.08	3659.5 ± 2.5	0.1	
Z2 cl, co	4	129	123.8	13	1733	0.120	0.7611 ± 0.17	35.613 ± 0.17	0.33935 ± 0.05	3659.9 ± 1.4	0.3	
Z3 cl, co, el	5	78	78.9	10	1775	0.201	0.7646 ± 0.21	35.761 ± 0.20	0.33921 ± 0.08	3659.2 ± 2.4	0.0	
Z4 cl, co, fg	2	112	113.7	16	652	0.204	0.7648 ± 0.30	35.763 ± 0.27	0.33913 ± 0.15	3658.9 ± 4.5	-0.1	
T1 (2), br	15	43	38.7	75	405	0.093	0.7417 ± 0.14	33.189 ± 0.14	0.32452 ± 0.05	3591.4 ± 1.4	0.5	
T2 (3), br	14	61	54.0	76	546	0.047	0.7477 ± 0.14	33.762 ± 0.15	0.32750 ± 0.05	3605.4 ± 1.6	0.2	
T3 br	9	113	98.1	45	1028	0.034	0.7467 ± 0.14	33.604 ± 0.15	0.32639 ± 0.04	3600.2 ± 1.1	0.1	
T4 (2), tn, fl	10	104	91.9	93	526	0.036	0.7509 ± 0.13	33.914 ± 0.14	0.32758 ± 0.04	3605.8 ± 1.1	-0.1	
Granite sheet—sample 4 (JC-156-99) (Fig. 7C) at lat. 65°10'39"N, long. 49°56'32"W												
Z1 tn	9	700	654.0	21	14566	0.108	0.7508 ± 0.12	34.982 ± 0.12	0.33792 ± 0.03	3653.4 ± 0.8	1.2	
Z2 cl, co, el	5	198	176.6	15	2739	0.175	0.6901 ± 0.18	31.302 ± 0.18	0.32897 ± 0.06	3612.3 ± 1.9	6.3	
Z3 co	2	610	536.0	81	645	0.101	0.7154 ± 0.18	32.059 ± 0.18	0.32502 ± 0.05	3593.7 ± 1.6	3.2	
Z4 co, el	2	840	697.8	25	1950	0.184	0.6459 ± 0.12	27.686 ± 0.13	0.31087 ± 0.04	3525.2 ± 1.3	8.9	
Z5 cl, tn	4	385	308.1	22	2976	0.098	0.6566 ± 0.09	29.016 ± 0.10	0.32048 ± 0.03	3572.2 ± 1.0	8.9	
Z6 tn	3	511	461.8	37	1750	0.105	0.7304 ± 0.09	33.534 ± 0.10	0.33297 ± 0.03	3630.8 ± 0.8	2.6	
Z7 cl, tn	2	487	481.6	29	1210	0.174	0.7603 ± 0.11	35.402 ± 0.11	0.33770 ± 0.04	3652.4 ± 0.9	0.2	
Z8 cl, tn	1	494	477.3	29	1086	0.133	0.7630 ± 0.16	35.544 ± 0.17	0.33785 ± 0.04	3653.1 ± 1.2	-0.1	
Pegmatite sheet—sample 5 (JC-132-99) (Fig. 7D) at lat. 65°10'22"N, long. 50°00'32"W												
Z1 cl, co, tp	5	2490	1796.6	24	18040	0.096	0.6040 ± 0.09	24.342 ± 0.10	0.29230 ± 0.03	3429.9 ± 0.8	11.2	
Z2 el	5	2328	1718.6	32	13298	0.096	0.6139 ± 0.09	25.554 ± 0.10	0.30190 ± 0.03	3480.0 ± 0.8	11.3	
Z3 cl, co, el	7	2561	2086.9	76	10566	0.109	0.6666 ± 0.19	28.683 ± 0.19	0.31210 ± 0.03	3531.3 ± 0.8	6.7	
Z4 co, fg	6	1288	1161.7	38	8823	0.097	0.7343 ± 0.10	33.411 ± 0.11	0.33000 ± 0.03	3617.1 ± 0.8	1.9	
Z5 cl, co	3	3530	2558.8	251	1446	0.160	0.5808 ± 0.15	23.197 ± 0.14	0.28966 ± 0.08	3415.8 ± 2.5	13.6	
Granite sheet—sample 6 (JC-129-99) (Fig. 7B) at lat. 65°10'23"N, long. 50°00'20"W												
T1 tn	7	14	12.0	29	161	0.079	0.7261 ± 0.45	31.473 ± 0.48	0.31436 ± 0.12	3542.5 ± 3.5	0.7	
Southeastern margin of northern gneisses												
Tonalitic gneiss—sample 7 (JC-047-99) (Fig. 7E) at lat. 65°06'22"N, long. 49°57'55"W												
Z1 cl, co, fg	7	37	36.7	29	470	0.141	0.7728 ± 0.29	37.080 ± 0.19	0.34798 ± 0.23	3698.2 ± 7.0	0.2	
Z2 cl, co, el	5	46	43.7	21	521	0.086	0.7778 ± 0.30	37.324 ± 0.31	0.34803 ± 0.05	3698.4 ± 1.6	-0.3	
Z3 cl, co, el	2	147	139.6	13	1015	0.080	0.7705 ± 0.23	36.896 ± 0.21	0.34728 ± 0.11	3695.1 ± 3.4	0.3	
Z4 co, fg	1	185	188.8	28	314	0.165	0.7865 ± 0.41	37.638 ± 0.41	0.34709 ± 0.09	3694.3 ± 2.9	-1.2	
Leucogranite vein—sample 8 (JC-055-99) (Fig. 7F) at lat. 65°07'17"N, long. 49°56'41"W												
Z1 cl, co, tp	2	88	83.9	18	450	0.111	0.7630 ± 0.34	36.902 ± 0.29	0.35077 ± 0.19	3710.3 ± 5.7	1.5	
Z2 cl, tn	4	255	243.3	62	745	0.115	0.7631 ± 0.16	35.544 ± 0.16	0.33780 ± 0.04	3652.9 ± 1.1	-0.1	
Z2 br, el	10	215	188.6	76	1307	0.098	0.7108 ± 0.10	32.842 ± 0.11	0.33512 ± 0.03	3640.7 ± 0.9	4.9	
Z4 tn, el	10	318	291.2	64	2407	0.077	0.7506 ± 0.10	35.024 ± 0.11	0.33842 ± 0.03	3655.7 ± 0.8	1.3	
Z5 tn, crk	4	332	306.1	29	2239	0.103	0.7423 ± 0.11	34.479 ± 0.12	0.33688 ± 0.03	3648.7 ± 0.9	1.9	
Z6 tn, crk	5	436	390.9	104	869	0.066	0.7431 ± 0.09	34.504 ± 0.10	0.33675 ± 0.03	3648.1 ± 0.9	1.8	
Granite sheet—sample 9 (JC-046-99) (Fig. 7E) at lat. 65°N, long. 49°57'53"W												
Z1 cl, co	2	357	281.4	14	1924	0.086	0.6541 ± 0.11	28.263 ± 0.11	0.31341 ± 0.04	3537.8 ± 1.2	8.3	
Z2 cl, co, el	2	339	275.6	13	1959	0.133	0.6567 ± 0.14	27.833 ± 0.14	0.30741 ± 0.06	3508.0 ± 1.8	7.2	
Z3 cl, tn	2	169	155.2	12	1220	0.084	0.7549 ± 0.15	34.884 ± 0.15	0.33517 ± 0.06	3640.9 ± 1.9	0.4	
Z4 sbeq	5	88	85.1	18	1147	0.111	0.7716 ± 0.14	36.690 ± 0.14	0.34489 ± 0.06	3684.6 ± 1.8	0.0	
Z5 co, el	5	131	128.4	15	1952	0.167	0.7549 ± 0.13	35.061 ± 0.13	0.33687 ± 0.04	3648.6 ± 1.3	0.6	
Z6 cl, co, tp	2	143	125.5	35	399	0.085	0.7212 ± 0.23	32.489 ± 0.23	0.32674 ± 0.10	3601.9 ± 3.0	2.8	
Z7 cl, co, tp	1	372	317.1	23	741	0.078	0.7074 ± 0.17	31.510 ± 0.17	0.32307 ± 0.06	3584.5 ± 1.9	3.8	
T1 tn	6	16	10.4	30	124	0.061	0.5868 ± 0.49	18.184 ± 0.51	0.22476 ± 0.35	3015.0 ± 11.2	1.3	
T2 (2), tn	7	14	10.1	34	130	0.075	0.6158 ± 0.33	20.895 ± 0.38	0.24610 ± 0.17	3159.9 ± 5.3	2.1	
T3 (3), tn	11	11	8.0	36	145	0.039	0.6154 ± 0.31	20.848 ± 0.34	0.24571 ± 0.20	3157.4 ± 6.3	2.1	

Note: Map datum for sample locations is WGS 84.

*Radiogenic.

†Mineral analyzed (T—titanite; Z—zircon), followed by number of grains in each analysis in parentheses (where >1) and grain characteristics (br—brown; cl—clear; co—colorless; crk—cracks; el—elongate; fg—fragment; pk—pink; sbeq—subequant; tn—tan; tp—tip; ylpk—yellowish pink).

‡Weight of zircon grains estimated visually using a microscope, and thus are only approximate. Weight of titanite grains measured with a microbalance.

§Concentration uncertainty varies with sample weight: estimated at >30% for sample weights <5 mg, >10% for sample weights <10 mg, <10% for sample weights >10 mg. Pb*, radiogenic Pb; P_c, total common Pb in analysis corrected for spike and fractionation.

††Ratios corrected for spike, fractionation, blank, and initial common Pb, except ²⁰⁶Pb/²⁰⁴Pb ratio corrected for spike and fractionation only.

Errors are 1σ in percent.

§§Errors are 2σ in Ma.

##Disc.—discordance = 100 - [100 × (²⁰⁶Pb/²³⁸U age)/(²⁰⁷Pb/²⁰⁶Pb age)].