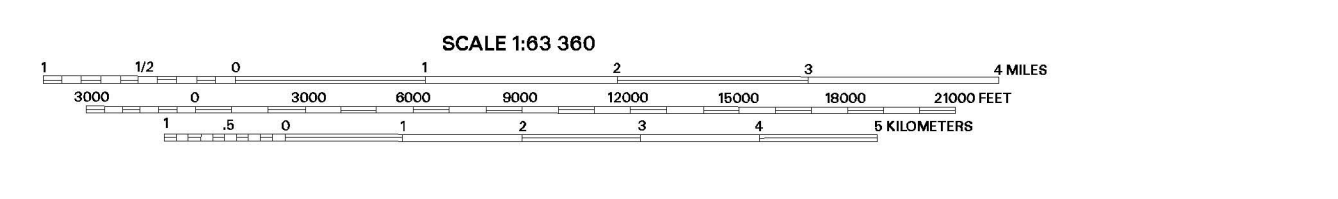
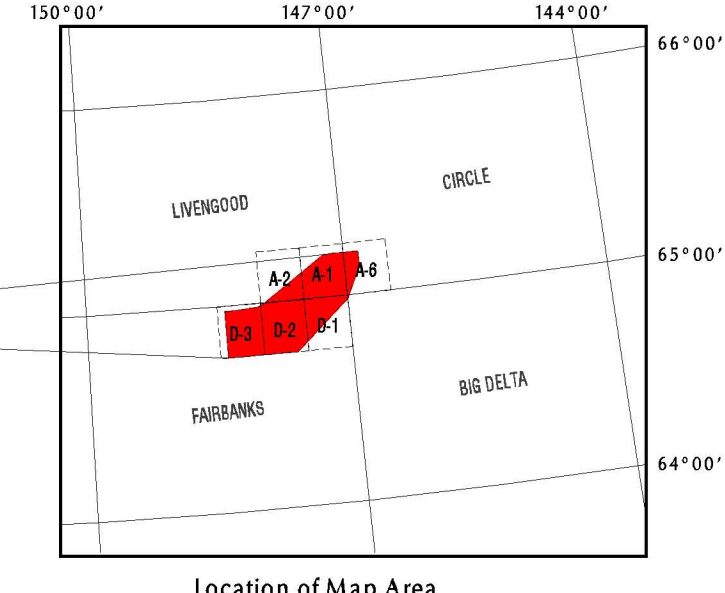


TABLE 2. AR-AR AGES DETERMINED FOR THIS STUDY

Sample number	Rock type	Mineral dated*	Integrated age (Ma)*	Plateau age (Ma)	Reset age	Interpretation of spectra
ECLOGITE SEQUENCE						
95BT200	eclogite	ms	127.4 +/- 1.2	124	90	earlier meta >160 Ma; mostly reset at about 120 Ma; minor 90 Ma reset
95BT200	eclogite	ms	129.0 +/- 1.3	124	90	
95TD45	eclogite schist	bt	146.4 +/- 1.2	145	120	major thermal event at about 140-160 Ma; slight reset at about 120 Ma
95TD45	eclogite schist	bt	160.9 +/- 3.4	145	120	
95TD45	eclogite schist	bt	149.5 +/- 1.3	163	120	
95TD45	eclogite schist	ms	122.3 +/- 0.8	125		Tertiary hydrothermal event at about 120 Ma with slight Tertiary reset earliest metamorphism at about 360 Ma; very strong overprint at about 125 Ma; slight reset at about 90 Ma
95TD63	eclogite schist	bt	138.8 +/- 4.0	125	90	
95TD63	eclogite schist	bt	126.0 +/- 1.3	125		
95TD64	eclogite schist	bt	115.3 +/- 0.4	110-136		Tertiary complex cooling after the 120 Ma event; slight Tertiary reset earliest metamorphism >280 Ma; strong reset by about 120 Ma event; slight reset at about 90 Ma
95TD64	eclogite schist	bt	117.5 +/- 0.5	110-136		
95TD64	eclogite schist	ms	164.8 +/- 1.8	110-130		
95TD64	eclogite schist	ms	131.6 +/- 0.6	120-140	90	
RNTN2	altered eclogite	ms	106.7 +/- 0.6	115	88	thermal event at about 115-125 Ma; weak reset (by mine's?) at about 90 Ma
RNTN2	altered eclogite	ms	132.0 +/- 0.5	135	88	
RNTN2	altered eclogite	ms	118.0 +/- 0.5	118	88	
MUSKOK SEQUENCE						
95BT13	quartz schist	ms	98.1 +/- 0.7	101		slow cooling after >100 Ma thermal event
FAIRBANKS SCHIST						
81BT198	quartz schist	ms	137.3 +/- 0.7	140		complex event at about 140 Ma
95TD50	quartz schist	bt	126.3 +/- 0.8	125-137	85	complex thermal event at about 120-140 Ma; minor reset at about 90 Ma
95TD50	quartz schist	bt	135.4 +/- 0.6	118-142	85	
95TD50	quartz schist	ms	115.7 +/- 1.6	115		complex event at about 115-120 Ma
95TD50	quartz schist	ms	114.8 +/- 0.9	115		
95TD51	quartz schist	bt	99.6 +/- 0.4	103	55	slow cooling after >105 Ma thermal event; minor reset at 55 Ma
95TD66	quartz schist	bt	104.7 +/- 0.5	103	90	thermal event at >105 Ma; minor reset at about 90 Ma thermal event at >160 Ma; strong reset at >105 Ma
95TD66	quartz schist	bt	100.9 +/- 0.4	103	90	
95TD66	quartz schist	ms	103.6 +/- 1.5	103		
95BT35	quartz schist	bt	104.2 +/- 6.8	102		Tertiary slow cooling after >105 Ma event; minor Tertiary reset
95BT35	quartz schist	bt	96.5 +/- 2.0	100		
95BT35	quartz schist	bt	92.8 +/- 1.3	100		
95BT35	quartz schist	bt	92.9 +/- 1.2	98		
95BT35	quartz schist	ms	115.4 +/- 0.7	113		thermal event at >290 Ma; strong reset at > about 115 Ma
95KC57	quartz schist	bt	71.8 +/- 1.4	105	50	strongly reset by 50 Ma event
95KC57	quartz schist	ms	130 +/- 16	125		complex cooling after thermal event at about 120 Ma
95KC62	quartz schist	ms	104.0 +/- 1.0	105		slow cooling after thermal event > about 105 Ma
95KC83	amphibolite	hb	185.0 +/- 4.3	150		Tertiary thermal event at >180 Ma; major reset event at about 120 Ma; minor Tertiary reset
95KC83	amphibolite	hb	160.4 +/- 11.6	150		
95KC83	amphibolite	bt	113.7 +/- 0.6	122		Tertiary reset
95KC83	amphibolite	bt	109.7 +/- 2.2	122		
95KC83	amphibolite	bt	113.3 +/- 0.6	118		Tertiary
95KC117	biotite hornfels	bt	86.7 +/- 1.4	88	40	completely reset by the 90 Ma Giliore Dome pulse (0.5 km from the sample); minor Tertiary reset
95KC117	biotite hornfels	bt	78.0 +/- 1.1	84		Tertiary
95KC117	biotite hornfels	ms	92.3 +/- 0.4	93		
95KC155	muscovite schist	ms	108.6 +/- 0.4	108		Tertiary thermal event at >about 110 Ma; minor Tertiary reset
BIRCH HILL SEQUENCE						
95RN104	calc-pyroxene	ms	101.1 +/- 0.6	105	50	thermal event at about 110-120 Ma; minor reset at about 50 Ma
95RN167	calc-pyroxene	ms	116.0 +/- 1.7	119		
TERTIARY IGNEOUS ROCKS						
95BT163	basalt	wr	49.9 +/- 0.3	49		erupted at about 50-55 Ma
95BT163	basalt	wr	49.2 +/- 0.2	53		erupted at about 50-55 Ma
CRETACEOUS IGNEOUS ROCKS						
JRyDK	granite dike	bt	91.3 +/- 0.5	93		intruded at about 92 Ma; minor Tertiary reset
JRyDK	granite dike	bt	92.5 +/- 0.4	93		
95BT105	alt'd granite	ms	72.3 +/- 4.2	92		Tertiary intruded at about 92 Ma; minor Tertiary reset
95BT105	alt'd granite	ms	88.9 +/- 1.1	91		Tertiary granite altered at about 91 Ma
95BT142	alt'd granite	bt	91.6 +/- 3.0	96		Tertiary intruded at about 92 Ma; minor Tertiary reset
95BT142	alt'd granite	bt	93.4 +/- 2.6	96		
95BT142	alt'd granite	ms	91.4 +/- 0.5	92		granite; alt'd at about 92 Ma; minor 55 Ma reset
AH-1	tonalite	bt	90.4 +/- 0.4	91	50	intruded at about 91 Ma; minor 50 Ma reset



Alaska Division of Geological and Geophysical Surveys
Geologic Data Modeling System
Universal Transverse Mercator Projection Zone 6

LOCATION MAP FOR Ar-Ar AGES, FAIRBANKS MINING DISTRICT, ALASKA

by
R.J. Newberry, T.K. Bundtzen,
K.H. Clautice, R.A. Combellek, T. Douglas,
G.M. Laird, S.A. Liss, D.S. Pinney, R.R. Reifenhuth,
and D.N. Solie

1996

The State of Alaska makes no express or implied warranty including warranties for merchantability and fitness with respect to the character, quality or quantity of the electronic services or products or their appropriateness for any user's purposes. In no event will the State of Alaska be liable for any incidental, indirect, special, consequential or other damages suffered by the user or any other person or entity whether from use of the electronic services or products, any failure thereof or otherwise, and in no event will the State of Alaska be liable to the Requestor or anyone else exceed the fee paid for the electronic service or product.

THIS REPORT HAS NOT BEEN REVIEWED FOR TECHNICAL CONTENT OR FOR CONFORMITY TO THE EDITORIAL STANDARDS OF DOI.