

Tin in rock samples (spectrographic determinations)

Average abundance of tin (in ppm) in the Earth's crust and in various crustal components

	Ultramafic	Basalt	Intermediate igneous rocks	Silicic igneous rocks	Alkalic igneous rocks	Gneisses	Shale, clay	Limestone	Soil
Average <sup>1/2</sup>	0.6	1.1	1.4	3.5	-	-	6	0.27	87
Usual Range <sup>2/3</sup>	0.1-1.3	0-6	0-10	<1-15	8-39	700-7800	1-20	-	0-10

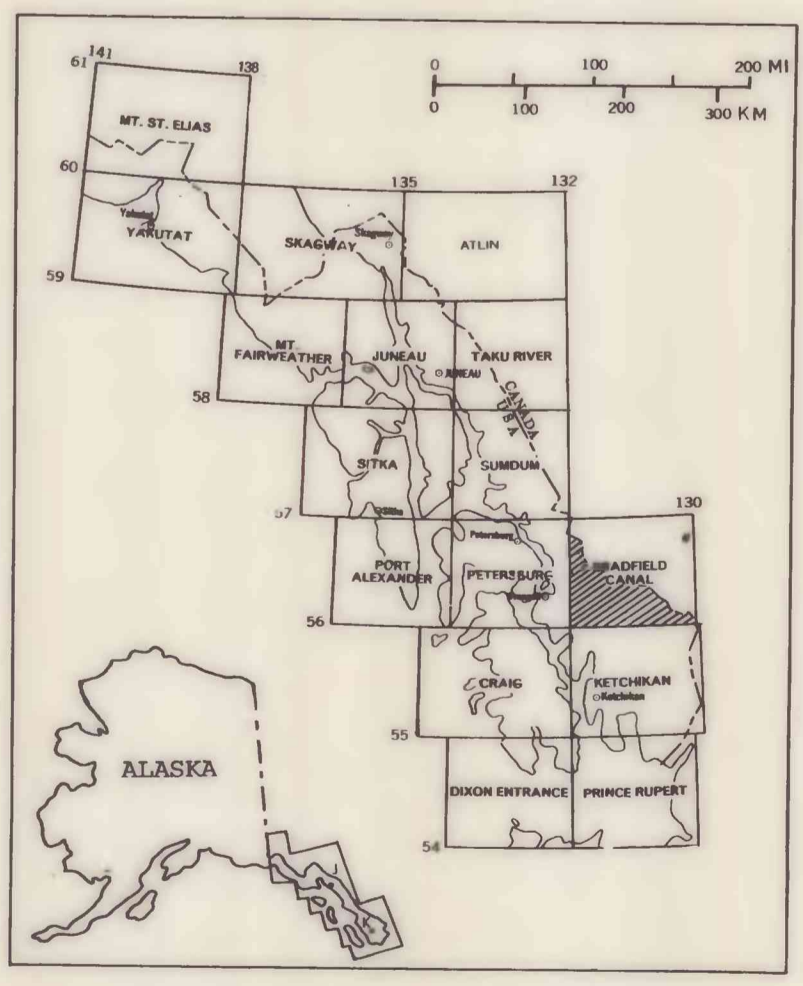
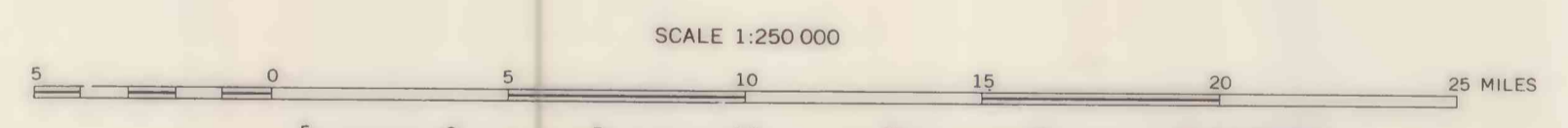
	Earth's Ultramafic	Basalt	Granodiorite	Granite	Shale	Limestone	Soil
Average <sup>1/2</sup>	2	0.5	1	2	3	-	4

<sup>1/2</sup> Note: Because the analyses on which these averages are based may not be directly compatible with the analyses used for this report, these figures serve only as a general guide.  
<sup>2/3</sup> From Sainsbury and Reed (1973)  
<sup>3/4</sup> From Levinson (1974)

ROCK SAMPLES

Geology by H. C. Berg, D. A. Brew, A. L. Clark, H. M. Condon, J. E. Decker, M. F. Diggle, G. C. Dunne, R. L. Elliott, J. D. Gallinatti, M. H. Herdrick, S. M. Kar, R. D. Koch, M. L. Miller-Hoare, R. P. Morrell, J. G. Smith, and R. A. Someville, 1968-1979.

Base from USGS 1:250,000 topo series: Bradfield Canal, 1955, ALASKA-CANADA.



- KEY TO LITHOLOGY GROUP SYMBOLS
- A - ALKALI-FELDSPAR GRANITE - Includes related dikes
  - B - BASALT and ANDESITE - Includes dikes and flows, and lamprophyre dikes
  - C - CALCISILICATE and SKARN
  - D - DIORITE and GABBRO - Includes minor metadiorite, hornblende, and ultramafic rocks
  - F - FELSITE - some quartz-porphyrific. Includes dikes, flows(?), and breccias
  - G - GRANITIC ROCKS - mainly massive and foliated quartz monzonite, granodiorite, and quartz diorite, with lesser alkali, apite, and pegmatite
  - H - HORNBLende-RICH SCHIST and GNEISS - Includes amphibolite, greenschist, and other mafic metamorphic rocks
  - M - MIGNATTITE and ORTHOGNEISS - Includes granitic gneiss (eg: granodiorite gneiss, quartz diorite gneiss, etc.)
  - S - SCHIST and GNEISS - mainly pelitic and quartzofeldspathic schist and gneiss, and lesser non-schistose metasedimentary rocks
  - V - VEINS

- Unit Descriptions
- Qu UNCONSOLIDATED DEPOSITS, UNDIVIDED (Quaternary)
  - Qtz BASALT (Quaternary and Tertiary)
  - Tgr ALKALI-FELDSPAR GRANITE WITH ASSOCIATED QUARTZ-PORPHYRITIC RHYOLITE DIKES AND FLOWS(?) (Miocene)
  - Tgb BIOTITE-PYROXENE GABBRO, LOCALLY CONTAINS HORNBLende AND/OR OLIVINE (Miocene)
  - Teg LEUCOCRATIC QUARTZ MONZONITE AND GRANODIORITE (Eocene)
  - Tegs GRANODIORITE AND QUARTZ DIORITE (Eocene)
  - Tk QUARTZ DIORITE (Eocene or Paleocene)
  - Tkg LEUCOCRATIC QUARTZ MONZONITE AND GRANODIORITE (Tertiary and/or Cretaceous)
  - Tkgd GRANODIORITE AND QUARTZ DIORITE (Tertiary and/or Cretaceous)
  - Kgs BIOTITE-HORNBLende QUARTZ DIORITE, PLAGIOCLASE-PORPHYRITIC BIOTITE GRANODIORITE/QUARTZ DIORITE, BOTH LOCALLY CONTAIN SKARN AND/OR EPIDOTE (Cretaceous)
  - Tr TEXAS CREEK GRANODIORITE (Triassic)
  - MaPmg MIGNATTITE AND ORTHOGNEISS, WITH LESSER PARANGNEISS (Mesozoic and/or Paleozoic)
  - maPpo PARANGNEISS AND ORTHOGNEISS, WITH LESSER AMPHIBOLITE AND MARBLE (Mesozoic and/or Paleozoic)
  - maPzp SCHIST AND PARANGNEISS, WITH LESSER AMPHIBOLITE AND MARBLE (Mesozoic and/or Paleozoic)
  - maPzv METASEDIMENTARY AND LESSER METAVOLCANIC ROCKS, WITH LOCAL MARBLE (Mesozoic and/or Paleozoic)

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MAPS SHOWING DISTRIBUTION AND ABUNDANCE OF TIN IN GEOCHEMICAL SAMPLES FROM THE BRADFIELd CANAL QUADRANGLE, SOUTHEASTERN ALASKA

by  
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