

Folio of the Ketchikan and Prince Rupert Quadrangles, Alaska
Koch and others -- Geochemistry -- Ni



CORRELATION OF MAP UNITS

[Geologic map generalized from Berg and others (1978)]

Qu	} QUATERNARY AND TERTIARY	In the course of U.S. Geological Survey investigations of the Ketchikan and Prince Rupert quadrangles, 2602 stream-sediment samples were collected. Samples were analyzed for up to 30 elements by a 6-step, semiquantitative emission spectroscopic method (Grimes and Marranzino, 1968) and for up to 5 elements by atomic-absorption spectrophotometry (Ward and others, 1969). This map shows sample collection sites for 2601 samples which were analyzed for nickel by the spectrographic method. Complete analytical data plus location maps (scale 1:125,000), station coordinates, and a discussion of sampling and analytical procedures for samples from sites on this map are published in two reports (Koch and Elliott, 1978b, c). These data are also available on magnetic computer tape (Koch, Van Trump, and McDana1, 1978).
QTV		
Tmp		
Tep		
TKp	} MIOCENE	} TERTIARY
TKp		
KJhp	} LOWER CRETACEOUS OR UPPER JURASSIC	} TERTIARY OR CRETACEOUS
KJhp		
Jkt Jkvs	} UPPER TRIASSIC	} JURASSIC OR TRIASSIC
Jsv		
MrPp MrPsv		
Psv	} MIDDLE AND UPPER PALEOCENE	} TRIASSIC
Psv		
Psv		
Psv		
Psv	} SILURIAN OR OLDER	} PALEOZOIC OR OLDER
Psv		

DESCRIPTION OF MAP UNITS

Qu	UNCONSOLIDATED DEPOSITS, UNDIVIDED (Quaternary)
QTV	VOLCANIC ROCKS (Quaternary and Tertiary)
Tmp	UNDIVIDED MIOCENE PLUTONIC ROCKS
Tep	UNDIVIDED EOCENE PLUTONIC ROCKS
TKp	UNDIVIDED TERTIARY OR CRETACEOUS PLUTONIC ROCKS
KJhp	GRAVINA ISLAND FORMATION AND UNNAMED CORRELATIVE ROCKS (Lower Cretaceous or Upper Jurassic)
KJhp	ULTRAMAFIC AND OTHER PLUTONIC ROCKS
KJhp	Metasedimentary rocks
KJhp	Metavolcanic rocks
Jkt	TEXAS CREEK GRANODIORITE (Jurassic or Triassic)
Jkvs	METAMORPHOSED VOLCANIC AND SEDIMENTARY ROCKS (Jurassic or Triassic)
Jsv	METAMORPHOSED SEDIMENTARY AND VOLCANIC ROCKS (Upper Triassic)
MrPp	PARAGNEISS AND AMPHIBOLITE (Mesozoic or Paleozoic)
MrPp	METAMORPHIC ROCKS, UNDIVIDED (Mesozoic or Paleozoic)
Psv	METAMORPHOSED SEDIMENTARY AND MINOR VOLCANIC ROCKS (Middle and upper Paleozoic)
Psv	FELSIC METAVOLCANIC ROCKS (Paleozoic or older)
Psv	PLUTONIC ROCKS, CHIEFLY TRONDHJEMITE (Silurian or older)
Psv	METAMORPHOSED SEDIMENTARY AND VOLCANIC ROCKS (Silurian or older)

SYMBOLS

- Contact. Approximately located; dotted where concealed
- High-angle fault. Dashed where inferred; dotted where concealed
- Thrust fault. Dashed where concealed, inferred, or assumed; Sawtooth on upper plate

Selected References

Berg, H. C., Elliott, R. L., Smith, J. G., and Koch, R. D., 1978, Geologic map of the Ketchikan and Prince Rupert quadrangles, Alaska: U.S. Geol. Survey open-file rept. 78-73A, 1 sheet, scale 1:250,000.

Grimes, D. J., and Marranzino, A. P., 1968, Direct-current arc and alternating-current spark emission spectrographic field methods for the semiquantitative analysis of geologic material: U.S. Geol. Survey Circ. 591, 6 p.

Koch, R. D., and Elliott, R. L., 1978a, Analyses of rock samples from the Ketchikan quadrangle, southeastern Alaska: U.S. Geol. Survey open-file rept. 78-156A, 163 p.

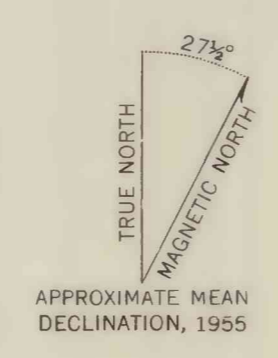
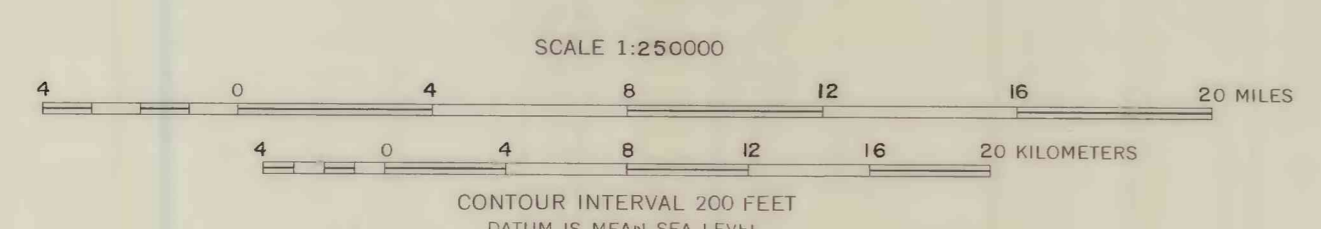
1978b, Analyses of rock and stream-sediment samples from the Prince Rupert quadrangle, southeastern Alaska: U.S. Geol. Survey open-file rept. 78-156B, 98 p.

1978c, Analyses of stream-sediment samples from the Ketchikan quadrangle, southeastern Alaska: U.S. Geol. Survey open-file rept. 78-156C, 214 p.

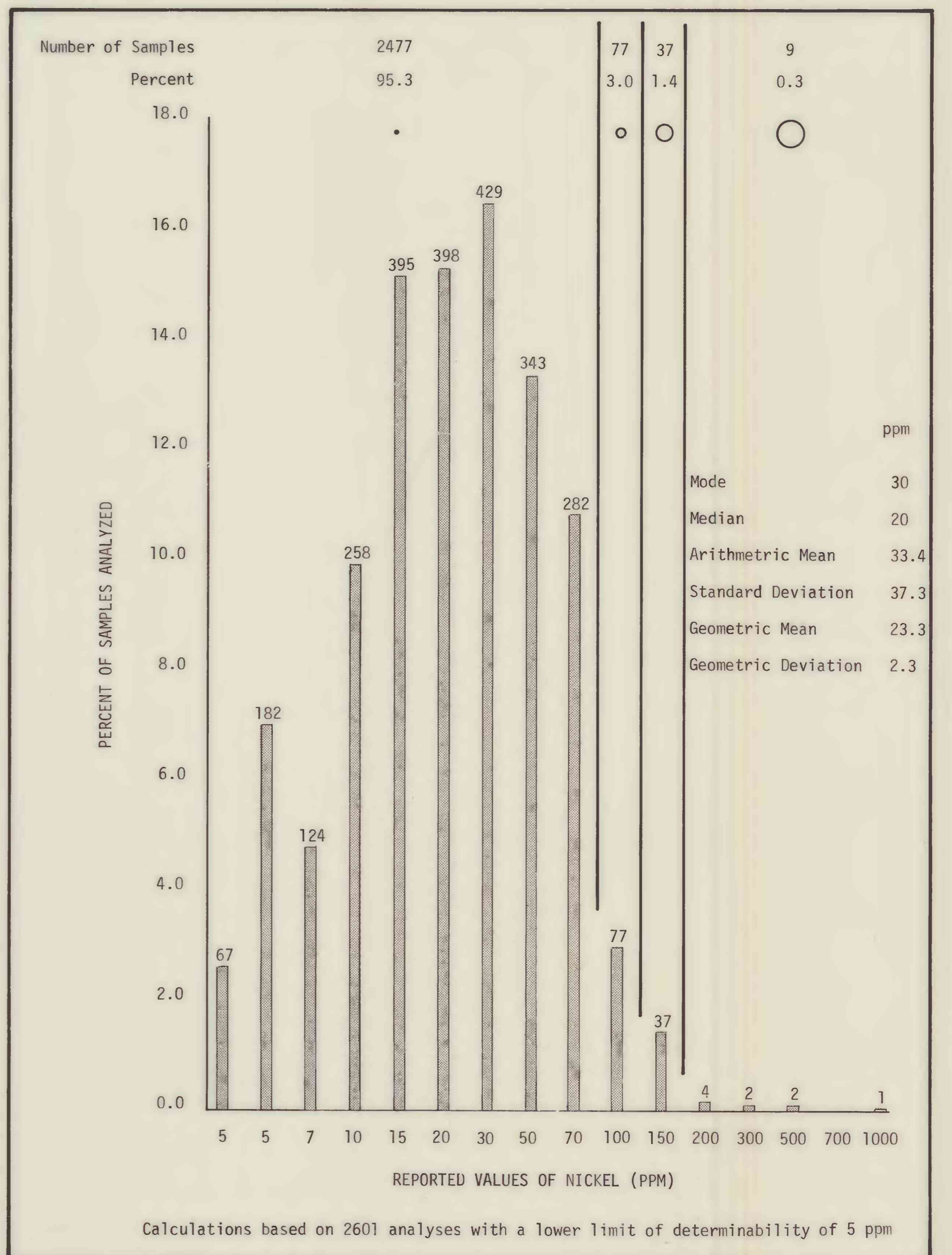
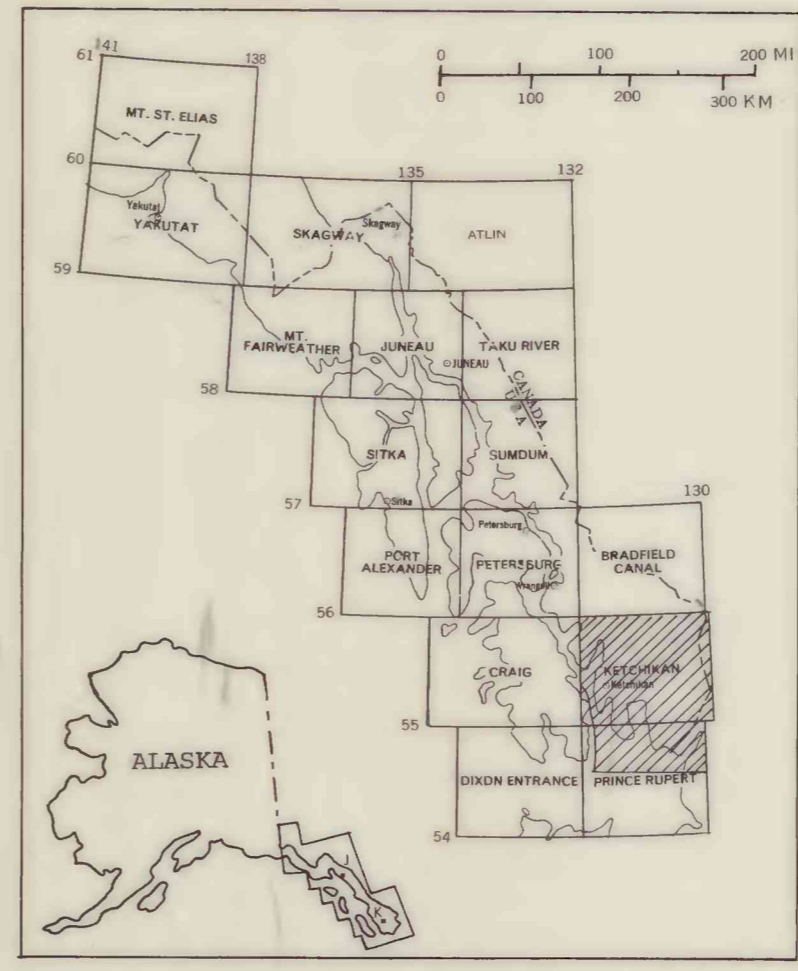
Koch, R. D., Van Trump, George, Jr., and McDana1, S. K., 1978, Magnetic tape containing analytical data for rock and stream-sediment samples from Ketchikan and Prince Rupert quadrangles, southeastern Alaska: U.S. Geol. Survey Rept., 8 p., computer tape [Available from the Natl. Tech. Inf. Service, U.S. Dept. Commerce, Springfield, VA NTIS PB-276-777].

Ward, F. N., Nakagawa, H. M., Harms, T. F., and Van Sickle, G. H., 1969, Atomic-absorption methods of analysis useful in geochemical exploration: U.S. Geol. Survey Bull. 1289, 45 p.

Base from USGS 1:250,000 topo series: KETCHIKAN, 1955; PRINCE RUPERT, 1959. ALASKA-CANADA.



Geology by H. Berg, R. Carten, J. Childs, A. Clark, W. Condon, M. Diggles, G. Dunne, R. Elliott, C. Hollaway, J. Houghton, R. Koch, R. Miller, R. Rudser, J. Smith, B. Wiggins, 1966-1977



MAP SHOWING SPECTROGRAPHICALLY DETERMINED NICKEL IN STREAM SEDIMENTS, KETCHIKAN AND PRINCE RUPERT QUADRANGLES, ALASKA

By
R.D. Koch, R.L. Elliott, and M.F. Diggles
1978

This report is preliminary and has not been edited or reviewed for conformity with Geological Survey standards and nomenclature.