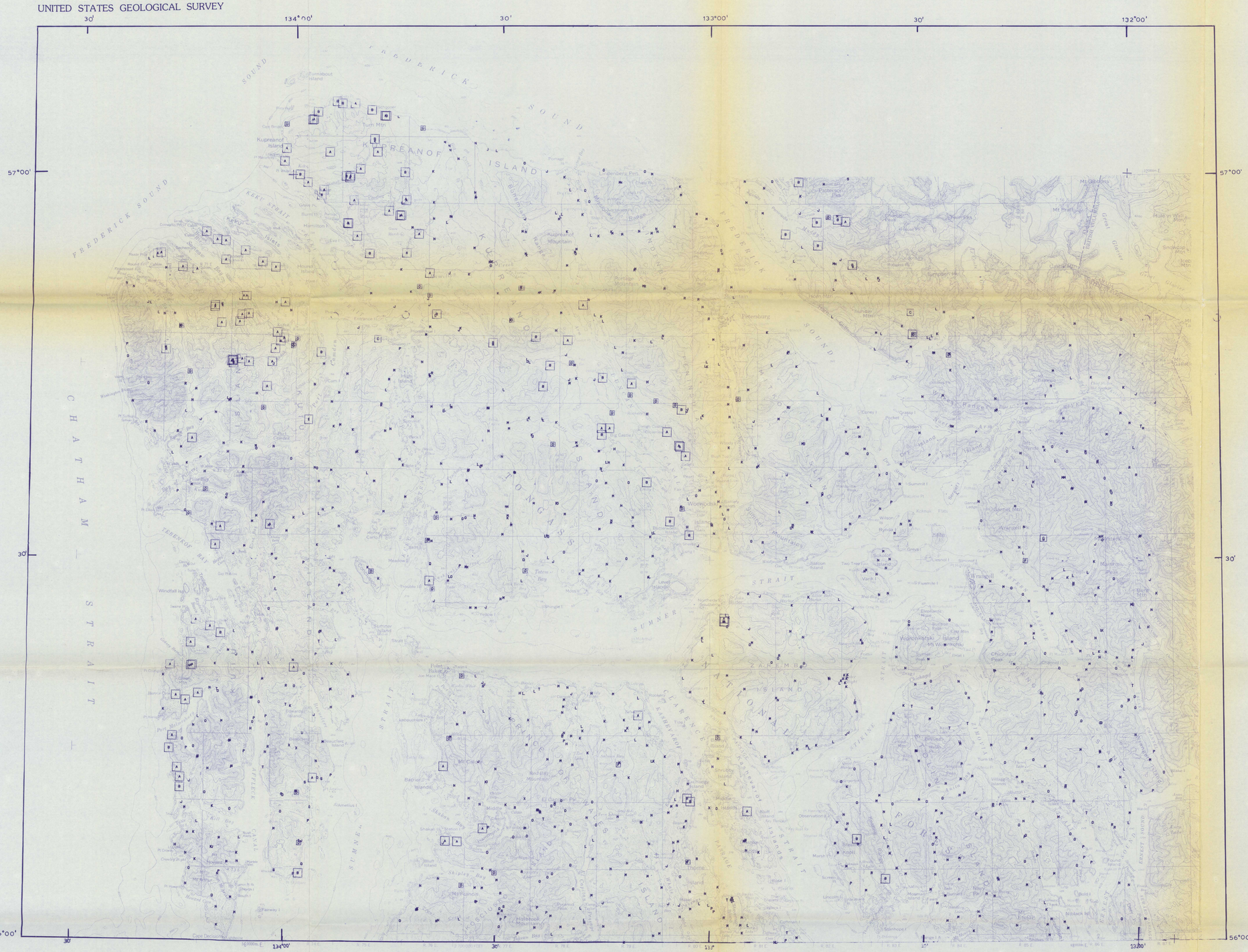
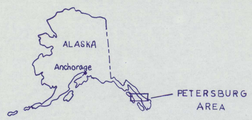
DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

OPEN-FILE REPORT
83-420-I

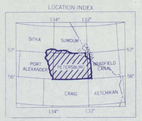


Base from U.S. Geological Survey Petersburg, 1960; Bradfield Canal, 1955; Sumdum, 1961, 1971; Port Alexander, 1951, 1977; Sitka, 1951, 1970



SCALE 1:250 000

CONTOUR INTERVAL 200 FEET IN THE UNITED STATES AND 250 FEET IN CANADA
DATUM IS MEAN SEA LEVEL



This report is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards.

EXPLANATION

SAMPLE SITES--Letters are explained on table 1.

☐ Anomalous site--sample locality at which the concentration is considered to deviate from the upper limit of normal background values, as determined by inspection of histograms, percentiles, and enrichment relative to crustal abundance.

A Concentration

NOTE

This map is one of a series of geochemical maps concerning the Petersburg area, southeast Alaska. For discussion of sample description, collection methods, media selection, sample preparation, statistical data, and analytical techniques, see Cathrall and others (1983)

REFERENCE

Cathrall, J. B., Day, G. W., Hoffman, J. D., and McDanal, S. K., 1983, A listing and statistical summary of analytical results for pebbles, stream sediments, and heavy-mineral concentrates from stream sediment, Petersburg area, southeast Alaska: U.S. Geological Survey Open-File Report 83-420-A.

Table 1.--Barium in 1430 nonmagnetic samples of heavy-mineral concentrates from stream sediments, Petersburg area, southeast Alaska.

[Concentrations in parts per million; >, greater than value shown; <, detected, but less than value shown; N, not detected at limit of detection or at value shown. Arithmetic mean, 94.4; standard deviation, 150; geometric mean, 50.3; and geometric deviation, 3, based on unqualified values within the sample population.]

Concentration	Map symbol	Frequency	Percentile
			100
>10,000	A	97	93.22
10,000	B	44	90.14
7,000	C	3	89.93
5,000	D	38	87.27
3,000	F	5	86.92
2,000	H	33	84.62
1,500	J	67	79.93
1,000	K	159	68.81
700	L	147	58.53
500	M	262	40.21
300	N	267	21.54
200	O	158	10.49
150	P	72	5.45
100	R	42	2.42
70	S	9	1.89
50	T	17	0.70
<30	U	4	.56
N30	X	6	.00

DISTRIBUTION AND ABUNDANCE OF BARIUM, DETERMINED BY SPECTROGRAPHIC ANALYSIS, IN NONMAGNETIC FRACTION OF HEAVY-MINERAL CONCENTRATES FROM STREAM SEDIMENTS, PETERSBURG AREA, SOUTHEAST ALASKA

By
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1983