STATE OF ALASKA

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF GEOLOGICAL AND GEOPHYSICAL SURVEYS

This report is preliminary and has not been edited or reviewed for conformity with Alaska Division of Geological and Geophysical Surveys standards.

July 1975

Alaska Open File Report 67

GEOCHEMICAL ANALYSIS OF ROCK AND STREAM-SEDIMENT SAMPLES, SURVEY PASS A-4, A-5, A-6, B-4, B-5, and B-6 QUADRANGLES, ALASKA

by

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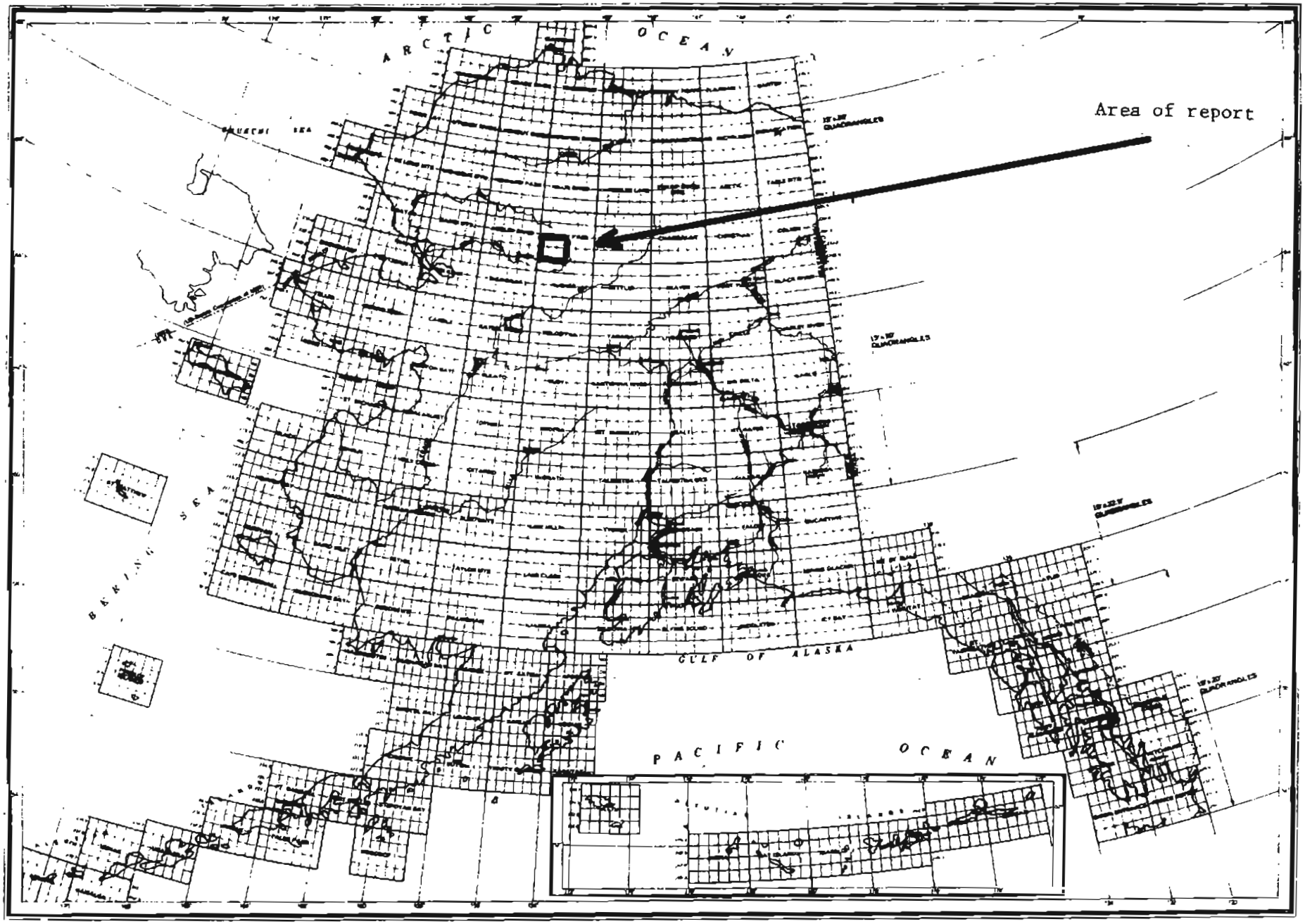
ARCTIC OCEAN
Area of report
BERING SEA
GULF OF ALASKA
PACIFIC OCEAN

Introduction

During 1971 and 1973, samples of stream sediments and rocks were collected in the Survey Pass A-4, A-5, A-6, B-4, B-5, and B-6 quadrangles, Alaska, for geochemical analysis. Samples were collected by G.L. Kline, J.T. Larson, W.S. Roberts, J.M. Zdepski, G.R. Eakins, C.E. Eritts, R.E. Garland, G.H. Pessel, and I.L. Tailleur. Atomic absorption analyses were performed in part by T.C. Trible and the U.S. Geological Survey.

Stream sediment samples were taken to include the finer fractions of sand and silt in the active parts of the streams and small tributaries. Every effort was made to take samples from areas where the results would not be obscured by the presence of large amounts of glacial derived material, which is common throughout much of the area. Organic material was excluded where possible.

Key To Data Sheets

1. The samples have been arranged into three classifications: stream sediment, rock and soil samples.

2. Semiquantitative emission spectrographic values are reported in parts per million (ppm) except values for iron (Fe), magnesium (Mg), and calcium (Ca) which are reported in percent (%). Titanium (Ti) is reported in parts per million except that values in excess of 10,000 ppm are reported in percent.

The data is reported as geometric mid-points (1.0, 0.7, 0.5, 0.3, 0.2, 0.15, 0.1, . . . etc.) of geometric intervals having limits (1.2, 0.83, 0.56, 0.38, 0.26, 0.18, 0.12, . . . etc.). For example, a reported value of 1.0 is between the limits 0.83 and 1.2.

Under the columns Atomic Absorption Spectrophotometry and

Semiquantitative Emission Spectrography, NA means not analyzed and L means not detected at the specified limit of detection.

Backgrounds and thresholds are computed using standard techniques as discussed in Lepeltier, Claude, 1969, A SIMPLIFIED TREATMENT OF GEOCHEMICAL DATA BY GRAPHICAL REPRESENTATION: Econ. Geol., v. 64, no. 5, p. 538-550

3. Abbreviations of rock types in sample vicinity, including bedrock and float:

CALC - calcareous
CASC - calc-schist
CHSC - chlorite schist
DOLO - dolomite
GNS - greenschist
GNSC - greenschist
GNST - greenstone
GR - granite
GWKE - graywacke
MARB - marble
PHYL - phyllite
QTZ - quartz
QTZT - quartzite
SCH - schist
SH - shale
VQTZ - vein quartz