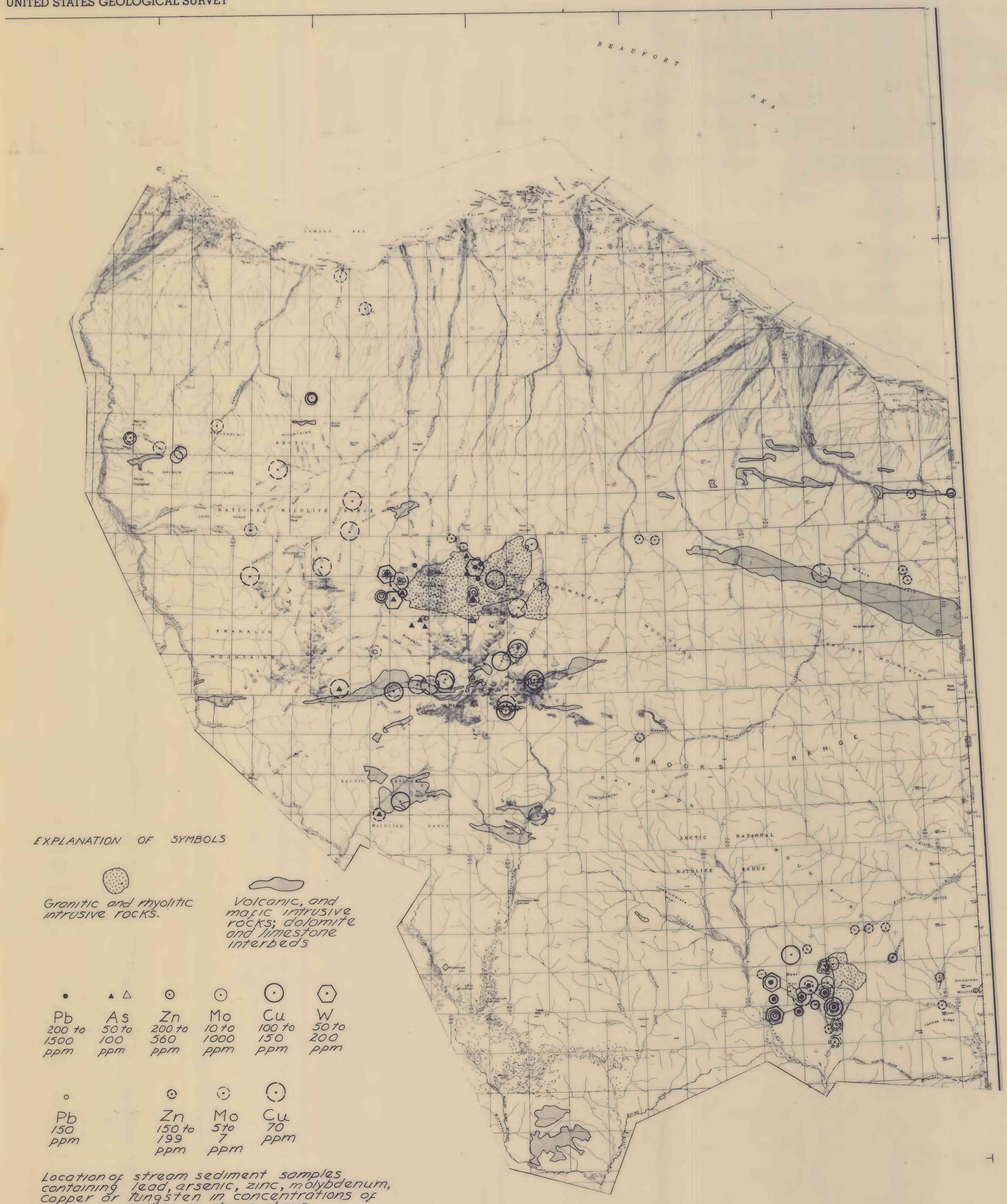
DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

OPEN FILE MAP
76-539

SHEET 3 OF 4



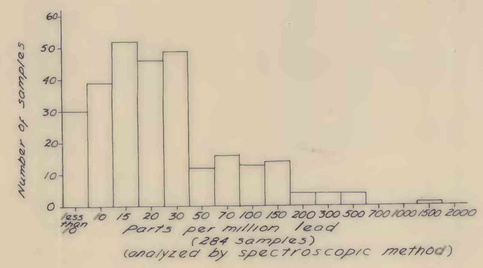
EXPLANATION OF SYMBOLS

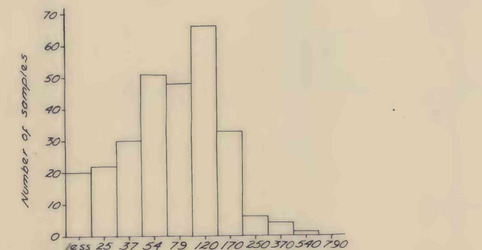
Granitic and rhyolitic intrusive rocks.

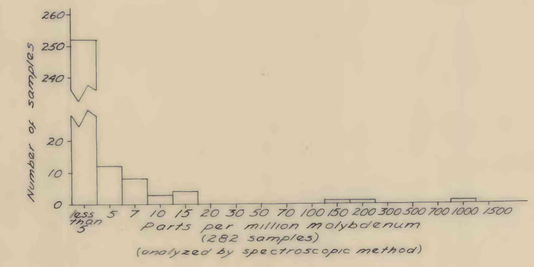
Volcanic, and mafic intrusive rocks; dolomite and limestone interbeds

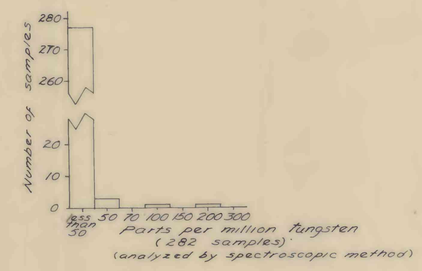
	Pb	As	Zn	Mo	Cu	W
● ▲ △ ⊙ ⊙ ⊙ ⬡	200 to 1500 ppm	50 to 100 ppm	200 to 560 ppm	10 to 1000 ppm	100 to 150 ppm	50 to 200 ppm
○ ⊙ ⊙ ⊙	150 ppm		150 to 199 ppm	5 to 7 ppm	70 ppm	

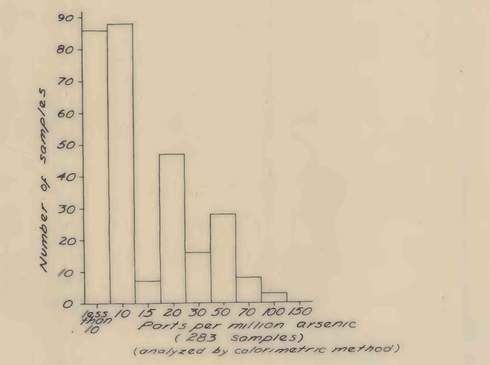
Location of stream sediment samples containing lead, arsenic, zinc, molybdenum, copper or tungsten in concentrations of parts per million as shown above. Symbols are combined concentrically where more than one element is shown for a sample. Open triangle is used for arsenic where lead is also shown for same sample.











Histograms showing distribution of lead, zinc, molybdenum, tungsten and arsenic in 284 samples of stream sediments. Concentrations determined by spectroscopic method are reported in the number series ... 10, 15, 20, 30, 50, 70, 100, 150 .... on a six-step logarithmic scale. Data for arsenic have been recast into this scale. Data for zinc have been recast into a six-step scale with class intervals whose midpoints are numbers in the series ... 25, 37, 54, 79, 120, 170, 250, 370 ....

REFERENCES

Brosgé, W.P. and Reiser, H.N., 1968, Geochemical reconnaissance maps of granitic rocks, Coleen and Table Mountain quadrangles, Alaska: U.S. Geol. Survey open-file map. Scale, 1:250,000

Brosgé, W.P., Reiser, H.N. and Estlund, M.B., 1970, Chemical analyses of stream-sediment samples from the Sadlerochit-Jago Rivers area, Mt. Michelson and Demarcation Point quadrangles, Alaska: U.S. Geol. Survey open-file report, 6p.

Sable, E.G., 1965, Geology of the Romanzof Mountains, Brooks Range, northeastern Alaska: U.S. Geol. Survey open-file report, 218p.

Base from USGS 1:250,000 Topo Series:
BARTER ISLAND, 1959; FLAXMAN ISLAND, 1955;
DEMARCATION POINT, 1955; MT MICHAELSON, 1956;
ARCTIC, 1956; TABLE MOUNTAIN, 1956; CHRISTIAN,
1956, COLEEN, 1956, ALASKA.

Scale 1:500,000
5 0 25 miles
5 0 25 kilometres

Stream sediment data compiled from Sable, 1965 (2 samples), Brosgé and Reiser, 1968 (54 samples), Brosgé, Reiser and Estlund, 1970 (144 samples), and from unpublished data for 84 samples, 1969, 1970, 1971, 1972, which were analyzed by K.J. Curry, T.R. Hassemer, J.D. Hoffman, R.T. Hopkins, Jr., H.D. King, A.L. Meier, R.L. Miller, D. Murrey, M.S. Rickard, C. Smith, C. Torn, R.B. Tripp, L.A. Vinnola

Preliminary Geologic and Mineral Resource Maps, (excluding petroleum) Arctic National Wildlife Range, Alaska

by W.P. Brosgé and H.N. Reiser, 1976

Sheet 3 - Highest concentrations of Lead, Zinc, Molybdenum, Copper, Tungsten and Arsenic in stream sediments

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