

EXPLANATION OF SYMBOLS

Granitic and rhyolitic intrusive rocks.

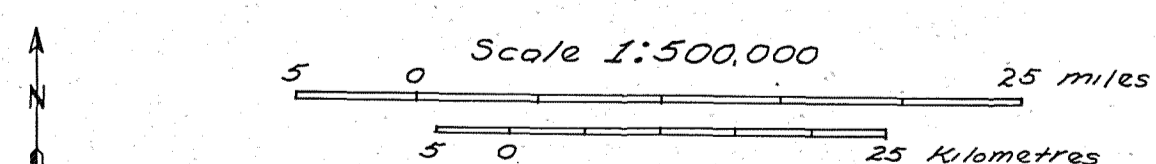
Volcanic, and mafic intrusive rocks; dolomite and limestone interbeds

●	▲	○	○	○	○
Pb	As	Zn	Mo	Cu	W
200 to	50 to	200 to	10 to	100 to	50 to
1500	100	360	1000	150	200
ppm	ppm	ppm	ppm	ppm	ppm

○	○	○	○
Pb	Zn	Mo	Cu
150	150 to	5 to	70
ppm	199	7	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.

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



Preliminary Geologic and Mineral Resource Maps,
(excluding petroleum)

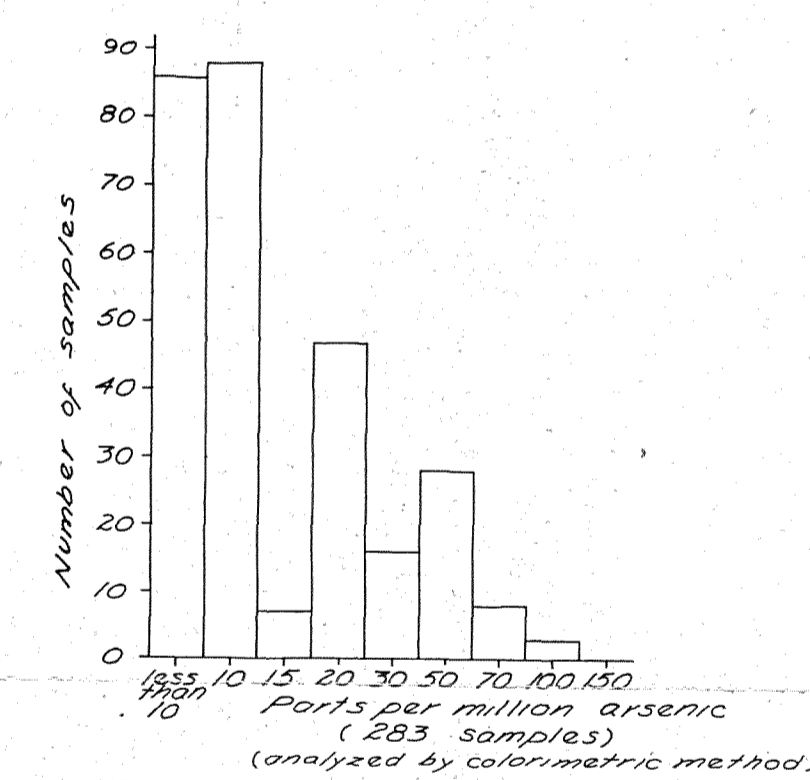
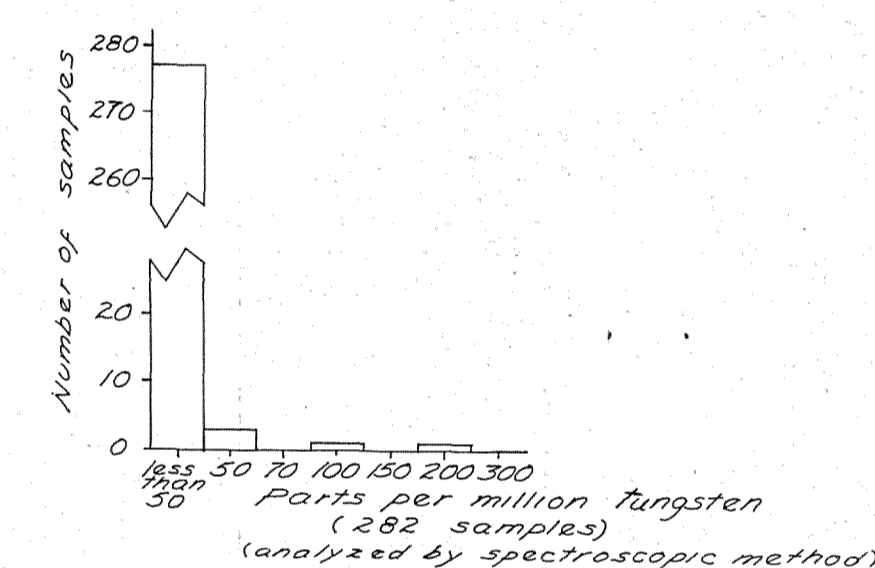
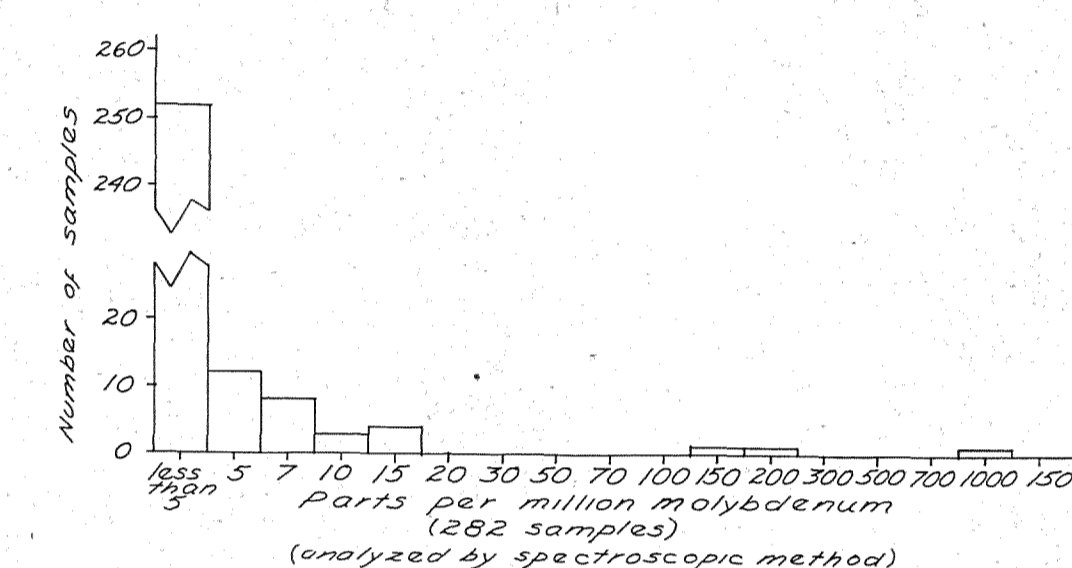
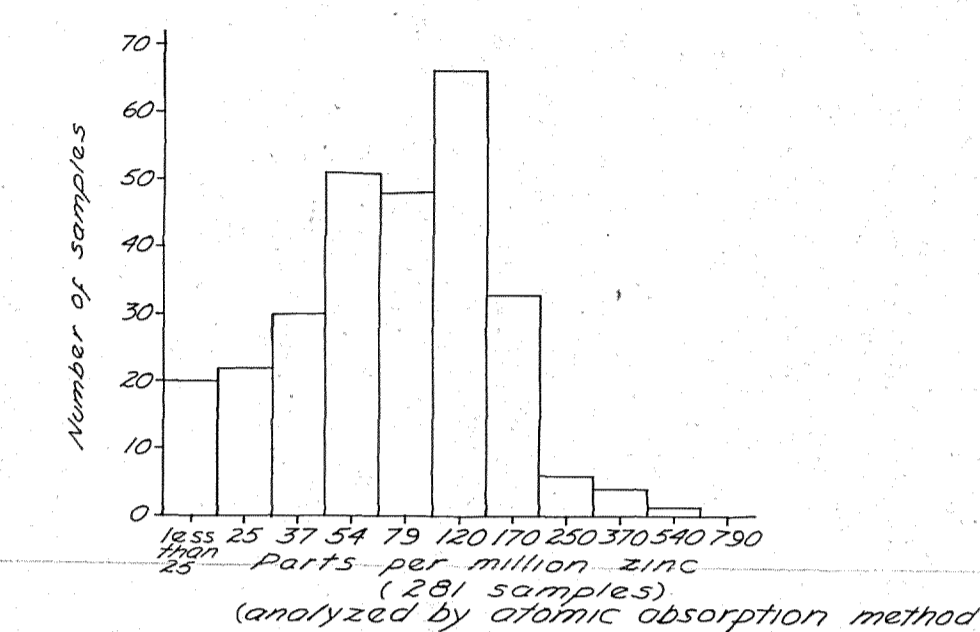
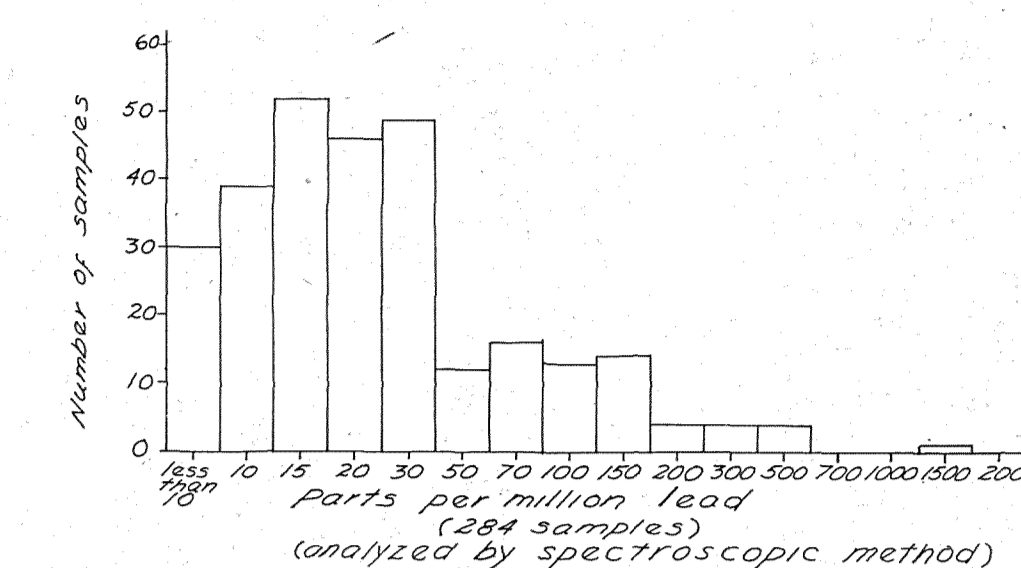
Arctic National Wildlife Range, Alaska

by W.P. Brosge' and H.N. Reiser, 1976

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

Stream sediment data compiled from
Sagle, 1965 (2 samples), Brosge' and
Reiser, 1968 (54 samples), Brosge',
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.
Hessemer, J.D. Hoffmann, R.T. Hopkins, Jr.,
H.D. King, A.L. Meier, R.L. Miller, D. Murrey,
M.S. Rickard, C. Smith, C. Tern, R.B. Tripp,
L.A. Vinicola.

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



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

Brosge', W.R. 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.

Brosge', W.R., Reiser, H.N. and Estlund, M.B., 1970, Chemical analyses of stream-sediment samples from the Sagle River-Yoga River area, Mt. Michaelson and Demarcation Point quadrangles, Alaska: U.S. Geol. Survey open-file report, 6 p.

Sagle, E.G., 1965, Geology of the Romanoff Mountains, Brooks Range, northeastern Alaska: U.S. Geol. Survey open-file report, 28 p.