

Note: This legend is common to National Geochemical Reconnaissance Map 5-1976, Open File 409; Map 6-1976, Open File 410 and Map 7-1976, Open File 411

8. Glacial, lacustrine, and fluvial gravel, sand, silt and clay

7 Plateau basalts, olivine basalts

6 Volcanic flow rocks with interbedded sedimentary rocks; 6a, conglomerate, sandstone, shale and tuff

5 CORYELL: alkalic plutonic rocks; porphyritic granite and rhyolite

JURASSIC - CRETACEOUS

4 NELSON and VALHALLA: granitic plutonic rocks

JURASSIC

3 Mafic and ultramafic intrusive rocks, pyroxinite, hornblende
serpentine

PALEOZOIC (including UPPER PROTEROZOIC and TRIASSIC)

2 Basaltic and andesitic lavas, greenstone, tuff, quartzite, limestone and argillite; 2a, quartzite, argillite, limestone, slate, schist, phyllite, sandstone and conglomerate

PROTEROZOIC (SHUSWAP TERRANE)

1 Gneiss, minor schist, limestone, marble, dolomite, slate, phyllite;
la, schist, quartzite, limestone, slate, argillite

Geological contact.....
 Fault.....
 Dyke.....
 Mineral occurrence..... Zn x

Legend modified and geology compiled for the geochemical map by T.E. Kalnins from map 48-1963, by R.B. Campbell and map 12-1964 by J.O. Wheeler

Geological cartography by the Geological Survey of Canada

Base map modified by the Geological Cartography Unit from map published at same scale by Surveys and Mapping Branch, 1965. Additional drainage obtained from Department of Lands, Forests and Water Resources, British Columbia Land Use maps, 1:250,000 scale

Mean magnetic declination 1977, 23°07.2' East decreasing 4.9' annually.
Readings vary from 22°30' in the SE corner to 23°45'
in the NW corner of the map area

Elevation in feet above mean sea-level

Geochemical Symbol and Data Presentation

The concentration of an element at a sample site is graphically represented as one of 15 symbols, if a sample was collected but there is no data available a dot is plotted. The symbols are symmetrically arranged so that they first increase in size to the eighth symbol and then increase in blackness to the fifteenth. The two small crosses at the low end of the scale are used to designate concentrations below the analytical detection limit, or, if the data group containing these concentrations is large, the logarithmic mean of the group, i.e., 1.5, 5, 10, 50, 100, etc. Five decades can be spanned and this arbitrary division has been chosen for the continuing Canada wide series of maps constituting the National Geochemical Reconnaissance.

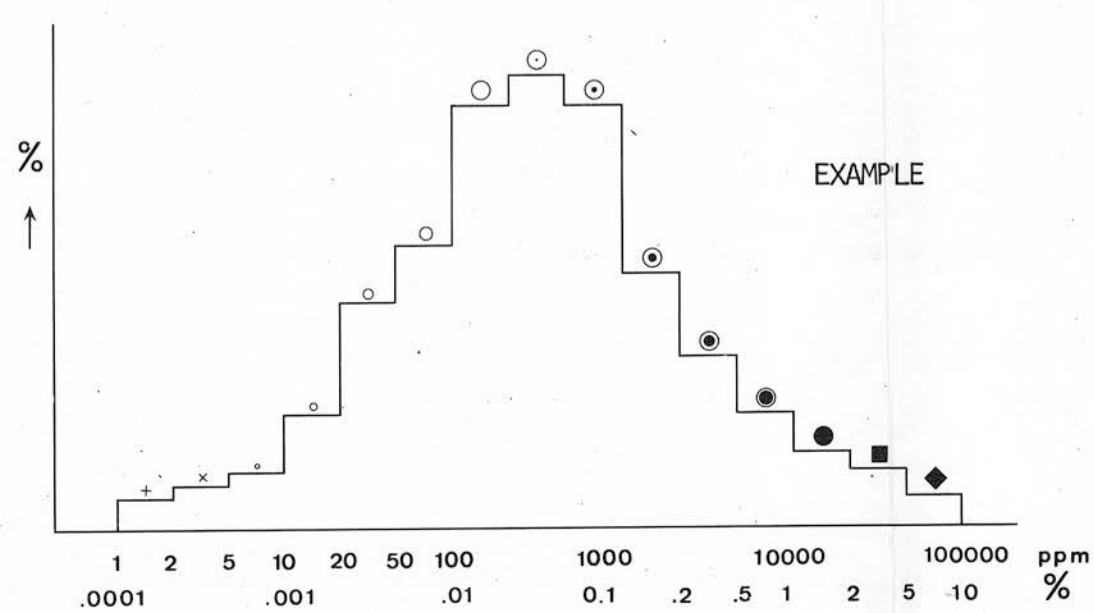
During the nationwide series of workshops, consideration of the symbols used to represent any specific element is based on the histogram and cumulative frequency plot for the total survey data from one, or more, contiguous, open file sheets covered in one field season. The eighth symbol is used for the model group as defined by the histogram, this group usually includes the median of the data as defined by the 0.5 (50%) point on the cumulative frequency plot. Some, or all, of the remaining 14 symbols are chosen so as to achieve an appropriate graphical impact. An example of all 15 symbols is given below.

The symbol maps being based on the total survey data distributions, are unaffected by the availability of ever increasing levels of knowledge in bedrock and surficial geology, and other environmental factors. Therefore, the raw data symbol maps are only intended to assist the rapid inspection of the data for gross regional features. To fully understand the meaning of the symbols and the data distributions, the symbol maps should be modified using the field and analytical data provided in the data listings and any other knowledge available. To assist in the appraisal and modification of the data in terms of the symbol map bedrock geology, a table of summary statistics and proposed threshold values for each mapped bedrock unit, or broad lithologic unit, again based on the total sample data, is presented below. The data listings, which can be used in conjunction with the sample location map and data listings to indicate above threshold samples where they occur on the map. In many instances, the table will also illustrate, more clearly than the map, the dependence of mean geochemical levels on bedrock type. It may often be also observed that whilst the total data appears to approximate a log-normal distribution the data for individual units or lithologies may not. The log-normal approximation is a useful statistical program, thresholds presented are believed to be useful in interpreting the data from a mineral exploration viewpoint. Locations of samples with concentrations in excess of the threshold for the rock unit they appear to be derived from, should be studied carefully. The above threshold concentration can be due to a wide range of geological and environmental factors, but one of these could be the presence above threshold concentrations of the element in the host rock. The mineral exploration geologist

To comprehensively study an area, all available geological, environmental and recorded data should be utilized. The data separation by bedrock type can often be improved by constructing new data subsets and deriving local threshold levels based on the most detailed and up-to-date knowledge available.

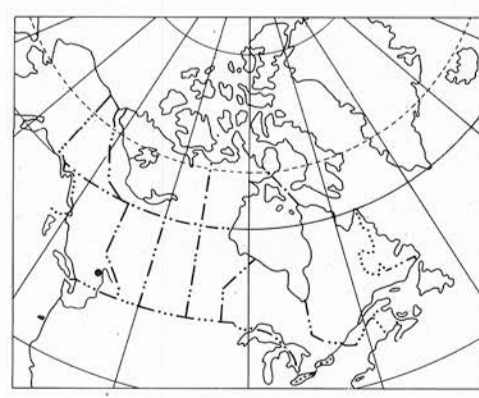
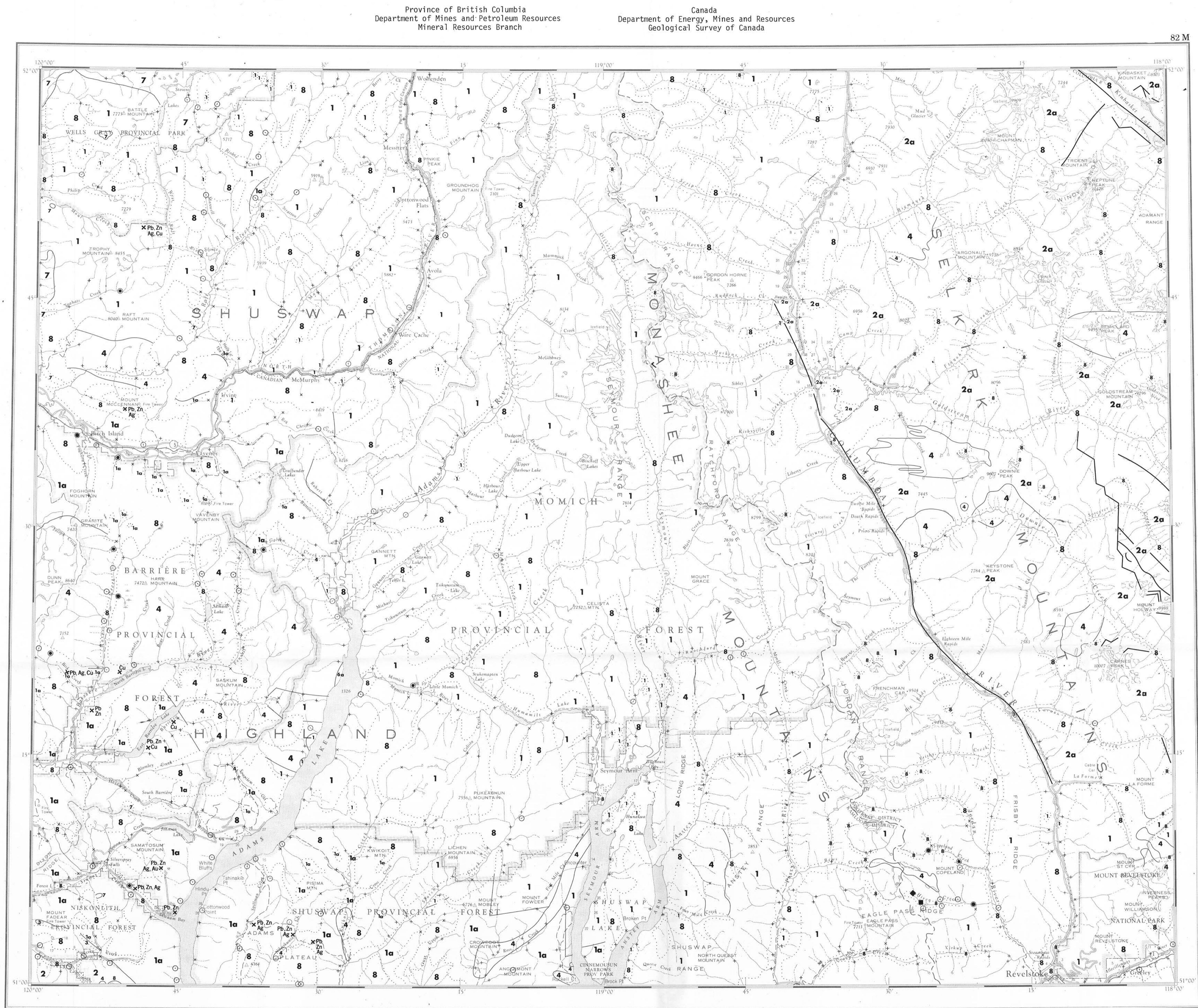
The objective of the survey is to outline broad areas of increased mineral potential worthy of further study leading to the identification of exploration targets. Individual samples with high metal contents should not be automatically regarded as finite exploration targets. It is recommended that the data levels vary across the survey area with local geology and surficial environment.

The dispersion of elements in stream sediments is controlled by both mechanical and chemical processes. An insight into the relative importance of these processes can be gained from a study of local topography, bedrock and surficial geology particularly in terms of host minerals and the chemical properties of each element. The field observations on sediment composition and sample site environment recorded in the data listings can yield information on the relative importance of clastic versus chemical dispersion.



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NATIONAL GEOCHEMICAL RECONNAISSANCE MAP 7-1976
MOLYBDENUM IN STREAM SEDIMENTS
CANADA-BRITISH COLUMBIA AGREEMENT ON A URANIUM RECONNAISSANCE PROGRAM

Scale 1:250,000

Kilometres 6 0 6 12 18 Kilometres

Miles 4 0 4 8 Miles

Universal Transverse Mercator Projection

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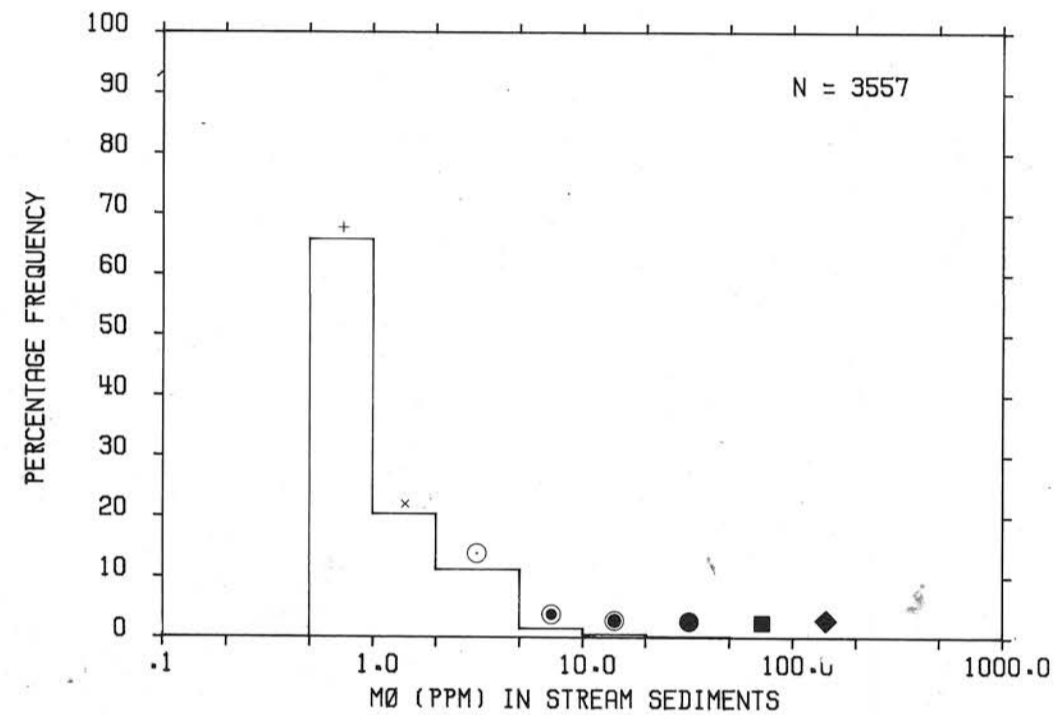
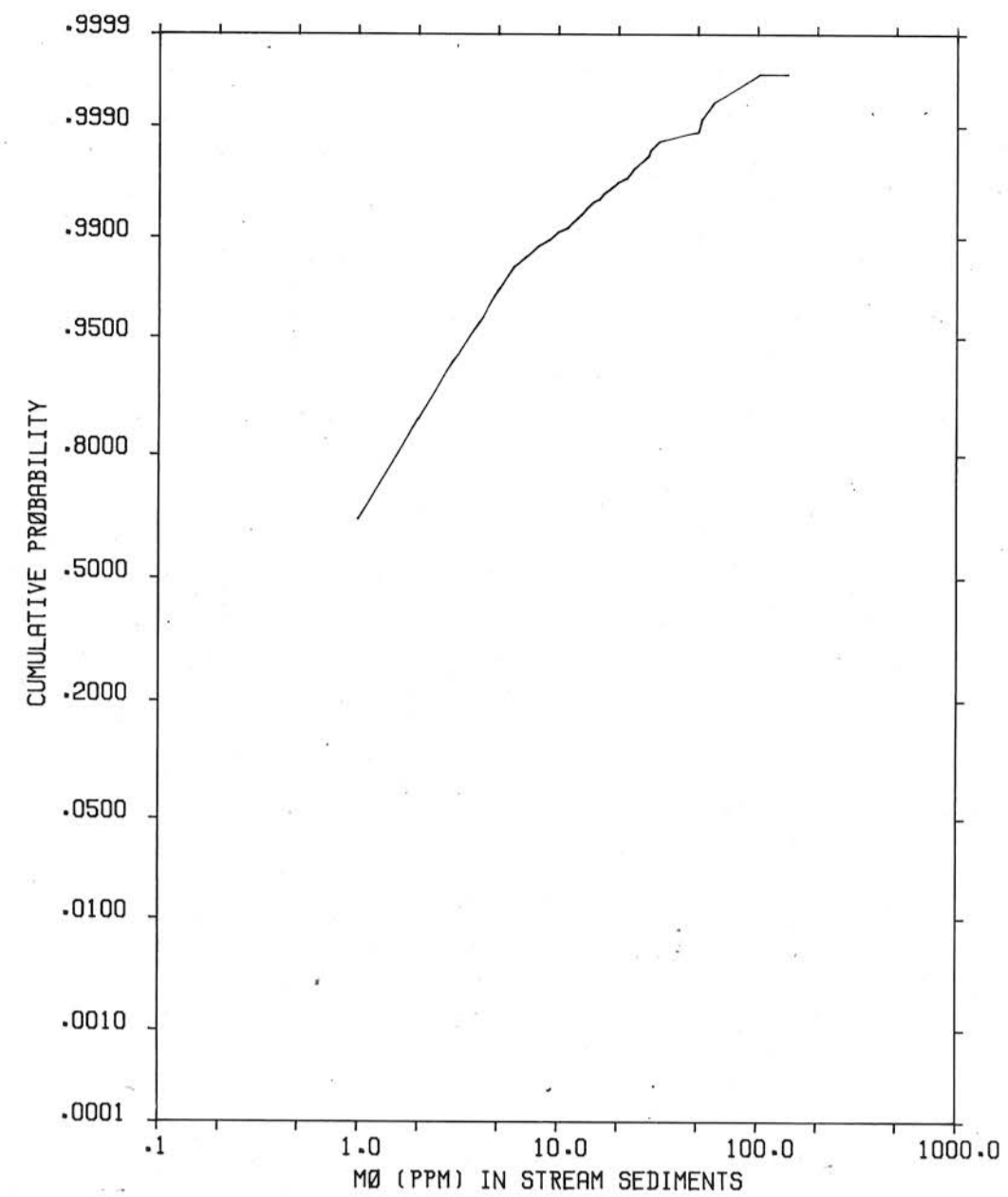
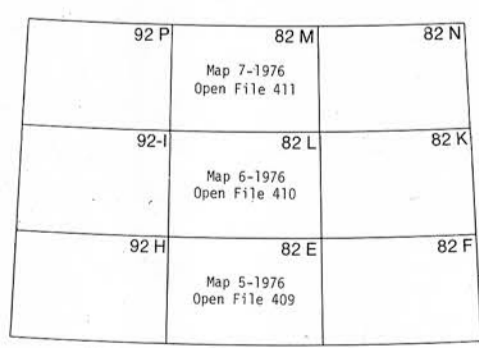


Table of Thresholds for Major Geological Units

Lithology	No. of Samples	Mean	S.D.	C.V. %	Threshold
8 TILL	405	1.6	1.3	80	5
7 OLVB	197	1.5	1.4	90	6
6a GCLB	23	0.7	1.3	55	7
6 ANDS	118	1.7	2.7	159	5
5 SYNT	146	1.6	2.2	132	5
4 GRIN	966	2.0	4.3	217	7
3 UMF	3	3.0	2.7	88	5
2a QRTZ	50	1.4	0.8	56	5
2 GRNS	321	2.3	3.6	154	5
1a SCST	241	1.8	1.2	69	5
1 GNSS	1087	1.7	4.8	274	6

Data units are ppm

NATIONAL GEOCHEMICAL RECONNAISSANCE MAP 7-1976
OPEN FILE 411

Geological Survey of Canada, Ottawa

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Contractors
Sample collection staff and vehicles supplied by Stokes
Exploration Management Co. Ltd.
Sample preparation by Golder Associates
Chemical analysis by Chemex Labs Ltd.

This map forms one of a series of 39 sheets released under Geological Survey of Canada, Open Files 409, 410, 411. The Open Files consists of data for 10 elements each for stream sediments, two elements for stream waters and sample site location. The data listing of each Open File includes pH data.

The data are also available in digital form. For further information please contact:

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NATIONAL GEOCHEMICAL RECONNAISSANCE MAP 7-1976
OPEN FILE 411
SOUTH EASTERN BRITISH COLUMBIA, 1976
MOLYBDENUM IN STREAM SEDIMENTS