

- HORNBY BAY GROUP**
- 6b** Dolomite
  - 6a** Sandstone, conglomerate
- BEAR BATHOLITH PLUTONIC ROCKS**
- 5e** Hornblende diorite and quartz diorite
  - 5d** Biotite granite
  - 5c** Biotite-hornblende quartz monzonite
  - 5b** Hornblende-biotite granodiorite
  - 5a** Hornblende monzonite, syendiorite and syenite
- FELSITIC INTRUSIVE ROCKS**
- 4d** Alkali feldspar-plagioclase-quartz megaporphyry
  - 4c** Plagioclase-hornblende porphyry
  - 4b** Plagioclase-quartz porphyry
  - 4a** Quartz-plagioclase-alkali feldspar porphyry
- SLOAN RIVER GROUP: Acid to intermediate volcanic extrusives and ignimbrites, and mixed clastic sedimentary rocks**
- 3**
- VOLCANIC AND SEDIMENTARY ROCKS: Acid to basic volcanic extrusives, acid to intermediate ignimbrites and tuffs, and mixed clastic sedimentary rocks**
- 2**
- HEPBURN BATHOLITH, BASEMENT ROCKS: Massive and gneissic granitoid rocks, amphibolite, paragneiss**
- 1**

Geological contact (defined, approximate) .....  
 Fault .....

Geology for Sheet 86K derived from Sloan River Map Area,  
 Paper 76-1A by P.F. Hoffman, I.R. Bell and R. Tirrul

Geological cartography by the Geological Survey of Canada

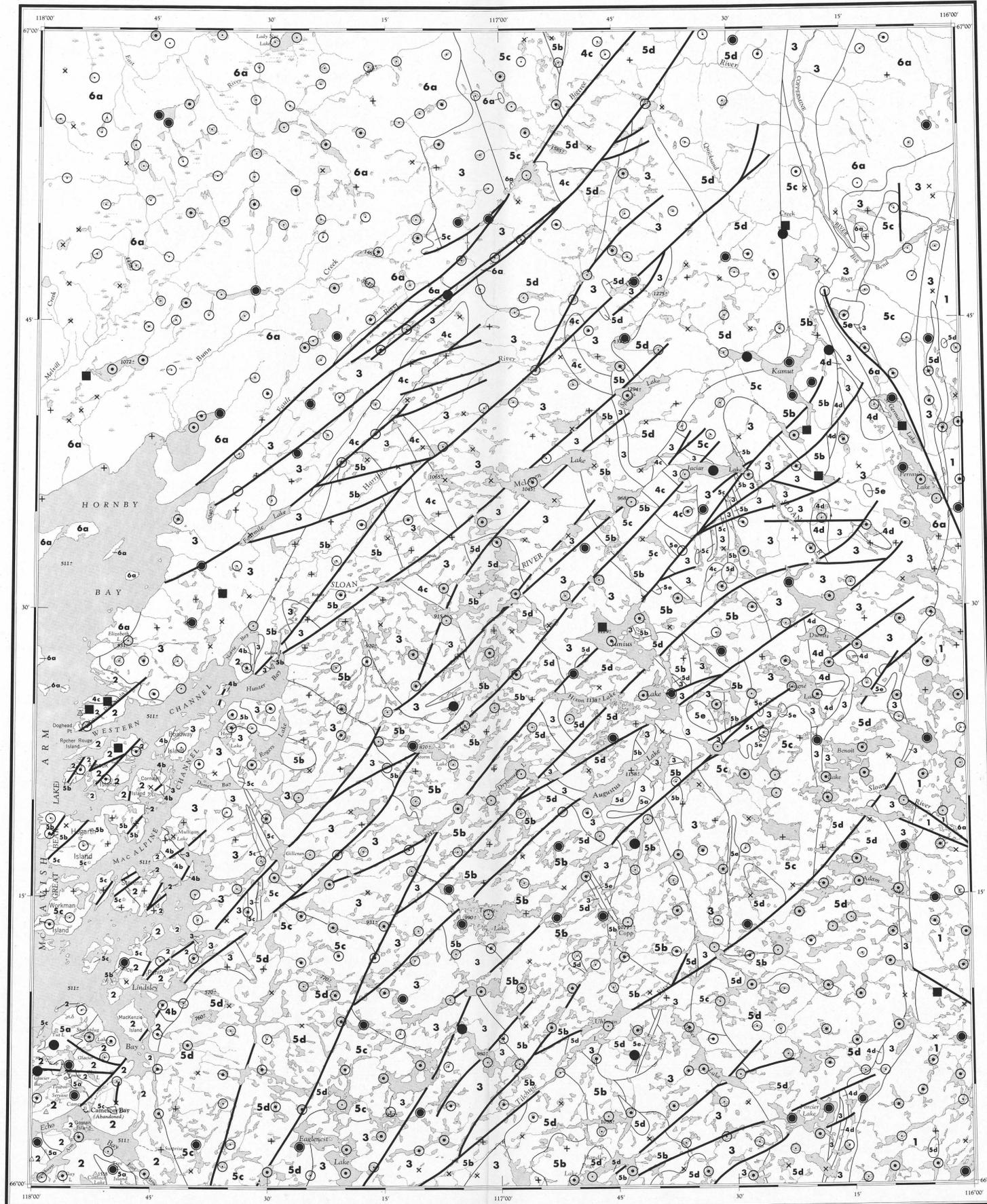
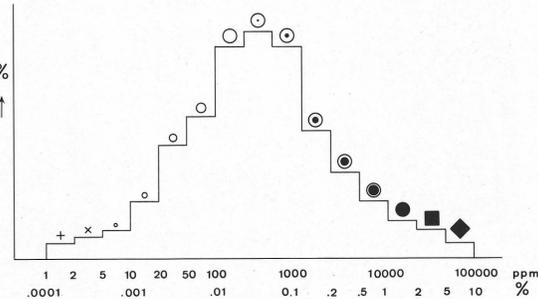
Any revisions or additional geological information known to the user would be welcomed by the Geological Survey of Canada

Geochemical Symbols and Data Presentation

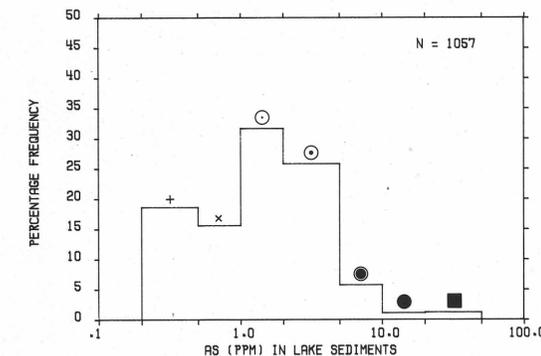
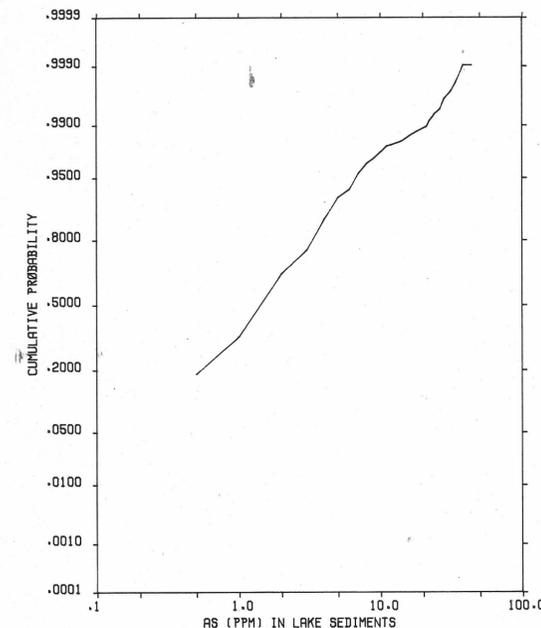
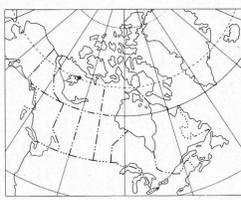
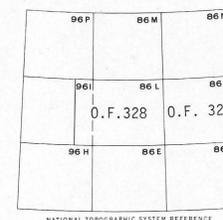
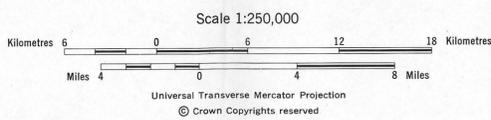
The concentration of an element at a sample site is graphically presented by using one of 15 symbols, if a sample was collected but no relevant data is available a dot is plotted. The symbols are divided into 2 groups of 7 respectively, and one additional symbol. The first 7 increase in size from a small cross to a large open circle. The eighth symbol, the additional one, consists of the large open circle with a dot at its centre. In the last 7 symbols the dot becomes progressively larger until a solid black circle is reached, a circumscribed square in solid black is used for the last symbol. Thus the overall impression is of increasing size and blackness as samples display from low to high elemental content.

The data distributions are depicted using both a cumulative probability plot and a histogram. It should be noted that if the survey covers several map sheets the distribution displays are for the total survey data, not the single sheet being studied. The data intervals used for the histogram are semi-logarithmic, e.g. 1,2,5,10,20,50,100 etc., due to the apparent log-normal characteristic of most trace element distributions. The symbols cover 5 decades, e.g. 1 ppm to 10%, using the above data intervals. As this map is part of a Canada wide series these arbitrary intervals have been chosen to preserve some long-term continuity, however, based on experience at the Geological Survey, we believe them to be an appropriate compromise.

For any particular element the eighth, central, symbol is ascribed to the histogram mode. The median of the data distribution, as defined by the 50% (0.5) point on the cumulative probability plot, usually falls within the mode interval of the histogram. The symbol (+) and (x) are respectively used to display concentrations below and at the analytical detection limit. To illustrate the use of the symbols an example is given below. If the actual data distribution does not require all 15 symbols some are selectively dropped so that maximum overall graphic impact is maintained.



ARSENIC IN LAKE SEDIMENTS  
 URANIUM RECONNAISSANCE PROGRAM  
 NATIONAL GEOCHEMICAL RECONNAISSANCE



OPEN FILE 327  
 by  
 E.H.W. Hornbrook, R.G. Garrett and J.J. Lynch

Geological Survey of Canada

Geochemistry and Federal-Provincial coordination by  
 E.H.W. Hornbrook  
 Analytical chemistry by J.J. Lynch  
 Data monitoring and compilation by R.G. Garrett and  
 N.G. Lund  
 Cartography and base compilation by Geological Carto-  
 graphy Section

Base-map assembled by the Geological Cartography Unit from  
 maps published at the same scale by the Army Survey  
 Establishment, R.C.E. in 1961

Mean magnetic declination 1976, 40°15.0' East, decreasing  
 9.6' annually. Readings vary from 39°08.4' in the SE  
 corner to 41°20.4' in the NW corner of the map area

Elevations in feet above mean sea-level

Contractors

Sample collection by Trigg, Woollett & Associates Ltd.  
 Chemical analyses by Chemex Labs. Ltd.

Chemical analyses by Chemex Labs Ltd., and Atomic Energy of  
 Canada Ltd., Commercial Products Division

This map forms one of a series of 28 sheets released  
 under Geological Survey of Canada Open File 327. The open  
 file consists of data for 12 elements, percent loss on  
 ignition and sample site location, each variable requiring  
 2 sheets for the total survey area.

The data is also available in digital form from the  
 Computer Science Centre of the Department of Energy, Mines  
 and Resources. For further information please contact:

The Director,  
 Computer Science Centre,  
 Department of Energy, Mines and Resources,  
 Ottawa, Ontario K1A 0E4.

OPEN FILE 327  
 ARSENIC  
 NATIONAL GEOCHEMICAL RECONNAISSANCE  
 NORTHWEST TERRITORIES, 1975