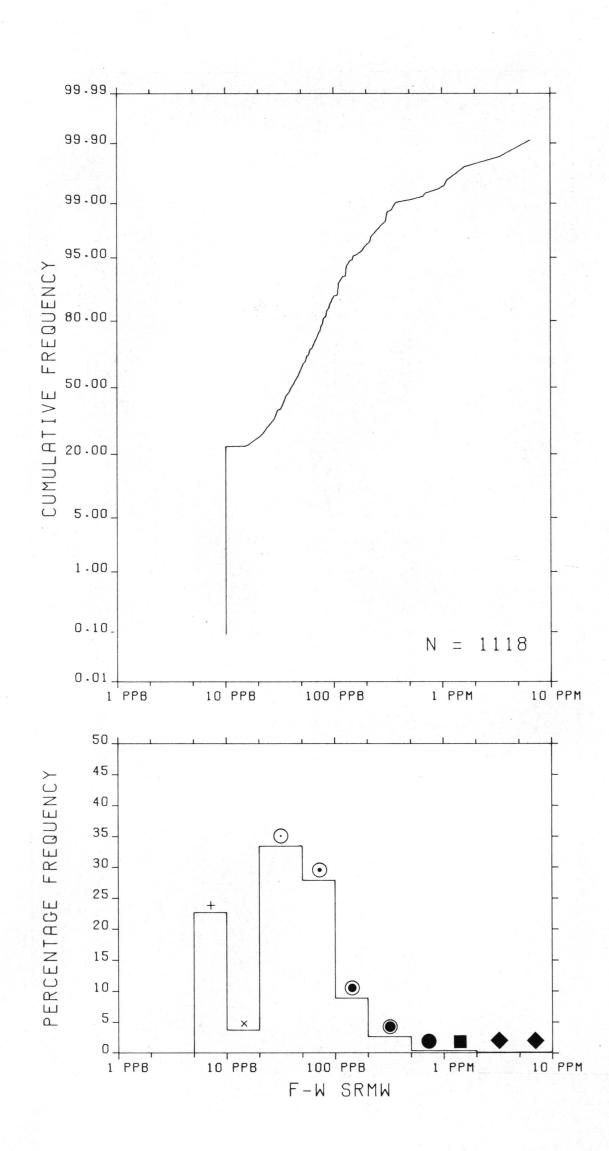
137°00'



Geochemical Symbol and Data Presentation

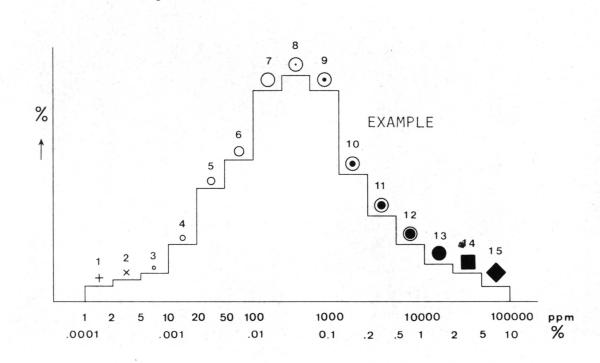
The concentration of an element at a sample site is graphically represented as one of 15 symbols. If a sample was collected but there is no data available a dot is plotted. The symbols are symmetrically arranged so that they first increase in size to the eighth symbol and then increase in blackness to the fifteenth. The two small crosses at the low end of the scale are used to respectively denote concentrations below the analytical detection limit, or, in the data group containing the detection limit. The data are grouped on a semi-logarithmic scale, i.e. 1,2,5,10,20,50,100 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.

The choice of symbols and the data groups they represent for 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 (above). 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 tha 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 fulfill the needs of a more specific and thorough interpretation, the raw symbol maps should be modified using the field and analytical data provided in the data listings and any other knowledge available.

The data listings contain notes on survey and analytical methods, raw data listing with legend and statistics for total data as well as for data grouped on the basis of rock type.

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 upto-date knowledge available."

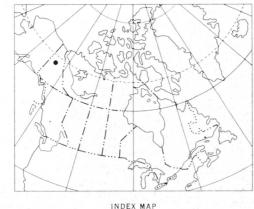


Copies of map material and listings of field observations and analytical data from which the material was prepared may be available at users expense by application to:

> K.G. Campbell Corporation 880 Wellington Street Bay No. 238 Ottawa, Ontario K1R 6K7

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

> The Director Computer Science Centre Department of Energy, Mines and Resources Ottawa, Ontario K1A OE4



138°00'

Elevations in feet above mean sea level

Mean magnetic declination 1978, 33⁰55.8' East, decreasing 2.3' annually. Readings vary from 33⁰37.2' in the SE corner to $34^{\circ}13.5$ in the NW corner of the map-area

FLUORINE in water (ppb) OPEN FILE 519 NATIONAL GEOCHEMICAL RECONNAISSANCE MAP 30-1977 URANIUM RECONNAISSANCE PROGRAM

0 _{137°00′}

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CENTRAL YUKON 1977 Scale 1:250,000 Universal Transverse Mercator Projection © Crown Copyrights reserved

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

(SECWYN+ MOUNTAINS)

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of National Defence 1954, 1955 N.G.R. 30-197 This map has been reprinted from a scanned version of the original map Reproduction par numérisation d'une carte sur papier

440000m.E.

FLUORINE in water (ppb) OPEN FILE 519 CENTRAL YUKON 1977

LEGEND

16 Unconsolidated glacial and alluvial deposits

TERTIARY

15 Quartz porphyry

CRETACEOUS

Biotite granodiorite and quartz monzonite; 14a, hornblende/biotite syenite and minor diorite; 14b, diorite and gabbro; 14c, green and maroon shale and brown siltstone; 14d, Keno Hill quartzite and minor shale and phyllite; 14e, quartzite, graphitic and chloritic slate and phyllite; minor limestone; 14f, similar to 14d but may be older.

13 | Lower Schist division: argillite, slate, phyllite and quartzite

PERMIAN Tahkandit Formation: chert, cherty limestone and limestone; 12a, undivided clastics and carbonates; 12b, Jungle Creek Formation: shale

PERMIAN AND CARBONIFEROUS

Limestone, black shale, chert and chert-pebble conglomerate; lla, dark shale, limestone, sandstone, minor conglomerate; llb, shale, slate, minor limestone and sandstone.

CARBONIFEROUS

10 | Hart River Formation: siltstone, shale and limestone.

DEVONIAN TO CARBONIFEROUS

Black shale, argillite, slate, limestone, chert, conglomerate and quartzite; 9a, Nation River Formation: chert-pebble conglomerate and

DEVONIAN

Undivided clastics; 8a, Canol Formation: black siliceous shale; 8b, Ogilvie Formation: limestone, 8c, Cranswick Formation: limestone; 8d, Michelle Formation: limestone and shale.

CAMBRIAN, ORDOVICIAN AND SILURIAN

Road River Formation: shale and limestone; 7a, unnamed carbonates, 7b, dark volcanic rocks, tuff, argillite and limestone; 7c, carbonate debris

CAMBRIAN

Unnamed clastics; 6a, unnamed carbonates and clastics; 6b, unnamed 6 carbonates and clastics.

PRECAMBRIAN AND/OR LATER

Dark green volcanic rocks, breccia, tuff and agglomerate; minor shale, chert, siltstone and limestone; 5a, dark green volcanic rocks, breccia, tuff and agglomerate; 5b, dark green andesite.

Quartzite, sandstone, quartz-pebble conglomerate, shale and slate; quartz-chlorite schist, quartz-mica schist and phyllite; minor limestone and chert; 4a, limestone.

HELIKIAN 3 Unnamed carbonates, shale and gypsum.

HADRYNIAN AND HELIKIAN

Orange-weathering dolomite, slate, minor phyllite and quartzite; 2a, pink-, orange - and grey-weathering dolomite, shale, quartzite, conglomerate and limestone; 2b, buff and orange dolomite, slate, quartzite, limestone and conglomerate; 2c, grey dolomite, shale and quartzite; 2d, dolomiteboulder conglomerate; 2e, shale, argillite, siltstone and dolomite.

HELIKIAN AND (?) APHEBIAN

Unnamed orange dolomite; la, unnamed orange and grey dolomite; lb, phyllitic argillites and quartzite; minor slate, dolomite and conglomerate.

GEOLOGICAL BOUNDARY.....

FAULT.....

The legend modified and geology derived for this geochemical map from G.S.C. map 1283A and Open File 279.

> Geological Survey of Canada Resource Geophysics and Geochemistry Division

> > CONTRACTORS

Sample collection by Semco Sample preparation by Golder Associates Uranium in sediment chemical analyses by Atomic Energy of Canada Ltd. Other sediment chemical analyses by Chemex Labs Ltd. Water chemical analysis by Bondar-Clegg & Co. Ltd.

This map forms one of a series of 42 sheets released under the Geological Survey of Canada. Open Files 518, 519, 520. The Open Files consist of maps for 11 elements, each for stream sediments, 2 elements for stream waters and sample site locations.

> FLUORINE in water (ppb) OPEN FILE 519 CENTRAL YUKON 1977