

Geochemical Symbol and Data Presentation

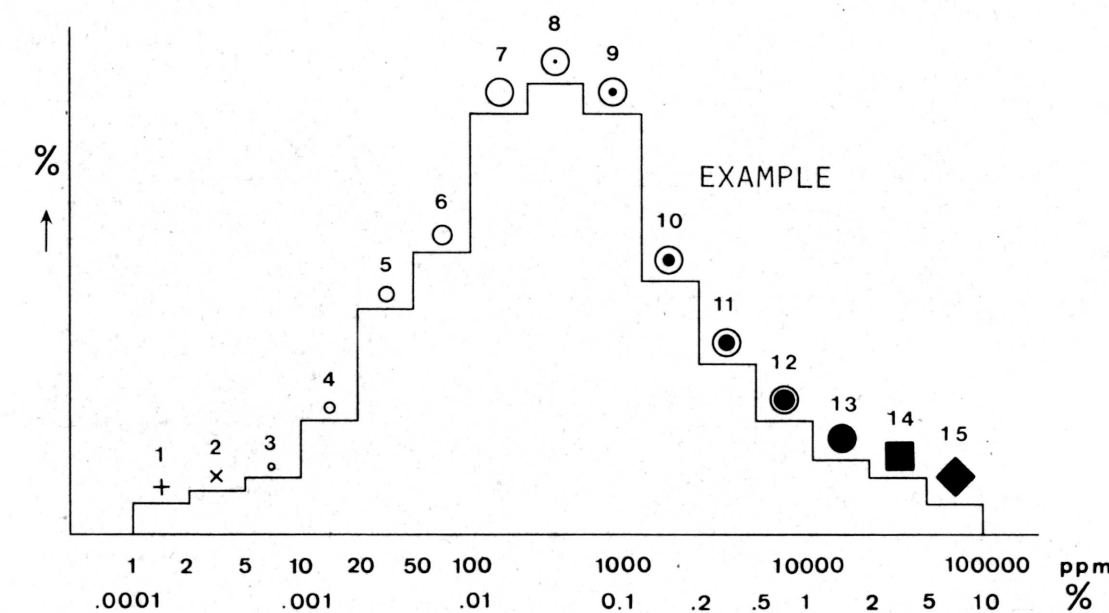
The concentration of an element at a sample site is graphically represented as one of 15 symbols. If a sample was collected but there is no data available a dot is plotted. The symbols are symmetrically arranged so that they first increase in size to the eighth symbol and then increase in blackness to 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 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 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 up-to-date knowledge available.

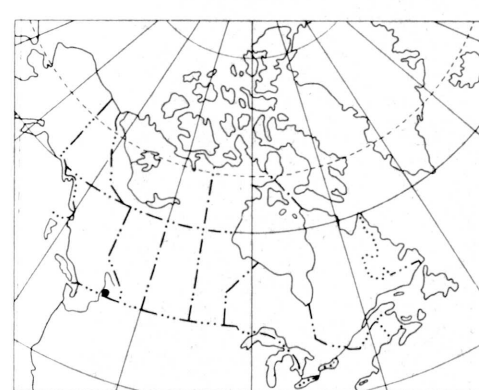


Copies of map material and listings of field observations and analytical data from which the material was prepared may be available at users expense by application to:

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 0E4

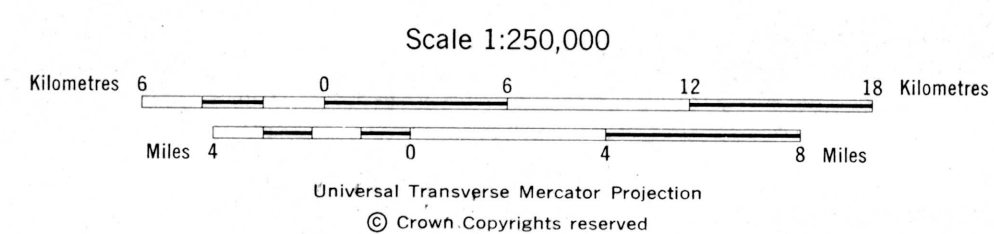


Elevations in feet above mean sea level

Mean magnetic declination 1978, 21°10.2' East, decreasing 5.1' annually. Readings vary from 20°37.2' in the SE corner to 21°44.4' in the NW corner of the map-area

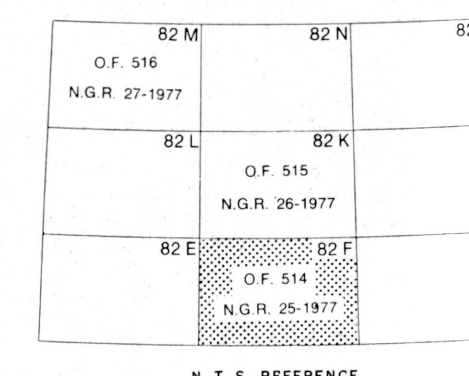
FLUORINE in water (ppb)

OPEN FILE 514
NATIONAL GEOCHEMICAL RECONNAISSANCE MAP 25-1977
URANIUM RECONNAISSANCE PROGRAM
SOUTHEASTERN BRITISH COLUMBIA 1977



Base map modified by the Geological Cartography Unit from map published at same scale by Surveys and Mapping Branch, 1973. Additional drainage obtained from Department of Lands, Forests and Water Resources, British Columbia Land Use maps, 1:125,000 scale

This map has been reprinted from a scanned version of the original map. Reproduction par numérisation d'une carte sur papier.



FLUORINE in water (ppb)
OPEN FILE 514

SOUTHEASTERN BRITISH COLUMBIA 1977

LEGEND

Note: This legend is for the National Reconnaissance Map 25-1977, Open File 514.

- CENOZOIC (TERTIARY)
 - (TILL) Unconsolidated recent sediments
 - 22 (SYNT 42)* MCGREGOR INTRUSIONS: shonkinite; SHEPPARD PLUTONIC ROCKS: leuco-granite; CORYELL PLUTONIC ROCKS: syenite, minor granite, monzonite, shonkinite, agglomerate
- MESOZOIC
 - 20 (GRNT 35) VALHALLA PLUTONIC ROCKS: granodiorite, minor pegmatite; NELSON PLUTONIC ROCKS: porphyritic granite, quartz diorite, syenite, diorite, monzonite, mylonite
 - 19 Ultrabasic rocks, serpentinite
 - 18 (ANDS 34) ROSSLAND FORMATION: andesite, latite basalt flow breccia, azuite porphyry, agglomerate tuff, minor shale
 - 17 (ARGL 33) HALL Fm: argillite, sandstone, conglomerate; SINEMURIAN BEDS: quartzite, slate, minor flows and pyroclastic rocks; YMIR GROUP: minor limestone
 - 16 (SCST 32) SLOCAN GROUP: paragneiss, mica schist
 - 15 (ANDS 32) KASLO GROUP: greenstone, metabasalt and meta-andesitic flows and tuffs
 - 14 (SLTE 32) SLOCAN GROUP: slate, argillite, quartzite, limestone, conglomerate, tuff, phyllite; YMIR GROUP: paragneiss; MILFORD GROUP: chert, greenstone
 - 13 (GNSS 30) gneiss, argillite, quartzite, greywacke conglomerate, minor flows, pyroclastic rocks and limestone
- PALEOZOIC
 - 12 (SHLE 12) EAGER FORMATION: shale, gritty limestone, argillite; CHANCELOR GROUP: shale, limestone
 - 11 (QRTZ 10) CRANBROOK FORMATION: quartzite, conglomerate, grit
 - 10 (SCST 10) schist, quartzite, phyllite, limestone-LARDEAU GROUP: paragneiss, greenstone, amphibolite, marble; MILFORD GROUP: gneiss, conglomerate, metabasalt flows; HAMILL GROUP, MOHICAN FORMATION: greenstone, amphibolite
 - 9 (SLTE 10) MOUNT ROBERTS, ACTIVE and LAIB FORMATIONS: slate, argillite, quartzite, limestone, dolomite, phyllite schist
 - 8 (LMSN 12) NELWAY, BADSHOT-MOHICAN and JUBILEE FORMATIONS: limestone, dolomite, phyllite, schist
 - 7 (QRTZ 12) HAMILL GROUP, MARSH ADAMS, MOUNT GAINER, RENO and QUARTZITE RANGE FORMATIONS: argillaceous quartzite schist, quartzite, minor limestone
- PROTEROZOIC
 - 6 (SLTE 46) THREE SISTERS FORMATION, HORSETHIEF CREEK GROUP: slate, argillite, conglomerate, quartzite, grit, sandstone, arkose, limestone; MONK FORMATION: phyllite, schist
 - 5 (ANDS 46) IRENE VOLCANIC FORMATION: greenstone, minor argillite, limestone; HORSETHIEF CREEK SERIES: andesitic volcanic rocks
 - 4 (CGLM 46) TOBY FORMATION: conglomerate, minor argillite, limestone
 - 3 (DLMT 45) MOUNT NELSON FORMATION: dolomite, argillite, shale, quartzite
 - 2 (ARGL 45) DUTCH CREEK and KITCHENER-SIYETH FORMATIONS: argillite, dolomite, quartzite
 - 1 (QRTZ 45) CRESTON and ALDRIDGE FORMATIONS: argillaceous quartzite, quartzite, argillite

* A four letter mnemonic name recorded as rock type and two digit number recorded as age as part of field observations

Geological boundary
Fault

The legend modified and geology derived for this geochemical map from G.S.C. map 1090A, 603A and 1326A, and from G.S.C. Open File 432.

Geological Survey of Canada
Resource Geophysics and Geochemistry Division
and
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Ministry of Mines and
Petroleum Resources

CONTRACTORS

Sample collection by Semco Ltd.
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 analyses by Chemex Labs Ltd.

This map forms one of a series of 26 sheets released under the Geological Survey of Canada, Open Files 514, 515. The Open Files consist of maps of 10 elements, each for stream sediments, 2 elements for stream waters and sample site location.

FLUORINE in water (ppb)

OPEN FILE 514

SOUTHEASTERN BRITISH COLUMBIA 1977