LEGEND

NOTE: This legend is common to Open-File 495, and

GROUP IDENTIFIER

- TRIASSIC-JURASSIC (Tr-J)
- EARLY PRICE BROOK (Ordovician)
- PRINCETON (Lowbanks, Early Ordovician)

GROUP IDENTIFIER

- CHERRY (Atlantic)
- MARCO (Lowbanks, Atlantic)
- NAPPAN (Lowbanks)

SUITE IDENTIFIER

- TERRACE (Lowbanks, Atlantic)

SUITE

- Bauble
- Cooglemoser
- Amherst
- Mapleton
- Pre Carboniferous (undivided parts)
- Pennsylvanian
- Plutonic, granitic parts
- Anorthosite-syenite parts

SUITE

- Sackville
- Sackville-Amherst parts
- Sackville-Mapleton parts
- Sackville-Amherst-Mapleton parts
- Pre Carboniferous (undivided parts)
- Carboniferous-parts, Sackville-Amherst parts

SUITE

- Pre Triassic (undivided parts)
- Carboniferous-parts, Sackville parts
- Carboniferous-parts, Amherst parts
- Carboniferous-parts, Mapleton parts
- Carboniferous-parts, Sackville-Amherst parts
- Triassic-parts, Sackville parts
- Triassic-parts, Sackville-Amherst parts
- Triassic-parts, Amherst parts
- Triassic-parts, Sackville-Amherst-Mapleton parts
- Triassic-parts, Mapleton parts
- Triassic-parts, Amherst-Mapleton parts

SUITE

- Pre Triassic (undivided parts)
- Pre Triassic (plutonic granitic parts)
- Pre Triassic
- Pre Triassic
- Parsboro
- Hardwood Lands
- Plutonic, granitic parts
- Anorthosite-syenite parts

Geological contact.
Fault.
Dyke.

Geology derived from the map 1216-A, Pre-Pre Cambrian at the scale of 1:250,000 by D.F. Stockmal, W.H. Poole and G.J. Sparhawk, 1973

Geological cartography by the Geological Survey of Canada

Base-map at the same scale published by the Surveys and Mapping Branch, Department of Energy, Mines and Resources, Ottawa, 1974

Mean magnetic declination 14°7, 17'E,1' east decreasing 0.0' annually. Readings vary from 13°24.0' in the S.E. corner to 20°0.0' in the N.W. corner of the map area

Elevation in feet above mean sea-level

Geochemical Symbol and Data Presentation

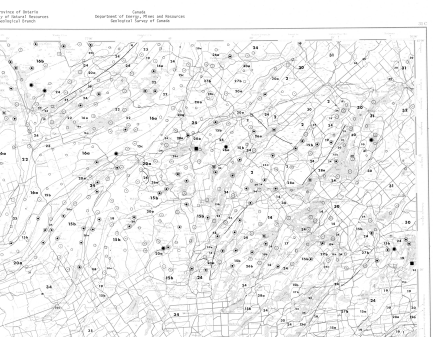
The concentration of an element at a sample site is graphically represented as one of 15 symbols, if a sample was collected but there is no data available a dot is shown. The symbols represent ranges of concentration. The ranges are based on thirds in the signed symbol and then increase in fluences to the fifteenth. The two end classes at the low end of the scale are used to respectively denote concentrations equal to the lowest detectable amount and those that are below the lowest detectable 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 convenience of the cartographer and to facilitate the reading of the map by the public.

The choice of symbols and the data groups may necessitate for any specific element, a change in the data groups to be more representative of the data. To avoid confusion from one, or more contiguous, open file sheets covered in one field season. The symbols used for the first sheet published in the series, Open File 495, which usually includes the number of the data as defined by the 0.1 100% point on the cumulative frequency plot. Some, or all, of the remaining 14 symbols are chosen to give a scheme 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 any local or regional variations in geology, or any other factors such as soil, geology, and other environmental factors. Therefore, the new data symbol maps are only intended to assist the rapid inspection of the data for gross regional features. The data, and the symbol maps, should be used with the appropriate geology and 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, the data listings include the number of samples, the mean, geometric mean and proposed threshold values for each mapped bedrock unit, or broad lithologic unit, and the number of samples and the percentage of samples above the threshold. These can be used along, or in conjunction, with the sample location map and data listings to assist in the appraisal of the significance of the data. The data listings include the mafic-ultra ultra fractions, more clearly than the map, the dependence of mean geochemical levels on bedrock type. It may often be also observed that within the data for a specific bedrock unit, the distribution of the data, as shown on the symbol map or histogram, often appears to approximate a normal distribution. The proposed threshold presented are believed to be useful in interpreting the data from a mineral exploration point of view, and are based on the distribution of the data. However, thresholds 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, and may be due to a local or regional anomalous concentrations of the element in a form of interest to the mineral exploationist.

To comprehensively study an area, all available geological, environmental and geochemical data should be used. The geochemical data can be further studied and improved by constructing new data subsets and deriving local thresholds levels based on the new data subsets, or by other statistical methods.

The data collected for the heavy mineral fraction appears below the table is an estimate of the concentration of the element in the heavy mineral fraction of the sample. It is not a "mineral assay" of the mineral fraction. The data should be of use in a comparative and identical methods of sample preparation and analysis are used the new data can be compared with the data in the table. The data should be of use in the fields where local soil variability due to both heterogeneity of the centre-size bedrock sediments and sample preparation and analytical causes.



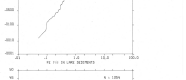


Table of Thresholds for Major Geological Units

Lithology	No. of Samples	Mean	G.S.	G.S.D.	Threshold
Lowbanks	22	1.4	1.3	1.6	10
Sackville	32	1.4	1.3	1.6	10
Amherst	19	1.4	1.3	1.6	10
Mapleton	7	1.4	1.3	1.6	10
Nappie	152	1.5	1.4	1.6	10
Hardwood Lands	9	1.5	1.4	1.6	10
Anorthosite	79	1.5	1.4	1.6	10
Bauble Cho	10	1.5	1.4	1.6	10
Cooglemoser	14	1.5	1.4	1.6	10
Triassic	107	1.5	1.4	1.6	10
Grassmarble	43	1.5	1.4	1.6	10
Parsboro	13	1.5	1.4	1.6	10
Terrace	5	1.5	1.4	1.6	10
Anorthosite	42	1.5	1.4	1.6	10
Cherry	11	1.5	1.4	1.6	10
Tatamagouche	21	1.5	1.4	1.6	10
Mapleton	92	1.5	1.4	1.6	10
Lawrence	8	1.5	1.2	3.0	6

Data units are percent Nutrability factor = 1.45

NATIONAL GEOCHEMICAL RECONNAISSANCE MAP 1-1676
NTS 31C 6-10

Resource Geophysics and Geochemistry Division

Geological Survey of Canada, Ottawa

Geochemistry and Federal-Provincial coordination by E.A.A. Hornbrook
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Contractors:
Sample preparation by Geller Associates
Chemical analyses by Chemex Labs Ltd.

This map forms copy of a series of 23 sheets released under Geological Survey of Canada, Open File 495-496.
The sheets contain of data for 13 elements each, per cent loss on ignition and sample site location.

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

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NATIONAL GEOCHEMICAL RECONNAISSANCE MAP 1-1676
NTS 31C 6-10
SASKATCHEWAN CONTOUR, 1974