LEGEND

NOTE: This legend is common to Open File 426, 436

Province of Ontario
Ministry of Natural Resources
Geological Branch

Canada
Department of Energy, Mines and Resources
Geological Survey of Canada

Geology derived from the map 1334-A, Dividing Gattinger at the scale of 1: 1,000,000. Compiled by L.L. Bear, W.R. Hastie and D.V. Geoffroy, 1974

Geological cartography by the Geological Survey of Canada

Basemap at the same scale published by the Mapping and Charting Establishment, M.C.E., 1980-82

Mean magnetic declination 30°7'/24.6.1 W and decreasing 0.1° annually; Readings vary from 29°31' in the S.E corner to 30°55.8 in the 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 14 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, then in blackness, as the concentration increases. The largest and blackest symbol crosses at the lower end of the scale are used to respectively denote concentrations below the analytical detection limit, or, in the data group containing the detection limit, concentrations which are equal to the detection limit. The 10th, 30th, 50th, 70th, 90th and 98th percentiles are plotted and this arbitrary scale has been chosen for the sake of having Canada wide series of maps constituting the National Geochemical Reconnaissance. The 10th percentile is based on the lowest 10% of the population, the 30th percentile is based on the lowest 30% of the population and cumulative frequency plot for the total survey data from one, or more contiguous, open file sheets covered in one field season. The 50th percentile is the median value and the 70th, 90th and 98th percentiles are usually included in the median of the data as defined by the E.J.[ED] point on the cumulative frequency plot. Some, or all, of the remaining 14 symbols are chosen to represent the data values which are greater than the 98th percentile, as described below.

The symbol codes, being based on the total survey data distribution, are subjected to the availability of ever increasing levels of knowledge in bedrock and surficial geology, and to improvements in analytical techniques, they are consequently not 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 data must be considered in conjunction with the regional geology, the sample site descriptions and any other knowledge available. In addition to the graphical modification of the data in terms of the symbol map bedrock geology, a table of summary statistics is presented for each lithology. The lithological classification of the bedrock geology, again based on the total survey data, is presented below the histogram. This table can be used always, or in conjunction, with the sample location map and data listings. Although the histograms are presented in terms of the log of the element concentration, the ranks will also illustrate, 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 single lithology, the histogram will approximate to a log-normal distribution, or if multiple units appears to approximate a normal distribution. The proposed thresholds presented are believed to be useful in interpreting the data from a mineral exploration point of view, but should be considered in conjunction with the table. 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 the following comments are only intended to assist the interpretation of elements in a form of interest to the mineral exploration[ist].

The data listings are presented in a form which includes environmental and recorded data should be attributed. The data separation by bedrock type can often be misleading where the sample site is in an area where glacial transported levels based on the most detailed and up-to-date knowledge available.

The term reliability factor and value that appears below the table is an estimate of the analytical reproducibility of the data. Values of 2.0 or less indicate that the effects upon sampling[ist] can be considered to be a MAJOR cause that in any case is reexamined and identical methods of sample preparation and analysis are used the new data. Values of 2.01 to 3.0 indicate that sampling[ist] and analytical variability are a major factor taken into account variability due to some heterogeneity of the content-size bottom sediments and sample preparation and analytical causes.

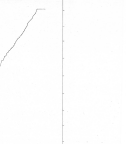

Table of Thresholds for Major Geological Units

Lithology	No. of Samples	Mean	S.D.	C.V.C.	Threshold
Limestone	12	6.8	9.6	140	40
Sandstone	12	13.5	13.3	101	50
Dolomite	12	10.5	10.3	101	50
Shale	12	10.5	10.3	101	50
Marble	203	6.6	11.7	180	40
Metasedimentaries	12	13.5	13.3	101	50
Amphibolite	15	10.5	10.3	111	40
Migmatite	3	30.5	33.6	120	60
Granodiorite	12	10.5	10.3	101	50
Granite	12	10.5	10.3	101	50
Granodiorite	67	16.6	17.5	106	65
Granite	3	30.5	33.6	120	60
Intrusive	5	11.2	11.1	99	50
Amphibolite	43	7.2	9.4	129	40
Migmatite	12	13.5	13.3	101	50
Paragneiss	15	6.6	11.0	168	40
Migmatite	90	11.0	11.9	106	60
Unknown	5	7.5	6.2	84	40

Data units are ppm

Reliability Factor = 2.07

NATIONAL GEOCHEMICAL RECONNAISSANCE MAP 2-1976
Open File 426

Resource Geophysics and Geochemistry Division

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Sample preparation by Bondar Associates
Chemical analyses by Chemex Labs Ltd.

This map forms one of a series of 73 sheets released under Geological Survey of Canada, Open Files 426-436. The open files consist of data for 73 elements each, per cent fine sn-portion 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 2-1976
OPEN FILE 426
SOUTHAMPTON ISLANDS, NWT
(CAN)

NATIONAL GEOCHEMICAL RECONNAISSANCE MAP 2-1976
1:250,000 OR 1:500,000 SERIES

CANADA-ONTARIO SUBSIDIARY AGREEMENT ON MINERAL EXPLORATION AND DEVELOPMENT

Scale 1:250,000

Kilometres 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100

Miles 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100

Universal Transverse Mercator Projection
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