LEGEND

NOTE: This legend is common to Open File 425, 426.

Geology derived from the map 1316-A, Rivière Gatineau at the scale of 1:1 000 000, Geological Survey of Canada, 1969.

Geological cartography by the Geological Survey of Canada

Base-map at the same scale published by the Mapping and Charting Establishment, M.D.S., 1958-61

Mean magnetic declination 1977, 11°41.0' west decreasing 3.0' annually. One degree square = 69 miles (111 km) One degree is EQUALLY the slope 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 a series of standard symbols selected from those in the table available a dot to 11 plotted. The lowest symbol (1) contains the lowest 10 percentile of the data, and so to the eighth symbol and then increase in blackness to the fifteenth. The two highest symbols (15 and 16) are used to show concentrations greater than the concentrations taken by statistical detection limits, etc. In the data group limiting the two highest limits. The data are grouped on a semi-logarithmic scale, 1 or 1,2,5,10,20,50,100 etc. The symbol used for each element is shown on the appropriate element map sheet. Viewing Canada wide series of maps constitutes the National Geochemical Reconnaissance.

The choice of symbols and the data groups they represent for any specific element is based on a histogram and probability plot constructed from the 1 to 16 symbol field-one, or three-component cases file (mode) assembly or user field census. The eighth symbol is used for the modal group as defined by the histogram, this group generally includes the median value for the data set. The shape of the histogram/probability 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.

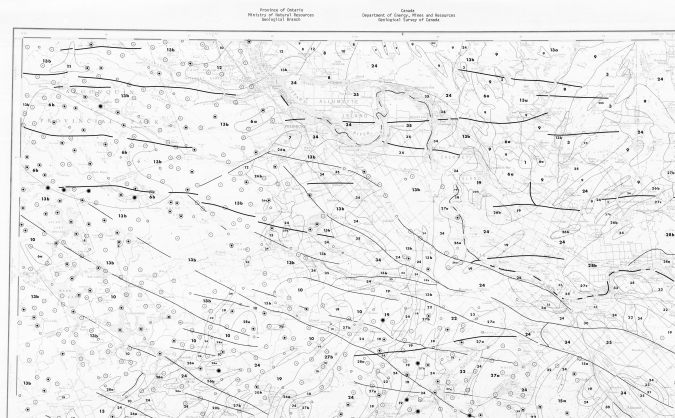
The symbol sizes, being based on the total survey data distributions, are unaffected by the availability of ever increasing levels of knowledge in bedrock and surficial geology, geochemistry and mineralization. The symbol sizes, therefore, are well retained to permit the rapid recognition of the data for gross regional features. To fulfill the needs of a more specific and thorough interpretation, the raw symbol data may be used in conjunction with the sample location map and data listings. This map and any other presenting available to assist in the appraisal and validation of the data in terms of the symbol map bedrock geology, a table of summary statistics and percentile values is given for each element mapped, and a cumulative frequency curve based on the total survey data, is presented below the histogram. This table can be used alone, or in conjunction, with the sample location map and data listings. Where the symbol map shows anomalous concentrations of an element, as indicated by the table with these statistics, more closely than the map, the dependence of exact geochemical levels on bedrock type. It may often be also observed that within the data for individual rock-formations, anomalous concentrations of one or more elements and or lithologies with respects to approximately a normal distribution. The proposed thresholds presented are believed to be useful in interpreting the data from a mineral exploration standpoint. Where the distribution approximates to the log-normal, threshold for each 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. They may reflect primary or secondary dispersion patterns, concentrations of the element in a form of interest to the mineral exploration&research.

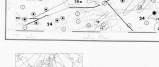
The data is available for use in various geological, environmental and recorded data should be utilized. The data are available geological, environmental and geochemical research and development and during final threshold levels based on the small statistical sub-populations and anomalous values.

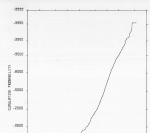
The term reliability factor and value that appears below the table is an estimate of the accuracy of the analytical method used. The reliability factor is expressed as a ± with takes account of it can be stated that there is a 68 chance that the sample will be reanalysed and identical methods of sample preparation and analysis are used the new value will fall within the range of the original value ± the reliability factor. This factor takes into account variability due to both heterogeneity of the centre-fine bottom sediments and sample preparation and analytical causes.

Province of Ontario
Ministry of Natural Resources
Geological Branch

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







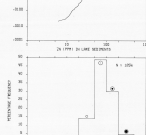


Table of Thresholds for Major Geological Units

Lithology	No. of Samples	Mean	S.D.	C.V.%	Threshold
Limestone	13	62.0	30.7	50	200
Sandstone	27	43.0	47.2	72	200
Greywacke	7	59.0	17.0	29	200
Slate	7	134.0	57.7	42	250
Marble	20	38.5	55.6	61	250
Metasedimentite	5	80.0	50.0	62	250
Andesite	19	113.0	57.0	50	250
Rhyolite	3	68.0	47.9	193	200
Basalt	10	68.0	47.9	193	200
Granite	107	19.5	14.9	76	200
Granodiorite	41	19.4	11.6	60	200
Diorite	6	78.0	61.6	79	200
Syenite	41	19.4	11.6	60	200
Gabbro	12	68.0	47.9	193	200
Gneiss	307	46.0	34.1	49	235
Paragneiss	61	46.0	34.1	49	235
Migmatite	6	69.0	64.1	93	200
Unknown	0	71.0	45.9	67	200

Data units are ppm

Reliability Factor = 1.44

NATIONAL GEOCHEMICAL RECONNAISSANCE MAP 2-1191

Resource Geophysics and Geochemistry Division

Geological Survey of Canada, Ottawa

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Chemical analyses by Chemex Labs. Ltd.

This map forms one of a series of 25 sheets released under Geological Survey of Canada, Open Files 425,426.
The full set of maps may be purchased as a single set, per cent lists on ingotites and samples after fourteen.

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

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