

LEGEND

QUATERNARY OR TERTIARY

16 Basalt and basalt breccia (Qtvb)

TERTIARY

15 Sandstone, conglomerate and shale (Tscg); 15a, Buff weathering white rhyolite (Tqfp)

CRETACEOUS

14 Quartz-feldspar porphyry dykes (KTqfp); 14a, biotite quartz monzonite (Kqpm); 14b, porphyritic biotite quartz monzonite (Kpqm)

TRIASSIC AND JURASSIC

13 Dark grey buff weathering bioclastic limestone (utsc); 13a, dark green volcaniclastic sandstone (utjv)

CARBONIFEROUS

12 Thin-bedded interlaminated buff to yellowish siltstone and brown argillite (Cs1); 12b, thin-bedded chert and cherty tuff (Mt); 12c, green and maroon tuff and volcanic breccia (Mv); 12c, rusty, black, white and orange weathering lapilli and sand sized tuff, volcanic breccia and flow rocks (Mva); 12d, equigranular syenite and trachyte (My)

CARBONIFEROUS AND PERMIAN

11 Amphibolite, greenstone and altered basalt (CPav); 11a, dunite, peridotite and pyroxenite (CPub); 11b, serpentinite (CPas); 11c, gaseous-red and apple-green chert and cherty tuff (CPat); 11d, recrystallized crinoidal limestone (Pc)

DEVONIAN AND MISSISSIPPIAN

10 Chert granule grit and chert pebble conglomerate (uDMcg); 10a, black siliceous slate with interbedded chert granule grit and greywacke (uDMs)

DEVONIAN (UPPER)

9 Basalt, basaltic tuff and breccia; calcareous calcarinite (Dvc); 9a, fetid crinoidal limestone with minor interbedded slate (Dc)

SILURIAN AND LOWER DEVONIAN

8 Dolomite, sandy dolomite and dolomitic sandstone (SDdq); 8a, dolomitized lamnated mudstone to sucrose dolomite and dolomitized calcarenite (SDd); 8b, coarsely sucrose dolomite and sandy dolomite (SDd1); 8c, crinoidal limestone and dolomite (SDc); 8d, calcareous siltstone and calcareous orthoquartzite (SDsq)

SILURIAN

7 Dolomitic siltstone and silty dolomite (Ss); 7a, lapilli tuff and volcanic breccia with interbedded bioclastic dolomite (Sv); 7b, algal laminate and sparry dolomite, orthoquartzite and sandy dolomite (Sdq); 7c, medium-grained mature orthoquartzite (Sq); 7d, laminated to sucrose dolomite (Sd); 7e, thinly laminated white and green hornfels (Sshf)

ORDOVICIAN, SILURIAN AND DEVONIAN

6 Dark grey to black "sooty" limey or dolomitic graphitic siltstone and fine grained impure quartzite with interbedded graphitic silty shale (OSDqc)

ORDOVICIAN AND SILURIAN

5 Black, locally calcareous fissile graphitic slate; includes thin sills or flows of dark green basalt (OSS1); 5a, quartz biotite and quartz chlorite schist and chlorite amphibolite (OSS1v); 5b, black graphitic siliceous and pyritic slate (OSS1n); 5c, black calcareous graphitic "sooty" slate and silty slate (OSS1c)

CAMBRIAN AND ORDOVICIAN

4 Grey chlorite muscovite quartz phyllite containing lenses of green-stone (uCOsv); 4a, grey chlorite muscovite quartz phyllite and slaty phyllite (uCOs); 4b, calcareous shale and silty limestone (uCOc); 4c, ankeritic shale, slate and phyllitic slate (uCO2); 4d, olive green tuff and tuffaceous slate (EOv); 4e, massive dark green and maroon amygdaloidal basalt (EOvb); 4f, massive saussuritized dark green diabase or diorite sills (Eb); 4g, medium to dark grey calcareous shale, siltstone and argillaceous limestone (EOsd1)

LOWER CAMBRIAN

3 Coarsely crystalline dolomite (1cd); 3a, grey calcareous argillite, limestone and calcareous siltstone; locally includes biotite schist and quartz tremolite diopside skarn (1cc); 3b, grey limestone and argillaceous limestone (1cc1); 3c, marble, recrystallized lime mud and biocalcareous limestone (1cc2)

PROTEROZOIC AND LOWER CAMBRIAN

2 Muscovite biotite granodiorite gneiss (Pns); 2a, muscovite biotite granodiorite gneiss and augen gneiss (Ejn); 2b, injection migmatite consisting of muscovite biotite gneiss, augen gneiss and schist with sills and plugs of biotite granite, biotite quartz monzonite, aplite and pegmatite (Bn+); 2c, silty slate and shaly quartzite (P16qs); 2d, muscovite biotite schist, garnet mica quartz schist and micaceous quartzite with minor amphibolite (P16fs); 2e, silty slate with some interbedded greywacke (P16sg); 2f, banded hornfels (P16hf)

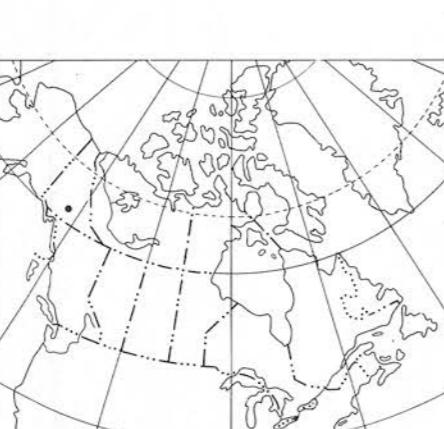
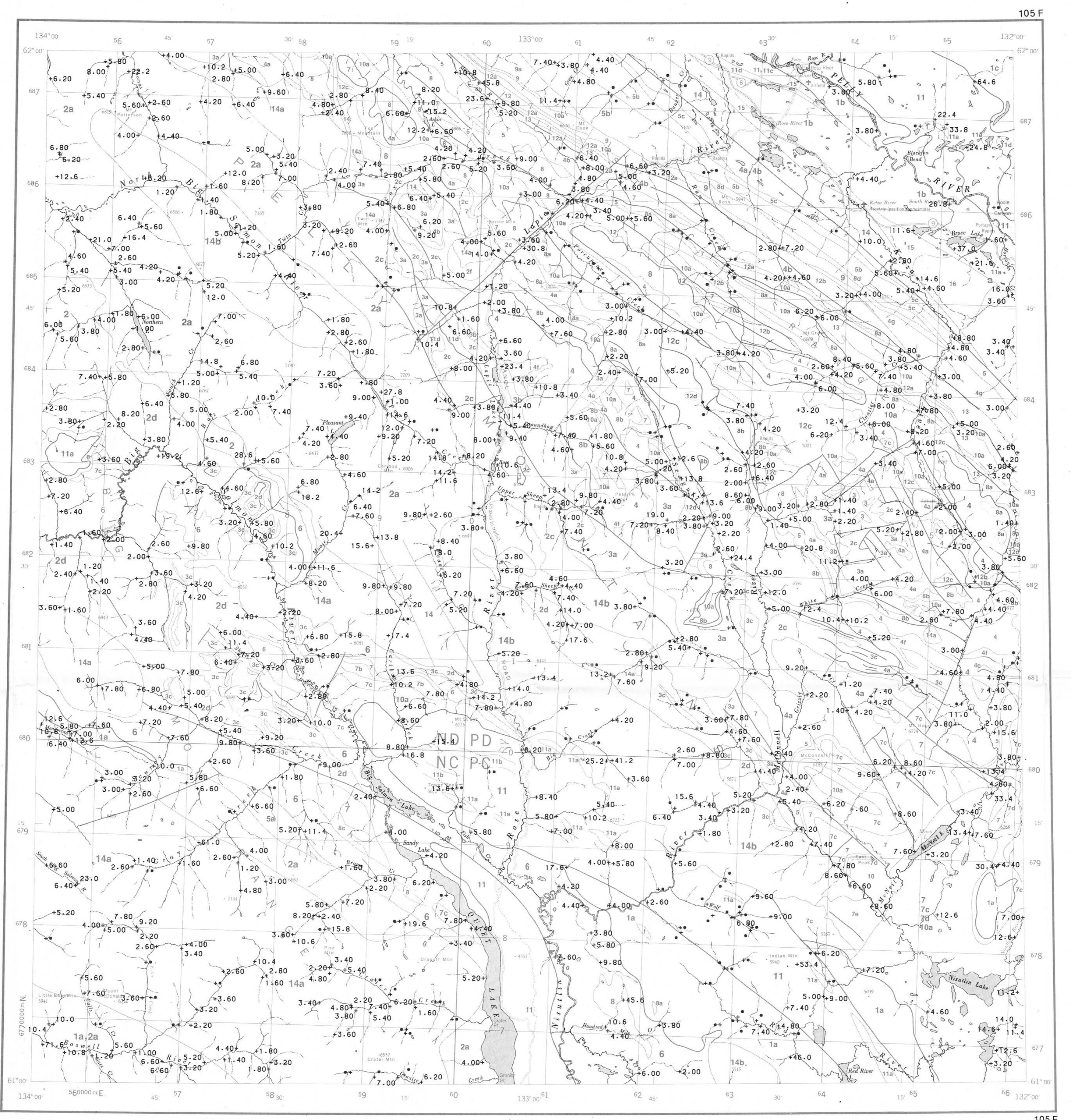
AGE UNKNOWN (KLONDIKE SCHIST)

1 Light grey weathering marble (Mc); 1a, muscovite quartz blastomylonite, muscovite quartz schist and muscovite quartzite (PPk1); 1b, black siliceous phyllite and amphibole chlorite phyllite (PPk2), 1c, Klondike schist undivided (Ppk)

Geological boundary.....

Fault.....

No analytical result.....



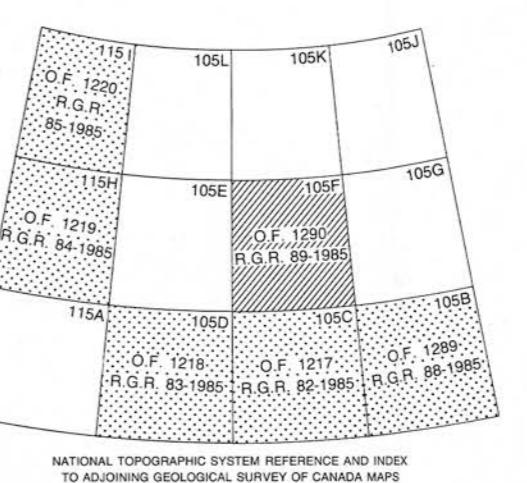
Elevation in feet above mean sea level

Mean magnetic declination 1986, 30°23' East, decreasing 15.6' annually. Readings vary from 29°50'E in the SW corner to 30°57'E in the NE corner of the map area

LOSS ON IGNITION (%)  
GSC OPEN FILE 1290  
REGIONAL GEOCHEMICAL RECONNAISSANCE MAP 89-1985  
URANIUM RECONNAISSANCE PROGRAM  
AND  
CANADA-YUKON ECONOMIC DEVELOPMENT AGREEMENT  
STREAM SEDIMENT AND WATER GEOCHEMICAL SURVEY  
SOUTHERN YUKON TERRITORY 1978/1985

Scale 1:250 000  
Kilometres 5 0 5 10 15 20 Kilometres  
Universal Transverse Mercator Projection  
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Base map at the same scale published by the Mapping and Charting Establishment, Department of National Defence, 1977



This legend was modified and the geology derived for this geochemical map from Geological Survey of Canada, Open File 486 and Map 7-1960

Geological Survey of Canada  
Resource Geophysics and Geochemistry Division

CONTRACTORS

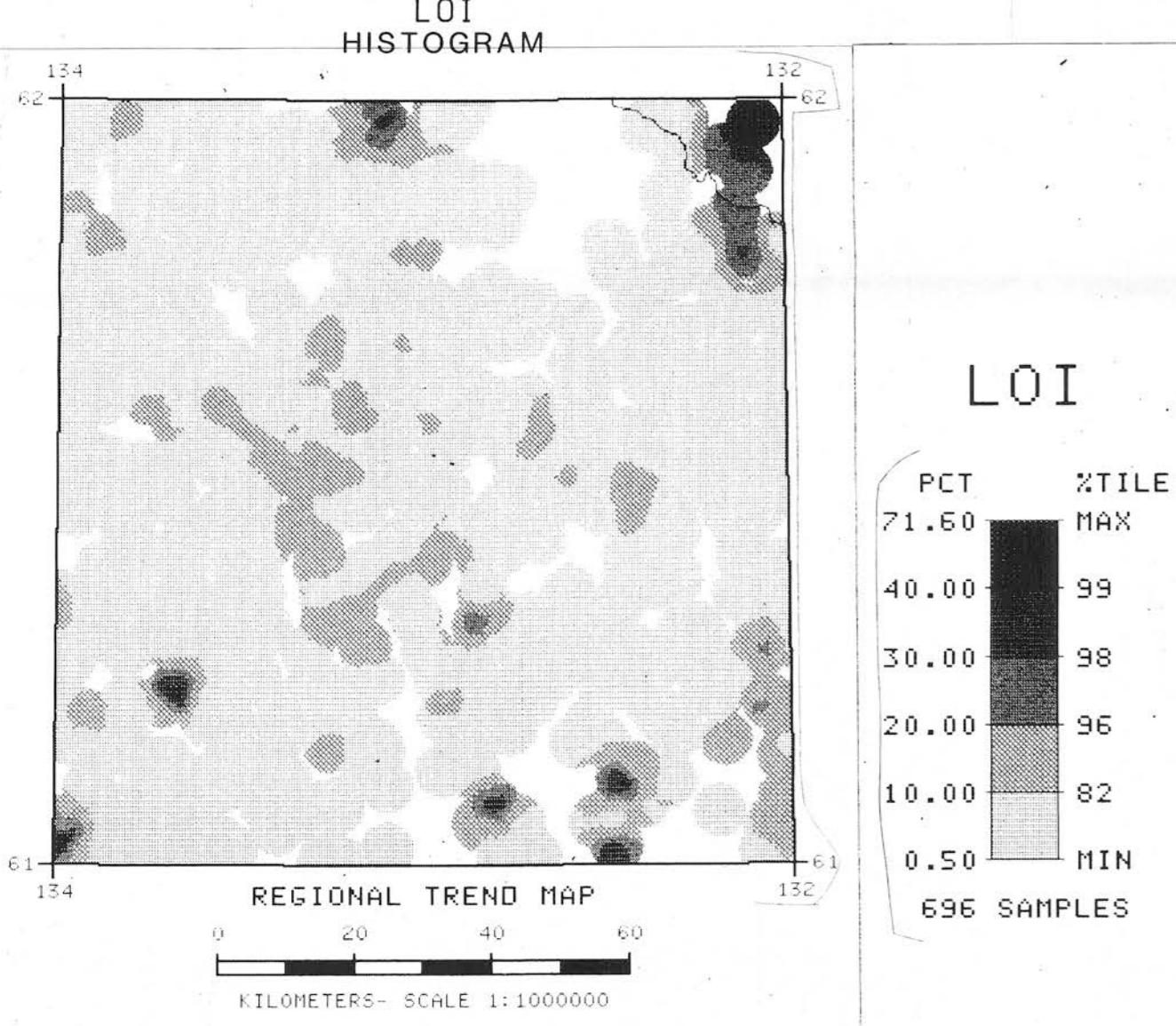
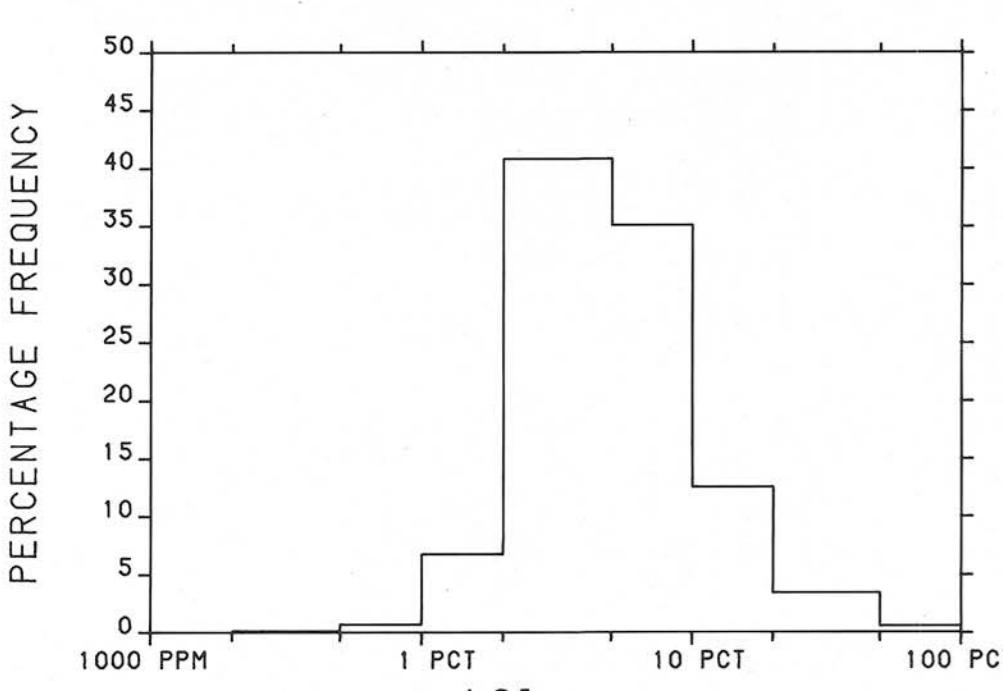
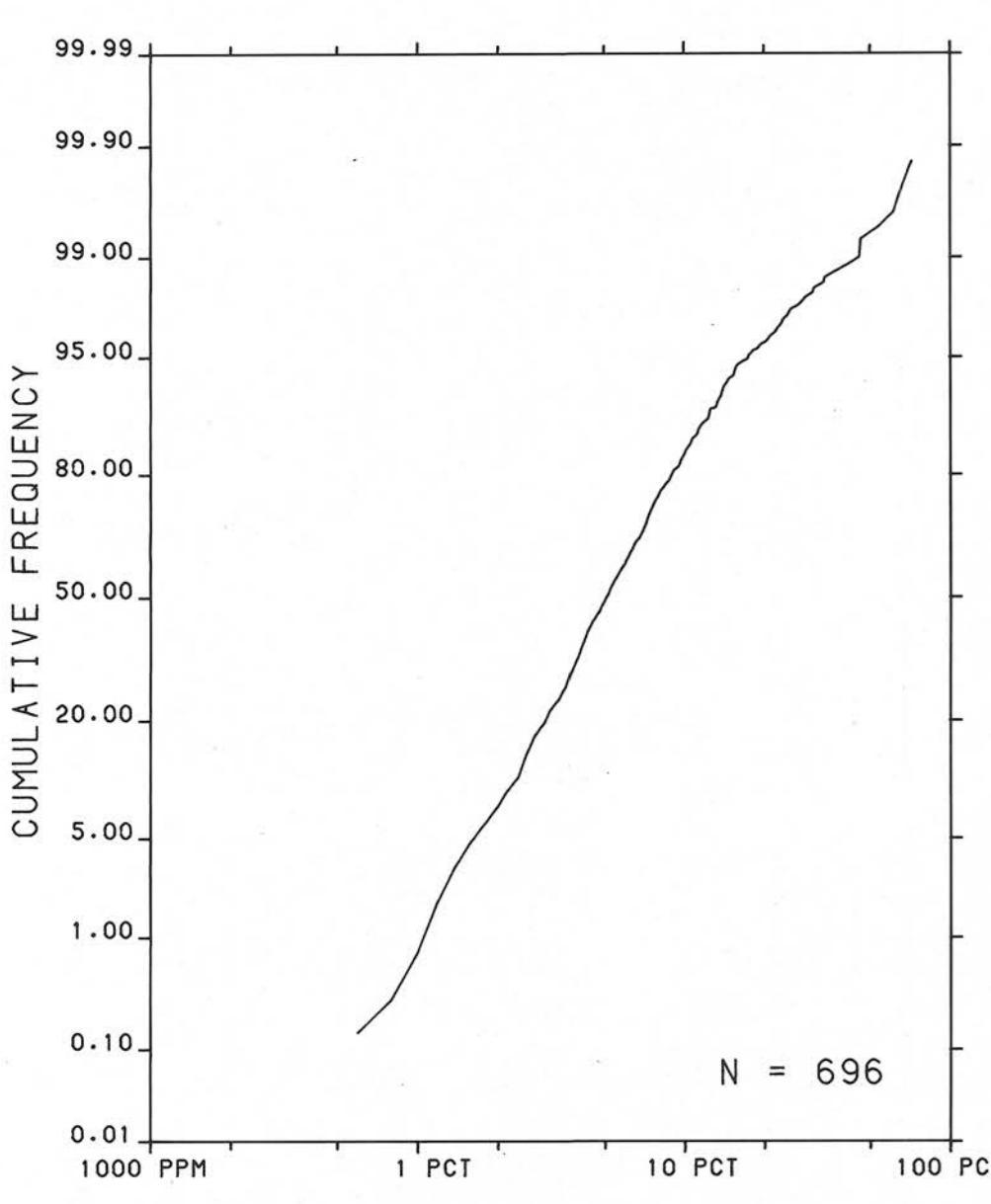
Sample collection by BEMA Ltd., Langley, B.C.  
Sample preparation by Golder Associates, Ottawa

Uranium in sediment chemical analyses by Atomic Energy of Canada Ltd. (1978)  
Other sediment chemical analyses by Chemex Labs Ltd., North Vancouver (1978, 1985)

and Barringer Magenta Ltd., Rexdale, Ont. (1978, 1980, 1985)

Water chemical analyses by Barringer Magenta Ltd., Rexdale, Ont. (1978)

LOSS ON IGNITION (%)  
GSC OPEN FILE 1290  
SOUTHERN YUKON TERRITORY 1978/1985



The regional geochemical trend map displayed above utilized a moving weighted average using an inverse distance function ( $1/d^2$ ) to filter out minor irregularities and emphasize broad-scale regional features. Single point anomalies may be suppressed or eliminated, however, geological units which are chemically enriched, or large metallic deposits undergoing weathering would be expected to produce identifiable anomalies.

This map forms one of a series of 120 maps released by the Geological Survey of Canada, Open Files 1217, 1218, 1219, 1220, 1289 and 1290. This Open File consists of maps for 9 elements for stream sediments, and one for sample site location.

Open File 1290 is an addition to Open File 564 released in 1978

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:

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

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Contribution to the Canada/Yukon Subsidiary  
Agreement on Mineral Resources 1985-1989  
under the Canada/Yukon Economic Development  
Agreement