SURFICIAL GEOLOGY

No comprehensive surficial or geomorphological data exists for the map area up to the release of this geochemical open file. A detailed geomorphology and surficial materials map, compiled by G.W. Morrison of Indian Affairs and Northern Development, Whitehorse, is forthcoming.

Geological Survey of Canada
Mineral Resources Division
Exploration Geochemistry Subdivision

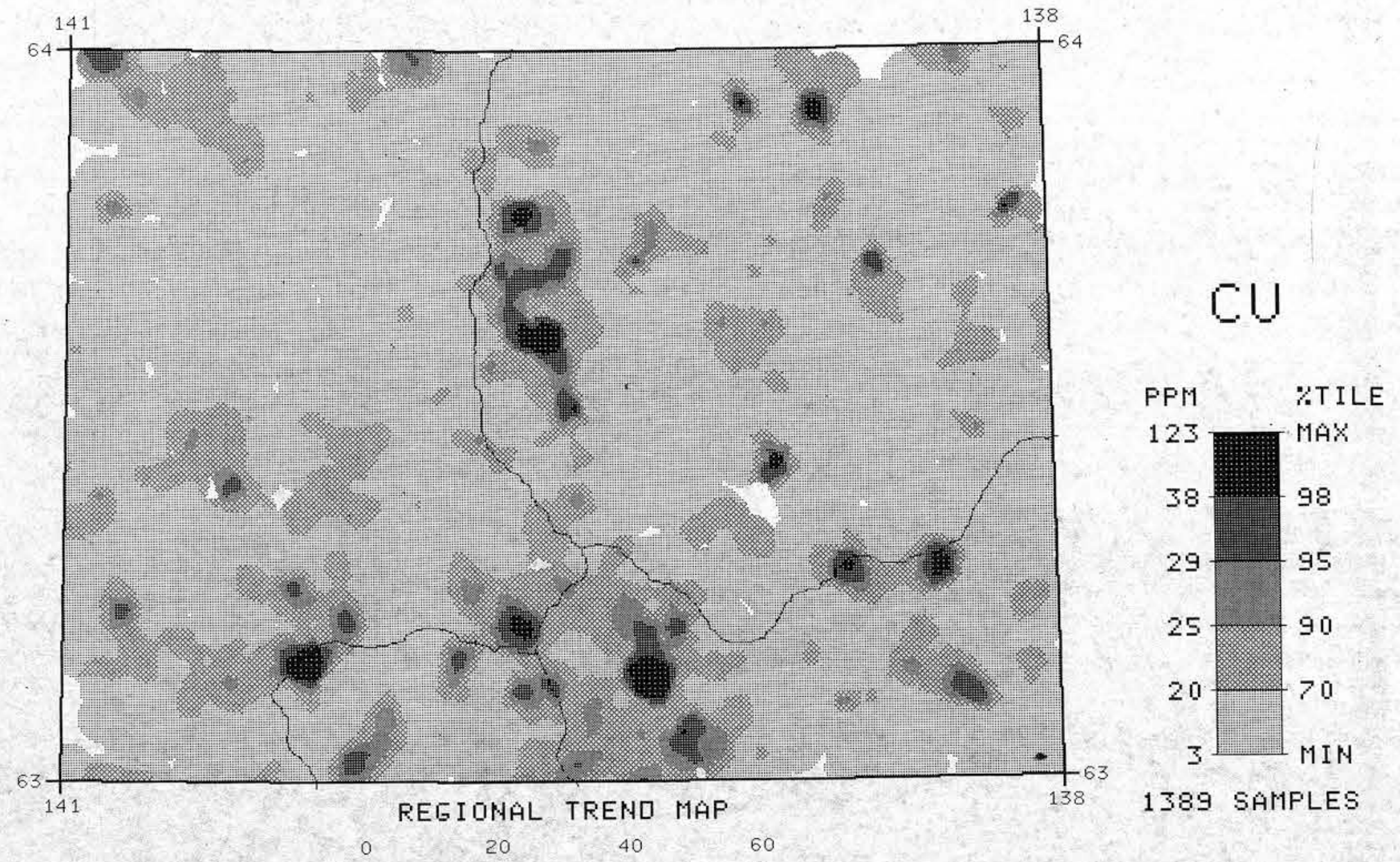
CONTRACTORS

Sample collection by Monaghan Delph Miller Limited, Don Mills, Ontario
Sample preparation by Golder Associates, Ottawa

Sediment chemical analyses by Bondar Clegg and Company Ltd., Ottawa, Ontario

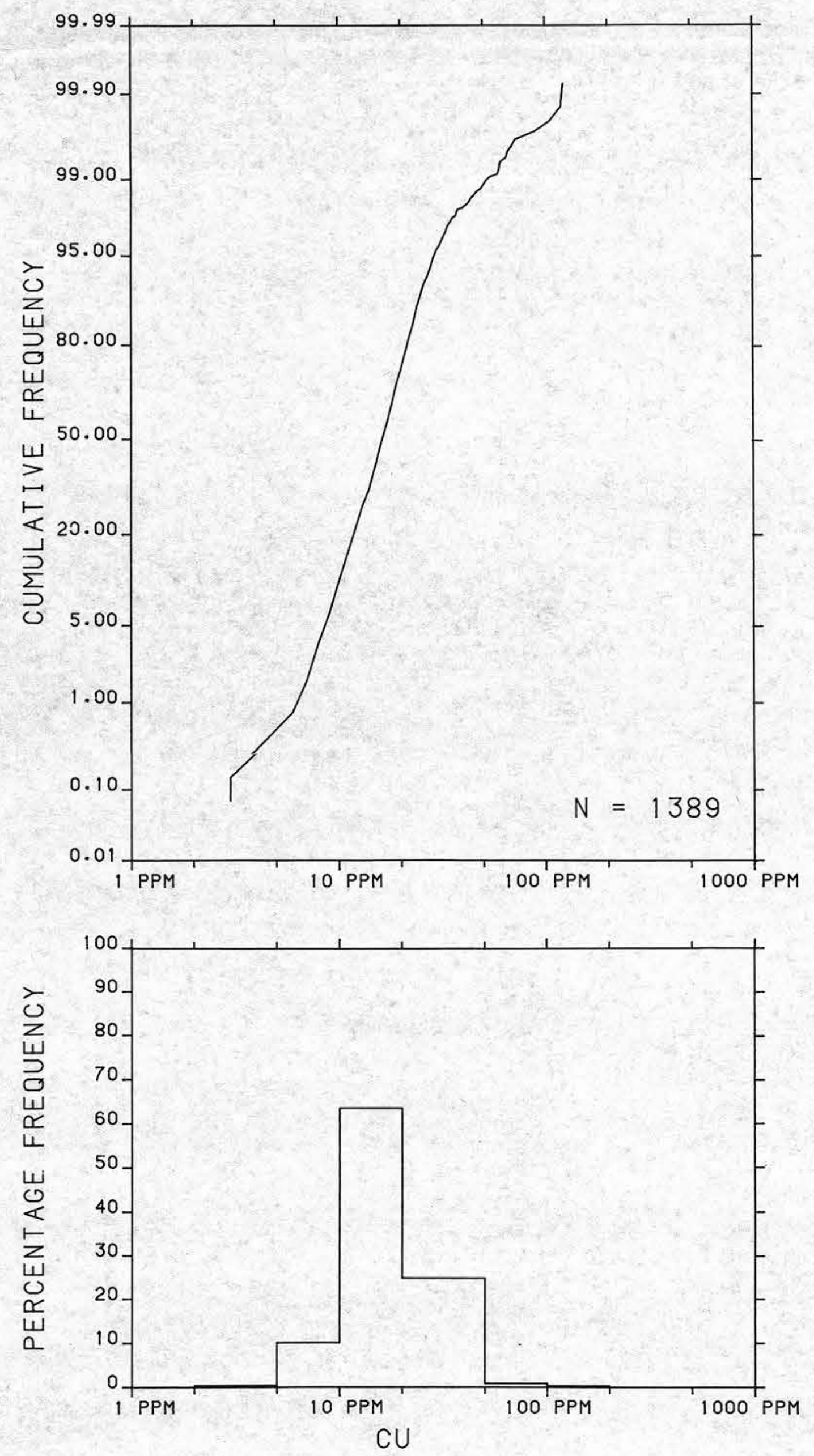
Au analyses by Chemex Labs Limited, Vancouver
Water chemical analyses by Barringer Magenta Laboratories
(Alberta) Ltd., Calgary

Canada



REGIONAL TREND MAP

The regional geochemical trend map displayed above utilized a moving weighted average using an inverse distance function ($1/d^3$) 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.



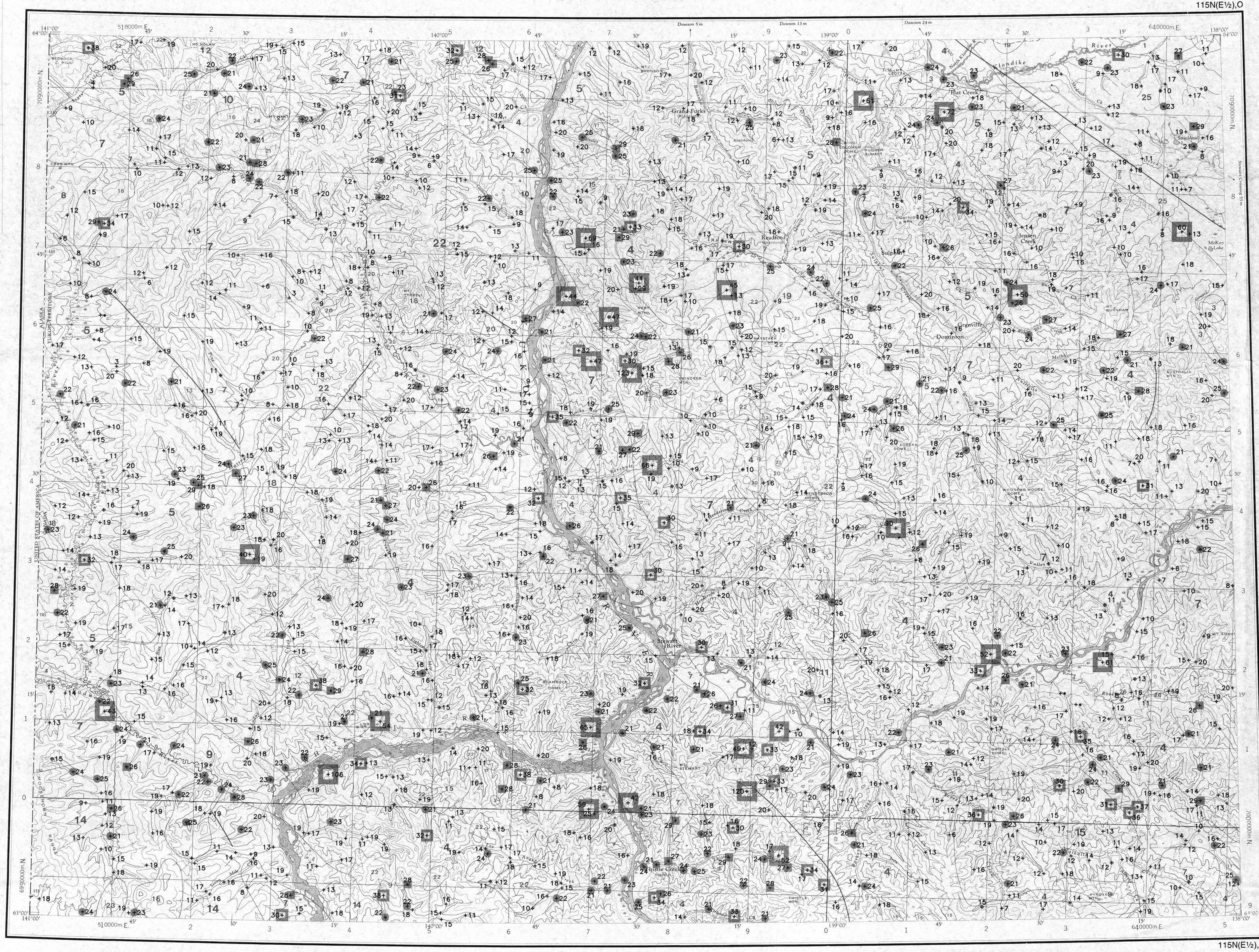
HISTOGRAM

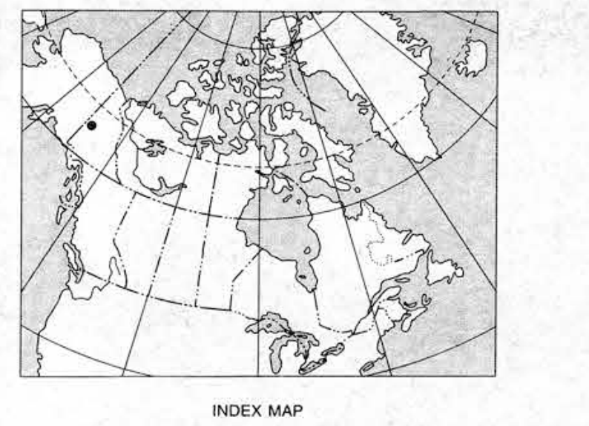
CONCENTRATION		FREQUENCY
39 to 123	▣	N= 26(1.9%)
30 to 38	▣	N= 43(3.1%)
26 to 29	■	N= 65(4.7%)
21 to 25	●	N= 226(16.3%)
3 to 20	+	N=1029(74.1%)

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

Yukon
Government

GEOLOGICAL SURVEY OF CANADA
COMMISSION GÉOLOGIQUE DU CANADA
DEPARTMENT OF ENERGY, MINES AND RESOURCES
MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RESSOURCES





Copies of map material and listings of field observations, analytical data and methods, from which the open file was prepared, are available from:

K.G. Campbell Corporation
880 Wellington St.
Bay 238
Ottawa, Ontario
K1R 6K7

Digital data are available on IBM-PC compatible diskette from:

Geological Survey of Canada
Publications Distribution
601 Booth St.
Ottawa, Ontario K1A 0E8
Tel.: (613)995-4342

COPPER (ppm)
STREAM SEDIMENTS
GSC OPEN FILE 1364

REGIONAL GEOCHEMICAL RECONNAISSANCE MAP 100-1986

CANADA - YUKON
SUBSIDIARY AGREEMENT ON MINERAL RESOURCES (1985-1989)

STREAM SEDIMENT AND WATER GEOCHEMICAL SURVEY
WESTERN YUKON, 1986

Scale 1:250 000 - Échelle 1/250 000

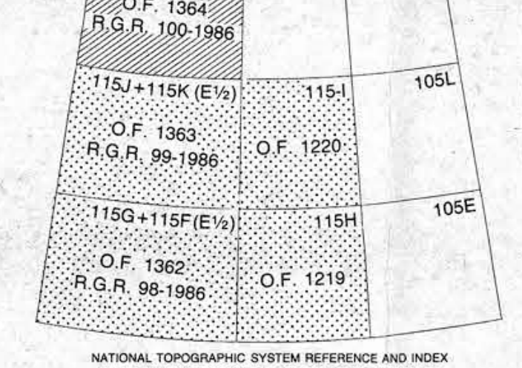
Kilometres 5 0 5 10 15 20 Kilomètres

Universal Transverse Mercator Projection
Projection transverse universelle de Mercator

Elevation in feet above mean sea level

Base map at the same scale published by the Surveys and Mapping Branch in 1963

Mean magnetic declination 1987, 30°25' East, decreasing 13.5' annually. Readings vary from 30°25'E in the SE corner to 30°20'E in the NW corner of the map area



NATIONAL TOPOGRAPHIC SYSTEM REFERENCE AND INDEX TO ADJOINING GEOLOGICAL SURVEY OF CANADA MAPS

COPPER (ppm)
STREAM SEDIMENTS
GSC OPEN FILE 1364
WESTERN YUKON, 1986

LEGEND

QUATERNARY

RECENT

SELKIRK GROUP

26	**RS 64***	Basalt, andesite flows, breccia, tuff

PLEISTOCENE AND RECENT

25	**QS 64**	Glacial and surficial deposits

TERTIARY

24	**TDI 57**	Diorite

OLIGOCENE AND MIOCENE

23	**OMA 61**	AMPHITHEATRE: Sandstone, conglomerate, shale, coal

CARMACKS GROUP

22	**OMCV 61**	Andesite, basalt, breccia
21	**OMD 61**	DONJEK: Tuff, breccia

OLIGOCENE

CARMACKS GROUP

20	**OCS 60**	Conglomerate, sandstone, shale

LOWER TERTIARY

19	**1TS 58**	Conglomerate, sandstone, shale
18	**TVR 58**	Rhyolite, quartz feldspar porphyry

EARLY TERTIARY

	ETF 57	Granite and syenite porphyry, rhyolite

CRETACEOUS

16	**KY 52**	Syenite, monzonite
15	**KQM 52**	Quartz monzonite, granodiorite; CASSIAR quartz monzonite, alaskite

TRIASSIC

14	**TGDN 42**	Foliated hornblende granodiorite, quartz

PALEOZOIC AND MESOZOIC UNDIVIDED

13	**PMUB 40**	Ultramafic rocks

PALEOZOIC UNDIVIDED

12	**PN 09**	NASINA: Graphitic quartzite, schist
	PC 09	Limestone
10	**PTV 09**	Chert, volcanic rocks, slate
9	**PV 09**	Greenstone, amphibolite
8	**PQMN 09**	Foliated muscovite quartz monzonite
7	**PGDN 09**	PELLY GNEISS: Foliated to gneissic granodiorite

PERMIAN

SKOLAI GROUP

6	**PS 36**	Andesite, basalt, ultramafics, pyroclastics, phyllite, chert, limestone, conglomerate

CARBONIFEROUS AND PERMIAN

5	**CPS 35**	Quartz - muscovite schist
4	**CPSN 35**	Schist, gneiss, includes BIG SALMON METAMORPHIC COMPLEX
3	**CPUB 35**	Serpentinite, diorite, pyroxenite, peridotite

DEVONIAN

2	**DC 25**	Limestone, marble

ORDOVICIAN, SILURIAN AND LOWER DEVONIAN

1	**OSDR 19**	ROAD RIVER: Black graptolitic shale, chert

*A mnemonic code assigned to rock types and recorded as part of field observations.

Geological boundary	〰
Fault	〰
No analytical result	*
Field duplicate sample sites	⊕

Geological base and legend are derived from:
Gabrielse, H., Tempelman-Kluit, D.J., Blusson, S.L. and Campbell, R.B. (1980) Map 1398A, MacMillan River, Yukon - District of Mackenzie - Alaska, NTS Sheet 105, 115, Geological Survey of Canada, Energy, Mines and Resources Canada. 1:1 000 000 Scale.

COPPER (ppm)
STREAM SEDIMENTS
GSC OPEN FILE 1364
WESTERN YUKON, 1986