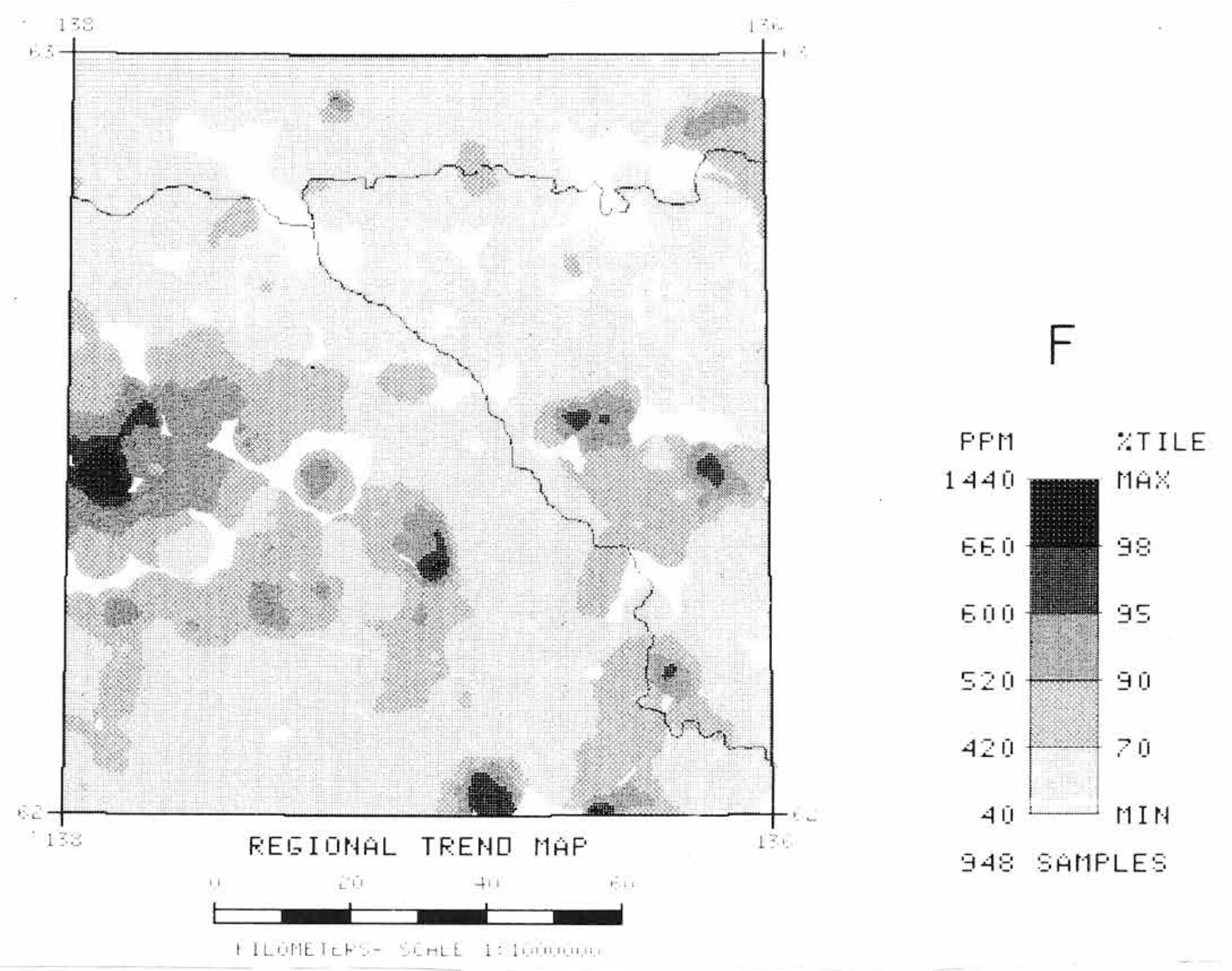


The regional geochemical trend map displayed above utilized a moving weighted average using an inverse distance function ($1/d^3$) to filter out minor irregularities and emphasize broad-scale regional features. Single point anomalies may be suppressed or eliminated, however, geological units which are chemically enriched, or large metallic deposits undergoing weathering would be expected to produce identifiable anomalies

Geological Survey of Canada
Resource Geophysics and Geochemistry Division

CONTRACTORS

Sample collection by Rogers Exploration Services Ltd., Whitehorse
Sample preparation by Golder Associates, Ottawa
Gold analysis by Chemex Labs Limited, Vancouver, B.C.

Sediment chemical analysis by Barringer Magenta ltd., Rexdale, Ontario
Water chemical analyses by Barringer Magenta Laboratories (Alberta) Ltd., Calgary

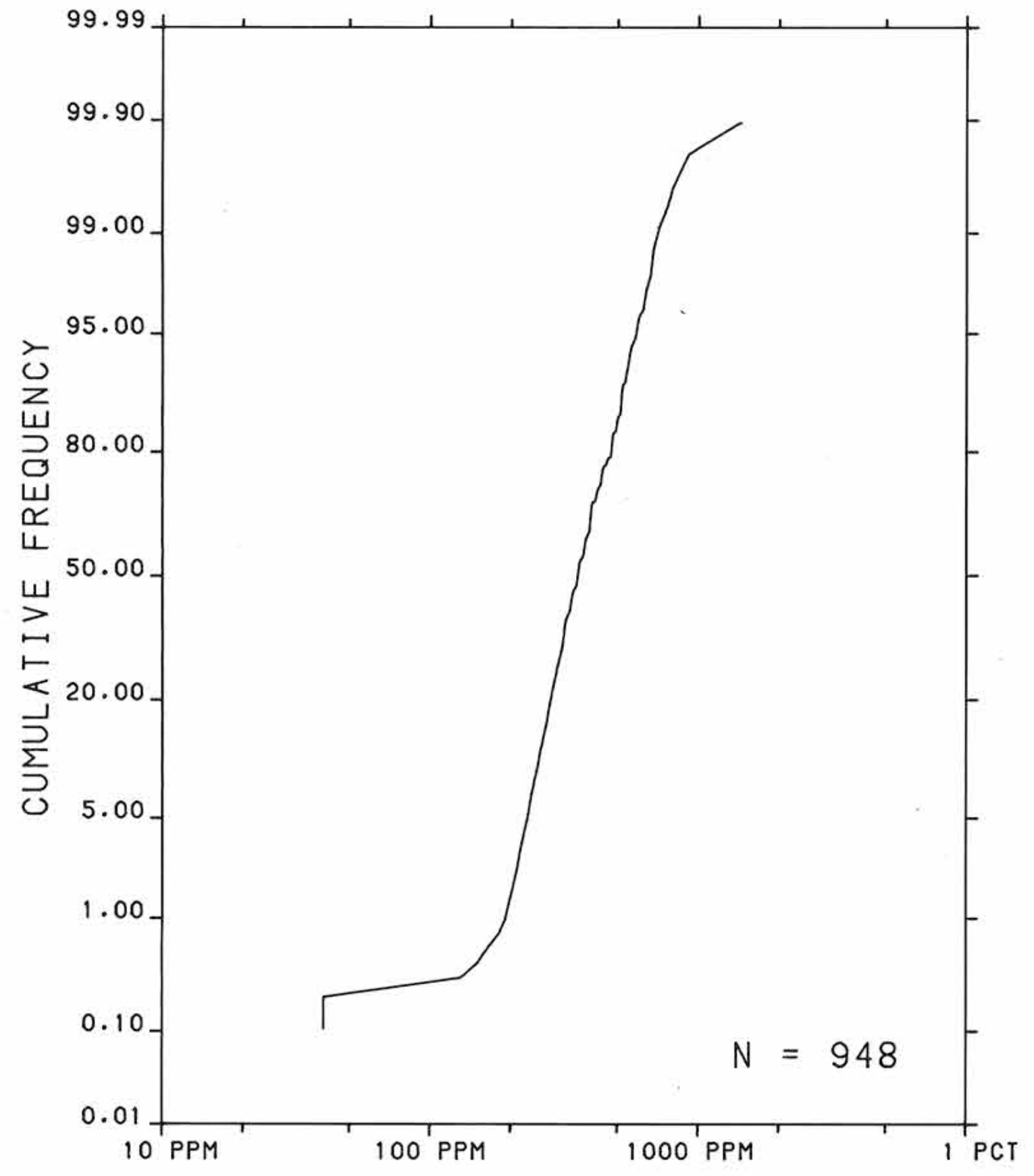
This map forms one of a series of maps released by the Geological Survey of Canada, Open Files 1217 to 1220. Each Open File consists of maps of various geochemical variables: 21 for stream sediment, 3 for stream water and 1 sample site location

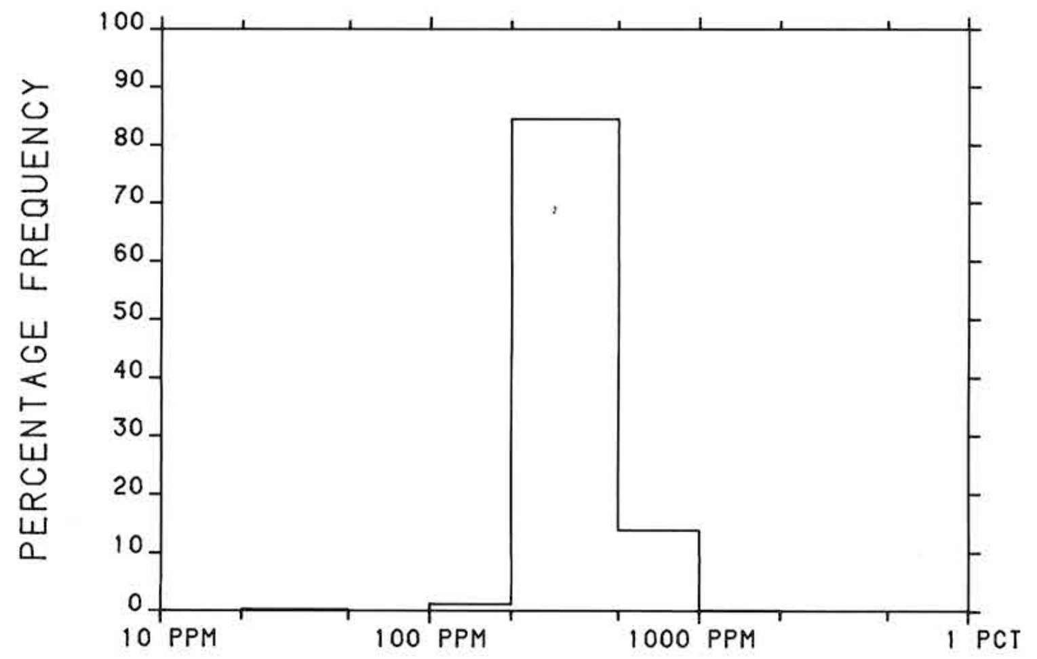
Copies of map material and listings of field observations and analytical data, from which the material was prepared, may be available at users expense by application to:

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

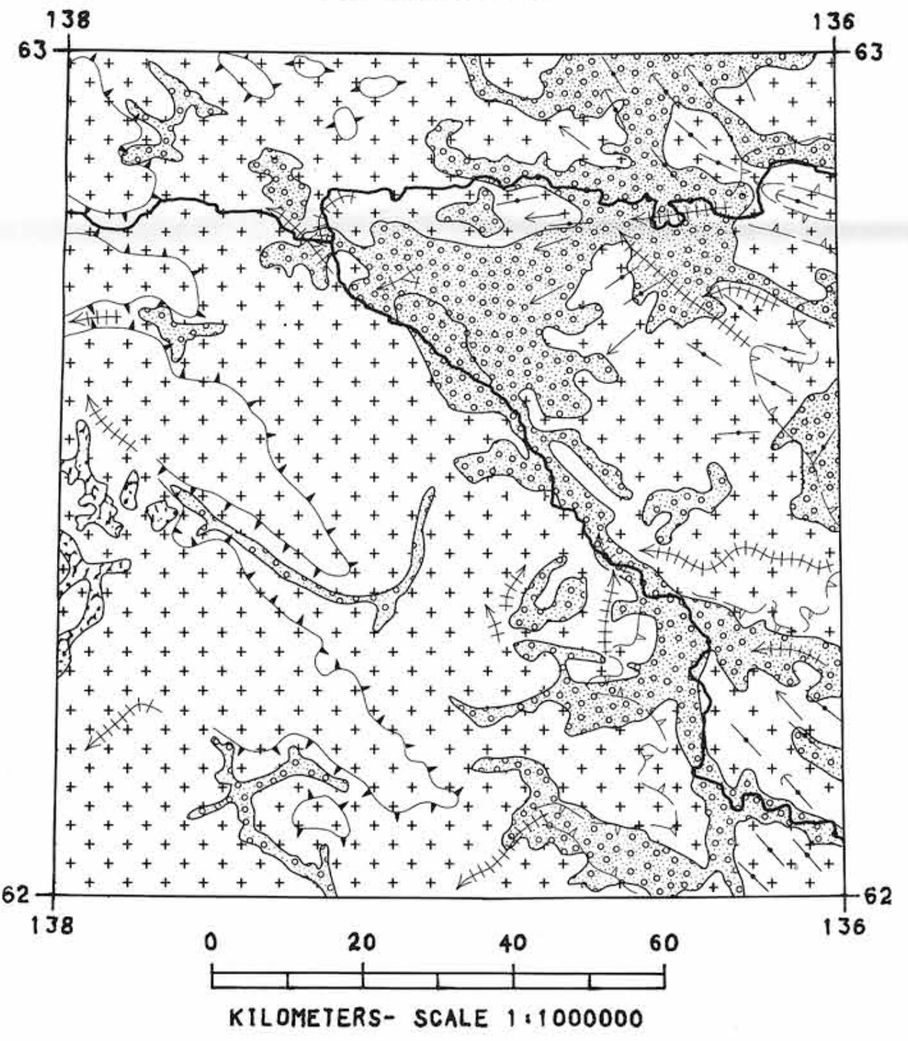
The data are also available in digital form. For further information please contact:

The Director
Computer Science Centre
Department of Energy, Mines and Resources
Ottawa, Ontario
K1A 0E4





F
HISTOGRAM



SURFICIAL GEOLOGY

▨	Undivided surficial deposits; alluvium, glacial till and moraine, outwash and ice contact deposits, volcanic ash, loess, colluvium
▨	Glaciers and permanent snowfields
+	Bedrock exposures; includes discontinuous veneer of undivided glacial drift

SYMBOLS

Surficial deposit boundary . . . .
Limit of Pre-Reid ice advance . . . .
Limit of McConnell (Ruby) ice advance . . . .
Meltwater channels, outwash deposits, indicating direction of flow . . .
Glaciation lineation parallel to ice flow direction, includes fluting, crag and tail, roches moutonees and drumlinoid forms, direction of flow indicated . . . .
Drumlinoid form, direction of movement inferred, not inferred . . . .

Sources of information:

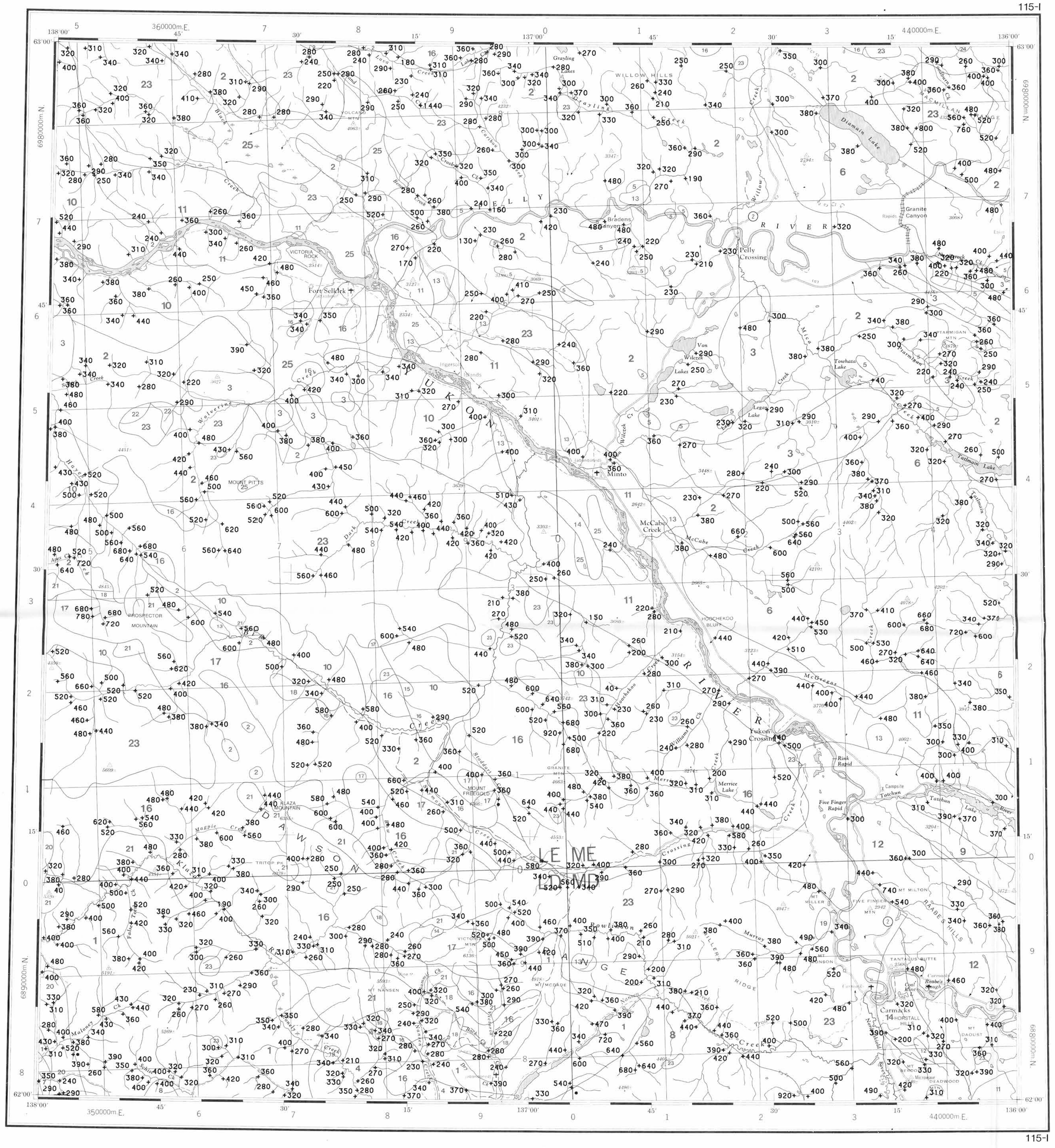
Bostock, H.S. (1936) Geology - CARMACKS SHEET, Yukon Territory, Canada Department of Mines, Bureau of Economic Geology, Geological Survey, Map 340A (1:253,440 scale)
Hughes, O.L., Campbell, R.B., Muller, J.E., and Wheeler, J.O. (1968) Glacial Map of Yukon Territory, Geological Survey of Canada, Map 6-1968, (1:1 000 000 scale) to accompany GSC Paper 68-34
Prest, V.K., Grant, D.R., and Rampton, V.N. (1967) Glacial Map of Canada, Geological Survey of Canada (1:5 000 000 scale)

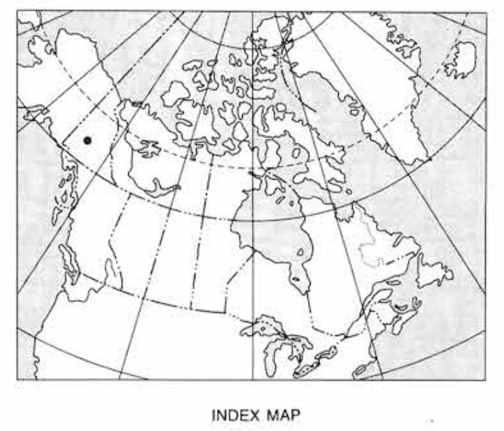
Canada

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





Elevation in feet above mean sea level

Mean magnetic declination 1986, 30°25' East, decreasing 13.6' annually. Readings vary from 30°14' E in the SE corner to 30°36' E in the NW corner of the map area

FLUORINE (ppm)

GSC OPEN FILE 1220

REGIONAL GEOHCEMICAL RECONNAISSANCE MAP 85-1985

CANADA-YUKON

MINERAL DEVELOPMENT AGREEMENT (1984-89)

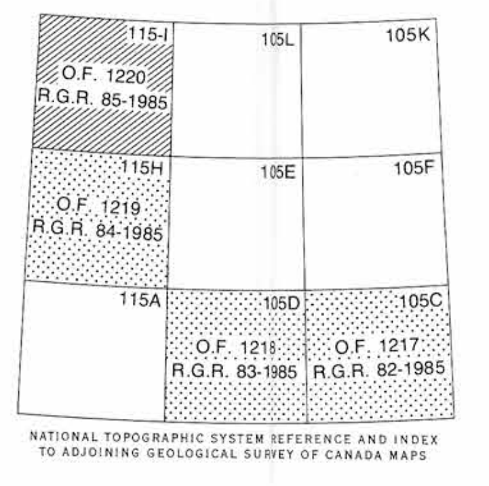
STREAM SEDIMENT AND WATER GEOCHEMICAL SURVEY
SOUTHERN YUKON TERRITORY, 1985

Scale 1:250 000

Kilometres 5 0 5 10 15 20 Kilometres

Universal Transverse Mercator Projection

Base map at the same scale published by the Surveys and Mapping Branch in 1974
Streams were revised by the Geological Survey of Canada for this edition



FLUORINE (ppm)

GSC OPEN FILE 1220

SOUTHERN YUKON TERRITORY, 1985

LEGEND

CENOZOIC			QUATERNARY
			RECENT
			SELKIRK GROUP
	25	**RS 64***	Basalt, andesite flows, breccia, tuff
			TERTIARY
			LATE TERTIARY
	24	**LTG 62**	Rhyolite porphyry, granite, granodiorite
			OLIGOCENE AND MIOCENE
			CARMACKS GROUP
	23	**OMCV 60**	Andesite, basalt, breccia
			OLIGOCENE
			CARMACKS GROUP
	22	**OCS 60**	Conglomerate, sandstone, shale
			EOCENE
			MOUNT NANSEN GROUP
	21	**EMN 59**	Acid to intermediate tuff, breccia
			LOWER TERTIARY
	20	**TFP 58**	Feldspar porphyry dykes, flows
	19	**TVB 58**	Basalt
			EARLY TERTIARY
	18	**ETF 57**	Granite and syenite porphyry, rhyolite
MESOZOIC			CRETACEOUS
	17	**KY 52**	Syenite, monzonite
	16	**KQM 52**	Quartz monzonite, granodiorite; CASSIAR quartz monzonite, alaskite
			JURASSIC AND CRETACEOUS
			DEZADEASH GROUP
	15	**JKD 51**	Argillite, greywacke, conglomerate, volcanics
	14	**JKT 51**	TANTALUS: Conglomerate, siltstone, arkose, coal
	13	**JKDI 51**	Diorite, hornblende diorite
			JURASSIC
			LABERGE GROUP
	12	**JL 47**	Greywacke, arkose, conglomerate
			TRIASSIC
	11	**TV 42**	Basaltic greenstone
	10	**TGDN 42**	Foliated hornblende granodiorite, quartz
			UPPER TRIASSIC
			LEWES RIVER GROUP
	9	**UTC 45**	Limestone
			MESOZOIC UNDIVIDED
	8	**MQM 41**	Porphyritic quartz monzonite
	7	**MGD 41**	Granodiorite, quartz monzonite
	6	**MGDN 41**	Foliated hornblende granodiorite, quartz monzonite
PALEOZOIC			PALEOZOIC UNDIVIDED
	5	**PC 09**	Limestone
	4	**PM 09**	Amphibolite, schist, gneiss
	3	**PGDN 09**	PELLY GNEISS: Foliated to gneissic granodiorite
			CARBONIFEROUS AND PERMIAN
	2	**CPSN 35**	Schist, gneiss, includes BIG SALMON METAMORPHIC COMPLEX
			HADRYNIAN AND CAMBRIAN
	1	**HCSN 08**	Schist, gneiss, quartzite

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

Geological boundary . . . .
Fault . . . .
No analytical result . . . . •

Geological base and legend are derived from: Map 1398A, MACMILLAN RIVER, YUKON - DISTRICT OF MACKENZIE - ALASKA, NTS SHEET 105, 115. Compiled by H. Gabrielse, D.J. Tempelman-Kluit, S.L. Blusson and R.B. Campbell, Geological Survey of Canada, Energy, Mines and Resources Canada, 1980. 1:1 000 000 scale

FLUORINE (ppm)

GSC OPEN FILE 1220

SOUTHERN YUKON TERRITORY, 1985