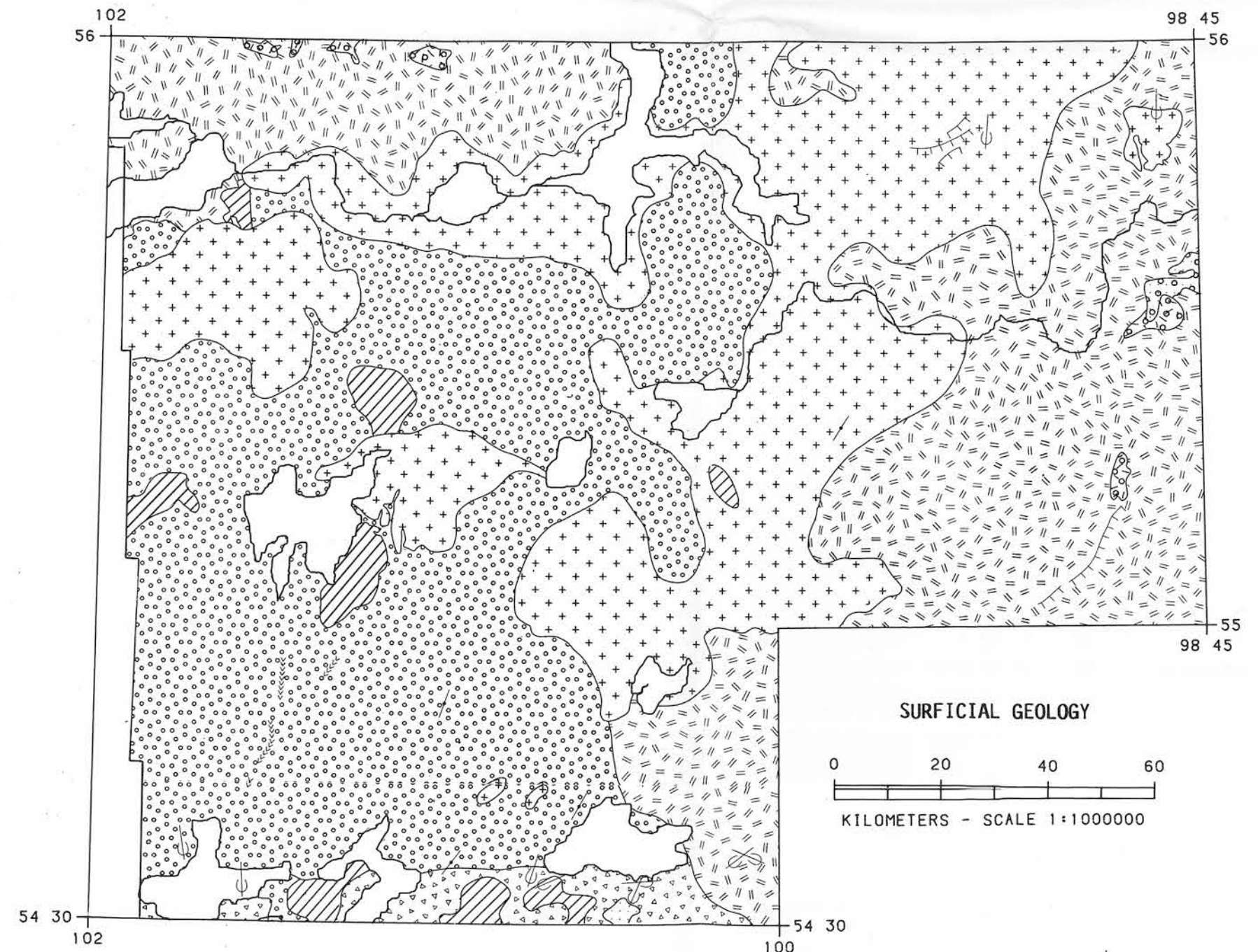


The regional geochemical trend map displayed above utilized a moving weighted average using an inverse distance function (1/d²) to filter out minor irregularities and emphasize broad-scale regional features. Single point anomalies may be suppressed or eliminated, however, geological units which are chemically enriched, or large metallic deposits undergoing weathering would be expected to produce identifiable anomalies.



NONGLACIAL ENVIRONMENT

ORGANIC DEPOSITS: marsh, fen, bog and swamp deposits up to 6 m thick, seasonally flooded; commonly overlying fine textured proglacial lake and glacial till deposits

PROGLACIAL AND GLACIAL ENVIRONMENT

GLACIOLACUSTRINE DEPOSITS: clay silt, sand and minor gravel, 1-30 m thick, deposited in proglacial lakes

Beach and nearshore deposits: sand and gravel 1-4 m; sand blanket 0-1 m thick; includes areas of wave washed till and exposed bedrock

Deep basin deposits: silt, clay and sand, 1-30 m thick, forming extensive lake plains and discontinuous veneer reflecting underlying topography; may include areas of iceberg scouring, thin alluvium, wave washed till and exposed bedrock

GLACIOFLUVIAL DEPOSITS: gravel, sand and silt 1-100 m thick, deposited in an ice-marginal environment; includes subaqueous outwash deposited in glacial lakes, and some late glacial valley fill

GLACIAL ENVIRONMENT

GLACIAL DEPOSITS: unsorted glacial debris, 1-10 m thick, reflecting composition of underlying bedrock; predominantly lodgment till; also includes extensive areas of hummocky stagnation moraine, ribbed moraine and water deposited till

Till: 1-10 m thick, highly calcareous, derived primarily from Paleozoic carbonate rocks; typical composition: silt - 44%, sand - 21%, clay - 19%, gravel - 16%; includes bedrock exposures, evidence of wave-washing

Till: 1-5 m thick, derived primarily from Precambrian bedrock; typical composition: sand - 46%, gravel - 28%, silt - 22%, clay - 9%; includes extensive areas of bedrock outcrop, surface reflects form of underlying bedrock surface

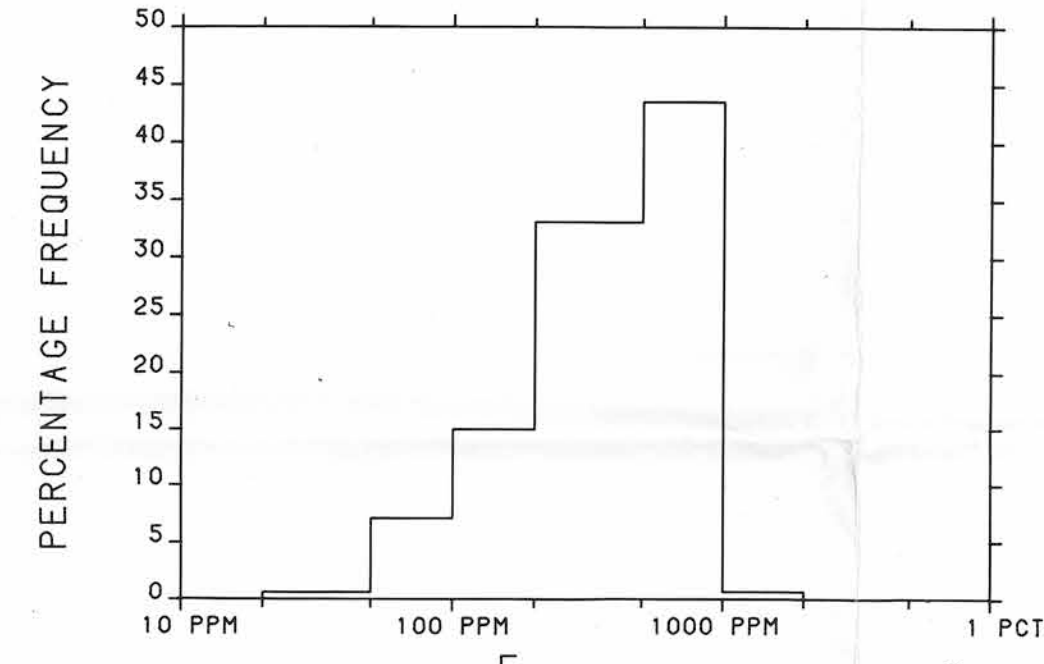
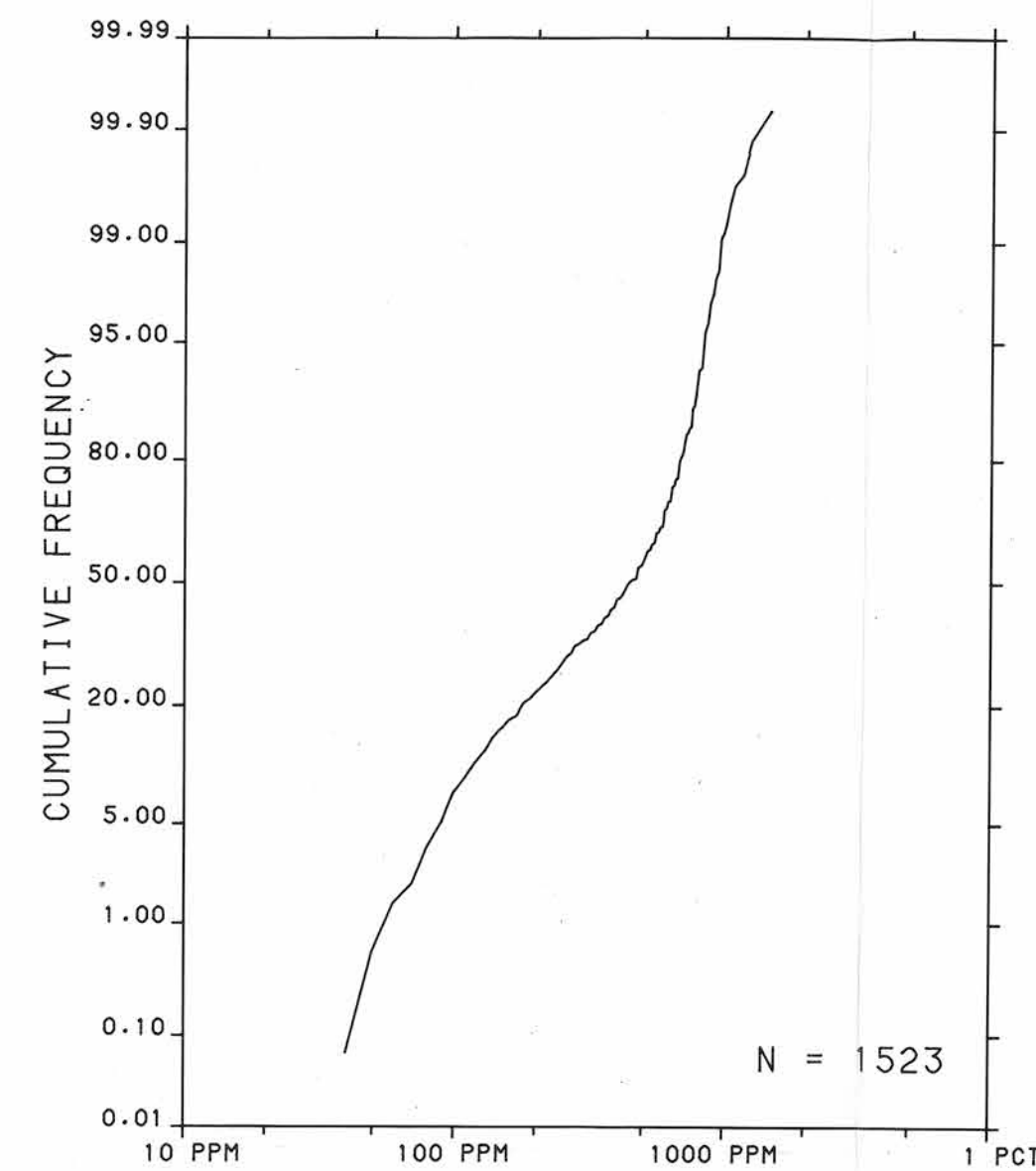
NONGLACIAL ENVIRONMENT

BEDROCK: Precambrian, Paleozoic and Mesozoic bedrock of various lithologies. Detailed geological legend at right

SYMBOLS

Surficial geological boundary
Striae
Flutings, drumlins and drumlinoid ridges
Moraines (including end, interlobate and recessional)
Beach ridges, bars and strandlines
Esker

Surficial geology derived from: Nielson, G. et al. (1981) Surficial Geological Map of Manitoba, Aggregate Resources Section, Manitoba Mineral Resources Division, Map G1-1 (1:1,000,000 scale)



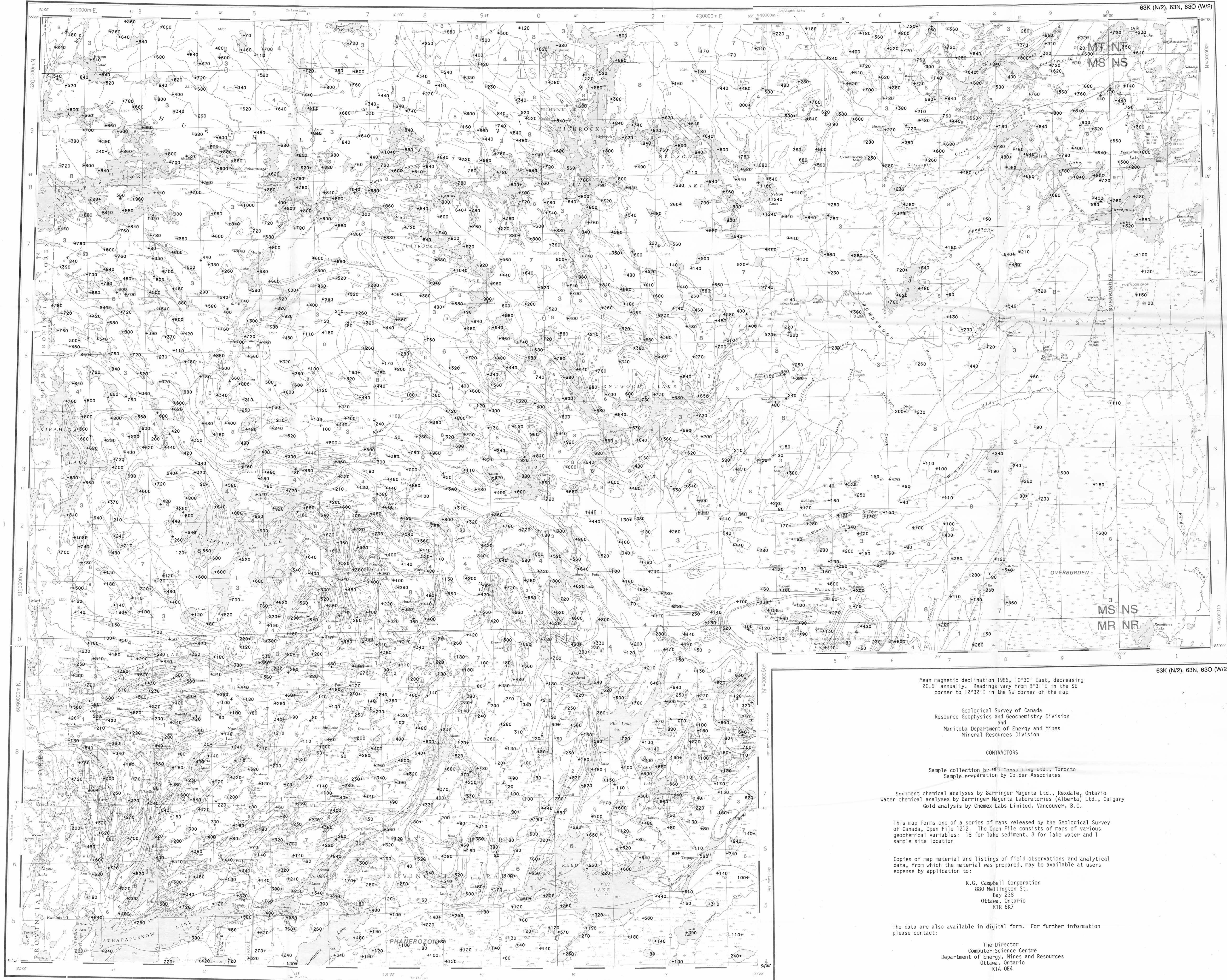
LEGEND

- CENOZOIC
- 10 OVBD 44* Overburden; mainly glacial till and glaciolacustrine deposits
- PALEOZOIC
- ORDOVICIAN
- 9 DM 14 RED RIVER FORMATION: Mottled dolomitic limestone to dolomite, in part cherty and calcareous
- PROTEROZOIC
- 8 ACIV 04 Felsic to intermediate plutonic rocks
 - 7 IMIV 04 Intermediate plutonic rocks
 - 6 BCIV 04 Mafic to intermediate plutonic rocks. Includes ultramafic rocks
 - 5 AMPB 04 Amphibolite. Includes chert, marble
 - 4 MARK 04 Meta-arkose and quartz-feldspathic gneiss
 - 3 MGCK 04 Meta-greywacke and quartz-biotite gneiss
 - 2 LEXV 04 Intermediate to felsic volcanic rocks
 - 1 BEVX 04 Mafic to intermediate volcanic rocks

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

Geological boundary
Surficial deposit boundary
No analytical results

Provisional Synoptic Geological Compilation at 1:250,000 scale, by S. Parker, Geological Services, Manitoba Energy and Mines, 1985



FLUORINE (ppm)

GSC OPEN FILE 1212

REGIONAL GEOCHEMICAL RECONNAISSANCE MAP 77-1985

CANADA-MANITOBA

MINERAL DEVELOPMENT AGREEMENT (1984-89)

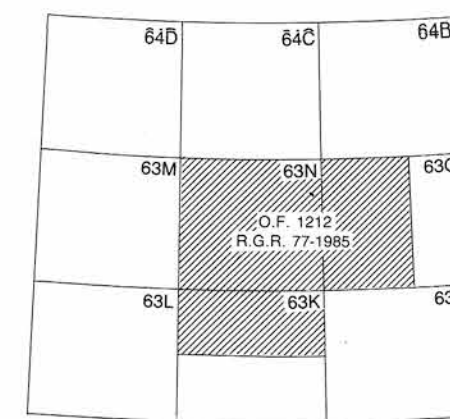
LAKE SEDIMENT AND WATER GEOCHEMICAL SURVEY

WEST-CENTRAL MANITOBA, 1985

Scale 1:250 000

Kilometers 0 10 20 30 40 50 60 70 80 90 100

Universal Transverse Mercator Projection
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FLUORINE (ppm)

GSC OPEN FILE 1212

WEST-CENTRAL MANITOBA, 1985

Contribution to Canada-Manitoba Mineral Development Agreement 1984-89, a subsidiary agreement under the Economic and Regional Development Agreement. Project funded by the Geological Survey of Canada

Manitoba Energy and Mines

Energy, Mines and Resources Canada

Canada