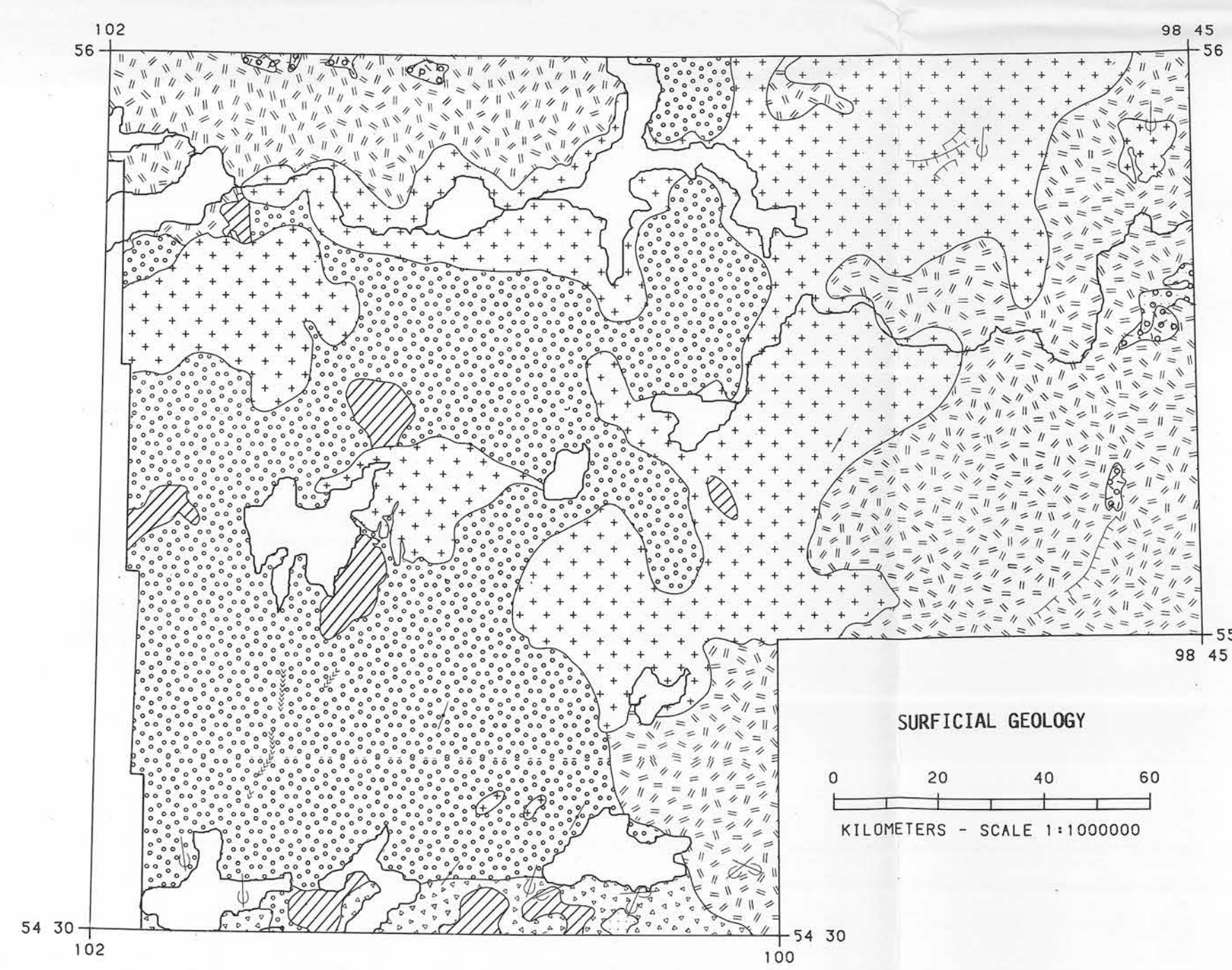


The regional geochemical trend map displayed above utilized a moving weighted average using an inverse distance function (1/d²) to filter out minor irregularities and emphasize broad-scale regional features. Single point anomalies may be suppressed or eliminated, however, geological units which are chemically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

GLACIOFLUVIAL 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 lobed 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 rock; typical composition: silt - 40%, sand - 21%, clay - 15%, 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 - 6%; includes extensive areas of bedrock outcrop, surface reflects form of underlying bedrock surface.

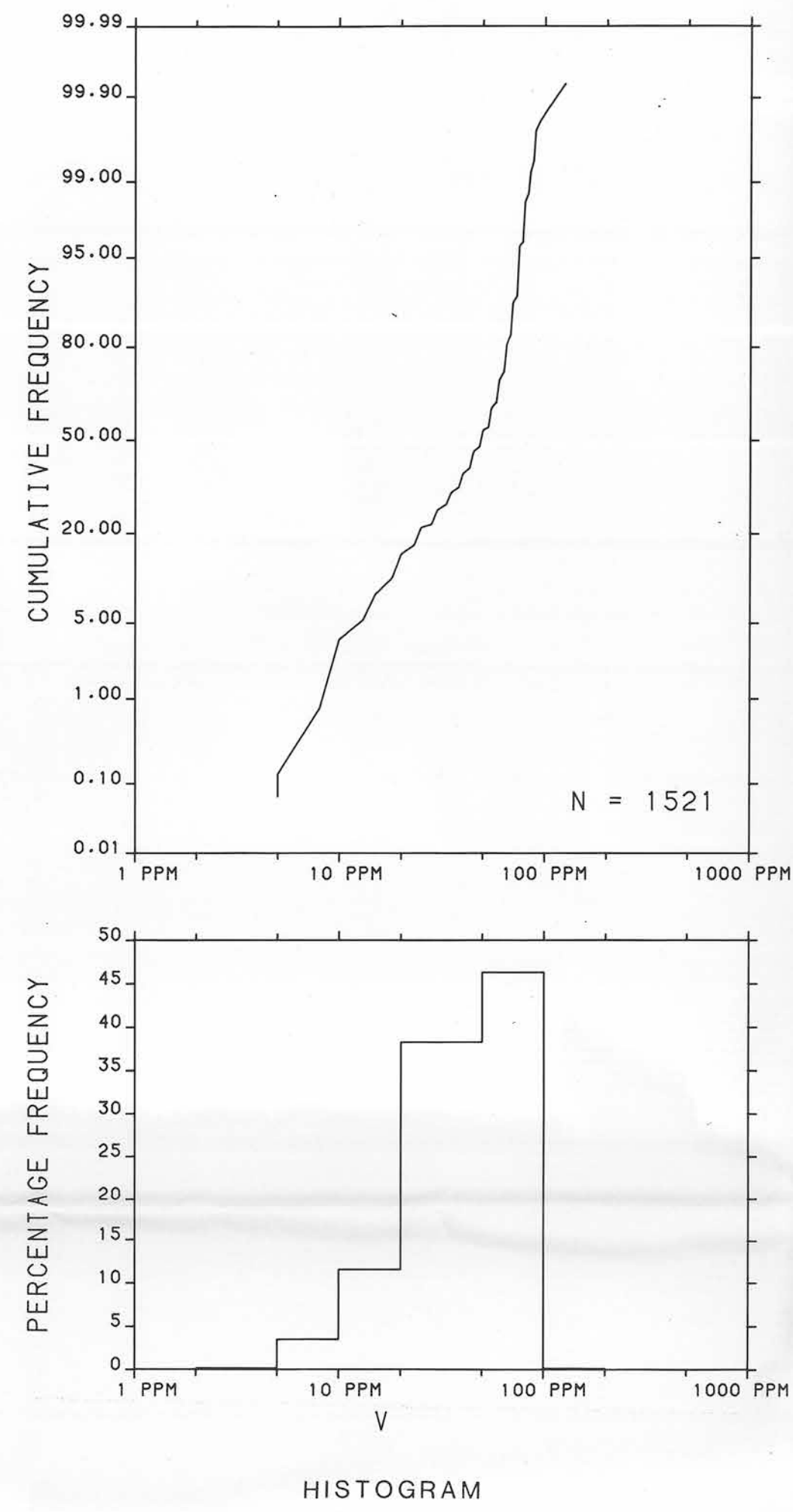
NONGLACIAL ENVIRONMENT

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

SYMBOLS

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

Surficial geology derived from: Nielson, E. et al. (1981) Surficial Geological Map of Manitoba, Aggregate Resources Section, Manitoba Mineral Resources Division, Map 61-1 (1:1,000,000 scale).



LEGEND

CENOZOIC

10 QVBD 44* Overburden; mainly glacial till and glaciolacustrine deposits.

PALEOZOIC

ORDOVICIAN

9 DMLM 14 RED RIVER FORMATION: Mottled dolomitic limestone to dolomite, in part cherty and calcareous.

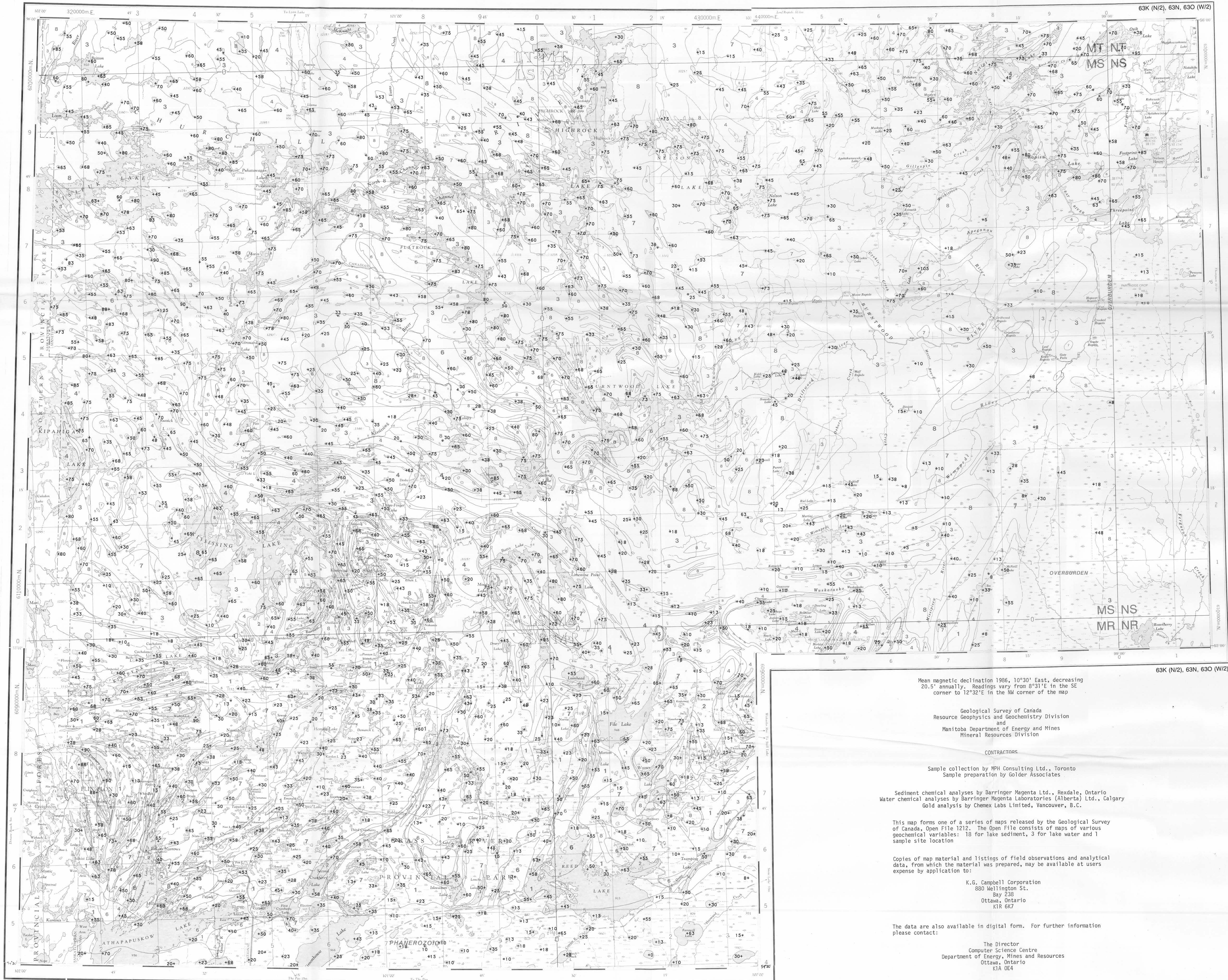
PROTEROZOIC

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 ANPB 04 Amphibolite. Includes chert, marble
4 MARB 04 Meta-arkose and quartz-feldspathic gneiss
3 MDCK 04 Meta-greywacke and quartz-biotite gneiss
2 LEVY 04 Intermediate to felsic volcanic rocks
1 BEVY 04 Mafic to intermediate volcanic rocks

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

Geological boundary
Surficial deposits boundary
No analytical results

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



VANADIUM (ppm)

GSC OPEN FILE 1212

REGIONAL GEOCHEMICAL RECONNAISSANCE MAP 77-1985

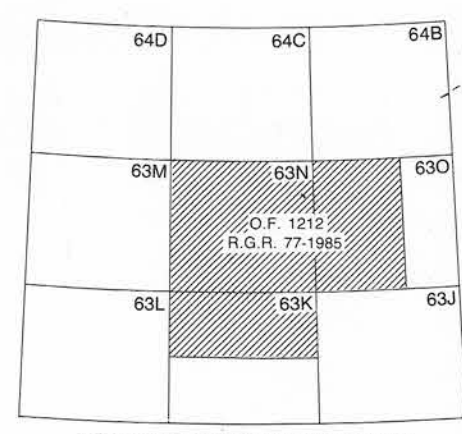
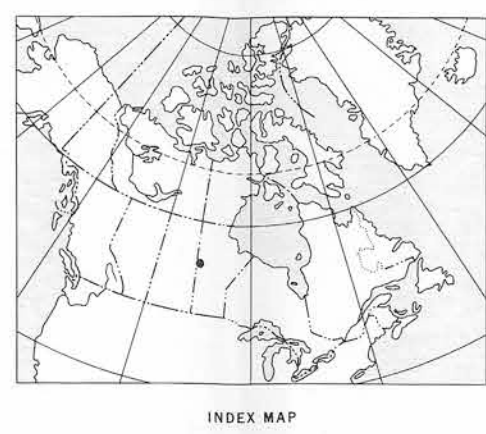
CANADA-MANITOBA

MINERAL DEVELOPMENT AGREEMENT (1984-89)

LAKE SEDIMENT AND WATER GEOCHEMICAL SURVEY

WEST-CENTRAL MANITOBA, 1985

Scale 1:250 000



VANADIUM (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

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