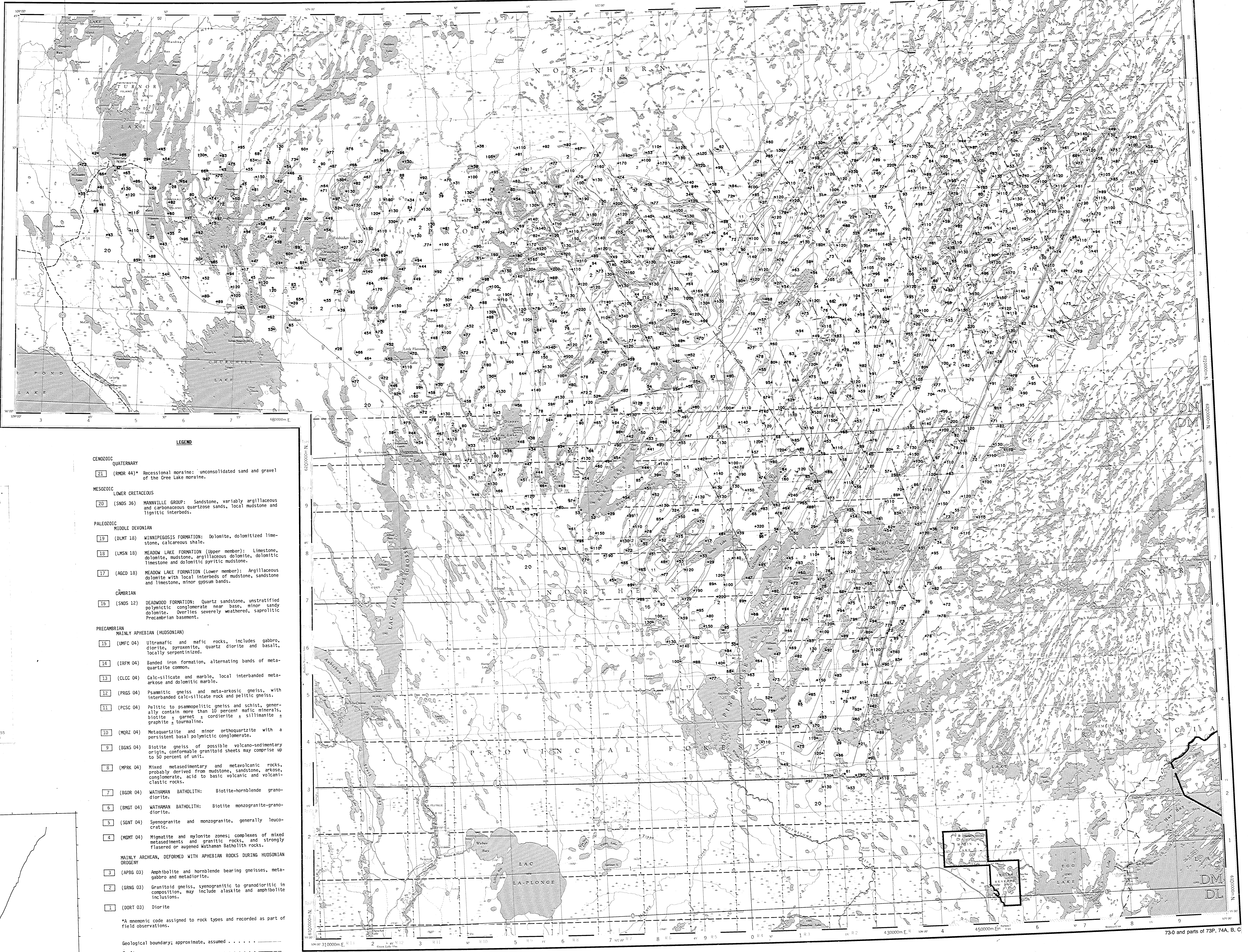


ENVIRONMENT CATEGORY	GEOGRAPHIC MODIFIER
Organic	c concealed
Glaciolacustrine	w weathered
Glacioluvial	e eroded
	g gullied
	o collapsed
	p plain
	v veneer
	r ridged
	h hummocky
	d drumlinoid
	t terrace

Complexes: where two or more classes of terrain are interspersed in a mosaic or repeating pattern the proportion of each component is given in a three-position designation set off by slashes denoting arbitrary percentage limits. For example, Wv/Dr/K means that at least 50% of the area is underlain by thin till, with up to 40% boggy areas, and less than 10% scattered rock outcrops. "Wv/Dr" indicates more than 60% bedrock concealed by vegetation and less than 10% outcrop. Wv/R indicates at least 60% moraine veneer and up to 40% bedrock exposures.

GLACIAL FEATURE SYMBOLS
 Boundary of overburden unit
 Drumlin, drumlinoid ridge, fluting
 Striation, groove (ice direction inferred)
 End moraine
 Esker, crevasse filling

Surficial geology modified from:
 Schreiner, B. T. (1984) Quaternary Geology of the Precambrian Shield, Map 221A (1:1,000,000 scale), to accompany Report 221, Saskatchewan Energy and Mines.



LEGEND

CENOZOIC

QUATERNARY

21 (QMR 44)* Reconsolidated moraine: unconsolidated sand and gravel of the Dore Lake moraine.

MESOZOIC

LOWER CRETACEOUS

20 (SNOS 36) MANNVILLE GROUP: Sandstone, variably argillaceous and carbonaceous quartzose sands, local mudstone and lignitic interbeds.

PALEOZOIC

MIDDLE DEVONIAN

19 (DUMT 18) WINDYBUSH FORMATION: Dolomite, dolomitized limestone, calcareous shale.

18 (LMSN 18) MEADOW LAKE FORMATION (Upper member): Limestone, dolomite, mudstone, argillaceous dolomite, dolomitic limestone and dolomitic argillaceous mudstone.

17 (AGCO 18) MEADOW LAKE FORMATION (Lower member): Argillaceous dolomite with local interbeds of mudstone, sandstone and limestone, minor opium bands.

CAMBRIAN

16 (SNOS 12) DEADWOOD FORMATION: Quartz sandstone, unstratified polyclitic conglomerate near base, minor sandy dolomite. Overlies severely weathered, saprolitic Precambrian basement.

PRECAMBRIAN

MAINLY APHEBIAN (HUDSONIAN)

15 (LWFC 04) Ultramafic and mafic rocks, includes gabbro, diorite, pyroxene, quartz diorite and basalt, locally serpentinitized.

14 (ERPM 04) Banded iron formation, alternating bands of meta-quartzite common.

13 (CLOC 04) Calc-silicates and marble, local interbedded meta-arkose and dolomitic marble.

12 (PRGS 04) Psammite gneiss and meta-arkosic gneiss, with interbedded calc-silicate rock and pelitic gneiss.

11 (PCSC 04) Pelitic to psammopelitic gneiss and schist, generally contains more than 10 percent mafic minerals; biotite ± garnet ± cordierite ± sillimanite ± graphite ± tourmaline.

10 (MWRZ 04) Metagranite and minor orthoquartzite with a persistent basal polyclitic conglomerate.

9 (SGNS 04) Biotite gneiss of possible volcano-sedimentary origin, conformable granitoid sheets may comprise up to 50 percent of unit.

8 (MPRK 04) Mixed metasedimentary and metavolcanic rocks, probably derived from mudstone, sandstone, arkosic conglomerate, acid to basic volcanic and volcaniclastic rocks.

7 (BGRD 04) WATHAMAN BATHOLITH: Biotite-hornblende granodiorite.

6 (EMGT 04) WATHAMAN BATHOLITH: Biotite monzogranite-granodiorite.

5 (LSMT 04) Syenogranite and monzogranite, generally leucocratic.

4 (MDMT 04) Migmatite and mylonite zones; complexes of mixed metasediments and granitic rocks, and strongly foliated or augen Wathaman Batholith rocks.

MAINLY ARCHEAN, DEFORMED WITH APHEBIAN ROCKS DURING HUDSONIAN OROGENY

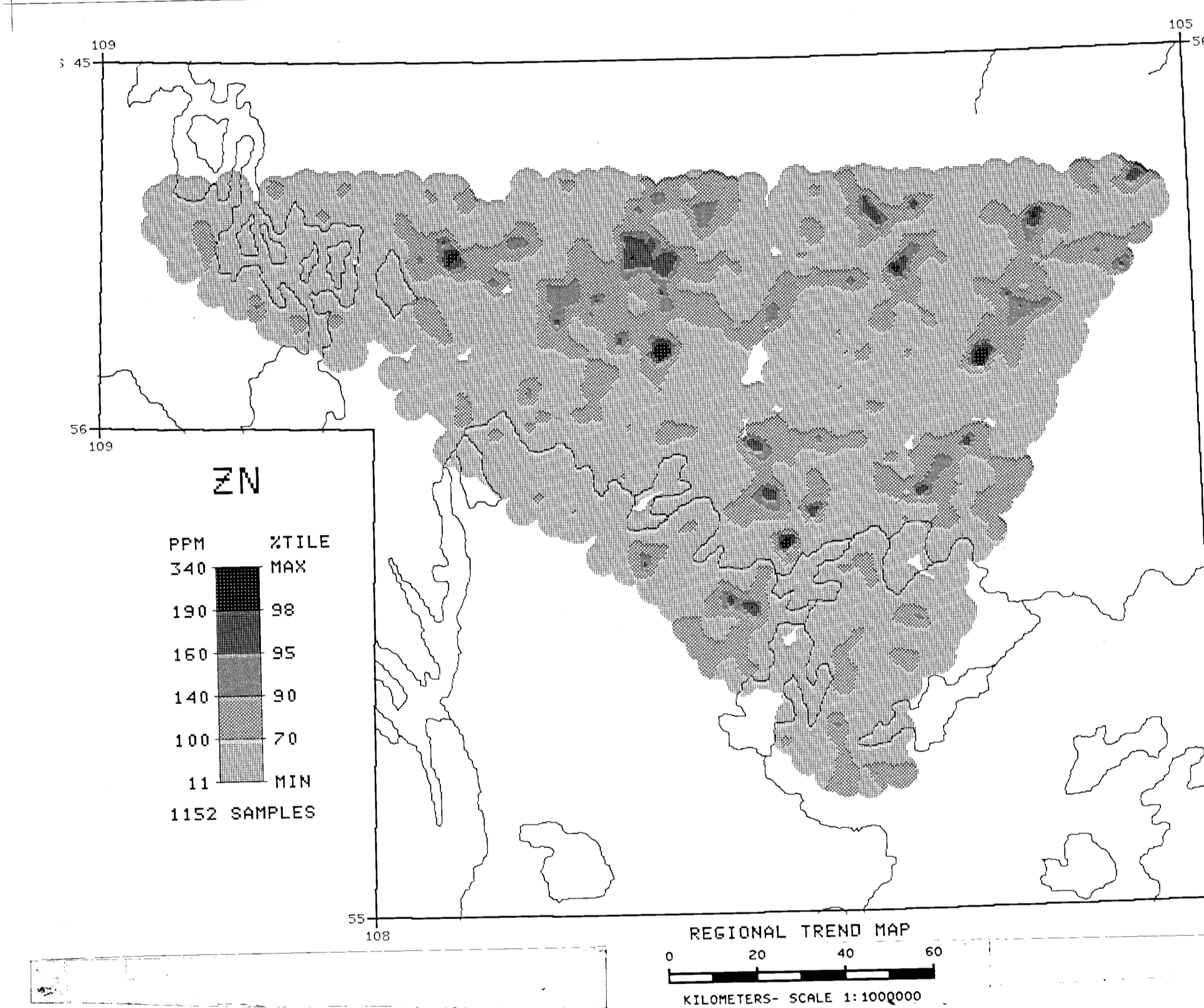
3 (APSG 03) Amphibolite and hornblende bearing gneisses, meta-gabbro and metadiorite.

2 (GRNG 03) Granitoid gneiss, syenogranitic to granodioritic in composition, may include alkali feldspar and amphibolite inclusions.

1 (DORT 03) Diorite

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

Geological boundary: approximate, assumed
 Fault
 No analytical result



The regional geochemical trend map displayed above utilized a moving weighted average using an inverse distance function (1/r²) 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
 and
 Department of Mineral Resources
 Saskatchewan Geological Survey

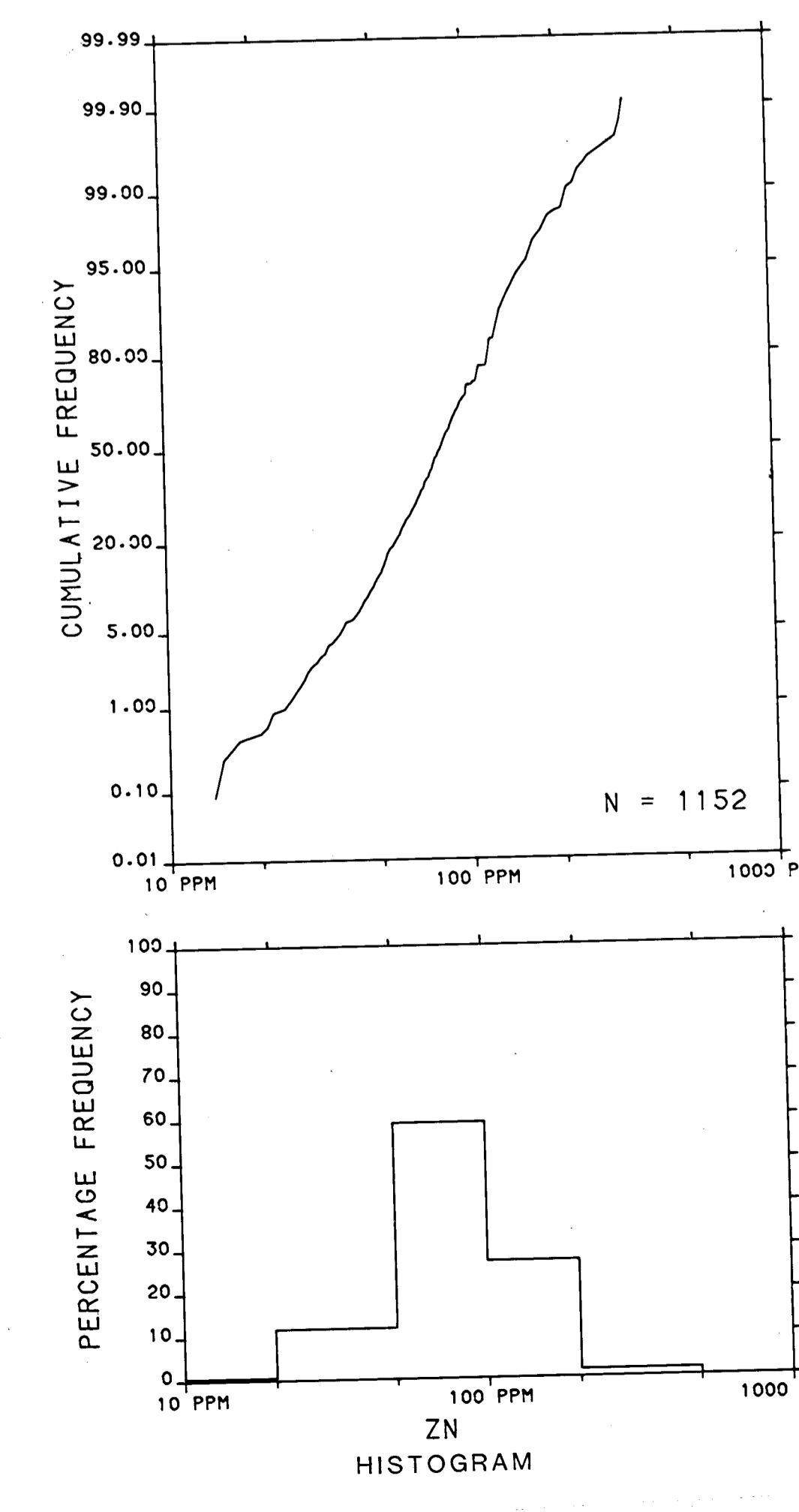
CONTRACTORS
 Sample collection by MHI Consulting Ltd., Toronto
 Sample preparation by Golden Associates

Sediment chemical analyses 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 File 1213. The Open File consists of maps of various geochemical variables: 16 for lake sediment, 3 for lake 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 0G4



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

ZINC (ppm)
 GSC OPEN FILE 1213
 REGIONAL GEOCHEMICAL RECONNAISSANCE MAP 78-1985
 CANADA - SASKATCHEWAN
 MINERAL DEVELOPMENT AGREEMENT (1984-89)
 LAKE SEDIMENT AND WATER GEOCHEMICAL SURVEY
 NORTH-CENTRAL SASKATCHEWAN, 1985
 Scale 1:250 000
 Geographical Names Commission
 © Crown Copyright reserved

Elevation in feet above mean sea level
 Mean magnetic declination 1985, 17°29' East, decreasing 20.4' annually. Readings vary from 15°30' East in the SE corner to 20°00' East in the NW corner of the map area

Base map assembled by the Geological Survey of Canada from maps published at the same scale by Mapping and Charting Establishment, Department of National Defence and the Survey and Mapping Branch, Department of Energy, Mines and Resources in 1974, 1977, 1982