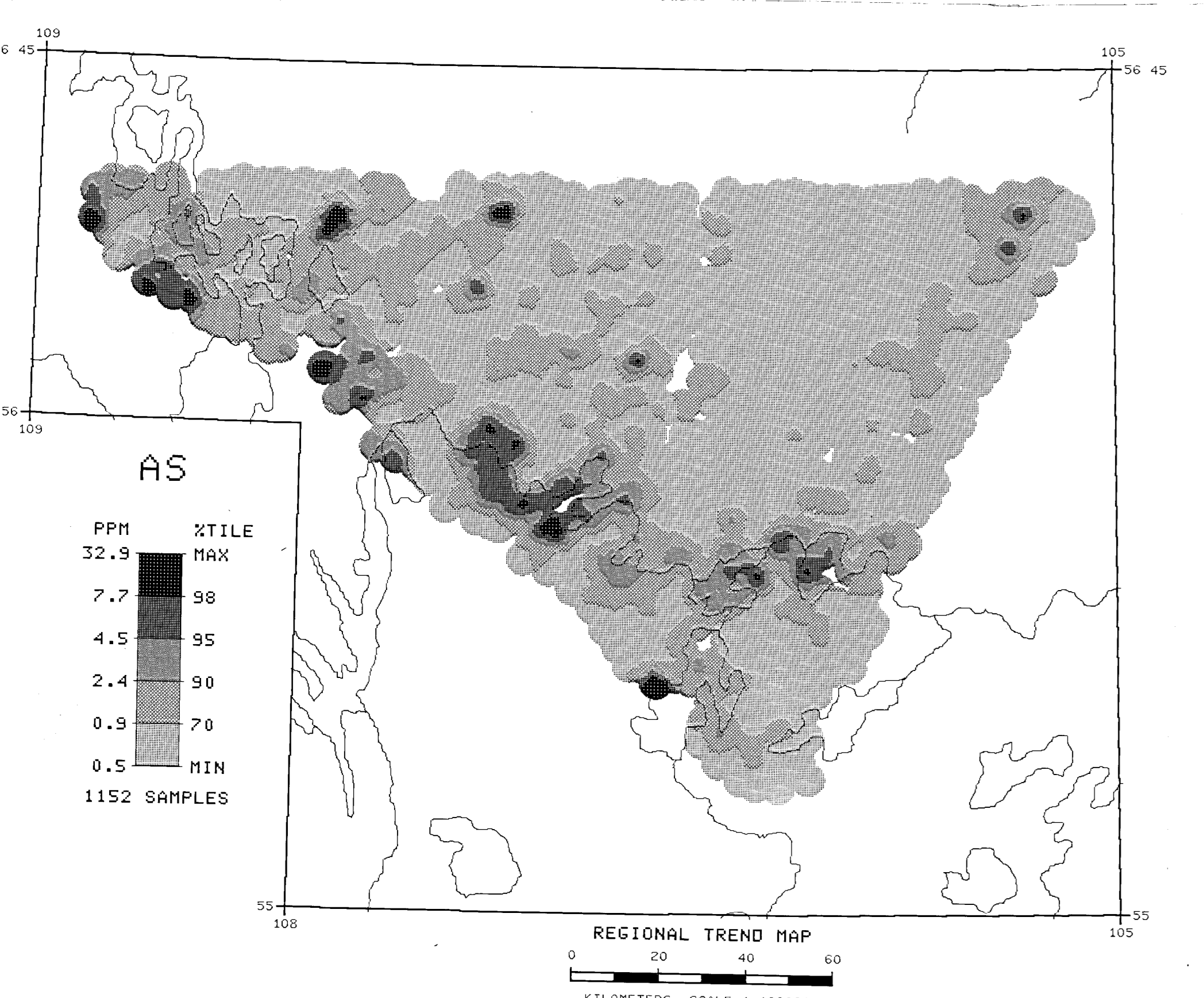
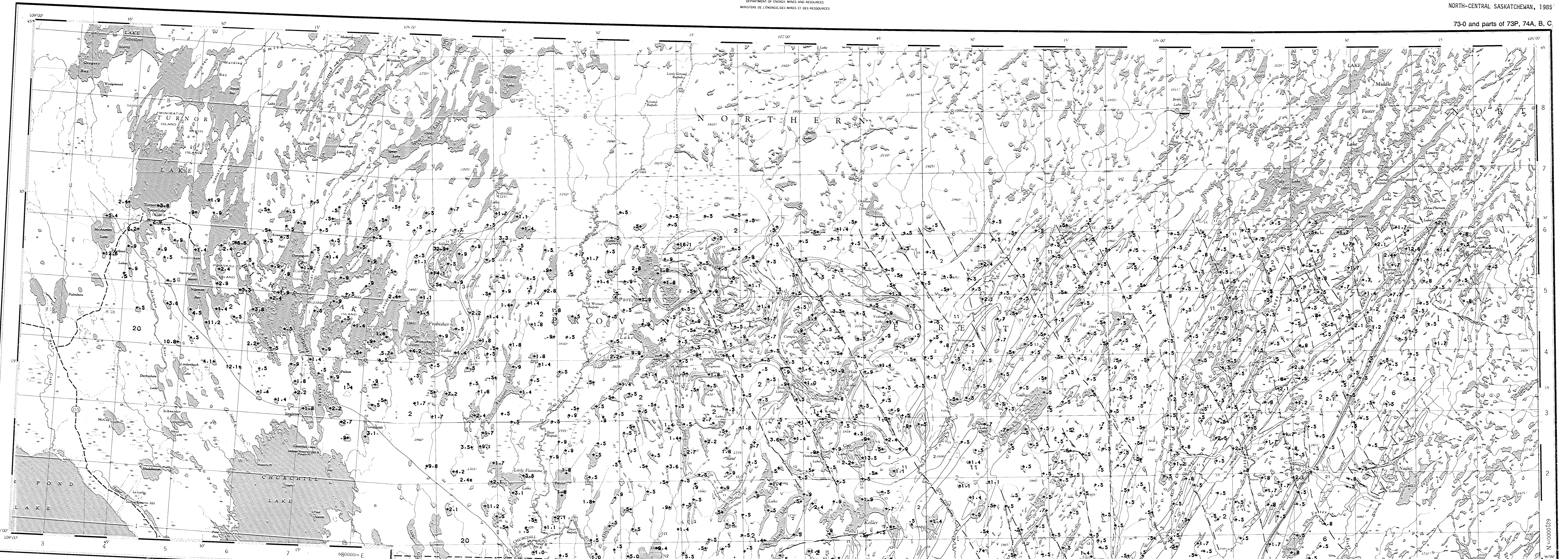


ENVIRONMENT CATEGORY	GEOMORPHIC MODIFIER
Organic	c concealed
Glaciolacustrine	w weathered
Glaciofluvial	e eroded
Morainal	g gullied
Rock	p plain
Colluvial	v veneer
Hummocky	r ridged
Drumlinoid	h hummocky
Drumlinoid	d drumlinoid
Terrace	t terrace

Complexes: where two or more classes of terrain are interspersed in a mosaic given in three-position designation set off by slashes denoting arbitrary percentage limits. For example, M/W/O/R means that at least 60% of the area is underlain by thin till, with up to 40% boggy areas, and less than 10% scattered rock outcrops. M/R/H indicates more than 60% bedrock concealed by vegetation and less than 10% outcrop. M/R/A indicates at least 60% morainal 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, S.T. (1984) Quaternary Geology of the Precambrian Shield, Map 221A (1:1,000,000 scale), to accompany Report 221, Saskatchewan Energy and Mines.



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 distinctive or large metallic deposits undergoing weathering would be expected to produce identifiable anomalies.

Geological Survey of Canada
 Resource Geophysics and Geochemistry Division
 Department of Mineral Resources
 Saskatchewan Geological Survey

CONTRACTORS
 Sample collection by MPM Consulting Ltd., Toronto
 Sample preparation by Golder Associates

Sediment chemical analyses by Barringer Magenta Ltd., Rexdale, Ontario
 Water chemical analyses by Barringer Magenta Laboratories (Albair) 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 for 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.
 Box 220
 Ottawa, Ontario
 K1B 6J7

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

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.

Saskatchewan Energy and Mines
 Energy, Mines and Resources Canada
 Energy, Mines et Ressources Canada

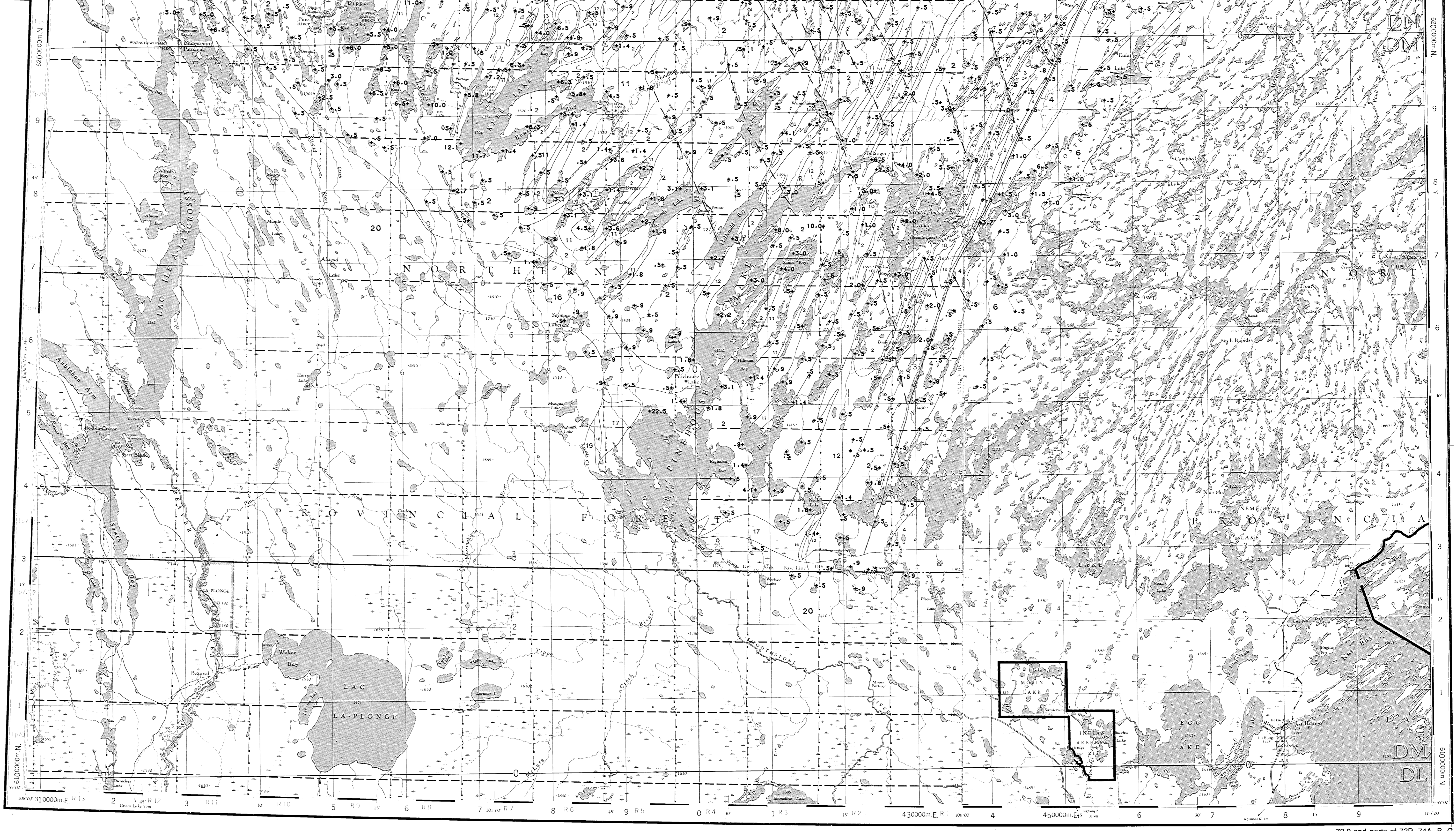
LEGEND

- CEANOZOIC
- QUATERNARY
 21 (RMR 44)* Recessional moraine: unconsolidated sand and gravel of the Oree Lake moraine.
- MESOZOIC
- LOWER CRETACEOUS
 20 (SNS 36) MANNVILLE GROUP: Sandstone, variably argillaceous and carbonaceous quartzose sands, local mudstone and lignitic interbeds.
- PALEOZOIC
- MIDDLE DEVONIAN
 19 (DLMT 18) WINKIPEGOSIS FORMATION: Dolomite, dolomitized limestone, calcareous shale.
 18 (LMS 18) MEADOW LAKE FORMATION (Upper member): Limestone, dolomite, mudstone, argillaceous dolomite, dolomitic limestone and dolomitic pyritic mudstone.
 17 (AGD 18) MEADOW LAKE FORMATION (Lower member): Argillaceous dolomite with local interbeds of mudstone, sandstone and limestone, minor gypsum bands.
- CAMBRIAN
 16 (SNS 12) DEADWOOD FORMATION: Quartz sandstone, unstratified polymictic conglomerate near base, minor sandy dolomite. Overlies severely weathered, saprolitic Precambrian basement.
- PRECAMBRIAN
- MAINLY APHERIAN (HUSSONIAN)
 15 (UMFC 04) Ultramafic and mafic rocks, includes gabbro, diorite, pyroxenite, quartz diorite and basalt, locally sericitized.
 14 (IRFM 04) Banded iron formation, alternating bands of meta-quartzite common.
 13 (CLOC 04) Calc-silicate and marble, local interbedded meta-arkose and dolomitic marble.
 12 (PRGS 04) Psammitic gneiss and meta-arkose gneiss, with interbedded calc-silicate rock and pelitic gneiss.
 11 (PCSC 04) Pelitic to psammpelitic gneiss and schist, generally contain more than 10 percent mafic minerals, biotite, garnet, cordierite, sillimanite, graphite and tourmaline.
 10 (MQR 04) Metaquartzite and minor orthoquartzite with a persistent basal polymictic conglomerate.
 9 (BGAS 04) Biotite gneiss of possible volcano-sedimentary origin. Metamorphic granitic sheets may comprise up to 50 percent of unit.
 8 (MPK 04) Mixed metasedimentary and metavolcanic rocks, probably derived from mudstone, sandstone, arkose, calcic rocks.
 7 (BGR 04) WATHAMAN BATHOLITH: Biotite-hornblende granodiorite.
 6 (BMT 04) WATHAMAN BATHOLITH: Biotite monzogranite-granodiorite.
 5 (SGT 04) Syenogranite and monzogranite, generally leucocratic.
 4 (MHMT 04) Mispeltonite and mylonite zones: complexes of mixed metasediments and granitic rocks, and strongly flattened or augenoid Wathaman batholith rocks.
- MAINLY ARCHAIAN, DEFORMED WITH APHERIAN ROCKS DURING HUSSONIAN OROGENY
 3 (APBG 03) Amphibolite and hornblende bearing gneisses, meta-gabbro and metadiorite.
 2 (GRNG 03) Granitoid gneiss, syenogranitic to granodioritic in composition, may include alaskite and amphibolite inclusions.
 1 (DORT 03) Diorite

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

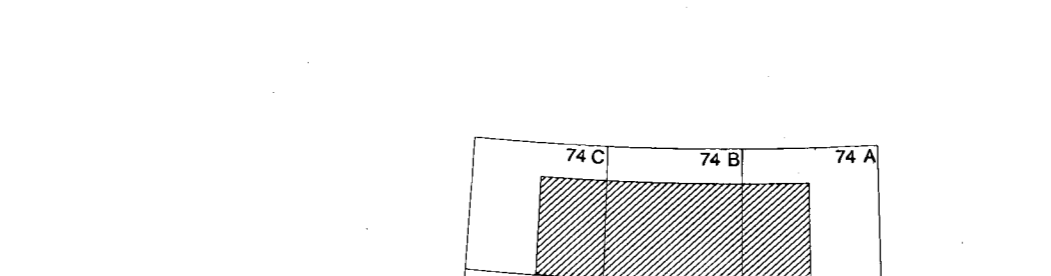
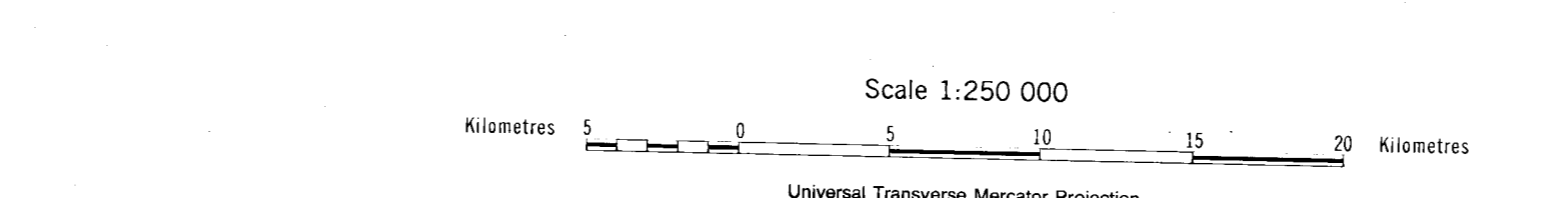
Geological boundary: approximate, assumed
 Fault
 No analytical result

Geological base and legend are derived from: Thomas, H.W. and Stinson, W.L. (1980): Compilation Bedrock Geology, 11e-4-1a-Cross, NTS Area 730; Saskatchewan Energy and Mines, Report 245 (1:250,000 scale map with marginal notes).
 Loney, J.F. and Stinson, W.L. (1985): Compilation Bedrock Geology, Lac La Ronge, NTS Area 73P/731; Saskatchewan Energy and Mines, Report 225 (1:250,000 scale map with marginal notes).
 Area 74A; Saskatchewan Energy and Mines, Report 225 (1:250,000 scale map with marginal notes).
 Thomas, H.W. (1984): Preliminary Compilation Bedrock Geology, NTS Area 74B (1:250,000 scale map with marginal notes).
 MacDonald, R. and Broughton, P. (1980): Geological Map of Saskatchewan, Provisional Edition, Saskatchewan Energy and Mines, Report 225 (1:1,000,000 scale map with marginal notes).



ARSENIC (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



Elevation in feet above mean sea level
 Mean magnetic declination 1985, 17°29' East, decreasing 20.4' annually. Readings vary from 15°38' East in the SE corner to 20°20' 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