

ENVIRONMENT CATEGORY	GEOMORPHIC MODIFIER
Organic	c concealed
Glaciolacustrine	w weathered
Glaciolacustrine	e eroded
Glaciolacustrine	g gullied
Glaciolacustrine	co collapsed
Moraine	p plain
Rock	v veneer
Rock	r ridged
Rock	h hummocky
Rock	dr drumlinoid
Rock	t terrace

Composites: where two or more classes of terrain are interspersed in a mosaic or repeating pattern the proportion of each component in the combination is given in a semi-position designation set off by slashes denoting arbitrary percentage limits. For example, 'Mw/D/R' means that at least 60% of the area is underlain by this fill, with up to 40% boggy areas and less than 15% scattered rock outcrops. '50g/R' indicates more than 50% bedrock concealed by vegetation and less than 15% outcrop. 'M/R' indicates at least 60% moraine veneer and up to 40% bedrock exposures.

GLACIAL FEATURE SYMBOLS

Boundary of overburden unit

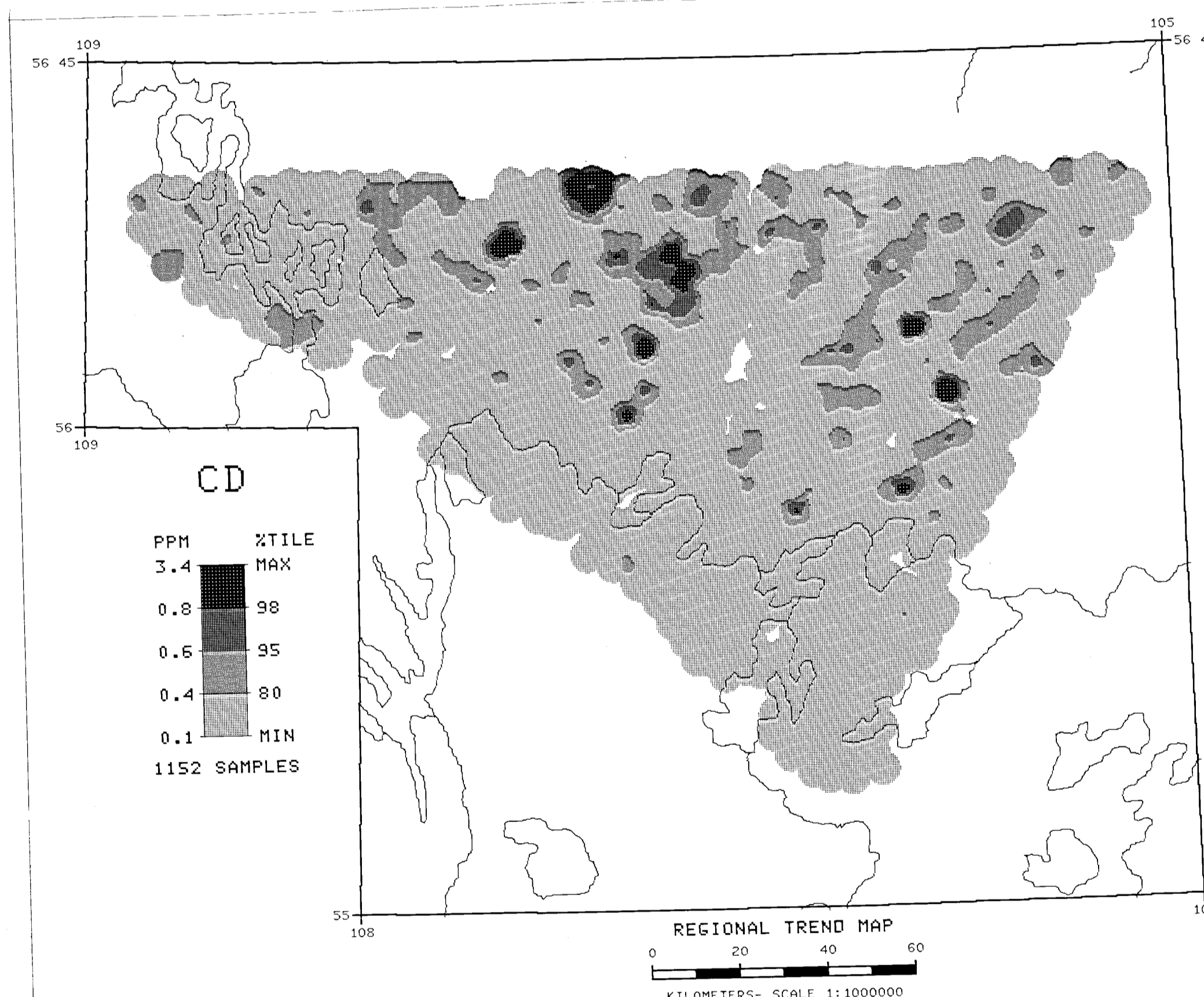
Drumlin, drumlinoid ridge, fluting

Striation, groove (ice direction inferred)

End moraine

Esker, crevasse filling

Surficial geology modified from:
Schreiner, B.T., 1964. 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 enriched, or large metallic deposits undergoing weathering would be expected to produce identifiable anomalies.

Geological Survey of Canada
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CONTRACTORS

Sample collection by MPH Consulting Ltd., Toronto
Sample preparation by Golder 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.

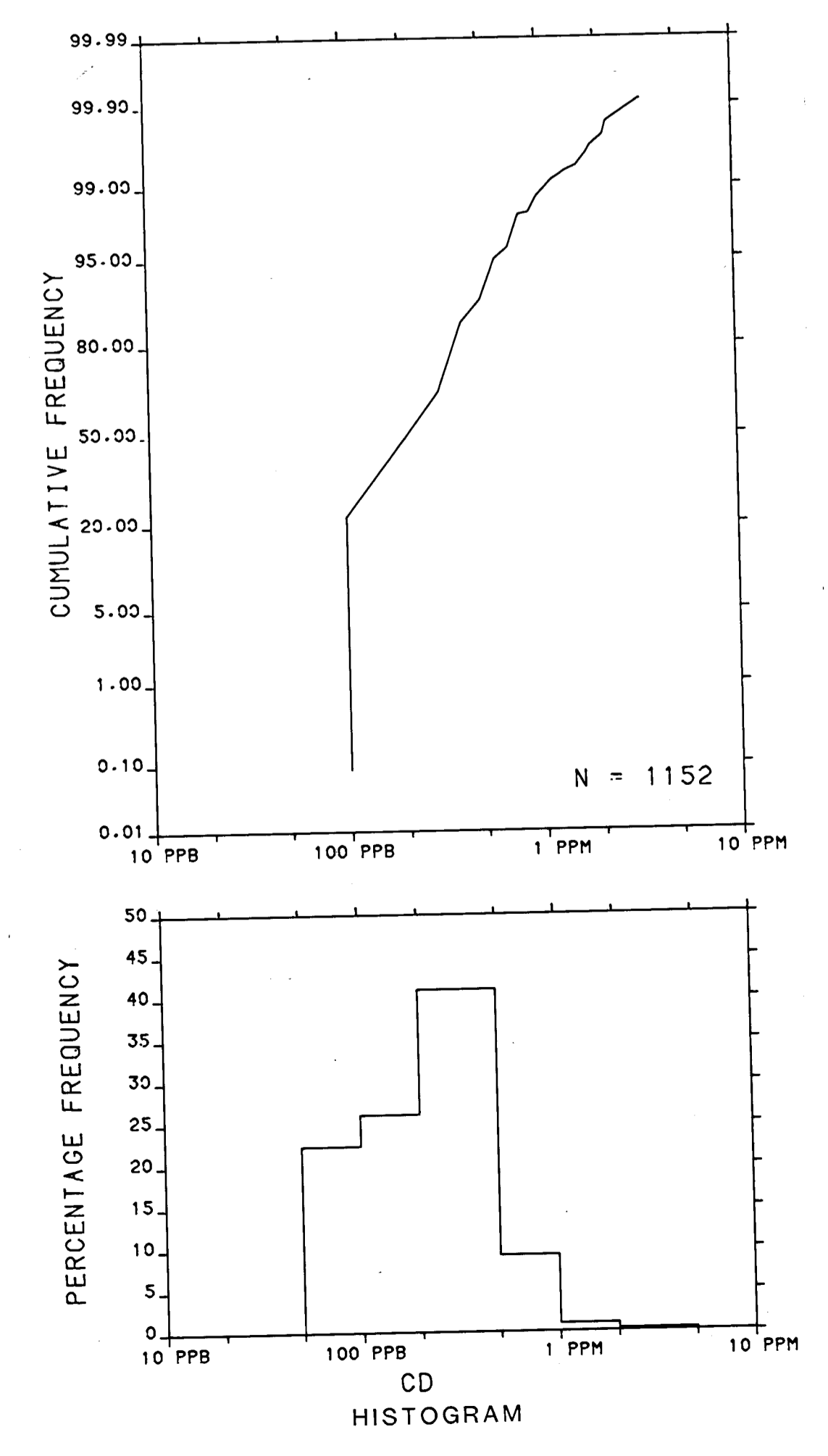
Copies of map material and listings of field observations and analytical data, from which the material was prepared, may be available at users expense by application to:

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

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GENEOZIC	QUATERNARY
21 (RMR 44)*	Recessional moraine; unconsolidated sand and gravel of the Cree Lake moraine.

MESOZOIC	LOWER CRETACEOUS
20 (SNDS 36)	MANVILLE GROUP: Sandstone, variably argillaceous and carbonaceous quartzose sands, local mudstone and lignitic interbeds.

PALEOZOIC	MIDDLE DEVONIAN
19 (DLMT 18)	WINNIPEGOSIS FORMATION: Dolomite, dolomitized limestone, calcareous shale.
18 (LMSN 18)	MEADOW LAKE FORMATION (Upper member): Limestone, dolomite, mudstone, argillaceous dolomite, dolomitic limestone and dolomitic pyritic mudstone.
17 (AGCS 18)	MEADOW LAKE FORMATION (Lower member): Argillaceous dolomite with local interbeds of mudstone, sandstone and limestone, minor gypsum bands.

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

PRECAMBRIAN	MAINLY APHERIAN (MUSONIAN)
15 (UMFC 04)	Ultramafic and mafic rocks, includes gabbro, diorite, pyroxenite, quartz diorite and basalt, locally amphibolitized.
14 (IRFM 04)	Banded iron formation, alternating bands of meta-quartzite common.
13 (CLCC 04)	Calc-silicate and marble, local interbedded meta-arkose and dolomitic marble.
12 (PRGS 04)	Psammite gneiss and meta-arkose gneiss, with interbedded calc-silicate rock and pelitic gneiss.
11 (PCSC 04)	Pelitic to psammopelitic gneiss and schist, generally contain more than 10 percent mafic minerals, biotite ± garnet ± cordierite ± sillimanite ± graphite ± tourmaline.
10 (MRZ 04)	Metagabbro and minor orthoquartzite with a persistent basal polyimetic conglomerate.
9 (BGKS 04)	Biotite gneiss of possible volcano-sedimentary origin, conformable granitoid sheets may comprise up to 50 percent of unit.
8 (MFRK 04)	Mixed metasedimentary and metavolcanic rocks, probably derived from mudstone, sandstone, arkose, conglomerate, acid to basic volcanic and volcanoclastic rocks.
7 (BGOR 04)	NATHAN BATHOLITH: Biotite-hornblende granodiorite.
6 (BMGT 04)	NATHAN BATHOLITH: Biotite monzogranite-granodiorite.
5 (SGRT 04)	Syngranite and monzogranite, generally leucocratic.
4 (MNGT 04)	Migmatite and mylonite zones; complexes of mixed metasediments and granitic rocks, and strongly fibrous or banded Nathan Batholith rocks.

MAINLY ARCHEAN, DEFORMED WITH APHERIAN ROCKS DURING MUSONIAN OROGENY	
3 (APBB 03)	Amphibolite and hornblende bearing gneisses, meta-gabbro and metatuffite.
2 (GRNG 03)	Granitoid gneiss, syenogranitic to granodioritic in composition, may include alkalic 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

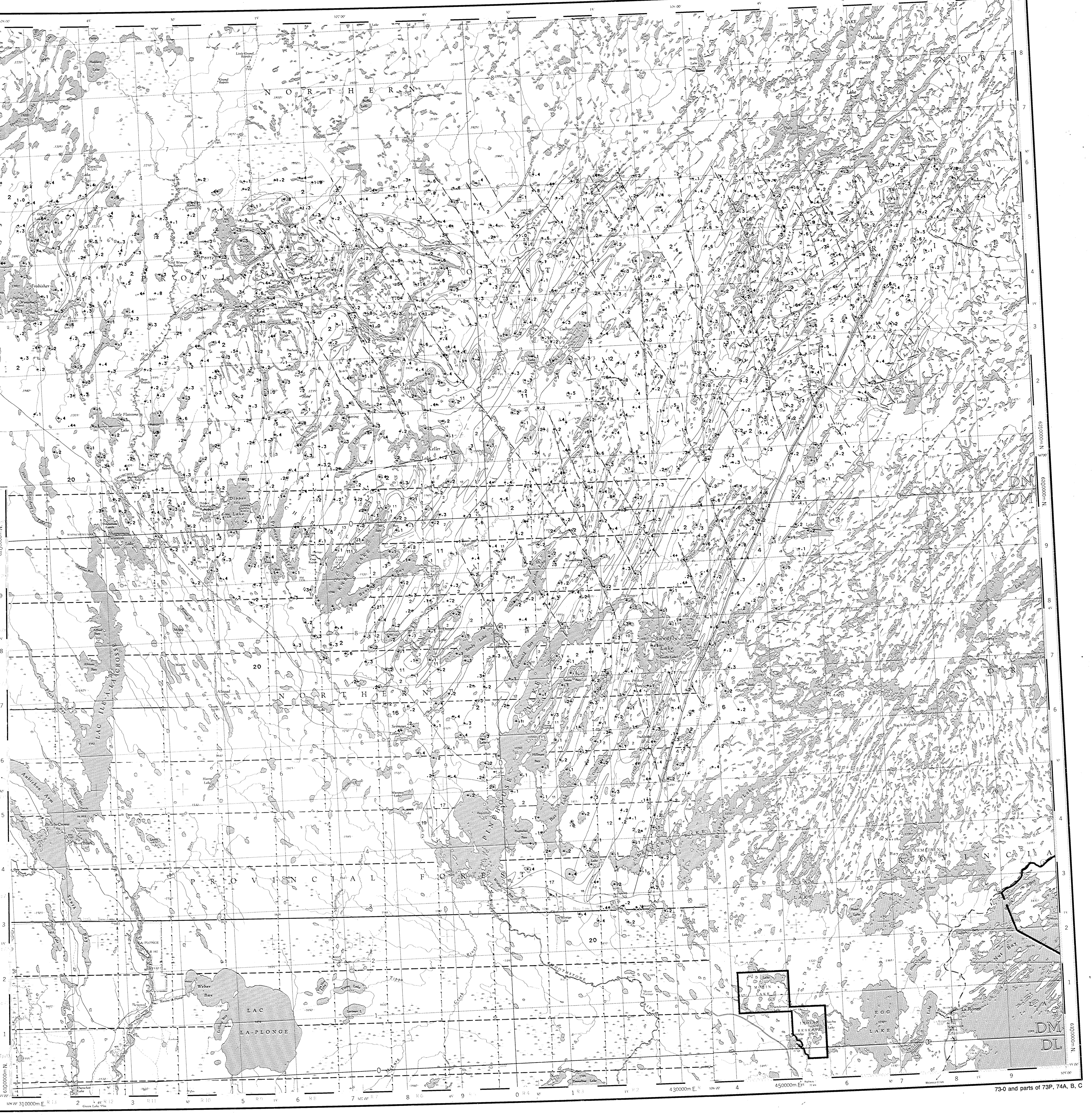
Geological base and legend are derived from: Thomas, H.W. and Stille, W.L. (1965): Compilation Bedrock Geology, Ile-la-Croix, NTS area 730, Saskatchewan Energy and Mines, Report 245 (1:250,000 scale map with marginal notes).

Thomas, H.W. and Stille, W.L. (1966): Compilation Bedrock Geology, Lac La Ronge, NTS area 737/732; Saskatchewan Energy and Mines, Report 228 (1:250,000 scale map with marginal notes).

Ray, G.S. (1983): Compilation Bedrock Geology, Foster Lake, NTS Area 74A, Saskatchewan Energy and Mines, Report 228 (1:250,000 scale map with marginal notes).

Thomas, H.W. (1968): Preliminary Compilation Bedrock Geology, Medatuk, NTS Area 748 (1:250,000 scale map with marginal notes).

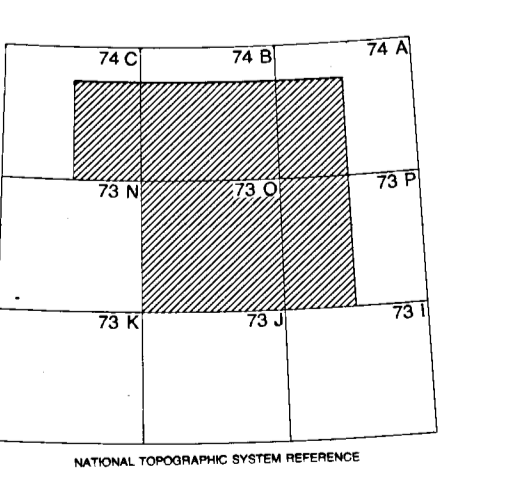
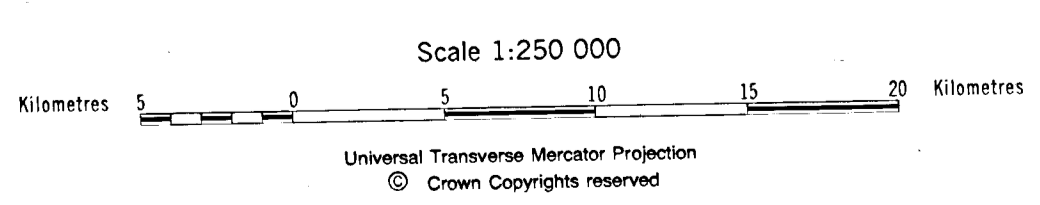
MacDonald, E. and Broughton, L. (1960) Geological Map of Saskatchewan Provisional Edition, North Half, Saskatchewan Mineral Resources, (1:1,000,000 scale map with marginal notes).



CADMIUM (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° 02' 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.

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