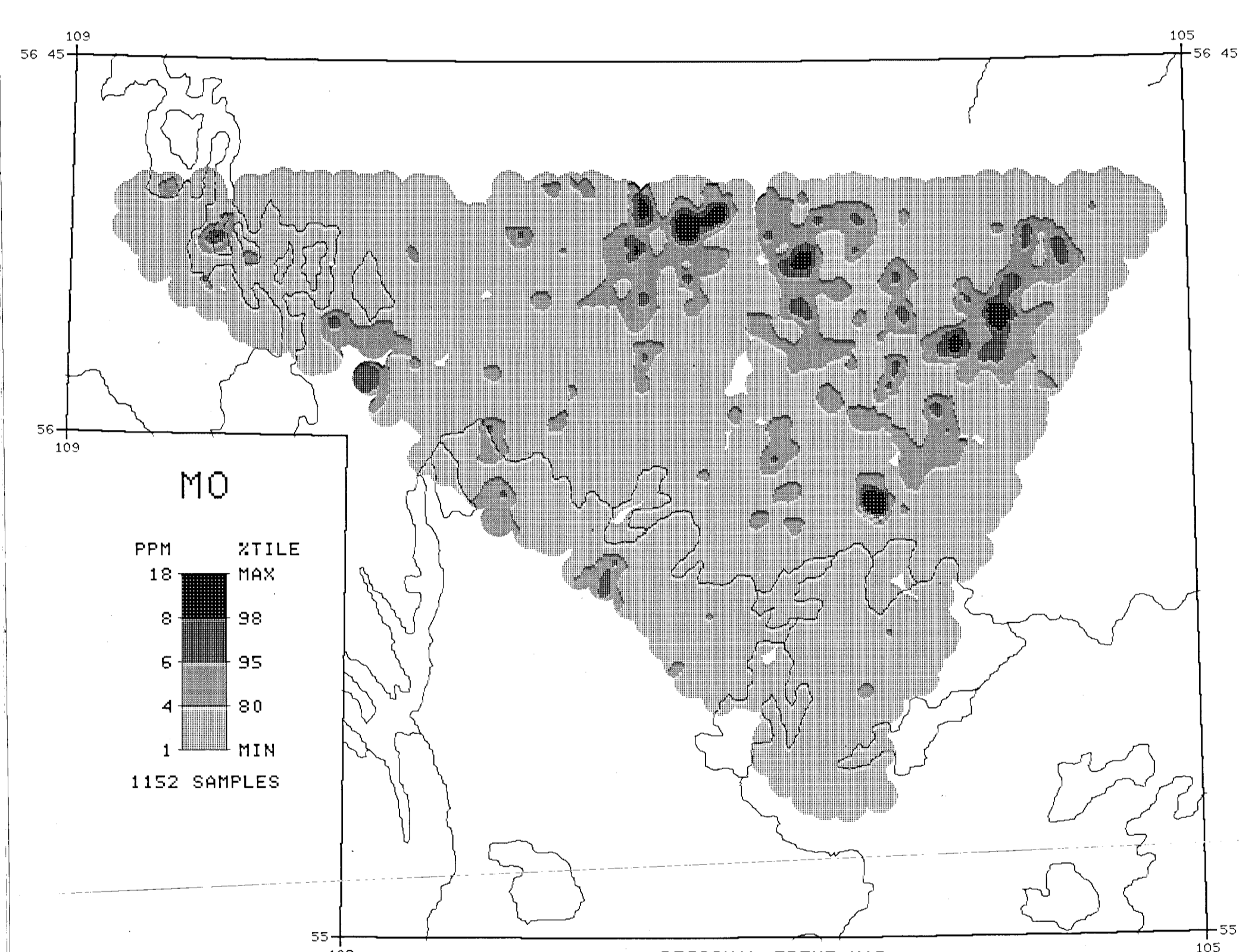


ENVIRONMENT CATEGORY	GEOGRAPHIC MODIFIER
Organic	c concealed
Glacio-lacustrine	w weathered
Glaciofluvial	e eroded
Morainal	g gullied
Rock	l collapsed
Soilian	p plain
	r ridged
	v veneer
	h hummocky
	d drumlinoid
	t terrace

Complexes: where two or more classes of terrain are interspersed in a mosaic or repeating pattern the proportion of each component in the combination is given in a three-position designation set off by slashes denoting arbitrary percentage limits. For example: Mv/D/R 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. "/>

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.



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  
 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 Magneta Ltd., Rexdale, Ontario  
 Water chemical analyses by Barringer Magneta 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.  
 Box 225  
 Ottawa, Ontario  
 K1R 6G7

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

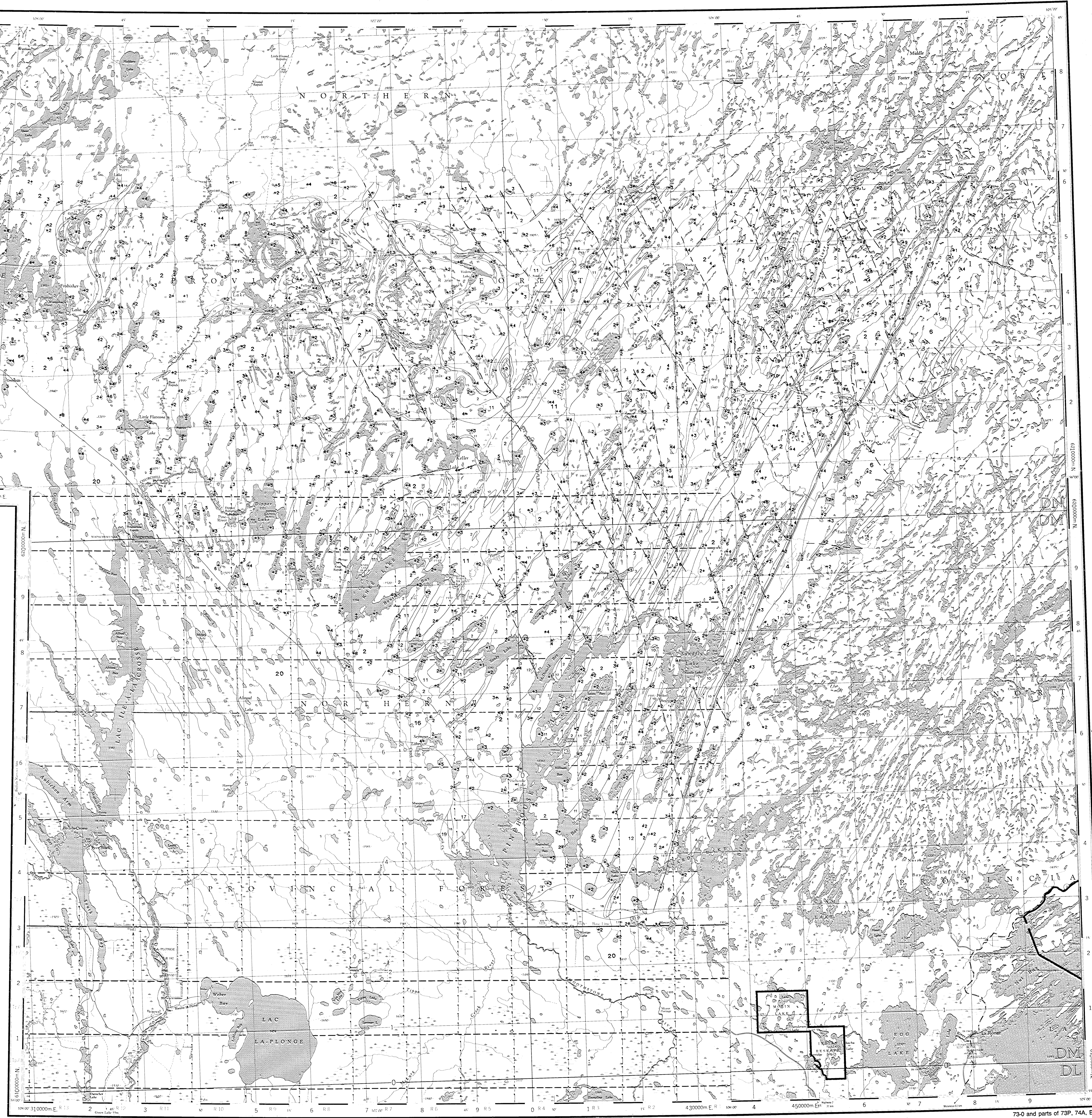
The Director  
 Computer Science Centre  
 Department of Energy, Mines and Resources  
 Ottawa, Ontario  
 K1A 0E4

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LEGEND

- CENOZOIC**  
**QUATERNARY**  
 (21) (RMOR 44) Recessional moraine: unconsolidated sand and gravel of the Cree Lake moraine.
- MESOZOIC**  
**LOWER CRETACEOUS**  
 (20) (SND3 36) MANNVILLE GROUP: Sandstone, variably argillaceous and carbonaceous quartzose sands, local mudstone and lignitic interbeds.
- PALEOZOIC**  
**MIDDLE DEVONIAN**  
 (19) (DUMT 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) (AGCD 18) MEADOW LAKE FORMATION (Lower member): Argillaceous dolomite with local interbeds of mudstone, sandstone and limestone, minor gypsum bands.
- CAMBRIAN**  
 (16) (SND5 12) DEANWOOD FORMATION: Quartz sandstone, unstratified polymictic conglomerate near base, minor sandy dolomite. Dolomite severely weathered, saproplitic Precambrian basement.
- PRECAMBRIAN**  
**MAINLY APHEBIAN (HUGONIAN)**  
 (15) (UMFC 04) Ultramafic and mafic rocks, includes gabbro, diorite, pyroxenite, quartz diorite and basalt, locally serpentinized.  
 (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) Psammitic gneiss and meta-arkose gneiss, with interbedded calc-silicate rock and pelitic gneiss.  
 (11) (PSCS 04) Pelitic to psammopelitic gneiss and schist, generally contain more than 10 percent mafic minerals, biotite + garnet + corundum + sillimanite + graphite + tourmaline.  
 (10) (MQRZ 04) Metaquartzite and minor orthoquartzite with a persistent basal polymictic conglomerate.  
 (9) (BGRS 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, arkose, conglomerate, acid to basic volcanic and volcaniclastic rocks.  
 (7) (BGRD 04) WATHAMAN BATHOLITH: Biotite-hornblende granodiorite.  
 (6) (BNMT 04) WATHAMAN BATHOLITH: Biotite monzogranite-granodiorite.  
 (5) (SANT 04) Syenogranite and monzogranite, generally leucocratic.  
 (4) (MGRM 04) Migmatite and mylonite zones; complexes of mixed metasedimentary and granitic rocks, and strongly foliated or augen Wathaman Batholith rocks.
- MAINLY ARCHEAN, DEFORMED WITH APHEBIAN ROCKS DURING HUGONIAN OROGENY**  
 (3) (APRS 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, M.W. and Simon, M.L. (1985): Compilation Bedrock Geology, 116a-lac-Cresse, NTS area 730; Saskatchewan Energy and Mines, Report 245 (1:250,000 scale map with marginal notes).  
 Lowry, J.P. and Simon, M.L. (1985): Compilation Bedrock Geology, Lac La Poudre, NTS area 737/1; Saskatchewan Energy and Mines, Report 225 (1:250,000 scale map with marginal notes).  
 Ray, G.E. (1983): Compilation Bedrock Geology, Foster Lake, NTS Area 744; Saskatchewan Energy and Mines, Report 228 (1:250,000 scale map with marginal notes).  
 Thomas, M.W. (1984): Preliminary Compilation Bedrock Geology, Mudjatik, NTS Area 746 (1:250,000 scale map with marginal notes).  
 MacDonald, R. and Broughton, P. (1980) Geological Map of Saskatchewan Provisional Edition, North Half, Saskatchewan Mineral Resources, (1:1,000,000 scale map with marginal notes).



**MOLYBDENUM (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  
 Kilometers

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

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2 of 20  
 MOLYBDENUM (ppm)  
 GSC OPEN FILE 1213  
 NORTH-CENTRAL SASKATCHEWAN, 1985