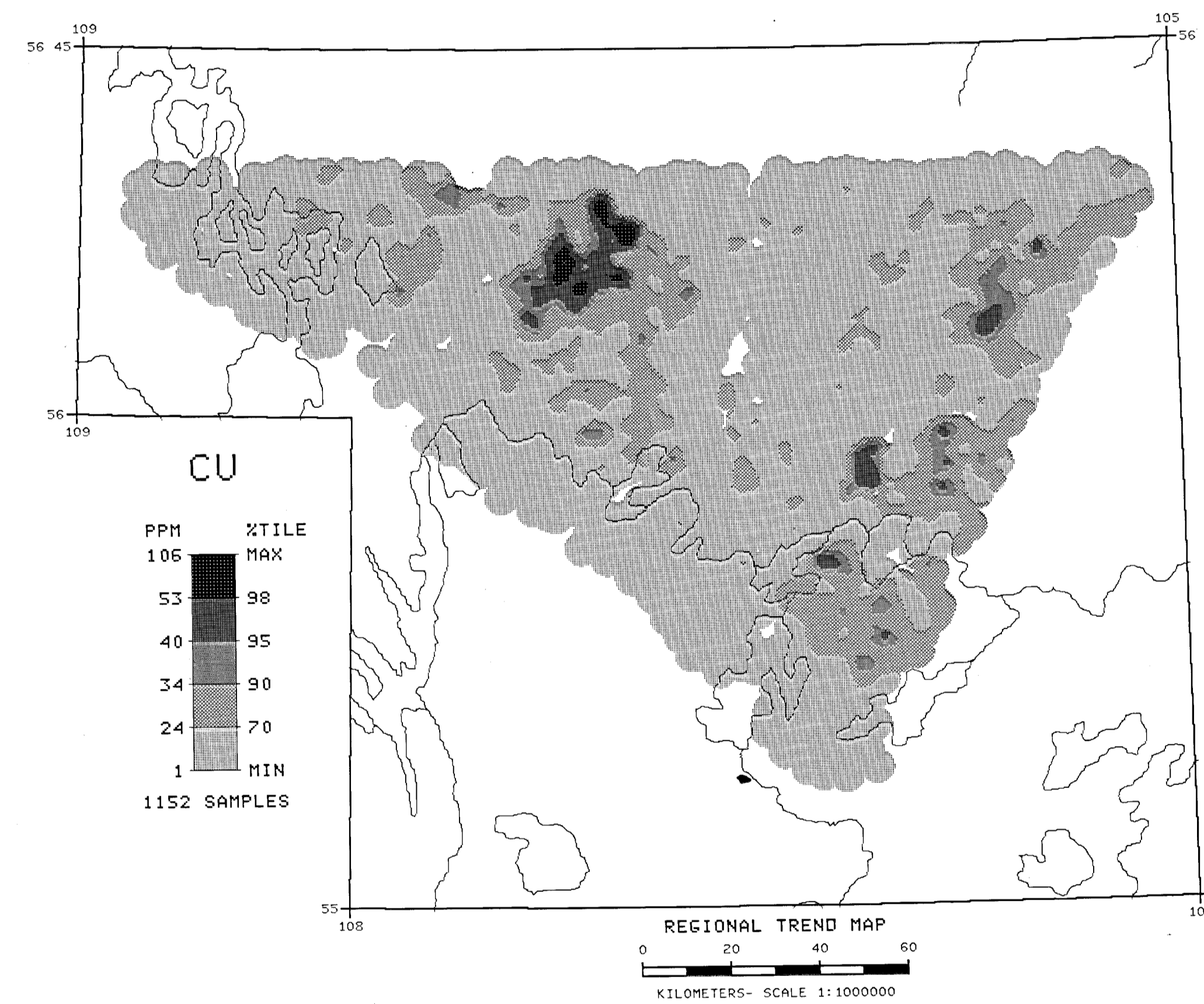


ENVIRONMENT CATEGORY	GEOGRAPHIC MODIFIER
Organic	c concealed
Glaciolacustrine	w weathered
Glacioluvial	e eroded
Morainal	g gullied
Rock	o collapsed
Colluvial	p plain
	v veneer
	r ridged
	h hummocky
	dr drumlined
	t terrace

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, Wv/0/0 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/0/0 indicates more than 60% bedrock concealed by vegetation and less than 10% outcrop. Wv/R 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, 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  
 and  
 Department of Mineral Resources  
 Saskatchewan Geological Survey

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

Sediment chemical analyses by Barringer Magenta Ltd., Rexdale, Ontario  
 Water chemical analyses by Barringer Magenta Laboratories (Albera) 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.

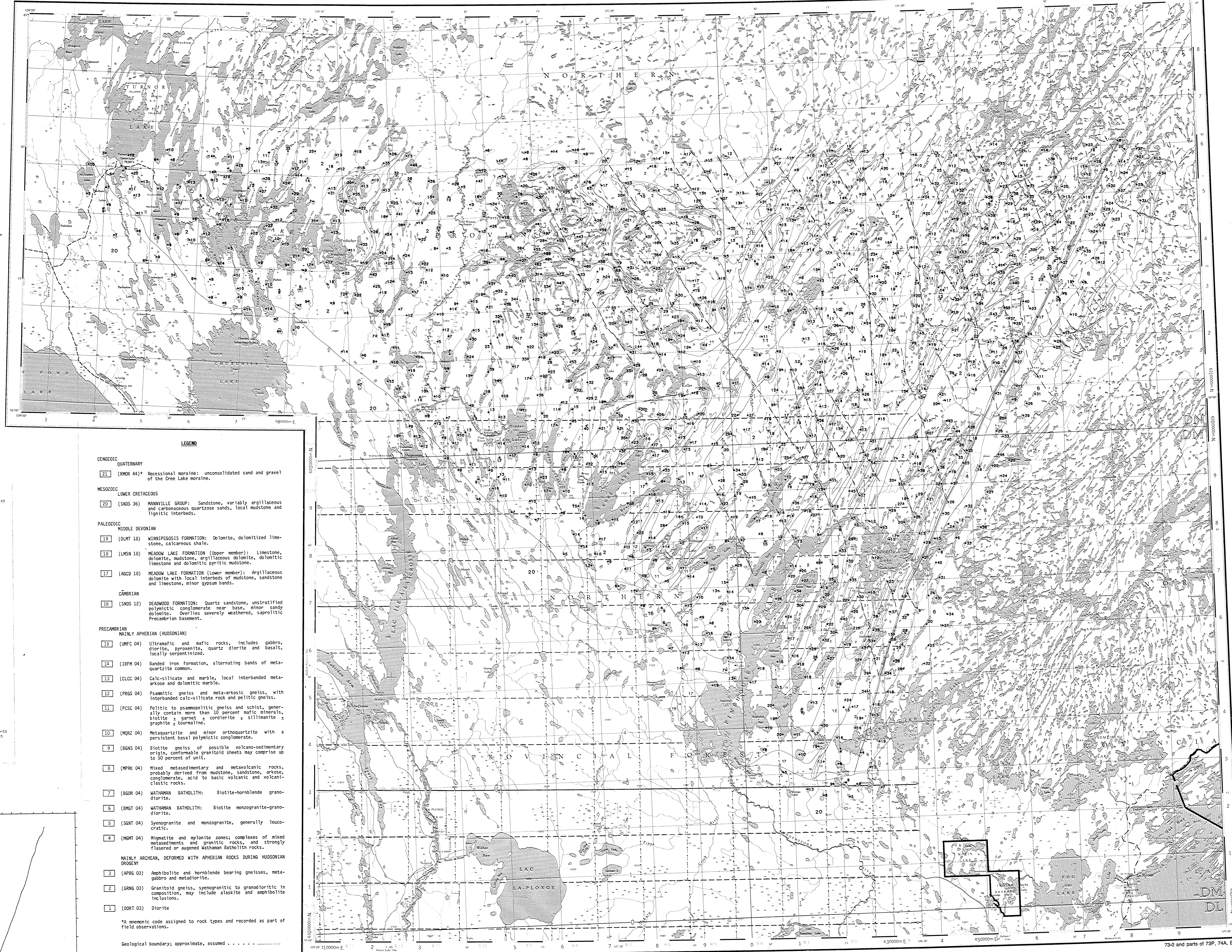
Copies of map material and listings of field observations and analytical data, from which the material was prepared, may be available at user expense by application to:

K.G. Campbell Corporation  
 880 Wellington St.  
 Bay 238  
 Ottawa, Ontario  
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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

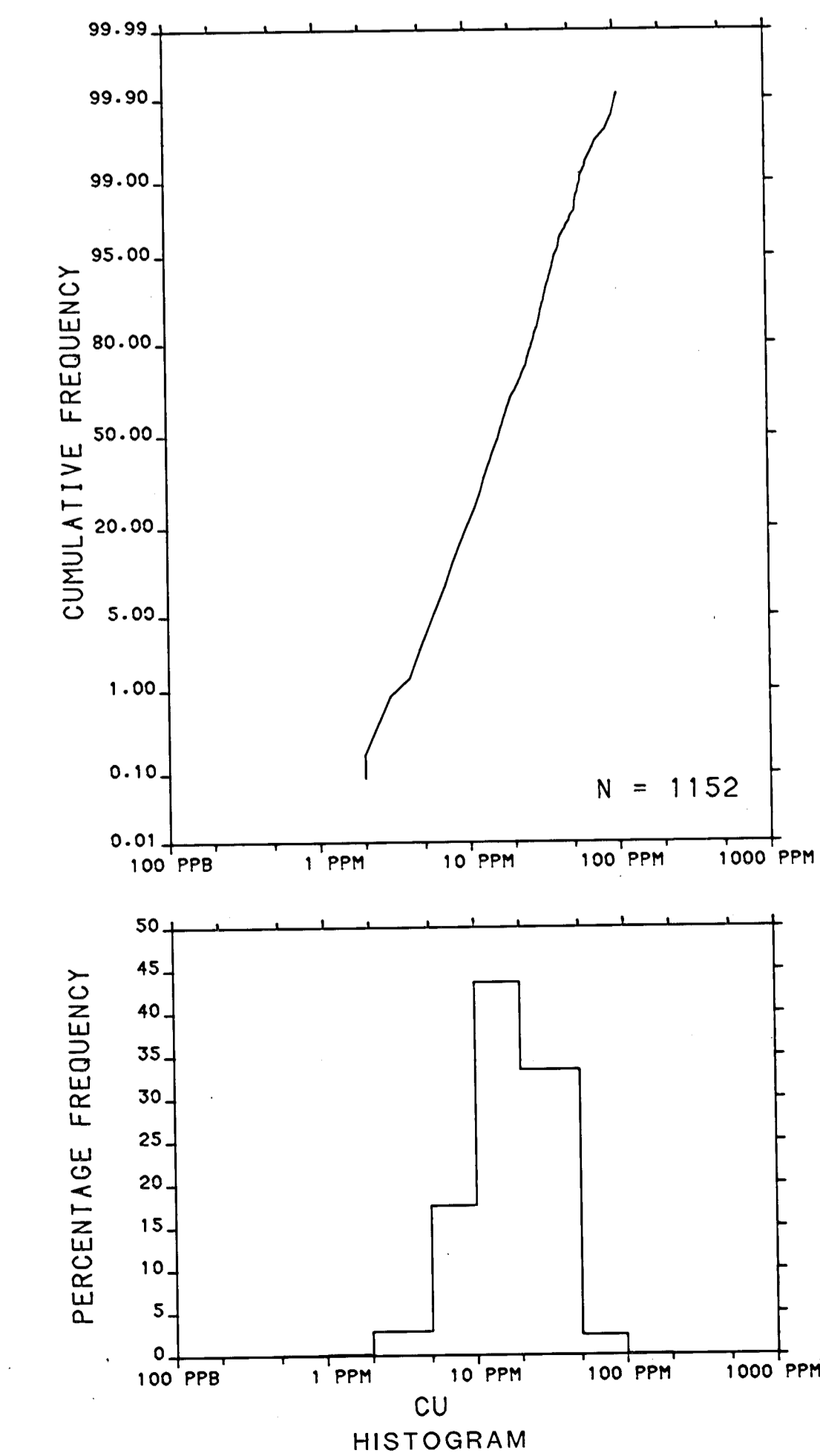
Contribution to Canada-Saskatchewan Mineral Development Agreement 1984-89, a subsidiary agreement under the Economic and Regional Development Agreement. Project funded by the Geological Survey of Canada.



LEGEND	
<b>CENOZOIC</b>	
<b>QUATERNARY</b>	
21 (BMR 04)	Recessional moraine: unconsolidated sand and gravel of the Cree Lake moraine.
<b>MESOZOIC</b>	
<b>LOWER CRETACEOUS</b>	
20 (SNS 36)	MANVILLE GROUP: Sandstone, variably argillaceous and carbonaceous quartzose sands, local mudstone and lignitic interbeds.
<b>PALEOZOIC</b>	
<b>MIDDLE DEVONIAN</b>	
19 (DMT 18)	WINNIPEGOSIS 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 (AGC 18)	MEADOW LAKE FORMATION (Lower member): Argillaceous dolomite with local interbeds of mudstone, sandstone and limestone, minor gypsum bands.
<b>CAMBRIAN</b>	
16 (SNS 12)	DEADWOOD FORMATION: Quartz sandstone, unstratified polyimic conglomerate near base, minor sandy dolomite. Overlies severely weathered, saprolitic Precambrian basement.
<b>PRECAMBRIAN</b>	
<b>MAINLY APHEBIAN (HUDSONIAN)</b>	
15 (UMF 04)	Ultramafic and mafic rocks, includes gabbro, diorite, pyroxenite, quartz diorite and basalt, locally serpentinitized.
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 (PRSS 04)	Psammite gneiss and meta-arkose gneiss, with interbedded calc-silicate rock and pelitic gneiss.
11 (PSC 04)	Pelitic to psammolitic gneiss and schist, generally contain more than 10 percent mafic minerals, biotite + garnet + cordierite + sillimanite + graphite + corundum.
10 (MQR 04)	Metagranite and minor orthoquartzite with a persistent basal polyimic conglomerate.
9 (BGS 04)	Siltstone gneiss of possible volcano-sedimentary origin, conformable granitoid sheets may comprise up to 50 percent of unit.
8 (MPK 04)	Mixed metasedimentary and metavolcanic rocks, probably derived from mudstone, sandstone, arkose, conglomerate, acid to basic volcanic and volcaniclastic rocks.
7 (BGR 04)	WATHAMAN BATHOLITH: Biotite-hornblende granodiorite.
6 (BMT 04)	WATHAMAN BATHOLITH: Biotite monzonite-granodiorite.
5 (SMT 04)	Syenogranite and monzonite, generally leucocratic.
4 (MGT 04)	Migmatite and gneiss zones; complexes of mixed mesodiments and granitic rocks, and strongly foliated or augen Wathaman batholith rocks.
<b>MAINLY ARCHEAN, DEFORMED WITH APHEBIAN ROCKS DURING HUDSONIAN OROGENY</b>	
3 (APG 03)	Amphibolite and hornblende bearing gneisses, meta-gabbro and metaforite.
2 (GRG 03)	Granitoid gneiss, syenogranitic to granodioritic in composition, may include alkali and amphibolite inclusions.
1 (DRT 03)	Diorite

Geological base and legend are derived from: Thomas, M.W. and Simmon, W.L. (1950): Compilation Bedrock Geology, 11e-a-1a-Drossin, NTS Area 730; Saskatchewan Energy and Mines, Report 246 (1:250,000 scale map with marginal notes).  
 Lewis, J.F. and Simmon, W.L. (1955): Compilation Bedrock Geology, Lac La Ronge, NTS Area 739/731; Saskatchewan Energy and Mines, Report 255 (1:250,000 scale map with marginal notes).  
 Day, G.L. (1960): 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. (1964): Preliminary Compilation Bedrock Geology, Madelia, NTS Area 748 (1:250,000 scale map with marginal notes).  
 Macdonald, R. and Brogton, P. (1980) Geological Map of Saskatchewan Provisional Edition, North West, Saskatchewan Mineral Resources, (1:1,000,000 scale map with marginal notes).

\*A mnemonic code assigned to rock types and recorded as part of field observations.  
 Geological boundary; approximate, assumed .....  
 Fault .....  
 No analytical result .....



COPPER (ppm)  
 GSC OPEN FILE 1213  
 REGIONAL GEOCHEMICAL RECONNAISSANCE MAP 73-1985  
 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°30' 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 Surveys and Mapping Branch, Department of Energy, Mines and Resources in 1974, 1977, 1982

This map has been prepared from a revised version of the original map. Reproduction for dissemination does not affect the original.