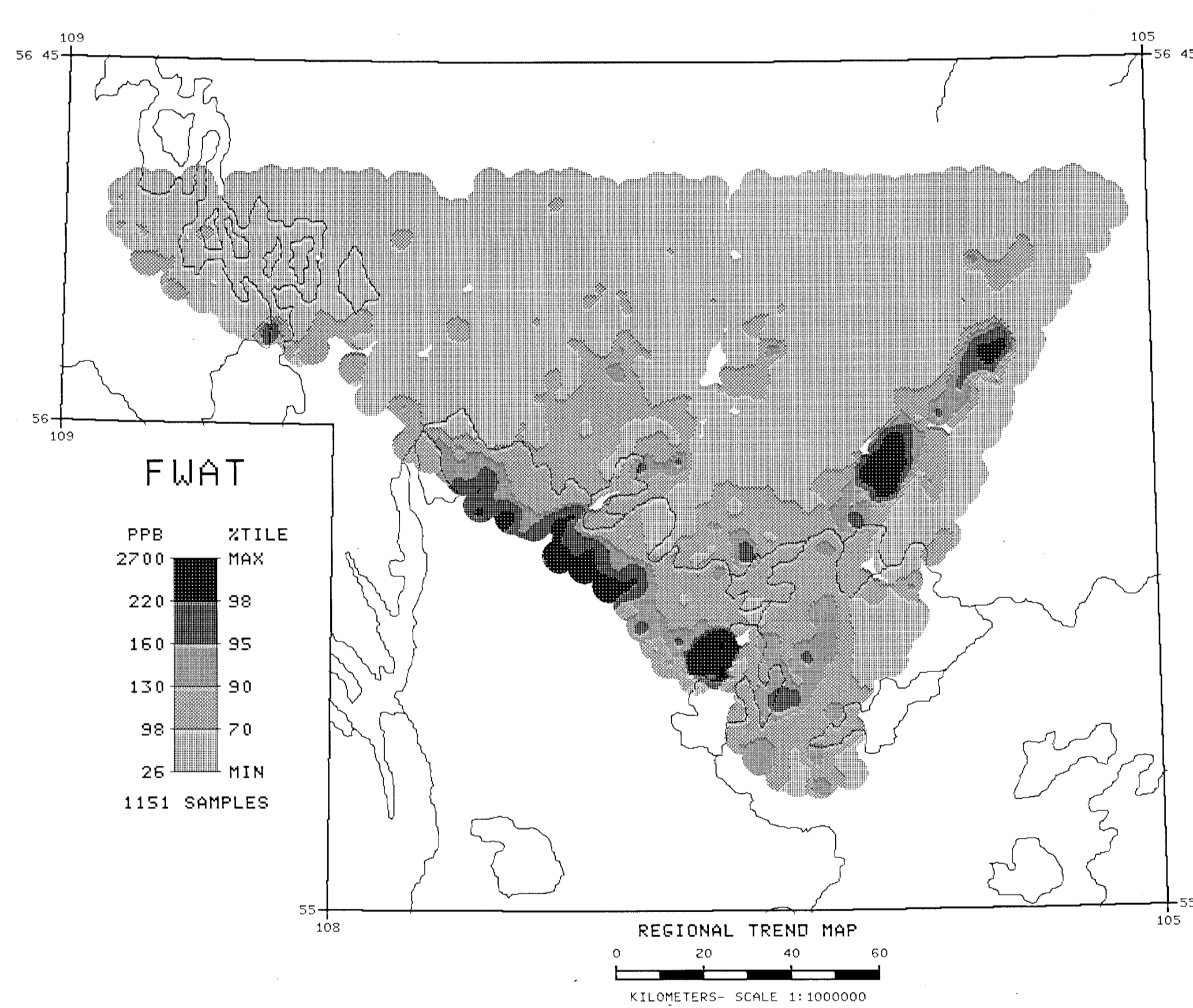
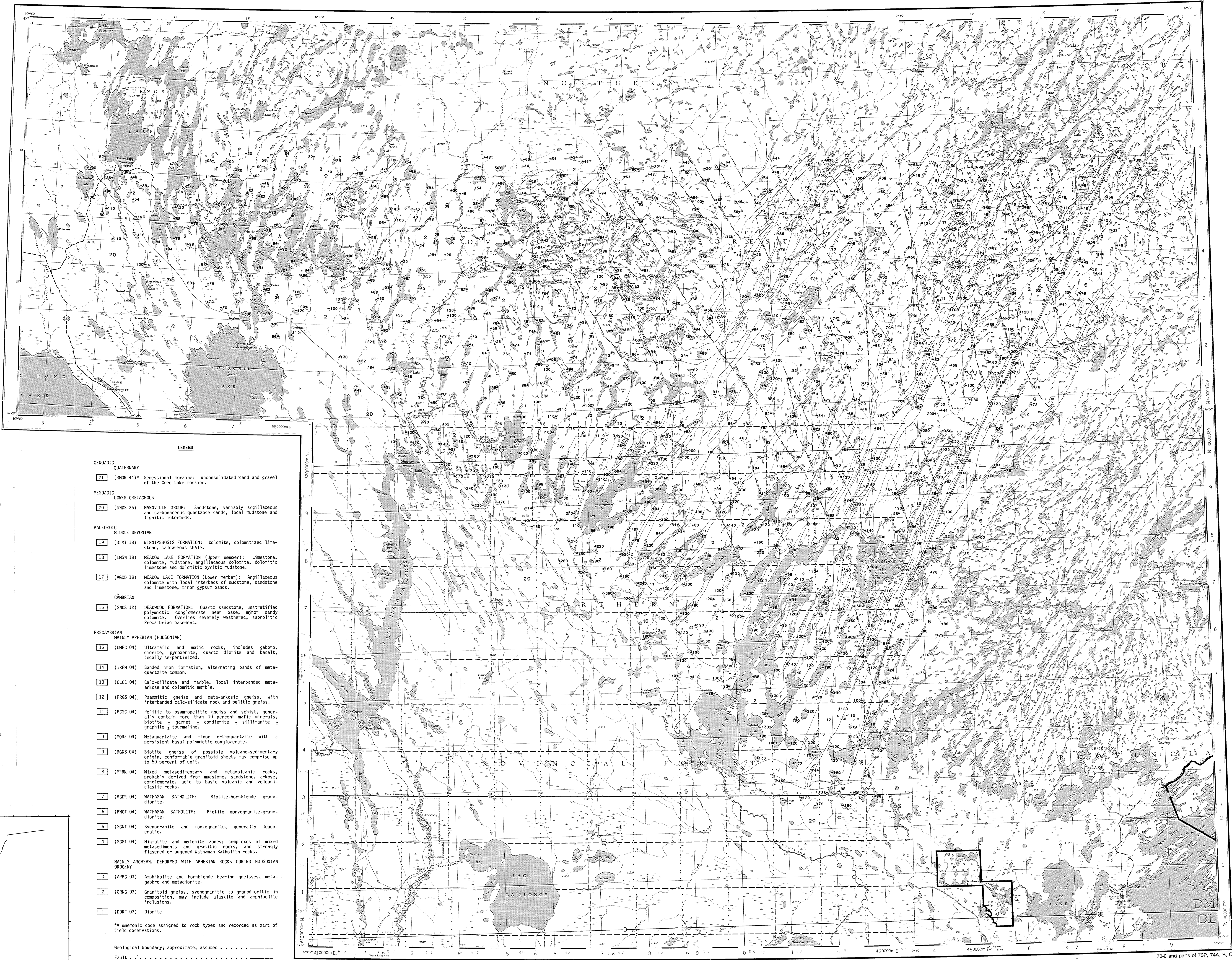


ENVIRONMENT CATEGORY	GEOGRAPHIC MODIFIER
Organic	c concealed
Glaciolacustrine	w weathered
Glacioluvial	e eroded
Morainal	t collapsed
Rock	p plain
Colluvial	v veneer
Colluvial	r ridged
Colluvial	f hummocky
Colluvial	dr drumlinoid
Colluvial	t terrace

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 slanted dividing arbitrary percentage limits. For example, W/W/R means that at least 60% of the area is underlain by thin till, with up to 40% boggy areas, and less than 1% scattered rock outcrops. W/R/A indicates more than 60% bedrock concealed by vegetation and less than 1% outcrop. W/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:
 Sawchenko, A., 1984. Quaternary Geology of the Precambrian Shield, Map 221A (1:1,000,000 scale), in Economic 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 MPR 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 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
 800 Wellington St.
 Bay 236
 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
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Saskatchewan Energy and Mines
 Energy Mines and Resources Canada

LEGEND

CENOZOIC
QUATERNARY
 21 (QMR 44)* Recessional moraine: unconsolidated sand and gravel of the One Lake moraine.

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

PALEOZOIC
MIDDLE DEVONIAN
 19 (DUMT 18) WEMIPEROSIS FORMATION: Dolomite, dolomitized limestone, calcareous shale.
 18 (LMSN 18) WEGON LAKE FORMATION (upper member): Limestone, dolomite, mudstone, argillaceous dolomite, dolomitic limestone and dolomitic pyritic mudstone.
 17 (AGGD 18) WEGON LAKE FORMATION (lower member): Argillaceous dolomite with local interbeds of mudstone, sandstone and limestone, minor gypsum bands.

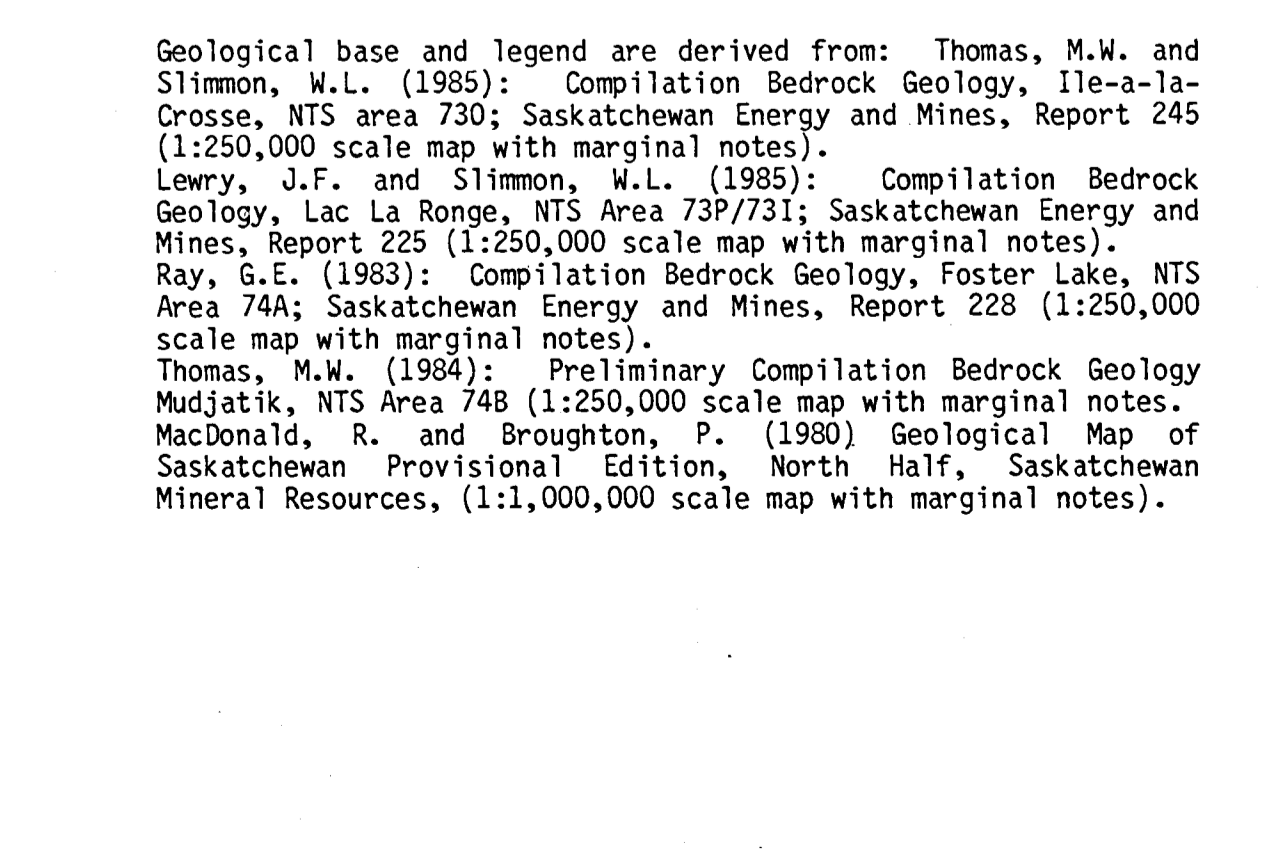
CAMBRIAN
 16 (SNDG 12) DEADWOOD FORMATION: Quartz sandstone, unstratified polymictic conglomerate; may have minor sandy dolomite. Overlies severely weathered, saprolitic Precambrian basement.

PRECAMBRIAN
MILNE APHESIAN (Hudsonian)
 15 (MPC 04) Ultramafic and mafic rocks, includes gabbro, diorite, pyroxenite, quartz diorite and basalt, locally serpentinitized.
 14 (JAFW 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 (PPSC 04) Pelitic to psammopelitic gneiss and schist, generally contain more than 10 percent mafic minerals, biotite, garnet, cordierite ± sillimanite ± graphite ± tourmaline.
 10 (MPC 04) Metaquartzite and minor orthoquartzite with a persistent basal polymictic conglomerate.
 9 (SNDG 04) Biotite gneiss of possible volcano-sedimentary origin, conformably granitic sheets may comprise up to 50 percent of unit.
 8 (MPC 04) Mixed metasedimentary and metavolcanic rocks, probably derived from mudstone, sandstone, arkose, conglomerate, acid to basic volcanic and volcaniclastic rocks.
 7 (SNDG 04) WATHAMAN BATHOLITH: Biotite-hornblende granodiorite.
 6 (EMGT 04) WATHAMAN BATHOLITH: Biotite monzogranite-granodiorite.
 5 (SMT 04) Syenogranite and monzogranite, generally leucocratic.
 4 (MONT 04) Migmatite and mylonite zones; complexes of mixed metasediments and granitic rocks, and strongly flattened or augen Wathaman batholith rocks.

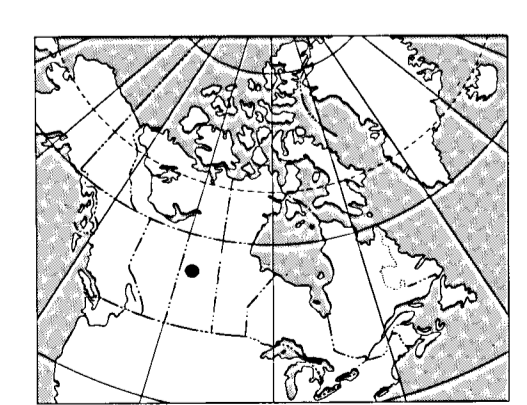
MILNE APHESIAN, DEFORMED WITH APHESIAN ROCKS DURING HUDSONIAN OROGENY
 3 (APBG 03) Amphibolite and hornblende bearing gneisses, meta-gabbro and metadiorite.
 2 (GRNG 03) Granitoid gneiss, syenogranitic to granodioritic in composition, may include alaskite and amphibolite inclusions.
 1 (DORT 03) Diorite

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

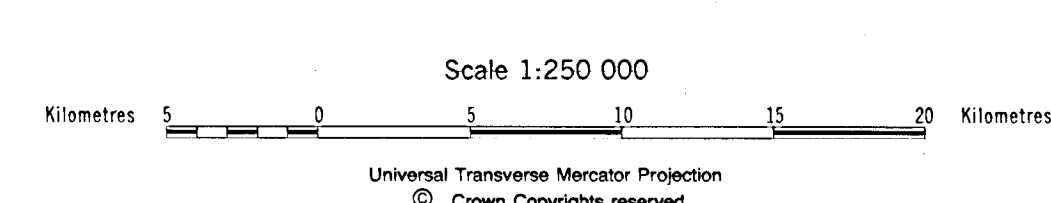
Geological boundary, approximate, assumed
 Fault
 No analytical result



Geological base and legend are derived from: Thomas, M.W. and Stimson, W.L. (1985): Compilation Bedrock Geology, 116-14-Crosson, NTS Area 7202, Saskatchewan Energy and Mines, Report 245 (1:250,000 scale map with marginal notes).
 Lavery, J.F. and Stimson, W.L. (1985): Compilation Bedrock Geology, Lac La Ronge, NTS Area 73P/731; Saskatchewan Energy and Mines, Report 235 (1:250,000 scale map with marginal notes).
 Ray, G.E. (1983): Compilation Bedrock Geology, Foster Lake, NTS Area 74A; Saskatchewan Energy and Mines, Report 228 (1:250,000 scale map with marginal notes).
 Thomas, M.W. (1984): Preliminary Compilation Bedrock Geology, NTS Area 74B (1:250,000 scale map with marginal notes).
 MacDonald, R. and Bruggerton, P. (1980) Geological Map of Saskatchewan, Provisional Edition, North, Half, Saskatchewan Mineral Resources, (1:1,000,000 scale map with marginal notes).



FLUORINE in water (ppb)
 GSC OPEN FILE 1213
 REGIONAL GEOCHEMICAL RECONNAISSANCE MAP 78-1985
 CANADA - SASKATCHEWAN
 MINERAL DEVELOPMENT AGREEMENT (1984-85)
 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

This map has been prepared from a
 photoreduced version of the original map
 (1:250,000 scale) and is not a reproduction of the
 original map.

14 of 20
FLUORINE in water (ppb)
 GSC OPEN FILE 1213
 NORTH-CENTRAL SASKATCHEWAN, 1985