

Geological Survey of Canada
Resource Geophysics and Geochemistry Division
and
Manitoba Department of Energy and Mines
Mineral Resources Division

CONTRACTORS

Sample collection by Marshall MacKlin Monaghan Ltd., Toronto
Sample preparation by Golder Associates, Ottawa

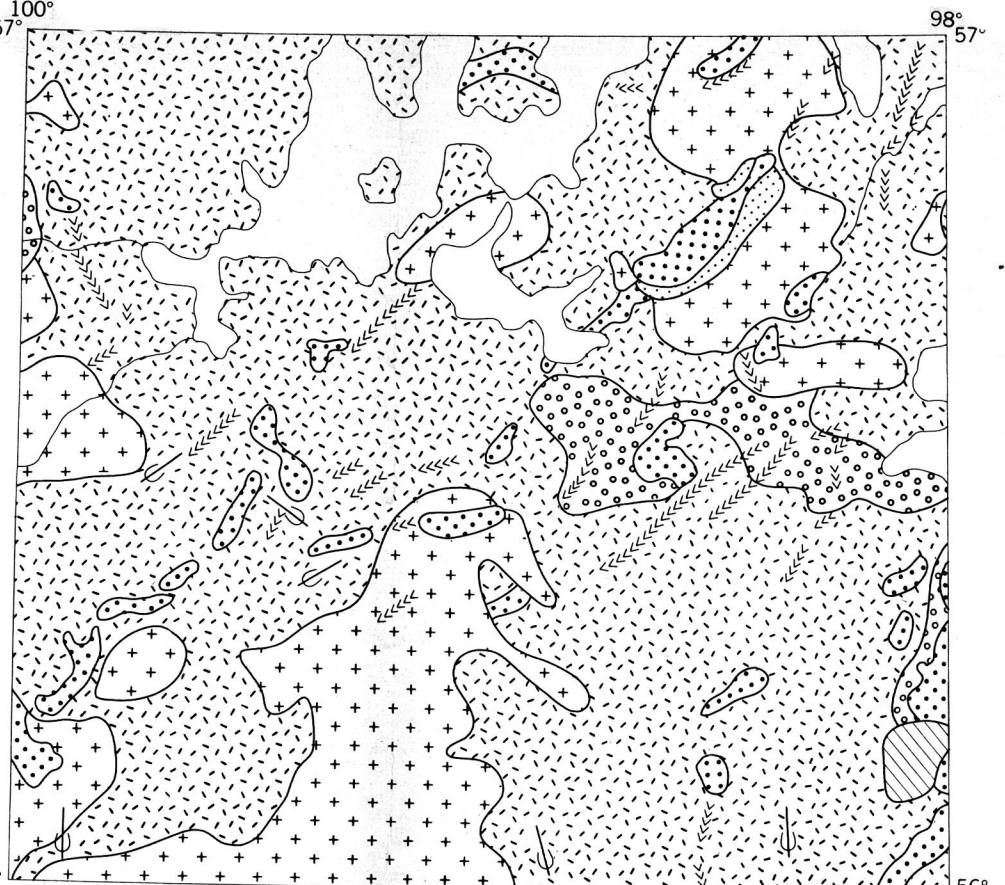
Sediment chemical analysis by Barringer Magenta Ltd., Rexdale, Ontario
Water chemical analyses by Barringer Magenta Laboratories (Alberta) Ltd., Calgary

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
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PROGLACIAL AND GLACIAL ENVIRONMENT

GLACIOLACUSTRINE DEPOSITS: beach and nearshore deposits:
sand and gravel 1-4 m thick, forming distinct ridges

GLACIOLACUSTRINE DEPOSITS: deep basin deposits:
silt, clay and sand, 1-30 m thick

GLACIOFLUVIAL DEPOSITS: gravel, sand and silt, 1-100 m thick

GLACIAL ENVIRONMENT

GLACIAL DEPOSITS: till: 1-5 m thick, derived primarily from
Precambrian bedrock

NONGLACIAL ENVIRONMENT

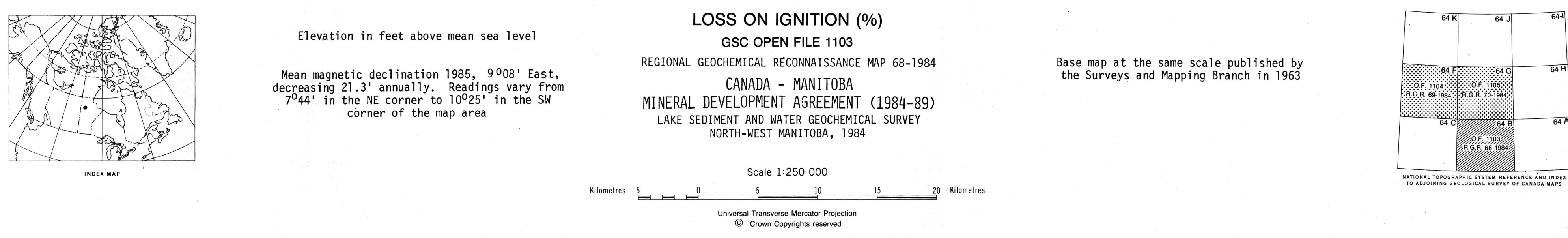
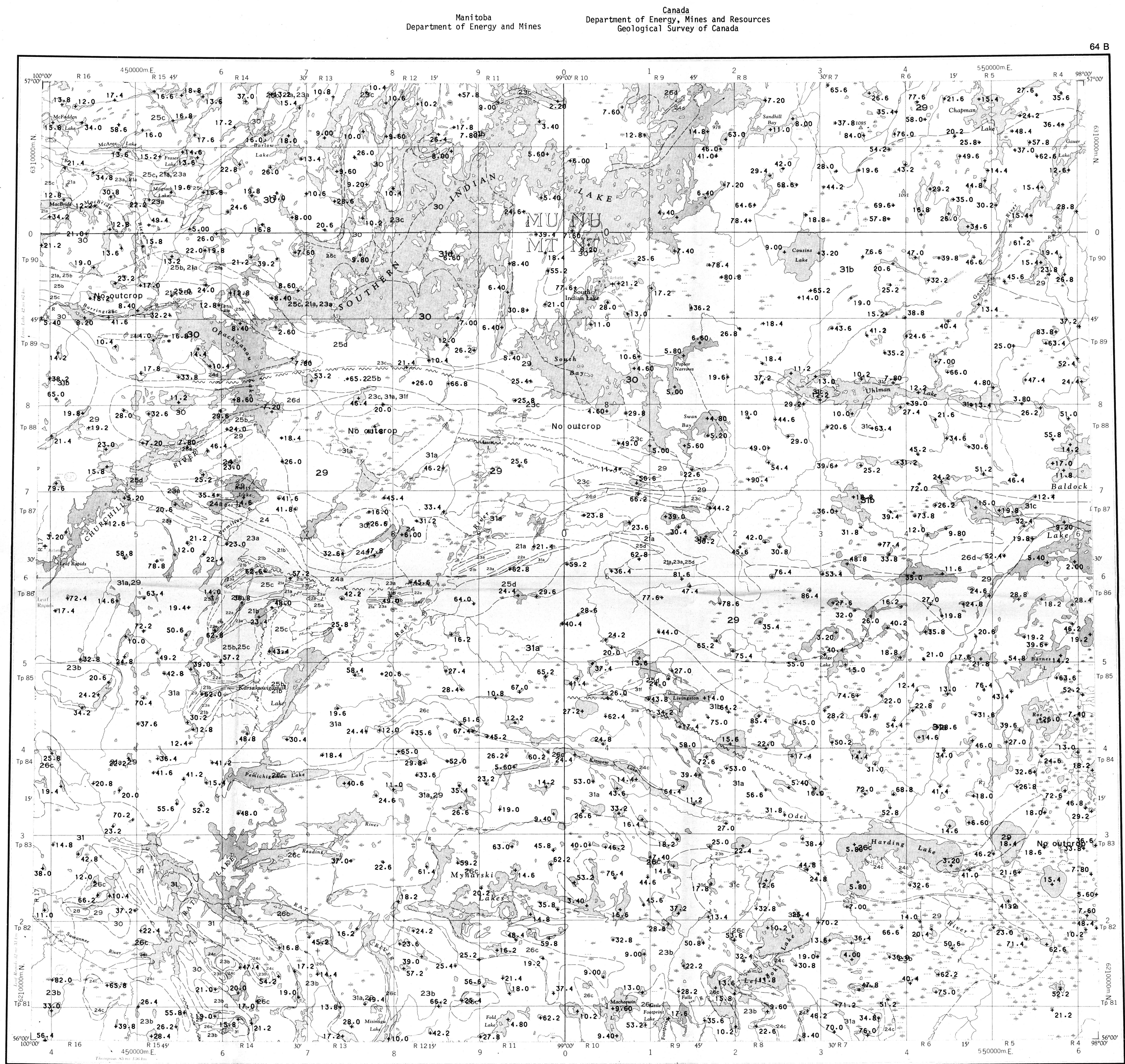
BEDROCK

ORGANIC DEPOSITS: marsh, fen, swamp and bog deposits up to
6 m thick, characterized by seasonal flooding

Striations

Flutings, drumlins, and drumlinoid ridges, oriented
parallel to ice flow direction

Esker (flow direction known or inferred)



LOSS ON IGNITION (%)
GSC OPEN FILE 1103
NORTH-WEST MANITOBA, 1984

LEGEND

Note: This legend is common for Regional Geochemical Reconnaissance
Map 68-1984, Open File 1103.

PROTEROZOIC (APHEBIAN)

31 GRANITIC INTRUSIVE ROCKS, POST-SICKLE (HUDSONIAN) (AHia to AHif)*
31a-granite (AHia) 31b-granodiorite, tonalite 31c-megacrystic granite; 31c-granite, grano-
diorite ± muscovite; 31d-leucogranite, tonalite; 31e-monzonite, syenite; 31f pegmatite

30 GRANITIC INTRUSIVE ROCKS, POST-SICKLE and remobilized PRE-SICKLE
30-granite, granodiorite (AHig)

29 INTERMEDIATE INTRUSIVE ROCKS, POST-SICKLE and remobilized PRE-SICKLE
29-tonalite, granodiorite, quartz diorite (AHit), 29a-pyroxene tonalite (AHip)

28 MAFIC INTRUSIVE ROCKS, POST-SICKLE
28-gabbro, minor ultramafic rock (AHir)

27 BLACK TROUT INTRUSIVE SUITE
27-quartz diorite, diorite (ATiq)

SICKLE GROUP **SICKLE METAMOR-
PHIC SUITE**

26 ARKOSIC METASEDIMENTARY ROCKS, DERIVED GNEISS
26a-conglomerate (ASac) 26b-arkosic sandstone (ASas)

26c-sandstone-derived
gneiss, migmatite (ASan)
on Burntwood River 26c

25 PRE-SICKLE INTRUSIVE ROCKS
25a-gabbro, norite, ultramafic rock (APir)
25b-tonalite, granodiorite, diorite (APit)
25c-granite (APig); 25d-gabbro-quartz diorite (APd)

26d-felsic, minor mafic gneiss
(age unknown) (AImf)

WASEKAN or SICKLE **GNEISSIC ROCKS OF PROBABLE
GROUP** **WASEKAN AGE**

24 AMPHIBOLITE, CALC-SILICATE ROCK, METASEDIMENTARY ROCKS
24a-greywacke (AGsm)
24a-conglomerate, greywacke (AGmc); 24b-felsic gneiss (AGmf)

WASEKAN GROUP **BURNWOOD RIVER
METAMORPHIC SUITE**

23 METASEDIMENTARY ROCKS
23a-greywacke, conglomerate,
mafic mudstone (AWsw)

24c-mafic gneiss, volcanic
greywacke, quartzite, marble
conformable (ABm)
23b-greywacke-derived
gneiss, migmatite (ABsw)

24d-amphibolite, tuff (AIma)
23c-greywacke-derived gneiss
and migmatite (AIsu)

22 FELSIC, INTERMEDIATE VOLCANICS
22a-dacite, rhyolite (AWvd)

21 MAFIC, INTERMEDIATE VOLCANICS
21a-basalt, andesite (AWva)
21b-basalt (AWvb)

Geological boundary (approximate, inferred).....
Fault approximate or inferred.....
Area of no outcrop.....
No analytical result.....

* A four character mnemonic name recorded rock type as part of the 1984
field observations

Provisional Compilation map by H.W. Zwanig,
Manitoba Department of Energy and Mines

This map forms one of a series of maps released by the Geological Survey
of Canada, Open File 1103 to 1105. Each Open File consists of maps of
various geochemical variables: 16 for lake sediment, 3 for lake water
and 1 sample site location

LOSS ON IGNITION (%)
GSC OPEN FILE 1103
NORTH-WEST MANITOBA, 1984

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scanned version of the original map.
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