



UTM zone 14 NAD83



Legend

SILURIAN

Severn River Formation: limestone, dolomitic limestone and dolomite, very fine grained, fucoidal

ORDOVICIAN

Churchill River Group: Caution Creek Formation: microcrystalline calcitic dolomite; Red Head Rapids Formation: dolomite, thin-bedded, in part argillaceous
 Bad Cache Rapids Group: Portage Chute Formation: basal quartz sandstone overlain by microcrystalline limestone

PROTEROZOIC

gabbro-norite; layered gabbro, leucogabbro, anorthosite
 polymictic metaconglomerate, magnetite bearing; quartzose conglomeratic paragneiss
 felsic intrusive rocks: tonalite, granodiorite, quartz diorite, rhyolite, pegmatite, aplite
 granite, granite gneiss, hybrid granite, pegmatitic granite, aplite, porphyritic granite

granodiorite, granodiorite diatexite
 anorthositic gabbro
 calc-silicate rock
 semipelitic paragneiss to metatexite
 conglomerate, volcanic derived (probably Archean); grey to grey-green phyllite
 "Churchill" quartzite, phyllite, schist
 quartz porphyry
 sandstone, psammitic gneiss, meta-arkose, metasiltsite
 grey tonalitic to granodioritic gneiss, hypersthene tonalite, quartz diorite
 ultramafic rocks
 pyroclastic rocks; volcanoclastic rocks and derived schist

migmatite derived from greywacke
 pegmatite
 diorite, leucodiorite, quartz diorite, gabbro, tonalite, locally porphyroblastic
 felsic volcanic rocks
 andesite and minor basalt, interlayered tuff and pillowed andesite
 amphibolite
ARCHEAN
 enderbitic gneiss, garnet bearing, with mafic/ultramafic inclusions; minor opalitic gneiss
 hypersthene granite (monzocharnockite) with hybrid granite

Lake Sediment Reanalysis Sites

Analytical Method

• ICP-ES/MS only
 • ICP-ES/MS and INAA

Geological contacts

— geological contact; approximate
 - - - geological contact; assumed
 - / - geological contact; gradational
 = fault
 - - - shear zone



Figure 1. Map of northeast Manitoba with geology background and legend showing locations of lake sediment samples collected and analyzed in 1976 and reanalyzed for this report. Bedrock geology is modified after Schledewitz (1986).

Citation
 McCurdy, M.W., Böhm, C.O., Campbell, J.E., Day, S.J.A. and McNeil, R.J. 2010. Regional Lake Sediment Geochemical Data, Great Island-Seal River Area, Manitoba (NTS 54L, 54M, 64I, 64P), Geological Survey of Canada, Open File 6671, Manitoba Geological Survey, Open File 2010-3, CD-ROM.

References
 Schledewitz, D.C.P., 1986. Geology of the Cochrane and Seal rivers area, Manitoba Energy and Mines, Geological Services, Geological Report 80-9, 139 p.