



Gauthier, M.S., Matile, G.L.D. and Keller, G.R. 2017: Surficial geology of the Shethanei Lake

Geological Survey, Surficial Geology Compilation Map Series, SG-64I, scale 1:250 000.

map sheet (NTS 64I), Manitoba; Manitoba Growth, Enterprise and Trade, Manitoba

360-1395 Ellice Ave

Winnipeg, MB, R3G 3P2

This map is available to download

free of charge at www.gov.mb.ca/minerals

Trommelen, M.S. and Campbell, J.E. 2012: Surficial geology, Sosnowski Lake, Manitoba; Geological Survey of Canada, Canadian Geoscience Map 43; Manitoba Innovation, Energy and Mines, Manitoba Geological Survey, Geoscientific Map MAP2011-4, scale 1:50 000.

**LEGEND** 

Quaternary ORGANIC DEPOSITS: peat, muck; <1–5 m thick; very low relief wetland deposits; commonly in low-lying areas; accumulated in fen, bog, swamp, and marsh settings; in areas of permafrost,

commonly include permafrost features such as patterned ground and peat palsas SHORELINE SEDIMENTS: sand and gravel; 1–2 m thick; beaches; formed by waves at the margins

COLLUVIUM: landslide debris, eroded slopes, sheet flood deposits associated with steep slopes

EOLIAN: sand and minor silt; dunes, blowouts and undulating plains; generally overlies deltaic sediments, coarse lacustrine sediments, or glaciofluvial deposits

ALLUVIAL SEDIMENTS: sand and gravel, sand, silt, clay, organic detritus; 1–20 m thick; channel and overbank sediments

MARGINAL GLACIOMARINE SEDIMENTS: littoral sand and gravel; 1–10 m thick; beach ridges, spits, bars; formed by waves at the margin of the Holocene Tyrell Sea and present-day Hudson Bay OFFSHORE GLACIOMARINE SEDIMENTS: clay, silt, minor sand; 1–20 m thick; very low relief

massive and laminated deposits which are commonly overlain by peat; deposited from suspension in the offshore, deep water of the Holocene Tyrell Sea and present-day Hudson Bay MARGINAL GLACIOLACUSTRINE SEDIMENTS: sand and gravel; 1–20 m thick; beach ridges, spits, bars, littoral sand and gravel; formed by waves at the margin of glacial Lake Agassiz and other small

proglacial lakes OFFSHORE GLACIOLACUSTRINE SEDIMENTS: clay, silt, minor sand; 1–20 m thick; low relief massive and laminated deposits; deposited from suspension in offshore deep water of proglacial lakes, primarily glacial Lake Agassiz; commonly scoured and homogenized by icebergs

DISTAL GLACIOFLUVIAL SEDIMENTS: fine sand, minor gravel, thin silt and clay interbeds; 1–75 m thick; subaqueous or subaerial outwash fans, deltas and blankets; commonly reshaped by wave erosion

PROXIMAL GLACIOFLUVIAL SEDIMENTS: sand and gravel; 1–20 m thick; complex deposits, belts with single or multiple esker ridges and kames, as well as thin, low-relief deposits; deposited in contact with glacial ice by meltwater

TILL: diamicton; unsorted glacial debris; 1–75 m thick; generally low-relief, commonly streamlined deposits; in Lake Agassiz basin areas, the till can be wave washed, covered discontinuously by a thin veneer of glaciolacustrine sediments and scoured by icebergs; thicker sequences in the Hudson Bay Lowland, consist of multiple units of varying texture and provenance

CALCAREOUS SHALE-RICH DIAMICTON: calcareous diamicton; fine-grained matrix; contains a high percentage of Mesozoic shale clasts

CALCAREOUS DIAMICTON: fine-grained matrix; contains a high percentage of Paleozoic carbonate-

NON-CALCAREOUS DIAMICTON: fine-grained to sandy matrix; contains a high percentage of Precambrian intrusive, metasedimentary and metavolcanic rocks

## Pre-Quaternary

ROCK: > 75% bedrock outcrop; generally subglacially eroded and unweathered; in areas of permafrost includes frost shattered, angular, monolithic boulder fields (Felsenmeer)

MESOZOIC TERRANE: shale-dominated rocks above the Manitoba Escarpment, exposed in the base of spillways and along the Manitoba Escarpment in association with colluvium

PALEOZOIC TERRANE: carbonate-dominated rocks; exposed typically as glacially striated, low-relief surfaces in areas west of Lake Winnipeg; along large river valleys in the Hudson Bay lowland

PRECAMBRIAN TERRANE: intrusive, metasedimentary, and metavolcanic rocks having a glacially scoured irregular surface with high local relief

Uncoloured legend blocks indicate units that do not appear on this map. Letter symbols on legend blocks (not shown on map face) are used to identify units in the map legend database included online and on the DVD (2007).

To aid the reader, a shadow effect has been added to exaggerate the topographic relief based on data from the Shuttle Radar Topography Mission Digital Elevation Model.

United States Geological Survey 2002: Shuttle radar topography mission, digital elevation model, Manitoba; United States Geological Survey, URL <fp://edcsgs9.cr.usgs.gov/pub/data/srtm/>, portions of files N48W88W.hgt.zip through N60W102.hgt.zip, 1.5 Mb (variable), 90 m cell, zipped hgt format [Mar 2003].

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