



LEGEND

This legend is common to GSC maps 2049A-2060A, and MGS geoscience maps MAP2003-1-MAP2003-12. Coloured legend blocks indicate map units that appear on this map. Not all map symbols shown in the legend necessarily appear on this map.

QUATERNARY

- O Organic deposits: peat, muck, <1-m thick, very low relief wetland deposits; accumulated in fen, bog, swamp, and marsh settings.
- E Eolian sediments: fine sand; 1-m to 2-m thick, dunes; formed by wind prior to stabilization by vegetation; in most cases on subaqueous outwash sand.
- Lm Shoreline sediments: sand and gravel; 1-2 m thick; beaches; formed by waves at the margins of modern lakes.
- Ap Alluvial sediments: sand and gravel, sand, silt, clay, organic detritus; 1-20 m thick; channel and overbank sediments; deposited by postglacial rivers.
- Ac Overbank deposits.
- Ac Channel deposits.

GLACIOLACUSTRIAL DEPOSITS

- Ls Glacial lake shoreline 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.
- Li Shoreline deposits.
- Li Littoral deposits.

OFFSHORE GLACIOLACUSTRIAL DEPOSITS

- Lz Offshore glaciolacustrine sediments: clay, silt, minor sand; 1-20 m thick; very low relief massive and laminated deposits; deposited from suspension in offshore, deep water of glacial Lake Agassiz, commonly scoured and homogenized by icebergs.
- Lc Clayey to silty clay.

GLACIOFLUVIAL DEPOSITS

- Gs Subaqueous outwash: fine sand, minor gravel, thin silt and clay interbeds; 1-75 m thick; subaqueous outwash fans, deposited near the ice margin in glacial Lake Agassiz by meltwater turbidity currents; commonly reworked by wave erosion.
- Gc IRE-CONTACT GLACIOFLUVIAL DEPOSITS: sand and gravel; 1-20 m thick; complex deposits, belts with single or multiple older ridges and kames, as well as thin, low-relief deposits; deposited in contact with glacial ice by meltwater.
- Gp Predominantly derived from igneous and metamorphic rocks.

GLACIAL DEPOSITS

- T TILL: calcareous silt diamictite; 1-75 m thick; low-relief, commonly streamlined deposits; subglacial deposits; largely derived from carbonate rocks; thicker units, often multiple units of varying texture, commonly scoured by icebergs; covered discontinuously by thin veneers (<1 m) of glaciofluvial and glaciolacustrine sediments.

- Tc DISCONTINUOUS TILL AND ASSOCIATED GLACIOFLUVIAL DEPOSITS: gravelly till to sand diamictite, sand and gravel; 1-30 m thick; low-relief deposits between bedrock outcrops making up 25-75% of the area; sandy till interbedded and intercalated with glaciolacustrine and glaciofluvial sediments, as well as minor glaciolacustrine sediments.

- Tp ROCK: >75% bedrock outcrop; Paleozoic calcareous dolomites in areas west and south of Lake Winnipeg, and typical of glacially derived, low-relief surfaces; in mountainous terrain, generally unweathered intrusive, metasedimentary, and metavolcanic rocks having a glacially scoured irregular surface with high local relief; includes patches of thin glacial sediments and organic material.

- Rc PRE-QUATERNARY: Paleozoic sedimentary rocks.

- Rp PRECAMBRIAN IGNEOUS AND METAMORPHIC ROCKS.

- Geological boundary (approximate)
- Built-up area (map GSC 2055A / MGS MAP2003-7 only)
- Mine waste
- Peat-extraction area
- Gravel pit
- Mine or bedrock quarry
- Stabilized dunes
- Abandoned channel
- Minor beach ridge
- Wave-cut scarp
- Groundwater seepage channel
- Piping depression
- Iceberg scour
- Tunnel valley
- Esker (direction of flow indicated)
- Streamlined landform
- Glacial striae
- Crossed striae (numbers indicate relative age, 1 being the oldest)
- Small bedrock outcrop

GSC MAP 2057A

MGS GEOSCIENTIFIC MAP MAP2003-9

SURFICIAL GEOLOGY

WEST HAWK LAKE

MANITOBA-ONTARIO

Scale 1:100 000/Echelle 1/100 000

Kilometres 2 0 2 4 6 8 Kilometres

Universal Transverse Mercator Projection
North American Datum 1983
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Any revisions or additional geological information known to the user would be welcomed by the Geological Survey of Canada and the Manitoba Geological Survey.

Digital base map from data compiled by Geomatics Canada, modified by ESS Info

Mean magnetic declination 2004, 3°03' E, decreasing 5.6' annually. Readings vary from 3°35' E in the SW corner to 2°30' E in the NE corner of the map

Elevations in feet above mean sea level

62-01-02	102-01-02	62-01-03	102-01-03	62-01-04	102-01-04	62-01-05	102-01-05	62-01-06	102-01-06
GSC 2049A MGS MAP2003-1	GSC 2050A MGS MAP2003-2	GSC 2051A MGS MAP2003-3							
62-05	62-05	62-05	62-05	62-05	62-05	62-05	62-05	62-05	62-05
GSC 2052A MGS MAP2003-4	GSC 2053A MGS MAP2003-5	GSC 2054A MGS MAP2003-6							
62-10	62-10	62-10	62-10	62-10	62-10	62-10	62-10	62-10	62-10
GSC 2055A MGS MAP2003-7	GSC 2056A MGS MAP2003-8	GSC 2057A MGS MAP2003-9							
62-15	62-15	62-15	62-15	62-15	62-15	62-15	62-15	62-15	62-15
GSC 2058A MGS MAP2003-10	GSC 2059A MGS MAP2003-11	GSC 2060A MGS MAP2003-12							
62-20	62-20	62-20	62-20	62-20	62-20	62-20	62-20	62-20	62-20

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ECONOMIC DEVELOPMENT AND MINES, MANITOBA GEOLOGICAL SURVEY,
GEOSCIENTIFIC MAP MAP2003-9, SCALE 1:100 000

Recommended citation:
Matile, G.L.D., 2004, Surficial geology, West Hawk Lake, Manitoba-Ontario, Geological Survey of Canada, Map 2057A, Manitoba Industry, Economic Development and Mines, Manitoba Geological Survey, Geoscience Map MAP2003-9, scale 1:100 000.

