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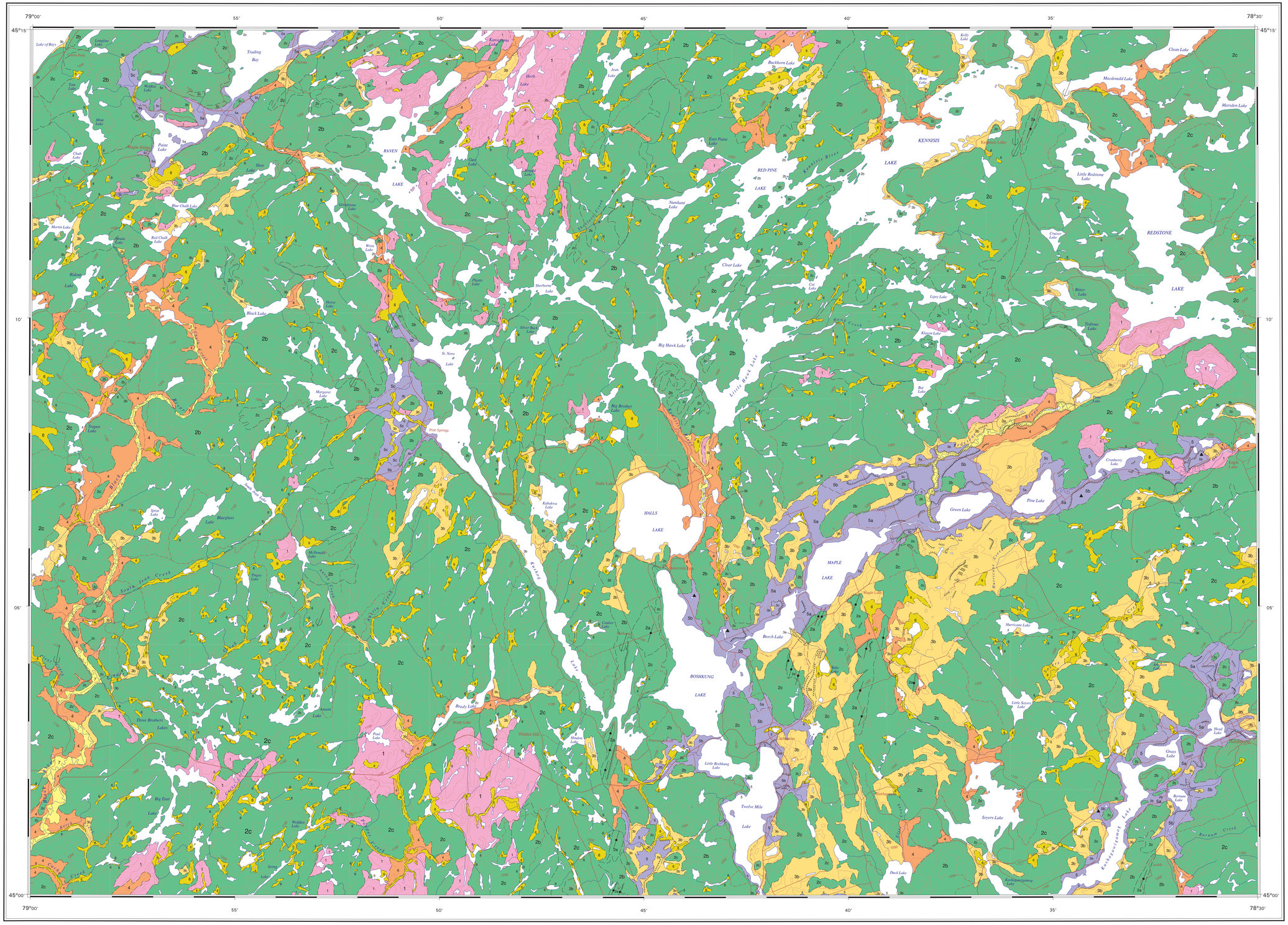
GEOLOGICAL SURVEY OF CANADA | COMMISSION GÉOLOGIQUE DU CANADA



LEGEND

Note: This a common legend for Open files 3963, 3964, 3965 and 3966. Not all units or symbols will appear on each map. Unit boxes without colour indicate the unit does not appear on map

QUATERNARY

HOLOCENE

7 — ***ALLUVIUM:*** *Modern floodplain deposits; silt, sand; and gravel with organic fragments and lenses; includes all areas that are inundated during normal overbank flooding; surfaces may be scarred by abandonned channels; commonly terraced*

6 — ***BOG AND SWAMP DEPOSITS:*** *Silt, woody peat, and gyttja; common in undrained depressions; less frequent in kettle depressions due to permeable nature of ice-contact deposits*

PLEISTOCENE (WISCONSINAN)

GLACIOLACUSTRINE SEDIMENT

5 — ***UNDIFFERENTIATED:*** *sand, silt, and clay, deposited in ice-contact or proglacial lakes; thickness varies from less than 1 to 10's of metres and glaciolacustrine surfaces may either mimic or mask topography of underlying bedrock*

5a — ***DEEP BASIN DEPOSITS:*** *laminated clay, silt, and sand; fine-to medium -grained sand, massive to micro-crosslaminated; commonly exhibits flow folding and high angle reverse faults; may form depositional terraces rimming modern lakes*

5b — ***DELTAIC DEPOSITS:*** *coarsening upward sequences of clay, silt, sand, and gravel; 10's of metres thick with planar upper surfaces and steeply dipping foresIopes; internal structure characterized by large scale foreset crossbedding*

5c — ***ICE-CONTACT DEPOSITS:*** *silt and fine sand to coarse cobble gravel and diamicton; may be arranged in fining upward sequences composed of a cobble gravel core, overlain in turn, by plane to tabular crossbedded granular sand, ripple drift cross-laminated fine sand and silt, capped by laminated sand, silt, and clay, interpreted as deposits of ice-marginal subaqueous fans; may form perched terraces flanking valley walls, esker beads or complete valley-fill sequences*

GLACIOFLUVIAL SEDIMENT

4 — ***PROGLACIAL DEPOSITS (OUTWASH):*** *undifferentiated valley train deposits 1 to 10's of metres thick; frequently composed of coarsening upward sequences characterized by ripple-drift crosslaminated and graded silt and fine sand near the base, overlain by plane to crossbedded sand, gravel, and cobble gravel; bedding may be contorted and frequently is cut by high angle reverse faults; forms planar depositional surfaces (occasionally slightly pitted) or may form depositional terraces rimming modern lakeshores*

ICE-CONTACT DEPOSITS: *interstratified complex of sand, gravel, and diamicton; bedding often chaotic and cut by both high angle reverse faults and normal faults; may contain minor glaciolacustrine deposits; subdivided on the basis of morphology*

3a — ***ESKERS:*** *sinous ridges trending subparallel to ice-flow, thickness up to 10 to 20 m, maximum length about 2 km*

3b — ***KAME AND KAME TERRACE:*** *hummocky stagnant ice deposits; thickness variable ranging up to 10 to 15 m; commonly forms thin (1–2 m) discontinuous veneer on bedrock; includes all perched ice-contact glaciofluvial deposits that form isolated pockets flanking valley sides; terracing is frequently indistinct*

TILL AND RELATED DEPOSITS: *Chiefly unsorted debris containing erratics, deposited beneath or in the terminus regions of the ice sheet; textural properties average 80% sand, 17% silt, and 3% clay; boulder content variable, commonly approximately 10% but ranges up to 30%; mechanism and environment of deposition variable, ranging from deposition directly from glacier ice, to sediment flow deposition in the ice-marginal and sub-ice environments*

2a — ***FLUTED AND DRUMLINOID TERRAIN:*** *thickness variable ranging up to 8 to 10 m*

2b — ***GROUND MORAINE:*** *thickness variable, commonly 2 to 3 m thick but up to 10 m in topographic lows; topography of the bedrock surface and bedrock structure control surface morphology*

2c — ***THIN DRIFT ON BEDROCK:*** *thickness variable, commonly less than 1 m but ranging up to several meters in topographic depressions; may include minor glaciofluvial and glaciolacustrine deposits; amount of be bedrock outcrop varies from 0 to 25%*

PRE-QUATERNARY

BEDROCK

1 — *Composed predominantly of granitic gneisses and migmatitic intrusives, gneissic meta-sediments, and marbles; minor outcrop of Paleozoic lithologies; Paleozoic/Precambrian contact symbolized; exposed surfaces frequently smoothed and moulded by glacial abrasion; surfaces are commonly etched and pitted obscuring striation, however these are preserved locally; bedrock topography consists of rock knobs and undrained depressions; local relief averages 70 to 125 m; small pockets of glacial and proglacial sediment may occupy topographic lows; amount of bedrock outcrop varies from 25 to 100%*

Geological boundary

Terrace

Esker

Kettle depression

Striae

Fluting

Glaciolacustrine delta

Geology by C.A. Kaszycki, 1981–83

Geological compilation by C.A. Kaszycki, 1988

Digital cartography by R.L. Allard, Earth Sciences Sector Information Division (ESS Info)

This map was produced from processes that conform to the ESS Info Publishing Services Subdivision Quality Management System, registered to the ISO 9001: 2000 standards

Any revisions or additional geological information known to the user would be welcomed by the Geological Survey of Canada

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

Mean magnetic declination 2003, 11°43′W, increasing 0.6′ annually

Elevations in feet above mean sea level

OPEN FILE 3966

SURFICIAL GEOLOGY

HALIBURTON

ONTARIO

Scale 1:50 000/Échelle 1/50 000

kilometres 1 0 1 2 3 4 kilometres

Universal Transverse Mercator Projection
North American Datum 1983
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Projection transverse universelle de Mercator
Système de référence géodésique nord-américain, 1983
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LOCATION MAP

31 E/6	31 E/7	31 E/8
31 E/3	31 E/2 OF 3966	31 E/3 OF 3965
31 D/14	31 D/15 OF 3963	31 D/16 OF 3964

NATIONAL TOPOGRAPHIC SYSTEM REFERENCE AND INDEX TO ADJOINING GEOLOGICAL SURVEY OF CANADA MAPS

OPEN FILE DOSSIER PUBLIC
3966
GEOLOGICAL SURVEY OF CANADA
COMMISSION GÉOLOGIQUE DU CANADA
2003

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