

LEGEND

This legend is common to maps 1790A to 1797A, 1819A to 1822A, and 1832A to 1835A Coloured legend blocks indicate map units that appear on this map

HOLOCENE - POST McCONNELL GLACIATION

Also includes semi-permanent snow banks; thickness ranges from 10 m to tens NEOGLACIAL TILL: stony diamicton, less than 1 m thick and in places

ICE (extant glaciers): flowing or stagnant glacial ice, locally covered by debris.

discontinuous; end moraines (denoted by symbol) may be tens of metres thick

and contain masses of buried glacial ice ORGANIC DEPOSITS: peat and muck several metres to tens of metres thick; formed predominantly by the accumulation of vegetative material in bogs, fens, and swamps in depressions and valley bottoms. Permafrost is commonly present within 1 m of the surface in blanket bog; thermokarst collapse and palsa growth

are common in bogs, fens, and swamps

COLLUVIAL DEPOSITS: stony diamicton resulting from the breakdown of bedrock through physical and chemical weathering; variably reworked and transported by gravitational processes such as creep, solifluction, debris flow, snow avalanching,

Colluvial apron sediments: bouldery diamicton, poorly sorted sands and gravels forming a wedge-like slope-toe complex of small steep debris flow and avalanchedominated fans and solifluction deposits ranging from less than 1 m at the upslope limit to 10 m or more in the thickest part of the apron

Rockfall deposits: bouldery, angular rockfall deposits that form aprons that may exceed 10 m in maximum thickness along the bases of steep slopes

ALLUVIAL DEPOSITS: gravel and sand with minor silt deposited by streams; deposits are commonly stratified and moderately to well sorted, except for some alluvial fan deposits where debris flow diamictons may be present Floodplain sediments: gravel and sand with minor silt, greater than 1 m thick, flat

channels and backswamp areas; floodplain deposits subject to periodic inundation and reworking by floods Alluvial terrace sediments: gravel and sand with minor silt; greater than 1 m thick; former floodplain sediments incised and now above the level of the contemporary

lying; includes lacustrine and organic sediments deposited in abandoned

floodplain; terrace sediments not subject to flooding and usually well drained Alluvial fan sediments: gravel, sand, silt, and diamicton up to 10 m or more thick; alluvial fans subject to stream avulsion and flooding and, on smaller and steeper fans, inundation by debris flows

Alluvial sediments, undivided: floodplains, fans, and terraces that cannot be subdivided at this map scale

WISCONSINAN - McCONNELL GLACIATION

GLACIOLACUSTRINE DEPOSITS: well stratified sand, silt, and clay deposited in lakes ponded by glacial ice; sediments may have regular surfaces or ridged, hummocky, or pitted surfaces caused by meltout of buried glacial ice. Silts and clays commonly contain segregated ground ice and are affected by retrogressive thaw flow slides along rivers and contemporary thermokarst collapse

Glaciolacustrine plain: silt and fine sand, minor clay; 5 m or more thick

Glaciolacustrine blanket: silt and fine sand, minor clay; 1 to 3 m thick but thin enough to conform to underlying topography

Glaciolacustrine veneer: silt and fine sand, minor clay; less than 1 m thick or discontinuous

Glaciolacustrine complex: sand, silt, and clay; hummocky, pitted, and ridged; may comprise 10 per cent or more gravel and diamicton lenses and dropstones; usually more than 5 m thick

GLACIOFLUVIAL DEPOSITS: gravel, sand, and minor silt, greater than 1 m thick, graded to former glacial lake levels. Sorting ranges from good to poor, and stratification from thin bedded to massive. Sediments commonly display evidence of syndepositional collapse due to meltout of buried or supporting ice

Glaciofluvial plain and fan sediments: gravel, sand, and minor silt; planar surfaces; greater than 1 m thick

Glaciofluvial terrace sediments: gravel, sand, and minor silt; planar surfaces cut by flights of terraces; greater than 1 m thick

Glaciofluvial delta sediments: sand, gravel, and minor silt and clay; commonly overlying lacustrine silt and clay; greater than 5 m thick

Glaciofluvial complex: sand, gravel, diamicton, and minor silts and clay; greater than 5 m thick; forming kettles, esker and crevasse-fill ridges; includes minor elements of Gp and Gt

Glaciofluvial deposits, undivided: hummocky deposits of gravel, sand, and minor

silt; less than 5 m thick; includes areas made up of 50 per cent units Mb and

MORAINAL DEPOSITS (till): diamicton, mainly till, generally consisting of a silty sandy matrix containing pebbles, cobbles, and minor boulders; deposited either directly by glacial ice or by gravity flow from glacier ice

Till blanket: greater than 1 m thick but conforming to the underlying topography

Till veneer: less than 1 m thick or discontinuous; may contain extensive areas of thin (less than 1 m) and patchy colluvium

PRE-QUATERNARY

601 Booth Street, Ottawa, Ontario K1A 0E8

3303-33rd Street, N.W., Calgary, Alberta T2L 2A7

100 West Pender Street, Vancouver, B.C. V6B 1R8

BEDROCK: volcanic, sedimentary, metasedimentary rocks, and felsic and ultramafic intrusions; includes areas of thin colluvial cover, blockfields, sorted stone polygons in alpine areas. R-A denotes bedrock subject to rockfall and snow avalanches

Geological boundary
Cirque
Arête
Streamlined glacial bedforms (ice flow direction known, unknown)
Neoglacial end moraine
Medial moraine
Ice-contact face in stratified drift (teeth on ice side)
Crevasse filling
Esker (flow direction known or assumed)
Subglacial and proglacial meltwater channels, large and small (arrow indicates flow direction)
Small sidehill (lateral) meltwater channel; barb on upslope side
Blanket bog or fen, generally <1 m thick
Rock glacier
Landslide; arrow(s) indicate direction of movement
Thermokarst collapse activity
Location of stratigraphic section
ATTAINED TO ANALY OF CAMADA

GEOLOGICAL SURVEY OF CANADA COMMISSION GEOLOGIQUE DU CANADA

SEP 8 1993

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STRATIGRAPHIC SECTIONS LEGEND Glaciolacustrine Sand and gravel Glaciofluvial Gravel, bouldery Gravel, sandy, pebbly Clay and silt Sand and gravel Vertical Scale (m) Sand, silt, clay

Geology by L.E. Jackson Jr., 1981-1982

Geological cartography by J.D. Narraway, Geological Survey of Canada

Colour separations were produced using digital methods

Any revisions or additional geological information known to the

user would be welcomed by the Geological Survey of Canada

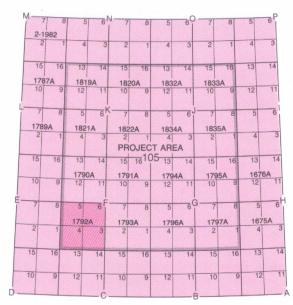
Base map assembled by the Geological Survey of Canada from maps 105 F/3,4,5,6 (1984) published at 1:50 000 scale by the Surveys and Mapping Branch

Copies of the topographical editions covering this map area may be obtained from the Canada Map Office, Department of Energy,

Mines and Resources, Ottawa, Ontario, K1A 0E9

Mean magnetic declination 1993, 29°20' East, decreasing 11.5' annually. Readings vary from 29°04' E in the SW corner to 29°36' E in the NE corner of the map

Elevations in metres above mean sea level





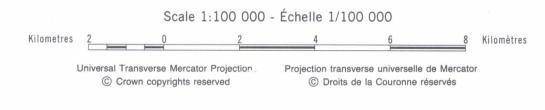
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COMMISSION GÉOLOGIQUE DU CANADA

MAP 1792A SURFICIAL GEOLOGY

GRAY CREEK YUKON TERRITORY



Recommended citation: Jackson, L.E., Jr. 1993: Surficial geology, Gray Creek, Yukon Territory; Geological Survey of Canada, Map 1792A, scale 1:100 000



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