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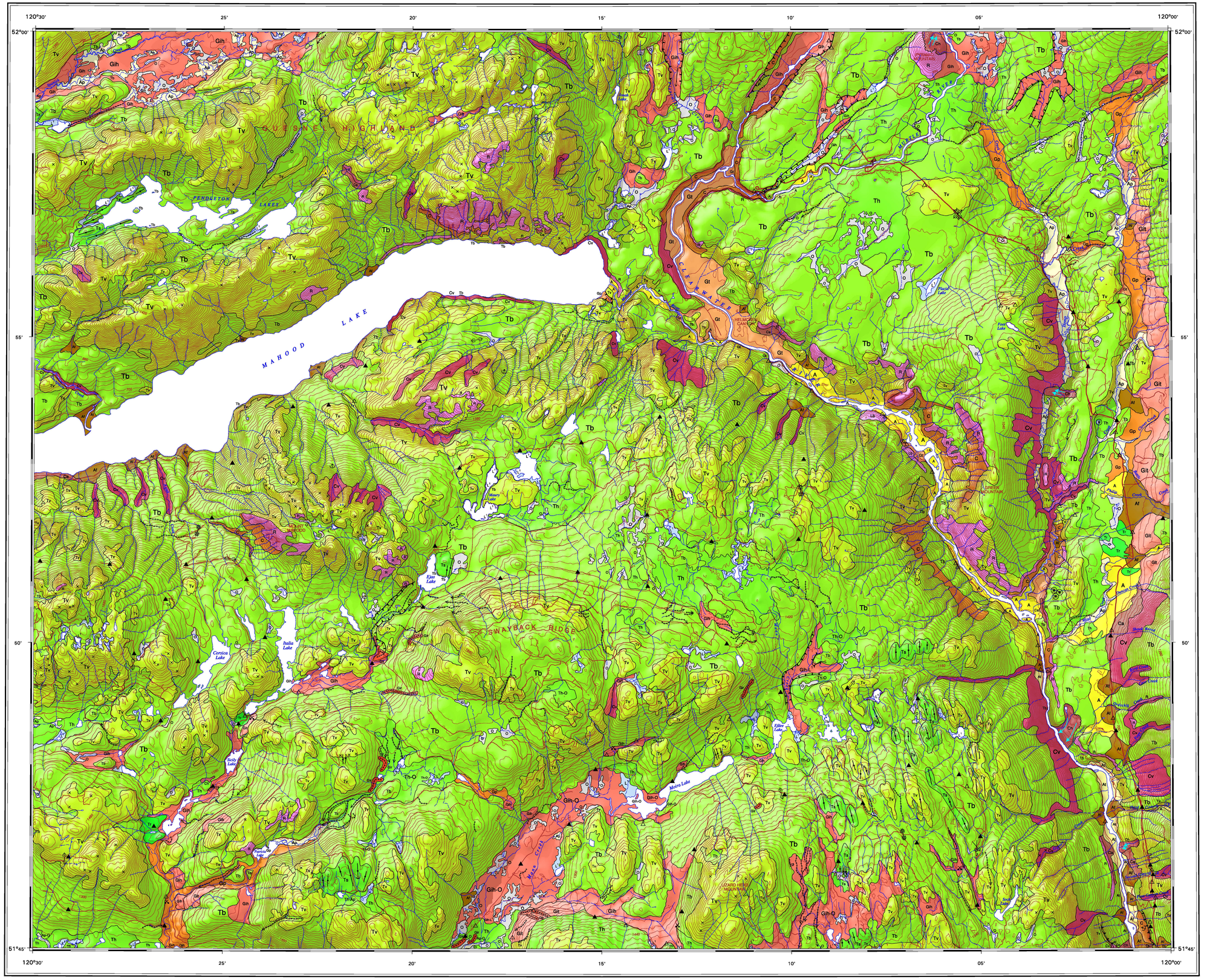
GEOLOGICAL SURVEY OF CANADA | COMMISSION GÉOLOGIQUE DU CANADA



LEGEND

NOTE: *In areas where the surficial cover forms a complex pattern, the area is coloured according to the dominant unit and labelled in descending order of cover (e.g. O-Tr). Where buried aggregate deposits (sand and gravel - commonly associated with Gt or Gd surficial units) are known, or suspected, areas are coloured according to the overlying unit and labelled in the following manner: Lv/Gd.*

QUATERNARY
SURFICIAL DEPOSITS
POST LAST GLACIATION

NONGLACIAL ENVIRONMENTS

O — ***ORGANIC DEPOSITS:*** *Fen peat; 1 to 3 m thick on average; peat derived from sedges and partially decayed shrubs in a eutrophic environment; the plant material is in various stages of decomposition; generally occurs as flat, wet terrain (swampa) over poorly drained substrates; forms relatively open peatlands.*

COLLUVIAL DEPOSITS: *diamicton and rubble; poorly sorted, massive to stratified debris deposited by direct, gravity-induced movement; composition dependant on source material.*

Ch — ***Landslide and slump debris:*** *diamicton, generally 1 to 10 m thick, but may exceed 10 m near the toe of large landslides; hummocky topography; includes active and inactive landslides.*

Cv — ***Colluvial veneer:*** *thin and discontinuous cover of slumped and/or soliflucted material <1 m thick; overlies bedrock or till.*

Ca — ***Talus (scree):*** *accumulation of angular boulders below cliffs; generally 1 to 10 m thick or greater; usually forming fans or aprons.*

C — ***Undifferentiated colluvial deposits:*** *undivided landslide debris, colluvial veneer and talus.*

ALLUVIAL DEPOSITS: *sorted gravel, sand, minor silt, and organic detritus deposited by streams; commonly stratified.*

Ap — ***Floodplain deposits:*** *sorted gravel, sand, silt, and organic detritus >1 m thick; forming active floodplains close to river level with meander channels and scroll marks.*

At — ***Fluvial terrace deposits:*** *>2 m thick; forming inactive terraces above modern floodplain; represent a potential aggregate source.*

Af — ***Alluvial fan deposits:*** *poorly sorted gravel, sand, and diamicton >1 m thick; occur where a stream issues from a narrow valley onto a plain or valley floor.*

A — ***Undifferentiated fluvial deposits:*** *undivided floodplain, fluvial terrace, and alluvial fan deposits.*

L^1 — ***LACUSTRINE DEPOSITS:*** *sand, silt, and minor clay deposited in a former lake; >1 m thick; occasionally overlain by organic deposits; exposed by recent fluctuations in lake levels.*

POSTGLACIAL OR LATE WISCONSINAN

PROGLACIAL AND GLACIAL ENVIRONMENTS

GLACIOLACUSTRINE DEPOSITS: *fine sand, silt, and clay, with minor debris-flow diamicton, deposited in glacier-dammed lakes in valleys and along the margin of the retreating Cordilleran glaciers; usually overlain by organic deposits in lowlands.*

Lb — ***Glaciolacustrine blanket:*** *>1 m thick; obscures topography of underlying units.*

GLACIOFLUVIAL DEPOSITS: *well to poorly stratified sand and gravel; minor diamicton; deposited behind, at, or in front of the ice margin by glacial meltwater; represent a potential aggregate source.*

Gp — ***Proglacial outwash deposits:*** *generally 1 to 5 m thick; forming planar surfaces; generally mantle valley floors and surfaces adjacent to glacial meltwater channel margins.*

Gt — ***Outwash terrace deposits:*** *1 to 10 m thick; generally associated with meltwater channels and canyons; generally forming flat paired terraces perched above alluvial deposits.*

Gih — ***Ice-contact stratified deposits:*** *poorly-sorted sand and gravel with minor diamictons; 1 to >20 m thick; deposited in contact with the retreating glacier; forming hummocky topography related to melting of underlying ice.*

Gir — ***Esker deposits:*** *moderately sorted sand and gravel, 1 to >20 m thick; forming ridges. Formed by meltwater flow within tunnels or chasms in glacier ice.*

Git — ***Kame terrace deposits:*** *1 to 10 m thick; generally forming flat unpaired terraces on valley slopes.*

TILL: *diamicton deposited directly by Cordilleran glaciers; sandy to clayey matrix with striated clasts of various lithologies.*

Tb — ***Till blanket:*** *>1 m thick; continuous till cover forming undulating topography that locally obscures underlying units.*

Ts — ***Streamlined and fluted till:*** *>1 m thick; till surface marked by streamlined landforms including flutings and drumlins.*

Th — ***Hummocky till:*** *>1m thick; hummocky to rolling till surface including discontinuous pockets of gravel.*

Tr — ***Ridged till deposits:*** *>1 m thick; moraines or crevasse fillings forming a ridged topography.*

Tv — ***Till veneer:*** *<1 m thick; discontinuous till cover; underlying bedrock topography is discernible.*

PRE-QUATERNARY

R — ***Bedrock outcrop:*** *continuous bedrock outcrop; can include pockets of till or colluvium rarely exceeding 2 m thickness.*

Geological boundary (defined)
Slump direction
Landslide, small
Major landslide
Meltwater channel or underfit channel, small (paleoflow direction known, unknown)
Meltwater channel, large (paleoflow direction known, unknown)
Kettle, small
Esker (direction known, unknown)
Drumlin (ice flow direction known, unknown)
Fluting
Striation (direction known, unknown)(coincide with some station sites)
Crossed striations (numbers indicate relative age, 1 being the oldest)
Outcrop
Gravel pit
Field observation site (with and without samples)

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Geology by C.A. Huscroft, 2007

Geological compilation by C.A. Huscroft, 2008

Digital cartography by M.J. Coulthart, Data Dissemination Division (DDD)

This map was produced from processes that conform to the Scientific and Technical Publishing Services Subdivision (DDD) Quality Management System, registered to the ISO 9001: 2000 standard

OPEN FILE 6172

SURFICIAL GEOLOGY

MAHOOD LAKE

BRITISH COLUMBIA

Scale 1:50 000/Échelle 1/50 000

kilometres 1 0 1 2 3 4 kilometres

Universal Transverse Mercator Projection
North American Datum 1983

Projection transverse universelle de Mercator
Système de référence géodésique nord-américain, 1983

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

Digital base map provided by the BC Watershed Atlas (1:50 000, TRIM base)

Shaded relief image prepared by DDD, derived from the digital elevation model supplied by L. Robertson, based on the TRIM topographic data Illumination: azimuth 315°, altitude 45°, vertical factor 5x

Magnetic declination 2009, 17°58' E, decreasing 14.4' annually

Elevations in metres above mean sea level

93 A/2	93 A/1	83 D/4
92 P/15 OF6179	92 P/16 OF6172	82 M/13
92 P/10 OF6173	92 P/9 OF6133	82 M/12

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

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2009

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