



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-Tv). 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: LxGd.

QUATERNARY SURFICIAL DEPOSITS

POST LAST GLACIATION

NONGLACIAL ENVIRONMENTS

- O** ORGANIC DEPOSITS: Fine 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 (swamps) over poorly drained substrates; forms relatively open pastures.

COLLUVIAL DEPOSITS: diamicton and rubble; poorly sorted, massive to stratified debris deposited by direct, gravity-induced movement; composition dependent 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 silt.
- Ca** Talus (scree): accumulation of angular boulders below cliffs; 1 to 10 m thick or more; usually forming fans or aprons.

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

- Ap** Floodplain deposits: sorted gravel, sand, silt, and organic debris >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 floodplains; represents a potential aggregate source.
- Al** Alluvial fan deposits: poorly sorted gravel and sand >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.
- L¹** LACUSTRINE DEPOSITS: silt, sand and minor clay deposited in a former lake; >1 m thick; occasionally overlain by organic deposits; exposed by recent fluctuations in lake levels.

NONGLACIAL AND PROGLACIAL ENVIRONMENTS

EOLIAN DEPOSITS: medium to fine sand, wind-deposited; derived from detrital or glaciolacustrine deposits; in some areas eolian sediments are thin or absent between dunes.

- Er** Ridged eolian deposits: generally >2 m thick; forming dunes.

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; represents a potential aggregate source.

- Gp** Proglacial outwash deposits: generally 1 to 5 m thick; forming planar surfaces; generally massive 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 paired terraces perched above fluvial deposits.
- Gih** Ice-contact stratified deposits: poorly-sorted sand and gravel with minor diamicton; 1 to >20 m thick; deposited in contact with the retreating glacier; forming hummocky topography relating to melting of underlying ice.
- Gik** Ice-contact stratified deposits with kettles: same as Gih, but the surface is marked with kettles.
- Gir** Esker deposits: 1 to >20 m thick; forming ridges.
- 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: >1 m 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)
Debris flow
Landslide, small
Major landslide
Palaeocurrent direction (coincides with some station sites)
Meltwater channel or undercut channel, small (palaeoflow direction known, unknown)
Meltwater channel, large (palaeoflow direction known, unknown)
Esker
Major moraine
Drumlin (ice flow direction known, unknown)
Crag-and-tail
Fluting
Striation (direction known, unknown) (coincide with some station sites)
Outcrop
Gravel pit
Field observation site (with and without samples) ▲ △



Author: A. Plouffe
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SURFICIAL GEOLOGY
LOON LAKE
 BRITISH COLUMBIA
 Scale 1:50 000/Echelle 1/50 000
 Kilometres 1 2 3 4 kilometres
 Universal Transverse Mercator Projection
 North American Datum 1983
 © Her Majesty the Queen in Right of Canada 2009
 Projection transversale universelle de Mercator
 Système de référence géodésique nord-américain, 1983
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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 1x
 Magnetic declination 2009, 17°54' E, decreasing 13.8' annually
 Elevations in metres above mean sea level

92 P11	92 P10	92 P9
92 P8	92 P7	92 P6
OF9839	OF9839	OF9839
92 P3	92 P2	92 P1
OF5933	OF9832	

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