



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-T1). Where buried aggregate deposits (sand and gravel) commonly associated with Gt or Gh surficial units are known, or suspected, areas are coloured according to the overlying unit and labelled in the following manner: L1Gd.

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 (swamps) over poorly drained substrates; forms relatively open peatlands.

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

**Ch** Landslide and slump debris: clast-rich, 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 fill.

**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 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 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.

**L1** LACUSTRINE DEPOSITS: sand, silt, and minor clay deposited in a former lake; >1 m thick; occasionally formed 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.

**Ev** Eolian veneer: <1 m thick; discontinuous veneer of eolian sediments.

POSTGLACIAL OR LATE WISCONSINAN PROGLACIAL AND GLACIAL ENVIRONMENTS

**GLACIOFLUVIAL DEPOSITS:** well to poorly stratified sand and gravel; minor diamict; 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 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 fluvial deposits.

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

**Gr** Esker deposits: 1 to >20 m thick; forming ridges.

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

**TILL:** diamict 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.

**Te** 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)  
Major landslide  
Paleocurrent direction (coincides with some station sites)  
Meltwater channel or underflow channel, small (paleoflow direction known, unknown)  
Meltwater channel, large (paleoflow direction known, unknown)  
Esker  
Major moraine  
Minor moraine or crevasse filling  
Drumlin (ice flow direction known, unknown)  
Crag-and-tail  
Fluting  
Striation (direction known, unknown)(coincides with some station sites)  
Bedrock lineation  
Outcrop  
Gravel pit  
Field observation site (with and without samples)



Author: A. Plouffe  
Geology by A. Plouffe, 2007  
Geological compilation by A. Plouffe, 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 5939  
SURFICIAL GEOLOGY  
**GREEN LAKE**  
BRITISH COLUMBIA  
Scale 1:50 000/Echelle 1/50 000  
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 5x  
Magnetic declination 2009, 1° 00' E, decreasing 14.0' annually  
Elevations in metres above mean sea level

92 P11	92 P10	92 P9
92 P8	92 P7	92 P6
92 P5	92 P4	92 P3
92 P2	92 P1	

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**5939**  
GEOLOGICAL SURVEY OF CANADA  
COMMISSION GÉOLOGIQUE DU CANADA  
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