



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. G-T). Where buried aggregate deposits (sand and gravel) - commonly associated with G or Gd surficial units) are known, or suspected, areas are coloured according to the overlying unit and labelled in the following manner: L/Gd.

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 autrophic 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.
 - 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, 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.
 - Al** **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** **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**
- Lb** **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.
 - Lh** **Hummocky glaciolacustrine sediments:** > 1 m thick; forming hummocky topography.
 - 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 terraces perched above alluvial deposits.
 - Gd** **Glaciofluvial delta deposits:** 1 to >30 m thick; deposited at the mouth of streams entering former glacial lakes.
 - Gb** **Glaciofluvial blanket:** >1 m thick; obscures topography of underlying units.
 - Gih** **Ice-contact stratified deposits:** poorly-sorted sand and gravel with minor diamictons; 1 to >20 m thick; deposited in contact with retreating glacier ice; 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 channels in glacier ice.
 - Gik** **Ice-contact stratified deposits with kettles:** same as Gih, but the surface is marked with kettles.
 - TLL** **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)
- Slump, direction known
- Landslide, small
- Major landslide
- Meltwater channel or underfit channel, small (paleoflow direction known, unknown)
- Meltwater channel, large (paleoflow direction unknown)
- Kettle large, small
- Esker (direction known, unknown)
- End moraine
- Drumlin (ice flow direction known)
- Crag-and-tail
- Fluting
- Striation (direction known, unknown)(coincide with some station sites)
- Crossed striations (numbers indicate relative age, 1 being the oldest)
- Bedrock lineation
- Outcrop
- Gravel pit
- Field observation site (with and without samples)



Author: S.J. McCuaig
Geology by S.J. McCuaig¹, 2008
Geological compilation by S.J. McCuaig¹ and M. Harrison¹
Digital cartography by M.J. Coulthart, Data Dissemination Division (DDD) and M. Harrison¹
¹Stantec, 4208, 97th Street, Suite 203, Edmonton, Alberta, T6E 5Z9
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 6173
SURFICIAL GEOLOGY
DEKA LAKE
BRITISH COLUMBIA
Scale 1:50 000/Échelle 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
© Sa Majesté la Reine du chef du Canada 2009

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°59' E, decreasing 14.2' annually
Elevations in metres above mean sea level

92 P14	92 P15	92 P16
OF6193	CF6179	OF6172
92 P11	92 P10	92 P19
	OF6173	OF6133
92 P18	92 P17	92 P18
OF6939	OF6839	

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

OPEN FILE
DOSSIER PUBLIC
6173
GEOLOGICAL SURVEY OF CANADA
COMMISSION GÉOLOGIQUE DU CANADA
2009
Open file are products that have not gone through the GSC formal publication process
Les dossiers publics sont des produits qui n'ont pas été soumis au processus officiel de publication de la GSC