



LEGEND

This legend is common to GSC Open File maps produced for NTS sheet 94 P. Not all map units in the common legend appear on this map.

QUATERNARY SURFICIAL DEPOSITS POST LAST GLACIATION

NONGLACIAL ENVIRONMENTS

ORGANIC DEPOSITS: peat and muck, 1 to 3 m thick on average; formed by the accumulation of plant material in various stages of decomposition; generally occurs as flat, wet terrain (swamps and bogs), over poorly drained substrates.

- O¹** Bog peat: sphagnum or forest peat formed in an ombrotrophic environment; wet terrain; may be treed or treeless; O¹h: hummocky, mounds and plateaus; area may be underlain by ground ice or shallow permafrost conditions; O¹k: thermokarst terrain related to melting ground ice.
- O²** Fen peat: peat derived from sedges and partially decayed shrubs in a eutrophic environment; forms relatively open peatlands with a mineral-rich water table that persists seasonally near the surface; often covered with low shrubs and sometimes a sparse layer of trees.
- O** Undifferentiated bog and fen deposits: O¹h: undifferentiated hummocky bog and fen deposits; area may be underlain by ground ice or shallow permafrost conditions; O²: undifferentiated bog and fen deposits with thermokarst terrain related to melting of ground ice; O²k: undifferentiated bog and fen deposits, cut by numerous subparallel channels on gentle slopes.

COLLUVIAL DEPOSITS: mass wasting debris; poorly sorted, massive to stratified debris deposited by direct, gravity-induced movement; composition dependent on source material.

- Ch** Landslide and slump debris: active and inactive landslides; hummocky topography; diamicton, generally 1 to 10 m thick, but may exceed 10 m near the toe of large landslides.
- Cv** Colluvial veneer: thin and discontinuous cover of slumped and/or soliflucted material <1 m thick; overlies bedrock or till.

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: inactive terraces above modern floodplain; >2 m thick; represents a potential aggregate source.
- Al** Alluvial fan deposits: poorly sorted gravel, sand, and organic detritus >1 m thick.
- Av** Alluvium veneer: <1 m thick; primarily as uniform sheets of slope wash on gentle slopes.
- A** Undifferentiated fluvial deposits.

LACUSTRINE DEPOSITS: sand, silt, and minor clay deposited in a former lake; >1 m thick; generally overlain by organic deposits; exposed by recent fluctuations in lake levels. - L¹** NONGLACIAL AND PROGLACIAL ENVIRONMENTS **EOLIAN DEPOSITS:** wind-deposited medium to fine sand; derived from deltaic or glaciolacustrine deposits; in some areas eolian sediments are thin or absent between dunes. - Er** Ridged eolian deposits: forming dunes; generally >2 m thick. POSTGLACIAL OR LATE WISCONSINANPROGLACIAL AND GLACIAL ENVIRONMENTS **GLACIOFLUVIACAL 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 Laurentide Ice Sheet; usually overlain by organic deposits in lowlands. - Lb** Glaciolacustrine blanket: >1 m thick. **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. - G** Proglacial outwash: cross-stratified gravel and sand deposited in front of the ice margin; G¹: forming hummocks; G²: outwash terrace deposits, often associated with meltwater channels and canyons; 1 to 10 m thick. - G¹** Ice-contact stratified drift: poorly-sorted sand and gravel with minor diamictons; deposited in contact with the retreating glacier; 1 to >20 m thick; G¹r: esker ridges. **TILL:** diamicton deposited directly by the Laurentide Ice Sheet; sandy to clayey matrix with striated clasts of various lithologies, including many Canadian Shield, carbonate and sandstone erratics; clast content is typically low (<10%). - 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 flutes and drumlins. - Th** Hummocky till: >1 m thick; hummocky till surface. - 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 discernable. PRE-QUATERNARY BEDROCK - R** Sedimentary bedrock: Cretaceous Fort St. John Group shales (including the Shalebury Formation) and Devonian Formation sandstone exposed in highlands and along meltwater channel and canyon walls. **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., O¹-Tb). Where buried aggregate deposits (sand and gravel - commonly associated with G¹ or G² surficial units) are known, or suspected, areas are coloured according to the overlying unit and labelled in the following manner: L¹G¹G². Geological boundary (defined, approximate) Oxbow Meltwater channel or underfit channel, small (paleoflow direction known) Meltwater channel, large (paleoflow direction unknown) Esker Escarpment Major moraine Ice moulded form in till (direction of flow inferred, not inferred) Gravel pit X DESCRIPTIVE NOTES The Baho Plateau occupies most of the southern part of the Gote Creek map area. The plateau is more than 600 m above sea level and is underlain by flat lying sandstone and minor shale of the Devonian Formation, which is more resistant than the Cretaceous shales of the surrounding area. The plateau is bound in the northeast by the Pellet River lowland, especially by a 10 km wide valley that lies about 150 m below the plateau. This valley may be part of a preglacial valley system because the modern Pellet River occupies a narrow channel, about 500 m wide, which is incised a further 50 m below the level of the broad valley. When the continental Laurentide Ice Sheet glaciated the map area during the Late Wisconsin (ca. 20 000-10 000 years ago), it covered the area with glacial drift. Borrow pits along the Cabin Gorge road show that the bedrock is covered by 3 to 10 m of till, sporadic glaciolacustrine gravelly, and ice-thrust blocks of sandstone and shale. The surface of the drift covering the Baho Plateau is extensively rounded, indicating glacial flow from the east-northeast. In places, some glacial tillings are over 10 km long. Small ridges, on their origin, these features could have been deposited shortly after the till forming advance, or some time later during deglaciation. Northwest-facing water systems on the northeast flank Baho Plateau indicate that parts of the ice sheet became stagnant. The eskers are composed of till and glaciolacustrine gravel and likely exploited pre-existing crevasse patterns from the ice sheet. Poorly drained areas are usually underlain by clayey till on the plateau, and glaciolacustrine sediments on the lowlands in the northern part of the map area. These areas are mostly covered by swamps and bogs, forming hummocky peatlands and probably contain significant amounts of ground ice.



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Airphoto interpretation by J.M. Bednarski, 2004

Compilation of geology was onto 1:40 000 orthorectified airphoto mosaic by J.M. Bednarski

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SURFICIAL GEOLOGY
GOTE CREEK
BRITISH COLUMBIA

Scale 1:50 000/Echelle 1/50 000

Universal Transverse Mercator Projection
North American Datum 1983
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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), modified by J.M. Bednarski

Magnetic declination 2005, 23°52'E, decreasing 18.2' annually

95 B/1 OP1754	95 A/4 OP4825	95 A/3 OP1714
94 O/16 OP4825	94 P/13 OP4846	94 P/14 OP1711
94 O/9 OP4846	94 P/12 OP4846	94 P/11 OP1711

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