

- LEGEND
- QUATERNARY**
- POST-FRASER GLACIATION**
- NONGLACIAL ENVIRONMENT**
- ORGANIC DEPOSITS:** peat and muck; 1 to 10 m thick (typically 2 to 3 m) forming fens and bogs; organic deposits too small to be shown at this scale occur within other units; common within abandoned meltwater channels.
- ALLUVIAL (FLUVIAL) DEPOSITS:** gravel and sand with minor silt and clay, deposited by streams; commonly stratified; generally well sorted except in alluvial fens.
- Floodplain sediments:** sand and silt, commonly including organic materials and underlain, in many places, by gravel; 1 to 3 m thick; occurring as flat surfaces close to river level; prone to flooding.
- Fan sediments:** poorly sorted sand and gravel, with diamicton; generally 2 to 15 m thick; forming fans at the toe of slopes.
- Terrace sediments:** stratified sand and gravel overlain by a veneer of sand and silt; 2 to 10 m thick; forming terraces well above flood level.
- COLLUVIAL DEPOSITS:** diamicton and rubble accumulated from various mass-wasting processes, ranging from slope wash to rock fall; composition dependent on source materials.
- Landslide debris:** mostly unconsolidated sediments, with texture dependent on source materials; generally 1 to 10 m thick, but may exceed 10 m near the toe of large landslides; forming hummocky accumulations on lower slopes and valley floors; commonly developed in glacial lake sediments and till.
- Slope colluvium:** rock fragments in a matrix of sand, silt, and minor clay; 1 to 5 m thick; formed by reworking of unconsolidated deposits on steep (>40°) slopes; commonly gullied.
- Colluvium veneer:** unconsolidated sediments, with texture dependent on source materials; generally less than 1 m thick; commonly developed on steep slopes.
- FRASER GLACIATION (WISCONSINAN)**
- PROGLACIAL AND GLACIAL ENVIRONMENTS**
- GLACIOACUSTRINE DEPOSITS:** well sorted, stratified sand, silt, and clay deposited in deep water of former glacial lakes; including sporadic sand and gravel deposited in a nearshore environment; sand, silt, and clay commonly occur as rhythmites with rare oblique-flow interbeds; outcrops are common on adjacent units; contacts between subunits Lb and Lv are gradational.
- Glaciolacustrine blanket:** well sorted, stratified sand, silt, and clay; 3 to 10 m thick; reflecting topography of underlying units.
- Glaciolacustrine veneer:** deep-water deposits of well sorted, stratified sand, silt, and clay overlain, in places, by shallow-water deposits of sand and gravel; occurring near limits of former glacial lakes; includes minor till outcrops; 1 to 3 m thick; reflects topography of underlying units; commonly developed on till surfaces.
- GLACIOFLUVIAL DEPOSITS:** sand and gravel, well to poorly sorted, and commonly stratified; deposited by glacial meltwater; bedding disrupted locally following the melting of supporting ice.
- Glaciofluvial terrace sediments:** sand and gravel, stratified to massive; 1 to 10 m thick; forming flat surfaces perched well above alluvial deposits or associated with meltwater channels.
- Glaciofluvial blanket:** sand and gravel, stratified to massive; generally 1 to 5 m thick; sediment cover is continuous, but the underlying morphology is visible; commonly located near the mouth of meltwater channels.
- Ice contact deposits:** sand and gravel, stratified to massive and commonly faulted; generally greater than 3 m thick; forming hummocky, kilted surfaces or eskers.
- Glaciofluvial veneer:** made up of sand and gravel, well to poorly sorted, and commonly stratified; deposited by glacial meltwater; bedding disrupted locally following the melting of supporting ice; 1 to 3 m thick.
- GLACIAL ENVIRONMENT**
- Till:** poorly sorted diamicton consisting of pebbles, cobbles, and boulders in a sandy to clayey matrix directly deposited by glaciers; includes colluvium (reworked till) on steep slopes, and small inclusions of glaciofluvial sediments, especially in valley bottoms and near the mouths and banks of meltwater channels; till surface is commonly fluted and drumlinized.
- Thick till, rolling:** continuous till cover; greater than 3 m thick; masking the underlying topography; bedrock outcrops are rare.
- Till blanket:** continuous till cover with few bedrock outcrops; 1 to 3 m thick on average; conforming to and locally obscuring topography of underlying units.
- Till veneer:** discontinuous till cover with abundant bedrock outcrops; average thickness of 1 m; reflecting topography of underlying units, which is predominantly bedrock.
- PRE-QUATERNARY BEDROCK:** sedimentary, metamorphic, volcanic, and intrusive rocks of Precambrian(?) to Cenozoic age; including, in places a thin veneer of till and colluvium.
- R**
- Geological boundary (defined)
Meltwater channel, large (direction unknown)
Meltwater channel, small (direction unknown)
Escarpment
Esker (direction unknown)
Landslide scar: large
Drumlin (direction known, direction unknown)
Crag-and-tail
Outcrop
Field observation site
Gravel pit
Kettle hole

ACKNOWLEDGMENTS

The authors would like to thank K. Shimamura, L. Robertson, F. Cr  ch  cadeo, and J.L. Dohar for their Geographical Information Systems and cartographic support. Field assistance provided by a multitude of students was greatly appreciated.

REFERENCES

- Blais-Stevens, A. and Clague, J.J., 2007: Surficial geology, Cottonwood, British Columbia. Geological Survey of Canada, Open File 5270, scale 1:50 000.
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2007: Surficial geology, Ahnau Lake, British Columbia. Geological Survey of Canada, Open File 5273, scale 1:50 000.



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Geology by A. Blais-Stevens, 2003–2005 and J.J. Clague, 1981–1986

Airphotos (1971 and 1977), interpretation by A. Blais-Stevens, 2003–2005 and J.J. Clague 1981–1986

Digital map compilation by F. Cr  ch  cadeo and L. Robertson, GSC Northern Canada Division

Digital cartography by J.L. Dohar, Data Dissemination Division (DDD)

This map was produced from processes that conform to the Scientific and Technical Publishing Services Subdivision (2020) Quality Management System, registered to the ISO 9001:2000 standard

OPEN FILE 5274
SURFICIAL GEOLOGY
**SOUTHEASTERN PORTION OF THE
PRINCE GEORGE MAP AREA**
BRITISH COLUMBIA

Scale 1:100 000/  chelle 1/100 000

kilom  tres 2 0 2 4 6 8 kilom  tres

Universal Transverse Mercator Projection
Syst  me de r  f  rence g  od  sique non-d  formant, 1983
   Her Majesty the Queen in Right of Canada 2007
   Sa Majest   la Reine du chef du Canada 2007

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

Digital base map from data compiled by Geomatics Canada, modified by DDD

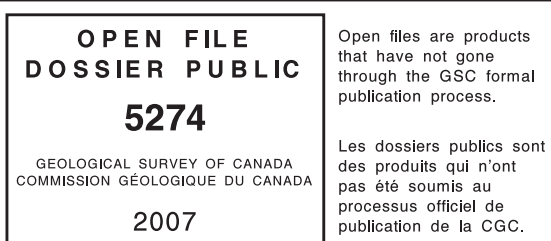
The digital elevation data was obtained from www.geobase.ca
Illumination: azimuth 315  , altitude 45  , vertical factor 1x

Mean magnetic declination 2007, 19  35' E, decreasing 15.7   annually.
Readings vary from 19  21' E in the SE corner to 19  49' E in the NW corner of the map

Elevations above mean sea level are in feet (west half of map) and in metres (east half of map)

OF3163	93 K	93 J	93 I
OF3184	OF2846		
OF3184	OF3182		
OF3686	OF3620	93 G	93 H
OF4157	OF4001	OF3638	OF274
	93 C	93 B	93 A

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Recommended citation:
Blais-Stevens, A. and Clague, J.J., 2007: Surficial geology, southeastern portion of the Prince George map area, British Columbia. Geological Survey of Canada, Open File 5274, scale 1:100 000.