

LEGEND

QUATERNARY
PLEISTOCENE AND RECENT
Q Glacial till, alluvium, and colluvium; unit designators in parentheses are the inferred underlying bedrock units.

JURASSIC AND CRETACEOUS
UPPER JURASSIC AND LOWER CRETACEOUS
BOWSER LAKE GROUP (units JKbu and JKbs)
SKELHORNE ASSEMBLAGE (slope assemblage): thinly interbedded and unconformable siltstone, sandstone, and conglomerate (with or without coal), commonly arranged in coarsening- and thickening-upward cycles; common features of sandstone are parallel bedding, crossbedding, ripple, burrows, bivalve coquina, and brown, green, and grey weathering; conglomerate is rusty- and grey-weathering, but constitutes a lower proportion (15–30%) of the unit than in the Eaglesnest assemblage; conglomerate units, up to 50 m thick, cap cycles up to 70 m thick, and tops locally have megapebbles; plant and marine fossils are ubiquitous, and trace fossils including *Skolithus* and *Diplocraterion* are present, as are tree fragments several metres long.

JKbs Undivided Bowser Lake Group.

JKbu Undivided Bowser Lake Group.

JURASSIC
UPPER MIDDLE TO UPPER JURASSIC
BOWSER LAKE GROUP (units JBra and JBt)
TODAGIN ASSEMBLAGE (slope assemblage): siltstone, fine-grained sandstone, and conglomerate; mainly laminated siltstone and/or fine-grained sandstone, which is dark grey to black weathering and includes thin, orange-weathering claystone beds and syndepositional faults and folds; chert-pebble conglomerate occurs as lenses; marine fossils.

JBt **RITCHIE-ALGER ASSEMBLAGE** (submarine fan assemblage): sandstone, siltstone, and rare conglomerate; approximately equal proportions of sheet-like intervals, up to 50 m thick, dominated either by siltstone and very fine-grained sandstone, or by medium-grained sandstone; siltstone and/or fine-grained sandstone is dark grey- and black-weathering, and sandstone is medium- and light grey-weathering; abundant turbidite features (e.g. Bouma cycles, flame structures, flute-and-groove casts); conglomerate includes debris-flow units; marine fossils.

JBra **RITCHIE-ALGER ASSEMBLAGE** (submarine fan assemblage): sandstone, siltstone, and rare conglomerate; approximately equal proportions of sheet-like intervals, up to 50 m thick, dominated either by siltstone and very fine-grained sandstone, or by medium-grained sandstone; siltstone and/or fine-grained sandstone is dark grey- and black-weathering, and sandstone is medium- and light grey-weathering; abundant turbidite features (e.g. Bouma cycles, flame structures, flute-and-groove casts); conglomerate includes debris-flow units; marine fossils.

Geological boundary (approximate, assumed or inferred beneath unit Q)
Trace of individual beds from ground observation and airphoto interpretation
Normal fault (defined; symbol on downthrown side)
Anticline, trace of axial surface (defined, approximate, overturned); arrow on line indicates direction of plunge
Syncline, trace of axial surface (defined, approximate, overturned); arrow on line indicates direction of plunge
Cross-section location. The cross-sections for this map area are shown in Figure 173 of GSC Bulletin 577 (Evenchick and Thorkelson, in press) A B
Bedding (inclined, overturned)
Cleavage (inclined)
Fold axis
Fossil location
Conglomerate
Icefield

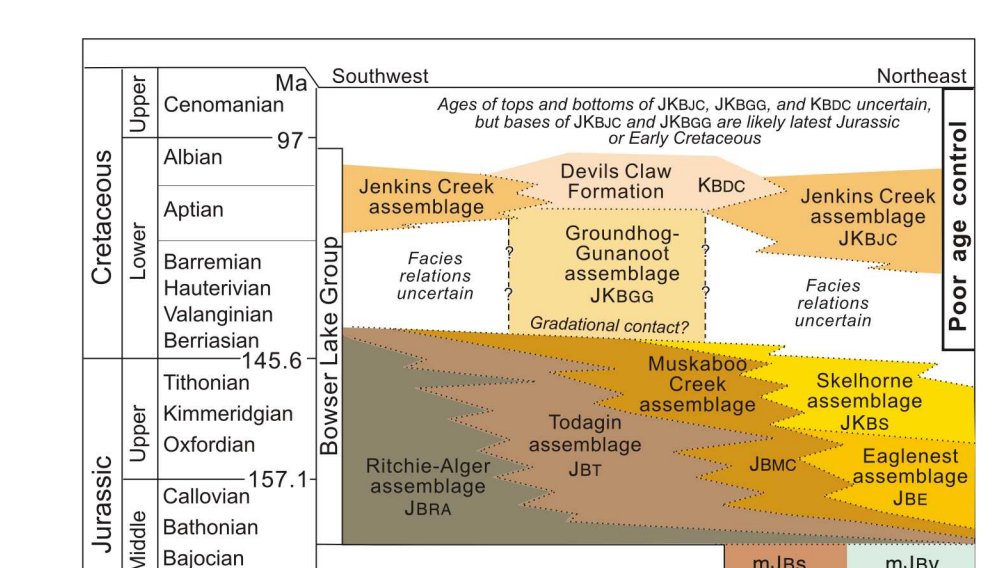


Figure 1. Approximate ages and relationships of units in the Bowser Lake Group

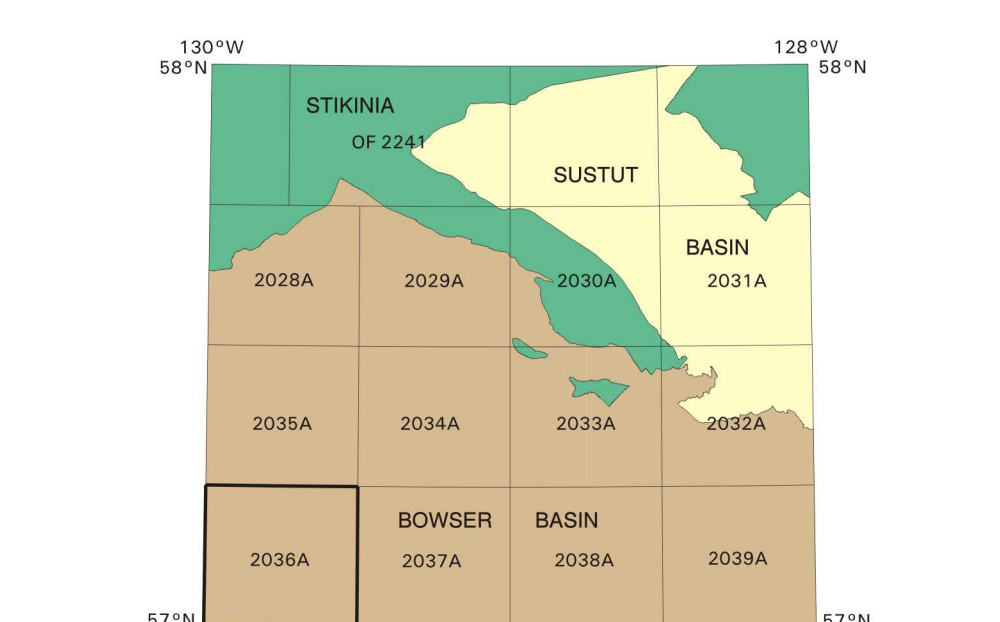


Figure 2. Tectonic elements of Spatsizi River map area (NTS 104 H) and location of NTS 104 H4 (Map 2036A)

Previous geological map of the region by Geological Survey of Canada (1957).
 Geology of the surrounding region (NTS 104 H) and descriptive notes are given by Evenchick and Thorkelson (in press).

REFERENCES
 Evenchick, C.A. and Thorkelson, D.J.,
 In press: Geology of the Spatsizi River map area, north-central British Columbia; Geological Survey of Canada, Bulletin 577.
 Geological Survey of Canada,
 1957: Sikine River area, Cassiar District, British Columbia; Geological Survey of Canada, Map 9-1957, scale 1:253 440.

Copies of this map may be obtained from the Geological Survey of Canada, 601 Booth Street, Ottawa, Ontario K1A 0E8, 3803-38th Street, N.W., Calgary, Alberta T2L 2A7, 101-609 Robson Street, Vancouver, B.C. V6B 2J2



Geology by C.A. Evenchick (1989, 1990) and G.M. Green (1989)
 Map compilation by C.A. Evenchick
 Digital geological cartography by C.L. Wagner and R. Cocking,
 Earth Sciences Sector Information Division (ESS-Info),
 D. Dunn, G. Evenchick, and D. McKee,
 Geological Survey of Canada
 Any revisions or additional geological information known to the user would be welcomed by the Geological Survey of Canada

MAP 2036A
GEOLOGY
TUMEKE CREEK
BRITISH COLUMBIA
 Scale 1:50 000/Échelle 1/50 000
 kilometres 1 0 1 2 3 4 kilometres
 Universal Transverse Mercator Projection
 North American Datum 1927
 © Her Majesty the Queen in Right of Canada 2004
 Projection transversale universelle de Mercator
 Système de référence géodésique nord-américain, 1927
 © Sa Majesté la Reine du chef du Canada 2004

Digital base map produced by vectorization of paper copy base map from Geomatics Canada, modified by ESS-Info
 Mean magnetic declination 2004, 23°31' E, decreasing 14.9' annually
 Elevations in feet above mean sea level
 Contour interval 100 feet

104 G8	104 H5	104 H6
2035A	2034A	2034A
104 G1	104 H4	104 H3
2036A	2037A	2037A
104 B16	104 A13	104 A14

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

Recommended citation:
 Evenchick, C.A. and Green, G.M.,
 2004: Geology, Tumeke Creek, British Columbia; Geological Survey of Canada, Map 2036A, scale 1:50 000.