

**GENOZOIC**

**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 JKb-JKbc)**

**JKBic** **JENKINS CREEK ASSEMBLAGE (nonmarine assemblage):** mudstone, siltstone, fine-grained sandstone, medium-grained sandstone, and rare conglomerate and coal, commonly arranged in fining-upward cycles; sandstone is grey, green, and brown-weathering, and occurs as laterally continuous sheets, discontinuous sheets, and lenses; lenses are planar and rough crossbedded; fossil plants abundant, including in situ roots, and plants with delicate structures; marine fossils absent.

**JKBgc** **GROUNDHOG-GUANOOT ASSEMBLAGE (deltaic assemblage):** sandstone, siltstone, and carbonaceous and calcareous mudstone, with minor conglomerate and coal; locally arranged in fining-upward cycles; sandstone is fine- to medium-grained with planar bedding and planar-tabular crossbedding; large proportion of sandstone is thin- and thick-bedded, medium-grained; recessive drab green- or brown-weathering wacke; resistant and light grey-weathering arenite is less common and forms discontinuous sheets and lenses; finer grained strata are thinly bedded and locally include densely packed plant fossils; conglomerate sheets and lenses, which constitute 10% of the unit, are light grey-weathering, with large-scale crossbedding; plant fossils common and include in situ trees; marine fossils rare.

**JKBs** **SKELHORNE ASSEMBLAGE (deltaic assemblage):** thinly interbedded and varicoloured siltstone, sandstone, and conglomerate (with or without coal), commonly arranged in coarsening- and thickening-upward cycles; common features of sandstone are parallel bedding, crossbedding, ripples, 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 Eaglecrest assemblage; conglomerate units, up to 50 m thick, cap cycles up to 70 m thick, and tuffs locally have megapillars; plant and marine fossils are ubiquitous, and trace fossils including Skolithus and Diplocraterion are present, as are tree fragments several metres long.

**MESOZOIC**

**JURASSIC**

**UPPER MIDDLE TO UPPER JURASSIC**

**BOWSER LAKE GROUP (units JBr and JBic)**

**JKBu** **MUSKABOO CREEK ASSEMBLAGE (shelf assemblage):** sandstone, siltstone, and conglomerate; primary lithofacies is sandstone, forming laterally continuous thin- to thick-bedded sheets; less common are siltstone interbedded with sandstone, and lenses of conglomerate; sandstone is green-, brown-, and grey-weathering, thin- to thick-bedded, and locally arranged in coarsening-upward cycles; includes burrows, bivalve coquina, and other marine fossils, common ripple marks and crossbedding, and local hummocky cross-stratification; conglomerate increases in proportion and thickness upsection.

**JBc** **TODAGH 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.

**LOWER AND LOWER MIDDLE JURASSIC**

**HAZELTON GROUP**

**SPATSIZI FORMATION (unit JHsu)**

**JHsu** Undivided Spatsizi Formation: siltstone, siliceous siltstone, calcareous siltstone, mudstone, fine-grained sandstone

Geological boundary (approximate, assumed or inferred beneath unit Q)

Trace of individual beds from ground observation and airphoto interpretation

Fault, unknown displacement (defined, assumed or inferred beneath unit Q)

Thrust fault (approximate, assumed or inferred beneath unit Q); symbol on hanging-wall side

Normal fault (defined); symbol on downthrown side

Anticline, trace of axial surface (defined, approximate); arrow on line indicates direction of plunge

Syncline, trace of axial surface (defined, approximate); arrow on line indicates direction of plunge

Cross-section location. The cross-sections for this map area are shown in Figure 172 of GSC Bulletin 577 (Evenchick and Thorkelson, in press)

Bedding (inclined, overturned)

Fold axis

Fossil location

Conglomerate

Icefield

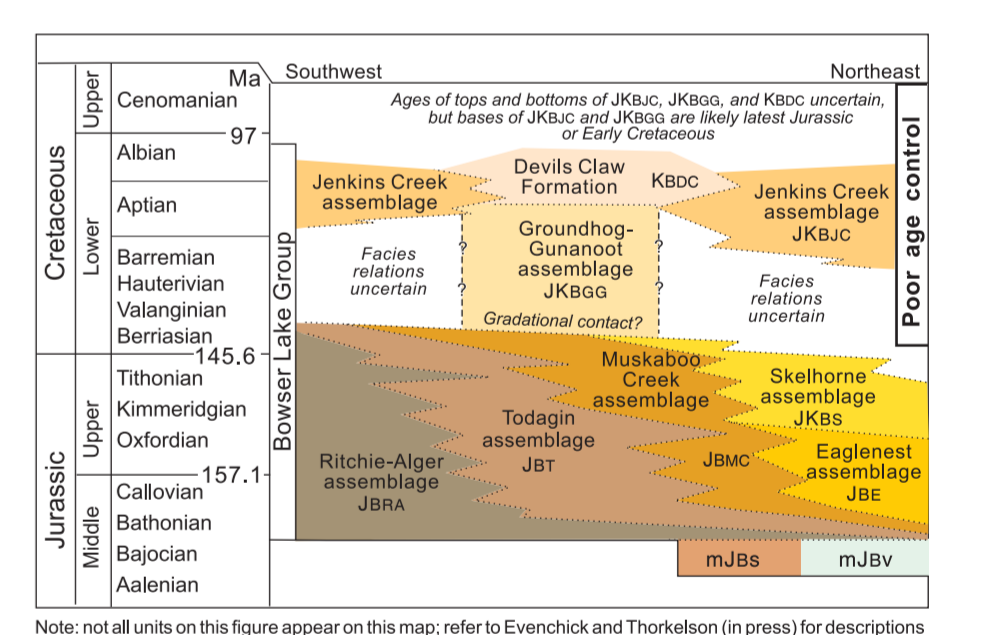


Figure 1. Approximate ages and relationships of units in the Bowser Lake Group

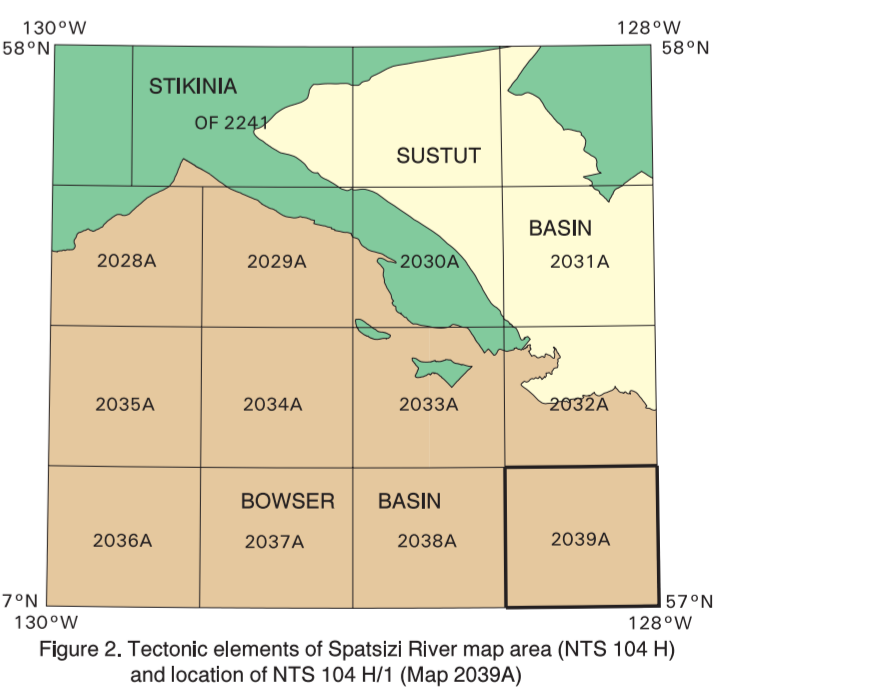


Figure 2. Tectonic elements of Spatsizi River map area (NTS 104 H) and location of NTS 104 H1 (Map 2039A)

MAP 2039A  
GEOLOGY  
**SKELHORNE CREEK**  
BRITISH COLUMBIA

Scale 1:50 000 / Échelle 1/50 000

Contour interval 100 feet

Mean magnetic declination 2004, 23°29' E, decreasing 15.1' annually

Elevations in feet above mean sea level

Universal Transverse Mercator Projection / North American Datum 1927

Projection transversale universelle de Mercator / Système de référence géodésique nord-américain, 1927

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Geology by C.A. Evenchick 1987, 1988, 1992

Map compilation by C.A. Evenchick

Digital geological cartography by C.L. Wagner and R. Cocking, Earth Science Sector Information Division (ESS Info), D. Dunn, C. Evenchick, T. Feeney, 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

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104 H/7	104 H/8	94 E/5
2039A	2039A	
104 H/2	104 H/1	94 E/4
2039A	2039A	
104 A/15	104 A/16	94 D/13

NATIONAL TOPOGRAPHIC SYSTEM REFERENCE AND LINK TO GEOLOGICAL SURVEY OF CANADA MAPS

Sources of information for this compilation are geological mapping and airphoto interpretation by C.A. Evenchick in 1987, 1988, and 1992.

Previous geological map of the region is by Geological Survey of Canada (1967).

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.  
1967: Geology of the Spatsizi River map area, north-central British Columbia. Geological Survey of Canada, Bulletin 577.

Geological Survey of Canada  
1967: Skelhorne Creek, British Columbia. Geological Survey of Canada, Map 9-1957, scale 1:253 460.

Recommended citation:  
Evenchick, C.A.  
2004: Geology, Skelhorne Creek, British Columbia. Geological Survey of Canada, Map 2039A, scale 1:50 000.

