

Any revisions or additional geological information known to the user

would be welcomed by the Geological Survey of Canada

OPEN FILE 4948
GEOLOGY

STALK LAKES
BRITISH COLUMBIA

Scale 1:50 000/Échelle 1/50 000

netres 1 0 1 2 3

Universal Transverse Mercator Projection Projection transverse universelle

North American Datum 1927

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Chelle 1/50 000

2 3 4 kilomètres

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

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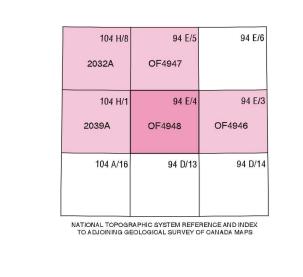
Converted to NAD27 by ESS Info

Mean magnetic declination 2005, 23°12'E, decreasing 15.1' annually

Elevations in metres above mean sea level

Contour interval 20 metres

Digital base map from 1:20 000 digital TRIM data,



LEGEND QUATERNARY PLEISTOCENE AND RECENT Glacial till, alluvium, and colluvium; unit designators in parentheses are the inferred underlying bedrock units. CRETACEOUS UPPER LOWER AND UPPER CRETACEOUS SUSTUT GROUP (units KTC and KBP)
CAMPANIAN AND MAASTRICHTIAN BROTHERS PEAK FORMATION: sandstone, siltstone, conglomerate, and tuff; sandstone and siltstone are cream- and grey-weathering, tuff is cream-weathering; conglomerate in laterally continuous sheets is most common near base. APTIAN OR ALBIAN TO CAMPANIAN TANGO CREEK FORMATION: micaceous sandstone, siltstone, mudstone, and MTC minor quartz grit and pebble conglomerate; sandstone is grey- and green-weathering, occurring as laterally continuous sheets and as lenses; siltstone and mudstone are grey-, black-, and maroon-weathering. JURASSIC AND CRETACEOUS UPPER JURASSIC AND LOWER CRETACEOUS BOWSER LAKE GROUP (units JKBu and JKBs) Undivided Bowser Lake Group. SKELHORNE ASSEMBLAGE (deltaic assemblage): thinly intermixed 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 Eaglenest assemblage; conglomerate units, up to 50 m thick, cap cycles up to 70 m thick, and tops locally have megaripples; plant and marine fossils are ubiquitous, and trace fossils including Skolithus and Diplocraterion are present, as are tree fragments several metres long. **JURASSIC** UPPER MIDDLE TO UPPER JURASSIC BOWSER LAKE GROUP (units JBT-JBE) EAGLENEST ASSEMBLAGE (deltaic assemblage): conglomerate, sandstone, siltstone, mudstone, and rare coal, arranged in coarsening- and fining-upward cycles of mudstone to pebble or cobble conglomerate; prominently rusty-weathering and 30 to 80% conglomerate; sheets of conglomerate, up to 50 m thick, include planar beds, tabular-planar cross-stratification and trough cross-stratification, with sets locally up to tens of metres thick; sandstone is green-, brown-, and grey-weathering, has planar cross-stratification and hummocky cross-stratification; sparse marine fossils but abundant plant fossils, including silicified tree fragments. 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, with local hummocky cross-stratification; conglomerate increases in proportion and thickness up-section. TODAGIN ASSEMBLAGE (slope assemblage): siltstone, fine-grained sandstone, 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 LOWER AND LOWER MIDDLE JURASSIC HAZELTON GROUP PLIENSBACHIAN TO BAJOCIAN

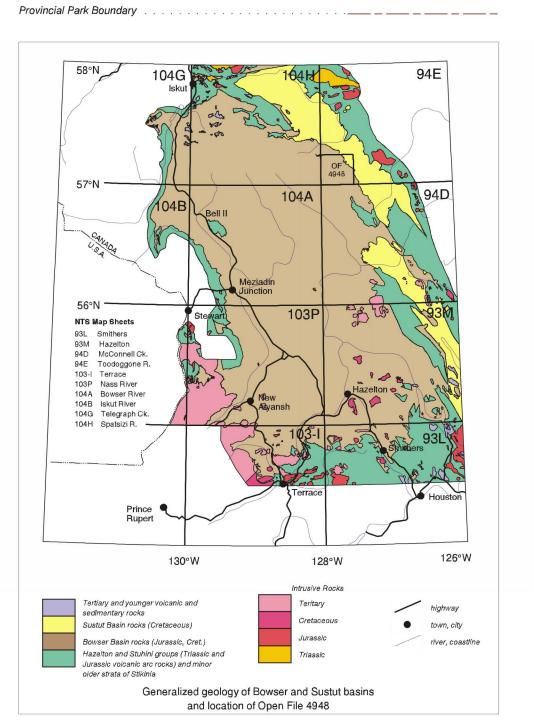
> Geological boundary (defined, approximate, assumed or inferred beneath Trace of individual beds from ground observation and airphoto interpretation Fault, unknown displacement (defined, approximate, assumed or inferred beneath unit Q) Thrust fault (approximate, assumed or inferred beneath unit Q); symbol on hanging-wall side . Normal fault (defined, assumed or inferred beneath unit Q); symbol on downthrown side . . Anticline, trace of axial surface (defined, approximate, overturned); arrow along line indicates direction of plunge . Syncline, trace of axial surface (defined, approximate, overturned); arrow along line indicates direction of plunge . Open, inclined syncline, trace of axial surface (approximate); long arrow points in direction of dip of axial surface Bedding (inclined, overturned) Intersection of bedding and cleavage

Undivided Spatsizi Formation: siltstone, silicious siltstone, calcareous siltstone,

SPATSIZI FORMATION (JHsu)

Conglomerate

mudstone, fine-grained sandstone



This is a revision of GSC Open File 3518 (Evenchick, 1997). It incorporates stratigraphic terminology consistent with new terminology used in the Bowser Basin (see Evenchick *et al.*, 2004; Evenchick and Thorkelson, 2005), and minor revisions to contacts and structures.

Sources of information for this compilation are geological mapping by C.A. Evenchick in 1991 (Evenchick, 1992), airphoto interpretation by C.A. Evenchick, and a regional (1:250 000) map by G. Eisbacher (1974).

This map is a contribution of the project "Integrated Petroleum Resource Potential and Geoscience Studies of the Bowser and Sustut Basins", of the Northern Resource Development Program, Natural Resources Canada. The project is a collaboration of the Geological Survey of Canada and the British Columbia Ministry of Energy and Mines, with contributions from Simon Fraser University. The digital topographic base map is provided by the BC Ministry of Energy and Mines (BC Mineral Potential Program).

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