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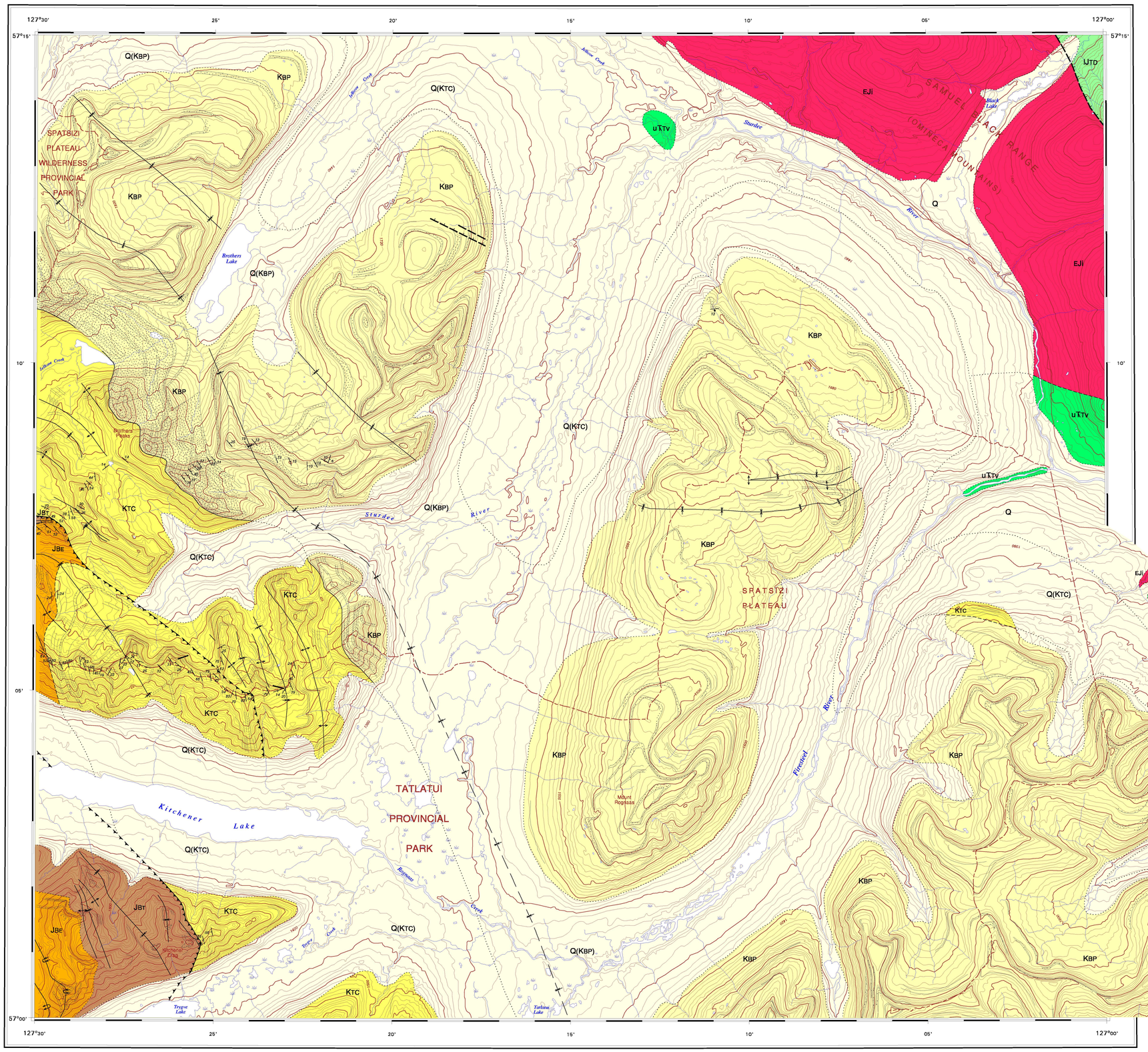
GEOLOGICAL SURVEY OF CANADA | COMMISSION GÉOLOGIQUE DU CANADA



LEGEND

CENOZOIC

QUATERNARY
PLEISTOCENE AND RECENT

Q — *Glacial till, alluvium, and colluvium; unit designators in parentheses are the inferred underlying bedrock units.*

MESOZOIC

CRETACEOUS
UPPER LOWER AND UPPER CRETACEOUS
CAMPANIAN AND MAASTRICHTIAN

KBP — *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

KTC — *TANGO CREEK FORMATION: micaceous sandstone, siltstone, mudstone, and 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
UPPER MIDDLE TO UPPER JURASSIC
BOWSER LAKE GROUP

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.*

JBT — *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 fossils.*

LOWER JURASSIC
HAZELTON GROUP

IJTD — *Todoggone Formation: subaerial andesitic to dacitic tuff; sandstone and siltstone.*

TRIASSIC
UPPER TRIASSIC
TAKLA GROUP

uTTv — *Augite- and coarse bladed feldspar-phyric mafic lava flows, aphanitic basalt, minor conglomerate, sandstone, mudstone, and limestone.*

PALEOZOIC

PERMIAN
LOWER PERMIAN
ASITKA GROUP

lPA — *Argillite, chert, basalt, limestone, turfaceous and argillaceous carbonate and calcareous tuff, sericite and chlorite phyllite, greenstone amphibolite.*

INTRUSIVE ROCKS

MESOZOIC

JURASSIC
EARLY JURASSIC

EJi — *Quartz monzonite, granodiorite.*

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

Trace of individual beds from ground observation and airphoto interpretation

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

Normal fault (approximate); symbol on down thrown side

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

Anticline, trace of axial surface (defined, overturned)

Syncline, trace of axial surface (defined, overturned)

Open, inclined syncline, trace of axial surface (defined, approximate); long arrow points in direction of dip of axial surface

Bedding (upright, top unknown, overturned) — 20, 15, 10

Conglomerate

Provincial Park Boundary

DESCRIPTIVE NOTES

This map overlaps the structural boundary between strata of the Bowser and Sustut basins, and the stratigraphic boundary between strata of the Sustut Basin underlying Triassic to early Jurassic volcanic arc rocks of Stikinia. The latter are included to provide a general context for the Sustut Basin; readers are encouraged to see Diakow (2001) and Diakow *et al.* (1993) for more detailed distributions of Stikinia strata east of the Sustut Basin, and for more detailed descriptions of map units. Descriptions and interpretations of Sustut Basin rocks may be found in Eisbacher (1974) and Evenchick and Thorkelson (2005). The broader map context of Bowser and Sustut Basin rocks is provided by Evenchick *et al.* (2006). This map replaces GSC open file 4946; significant changes are in the distribution of Sustut Group units in the southeast quadrant of the map, and the addition of geology in southwest 94E/02 to complete the distribution of Sustut Group rocks.

Sources of information are mapping by C.A. Evenchick in 1991; and airphoto interpretation by C.A. Evenchick and D. Ritcey (1991, 2005, 2007). The distribution of Early Jurassic and older rocks is generalized from Diakow (2001) and Diakow *et al.* (1993). Previous mapping by Eisbacher (1974) is incorporated.

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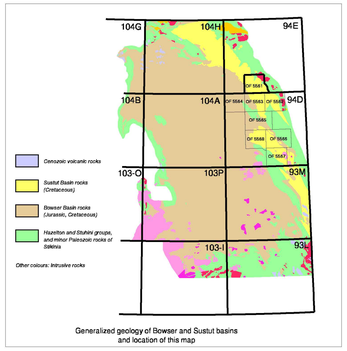


Generalized geology of Bowser and Sustut basins and location of this map

LOCATION MAP

Geology by C.A. Evenchick (1991) and C.A. Evenchick and D. Ritcey (2005)

Digital geological cartography by C.L. Wagner, Data Dissemination Division (DDD).

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

GSC OPEN FILE 5561

BCMEM PETROLEUM GEOLOGY OPEN FILE 2007-9

GEOLOGY

STURDEE RIVER AND SOUTHWEST ATTYCELLEY 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 2007

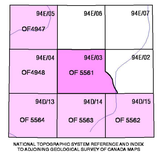
Projection transverse universelle de Mercator
Système de référence géodésique nord-américain, 1927
© Sa Majesté la Reine du chef du Canada 2007

Digital base map from data compiled by Geomatics Canada, converted to NAD27 by DDD

Mean magnetic declination 2007, 21°59'E, decreasing 19.5' annually

Elevations in metres above mean sea level

Contour interval 20 metres



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

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2007

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Recommended citation:
Evenchick, C.A., Ritcey, D.H., Mustard, P.S., and McMechan, M.E. 2007: Geology, Sturdee River and southwest Attycelley Creek, British Columbia; Geological Survey of Canada, Open File 5561; BC Ministry of Energy, Mines and Petroleum Resources, Petroleum Geology Open File 2007-9, scale 1:50 000.

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