

STRATIFIED ROCKS

QUATERNARY (PLEISTOCENE AND RECENT)

Q Glacial till, alluvium, colluvium; unit designations in parentheses are the inferred underlying bedrock units of Bowser and Sustut basins.

PLIOCENE TO (TYPE)PLEISTOCENE

Pv Mafic (basalt and/or andesite) flows, dykes, and small plugs; columnar jointed, festooned phenocrysts.

UPPER LOWER AND UPPER CRETACEOUS

SUSTUT GROUP

CAMPANIAN AND MAASTRICHTIAN

KBP BIRDYERS PEAK FORMATION: sandstone, siltstone, conglomerate, and tuff; sandstone and siltstone are cream- and gray-weathering; tuff is cream-weathering; conglomerate in laterally continuous sheets is most common near base.

APTIAN OR ALBIAN TO CAMPANIAN

KTC TANGGO CREEK FORMATION: micaceous sandstone, siltstone, mudstone, and minor quartz grit and pebble conglomerate; sandstone is gray- 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

JKBu Undivided Bowser Lake Group.

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, bralve coquina, and brown-, green-, and gray-weathering; conglomerate is rusty- and gray-weathering, but constitutes a lower proportion (15–20%) of the unit than in the Esplanet assemblage; conglomerate units, up to 50 m thick, cap cycles up to 70 m thick, and tops locally have megafossils; plant and marine fossils are common, and trace fossils including *Skolosia* and *Diplocateron* are present, as are tree fragments several metres long.

JURASSIC

UPPER MIDDLE TO UPPER JURASSIC

BOWSER LAKE GROUP

JBN NETALZIL FORMATION: festooned-hornblende porphyritic andesite flow, breccia, and tuff; intercalated volcanoclastic sedimentary rocks, including volcanic debris-flow conglomerate.

JBN/H Undivided Bowser Lake Group and upper Hazelton Group clastic rocks.

MIDDLE JURASSIC

HAZELTON GROUP

JHsu Undivided clastic rocks of Spatsizi, Salmon River, and Sliemers formations and related volcanic rocks; dominated by siltstone and shale, including siliceous well-bedded tuffaceous(?) siltstone, very silty siltstone, calcareous to siliceous shale, calcareous to siliceous siltstone, fine-grained sandstone, minor coarsenites are mudstone, limestone, conglomerate, coarse grained arkose, basalt, and rhyolite.

LOWER JURASSIC

UTJ Telwa Formation: calcalkaline basalt, andesite, dacite and rhyolite flow, breccia, tuff, volcanic debris-flow conglomerate, conglomerate, sandstone, and siltstone.

TRIASSIC

UPPER TRIASSIC

TAKLA GROUP

uTM Mesozoic Formation: andesitic and basaltic volcanic conglomerate, breccia, sandstone, tuff, and agillite.

uTd Dewar Formation: tuff, sandstone, argillite, minor limestone and breccia.

PALEOZOIC

PERMIAN

LOWER PERMIAN

ASITKA GROUP

IPA Argillite, chert, basalt, tuffaceous and argillaceous carbonate and calcareous tuff, sericite and chlorite phyllite, greenstone amphibolite.

JURASSIC

EARLY JURASSIC

EJi Undivided Jurassic intrusive rocks; includes granite, granodiorite, tonalite, diorite, quartz diorite, monzonite, quartz monzonite.

INTRUSIVE ROCKS

Geological contact (defined, approximate, assumed) ————

Trace of individual beds from ground observation and airphoto interpretation ————

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

Fault, normal (approximate); symbol on down thrown side ————

Fault, thrust (defined, assumed or inferred beneath unit Q); symbol on hanging wall side ————

Fault, reverse (defined, approximate, assumed or inferred beneath unit Q); symbol on hanging wall side ————

Anticline trace of axial surface (defined, approximate) ————

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

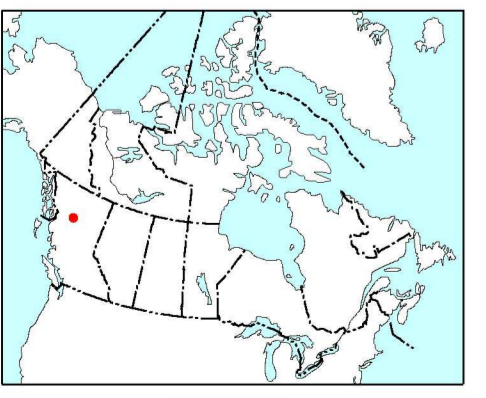
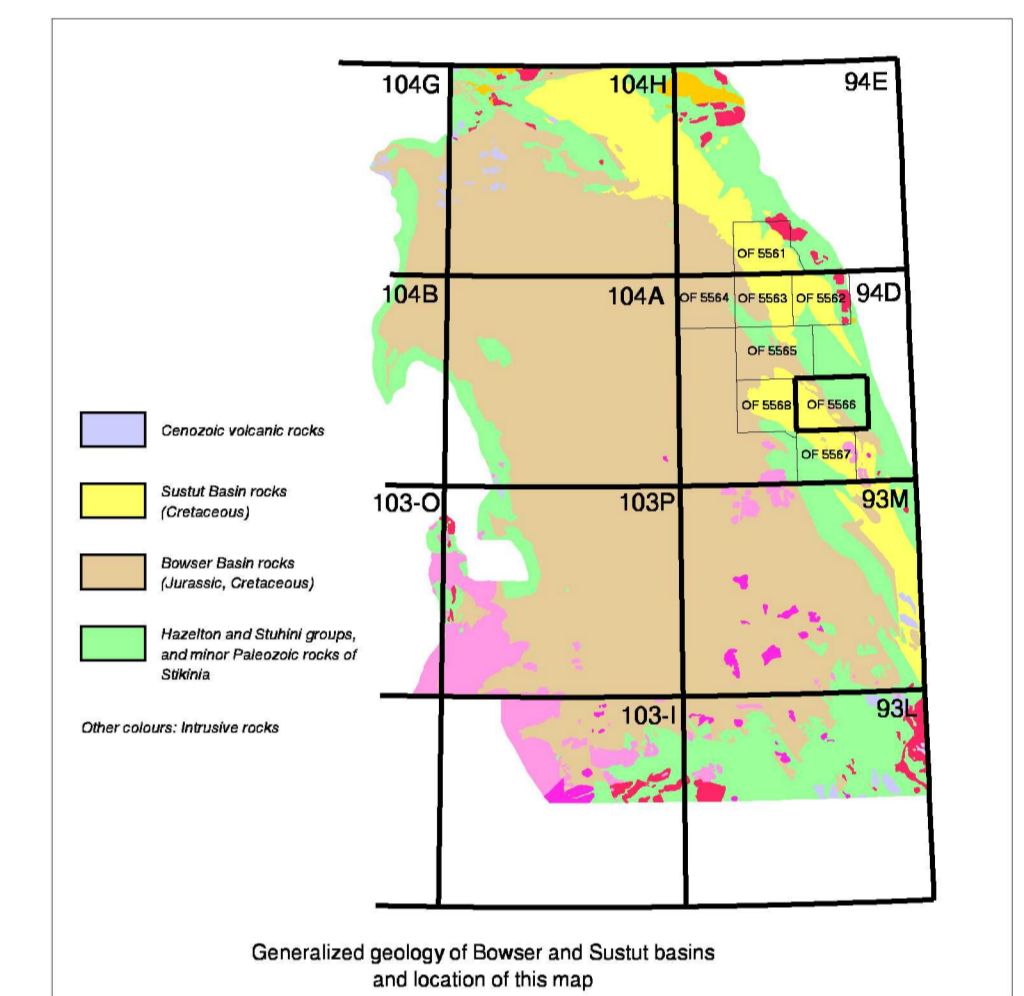
Conglomerate ————

Bedding (upright, top unknown, overturned) ————

Fossil locality ————

Outcrop examined bedding attitude not determined (collected locations shown) ————

Provincial park boundary ————



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 BCMEM PETROLEUM GEOLOGY OPEN FILE 2007-4
 GEOLOGY
**ASITKA RIVER AND
 SOUTHWEST CARRUTHERS PASS**
 BRITISH COLUMBIA

Geology by C.A. Evershick (1992),
 C.A. Evershick, F. Ferri, P.S. Mustard, T. Hadlari (2003),
 C.A. Evershick, P.S. Mustard, M.E. McMechan (2006)

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

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,
 converted to NAD27 by DDD

Mean magnetic declination 2007, 21°38'E,
 decreasing 18.6' annually

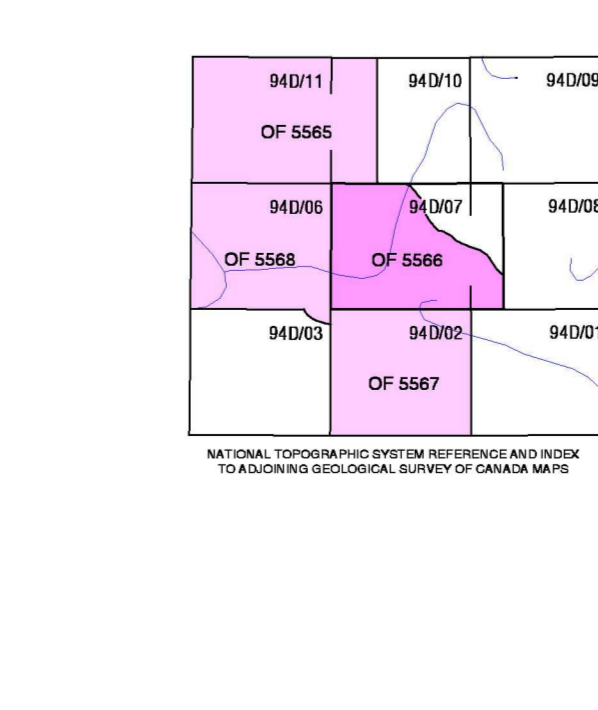
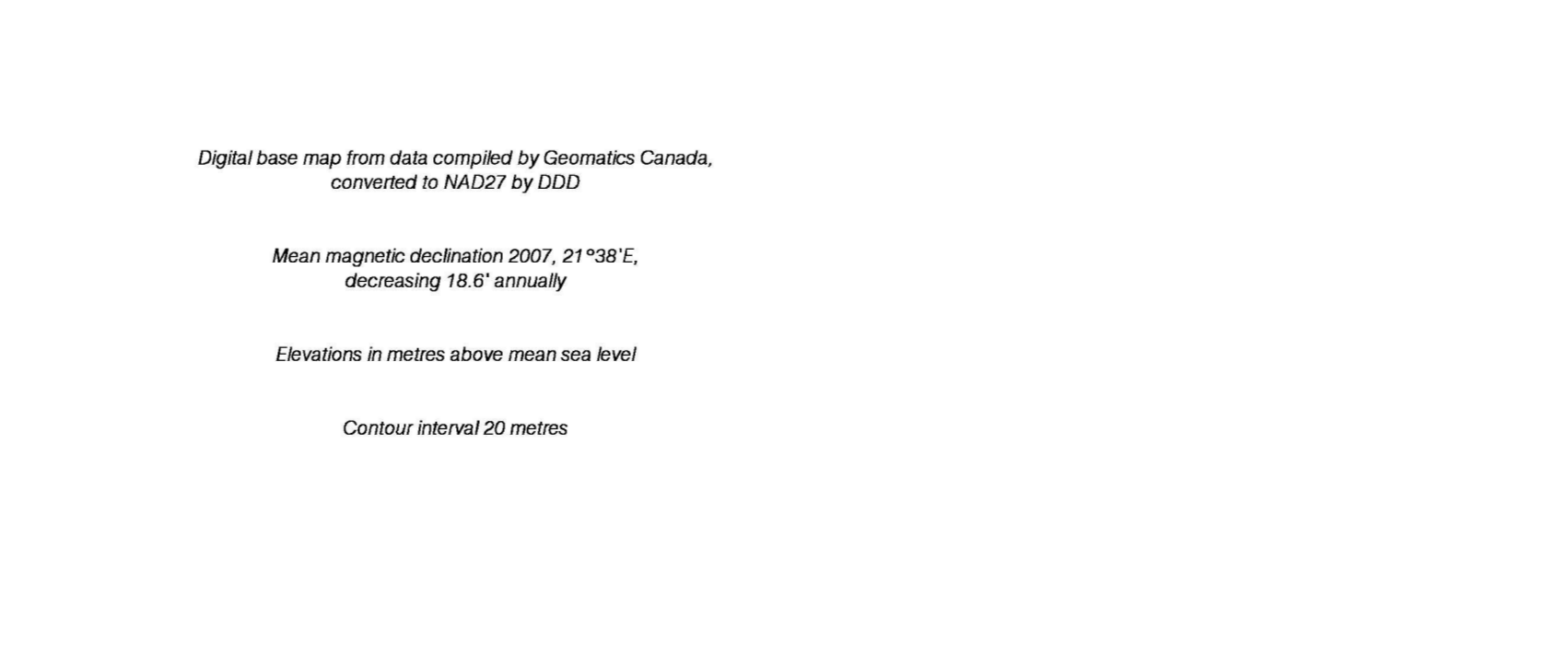
Elevations in metres above mean sea level

Scale 1:50 000 / Échelle 1/50 000

Contour interval 20 metres

Universal Transverse Mercator Projection
 North American Datum 1927
 © Her Majesty the Queen in Right of Canada 2007

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