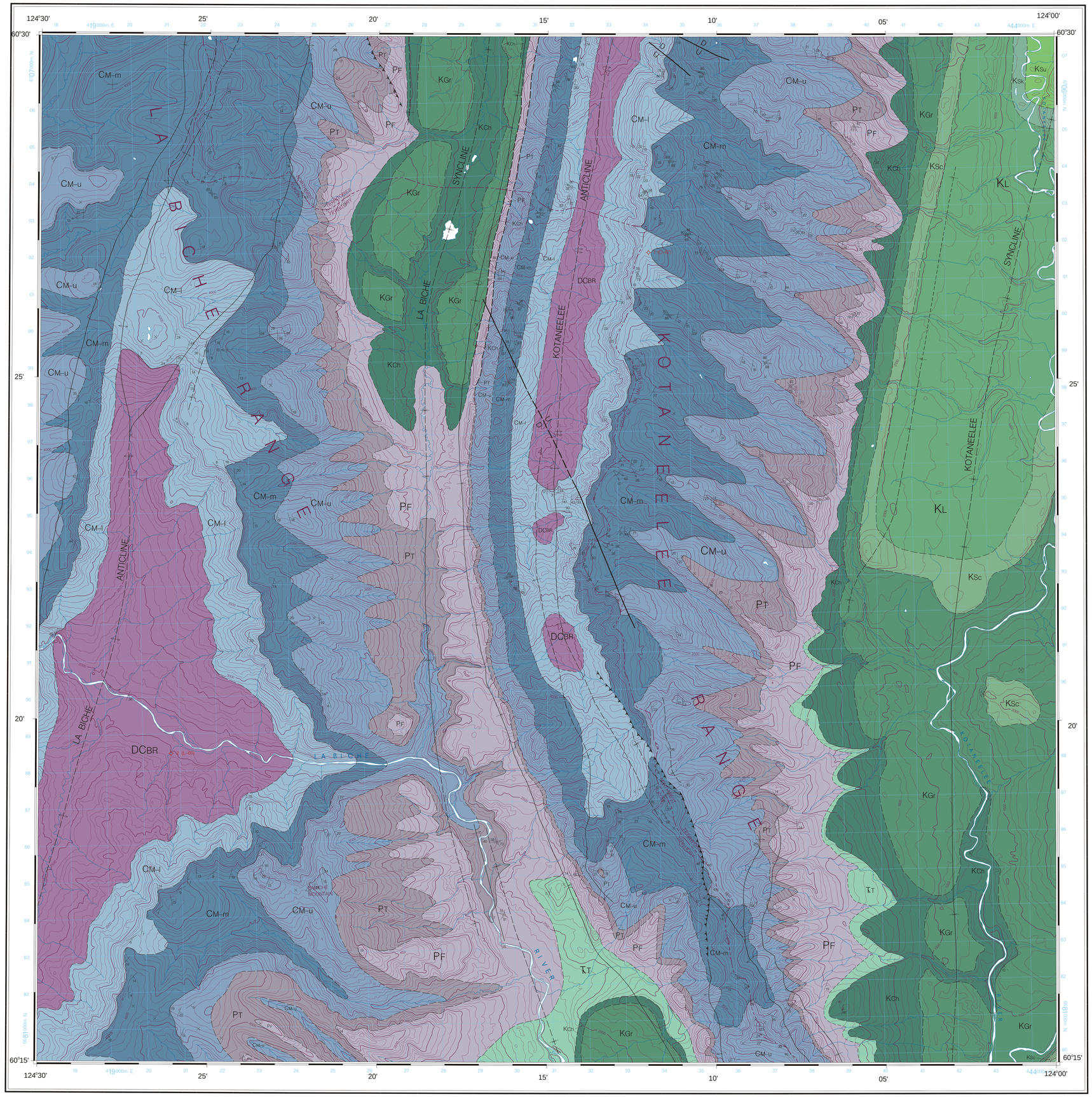
Natural Resources Canada | Ressources naturelles Canada

GEOLOGICAL SURVEY OF CANADA | COMMISSION GEOLOGIQUE DU CANADA



LEGEND

CRETACEOUS

LOWER CRETACEOUS

FORT ST. JOHN GROUP

- KSu — *SULLY FORMATION: Dark grey shale and siltstone with sideritic concretions; silt content higher in upper part.*
- KSk — *SIKANNI FORMATION: Greenish grey sandstone, siltstone, and shale; sandstone is thick-bedded, commonly calcareous or glauconitic, typically thinly laminated and crosslaminated.*
- KL — *LEPINE FORMATION: Dark grey mudstone with concretions, silty shale, and black fissile shale; lower part of unit abundantly fossiliferous.*
- KSc — *SCATTER FORMATION: Resistant, greenish-grey, glauconitic, laminated sandstone; medium- to thick-bedded; silty, concretionary mudstone common in middle part of unit.*
- KGr — *GARBUTT FORMATION: Grey shale and siltstone with sideritic concretions; minor thin-bedded, finely laminated sandstone.*
- KCh — *CHINKEH FORMATION: Chert-pebble conglomerate overlain by bioturbated quartz arenite with variable chert content, and argillaceous siltstone; woody or plant debris common.*

MESOZOIC

TRIASSIC

DIABER GROUP

- TT — *TOAD FORMATION: Grey, red, and green shale interbedded with thin- to thick-bedded brown sandstone; locally calcareous or phosphatic; may include the Grayling Formation at the base.*

PERMIAN

ISHBEL GROUP

- PF — *FANTASQUE FORMATION: Dark grey to white, well bedded, spiculitic chert; rusty weathering; rhythmically interbedded with minor shale and siliceous siltstone.*
- PT — *Tika map unit: Buff weathering, light to medium brown, silty and sandy limestone or dolostone grading into calcareous siltstone and sandstone; subordinate lithoclast breccia and shale; medium-bedded, massive to crosslaminated; sparsely fossiliferous; characteristic rectilinear fracture pattern.*

LOWER CARBONIFEROUS

MATTSON FORMATION

- CM–u — *UPPER MEMBER: Light to medium grey, fine- to coarse-grained, locally calcareous or dolomitic quartz arenite and sub-chert-arenite; subordinate fossiliferous limestone, dolostone, and grey to green shale; sandstone commonly shows large-scale crossbedding; fossils in the limestone are commonly silicified.*
- CM–m — *MIDDLE MEMBER: Grey to buff to brown, poorly- to well-indurated, fine-grained quartz arenite with subordinate siltstone and dark shale; minor coal and sandy dolostone; sandstone shows fine- to large-scale crossbedding; typically forms sharp-based, thick-bedded, fining-up sequences.*
- CM–l — *LOWER MEMBER: Greyish-orange weathering, light grey or buff, well-indurated, fine- to very fine-grained quartz arenite interbedded with siltstone and dark grey shale; minor coal, dolostone, and lithoclast breccia; crosslaminae and trace fossils common; typically thin- to medium-bedded with coarsening-up sequences.*

PALEOZOIC

DEVONIAN AND CARBONIFEROUS

- DCBR — *BESA RIVER FORMATION: Dark grey to black shale, locally weathers buff; sparsely fossiliferous; minor interbedded greyish-orange weathering sandstone, siltstone.*

MAP SYMBOLS

- *Geological boundary (defined, approximate, assumed)*
- *Outcrop stations*
- *Outcrop; remote observation*
- *Bedding (inclined, vertical, horizontal, overturned, estimated)*
- *Crossbedding (dip direction and dip; uncorrected)*
- *Joint (inclined)*
- *Anticline (defined, approximate, assumed)*
- *Syncline (defined, approximate, assumed)*
- *Overturned anticline (defined, approximate, assumed)*
- *Anticlinal kink fold - (defined, approximate, assumed) (See diagram below)*
- *Synclinal kink fold- (defined, approximate, assumed) (See diagram below)*
- *Overturned syncline - limbs dip in opposite direction (defined, approximate, assumed)*
- *Fault, thrust (defined, approximate)*
- *Fault, unknown type (defined, approximate) (U on upthrown side, D on downthrown side if known)*
- *Wells (dry and abandoned)*

FOLD SYMBOLOGY

Cross-section view: double arrows are used to indicate folds where the dip direction changes across the hinge, and single arrows are used where the dip direction remains the same across a hinge (see reference 1).

LIST OF WELLS

	UWID	FULL NAME	SPUD DATE	SURFACE LOCATION (Easting, Northing)
1	300O676030124000	PAN AM KOTANEELEE O-67	19 Nov 1968	433957, 6701843
2	300L606020124150	PAN AM SHELL MERRILL YT L-60	24 Jan 1969	420758, 6688465

References:

1. *Stockmal, G.S., Kubli, T.E., Currie, L.D., and McDonough, M.R., 2002: Map symbology and analysis of box and polyclinal folds, with examples from the Rocky Mountain Foothills of northeastern British Columbia and the Liard Ranges of southeastern Yukon Territory and southwestern Northwest Territories; Canadian Journal of Earth Sciences, vol. 39, p.145-155.*

NOTES:

1. *Bedding orientations are shown at station locations; crossbedding and joint orientations are shown slightly offset from stations for clarity.*
2. *Slumping of large sections of bedrock may locally influence structure orientations and lead to minor variations in strike and dip.*

Geological compilation by K.M. Fallas and L.S. Lane, 2002

Geology by: K.M. Fallas, L.S. Lane, and A.K. Khudoley, 2000-2002; L.D. Currie, T.E. Kubli, M.P. Cecile, and M.R. McDonough, 1995-1997: based on fieldwork and studies of vertical air photographs.

THIS MAP IS A PRODUCT OF THE CENTRAL FORELAND NATMAP PROJECT

Geological cartography by: S.J. Hinds, Geological Survey of Canada

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

Base map at the same scale published by Surveys and Mapping Branch in 1971

Recommended citation:

Fallas, K.M. and Lane, L.S. (compilers)

2003: Geology, Babiche Mountain (95C/8), Yukon and Northwest Territories; Geological Survey of Canada, Open File 1563, scale 1:50,000.

INDEX MAP

Canada

NATMAP CARTNAT

Canada's National Geoscience Mapping Program

Le Programme national de cartographie géoscientifique du Canada

GEOLOGY

BABICHE MOUNTAIN (95C/8)

YUKON AND NORTHWEST TERRITORIES

Scale 1:50 000 Échelle 1/50 000

Kilometres 1 0 1 2 3 Kilomètres

Universal Transverse Mercator Projection

© Her Majesty the Queen in Right of Canada, 2003

Projection transverse universelle de Mercator

© Sa Majesté la Reine du chef du Canada, 2003

OPEN FILE DOSSIER PUBLIC

1563

GEOLOGICAL SURVEY OF CANADA
COMMISSION GEOLOGIQUE DU CANADA

2003

Open files are products that have not gone through the GSC formal publication process.

Les dossiers publics sont des produits qui n'ont pas été soumis au processus officiel de publication de la CGC.

95C/10 Tika Creek	95C/9 Chinkeh Creek **GSC OF 3843**	95B/12 Mount Flett
95C/7 Brown Lake **GSC OF 4267**	95C/8 Babiche Mountain **GSC OF 1563**	95B/5 Fisherman Lake **GSC OF 4161**
95C/2 Mount Merrill **GSC OF 4264**	95C/1 Mount Martin **GSC OF 3402**	95B/4 Betalarnea Lake

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