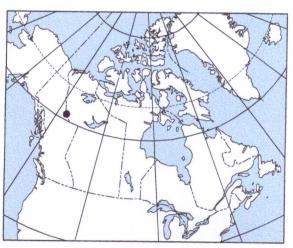


COMMISSION GÉOLOGIQUE DU CANADA



Canada's National Geoscience Mapping Program Le Programme national de cartographie géoscientifique du Canada

GEOLOGY BABICHE MOUNTAIN (95C/8)

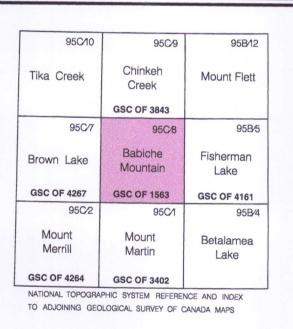
YUKON AND NORTHWEST TERRITORIES Scale 1:50 000 Échelle 1/50 000

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Projection transverse universelle de Mercator

Universal Transverse Mercator Projection

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LEGEND CRETACEOUS LOWER CRETACEOUS FORT ST. JOHN GROUP SULLY FORMATION: Dark grey shale and siltstone with sideritic concretions; silt content higher in upper part. SIKANNI FORMATION: Greenish grey sandstone, siltstone, and shale; sandstone is thick-bedded, commonly calcareous or glauconitic, typically thinly laminated and LEPINE FORMATION: Dark grey mudstone with concretions, silty shale, and black fissile shale; lower part of unit abundantly fossiliferous. SCATTER FORMATION: Resistant, greenish-grey, glauconitic, laminated sandstone; medium- to thick-bedded; silty, concretionary mudstone common in middle part of unit. GARBUTT FORMATION: Grey shale and siltstone with sideritic concretions; minor thin-bedded, finely laminated sandstone.

CHINKEH FORMATION: Chert-pebble conglomerate overlain by bioturbated quartz arenite with variable chert content, and argillaceous siltstone; woody or plant debris common. DIABER GROUP 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

FANTASQUE FORMATION: Dark grey to white, well bedded, spiculitic chert; rusty weathering; rhythmically interbedded with minor shale and siliceous siltstone. 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

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.

MIDDLE MEMBER: Grey to buff to brown, poorly- to well-indurated, fine-grained

sparsely fossiliferous; minor interbedded greyish-orange weathering sandstone,

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. 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. **DEVONIAN AND CARBONIFEROUS** BESA RIVER FORMATION: Dark grey to black shale, locally weathers buff;

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

SURFACE LOCATION SPUD DATE (Easting, Northing) 1 3000676030124000 PAN AM KOTANEELEE O-67 2 300L606020124150 PAN AM SHELL MERRILL YT L-60 19 Nov 1968 433957, 6701843 24 Jan 1969

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.

- 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. Khudloley, 2000-2002; L.D. Currie, T.E. Kubli, M.P. Cecile, and M.R. McDomough, 1995-1997: based on fieldwork and studies of vertical air photographs. THIS MAP IS A PRODUCT OF THE CENTRAL FORELAIND NATMAP PROJECT

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

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

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

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