

LEGEND

MESZOZOIC

CRETACEOUS

LOWER CRETACEOUS

FORT ST. JOHN GROUP

SCATTER FORMATION: Resistant, greenish-grey, glauconitic, laminated sandstone, medium- to thick-bedded; silt, concave/sandy 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.

PERMIAN

ISHBEL GROUP

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

Tika map unit: Buff weathering, light to medium brown, silty or sandy limestone or dolomite; medium-bedded, massive to cross-laminated; rectilinear fracture pattern characteristic.

LOWER CARBONIFEROUS

MATTSO FORMATION

MIDDLE AND UPPER MEMBERS UNDIVIDED: see Note 1

UPPER MEMBER: Light to medium grey, fine- to coarse-grained, locally calcareous or dolomitic quartz arenite and sub-chert arenite; subordinate fossiliferous limestone, dolomite, and grey to green shale; sandstone commonly shows large-scale crossbedding; may include Tika map unit.

MIDDLE MEMBER: Grey to buff to brown, poorly- to well-indurated, fine-grained quartz arenite and subordinate sub-chert arenite with siltstone and dark grey shale; dolomite, and lithoclast breccia, cross-laminated and trace fossils common; typically thin- to medium-bedded with coarsening-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; dolomite, and lithoclast breccia, cross-laminated 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; minor interbedded greyish-orange weathering sandstone, siltstone, lithoclast breccia, dolomite and limestone increasing up section; scattered sideritic nodules.

MAP SYMBOLS

Geological boundary (defined, approximate, assumed)

Marker beds

Outcrop stations

Outcrop: observation by helicopter

Bedding (inclined, horizontal); tops established by sedimentary structures and/or stratigraphic order

Fractures

Joints

Crossbedding (dip direction and dip, uncorrected)

Anticline (defined, approximate, assumed)

Syncline (defined, approximate, assumed)

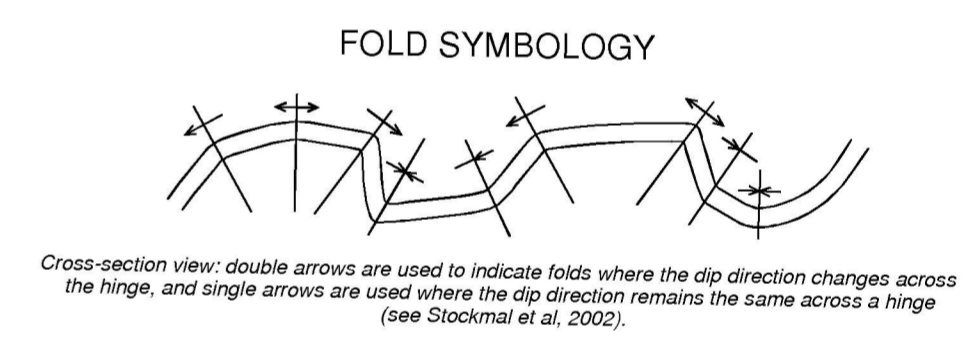
Anticlinal kink fold - (defined, approximate, assumed) (See diagram below)

Synclinal kink fold - (defined, approximate, assumed) (See diagram below)

Fault, thrust (defined, approximate, assumed)

Stratigraphic section (short, long)

Well (dry abandoned, gas abandoned)



LIST OF WELLS

UWID	FULL NAME	SPUD DATE	SURFACE LOCATION (Easting, Northing)
1 300F086040124302	OPOG ET AL LABICHE F-08	03-Aug-88	416806, 6721845
2 300C306040124300	FNK LA BICHE C-30	01-Mar-75	413652, 6725274

STRATIGRAPHIC SECTIONS

SECTION	NOTES
1 76RAH1	Mattsso Fm - B.C. Richards (Richards, 1989)
2 02RAH18	Tika map unit (continues from 76RAH1) - B.C. Richards (unpublished data, 2002)
3 02RAH20	Fantasque Fm - B.C. Richards (unpublished data, 2002)
4 L5	Chinkeh Fm - D.A. Leckie (Leckie et al., 1991)
5 L23	Chinkeh Fm - D.A. Leckie (Leckie et al., 1991)
6 L6	Chinkeh Fm - D.A. Leckie (Leckie et al., 1991)

NOTES:

- Middle and Upper members of the Mattso Formation are not subdivided in parts of the western half of the map area due to difficulties in delineating the characteristic carbonate beds of the Upper Mattso under heavy bush cover.
- Bedding orientations are shown at station locations; crossbedding and joint orientations are shown slightly offset from stations for clarity.

References:

- Leckie, D.A., Potocki, D.J., and Visser, K. 1991. The Lower Cretaceous Chinkeh Formation: A frontier-type play in the Liard Basin of Western Canada; *American Association of Petroleum Geologists Bulletin*, v.75 (6), pp.1324-1352.
- Richards, B.C. 1989. Uppermost Devonian and lower Carboniferous stratigraphy, sedimentation, and diagenesis, southwestern District of Mackenzie and southeastern Yukon Territory; *Geological Survey of Canada, Bulletin* 390, 135p.
- Stockmal, G.S., Kubli, T.E., Currie, L.D., and McDonough, M.R., 2002. Map symbology and analysis of box and polycylindrical folds, with examples from the Rocky Mountain Territory and southwestern Northwest Territories; *Canadian Journal of Earth Sciences*, vol. 39, p.145-155.

Compilation by A. K. Khudoley based on fieldwork and studies of vertical air photographs 2002.
THIS MAP IS A PRODUCT OF THE CENTRAL FORELAND NATMAP PROJECT

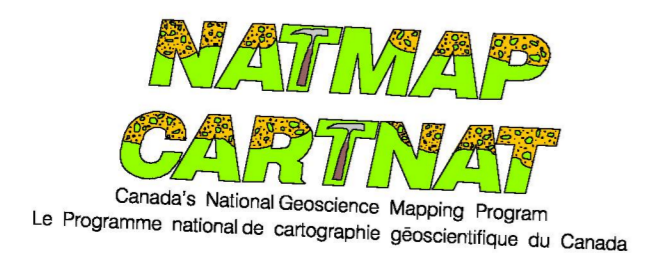
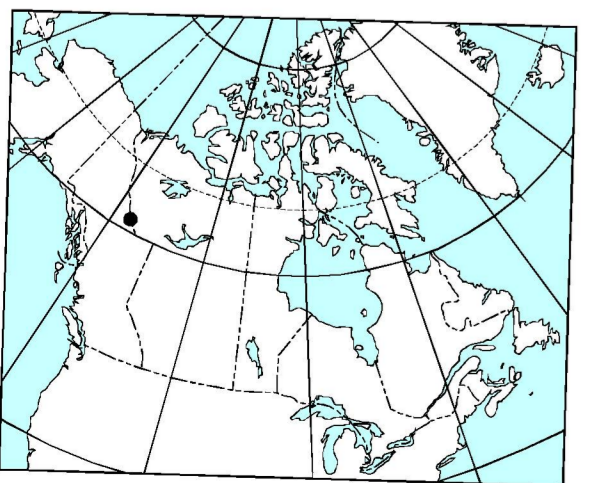
Geology from field work by A. K. Khudoley 2002, with contributions from L.C. Pigage, K.M. Fallas, L.D. Currie, and L.S. Lane

Geological cartography by S. J. Hinds

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 Surveys and Mapping Branch in 1971
CONTOUR INTERVAL 100 FEET
Elevations in Feet above Mean Sea Level

Recommended citation:
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GEOLOGY
TIKA CREEK (95C/10)
YUKON TERRITORY AND NORTHWEST TERRITORIES

Scale 1:50 000 Echelle 1/50 000

Kilometres 1 0 1 2 3 Kilometres

Universal Transverse Mercator Projection / Projection transversale universelle de Mercator
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OPEN FILE DOSSIER PUBLIC 1660

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2003

no title	95C/14	95C/15	95C/16
Dendale Lake	95C/14	95C/15	95C/16
Whitefish River	95C/11	95C/10	95C/09
Gold Pay Creek	95C/06	95C/07	95C/08



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