

- ### LEGEND
- LOWER CARBONIFEROUS**
- MATTSON FORMATION**
- CM: Member C: Orange, grey, or buff weathering, gray to buff, very fine- to fine-grained sandstone interbedded with subordinate siltstone and dark shales; sandstone massive to cross-bedded, locally calcareous; locally poorly indurated; pyrobitumen and detrital muscovite locally present.
  - CM-b: Member B: Orange, light grey, pinkish-grey, white, or buff weathering, gray or buff, very fine- to fine-grained sandstone; locally calcareous; locally poorly indurated; commonly medium to very thick bedded; massive to rippled to cross-bedded; lesser siltstone.
  - CM-a: Member A: Grey- to grayish-orange weathering, light grey or buff, well-indurated, and lesser siltstone on the order of 10 to 15 metres; sandstone massive to cross-bedded; ripples and load casts locally present; detrital coarse muscovite and pyrobitumen locally present.
- DEVONIAN AND CARBONIFEROUS**
- DCBR: BESA RIVER FORMATION: Pale bluish-grey weathering, dark grey to black shale, locally carbonaceous; lesser siltstone, bedded chert, and siliceous limestone; minor thin-bedded sandstone.
- DEVONIAN**
- DBR: Beaver River map unit: Buff- to grey weathering, light to medium gray, thick-bedded, finely crystalline, unfossiliferous dolomite; light to medium gray, thick-bedded, uppermost interval contains interbeds of fossiliferous dolomite with Gastrolites (See Note 1).
  - Dd: DUNEDIN FORMATION: Grey weathering, medium to dark grey, medium- to thick-bedded limestone and dolomite limestone; mudstone to wackestone to fossiliferous; crinoid debris locally abundant; Manetoe-facies dolomitization locally developed east-southeast of Larsen Lake.
  - DM+S: MUNCHO-McCONNELL AND STONE FORMATIONS: Buff- to grey weathering, light to medium grey, medium- to thick-bedded, unfossiliferous, finely crystalline, locally vuggy, laminated, or sandy, laminated dolomite siltstone locally present.
- SILURIAN AND DEVONIAN**
- SDc: Undivided Silurian to Devonian carbonate: Buff- to grey weathering, light to medium grey, thick-bedded dolomite or limestone, locally vuggy; locally fossiliferous with Beaver River map unit. ISDc = tectonic package of rocks dominated by SDc but possibly containing other stratigraphic units interbedded by faulting or folding.
- SILURIAN**
- SN: NONDA FORMATION: Dark grey, felt, medium- to thick-bedded, fossiliferous dolomite; discontinuous lenses of black chert.
- ORDOVICIAN AND SILURIAN**
- OSs: Sandstone and conglomerate: Grey to buff quartz arenite to quartz-pebble conglomerate and conglomeratic sandstone; clasts subround to round; subordinate beds up to 2 m thick of bioturbated, slightly dolomitic, very fine-grained sandstone and siltstone.
- ORDOVICIAN**
- OSu: SUNBLOOD FORMATION: Light brownish-grey to buff weathering, mottled, light to dark grey dolomite and limestone; finely to medium crystalline; commonly bioturbated.
  - Os: Siltstone and carbonate: Tan to off-white, laminated dolomite siltstone, medium to dark grey, medium crystalline limestone; tan weathering dolomite.
- CAMBRIAN**
- Ca: Sandstone and siltstone: Greyish-red, laminated siltstone to argillite interbedded with grayish-red to white, very fine-grained, massive to locally cross-bedded sandstone; locally calcareous or dolomitic; local interbeds of quartz-sandstone-chert conglomerate.
- PROTEROZOIC OR EARLY CAMBRIAN**
- PCs: Sandstone: White to light grey or greenish-grey, very fine- to medium-grained quartz arenite to quartzite; massive to laminated to ripple cross-laminated; interbeds of dark grey to black, laminated siltstone.

- ### MAP SYMBOLS
- Geological boundary (approximate, assumed)
  - Nomenclature change
  - Outcrop stations
  - Outcrop; remote observation
  - Bedding (inclined, vertical, estimated from helicopter)
  - Crossbedding (dip direction and dip; uncorrected)
  - Joints
  - Anticline (approximate)
  - Syncline (approximate)
  - Fault, thrust (approximate, assumed) (symbol on hangingwall side)
  - Fault, normal (approximate) (symbol on hangingwall side)
  - Fault, unknown type (approximate, assumed) (U, D on upthrown and downthrown sides where known)
  - Hot spring
  - Mineral occurrence (with locality number)

### MINERAL LOCALITIES

LOCALITY #	NAME	ELEMENT	LATITUDE	LONGITUDE	REFERENCE
024	PYRO	Ba (Pb,Zn)	60°03'27"N	125°37'07"W	Yukon MINFILE (2002)
032	CROW	unknown	60°01'29"N	125°32'19"W	Yukon MINFILE (2002)

**NOTES:**

- "Beaver River map unit" is an informal designator for a succession of carbonate strata best exposed to the north along Beaver River in Pool Creek map area (NTS 95C/3) and designated Dmd by Pigage and Allen (2001).
- Certain map units along the northern and eastern edges of this map sheet have been projected from adjacent map sheets. Wherever possible, the position of these map units within this map sheet has been constrained using vertical air photographs.

- References:**
- Deklerk, R., (compiler) 2002: Yukon MINFILE 2002 - A database of mineral occurrences; Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada.
  - Douglas, R.J.W., (compiler) 1976: Geology, La Biche River, Yukon Territory - District of Mackenzie; Geological Survey of Canada, Map 1380A, scale 1:250 000.
  - Pigage, L.C., and Allen, T.L., 2001: Geological map of Pool Creek (NTS 95C/3), southeastern Yukon, 1:50 000 scale; Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada, Open File 2001-32.
  - Gabrielse, H., and Blusson, S.L., 1969: Geology, Coal River, Yukon Territory - District of Mackenzie; Geological Survey of Canada, Map 11-1968 (Paper 68-38), scale 1:253 440.
  - Taylor, G.C., and Stott, D.F., (compilers) 1959: Geology, Toad River, British Columbia; Geological Survey of Canada, Map 1955A, scale 1:250 000.

Compilation by R.B. MacNaughton and L.C. Pigage based on fieldwork and studies of vertical air photographs in 2001 and 2002.  
 THIS MAP IS A PRODUCT OF THE CENTRAL FORELAND NATMAP PROJECT

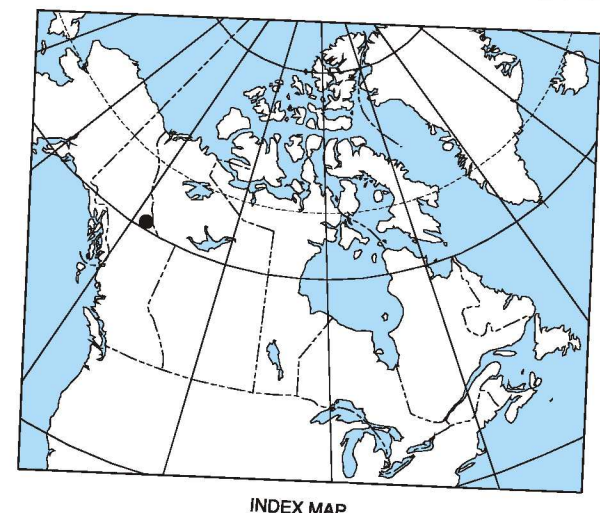
Geology from fieldwork in 2001 and 2002 by R.B. MacNaughton and L.C. Pigage, with contributions from A.K. Khudoley and I.R. Smith

Geological cartography by S. J. Hinds, K.M. Falles, and M. Ponto

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  
 CONTOUR INTERVAL 100 FEET  
 Elevations in Feet above Mean Sea Level

Recommended citation:  
 MacNaughton, R.B. and Pigage, L.C., 2003: Geology, Larsen Lake (95C/4), Yukon Territory and British Columbia; Geological Survey of Canada, Open File 1797, scale 1:500 000.



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

**GEOLOGY**  
**LARSEN LAKE (95C/4)**  
 YUKON TERRITORY AND BRITISH COLUMBIA

Scale 1:500 000 Échelle 1/500 000  
 Kilometres 1 2 3 Kilomètres

Universal Transverse Mercator Projection  
 North American Datum 1983  
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Projection transverse universelle de Mercator  
 Système de référence géodésique nord-américain, 1983  
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GEOLOGICAL SURVEY OF CANADA  
 COMMISSION GÉOLOGIQUE DU CANADA  
 2003

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95D/08 no title Pool Creek	95C/05 YGP OF 2001-32 Larsen Lake	95C/06 Gold Pay Creek
95D/01 no title	95C/04 GSC OF 1787 Thorp Creek	95C/03 Mooney Creek
94M/16 Smith River	94N/13 Thorp Creek	94N/14 Beaverrow Mountain

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