

LEGEND

- CRETACEOUS**
 - LOWER CRETACEOUS**
 - FORT ST. JOHN GROUP**
 - KB** BUCKINGHAM FORMATION - Shale, black; scattered brown-weathering sideritic nodules common in middle and upper parts; minor sandstone.
 - JURASSIC AND CRETACEOUS**
 - JKm-b** MINNES AND BULLHEAD GROUPS (Undivided) - Quartz arenite, massive or fine grained grey; interbedded, fine grained sandstone and shale; argillaceous quartz arenite; massive chert pebble conglomerate; conglomeratic sandstone; minor coal. May include underlying Fernie Fm., where it is too thin to show at 1:50 000 scale.
 - JURASSIC**
 - JF** FERNIE FORMATION - Shale, black rusty; and shale, calcareous, grey.
- TRIASIC**
 - SCHOOLER CREEK GROUP**
 - TP** PARDONET FORMATION - Limestone, recessive flaggy, fossiliferous, shaly and silty; abundant Monoid peltepodids are a characteristic feature; bivalves, brachiopods and ichthosaur bones are locally preserved.
 - TP-B** BALDONNEL AND PARDONET FORMATIONS (Undivided)
 - TB** BALDONNEL FORMATION - Limestone, massive grey cliff forming, fossiliferous; with minor shale; siltstone, quartz arenite, and argillaceous limestone.
 - TC** CHARLIE LAKE FORMATION - Siltstone, calcareous, dolomitic, orange-weathering; sandy limestone; shale; quartz arenite; breccia.
 - TL** LIARD FORMATION (Halfway Fm. - subsurface) - Quartz arenite, massive to cross-bedded, fine to very fine grained, forming metre-scale thick units; interstratified with calcareous and dolomitic siltstone, limestone.
 - DIABER GROUP**
 - TGT** TOAD - GRAYLING FORMATION (Doig and Montney fms. - subsurface) - Shale, calcareous, brown-grey weathering, laminated with units of very shaly, brown-weathering fine grained limestone. More calcareous in the upper part. More phosphatic in the lower part.
- CARBONIFEROUS AND PERMIAN**
 - RUNDELE, STODDART, AND ISHBEL GROUPS**
 - CP-C** PROPHET FORMATION, MEMBER 'C' PLUS PERMIAN FANTASQUE FORMATION - Limestone, grey, fossiliferous, silicified, well bedded; slightly more recessive than Member B. Includes chert of the overlying Fantasque Fm. and may include thin units of Stoddart and Ishbel groups.
 - CP-B** PROPHET FORMATION, MEMBER 'B' - Chert, black; spicular limestone, bioturbated; massive to irregularly bedded; resistant, forming conspicuous dark grey cliffs.
 - CP-A** PROPHET FORMATION, MEMBER 'A' - Spiculite, radiolarite, lime-wackestone, shale, minor siltstone; thin-bedded; orange-brown to dark grey; slightly recessive.
 - CPu** PROPHET FORMATION UNDIVIDED - Chert, black, grey; shale, brownish black; units of grey limestone toward top. Includes chert of the overlying Permian Fantasque Fm. and may include other units of the Stoddart and Ishbel groups.
 - DEVONIAN AND CARBONIFEROUS**
 - DCBR** BESA RIVER FORMATION - Black siliceous shale, minor siltstone (marine) calcareous siltstone; silty limestone; and limestone.

MAP SYMBOLS

- Outcrop (small, large, scattered, debris)
 - Note: Small outcrop symbol, X, denotes exact location of structural measurements. Associated structural symbols are positioned for clarity adjacent to outcrop symbols.
- Geological boundary (defined, approximate, assumed)
- LOCAL STRUCTURES**
 - PLANAR STRUCTURES**
 - Bedding, tops known (horizontal, inclined, overturned)
 - Cleavage, first phase (inclined)
 - Minor normal fault
 - LINEAR STRUCTURES**
 - Fault striation
- REGIONAL STRUCTURES**
 - Thrust fault (teeth indicate dip direction; defined, approximate, assumed)
 - Fault, sense uncertain (certain, assumed)
 - Anticline (defined, approximate, assumed)
 - Syncline (defined, approximate, assumed)
 - Anticline - limbs dip in same direction, arrow on steeper limb (certain, approximate, assumed)
 - Syncline - limbs dip in same direction, arrow on steeper limb (certain, approximate, assumed)
 - Overturned anticline (defined, approximate, assumed)
 - Overturned syncline (defined, approximate, assumed)
 - Overturned anticline - limbs dip in opposite direction (certain, approximate, assumed)
 - Overturned syncline - limbs dip in opposite direction (certain, approximate, assumed)
- OTHERS**
 - Fossil locality

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3733
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Although every effort has been made to ensure accuracy, this Open File Report has not been edited for conformity with Geological Survey of Canada standards.

Geology by G. S. Stockmal based on fieldwork and studies of vertical air photographs 1998.
THIS MAP IS A PRODUCT OF THE CENTRAL FORELAND NATMAP PROJECT

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Geology from field work by G.S. Stockmal 1998. With contributions from: Ann Ceccanese and Paul Mortensen (Crestar Energy).

Geological cartography by G. S. Stockmal and 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

NOTES:

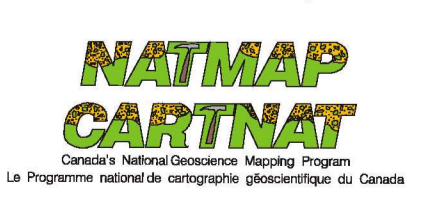
Base map and geology have been transformed from NAD27 (North American Datum 1927) to NAD83. Although every effort has been made to ensure accuracy, this Open File Report has not been edited for conformity with Geological Survey of Canada Standards.

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UNIVERSAL TRANSVERSE MERCATOR GRID, ZONE 10

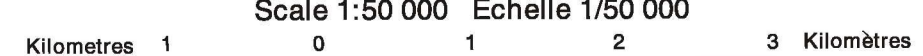
94F/16	94G/13	94G/14
x	Kluachesi Lake	Bunch Creek
94F/09	94G/12W 94G/12E	94G/11
x	Richards Creek GSC OF 3733	Minaker River GSC OF 3735
94F/08	94G/05W 94G/05E	94G/06
x	Redfern Lake GSC OF 3734	Mount Withrow GSC OF 3737

CONTOUR INTERVAL 100 FEET
Elevations in Feet above Mean Sea Level
North American Datum 1983
Transverse Mercator Projection



PRELIMINARY GEOLOGY
RICHARDS CREEK
PEACE RIVER DISTRICT
(EAST HALF)
BRITISH COLUMBIA

Scale 1:50 000 Échelle 1/50 000



Universal Transverse Mercator Projection
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