

LEGEND

CRETACEOUS

BULLHEAD GROUP

- KB-G** GETHING FORMATION - Quartz arenite, rusty; and shale, black.

JURASSIC AND CRETACEOUS MINNES GROUP

- KB** BEATTIE PEAKS FORMATION - Interbedded fine-grained sandstone and shale (marine, may possibly include Monach Formation equivalents)
- JKM-M** MONTIETH FORMATION - Quartz arenite, massive white, or fine grained grey; minor shale, black; and argillaceous quartz arenite; and rare chert pebbles conglomerate. Commonly includes underlying Fernie Formation, where it is too thin to show at 1:50 000 scale, and may include overlying Gething Formation and/or Cadomin Formation.

JURASSIC

- JF** FERNIE FORMATION - Shale, black rusty; and shale, calcareous, grey. Note: this unit is too thin to show at 1:50 000 scale in many places.

MESOZOIC

TRIASSIC

SCHOOLER CREEK GROUP

- TP** PARDONET FORMATION - Limestone, recessive foggy, fossiliferous, shaly and silty; abundant Monardella pelecypods are a characteristic feature; bivalves, brachiopods and Ichthyosaur bones are locally preserved.
- TB** BALDONNEL FORMATION - Limestone, massive grey cliff forming, fossiliferous; with minor shale; siltstone; quartz arenite; and argillaceous limestone. Rare chert nodules and lenses.
- TC** CHARLIE LAKE FORMATION - Siltstone, calcareous, orange weathering, dolomite, silty dolomite, silty limestone; minor limestone, argillite shale, quartz arenite, and carbonate breccia.
- TL** LIARD FORMATION (Halfway Fm - subsurface) - Quartz arenite, massive, thick bedded, forming metre scale thick units; interstratified with metre scale calcareous quartz arenite and limestone.

DIABLER GROUP

- TGT** TOAD - GRAYLING FORMATION (Doig and Montney Fms. subsurface) - Shale, calcareous, brown-grey weathering, interbedded with units of shaly, brown weathering fine grained limestone. More calcareous in the upper part. More phosphatic in the lower part.

CARBONIFEROUS

STODDARD GROUP

- CSG** STODDARD GROUP: (may include Fantassque Formation) - black massive chert and recessive shale

PALEOZOIC

RUNDELE GROUP

- CP/D** PROPHET AND DEBOLT FORMATIONS - Limestone, beds < 1 m thick, chert interbeds 15-50 cm thick, facies transitional from Debolt to Prophet Formations. Equivalent to Prophet Formation units B and C to the northwest.

MAP SYMBOLS

Geological boundary (defined, approximate, assumed)

LOCAL STRUCTURES

PLANAR STRUCTURES

Bedding, tops known (inclined, overturned, vertical, horizontal)

REGIONAL STRUCTURES

Thrust fault (teeth indicate dip direction; defined, approximate, assumed)

Anticline (defined, approximate, assumed)

Syncline (defined, approximate, assumed)

Overturned anticline (defined, approximate, assumed)

Overturned syncline (defined, approximate, assumed)

OTHERS

Fossil locality

Well (gas producer, gas abandoned, undesignated)

LIST OF WELLS

UWID	SOBC HB	TRIMBLE C	RIG RELEASE	SURFACE LOCATION (Easting, Northing)
1	200C0981094G0300	SOBC HB	TRIMBLE C- 098-1094-G-03	19 Jan 1962 471439 6345310
2	200D070094G0300	RANGER	SIKANNI D- 073-1094-G-03	01 Aug 1982 492274 6343237
3	200A020094G0300	RANGER	SIKANNI A- 032-1094-G-03	30 Oct 1982 491110 6399011
4	200D030094G0300	RANGER	SIKANNI D- 053-1094-G-03	08 Aug 1983 498285 6341317
5	200C080094G0300	RANGER	SIKANNI A- 094-1094-G-03	18 Jun 1985 497707 6344751
6	200C054094G0300	REMINGTON	MARION C- 054-1094-G-03	19 Dec 1986 485558 6331950
7	200C041094G0300	RANGER	SIKANNI C- 041-1094-G-03	20 Feb 1989 498285 6340276
8	200A080094G0300	HUSKY	SIKANNI A- 083-1094-G-03	01 Feb 1983 498283 6332592
9	200A090094G0300	RANGER	SIKANNI D- 094-1094-G-03	24 Jan 1994 497650 6335819
10	200D050094G0300	HUSKY	SIKANNI D- 055-1094-G-03	30 Jan 1984 496692 6332106
11	200B020094G0300	RANGER	SIKANNI D- 025-1094-G-03	21 Aug 1994 498930 6341495
12	200C0451094G0300	AMOCO	W SIKANNI D- 045-1094-G-03	13 Nov 1994 473224 6340213
13	200A057094G0300	RANGER NLMAC	SIKANNI A- 057-1094-G-03	27 Jan 1985 498227 6331702
14	200C060094G0300	RANGER	SIKANNI D- 005-1094-G-03	28 Jun 1995 496737 6336465
15	200C054094G0300	HUSKY	SIKANNI C- 053-1094-G-03	23 Feb 1987 498215 6341205
16	200B0411094G0300	KAISER	SIKANNI D- 041-1094-G-03	25 Jul 1987 498722 6330937

Geology by M.P. Cecilie, based on fieldwork conducted during 1998.

THIS MAP IS A PRODUCT OF THE CENTRAL FORELAND NATMAP PROJECT

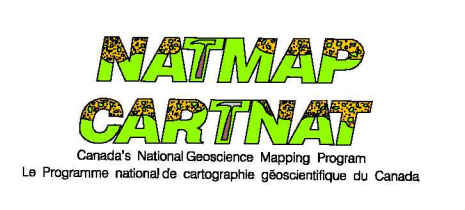
Acknowledgements.
 Geology from field work by M.P. Cecilie 1996, 1998. With contributions from: J.P. Restoule and T.C. Ziebell, Murphy Oil; M. McDonough, Husky Oil; Tara Brekko, Bob Moore, Michelle Pelletier, and Marcia Rempe, Crestar Energy; and Scott Carter, student assistant. Mapping was carried out as part of field work for the GSC Central Foreland Project in 1996 and 1998. Most of the helicopter support for the mapping in 1996 was provided by Murphy Oil; and in 1998 by the Geological Survey of Canada and some by Crestar Energy in support of training for their employees.

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
 North American Datum 1983
 Transverse Mercator Projection



PRELIMINARY GEOLOGY
MARION LAKE
 PEACE RIVER DISTRICT
 BRITISH COLUMBIA
 Scale 1:50 000 Echelle 1/50 000
 Kilometres 1 0 2 3 Kilometres
 Universal Transverse Mercator Projection
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 3736
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 OTTAWA
 JUNE 1999

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.

94G/05 Redfern Lake OSC OF 3736	94G/06 Mount Withrow OSC OF 3737	94G/07 Buckingham River
94G/04 Mount McCusker	94G/03 Marion Lake OSC OF 3736	94G/02 Pink Mountain
94B/13 Mount Robb	94B/14 Mount Laurier	94B/15 Cypress Creek

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

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.

Recommended citation:
 Cecilie M.P.,
 1999: Preliminary Geology of the Marion Lake map area (94G/03), Geological Survey of Canada Open File 3736, scale 1:50 000