

# COMPOSITE GEOLOGICAL MAP OF MARION LAKE (94G/3), MOUNT WITHROW (94G/6) AND MINAKER RIVER (94G/11) NORTHEASTERN BRITISH COLUMBIA

Scale 1:50 000 Echelle 1:50 000  
Kilometres 1 2 3 Kilometres  
Miles 0.6 1.2 1.8 Miles  
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### LEGEND

**CRETACEOUS**  
**LOWER CRETACEOUS**  
**FORT ST. JOHN GROUP**

- Kb** BUCKINGHAM FORMATION - Chalk, black with buff weathering shales and argillaceous concretions. Often includes underlying Gething Formation.
- Kb-g** BILLHEAD GROUP
- Kb-g** GETHING FORMATION - Chert, argillite, rusty and shales, black.
- Kc** CADOMIN FORMATION - Chert, pebbly conglomerate and quartz arenite.

**JURASSIC AND CRETACEOUS**  
**MINNES GROUP**

- JKM-M** MONTYETH FORMATION - Quartz arenite, massive white, or fine grained grey, micaceous shales, black and greyish blue shales, and argillaceous shales. Commonly includes underlying Fort Pemberton Formation. Where it is less than 1500' thick, and may include underlying Gething Formation and/or Cadomin Formation.

**JURASSIC**

- Jf** FERNE FORMATION - Chalk, black rusty and shales, calcareous, grey. Note: this unit is too thin to show at 1:50,000 scale in many places.

**TRASSIC**  
**SCHOLLER CREEK GROUP**

- Tb?** BOOCKLE FORMATION - Limestone, massive grey cliff forming, fossiliferous.
- Tb** BALDANEL AND PARONET FORMATIONS - Paronnet Formation: Limestone, grey to brownish grey, massive, shaly and shaly, micaceous shales. Baldanel Formation: Limestone, massive light grey cliff forming, fossiliferous.
- Tp** PARONET FORMATION - Limestone, massive, shaly, micaceous, shaly and shaly, micaceous shales. A characteristic feature: shales, micaceous and calcareous shales and argillaceous shales. Fine chert nodules and lenses.
- Ta** BALDANEL FORMATION - Limestone, massive grey cliff forming, fossiliferous, with thin shaly calcareous quartz arenite and argillaceous shales. Fine chert nodules and lenses.
- Tc** CHARLIE LAKE FORMATION - Shale, calcareous, orange weathering, micaceous, shaly, micaceous, shaly limestone, micaceous, quartz arenite, and calcareous shales.
- Tl** LARD FORMATION (Halfway Fm - subaerial) - Quartz arenite, massive, black, micaceous, shaly, micaceous, shaly, micaceous, shaly, micaceous quartz arenite and limestone.

**DIABER GROUP**

- Tgr** TOAD - GRAYLING FORMATION (Dolg and Montney Fms. subaerial) - Shale, calcareous, brown grey weathering, micaceous with shaly, brown weathering and fine grained limestone. More calcareous in the upper part. More phreatic in the lower part.

**CARBONIFEROUS**  
**STODDART GROUP**

- Csa** STODDART GROUP (may include Fantasque Formation) - Black massive chert and massive shale.

**PALEOZOIC**  
**RUNDLE GROUP**

- Cpd** PROPHET AND DEBOLT FORMATIONS - Limestone, beds 1' to 10' thick, chert interbeds 15-20 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**  
**FAULT STRUCTURES**  
Anticline (axis north, overturned, vertical, faulting)  
Syncline (axis south, overturned, vertical, faulting)  
Change of strike (defined)

**REGIONAL STRUCTURES**  
Thrust fault (axis north, dip direction, defined, approximate, assumed)  
Fault (axis not defined)  
Anticline (axis to 3-way direction, axis or steep dip basin, approximate, assumed)  
Syncline (axis to 3-way direction, axis or steep dip basin, approximate, assumed)  
Structure (defined, approximate, assumed)  
Overturned anticline (defined, approximate, assumed)  
Overturned syncline (defined, approximate, assumed)

**OTHERS**  
Fault locality  
Well (gas producer, gas abandoned, undeveloped, unknown)  
Gas test locality

#### LIST OF WELLS - 94G/11

WELL NO.	WELL NAME	PERMITS	SURFACE LOCATION
1	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
2	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
3	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
4	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
5	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
6	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
7	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
8	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
9	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
10	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
11	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
12	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
13	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
14	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
15	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
16	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
17	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
18	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
19	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
20	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD

  

#### LIST OF WELLS - 94G/06

WELL NO.	WELL NAME	PERMITS	SURFACE LOCATION
1	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
2	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
3	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
4	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
5	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
6	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
7	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
8	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
9	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
10	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
11	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
12	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
13	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
14	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
15	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
16	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
17	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
18	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
19	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
20	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD

  

#### LIST OF WELLS - 94G/03

WELL NO.	WELL NAME	PERMITS	SURFACE LOCATION
1	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
2	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
3	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
4	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
5	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
6	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
7	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
8	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
9	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
10	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
11	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
12	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
13	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
14	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
15	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
16	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
17	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
18	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
19	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD
20	BRIDGEHEAD	10-10-10-10	BRIDGEHEAD

THIS MAP IS A PRODUCT OF THE CENTRAL FORELAND NATMAP PROJECT

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Any remains or additional geological information from the user should be returned to the Geological Survey of Canada.

Base map of the same scale published by Survey and Mapping Branch in 1977

- NOTES:**
- Base map and geology have been transformed from NAD27 (North American Datum 1927) to NAD83.
  - Permian Fantasque Formation is normally present beneath the sub-Trassic unconformity, but is too thin to map at this scale.

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**NATMAP CARTMAP**  
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OPEN FILE	94G/2	94G/11	94G/10
FOSSIER PUBLIC	Richard Lake	Mackay River	Tyrell River
3879	94G/2	94G/11	94G/10
GEOLOGICAL SURVEY COMMISSION GÉOLOGIQUE	Hudson Lake	Mount Wheatley	Ogish Creek
OTTAWA DEC 2009	94G/2	94G/11	94G/10
	Mount Wheatley	Hudson Lake	Pin Woods

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INTERNATIONAL GEOLOGICAL CORRELATION AND DATA TO ACCORDANCE GEOLOGICAL SURVEY OF CANADA MAPS

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Cook, B.P., Houston, A.K., Curtis, L.C.,  
1988. Composite geological map of Marion Lake (94G/2), Mount Withrow (94G/6)  
and Minaker River (94G/11), northeastern British Columbia. Geological Survey  
of Canada, Open File 94G/11, 1:50,000 scale.



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