



LEGEND

QUATERNARY
Q GLACIOFLUVIAL AND FLUVIAL DEPOSITS: Unconsolidated and semi-consolidated gravel and sand, proglacial outwash terraces preserved locally on north bank of Muskwa River (Bednarski, 2000).

CRETACEOUS
LOWER CRETACEOUS
FORT ST. JOHN GROUP
KB BUCKINGHORSE FORMATION: Dark grey to black shale, silty mudstone, minor fine-grained sandstone, and siltstone; large selenitic concretions in discontinuous layers common (few in middle part of unit).
KG BULLHEAD GROUP: Rusty weathering quartz arenite in thick units, interbedded with thick units of dark grey to black shale and siltstone; trace fossils and bioturbation common; minor coal; includes the underlying Cadomin Formation if present.

JURASSIC AND CRETACEOUS
MINNES GROUP
JKM MONTEITH FORMATION: Resistant, white or grey quartz arenite; fine- to coarse-grained; minor dark grey shale and argillaceous quartz arenite; rare chert pebble conglomerates. May include the underlying Fernie Formation and/or the overlying Getling and Cadomin formations.
JF FERNIE FORMATION: Medium to dark grey siltstone and shale, interbedded with light to dark grey or black sandstone, siltstone, and limestone; calcareous in lower part; concretions locally present.

JURASSIC
Tb SCHOOLER CREEK GROUP
Tp BALDOWNE AND PARDONET FORMATIONS UNDIVIDED: Fossiliferous limestone.
Tc BALDOWNE FORMATION: Resistant, grey, massive, fossiliferous limestone and dolomite; minor shale, siltstone, and fine-grained quartz arenite.
Tl CHARLIE LAKE FORMATION: Recessive, orange-brown to yellow weathering, calcareous or siliceous siltstone, dolomite, and silty dolomite or limestone; minor shale, quartz arenite, and intraformational breccia.
LI LIARD FORMATION: White, buff, and light brown weathering, thick-bedded, fine- to very fine-grained quartz arenite, interbedded with calcareous quartz arenite, siltstone, and limestone; sandstone massive to crossbedded.

TRASSIC
TG+T GRAYLING AND TOAD FORMATIONS UNDIVIDED: Grey to brownish grey weathering, calcareous shale interbedded with brown weathering, silty, fine-grained limestone; shale more calcareous in upper part and more phospatitic in lower part.

PERMIAN
PI ISHBEL GROUP
PI FANTASQUE FORMATION: Dark grey to white or rusty weathering, dark grey, spiculate chert; well bedded to knobby bedded; 5-20m thick.

LOWER CARBONIFEROUS
STOODART GROUP
Csg STOODART GROUP: Includes Golate Fm: black shale and argillaceous limestone; Kaskasim Fm: brown weathering calcareous crossbedded sandstone; Taylor Flat Fm: rhythmically bedded carbonate, shale and calcareous mudstone; locally Golela, Taylor Flat or entire Group is absent.

RUNDLE GROUP
CR-Bc PROPHET FORMATION - Members B and C undivided: Resistant chert and cherty fossiliferous limestone.
CR-C PROPHET - Member C: Grey, cherty, skeletal limestone, rhythmically interbedded with marlstone and shale; locally abundant chert as bands, nodules, and selective silicification; proportion of chert increases up section and towards the northwest; medium-bedded, beds massive; may locally include Stoodart Group.
CR-A PROPHET - Member A: Resistant, white to dark grey, bedded and nodular calcareous chert; subordinate skeletal limestone; spiculate and dark grey shale; proportion of limestone increases up section; medium- to thick-bedded; bed contacts irregular.
CR-A PROPHET - Member A: Dark grey to black, spiculate chert interbedded with subordinate dark grey shale, mudstone, and cherty skeletal limestone; proportion of shale decreases up section; thin-bedded and clear laminae bedding commonly rhythmic.

DEVONIAN AND CARBONIFEROUS
DCBR BECA RIVER FORMATION: Medium grey to black shale and mudstone; variably calcareous, locally buff weathering, interbedded with minor argillaceous dolomite, limestone, spiculate, and chert that increase in proportion up section; scattered selenitic nodules and pyrite lenses.

DEVONIAN
Dd DUNDREY FORMATION: Medium grey to bluish-grey weathering, dark grey, fossiliferous marlstone to selenitic limestone.
Ds STONE FORMATION: Very light grey weathering, thick-bedded, finely crystalline sandstone; taafing quartz grains common; fenestrate, broken mud laminae, and stratiform breccia locally present.

SILURIAN AND DEVONIAN
SDM MACHINA-MCCONNELL FORMATION: Light brown to yellowish-brown weathering, silty to argillaceous dolomite overlain by medium and dark grey weathering, very thick-bedded dolomite; local thin beds of quartz arenite in upper part; rare, thin brown shale partings.

SILURIAN
Sn NORDA FORMATION: Very dark grey to black, very thick-bedded, siliceous dolomite with chert nodules and subordinate quartz arenite; high diversity and abundance of corals; anomalous poroid bioherms locally present.

ORDOVICIAN
Cb BEAVERFOOT FORMATION: Grey dolomite and limestone, dolomitization discordant to bedding; chert nodules and siltstone fossil debris locally present; locally abundant quartz arenite layers, particularly at the base of the unit.
Cs SKOKO FORMATION: Light to medium brown and grey, thick-bedded dolomite with variable quartz sand content; commonly crossbedded, fossiliferous; locally distributed.

CAMBRIAN AND ORDOVICIAN
CK KECHIKA GROUP: Orange to brown weathering, medium to dark grey, thin-bedded, silty limestone with mud laminae, and shale or slate; abundant bioturbation; chert nodules locally present.

MAP SYMBOLS

Outcrop stations
 Outcrop: remote observation
 Bedding (inclined, vertical, horizontal, overturned, estimated)
 Crossbedding (dip direction and dip; uncorrected)
 Joint (inclined)
 Cleavage (inclined)
 Cleavage-bedding intersection lineation
 Minor fold axis
 Geological contact (defined, approximate, assumed)
 Anticline (defined, approximate, assumed)
 Anticline (interpreted from seismic data)
 Syncline (defined, approximate, assumed)
 Syncline (interpreted from seismic data)
 Overturned anticline (defined, approximate, assumed)
 Overturned syncline (defined, approximate, assumed)
 Anticlinal kink fold (defined, approximate)
 Synclinal kink fold (defined, approximate)
 Overturned anticlinal kink (defined, approximate)
 Fault, thrust (defined, approximate, assumed)
 Wells (dry and abandoned)

FOLD SYMBOLOGY

Cross-section view: double arrows are used to indicate folds where the dip direction changes across the hinge, and single arrows are used where the dip direction remains the same across a hinge (Stockmal et al., 2002)

LIST OF WELLS

UWID	FULL NAME	SPUD DATE	SURFACE LOCATION (Easting, Northing)
1 200400000431300	HB PAN AM MUSKWA A-6-G	10 Jan 1960	458899, 6410388

NOTES

- Bedding orientations are shown at station locations; crossbedding, cleavage and joint orientations are shown slightly offset from stations for clarity when accompanied by bedding measurements.
- Map symbols are shown in grey where buried beneath thick Quaternary glacio-fluvial deposits.

References

- Bednarski, J.M. 2000. Surface Geology, Trutch, British Columbia (NTS 94G); Geological Survey of Canada, Open File 3885, scale 1:250 000.
- Stockmal, G.S., Kuhn, T.E., Currie, L.D., and McDonough, M.R. 2002. Map symbology and analysis of box and polygonal folds, with examples from the Rocky Mountain Foothills of southwestern British Columbia and the Lead Ranges of southeastern Yukon Territory and southwestern Northwest Territories. Canadian Journal of Earth Sciences, vol. 39, p. 143-158.



GEOLOGY
KLUACHESI LAKE (94G/13)
 PEACE RIVER DISTRICT
 BRITISH COLUMBIA
 Scale 1:50 000 Échelle 1/50 000
 Universal Transverse Mercator Projection
 North American Datum 1983
 © Her Majesty the Queen in Right of Canada 2003



UNIVERSAL TRANSVERSE MERCATOR GRID, ZONE 10

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

THIS MAP IS A PROJECTED GRAPHIC OF THE MAIN THEMES INCLUDED WITH THIS GIS DATASET, COMBINED WITH TOPOGRAPHIC BASEMAP INFORMATION. IT IS PROVIDED AS A REFERENCE TO BE USED IN CONJUNCTION WITH THE GIS DATA FILES.

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 Follis, K.M., and MacKinnon, R.D.
 2003. A GIS dataset of geological features for the Kluachesi Lake (94G/13) map area, Peace River District, British Columbia, Geological Survey of Canada, Open File 1796, 1 CD-ROM.