



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 siltstone concretions in discontinuous layers common (few in middle part of unit).

BULLHEAD GROUP

KG GIFFING FORMATION: 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 MONTETH 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 Giffing and Cadomin formations.

JURASSIC

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.

TRIASSIC

SCHOOL CREEK GROUP

Tb+p BALDOWNE AND PARDONET FORMATIONS UNDIVIDED: Fossiliferous limestone.

TP PARDONET FORMATION: Recessive, dark grey to brownish-grey weathering, thin bedded, fossiliferous limestone; locally argillaceous or silty, abundant monodol breccias are characteristic in eastern exposures; ichthyosaur bones locally preserved.

Ts BALDOWNE FORMATION: Resistant, grey, massive, fossiliferous limestone and siltstone; minor shale, siltstone, and fine-grained quartz arenite.

Tc CHARLIE LAKE FORMATION: Recessive, orange-brown to yellow weathering, calcareous or dolomitic siltstone, dolomite, and silty dolomite or limestone; minor shale, quartz arenite, and intraformational breccia.

TL LIAPE 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.

TO+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 phosphatic in lower part.

PERMAN

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 Goleat Fm. black shale and argillaceous limestone; Kaskine Fm. brown weathering calcareous crossbedded sandstone; Taylor Flat Fm. rhythmically bedded carbonate, shale and calcareous mudstone; locally Goleat, Taylor Flat or entire Group is absent.

RUNDLE GROUP

CR-BB 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-B PROPHET - Member B: Resistant, white to dark grey, bedded and nodular calcareous chert; subordinate skeletal limestone; argillaceous 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 laminated 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, opacities, and chert that increase in proportion up section; scattered siltstone nodules and pyrite lenses.

DEVONIAN

Ds DUNEDIN FORMATION: Medium grey to bluish-grey weathering, dark grey, fossiliferous marlstone to bioclastic limestone.

DS STONE FORMATION: Very light grey weathering, thick bedded, finely crystalline dolomite; fluting quartz sand grains common; fenestae, broken mud laminae, and stratiform breccia locally present.

SILURIAN AND DEVONIAN

SDM MUNCHO-MCCONNELL FORMATION: Light brown to yellowish-brown weathering, sandy 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 NONDA FORMATION: Very dark grey to black, very thick bedded, siliceous dolomite with chert nodules and subordinate quartz arenite; high diversity and abundance of corals, stromatopore bioherms locally present.

ORDOVICIAN

OB BEAVERFOOT FORMATION: Grey dolomite and limestone; dolomitization discordant to bedding; chert nodules and silicified fossil debris locally present; locally abundant quartz arenite layers, particularly at the base of the unit.

OS SKOKI FORMATION: Light to medium brown and grey, thick bedded dolomite with variable quartz sand content; commonly crossbedded; fossiliferous; locally interbedded.

CAMBRIAN AND ORDOVICIAN

CKK 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)

Anticinal kink fold - (defined, approximate)

(See schematic cross-section)

Synclinal kink fold - (defined, approximate)

(See schematic cross-section)

Overturned anticlinal kink (defined, approximate)

(See schematic cross-section)

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 200400000043100	HB PAN AM MUSKWA A-6-G	10 Jan 1960	458999, 6416386

NOTES

1. 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.

2. Map symbols are shown in grey where buried beneath thick Quaternary glacio-fluvial deposits.

References:

1. Bednarski, J.M. 2000. Surface Geology, Trutch, British Columbia (NTS 94G). Geological Survey of Canada, Open File 3885, scale 1:250 000.

2. Stockmal, G.S., Kubi, T.E., Cumis, L.D., and McDougall, M.R. 2002. Map symbology and analysis of box and polycrystalline faults, with examples from the Rocky Mountain Foothills of northeastern British Columbia and the Laramie Range of southeastern Yukon Territory and southwestern Northwest Territories. Canadian Journal of Earth Sciences, vol. 39, p. 145-155.

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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Canada

GEOLOGY
KLUACHESI LAKE (94G/13)
PEACE RIVER DISTRICT
BRITISH COLUMBIA

Scale 1:50 000 Échelle 1/50 000

Kilometres 1 0 1 2 3 Kilometres

Universal Transverse Mercator Projection
North American Datum 1983
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Projection transversale universelle de Mercator
Système de référence géodésique nord-américain 1983
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CONTOUR INTERVAL 100 FEET
Elevations in Feet above Mean Sea Level
North American Datum 1983
Transverse Mercator Projection