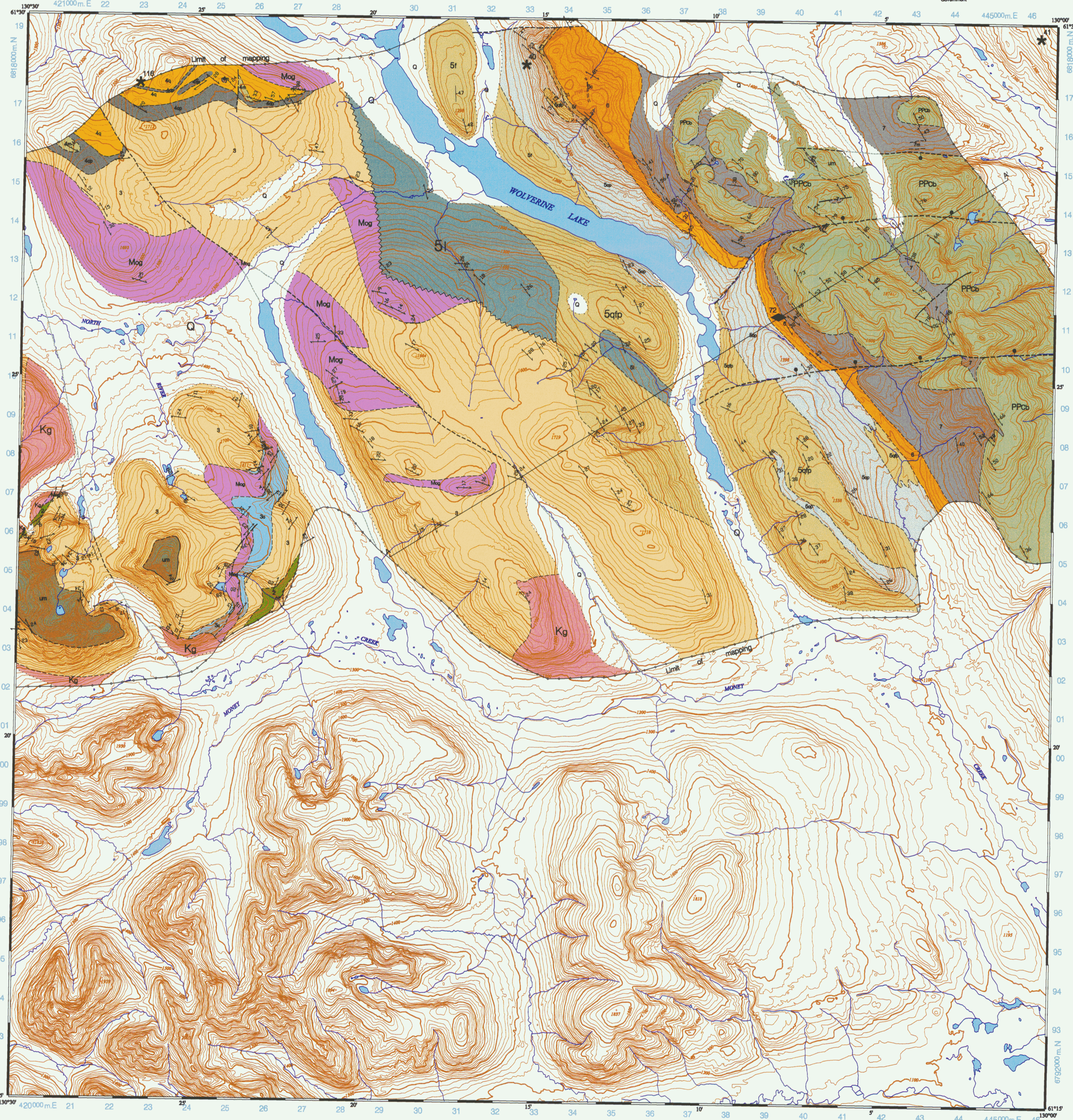


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Yukon
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QUATERNARY
Q Unconsolidated alluvium, colluvium, lacustrine and glacial deposits

CRETACEOUS¹
Kg Weakly foliated medium- to coarse-grained biotite-muscovite granite, generally equigranular

MISSISSIPPIAN²
Mog Equigranular medium- to coarse-grained granitic to monzonitic orthogneiss
um Massif, variably serpentinitized, ultramafic rocks. Relationship to surrounding rocks unclear.

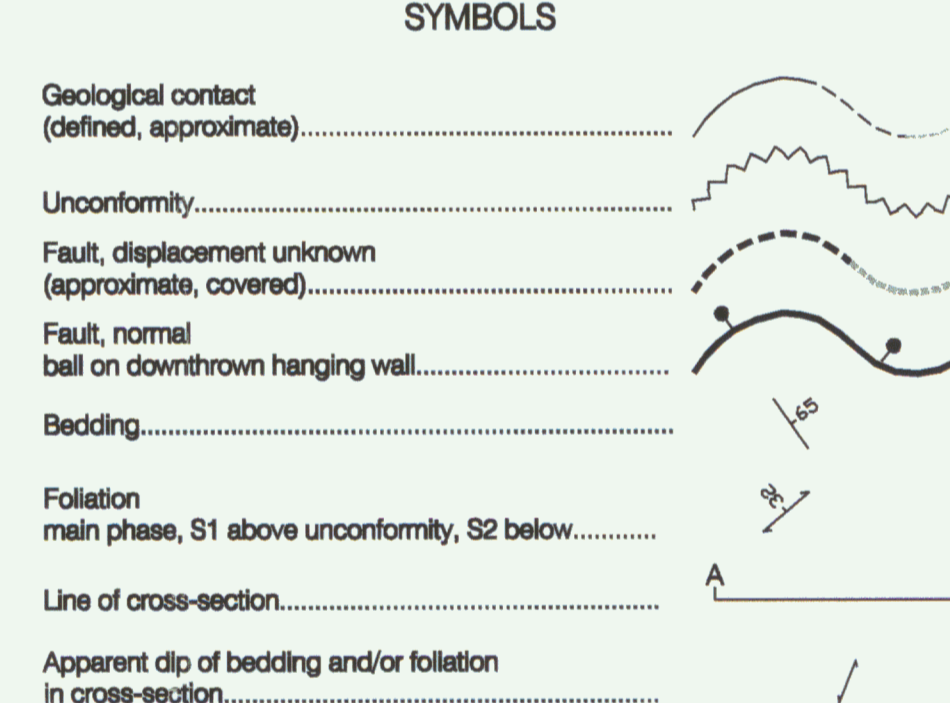
LAYERED ROCKS
PENNSYLVANIAN TO PERMIAN³
PPcb Campbell Range basalt: Coarse basaltic breccia, pillowed and massive basaltic lavas, gabbro, diabase, maroon and green chert. Foliated and tightly folded on western edge of Campbell Range Belt.

CARBONIFEROUS
7 Carbonaceous argillite, sandstone and grey quartz grit; minor diamicrite and mafic meta-igneous rock (7m); top is marked by several metres of green, possibly sulfurous chert and cherty argillite.
6 Thinly interbedded (cm-scale) massive to granular siliceous rock and light coloured phyllite. Siliceous rock is pale coloured, locally massive and bedded on metre-scale at base where associated with baritic iron formation. Darker near top where intercalated phyllite is dark grey.
S1 Carbonaceous phyllite and quartz sandstone (5cp) with variable amounts of locally porphyritic felsic phyllite (S1) and quartz-feldspar metaporphyr (5qfp). The lower part comprises coarse feldspathic sandstone and grit (S1).
S2

UNCONFORMITY
Layered rocks above unconformity have one foliation, equivalent to the second phase of deformation in rocks below the unconformity.
Layered rocks below unconformity are characterized by two phases of deformation with compositional layering transposed into the second phase foliation.

PRE-MISSISSIPPIAN AND MISSISSIPPIAN⁴
3c Carbonaceous phyllite (4cp), biotite-chlorite-actinolite-plagioclase mafic schist (4m), and quartzite (4q). Locally absent beneath unconformity
3 Un differentiated muscovite-feldspar-quartz⁵ felsic schist⁶, feldspar- and rarely quartz-sagen schist (mafic-porphyr), marble and calc-silicate (3c), thin calcite-plagioclase-biotite⁷ schist and lesser carbonaceous phyllite and grey quartzite. Magnetite iron formation occurs locally in carbonaceous argillite and thin felsic schist.
2 Massive to subtly layered biotite-plagioclase-actinolite-chlorite⁸ schist, and lesser carbonaceous phyllite and quartzite and grey marble
1 Biotite-muscovite-quartz⁵ schist, micaceous quartzite, marble

¹ ca. 112 Ma U-Pb age determinations reported from similar bodies elsewhere in the Pelly Mountains (Mortensen, 1992 and personal communication, 1999)
² Early Mississippian U-Pb age determinations reported from similar bodies elsewhere in Yukon-Tanana Terrane in the Pelly Mountains (Mortensen, 1992 and personal communication, 1999; Grant, Creaser and Erdmer, 1996)
³ Mid-Pennsylvanian to Early Permian, based on microlites identified by Tarkenton as reported in Platt and Gordon, (1997)
⁴ Early Mississippian U-Pb age determinations have been obtained from similar rocks throughout Yukon-Tanana Terrane (Mortensen, 1992)
⁵ Mineral modifiers are listed in order of increasing abundance.



MINERAL OCCURRENCES
Yukon Minfile

Volcanic-associated massive sulphide occurrences

105 G/072	Wolverine (Fetish)	Zn, Cu, Pb, Ag, Au (deposit)
105 G/040	Jay (Wol, Foot, F.Y.D, Wolf)	Work Targets
105 G/041	Finlayson	
105 G/116	Charlie	

RECOMMENDED CITATION

MURPHY, D.C. and PIERCEY, S.J., 1996. Preliminary geological map of northern Wolverine Lake area, Pelly Mountains, southeastern Yukon (NTS 105G/8, north half), Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Open File 1996-4 (1:50 000-scale).

Digital cartography and drafting by Will van Randen, Yukon Geology Program. Any revisions or additional geological information known to the user would be welcomed by the Yukon Geology Program.

Copies of this map, the accompanying report and Yukon Minfile may be purchased from Geoscience Information and Sales, c/o Whitehorse Mining Recorder, Indian and Northern Affairs Canada, Room 102-900 Main St., Whitehorse, Yukon, Y1A 2B5, Ph. 867-667-3266 or Fax 867-667-3267.

Keep this map stored in a dark area to prevent map colours from fading.

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Grant, S., Creaser, R., and Erdmer, P., 1996. Isotopic, geochemical, and kinematic studies of the Yukon-Tanana terrane in the Money Klippe, SE Yukon. In Cook, F. and Erdmer, P. (eds.) Lithoprobe Slave-Northern Cordilleran Lithospheric Evolution (SNORCLE) Transact Meeting, Report No. 50, p. 88-90.

Lithoprobe Slave-Northern Cordilleran Lithospheric Evolution (SNORCLE) Transact Meeting, Report No. 50, p. 88-90.

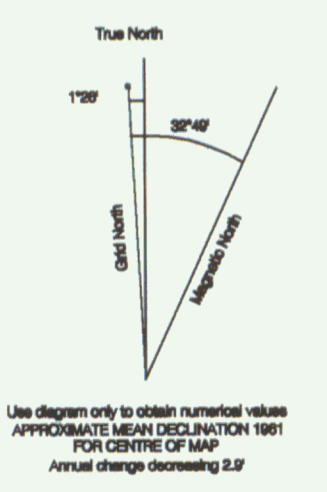
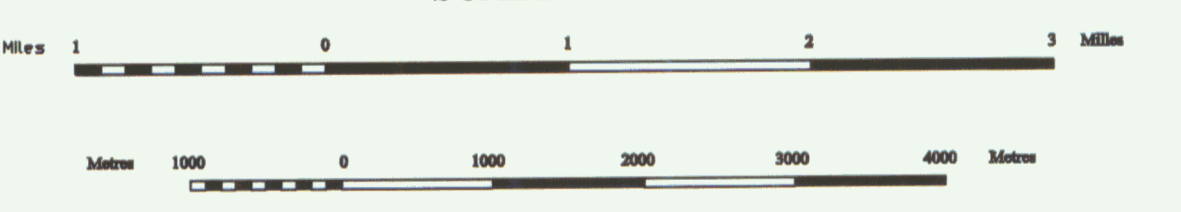
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Platt, H.E. and Gordon, T.M., 1997. The Slide Mountain Terrane and the structural evolution of the Finlayson Lake Fault Zone, southeastern Yukon. Canadian Journal of Earth Science, v. 34, p. 105-126.

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WOLVERINE LAKE
YUKON TERRITORY
SCALE 1:50 000



Topographic base prepared by SURVEY AND MAPPING BRANCH, DEPARTMENT OF INDUSTRY, MINES AND RESOURCE.

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ONE THOUSAND METRE
Universal Transverse Mercator Grid
ZONE 8

CONTOUR INTERVAL 20 FEET
Elevations in Feet above Mean Sea Level
North American Datum 1983
Transverse Mercator Projection

105 G/10	105 G/9	105 H/12
105 G/7	105 G/8 THIS MAP	105 H/5
105 G/2	105 G/1	105 H/4

Open File 1998-4
Preliminary geological map of Wolverine Lake area,
Pelly Mountains, southeastern Yukon
NTS 105G/8, north half

by
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Yukon Geology Program
Geoscience Office

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