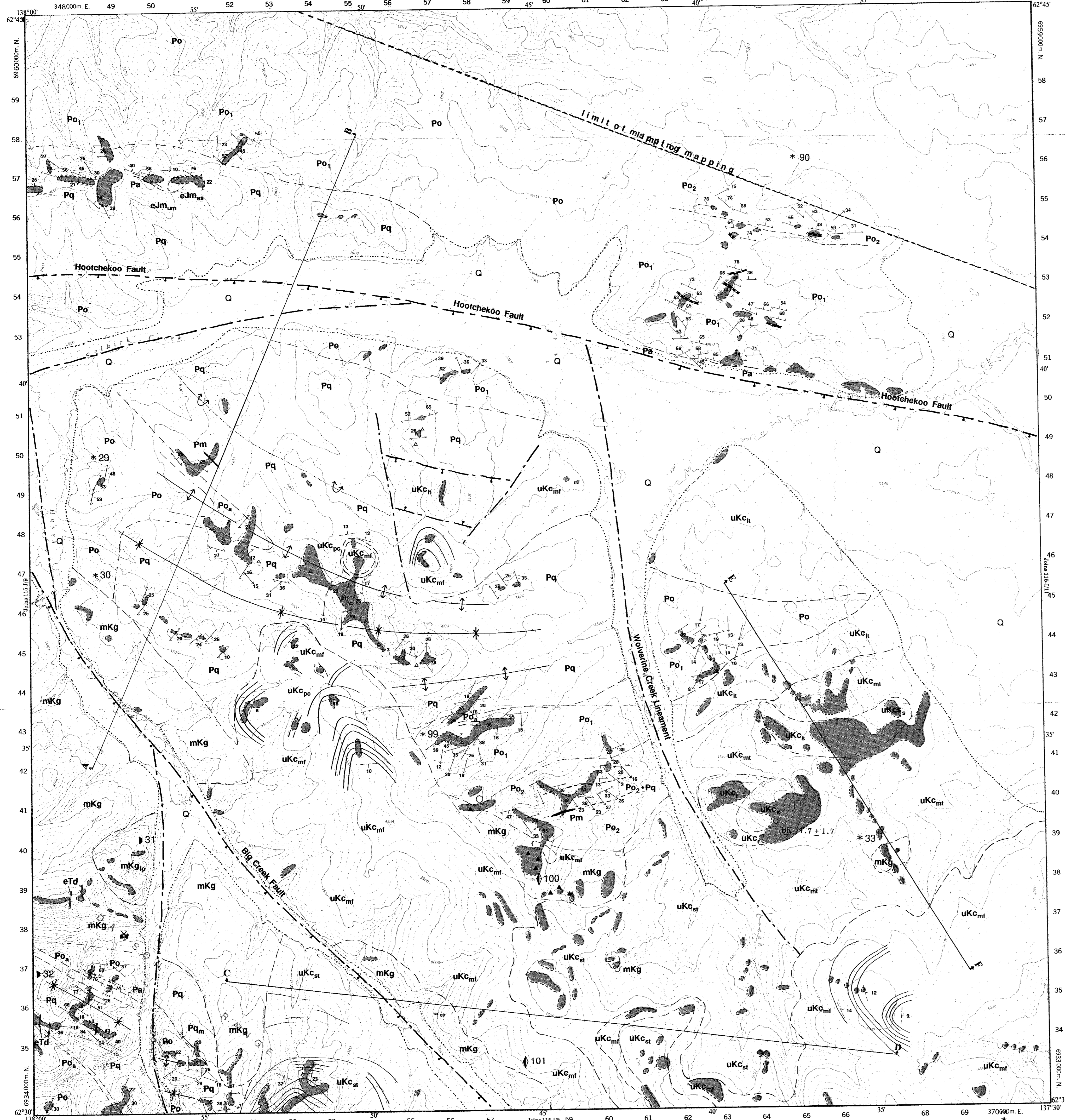


Canada

1:50,000



EDITION 1



Refer to this map as: 115-V/12 EDITION 1 (SEE SERIES A 722)

QUATERNARY

Q Undifferentiated, unconsolidated gravels, sands and clays

EARLY TERTIARY

eTd light yellow to green weathering, tan to light green, rhyolite and feldspar and hornblende feldspar porphyry dykes.

UPPER CRETACEOUS

CARMACKS GROUP

uKc₉ light pink weathering, varicolored pink to green, medium grained, equigranular, leucocratic, pyroxene biotite monzonite. K-Ar biotite age determination of 71.7 ± 1.7 (Tempelman-Kluit, 1984).

uKc_r grey to black weathering, dark grey, aphanitic, flow banded, cherty rhyolite or dacite plug.

uKc_{st} orange brown to pink weathering, tan to blue-grey to mauve, banded sandy tuff, tuff grades into massive glassy flows, vesicular flows and laminated tuff, subordinate crystal lithic chert pebble volcanoclastite, red sandstone and red mudstone.

uKc_{ml} orange brown weathering, grey to dark blue grey, lapilli and finer grained, pyroxene bearing mafic tuff; significant volumes of mafic lava; subordinate sandy tuff and grey to black cherty rhyolite.

uKc_{lt} pale grey to green grey weathering, dark blue grey, hornblende, pyroxene and feldspar bearing, crystal lithic tuff and volcanoclastite.

uKc_{mf} dark orange brown weathering, dark green grey to blue grey, massive and porphyritic (pyroxene, hornblende, biotite, feldspar, olivine, and magnetite) mafic flows; crude sub-vertical columnar jointing is commonly developed; subordinate vesicular flows with chlorite, calcite and quartz amygdules.

uKc_{pc} grey weathering, light to dark grey, fissile, poorly cemented and weakly bedded, quartz cobble conglomerate to coarse lithic sandstone.

MIDDLE CRETACEOUS

DAWSON RANGE BATHOLITH

mKg white to orange weathering, light grey to pink, fine to coarsely crystalline, leucocratic biotite quartz monzonite, granite, feldspar porphyry and quartz porphyry.

mKg_p green to pink feldspar porphyry, west of Hayes Cr.

EARLY JURASSIC

MINTO PLUTONIC SUITE

eJm_{um} grey weathering, white and pink, massive micaceous pegmatic dykes.

eJm_{um} dun weathering, dark green to black, spinel peridotite

eJm_{as} light brown to orange weathering, blue-grey, massive, equigranular, medium grained, leucocratic potassic syenite.

PALEOZOIC

METAMORPHIC ASSEMBLAGE

Po undivided Po₁ and Po₂ orthogneiss. Includes Po₂ augan orthogneiss.

Po₂ orange to grey weathering, biotite and biotite hornblende quartz diorite and diorite schist and orthogneiss; includes significant volumes of hornblende amphibolite, distinguished from Po₁ based on more mafic composition, finer grain size, and more heterogeneous nature.

Po₁ grey weathering, grey, medium to coarse grained, leucocratic, equigranular, hornblende and biotite hornblende quartz diorite to granodiorite orthogneiss.

Pa green weathering, black to dark green, medium to coarse grained amphibolite.

Pm orange weathering, white, medium to coarse grained marble.

Pq brown, orange and grey weathering, black to tan quartzite; subordinate micaschist, rare marble.

Pq_m buff to brown weathering, grey, medium grained, feldspathic, garnetiferous muscovite biotite micaschist.

MINERAL OCCURRENCES

- 29. * Delta exploration target
- 30. * Chat exploration target
- 31. ▶ Tad Pb,Zn,Cu - unknown
- 32. ▶ Phelps Cu - unknown
- 33. * Terra exploration target
- 90. * Sam exploration target
- 99. * Fland exploration target
- 100. ▶ Pitts Au - vein
- 101. ▶ Panther Au - vein

1 Numbers and symbols from Yukon MINFILE

LEGEND

- SYMBOLS**
- Geological contact (assumed)
 - - - Fault (approximate) normal displacement displacement unknown
 - ~ ~ ~ Folds: anticline syncline recumbent nappe
 - Approximate limit of bedrock
 - Outcrop
 - Bedding measured estimated from air photo flow lines from air photo
 - Prominent foliation (strike and dip)
 - Prominent lineation (trend and plunge)
 - Line of cross-section
 - Apparent dip of foliation projected onto cross-section
 - △ Breccia
 - △ Limonitic vuggy breccia (only developed in Pq)
 - △ Siliceous chert breccia (hosted in mKg)
 - Skarn (garnet and garnet magnetite)
 - ⊕ Placer mine
 - Age determination

REFERENCES

- Carlson, G.C., 1987. Geology of Mount Nansen (115-1/3) and Stoddart Creek (115-1/6) map areas, Dawson Range, central Yukon. Exploration and Geological Services Division, Indian and Northern Affairs Canada, Yukon Region, Open File 1987-2, 181 p.
- Payne, J.G., Gonzalez, R.A., Akhurst, K., and Sisson, W.G., 1987. Geology of Colorado Creek (115-J/10), Selwyn River (115-J/9), and Prospector Mountain (115-1/5) map areas, western Dawson Range, west-central Yukon. Exploration and Geological Services Division, Indian and Northern Affairs Canada, Yukon Region, Open File 1987-3, 141 p.
- Tempelman-Kluit, D.J., 1984. Geology of Labege (105E) and Carmacks (115) map areas, Yukon Territory. Geological Survey of Canada, Open File 1101.

THIS MAP ACCOMPANIES THE FOLLOWING REPORT:

- Johnston, S.T., and Hachey, N., 1993. Preliminary results of 1:50 000 scale geological mapping in Wolverine Creek map area (115/12), Dawson Range, southwest Yukon. In: Yukon Exploration and Geology, 1992. Exploration and Geological Services Division, Indian and Northern Affairs Canada.

RECOMMENDED CITATION:

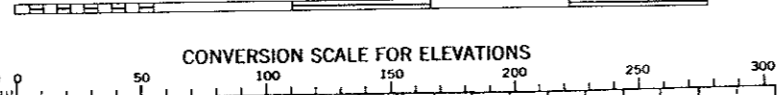
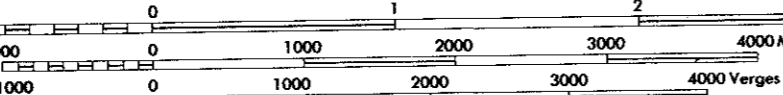
- Johnston, S.T., 1993. Geological map of Wolverine Creek map area (115/12), Dawson Range, Yukon. Exploration and Geological Services Division, Indian and Northern Affairs Canada, Open File 1993-3.

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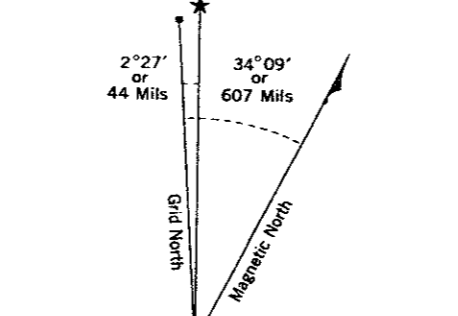
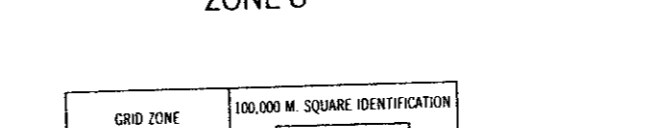
- Able field assistance was provided by Natalie Hachey. Discussions with Jim Mortensen, Derek Thorkelson, and Craig Hart aided in the interpretation of the geology. Wil van Randen provided much needed drafting assistance.

WOLVERINE CREEK
YUKON TERRITORY

Scale 1:50,000 Échelle



ONE THOUSAND METRE
UNIVERSAL TRANSVERSE MERCATOR GRID
ZONE 8



115 J/10 Payne et al. (1987)	115 J/9 Payne et al. (1987)	115 V/12 This study	115 I/11
115 J/7	115 J/8	115 I/5 Payne et al. (1987)	115 I/6 Carlson (1987)
115 J/2	115 J/1	115 I/4	115 I/3 Carlson (1987)

Indian and Northern Affairs Canada
Exploration and Geological Services Division
Yukon Region

Open File 1993 - 3 (G)

GEOLOGICAL MAP OF WOLVERINE CREEK (115/12)
DAWSON RANGE, YUKON
1:50 000 SCALE

by
S.T. Johnston
Canada/Yukon Mineral Development Agreement
Geoscience Office