SNAG GEOLOGY

1/2

LEGEND

AREA NORTHEAST OF SHAKWAK FAULT

CENOZOIC

PLEISTOCENE(?)

QTvbo — OLIVINE BASALT

EOCENE OR YOUNGER

lTvd — DONJEK VOLCANICS: grey-weathering, resistant, green and purple massive tuff-breccia. The volcanic fragments characteristically contain feldspar phenocrysts. Includes lTvr undifferentiated

lTvr — FELSIC VOLCANICS: white to buff, recessive weathering, felsic volcanic flow rocks and quartz feldspar porphyries; commonly pyritic. May include lTvd undifferentiated

lTsp — SANDSTONE: brown-weathering, grey, medium-bedded, poorly sorted, coarse- to fine-grained sandstone with minor interbedded black shale and siltstone; quartzite-pebble conglomerate near the base

Tcgq — QUARTZITE CONGLOMERATE: thick bedded to massive unsorted quartzite-pebble and boulder conglomerate; clasts are locally derived from PPqc; minor sandstone and shale

Tcgg — GRANITE CONGLOMERATE: thick-bedded to massive unsorted granite-pebble and boulder conglomerate; clasts are derived locally from Kgdm; minor sandstone and shale

eTcv — CARMACKS VOLCANICS: chocolate brown weathering, brown amygdaloidal augite olivine basalt and flow breccia; includes fine-grained gabbro feeder rocks

EOCENE(?)

Tva — CASINO VOLCANICS: ochre and orange weathering acid tuff, ignimbrite and tuff-breccia and minor related quartz feldspar porphyry (Tfp). Weathering colours commonly obscured by dense black lichen cover on stable slopes. Commonly pyritic

TMN — MOUNT NANSEN GROUP: dark grey to black weathering (blocky talus), dark greenish-grey, aphanitic, intermediate to acid, massive, tuff and tuff-breccia. Locally includes undifferentiated feldspar porphyry dykes (Tfp)

Tfp — FELDSPAR PORPHYRY: feldspar and quartz feldspar porphyry dykes and flow rocks of intermediate to acid composition, commonly with miarolitic cavities. Where these rocks are represented by intrusive phases this is indicated by a lined pattern defining the trend of dykes; where they are extrusive this pattern is not shown

Tgal — NISLING RANGE ALASKITE: buff to yellowish weathering, fine- to medium-grained, equigranular, miarolitic homogeneous leucocratic granite (=alaskite). Castellated weathering forms common. Locally includes undifferentiated intermediate to acid feldspar porphyry dykes (Tfp)

Tg — COFFEE CREEK GRANITE: coarse-grained, equigranular, homogeneous, biotite granite and quartz monzonite

007448

AREA SOUTH

CRETACEOUS(?)

Kgd — HORNBLENDE BIOTITE

TRIASSIC(?)

PTrub — ULTRAMAFIC ROCKS: p

PERMIAN AND/OR MESOZOIC

PMs — SEDIMENTARY ROCKS: conglomerate and mi

PMv — VOLCANIC ROCKS: gre tuff and tuff-brecc

Geological boundary (defined

CENOZOIC

kgdm; minor sandstone and shale

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EOCENE(?)

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Tg — COFFEE CREEK GRANITE: coarse-grained, equigranular, homogeneous, biotite granite and quartz monzonite

MESOZOIC

lMmzp — PORPHYRITIC MONZONITE: black-weathering, porphyritic (F-keldspar), medium-grained hornblende monzonite to syenite

lMdim — DIORITE: fine-grained biotite hornblende diorite

lMqm — QUARTZ MONZONITE: medium-grained, equigranular biotite quartz monzonite

Mqmp — PORPHYRITIC QUARTZ MONZONITE: rusty-weathering, medium-grained, porphyritic (K-feldspar) biotite quartz monzonite

Mgdb — NISLING RANGE GRANODIORITE: medium - to coarse-grained equigranular hornblende biotite granodiorite; mottled green and mauve. Contains diagnostic euhedral biotite

TRIASSIC(?)

Trqm — PINK QUARTZ MONZONITE: pink coarse-grained leucocratic quartz monzonite and porphyritic pink quartz monzonite; may include porphyritic quartz monzonite (Mqmp) undifferentiated

Trgdm — HORNBLENDE GRANODIORITE: dark grey weathering, coarse-grained equigranular biotite hornblende granodiorite to quartz diorite; commonly shows layering or foliation by alignment of mafics

PALEOZOIC(?) AND/OR MESOZOIC

PERMIAN(?) AND/OR TRIASSIC(?)

Pc — LIMESTONE: white weathering, light grey, massive coarsely crystalline marble

Ppt — ARGILLACEOUS CHERT: interbedded brown argillite, cherty slate and quartzite

Ppt_1 — HORNFELS: purplish brown fine-grained hornfels

PMub — DUNITE: dun-brown weathering, massive, resistant, black and dark green, partly serpentinized dunite and harzburgite

PMb — GABBRO: dark weathering, medium-grained, equigranular hornblende gabbro; may include PMv undifferentiated

PMv — MASSIVE GREENSTONE: dark green, massive aphanitic epidotized basalt; includes gabbro (PMb), undifferentiated

PMpr — PERIDODITE: dun-brown weathering, dark green to black, partly serpentinized massive harzburgite; may include volcanic rocks (PMv) undifferentiated

Pv — SHEARED GREENSTONE: sheared and foliated greenstone and related volcanic rocks, minor cherty tuff

PROTEROZOIC AND/OR PALEOZOIC

EPqc — NASINA QUARTZITE: black-weathering, massive, dark grey to black graphitic quartzite with lesser grey micaceous quartzite and quartz mica schist. Commonly shows alternating light and dark colour lamination. May include undifferentiated granitic rocks west of Onion Creek

EPsbq — BIOTITE SCHIST: brown grey weathering, recessive, chlorite muscovite biotite quartz schist and micaceous quartzite; garnetiferous; minor amphibolite, marble and skarn

EPm — AMPHIBOLITE: dark grey to black weathering amphibolite; includes minor granitic and metamorphic rocks of surrounding map-units

EPgd — FOLIATED BIOTITE GRANODIORITE: foliated to gneissic biotite granodiorite; minor interfoliated phyllite, schist and amphibolite

EPsb — SCHIST: biotite schist and gneiss

EPps — PHYLLITE: silvery grey muscovite chlorite quartz phyllite

EPsqm — KLONDIKE SCHIST: black and orange weathering well foliated pale green chlorite muscovite quartz schist; includes augen gneiss and amphibolite

EPsn — SCHIST GNEISS: brownish weathering, grey muscovite biotite-quartzite and quartz feldspar mica schist; includes amphibolite and augen gneiss and minor marble undifferentiated; includes rocks of Pelly Gneiss and Klondike Schist undifferentiated

EPgdn — PELLY GNEISS: strongly foliated to gneissic muscovite chlorite biotite granodiorite; minor augen gneiss; grades locally to garnetiferous amphibolite

AREA SOUTHWEST OF SHAKWAK FAULT

CRETACEOUS(?)

Kgd — HORNBLENDE BIOTITE GRANODIORITE

TRIASSIC(?)

PTrub — ULTRAMAFIC ROCKS: partly serpentinized peridotite

PERMIAN AND/OR MESOZOIC

PMs — SEDIMENTARY ROCKS: argillite, siltstone, greywacke, pebb conglomerate and minor limestone

PMv — VOLCANIC ROCKS: green massive aphanitic basalt and relat tuff and tuff-breccia; bright orange gossans are common

Geological boundary (defined, approximate, assumed) ...
Bedding tops known (horizontal, inclined, vertical) 20
Foliation (inclined, vertical) 45
Lineation (horizontal, inclined) .....
Trend of dykes (from air photographs).....
Fault (defined, inferred) .....
Jointing (inclined, vertical) .....
Antiform (location approximate) .....
Synform (location approximate) .....
Mineral occurrence ..... ×

METALS AND MINERALS

Chalcopyrite .....cp	Molybdenite ..... mo
Copper .....Cu	Nickel ..... Ni
Galena .....gn	Sphalerite ..... sp
Gold .....Au	Tungsten ..... W
Manganese .....Mn	

Geology by D.J. Tempelman-Kluit 1970, 1971, 1972

To accompany Paper 73-41 by D.J. Tempelman-Kluit

This preliminary edition may be subject to revision and correcti

Geological cartography by the Geological Survey of Canada

Any revisions or additional geological information known to th user would be welcomed by the Geological Survey of Canada

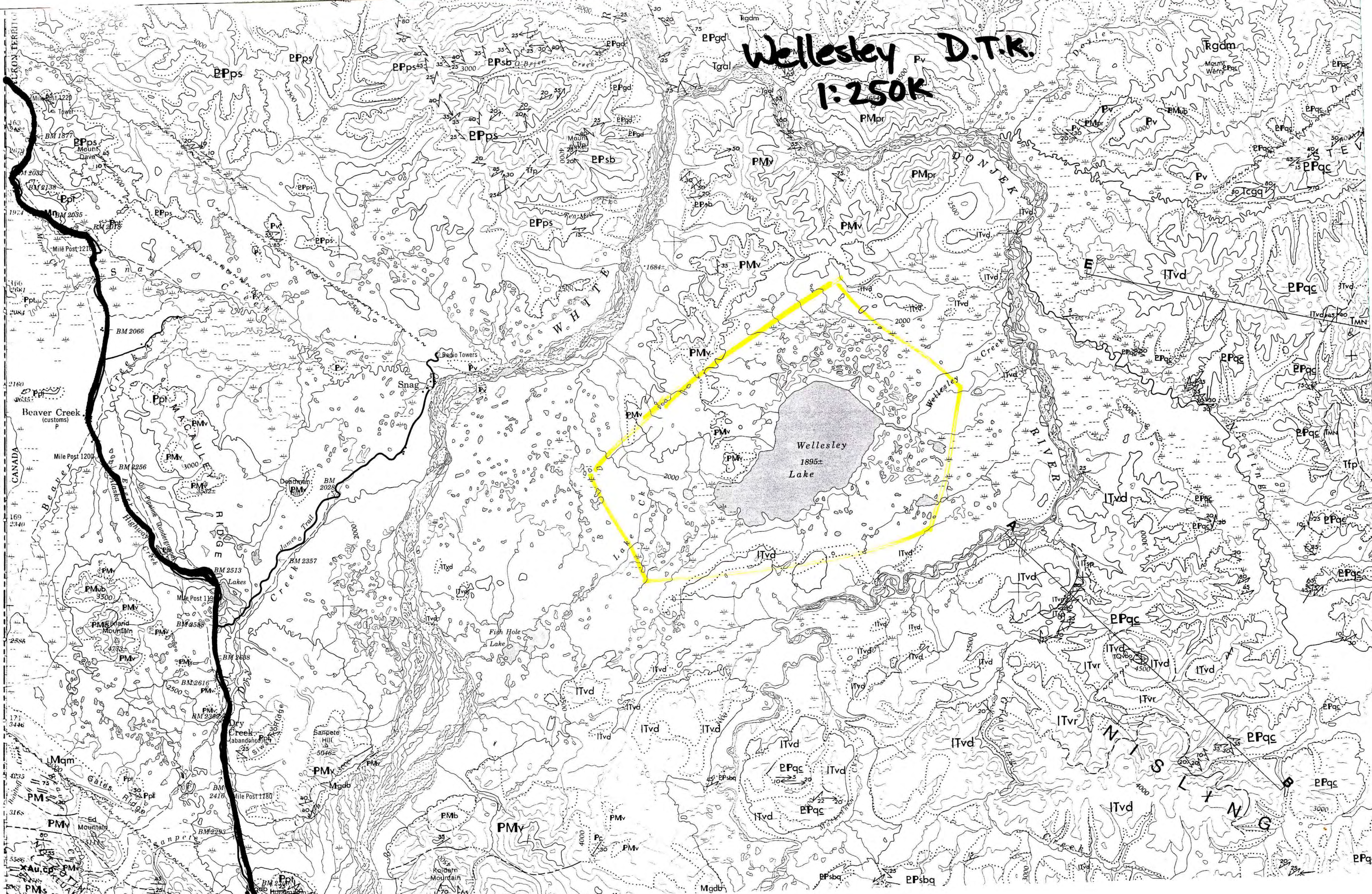
Base-map at the same scale published by the Surveys and Mappin Branch, Department of Energy, Mines and Resources in 1971

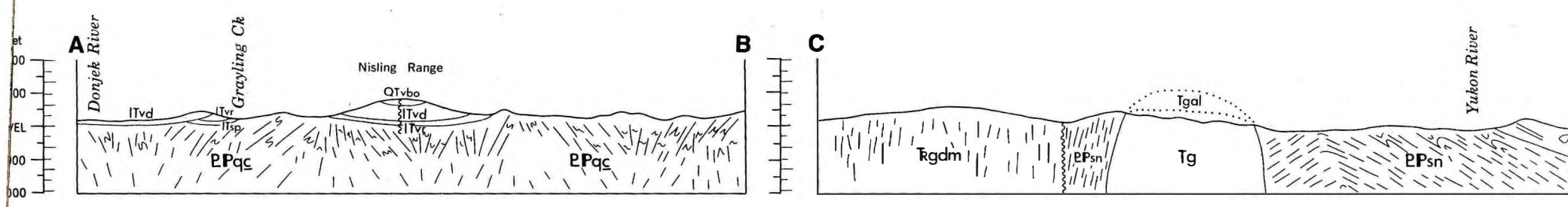
Copies of the topographical edition of this map may be obtaine from the Canada Map Office, Department of Energy, Mines and Resources, Ottawa

Magnetic declination 1973 varies from 29°49' easterly at cent of west edge to 31°09' easterly at centre of east edge. Mea annual change 3.6' westerly

Elevations in feet above mean sea-level

SNAG
2/2


Wellesley D.T.K.
1:250K
ALASKA
YUKON TERRITORY
UNITED STATES OF AMERICA
CANADA
Beaver Creek
(customs)
Mile Post 1200
Mile Post 1221
Mile Post 1180
Mount Dave
Snag
Radio Towers
WHITE
DONJEK
RIVER
Wellesley
Lake
1895±
Wellesley Creek
Lake Ck
MACAULEY RIDGE
Alaska Highway
James Trail Creek
Fish Hole Lake
Sanpete Hill
Dry Creek
(abandoned)
Gates Ridge
Ed Mountain
Kolden Mountain
Mount Wern
NISLING
Deadman
Lakes



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