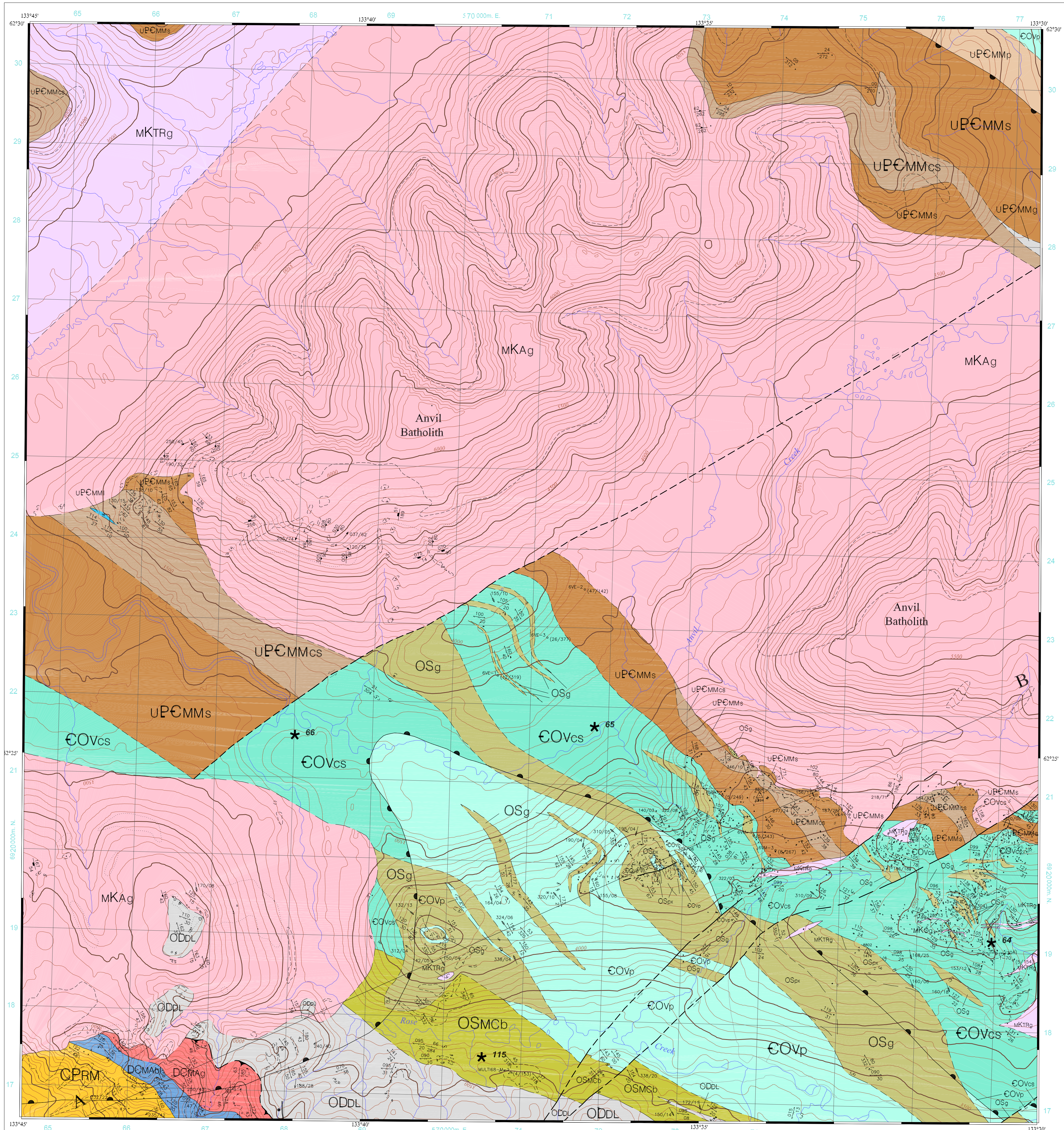
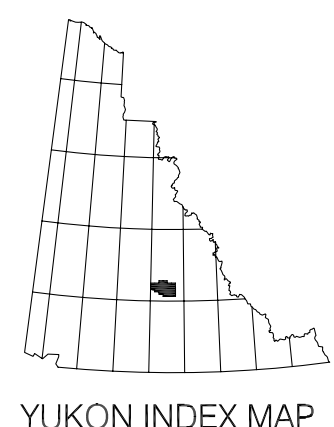
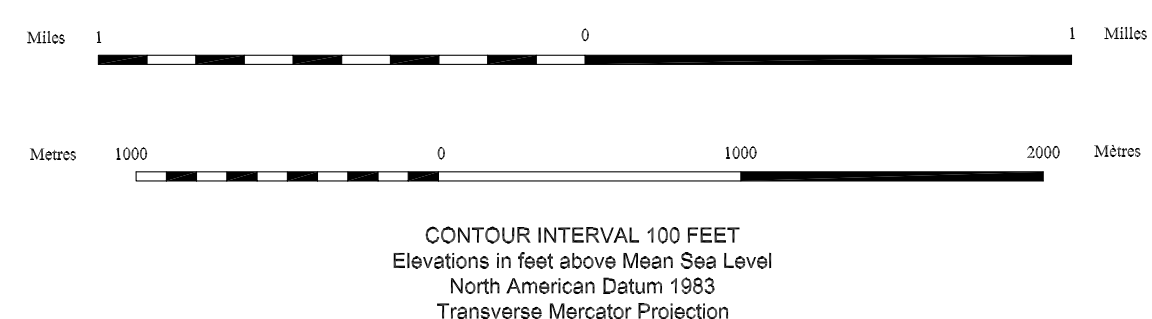
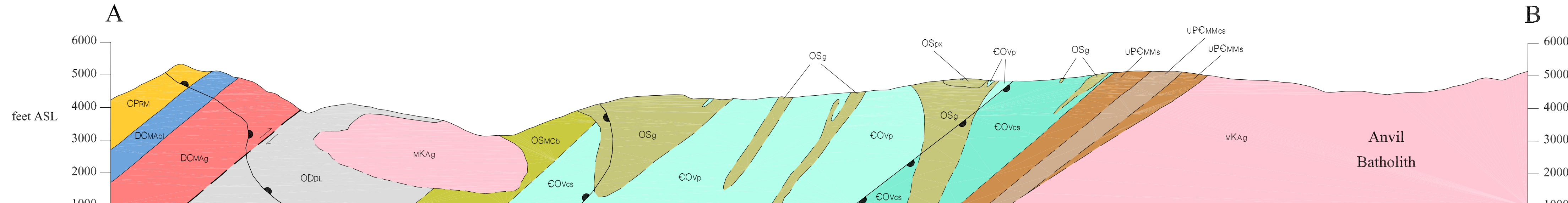
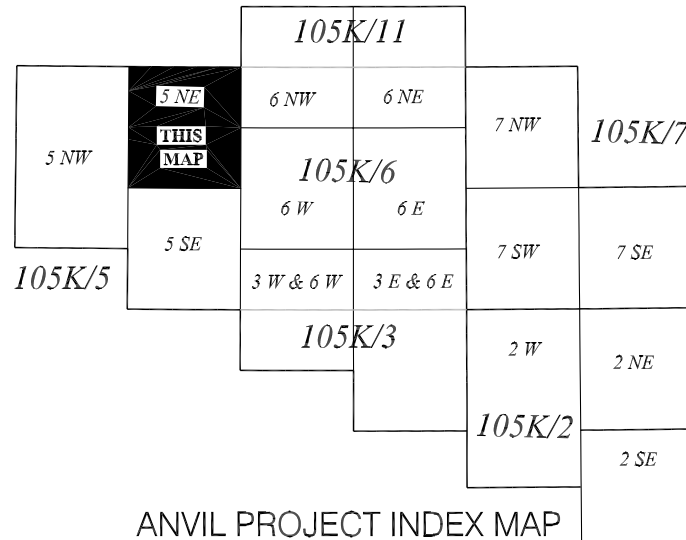
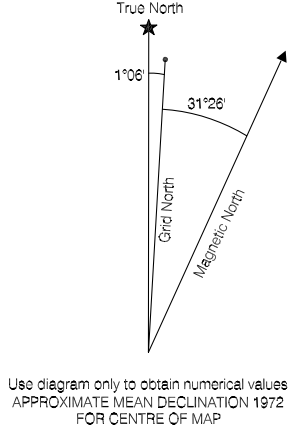




105K/5 NE
YUKON
SCALE 1:25 000



Topographic base provided by
SURVEY AND MAPPING BRANCH
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ONE THOUSAND METRE
Universal Transverse Mercator Grid
ZONE 8



LEGEND

INTRUSIVE ROCKS

EOCENE

quartz-feldspar porphyry
white-weathering, aphanitic to fine-grained, locally flow-banded quartz-feldspar porphyry; commonly contains phenocrysts of smoky grey quartz, biotite and white feldspar

CRETACEOUS

granite to granodiorite undifferentiated

grey, resistant, generally medium- to coarse-grained, locally megacrystic, undifferentiated Tay River plutonic suite or Anvil plutonic suite granite to granodiorite

Tay River plutonic suite

Orchay phase - biotite ± hornblende granite to granodiorite

Anvil plutonic suite

Mount Mye phase - biotite-muscovite granite; locally foliated

PERMIAN?

gabbro, harzburgite, serpentinite

mafic and ultramafic intrusive rocks, locally extensively sheared and serpentinized
P₁ - serpentinite; P_{1H} - harzburgite; P_{1G} - gabbro

ORDOVICIAN-SILURIAN

gabbro

dark green, locally magnetic, coarse- to fine-grained, massive to foliated gabbro; subvolcanic dykes and sills to Menzies Creek basalt (OSMc₂) enclosing phyllites locally display thin contact metamorphic aureoles

pyroxenite

dark green, locally magnetic, coarse-grained, massive to foliated, variably serpentinized pyroxenite; subvolcanic dykes and sills to Menzies Creek basalt (OSMc₂); enclosing phyllites locally display thin contact metamorphic aureoles

LAYERED ROCKS

YUKON-TANANA TERRANE

TRIASSIC

Faro Peak formation

resistant, massive, polymictic conglomerate; clasts include quartzite, chert, limestone and serpentinite; matrix contains detrital muscovite

dark grey carbonaceous, locally calcareous shale or siltstone interbedded with medium to dark grey, fine-grained limestone

interbedded cherty argillite, chert, sandstone and mafic greywacke or conglomerate

massive, dark green, fine-grained to aphanitic basalt, may be equivalent to Anvil Range Group basalt

PALEOZOIC

metasedimentary and metavolcanic rocks

medium to dark grey, locally gritty, muscovitic meta-quartzite to quartzose schist; contains bands of greywacke, gabbro, phyllite, rarely contains eclogite lenses

grey to tan, massive limestone or dolomite

medium to dark olive green, chloritic phyllite to amphibolite, locally displays relict equigranular gneiss texture; locally includes ultramafic rock and/or eclogite (P₁g₂)

felsic orthogneiss or paragneiss

SLIDE MOUNTAIN TERRANE

PERMIAN

Campbell Range formation

Epidiorite, locally hematitic, dark green, resistant, massive, poorly foliated basalt or brecciated basalt; contains lesser grey, green, red and black bedded chert, and pale green spiroviciolite sandstone or conglomerate

EARLY CARBONIFEROUS-PERMIAN

Rose Mountain formation

pale green, tan-weathering, bedded phyllitic chert interbedded with lesser maroon chert and argillite, especially near top of unit; also contains minor black bedded chert, black chert-pebble conglomerate, siltstone, limestone and argillite

DEVONIAN-PERMIAN

undivided Rose Mountain formation and Mount Aho formation

dark grey to black, pale green, and maroon noncalcareous argillite and bedded chert with lesser siltstone, sandstone, chert-pebble conglomerate and limestone

DEVONIAN-EARLY CARBONIFEROUS

Mount Aho formation

silvery cream, tan-weathering, bedded phyllitic chert with light grey barite beds

DO₁Ma₂

dark grey to black, noncalcareous, siliceous argillite and bedded chert with lesser siltstone, sandstone, chert-pebble conglomerate and limestone

DO₁Ma₃

pale green, noncalcareous argillite and bedded chert with lesser shale chip and siltstone breccia, grey sandstone and chert-pebble conglomerate; locally contains maroon argillite and bedded chert

DO₁Ma₄

ANCIENT NORTH AMERICA

DEVONIAN-EARLY CARBONIFEROUS

Earn Group

dark grey to black, noncalcareous, siliceous argillite with lesser siltstone, sandstone, chert-pebble conglomerate and limestone

SILURIAN

siltstone

dark grey to black, platy, tan-weathering, thinly laminated, dolomitic siltstone

Road River Group

Steel Formation

tan- to orange-weathering, dolomitic, bioturbated, silty mudstone

ORDOVICIAN-DEVONIAN

quartz sandstone and dolomite

Massive, medium-grained, quartz sandstone interbedded with pale tan-weathering limestone or dolomite.

Road River Group

Duo Lake Formation

dark grey to black, graphitic argillite; contains lesser medium to pale grey siltstone and fine sandstone, medium grey limestone, and basalt flows

Menzies Creek formation

undivided dark grey green, foliated basalt; includes massive and pillowed, locally amygdaloidal flows and heterolithic or monolithic breccias with lesser limestone, argillite, and tuff

OS₁Ma₂

dark grey green, locally amygdaloidal, massive and pillowed basalt with minor monolithic basalt breccia, volcanoclastic sandstone, siltstone, and tuff

OS₁Ma₃

dark grey green, monolithic basalt breccia with lesser volcanoclastic sandstone, siltstone and tuff, and massive and pillowed flows

OS₁Ma₄

grey to off-white limestone locally interbedded with orange-weathering dolomite

CAMBRIAN-ORDOVICIAN

Vangorite formation

soft, silvery grey, calcareous phyllite with lesser medium crystalline, grey marble, dark grey to black phyllite and dark green gabbro dykes and sills (OS₂)

CO₁Ma₂

pale green and dark purplish brown, thinly banded calc-silicate rock with lesser black schist, marble and dark green gabbro dykes and sills (OS₂)

CO₁Ma₃

black, locally calcareous, carbonaceous phyllite or schist; commonly contains thin quartzose siltstone interbeds, interbedded with dark green gabbro dykes and sills (OS₂)

CO₁Ma₄

pale to dark grey, foliated marble

UPPER PROTEROZOIC-CAMBRIAN

Mount Mye formation

brownish grey, noncalcareous, pervasively foliated phyllite; locally indistinctly bedded; contains minor siltstone, marble, calc-silicate rock, carbonaceous phyllite and dark green gabbro dykes and sills (OS₂)

UP₁Ma₂

brownish grey, noncalcareous, pervasively foliated muscovite-biotite schist; may contain staurolite, garnet, andalusite, or fibrolite; locally indistinctly bedded; contains minor siltstone, marble, calc-silicate rock, carbonaceous phyllite and dark green gabbro dykes and sills (OS₂)

UP₁Ma₃

pale green and dark purplish brown, thinly banded calc-silicate rock; contains marble and silicified marble beds and dark green gabbro dykes and sills (OS₂)

UP₁Ma₄

dark to pale grey, medium crystalline marble; typically contains abundant boudins of calc-silicate rock and/or quartz; locally contains coarsely crystalline garnet-pyroxene skarn

UP₁Ma₅

black phyllite to schist; locally contains lenses and beds of black carbonaceous limestone and dark green gabbro dykes and sills (OS₂)

SYMBOLS

geological contact (defined, approximate, assumed).....

fault or vein-fault, displacement unknown (defined, approximate, assumed).....

thrust fault (defined, approximate, assumed, teeth on hanging wall).....

normal fault (defined, approximate, assumed, dot on downthrown side).....

strike-slip fault (defined, approximate, assumed).....

fold surface axial trace (upright anticline, syncline, overturned anticline, syncline).....

metamorphic boundary (symbol on higher grade side).....

bedding (tops not known).....

foliation (one tick indicates earliest phase of deformation, two or more ticks indicate subsequent phase(s) of deformation).....

foliation (phase of deformation unknown).....

lineation (one arrow indicates earliest phase of deformation, two or more arrows indicate subsequent phase(s) of deformation).....

joint.....

igneous compositional banding.....

igneous mineral lineation.....

fault plane orientation, shear band (C-bands) orientation.....

shear band plane of flattening (S bands).....

mineral lineation/rodding associated with shear bands.....

apparent dip of measured bedding, foliation (in cross-section).....

foliation form lines in cross-section.....

limit of outcrop, subcrop.....

projection to surface of mineralized volume.....

limit of mapping.....

isotopic age determination sample location and age includes radiometric age, 2 sigma error, and sample number.....

fossil sample, includes sample reference number.....

barren fossil sample, includes sample reference number.....

geochemical sample-whole rock with major oxides, minor and trace elements, includes assay number and reference.....

survey control station with station name and elevation (in metres).....

diamond drill hole collar (overburden depth/total depth) in metres.....

rotary drill hole collar (overburden depth/total depth) in metres.....

field station.....

trench.....

line of cross-section.....

primary road.....

secondary road, trail, out line.....

MINERAL OCCURRENCES

Yukon MINFILE

105K 64	★	JACOLA	Exploration Target
105K 65	★	CO ₁ Ma ₂	Exploration Target
105K 66	★	LEON	Exploration Target
105K 115	★	MULTI	Exploration Target

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RECOMMENDED CITATION

Pigage, L.C., 2004. Geological map of Rose Mountain (NTS 105K/5 NE), central Yukon (1:25 000 scale). Yukon Geological Survey, Geoscience Map 2004-4, also Plate 4 in Bulletin 15.

This map accompanies the bulletin:
Pigage, L.C., 2004. Bedrock geology compilation of the Anvil District (parts of 105K/2, 3, 5, 6, 7, and 11), central Yukon. Yukon Geological Survey, Bulletin 15.

An earlier version of this map was published as Open File 2000-13 by Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada.

The legend shown here is for the entire Anvil District (shown in Plate 2-Geoscience Map 2004-2). Rock units not present in this map area are not coloured in this legend.

Digital cartography and drafting by L.C. Pigage, Yukon Geological Survey.
Any revisions or additional geological information known to the user would be welcomed by the Yukon Geological Survey.

Paper copies of this map, the accompanying report and Yukon MINFILE may be purchased from the Geoscience Information and Sales, c/o Whitehorse Mining Recorder, P.O. Box 2703 (K-102), Whitehorse, Yukon, Y1A 2C6. Phone 867-687-6200, Fax 867-687-6150, Email geosales@gov.yk.ca.

A digital PDF (Portable Document Format) file of this map may be downloaded free of charge from the Yukon Geological Survey website at www.geology.gov.yk.ca.

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

Yukon Geological Survey
Energy, Mines and Resources
Yukon Government

Plate 4
Geoscience Map 2004-4

Geological Map of Rose Mountain
(NTS 105K/5 NE)
Central Yukon (1:25 000 scale)

compiled by
L.C. Pigage