

LEGEND

INTRUSIVE ROCKS EOCENE

white-weathering, aphanitic to fine-grained, locally flow-banded quartz-feldspar Eqfp 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, MKUg undifferentiated Tay River plutonic suite or Anvil plutonic suite granite to

Tay River plutonic suite

MKTRg Orchay phase - biotite ± hornblende granite to granodiorite

Anvil plutonic suite

Mount Mye phase - <u>biotite-muscovite granite</u>; locally foliated

PERMIAN?

gabbro, harzburgite, serpentinite

mafic and ultramafic intrusive rocks; locally extensively sheared and Ps - serpentinite; Phz - harzburgite; Pg - gabbro

ORDOVICIAN-SILURIAN

dark green, locally magnetic, coarse- to fine-grained, massive to foliated gabbro; subvolcanic dykes and sills to Menzie Creek basalts (OSMCb);

dark green, locally magnetic, coarse-grained, massive to foliated, variably OSpx serpentinized pyroxenite; subvolcanic dykes and sills to Menzie Creek basalts (OSMCb); 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

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

grey to tan, massive <u>limestone</u> or dolostone

medium to dark olive green, chloritic phyllite to amphibolite; locally displays relict equigranular igneous texture; locally includes ultramafic rocks and/or eclogite (Pygre)

PYog felsic orthogneiss or paragneiss

SLIDE MOUNTAIN TERRANE

Campbell Range formation

Epidotized, locally hematitic, dark green, resistant, massive, poorly foliated PCR basalt or brecciated basalt; contains lesser grey, green, red and black bedded chert, and pale green epivolcaniclastic 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

DEVONIAN-PERMIAN

Mount Aho formation

undivided Rose Mountain formation and Mount Aho formation dark grey to black, pale green, and maroon noncalcareous argillite and bedded DPRMMA <u>chert</u> with lesser siltstone, sandstone, chert-pebble conglomerate and

DEVONIAN-EARLY CARBONIFEROUS

silvery cream, tan-weathering, <u>bedded phyllitic chert</u> with light grey <u>barite</u> beds dark grey to black, noncalcareous, siliceous argillite and bedded chert with

lesser siltstone, sandstone, chert-pebble conglomerate and limestone 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

ANCIENT NORTH AMERICA DEVONIAN-EARLY CARBONIFEROUS

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

SILURIAN

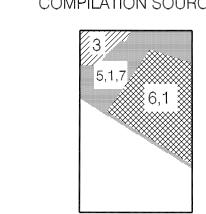
ANVIL PROJECT INDEX MAP

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

Road River Group Steel Formation

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

COMPILATION SOURCES



105K/5 NW

ORDOVICIAN-DEVONIAN Road River Group

Duo Lake Formation

quartz sandstone and dolostone

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

Massive, medium-grained, quartz sandstone interbedded with pale

tan-weathering limestone or dolostone Menzie 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

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

siltstone and tuff, and massive and pillowed flows

grey to off-white <u>limestone</u> locally interbedded with orange-weathering

CAMBRIAN-ORDOVICIAN

soft, silvery grey, calcareous phyllite with lesser medium crystalline, grey €○vp marble, dark grey to black phyllite and dark green gabbro sills and dykes (O\$g)

pale green and dark purplish brown, thinly banded calc-silicate rock with lesser black schist, marble and dark green gabbro dykes and sills (OSg) black, locally calcareous, <u>carbonaceous phyllite or schist</u>; commonly contains

€Ovg thin quartzose siltstone interbeds; interbanded with dark green gabbro dykes and sills (O\$g) €Ovı pale to dark grey, foliated <u>marble</u>

UPPER PROTEROZOIC-CAMBRIAN

Mount Mye formation

brownish grey, noncalcareous, pervasively foliated phyllite; locally indistinctly UP€MMp bedded; contains minor siltstone, marble, calc-silicate rock, carbonaceous

lacksquare phyllite and dark green gabbro dykes and sills (igtriangleSg) 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 ($\bigcirc S_g$) pale green and dark purplish brown, thinly banded calc-silicate rock; contains marble and silicated marble beds and dark green gabbro dykes and sills (○Ṣg); lithologically similar to Vangorda calc-silicate rock

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

<u>black phyllite to schist</u>; locally contains lenses and beds of black carbonaceous limestone and dark green gabbro dykes and sills ($\bigcirc S_g$)

geological contact

line of cross-section.

secondary road, trail, cut line.

primary road....

(defined, approximate, assumed)...

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t or vein-fault, displacement unknown ined, approximate, assumed)	
st fault ined, approximate, assumed, teeth on hanging wall)	
mal fault ined, approximate, assumed, dot on downthrown side)	· · · · · · · · · · · · · · · · · · ·
e-slip fault ined, approximate, assumed)	
surface axial trace ight anticline, syncline, overturned anticline, syncline)	XXXX
amorphic boundary (symbol on higher grade side)	schist
ding (tops not known)	<u>090</u> 20
etion (one tick indicates earliest phase of deformation, or more ticks indicate subsequent phase(s) of prmation)	090 090 20
ntion (phase of deformation unknown)	090
ation (one arrow indicates earliest phase of deformation, or more arrows indicate subsequent phase(s) of rmation)	1 045/05 A 045/05
t	090
eous compositional banding	<u>090</u> 20
eous mineral lineation	/ 045/05
t plane orientation, shear band (C-bands) orientation	<u>090</u> 20
ar band plane of flattening (S bands)	090
eral lineation/rodding associated with shear bands	045/05
arent dip of measured bedding, foliation cross-section)	
ntion form lines in cross-section	
of outcrop, subcrop	CS CS
ection to surface of mineralized volume	
of mapping	
opic age determination sample location and age ludes radiometric age, 2 sigma error, and sample number	● 69.3 ± 0.5 Ma GSC70-45
sil sample, includes sample reference number	f) GC-98-05
ren fossil sample, includes sample reference number	€ GC-98-05
chemical sample-whole rock with major oxides, or and trace elements, includes assay number and rence	■ A098, (1)
vey control station with station name and elevation (in res)	HIW10 1500
nond drill hole collar verburden depth/ total depth) in metres	70X-01 _° (15/100)
ry drill hole collar verburden depth/ total depth) in metres	70RH-01 ₀ (15/100)
station	•
ch	\sim
	Δ

MINERAL OCCURRENCES Yukon MINFILE				
105K 67	*	LORNA	Exploration Target	
105K 68	*	RESERVE	Exploration Target	
105K 69	*	PARADOX	OOX Exploration Target	
105K 70	*	MARY	Exploration Target	

Deklerk, R., 2003. Yukon MINFILE-a database of mineral occurrences. Yukon Geological Survey, CD-ROM.

ISOTOPIC AGE DATES						
Sample	Date	System	Mineral	Comments	Ref	
AR2	61±1.5 Ma Rb-Sr wr-min isochron cooling age? date suspect (8)					

Abbreviations: wr=whole rock; min=mineral

REFERENCES

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RECOMMENDED CITATION

Pigage, L.C., 2004. Geological map of Rose Mountain (NTS 105K/5 NW), central Yukon (1:25 000 scale). Yukon Geological Survey, Geoscience Map 2004-3, also Plate 3 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 previously published as Open File 1999-11

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 867-667-5200, Fax 867-667-5150, 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.

Energy, Mines and Resources Yukon Government

Yukon Geological Survey

Plate 3 Geoscience Map 2004-3 Geological Map of Rose Mountain (NTS 105K/5 NW)

compiled by

Central Yukon (1:25 000 scale)

L. C. Pigage