

DESCRIPTIVE NOTES

INTRODUCTION

Yukon-Tanana terrane

White River assemblage

GEOLOGICAL FRAMEWORK

distinguishes it from the SCA and Scottie Creek formation (below).

dunite and lesser Iherzolite, and intrusions of gabbro and diabase.

predominantly exposed near the confluence of Dip Creek with the Donjek River.

Paleogene rocks that locally host Au mineralization. The

backbone of the Dawson Range is underlain by the mid-

Cretaceous Whitehorse plutonic suite. Late Devonian

rocks of the White River assemblage and the Late

the Dawson Range. These rocks are structurally

overlain by a thrust sheet of the Early Permian

Dawson Range is characterized by Paleozoic rocks

typical of the Yukon-Tanana terrane, including Permian

Klondike schist, Permian Sulphur Creek plutonic suite

and pre-Devonian Snowcap assemblage. The White

River assemblage and the Yukon-Tanana terrane are

juxtaposed along the post-Triassic Moose Creek thrust,

which is partly demarcated by lozenges of peridotite.

Late Cretaceous and younger faults occur throughout

Spheroidal weathering in large tors of monzogranite

suite in Stevenson Ridge area, western Yukon.

Photograph by Witold Ciolkiewicz. 2013-060

in the Coffee Creek phase of the Whitehorse plutonic

CANADIAN GEOSCIENCE MAP 117

GEOLOGICIAN GEOLOGICAN

(NORTHWEST PART

the area but have only modest offsets.

Harzburgite Peak complex. The north side of the

metamorphosed volcanic, plutonic and sedimentary

Triassic Snag Creek suite gabbro occur southwest of

hornblende-plagioclase porphyritic and are difficult to distinguish from the Carmacks Group.

Mesozoic-Cenozoic successor rocks

and garnet-bearing quartzofeldspathic leucosome likely resulting from anatectic melting.

CANADIAN GEOSCIENCE MAP 117

GEOLOGY STEVENSON RIDGE (NORTHWEST PART)

Dextral strike-slip fault (approximate, inferred) . .

Sinistral strike-slip fault (approximate, inferred) .

Unconformity, ornament in younger unit (approximate) . . .

Fold hinge, minor S-fold (generation: first, uncertain) . .

Fold hinge, minor U-fold (generation: second, third, uncertain) . .

Stretching/mineral lineation (generation: first, second, uncertain) . .

Fold hinge, minor Z-fold (generation: second, uncertain) . .

Fold axial plane (generation: second, third, uncertain) .

Inclined volcanic flow layering (tops known, tops unknown) .

Inclined igneous layering (tops known, tops unknown) .

Gneissosity/schistosity (generation: first, second, third, uncertain) . . .

5J 037 Doyle Unknown Unknown

15J 040 Boreal Porphyry Cu-Mo-Au Showing Cu, Mo, Ag

15J 042 Run Unknown Unknown

J 044 Bid Porphyry Cu-Mo-Au Showing

15J 048 Hanna Porphyry Cu-Mo-Au Anomaly Cu 115J 049 Polaris Unknown Unknown

115J 050 Keg Plutonic Related Au Drilled Prospect Au

115J 051 Gold Hawk Unknown Unknown

115J 052 Boulevard Plutonic Related Au Drilled Prospect Au, Mo 15J 053 Leo Lion Unknown Anomaly

115J 054 Overproof Unknown Unknown

15J 055 Kirkman Unknown Unknown

115J 056 Coronation Unknown Unknown

15J 057 Sanson Unknown Unknown

115J 058 Vegus Unknown Unknown

115J 059 Tulare Unknown Unknown

115J 060 Touleary Unknown Unknown

115J 061 Ballarat Au-Quartz Veins Showing Au, Ag

115J 062 Canopus Unknown Unknown

115J 064 Lyon Porphyry Cu-Mo-Au Anomaly

15J 090 Indiana Porphyry Cu-Mo-Au Drilled Prospect Cu, Mo

115J 091 Amoco Porphyry Cu-Mo-Au Showing Cu, Mo

115J 110 Coffee Plutonic Related Au Prospect Au

115K 086 Batrick Mn veins and replacements Showing Mn

115K 087 Starvation Unknown Unknown

115K 109 Baker Unknown Anomaly

 Table 1. Yukon MINFILE 2010. Yukon MINFILE - A database of mineral occurrences.

The northwestern Stevenson Ridge area is almost devoid of mineral occurrences compared to the northeastern Stevenson Ridge area. No definitive syngenetic occurrences are recognized, although felsic and amphibolite

rock types within the Finlayson assemblage rocks of YTT have regional VMS potential (Colpron et al. 2006). A The most prominent mineral occurrences in the area are the Coffee prospec t and the Boulevard prospect. Both

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appear to be mid Cretaceous, structurally hosted orogenic gold systems (McKenzie et al., 2013).

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Map 116. (preliminary), scale 1:100 000

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Yukon Geological Survey.

MINERALOGICAL IMPLICATIONS

15J 108B Total Unknown Unknown Au

15J 063 Flush Unknown Unknown

115J 045 Vina Porphyry Cu-Mo-Au Showing

115J 046 Label Unknown Unknown

5J 047 Messiah Unknown Unknown

Unknown Anomaly

115J 041 Jog Unknown Unknown

115J 038 Rockland Unknown Unknown

Werry Unknown Unknown

Inclined bedding (top known, top unknown).

Overturned bedding (top known) . .

Dyke margin (inclined, vertical) . .

Fault plane (sense unknown) . . .

Shear zone (sense uknown) . .

Mineral occurrence (Yukon MINFILE) .

New unpublished GSC U/Pb zircon age (Ma) . .

Vein margin (inclined) . .

Mylonitic foliation (generation: uncertain) . .

Field metamorphic isograd (inferred by presence of leucosome;

Normal fault (approximate, inferred) . . .

Thrust fault (approximate, inferred,

Fault, offset uncertain (inferred) . . .

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