

INTRODUCTION

Yukon-Tanana terrane

White River assemblage

GEOLOGICAL FRAMEWORK

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

dunite and lesser lherzolite, 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

metamorphosed volcanic plutonic and sedimentary

Triassic Snag Creek suite gabbro occur southwest of

the Dawson Range. These rocks are structurally

overlain by a thrust sheet of the Early Permian

Dawson Range is characterized by Paleozoic rocks

and pre-Devonian Snowcap assemblage. The White

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

GEOLOGICH.

the area but have only modest offsets.

River assemblage and the Yukon-Tanana terrane are

Harzburgite Peak complex. The north side of the

Klondike schist, Permian Sulphur Creek plutonic suite

Mesozoic-Cenozoic successor rocks

CANADIAN GEOSCIENCE MAP 117

NUMBER NAME TYPE STATUS COMMODIT

1 038 Rockland Unknown Unknown

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

J 041 Jog Unknown Unknown

050 Keg Plutonic Related Au Drilled Prospect Au

054 Overproof Unknown Unknown

115J 056 Coronation Unknown Unknown

115J 063 Flush Unknown Unknown

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

115J 110 Coffee Plutonic Related Au Prospect Au

115K 087 Starvation Unknown Unknown

15K 109 Baker Unknown Anomaly

Table 1. Yukon M INFILE 2010, Yukon M INFILE - A database of mineral

http://www.geology.gov.yk.ca/databases_gis.html [accessed February 2013]

The northwestern Stevenson Ridge area is almost devoid of mineral occurrences compared to the northeaste

Stevenson Ridge area. No definitive syngenetic occurrences are recognized, although felsic and amphibolite

The most prominent mineral occurrences in the area are the Coffee prospect and the Boulevard prospect. Both

rock types within the Finlayson assemblage rocks of YTT have regional VMS potential (Colpron et al. 2006). A

possible VMS occurrence discovered by Arcus Development Group near Touleary Creek may be an exception

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ACKNOWLEDGMENTS

The northern Stevenson Ridge area is logistically difficult to access and map, and these challenges were largely overcome in summer 2011 by the superb piloting skills of Nathan Healey in the MD500 aircraft of Prism Helicopters Limited. Western Copper and Gold Limited are gratefully acknowledged for hosting our mapping crew

at their Casino exploration base camp. Field assistance was capably provided by Neil Beaton, Timothy Davis, Marthe Kloecking, Thomas Kelly, Logan Mills and Julia Pickering. We are grateful to Yukon Geological Survey for

sage advice and logistical support. Don Murphy, Maurice Colpron, Steve Israel, and Jeff Bond are thanked for

sharing data and engaging in numerous discussions that have contributed to these maps. Several exploration ompanies have contributed datasets and access to their properties which greatly improved the resolution of thi map. Nancy Joyce and Ellie Knight provided exceptional U/Pb geochronological analysis of some complicated

rocks, and Brian Jicha provided outstanding Ar/Ar analyses. Murray Allen, Jim Mortensen and Craig Hart of the

Mineral Deposits Research Unit (Yukon Gold Project), University of British Columbia, are acknowledged for contributions of data and stimulating discussions. Steve Gordey is thanked for a thoughtful review of this map.

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

occurrences. Yukon Geological Survey,

MINERALOGICAL IMPLICATIONS

086 Batrick Mn veins and replacements Showing Mn

57 Sanson Unknown Unknown 058 Vegus Unknown Unknown

042 Run Unknown Unknown

043 Mog Unknown Anomaly

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

Normal fault (approximate, inferred) . . .

Thrust fault (approximate, inferred,

Fault, offset uncertain (inferred)

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

Unconformity, ornament in younger unit (approximate).

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

Inclined bedding (top known, top unknown).

Mylonitic foliation (generation: uncertain) . .

Overturned bedding (top known) . .

Dyke margin (inclined, vertical).

Fault plane (sense unknown) . .

Shear zone (sense uknown) . . .

Mineral occurrence (Yukon MINFILE) . .

Vein margin (inclined) . .

U/Pb zircon age (Ma) . .

Cleavage

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

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

Field metamorphic isograd (presence of leucosome) . .

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