Occurrence Details

Occurrence Number: 115I 190
Occurrence Name: Drone
Occurrence Type: Hard-rock
Status: Showing
Date printed: 8/5/2025 8:28:16 AM

General Information

Secondary Commodities: bismuth, copper, gold
Aliases: Freegold
Deposit Type(s): Epithermal Au-Ag: Low Sulphidation
Location(s): N - W
NTS Mapsheet(s): 115I06
Location Comments: Coordinates provided by Triumph Gold in 2020.
Hand Samples Available: No
Last Reviewed:

Capsule

Work History

The Golden Revenue property was consolidated in 2006 by Northern Freegold Resources. Northern Freegold Resources performed a property wide VTEM and magnetic airborne survey in 2006.

Triumph Gold acquired Northern Freegold Resources in 2015 and the property is now termed the Freegold Mountain Project. In 2018, Triumph Gold discovered the Drone zone in outcrop and carried out 116 m of trenching (3 trenches) and rock geochemistry.

Regional & Property Geology

The occurrence is partly underlain by Yukon-Tanana Terrane (YTT). The rocks of the YTT in this region consist of Early Mississippian metamorphic rocks separated into meta-sedimentary and meta-igneous suites. The meta-sedimentary suite consists of micaceous quartz-feldspar gneiss, schist and quartzite. The meta-igneous package is comprised of biotite-hornblende feldspar gneiss and coarse-grained granodiorite orthogneiss with lesser amphibolite.

The YTT basement rocks are cut by numerous plutonic and volcanic events from the Mesozoic (Murray & Friend, 2018), including:
1. Early Jurassic Long Lake monzonite to syenite plutonic suites;
2. Mid-Cretaceous Mount Nansen Suite andesite to diorite;
3. Mid-Cretaceous Whitehorse granodiorite, quartz monzonite and granite;
4. Late Cretaceous Casino quartz monzonite;
5. Late Cretaceous Prospector Mountain syenite; and,
6. Quartz feldspar and feldspar hornblende porphyry dykes and plugs.

The major structural feature in the area is the Big Creek Fault with steeply-dipping, northwest-trending dextral faults parallel to the more regional Tintina and Denali faults (AR 097175).

The Drone zone is hosted in equigranular biotite granodiorite with large biotite schist xenoliths. The granodiorite is crosscut by irregular quartz-feldspar porphyry dikes and thick northwest trending gouge-rich faults interpreted to be part of a major trans-tensional fault structure that links the parallel north and south Big Creek faults (Triumph Gold, MD&A, 23 Apr/2019; Halle, 2020, personal communication).

Mineralization & Results

The Drone zone was discovered in 2018 by Triumph Gold after local placer mining operations exposed a 100 m x 25 m area of altered and mineralized outcrop. Mineralization consists of widespread disseminated sulphides and quartz-sulphide veins containing pyrite and chalcopyrite with lesser arsenopyrite and bismuthinite. Visible gold was noted in association with bismuthinite in a sample from in-situ rock at the eastern edge of the bedrock exposure (Triumph Gold, MD&A, 23 Apr/2019).

Trenching performed in 2018 by Triumph Gold returned elevated gold values in grab and chip samples of up to 450.41 g/t Au (F00032970), 3.67 g/t Au (F00032968), and 4.82 g/t Au over 2 m (F00032921).

Work History

Date	Work Type	Comment
12/13/2018	Geochemistry	Grab and chip sampling of trenches.
12/13/2018	Trenching	3 trenches totaling 116 m.
12/13/2006	Airborne Geophysics	Property wide survey.
12/13/2006	Airborne Geophysics	Property wide survey.

Related References

Number	Title	Page(s)	Reference Type	Document Type
YEG2017_4	New contributions to the bedrock geology of the Mount Freegold district, Dawson Range, Yukon (NTS 115I/2, 6 and 7)		Yukon Geological Survey	Annual Report Paper
2018-2	Bedrock geological map of the Mount Freegold district, Dawson Range		Yukon Geological Survey	Open File (Geological - Bedrock)