



Occurrence Details

Occurrence Number: 115I 179
Occurrence Name: Border Zone
Occurrence Type: Hard-rock
Status: Showing
Date printed: 8/5/2025 9:03:35 AM

General Information

Secondary Commodities: gold, silver
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

This area was originally explored by individual prospectors for gold veins in the 1930s. The first recorded staking of the area was by R. McKamey, who staked Low cl 9-49 (Y40124) in November 1969. The claims were optioned to Samson Mines Ltd. and Monarch Metal Mines Ltd. who carried out geochemical sampling before allowing the claims to lapse.

Re-staked as Ag cl 1-36 and Au cl 1-40 (Y75866) in July 1973 by E.D. Campbell and G.E. Smith who later optioned them to Prism Resources Ltd. and Dynasty Exploration Ltd.

Re-staked as the Seymour cl 1-44 (YA60053) in May 1981 by Arctic Red Resources Ltd., which carried out geochemical sampling. Re-staked as Ken cl 1-16 (YA82495) in June 1984 by G. Harris. Chevron Minerals Ltd surrounded Harris' claims with EYM cl 1-46 (YA86872) in June 1985 and carried out geochemical sampling and bedrock mapping in 1986. R.A. Granger partially re-staked the Ken claims as Nek cl 1-4 (YA95968) in August 1986.

In 1987, Chevron optioned its claims to Big Creek Joint Venture (Big Creek Resources Ltd. and Rexford Minerals Ltd.). Big Creek Resources Ltd. purchased the EYM claims in the spring of 1990. Rinsey Mines Ltd. optioned Big Creek's claims in February 1991.

In April 1994, G. Harris re-staked the majority of the EYM claims as Glen cl 1-40 (YB46680).

In 1996, the Glen claims were optioned to La Rock Mining Corporation, which carried out soil sampling later in the year.

In 2004, Midnight Mines Ltd. carried out prospecting, rock geochemistry of grab samples and bedrock mapping at the Border Zone.

Northern Freegold Resources consolidated the claims in 2006 as part of their Golden Revenue property and performed a property wide VTEM and magnetic airborne survey, including the Border Zone. Northern Freegold carried out soil sampling in 2011 and hand and mechanical trenching in 2013.

Triumph Gold acquired Northern Freegold Resources in 2015 and the property that includes the Border Zone is now termed the Freegold Mountain Project.

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).

Mineralization & Results

The Border Zone is associated with a pyritic shear that appears to be controlled by a north-northeasterly trending fault related to mid-Cretaceous extension in the area (Paulter, 2006).

A gold in soil anomaly with values up to 1575 ppb Au was noted at Border Zone (AR 091896).

Geology consisting of metasedimentary rocks, lenses of orthogneiss and west-northwest trending quartz-feldspar porphyry dikes with trace pyrrhotite, pyrite and magnetite as fine-grained disseminations and vein infill was observed in trenches in 2013 (AR 096643). Sampling returned up to 11.35 g/t Au in chip samples and 5 g/t Au in grab samples (AR 096643).

Work History

Date	Work Type	Comment
12/13/2013	Geochemistry	Chip and grab samples.
12/13/2013	Trenching	And hand trenching.

12/13/2011	Geochemistry	
12/13/2006	Airborne Geophysics	Property wide survey.
12/13/2006	Airborne Geophysics	Property wide survey.
12/13/2004	Geochemistry	Prospecting grab samples.
12/13/2004	Geology	
12/13/1996	Geochemistry	
12/13/1986	Geology	
12/13/1986	Geochemistry	

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)