



Occurrence Details

Occurrence Number: 115I 202

Occurrence Name: Discovery D-3

Occurrence Type: Hard-rock

Status: Prospect

Date printed: 8/3/2025 9:59:48 AM

General Information

Secondary Commodities: copper, gold, silver

Aliases: Freegold

Deposit Type(s): Vein Au-Quartz

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

P.F. Guder staked Revenue Copper in 1950 on a copper showing he explored that year with a shallow shaft and adit. The property was optioned by Conwest Exploration Ltd, which carried out EM and resistivity surveys in 1951. Guder re-staked it as Revenue Copper cl 1-8 (67180) in September 1953 and tied on Addition cl 1-2 (68060) to the south in January 1954. The claims were subsequently optioned by Teck Exploration Company Ltd. Guder tied on Addition cl 3-4 (74488) to the west in September 1959 and Addition cl 5 (75323) to the west and Homestake cl 1-2 (75321) to the south in September 1960. The claims were then optioned by the Meridian Syndicate (Canex Aerial Exploration Ltd., Noranda Exploration Company Ltd. and Homestake Mining Company) in 1964 and by General Enterprises Ltd in 1967. Between 1967 and 1968, 25 Inca, Revenue, Rev and Add claims were added to the fringes of the property. A new company, Yukon Revenue Mines Ltd., was formed in 1968 to develop the property and carried out bulldozer trenching, geochemical sampling, IP surveying and diamond drilling in 1968 and 1969.

Optioned in 1970 by Kaiser Resources Ltd. The property reverted to Yukon Revenue, which carried out work between 1974 and 1980. In 1983, the property was optioned to Shawkak Exploration Company Ltd., which carried out geochemical, magnetic and EM surveying later in the year and drilled 1 hole at the D-3 vein in 1984.

Nordac Mining Corporation acquired Shawkak's interest in 1985 and carried out grid soil sampling and excavator trenching that year and in 1986. In 1987, Nordac changed its name to Big Creek Resources Ltd. and entered a joint venture with Rexford Minerals Ltd (Big Creek Joint Venture), which staked Subtract cl 2-3 (YA97442) in May 1987 and carried out machine trenching, VLF-EM and magnetometer surveying in 1987. Big Creek purchased Rexford's interest in 1989 and drilled 11 holes (1 018 m) in 1991.

Big Creek subsequently merged with Pacific Sentinel Gold and the claims were later sold to Amarc Resources Ltd., which returned them to Yukon Revenue in 1995. Yukon Revenue changed its name to YKR International Resources Ltd in 1996 and carried out magnetometer and VLF-EM surveying that year and in 1998.

In 1999, ATAC Resources Ltd. optioned the Revenue claims from YKR and tied on Nuc cl 1-7 (YC09279) to the north in February 1999. At the same time, ATAC purchased the adjoining Nucleus claims (MINFILE occurrence 115I 107) from the W4 Joint Venture consolidating a total of 151 claims in the area to form a single contiguous claim group, which they named the Golden Revenue property. Hand trenching, as well as rock and soil sampling was carried out in 1999. In 2000, the Discovery zone was tested with 648 m in 9 excavator trenches. Soil and rock geochemistry was also carried out in 2000.

The Golden Revenue property was further consolidated in 2006 by Northern Freegold Resources. Northern Freegold Resources performed a property wide VTEM and magnetic airborne survey in 2006. In 2010, Northern Freegold carried rock and soil geochemistry and a TITAN IP survey.

Triumph Gold acquired Northern Freegold Resources in 2015 and the property is now termed the Freegold Mountain Project. Triumph carried out soil geochemistry and IP and magnetic ground surveys in 2018.

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 D-3 occurrence is one of three historical quartz-carbonate veins identified in the western part of the Discovery zone encompassed within the Revenue deposit breccia (MINFILE occurrence 115I 042). Gold mineralization is hosted in intense argillically altered breccia material related to a fault zone (Paulter, 2006).

The D-3 vein was intersected in a single drill hole in 1984 (DR84-9) that assayed 18.6 g/t Au over 2.2 m (Paulter, 2006). A nearby trench exposed east trending quartz-carbonate veins about 70 m uphill from the projected surface trace of the vein. In 1999, a specimen of quartz-carbonate bearing material from the trench returned 0.75 g/t gold, 10.2 g/t silver and 0.37% copper (AR 094102).

Work History

Date	Work Type	Comment

12/13/2018	Geochemistry	
12/13/2018	Ground Geophysics	
12/13/2018	Ground Geophysics	
12/13/2010	Geochemistry	
12/13/2010	Geochemistry	
12/13/2010	Ground Geophysics	TITAN survey.
12/13/2006	Airborne Geophysics	Property wide survey.
12/13/2006	Airborne Geophysics	Property wide survey.
12/13/2000	Geochemistry	Grab and chip sampling.
12/13/2000	Trenching	Nine trenches (648 m) testing the Discovery zone.
12/13/1999	Geochemistry	Grab sampling.
12/13/1999	Geochemistry	
12/13/1998	Ground Geophysics	And VLF-EM.
12/13/1991	Drilling	Eleven holes on the Discovery property (1018 m).
12/13/1987	Geochemistry	Grab and chip samples.
12/13/1987	Ground Geophysics	And VLF-EM.
12/13/1987	Trenching	Trenching on Discovery property.
12/13/1986	Geochemistry	Grab and chip samples.
12/13/1986	Geochemistry	
12/13/1986	Trenching	Trenching on Discovery property.
12/13/1984	Geochemistry	Prospecting grab samples
12/13/1984	Drilling	One hole.
12/13/1984	Geochemistry	
12/13/1984	Ground Geophysics	And EM.
12/13/1968	Geochemistry	
12/13/1968	Drilling	Discovery property drilling between 1968-1969.
12/13/1968	Ground Geophysics	
12/13/1968	Trenching	Discovery property trenching between 1968-1969.

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)