



Occurrence Details

Occurrence Number: 115I 196

Occurrence Name: Klaus

Occurrence Type: Hard-rock

Status: Showing

Date printed: 8/5/2025 9:05:02 AM

General Information

Secondary Commodities: copper, gold, tungsten

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 the Revenue Copper in 1950, 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. A new company, Yukon Revenue Mines Ltd, was formed in 1968 to develop the property.

Optioned in 1970 by Kaiser Resources Ltd, but the property reverted to Yukon Revenue in 1974. In 1983, the property was optioned to Shakwak Exploration Company Ltd. who carried out a ground magnetic geophysical survey in 1984.

Nordac Mining Corporation acquired Shakwak's interest in 1985. In 1987, Nordac changed its name to Big Creek Resources Ltd., entered a joint venture with Rexford Minerals Ltd. (Big Creek Joint Venture) and carried out machine trenching, rock and soil geochemistry and VLF-EM and magnetometer geophysical surveys in 1987.

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.

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, which includes the Klaus occurrence. ATAC carried out grab sampling in 1999 and a soil survey in 2001 at Klaus.

The Golden Revenue property, including Gow, was further 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. Triumph carried out a ground magnetic and IP survey, as well as soil sampling 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 Klaus zone consists of narrow, northeast trending, faulted quartz-carbonate veining hosted in intensely altered quartz monzonite proximal to the Revenue breccia (MINFILE occurrence 115I 042). Mineralization is present as discontinuous massive chalcopyrite and fine pyrite veinlets and disseminations. The vein is highly irregular and only apparent along strike for several meters (AR 092131).

Grab sampling in 1987 returned float samples with up to 91.5 g/t Au and in situ samples with up to 32.9 g/t Au (AR 092131).

Twelve samples were collected in the Klaus zone in 1999 that returned best results of 1.86 g/t Au from a sample of quartz monzonite with narrow quartz-sulphide veinlet (AR 094102).

Tungsten was confirmed by Triumph Gold in 2017 samples (J. Halle, pers comm.).

Work History

Date	Work Type	Comment
12/13/2018	Geochemistry	
12/13/2018	Ground Geophysics	

12/13/2018	Ground Geophysics	
12/13/2006	Airborne Geophysics	Property wide survey.
12/13/2006	Airborne Geophysics	Property wide survey.
12/13/2001	Geochemistry	
12/13/1999	Geochemistry	Prospecting grab samples.
12/13/1987	Geochemistry	Grab sampling.
12/13/1987	Geochemistry	
12/13/1987	Ground Geophysics	And VLF-EM.
12/13/1987	Trenching	

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)