



Occurrence Details

Occurrence Number: 115I 053

Occurrence Name: Margarete

Occurrence Type: Hard-rock

Status: Prospect

Date printed: 12/16/2025 5:58:41 AM

General Information

Primary Commodities: gold, silver

Aliases: Goldstar, Guder, Freegold

Deposit Type(s): Skarn Au

Location(s): 62°17'33" N - -137°8'42" W

NTS Mapsheet(s): 115I06

Location Comments: Coordinates provided by Triumph Gold in 2020.

Hand Samples Available: Yes

Last Reviewed:

Capsule

Work History

The original discovery in the Mt. Freegold area was made by P.F. Guder in 1930 on the Augusta cl (15494), followed by discoveries on the adjoining Peerless, Gold Star and Margarete claims. Guder explored by hand pits and shallow shafts until 1959, when Conwest, under option, drilled 5 holes (309 m) on the Main Vein and performed bulldozer trenching in 1964 on the Old cl (86068). Guder's claims (Gold Star group) were optioned in 1969 to Yukon Revenue Mines Ltd., which conducted bulldozer trenching and mapping, and in 1973 to Prism Resources Ltd., which did a magnetometer survey and staked an additional 100 claims - PFG, AG, etc (Y75468) in June-September.

Prism transferred the option early in 1974 to Dynasty Exploration Ltd., which explored by grid soil sampling, magnetic survey, bulldozing and 8 holes (653 m) later in the year. Guder's claims were optioned by Arctic Red Resources Corporation from 1980 to 1982, then transferred to Guder Mining Exploration Ltd., which performed trenching in 1982 and 1983. The south side was re-staked as Erick cl (YA82008) in June 1984 by D. Dodge and again as Rick cl (YA92748) in July 1985 by G. Harris. The Guder and Harris claims were optioned in 1986 by Chevron Minerals Ltd., which conducted a grid geochemical survey, and in 1987 by Big Creek Joint Venture (Big Creek Resources Ltd and Rexford Minerals Ltd), which explored with extensive bulldozer and excavator trenching, a VLF-EM and magnetometer survey and 17 holes (741 m) in 1987 and minor trenching in 1988. The claims were transferred back to Harris in September 1989.

Gagan Gold Corporation optioned the property and explored with trenching and six rotary holes (304.8 m) in 1991. G. Harris trenched on the property in January 1993, added several fractional claims in May and conducted a program of soil and rock sampling late in the year.

Redell Mining Corporation optioned the Goldstar property from Harris and Associates in August 1994. In September 1995, Pauline cl (YB37987) and Goldstar cl 1-3 (YB37988) were transferred to B. Harris.

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 Margarete occurrence. Limited trenching was performed at Margarete in 2008.

Triumph Gold acquired Northern Freegold Resources in 2015 and the property that includes the Margarete occurrence is now termed the Freegold Mountain Project. Triumph performed mechanical trenching and diamond drilling of four holes (1349 m) in 2018 and further trenching and diamond drilling (2 holes) in 2019.

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).

Gold bearing veins and skarn at Margarete occur in a roof pendant of Paleozoic metasedimentary rocks enclosed in Mesozoic syenite and granodiorite and intruded by Cretaceous porphyry dykes. The metamorphic rocks consist of quartz-feldspar-mica-chlorite gneiss and schist, and minor marble, amphibolite and quartzite (AR 093019).

Mineralization & Results

Mineralization in the Margarete zone is associated with quartz-carbonate stringers and veinlets in a 3.3 m wide zone of intense argillic alteration and brecciation and quartz-feldspar porphyry dykes. Sulphide minerals are pyrite and lesser arsenopyrite and chalcopyrite, which are commonly oxidized to depths of 20 m or more (AR 092127; AR 092699).

The Margarete vein system has been traced in drill holes and trenches for a total length of 350 m. The mineralized zone strikes west-northwest and dips steeply north. A specimen taken by the GSC from an old dump assayed 2,070 g/t Au (AR 093019). Historical, geological reserves (not NI 43-101 compliant) based on 1987 drilling at 50 m spacing are 123,800 tonnes grading 4.21 g/t Au and 47.2 g/t Ag to a depth of 60 m (AR 092699).

Right lateral faults probably offset the southeast extension of the Margarete zone through the Kirsteen and Augusta showings (MINFILE occurrences 115I 171 and 169) giving a possible total strike length of more than 1.5 km. A gold soil anomaly extends an additional 1 km to the northwest (AR 092699).

Diamond drilling in 1991 tested the Margarete vein at 50 m intervals along strike and intersected 0.049 oz/ton Au and 1.52 oz/ton Ag over 5 feet in hole 91-1 and 0.1635 oz/ton Au and 0.61 oz/ton Ag over 5 feet in 91-3 (AR 093019).

Triumph Gold performed diamond drilling in 2018 and 2019, which intersected significant copper and gold grades in supergene enriched sulphides (including 0.26 g/t Au, 3.3 g/t Ag and 0.17% Cu over

37.5 m in RV18-27) and porphyry style mineralization (including 0.26 g/t Au and 0.11% Cu over 26.38 m in RVD18-37) (MD&A, 23 Apr/2019).

Work History

| Date | Work Type | Comment |
|------------|---------------------|--|
| 8/1/2020 | Drilling | 2 holes, 186.37 m, |
| 12/31/1993 | Geochemistry | Work carried out on Goldstar property by Harris et al. |
| 12/31/1993 | Geochemistry | Work carried out on Goldstar property by Harris et al. |
| 12/31/1993 | Trenching | Work carried out on Goldstar property by Harris et al. |
| 12/31/1991 | Drilling | Four holes totaling 183 m. |
| 12/31/1988 | Trenching | |
| 12/31/1987 | Drilling | Seventeen holes, 741 m. |
| 12/31/1987 | Ground Geophysics | Also VLF-EM survey . |
| 12/31/1987 | Trenching | |
| 12/31/1987 | Trenching | |
| 12/31/1986 | Geochemistry | |
| 12/31/1983 | Trenching | |
| 12/31/1982 | Trenching | |
| 12/31/1974 | Drilling | Two holes, 219 m. |
| 12/31/1974 | Geochemistry | |
| 12/31/1974 | Ground Geophysics | |
| 12/31/1974 | Trenching | |
| 12/31/1973 | Ground Geophysics | |
| 12/31/1969 | Geology | |
| 12/31/1969 | Trenching | |
| 12/31/1964 | Trenching | |
| 12/31/1959 | Drilling | Five holes, 309 m. |
| 12/31/1959 | Trenching | |
| 12/31/1958 | Trenching | Work carried out between 1931 and 1958. |
| 12/31/1930 | Trenching | |
| 12/13/2019 | Geochemistry | |
| 12/13/2019 | Drilling | Two holes. |
| 12/13/2019 | Trenching | |
| 12/13/2018 | Drilling | Four holes totaling 1349 m. |
| 12/13/2008 | Trenching | |
| 12/13/2006 | Airborne Geophysics | Property wide survey. |
| 12/13/2006 | Airborne Geophysics | Property wide survey. |
| 12/13/1988 | Geochemistry | |

Assessment Reports that overlap occurrence

| Report Number | Year | Title | Worktypes | Holes Drilled | Meters Drilled |
|------------------------|------|---|---|---------------|----------------|
| 094745 | 2006 | 2006 Geophysical Assessment Report on the Freegold Mountain Property | Electromagnetic - Airborne Geophysics, Magnetic - Airborne Geophysics | | |
| 094709 | 2004 | 2004 and 2005 Assessment Report on the Goldstar and Glen Property | Rock - Geochemistry, Bedrock Mapping - Geology, Prospecting - Other | | |
| 093019 | 1991 | Rotary Percussion Drilling and Trenching Assessment Report on the Goldstar Property | All Weather Road - Development, Surface, Reverse Circulation - Drilling, Drill Cuttings - Geochemistry, Rock - Geochemistry, Mechanical - Trenching | 6 | 304.80 |

| | | | | | |
|------------------------|------|---|---|----|--------|
| 092699 | 1989 | Trenching Program on the Goldstar Property | Rock - Geochemistry, Mechanical - Trenching | | |
| 092127 | 1987 | Trenching, Geophysical and Diamond Drilling Program on the Goldstar Property | All Weather Road - Development, Surface, Diamond - Drilling, Rock - Geochemistry, EM - Ground Geophysics, Magnetics - Ground Geophysics, Mechanical - Trenching | 17 | 741.10 |
| 091896 | 1986 | Report on Geological Mapping and Geochemical and Geophysical Surveys Done on the Goldstar Property | Soil - Geochemistry, Regional Bedrock Mapping - Geology, EM - Ground Geophysics, Prospecting - Other | | |
| 061154 | 1974 | Application for Northern Mineral Assistance Grant Peg, Au, Ag, Add and Gold Star Claim Groups, Cat Trenching Report Gold Star Group | Mechanical - Trenching | | |
| 061093 | 1974 | Geological and Geophysical Report Gold Star Group | Magnetics - Ground Geophysics, Hand - Trenching | | |
| 060200 | 1970 | Report on the Geophysical and Geochemical Surveys Ram and Bow Claim Groups | Electromagnetic - Airborne Geophysics, Magnetic - Airborne Geophysics, Rock - Geochemistry, Soil - Geochemistry | | |

Related References

| Number | Title | Page(s) | Reference Type | Document Type |
|----------------------------|--|---------|--------------------------|---------------------------------------|
| ARMC007647 | Correspondence Re: Freegold Mountain property, Carmacks area | | Property File Collection | Miscellaneous Company Documents |
| ARMC007859 | Preliminary reconnaissance-type mapping - Freegold Mtn. - Job No. 06065-3 | | Property File Collection | Geoscience Map (General) |
| ARMC007648 | Correspondence Re: Prism Resources Limited, Gold Star property | | Property File Collection | Miscellaneous Company Documents |
| ARMC007649 | Report on the Gold Star group | | Property File Collection | Report |
| ARMC007650 | Isomagnetic plan map - Gammas - Freegold Mountain project - Fig. 4 | | Property File Collection | Geophysical Map |
| ARMC007651 | Third annual report - Prism Resources | | Property File Collection | Report |
| ARMC012160 | Report on 1974 field work - Northern mineral assistance grant - Gold Star, PEG, ADD, AU and AG groups | | Property File Collection | Report |
| ARMC012159 | Report on the Gold Star group 115-I-6, Whitehorse Mining District, Yukon Territory | | Property File Collection | Report |
| ARMC012166 | Report on the Gold Star group 115-I-6, Whitehorse Mining District, Yukon Territory | | Property File Collection | Report |
| ARMC012179 | Progress reports: June 4, June 24, July, & August 1974 - Freegold Project | | Property File Collection | Report |
| ARMC012170 | Provisional geology map of Mt. Freegold | | Property File Collection | Geoscience Map (Geological - Bedrock) |
| ARMC012941 | Geology map with legend - Guder Best group - Dawson Range | | Property File Collection | Geoscience Map (Geological - Bedrock) |
| ARMC012167 | Geochemical map of Potassium 40 - Contour interval 5 cps - Big Creek area - Carmacks - Job No. 1150 - Fig. No. 5 | | Property File Collection | Geochemical Map |
| ARMC012184 | Sketch maps - Trenches A - L & P-U - Freegold project | | Property File Collection | Geoscience Map (General) |
| ARMC012177 | Isomagnetic plan (gammas) - Freegold Mountain Project - Fig. 4 | | Property File Collection | Geophysical Map |
| ARMC012174 | Map of total isomagnetic plan - Big Creek area - Carmacks - Job No. 1150 - Fig. No. 4 | | Property File Collection | Geophysical Map |
| ARMC016627 | Land and disposition and mineral deposits chart - Freegold - Big Creek area | | Property File Collection | Geoscience Map (General) |
| ARMC012175 | Magnetometer values (gammas) - Freegold Mountain project - Fig. 3 with notes | | Property File Collection | Geophysical Map |
| ARMC012176 | Magnetometer values (gammas) - Freegold Mountain Project - Fig. 3 with notes | | Property File Collection | Geophysical Map |
| ARMC012182 | Provisional map 115-I/6 - Stoddart Creek with notes | | Property File Collection | Geoscience Map (General) |
| ARMC012185 | Provisional map 115-I/6 - Stoddart Creek with notes on Traverse M22-6 | | Property File Collection | Geoscience Map (General) |
| ARMC012161 | Diamond drill record - Hole No. DDH-G-1 to DDH-G-8 with cross-section maps - Mt. Freegold | | Property File Collection | Drill Logs |
| ARMC012183 | Field sheets for 1974 - Freegold project | | Property File Collection | Geoscience Map (General) |
| ARMC012173 | Flight Line Layout - Big Creek Area - Carmacks - Job No. 1150, Fig. No. 3 | | Property File Collection | Geoscience Map (General) |

