



Occurrence Details

Occurrence Number: 115I 039
Occurrence Name: Com
Occurrence Type: Hard-rock
Status: Anomaly
Date printed: 8/5/2025 9:05:02 AM

General Information

Secondary Commodities: copper, fluorite, tungsten
Aliases: Freegold
Deposit Type(s): Porphyry Cu-Mo-Au
Location(s): 62°21'33" N - -137°23'21" W
NTS Mapsheet(s): 115I06
Location Comments: 1 Kilometres
Hand Samples Available: No
Last Reviewed:

Capsule

Work History

Staked as Com cl (Y38245) in September 1969 by Cominco, which conducted soil sampling in 1970. The Roy and Tye cl (Y50930) were staked immediately to the southwest in March 1970 by Eagle Bay ML. Re-staked in December 1974 as Roc cl (Y91852) by Klotassin JV (Newconex Can EL, Marietta Res Int L, and Molybdenum Corp of America), which conducted mapping, geochemical sampling, a ground magnetic survey and limited bulldozer trenching in 1975; and a ground magnetic survey in 1976.

Archer, Cathro & Associates Ltd. performed bedrock mapping, as well as soil and rock geochemistry in 1985.

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 (Allan & Friend, 2018; AR 090087), including:

1. Early Jurassic monzonite to syenite plutonic suites;
2. Mid-Cretaceous Mount Nansen Suite andesite and rhyolite tuff-breccia;
3. Mid-Cretaceous Whitehorse granodiorite;
4. Late Cretaceous Carmacks rhyodacites; and,
5. Quartz feldspar and feldspar hornblende porphyry dykes and plugs.

Mineralization & Results

Small copper and molybdenum soil anomalies were outlined along the southwest side of the valley floor on the Com claims. Mapping of the rock chips collected during soil sampling delineated several small porphyry stocks and related dyke swarms, with a trace of malachite, that appear to be the source of the anomaly. Minor banded and disseminated fluorite was found in quartz float along Big Creek and one specimen was found to contain abundant scheelite.

Work History		
Date	Work Type	Comment
12/31/1975	Geology	
12/31/1975	Ground Geophysics	
12/31/1975	Trenching	
12/31/1970	Geochemistry	
12/13/1985	Geochemistry	
12/13/1985	Geology	
12/13/1985	Geochemistry	
12/13/1976	Ground Geophysics	

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		
094256	2001	Diamond Drilling, Excavator Trenching, and Geophysical Surveys on the Golden Revenue Property	Diamond - Drilling, Drill Core - Geochemistry, IP - Ground Geophysics, Prospecting - Other, Mechanical - Trenching	6	1202

094102	1999	Geological Mapping, Prospecting, Soil Geochemistry, Hand Trenching, and Ground Magnetic Surveys on the Golden Revenue Property	Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Magnetics - Ground Geophysics, Prospecting - Other, Hand - Trenching		
091804	1985	Geological and Geochemical Report on the NUCLEUS Property	Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Property Evaluation - Other, Prospecting - Other, Mechanical - Trenching		
090167	1976	Geological Mapping, Geochemical and Magnetometer Surveys May-August, 1976 Skunk 1-75 Mineral Claims	Rock - Geochemistry, Soil - Geochemistry, Regional Bedrock Mapping - Geology, Magnetics - Ground Geophysics, Line Cutting - Other		
090087	1975	Geological Mapping, Geochemical and Magnetometer Surveys - Big Creek West, Big Creek East, Bow Creek Properties	Soil - Geochemistry, Regional Bedrock Mapping - Geology, Magnetics - Ground Geophysics, Line Cutting - Other, Prospecting - Other, Surveying - Other		
060200	1970	Report on the Geophysical and Geochemical Surveys Ram and Bow Claim Groups	Electromagnetic - Airborne Geophysics, Magnetic - Airborne Geophysics, Rock - Geochemistry, Soil - Geochemistry		
060606	1969	Geochemical Report on the Com Group East and Com Group West Mineral Claims	Soil - Geochemistry		

Related References

Number	Title	Page(s)	Reference Type	Document Type
ARMC01662 Z	Land and disposition and mineral deposits chart - Freegold - Big Creek area		Property File Collection	Geoscience Map (General)
ARMC01294 0	Location plan of Com 1 to 101 mineral claims - Job 379		Property File Collection	Geoscience Map (General)
ARMC01662 6	Geology and mineralization chart - Freegold - Big Creek area		Property File Collection	Geoscience Map (Geological - Bedrock)
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)