



Occurrence Details

Occurrence Number: 115O 183
Occurrence Name: Glacier Gulch
Occurrence Type: Hard-rock
Status: Prospect
Date printed: 4/29/2025 7:12:09 AM

General Information

Primary Commodities: gold
Deposit Type(s): Vein Au-Quartz
Location(s): 63°53'41.19" N - -139°16'45.31" W
NTS Mapsheet(s): 115O14
Location Comments: Coordinates provided by Klondike Gold Corp. in 2019.
Hand Samples Available: No
Last Reviewed:

Capsule

Work History

Originally staked as the SUL cl 1-32 in 1972 by Sullivan & Rodgers who carried out soil sampling across the claims in 1972.

The occurrence is currently located within the RJ 1-70 cl (YA64216, etc) staked by Dawson Eldorado Exploration in June of 1981. In 1984, Dawson Eldorado carried out soil sampling across the claims containing the Glacier Gulch occurrence. In June 1986, the property was optioned to Arbor Resources Inc., which explored with airborne magnetics, EM and VLF-EM geophysical surveys, bulldozer trenching, rotary drilling and soil sampling in 1987. Soil sampling was performed across the claims in 1991. The RJ claims were optioned to Kennecott Canada Inc. in May of 1993, and transferred back to Arbor Resources in January of 1995.

In January, 1996 Arbor Resources Inc. changed its name to Klondike Gold Corp. Klondike Gold Corp. optioned a 50% interest to Klondike Star Mineral Corp. (KSMC), which became a 50/50 joint venture. In 2005, Klondike Star Mineral Corp held a 55% interest in the RJ and surrounding and became the main operator all claims, including the Lone Star zone (MINFILE occurrence 115O 072).

Klondike Gold Corp. resumed work in 2011 and purchased Klondike Star Mineral Corp. in 2015 to restore a 100% interest. No work was done at the Glacier Gulch occurrence until 2012 when Klondike Gold Corp. performed prospecting in the area as part of a regional program. AECOM was also contracted in 2012 to provide a detailed surficial terrain map for the entire Klondike property, including the RJ claims.

In 2015, Klondike Gold Corp. performed prospecting, a ground magnetics geophysical survey and orthophoto imagery over the RJ claims as part of a regional program. In 2018, Klondike Gold drilled two NQ holes totaling 201.16 m at Glacier Gulch and performed regional airborne magnetics, structural mapping and prospecting over their properties, including the RJ claims.

Regional & Property Geology

Glacier Gulch, similar to the Nugget occurrence (MINFILE occurrence 115O 180), is located within the Klondike region, which is underlain by the Permian Klondike Schist Assemblage of the Yukon-Tanana terrane (YTT). The Klondike Schist represents a transition from plutonism to arc volcanism that has undergone greenschist facies metamorphism and consists of metaplutonic Sulphur Creek orthogneiss in the west that transitions eastward to a package of metavolcanic and metasedimentary units including: felsic to mafic (quartz-mica ± chlorite) schist, graphitic schist, and quartz augen schist (PKf and PKs). Evidence of five deformation events (D1 to D5) are present in within the Klondike Schist Assemblage as a result of obduction and regional thrusting and faulting related to uplift, which have produced a visible S2 and S3 foliation fabric in the schist units.

The lithological units of the Klondike region commonly contain both large, foliaform quartz veins associated with D3 folding and thrusting and discordant quartz veins possibly associated with D4 brittle faulting. Mineralization is generally hosted in the discordant quartz veins, however, the exact mineralization age and timing in the Klondike region is currently unknown. A structural mapping program completed by SRK Consulting Inc. in 2018 on the Klondike claims in the Lone Star property area identified a newly defined "D4" fault system interpreted to be the primary conduit for gold mineralization fluids that suggests a younger mineralization age than previously assumed. The white to locally oxidized, discordant veins are generally mineralized with sulphides (pyrite, rare galena, chalcopyrite), as well as visible gold, and are rarely more than 2-3 metres thick. Where present, visible gold is commonly noted along the selvages of both fresh and oxidized pyrite grains and can also occur as free grains within the quartz veins.

Mineralization & Results

Mineralization at Glacier Gulch was noted in drill core as visible gold-bearing discordant quartz veining within a 50-meter zone of quartz flooding hosted by brittle mafic and/or felsic schist (quartz-mica ± chlorite). The Glacier Gulch occurrence is interpreted to be in proximity to the large "D3" Nugget Fault.

Trenching and rotary drilling on the RJ claims encompassing Glacier Gulch by Arbor Resources in 1987 returned anomalous gold values, including: 0.029 oz/t over 3 m in trench 87Tr13 and 0.172 oz/t over 5 feet in rotary hole 87-R-26. The 1991 soil sampling program by Arbor Resources returned anomalous values over Glacier Gulch of up to 4930 ppb Au.

In 2018, Klondike Gold Corp. drilled two NQ holes at Glacier Gulch that encountered a significant interval of 4.81 g/t Au over 1.9 m in EC18-235.

Work History

Date	Work Type	Comment
7/1/2019	Drilling	4 holes, 357.22 m
7/1/2019	Geochemistry	
7/1/2019	Geochemistry	
7/1/2019	Remote Sensing	

12/13/2018	Drilling	Two NQ holes totaling 201.16 m.
12/13/2018	Airborne Geophysics	
12/13/2018	Geology	Structural and lithological mapping.
12/13/2018	Other	
12/13/2015	Airphotography	
12/13/2015	Ground Geophysics	
12/13/2015	Other	
12/13/2012	Geology	
12/13/2012	Other	
12/13/1991	Geochemistry	
12/13/1987	Drilling	One rotary drill hole.
12/13/1987	Geochemistry	
12/13/1987	Ground Geophysics	As well as EM and VLF-EM.
12/13/1987	Trenching	Two trenches.
12/13/1984	Geochemistry	
12/13/1972	Geochemistry	

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
097066	2015	Report on Diamond Drilling, Prospecting, and Ground Magnetics on the Lone Star Property, Dawson Mining District, Yukon Territory, Canada	Diamond - Drilling, Rock - Geochemistry, Magnetics - Ground Geophysics	19	1369.30
096398	2012	Diamond Drilling, Trenching, Soil Sampling, Rock Sampling, and Prospecting at the Lone Star Property	All Weather Road - Development, Surface, All Weather Road - Development, Surface, Diamond - Drilling, Diamond - Drilling, Drill Core - Geochemistry, Drill Core - Geochemistry, Rock - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Detailed Bedrock Mapping - Geology, Prospecting - Other, Prospecting - Other, Backhoe - Trenching, Backhoe - Trenching	8	2762.20
094919	2007	Diamond Drilling, Rotary Drilling, Geological Mapping, Rock and Soil Geochemistry, IP Geophysics, Trenching and Bulk Sampling on the Lone Star Property	Diamond - Drilling, Percussion - Drilling, Drill Core - Geochemistry, Drill Cuttings - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, IP - Ground Geophysics, Bulk Sample - Lab Work/Physical Studies, Petrographic - Lab Work/Physical Studies, Resource Estimate - Studies, Hand - Trenching	11	1314.10
094638	2006	Diamond Drilling, Geological Mapping, Rock and Soil Geochemistry, IP Geophysics, Trenching and Bulk Sampling on the Lone Star	Diamond - Drilling, Drill Core - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, IP - Ground Geophysics, Bulk Sample - Lab Work/Physical Studies, Resource Estimate - Studies, Mechanical - Trenching	23	2892
094579	2005	Diamond Drilling, Geological Mapping, Rock and Soil Geochemistry, Trenching and Bulk Sampling on the Lone Star Property	Diamond - Drilling, Drill Core - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Bulk Sample - Lab Work/Physical Studies, Prospecting - Other, Backhoe - Trenching, Mechanical - Trenching	32	5429.40
094689	2004	Geological Mapping, Rock and Soil Geochemistry, Trenching and Bulk sampling on the Lone Star Property	Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Bulk Sample - Lab Work/Physical Studies, Petrographic - Lab Work/Physical Studies, Prospecting - Other, Data Compilation - Pre-existing Data, Mechanical - Trenching		
093321	1994	1994 Annual Report on the Klondike Gold Project	Magnetic - Airborne Geophysics, Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Magnetics - Ground Geophysics, Prospecting - Other, Backhoe - Trenching		
093320	1994	1994 Annual Report on the Lone Star Project	Diamond - Drilling, Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology	2	397.60
093075	1992	Geological, Geochemical and Trenching Report on the Dawson Property	Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Prospecting - Other, Mechanical - Trenching		
092162	1991	Geological, Geochemical, and Trenching Report on the Lone Star Property	Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Backhoe - Trenching		
092969	1990	Geological and Geochemical Report on the Lone Star Property	Reverse Circulation - Drilling, Drill Cuttings - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, EM - Ground Geophysics, IP - Ground Geophysics, Line Cutting - Other, Data Compilation - Pre-existing Data, Mechanical - Trenching	45	2796
092860	1989	Geological, Geochemical and Trenching Report on the Dawson Property	Drill Core - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Heavy Mineral Concentrate - Lab Work/Physical Studies, Mechanical - Trenching		

092690	1988	Geological, Geophysical, Geochemical, and Trench Report for Work Performed by Mark Management Ltd. on the REEF Grid	All Weather Road - Development, Surface, Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Magnetism - Ground Geophysics, Line Cutting - Other, Mechanical - Trenching		
091760	1987	Report on Combined Helicopter Borne Electromagnetic, Magnetic, and VLF-EM Survey Bonaza-Eldorado Creek Area	Electromagnetic - Airborne Geophysics, Magnetic - Airborne Geophysics, VTEM - Airborne Geophysics		
092132	1987	Geological, Geochemical, Geophysical, Diamond and Rotary Drilling Report on the Lone Star Property	Magnetic - Airborne Geophysics, Diamond - Drilling, Rotary - Drilling, Drill Core - Geochemistry, Drill Cuttings - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, EM - Ground Geophysics, IP - Ground Geophysics, Mechanical - Trenching	50	5753.40
091807	1985	Geological, Geochemical and Geophysical Report for Work performed by Mark Management on the Dawson Property	Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, EM - Ground Geophysics, Magnetism - Ground Geophysics, Heavy Mineral Concentrate - Lab Work/Physical Studies, Petrographic - Lab Work/Physical Studies, Mechanical - Trenching		
091683	1984	Report of 1984 Exploration on the Lone Star Property of Dawson Eldorado Mines Ltd.	Rehabilitation - Development, Underground, Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Regional Bedrock Mapping - Geology, Line Cutting - Other, Surveying - Other		
091535	1983	Summary Report 1983 Mapping and Interpretation Lone Star Gold Property	Detailed Bedrock Mapping - Geology, Regional Bedrock Mapping - Geology, Process/Interpret - Pre-existing Data		
091399	1981	Gold Potential Evaluation Report Klondike District on Violet Gold - Quartz Property	Orthophoto - Airphotography, Cursory Property Visit - Other, Data Compilation - Pre-existing Data		
091064	1981	Summary Report of 1981 Exploration on the Lone Star Ridge Property	Orthophoto - Airphotography, All Weather Road - Development, Surface, Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Heavy Mineral Concentrate - Lab Work/Physical Studies, Line Cutting - Other, Prospecting - Other, Surveying - Other, Data Compilation - Pre-existing Data, Hand - Trenching, Mechanical - Trenching		
060149	1972	Geological and Geochemical Report Yukon Quartz Mineral Claims	Silt - Geochemistry, Soil - Geochemistry		

Related References

Number	Title	Page(s)	Reference Type	Document Type
1992Geol Vol3 15	Preliminary observations on the geology and geochemistry of quartz veins in the Klondike District, west-central Yukon		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report Paper
1996-1(G)	Geological Compilation Maps of the Northern Stewart River Area, Klondike and Sixty mile Districts (115N/15, 16, 115O/13, 14 and Parts of 115O/15, 16)		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Open File (Geological - Bedrock)
1991Rushon	A fluid inclusion and stable isotope study of mesothermal gold-quartz veins in the Klondike Schists, Yukon Territory		University of Alberta	MSc Thesis