



Occurrence Details

Occurrence Number: 1150 185
Occurrence Name: Helena
Occurrence Type: Hard-rock
Status: Showing
Date printed: 6/14/2025 4:52:40 PM

General Information

Primary Commodities: gold
Deposit Type(s): Vein Au-Quartz
Location(s): 63°53'13.91" N - -139°13'29.08" W
NTS Mapsheet(s): 115014
Location Comments: Coordinates provided by Klondike Gold Corp. in 2019.
Hand Samples Available: No
Last Reviewed:

Capsule

Work History

A surge of lode gold interest in the area in 1908 to 1911 tied the Helena (10787) and Helena Fr (11982) to the west side of Pioneer (MINFILE occurrence 1150 150) by W.D. McKay and F.B. Kennedy. A 150 m adit was driven on the Pioneer claim between November, 1903 and October, 1910. In 1912, a shaft 23 m deep with a 3 m crosscut at the bottom was sunk on the Helena cl. The Helena MINFILE showing corresponds to this historical shaft.

The area was re-staked in 1979 as the ND and DE cl by Klondike Ken Ventures Inc., which did a minor amount of bulldozer trenching near the old Pioneer workings. The property was acquired in 1980 by Dawson Eldorado Gold Explorations, which carried out geological mapping and geochemical sampling from 1983 to 1984.

In June of 1986, the property was optioned to Arbor Resources Inc. Arbor completed magnetic and VLF-EM surveys in 1986 and airborne magnetics, EM and IP surveys in 1987.

Kennecott Canada Inc. optioned the property in August of 1992. Kennecott did no significant work on the claims surrounding the Helena shaft and in January of 1995 terminated the option agreement. In January of 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 claims in 2005.

Klondike Gold Corp. resumed work in 2011 and purchased Klondike Star Mineral Corp. in 2015 to restore a 100% interest. In 2012, Klondike Gold Corp. contracted AECOM Consulting to perform regional surficial terrain mapping over the entire Lone Star property, including the area surrounding the Helena shaft. Klondike Gold Corp. performed ground magnetics and orthophoto surveys in 2015 and an airborne magnetics survey, as well as detailed regional and structural mapping using SRK Consulting Inc. in 2018 over the entire Lone Star property, including the area surrounding the Helena shaft.

Regional & Property Geology

The Helena shaft, similar to the nearby Pioneer prospect (MINFILE occurrence 1150 150), 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 metavolcanics 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.

Work History

Date	Work Type	Comment
7/1/2019	Geochemistry	
7/1/2019	Remote Sensing	
12/13/2018	Airborne Geophysics	
12/13/2018	Geology	Regional detailed structural and lithological mapping.
12/13/2015	Airphotography	
12/13/2015	Ground Geophysics	
12/13/2012	Geology	
12/13/1996	Trenching	
12/13/1987	Airborne Geophysics	As well as VLF-EM and EM.

12/13/1986	Ground Geophysics	And a ground IP survey .
12/13/1984	Geochemistry	
12/13/1984	Geology	
12/13/1983	Geochemistry	
12/13/1983	Geology	

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
095996	2011	Trenching, Soil Sampling, Assay and Geological Mapping at the Lone Star (Klondike) Property	Rock - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Bedrock Mapping - Geology, Process/Interpret - Pre-existing Data, Process/Interpret - Pre-existing Data, Backhoe - Trenching, Backhoe - Trenching		
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
093208	1993	Assessment Report on a 1993 Prospecting, Soil Sampling, Mapping, and Drilling Program	Reverse Circulation - Drilling, Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Prospecting - Other	1	99.10
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		
092691	1988	Geological, Geochemical, Geophysical and Trenching Report on the Dawson Property	Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, EM - Ground Geophysics, IP - Ground Geophysics, Bulk Sample - Lab Work/Physical Studies, Column Leach Test - Lab Work/Physical Studies, Heavy Mineral Concentrate - Lab Work/Physical Studies, Metallurgical Tests - Lab Work/Physical Studies, Petrographic - Lab Work/Physical Studies, Prospecting - Other, 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, Magnetics - Ground Geophysics, Line Cutting - Other, Mechanical - Trenching		
091760	1987	Report on Combined Helicopter Borne Electromagnetic, Magnetic,	Electromagnetic - Airborne Geophysics, Magnetic - Airborne		

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
091750	1986	A Report on Magnetic, Electromagnetic and Induced Polarization Surveys	EM - Ground Geophysics, IP - Ground Geophysics, Magnetics - Ground Geophysics		
091754	1986	A Report on Magnetic and Induced Polarization Surveying	IP - Ground Geophysics, Magnetics - Ground Geophysics		
091756	1986	Geological, Geochemical and Diamond and Rotary Drilling Report on the Lone Star Property	Diamond - Drilling, Reverse Circulation - Drilling, Drill Core - Geochemistry, Drill Cuttings - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, EM - Ground Geophysics, IP - Ground Geophysics, Magnetics - Ground Geophysics, Mechanical - Trenching	52	5425.14
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, Magnetics - 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		