Occurrence Details

Occurrence Number: 115I 034
Occurrence Name: Prospector Mountain
Occurrence Type: Hard-rock
Status: Prospect
Date printed: 4/29/2025 5:00:19 AM

General Information

Secondary Commodities: copper, gold, lead, silver, zinc
Aliases: Frog
Deposit Type(s): Vein Polymetallic Ag-Pb-Zn+/-Au
Location(s): 62°27'27" N - -137°53'40" W
NTS Mapsheet(s): 115I05
Location Comments: 1 Kilometres
Hand Samples Available: Yes
Last Reviewed:

Capsule

Work History

Staked as Frog cl 1-96 (Y36840) in September and October 1969 by International Mines Services Ltd Syndicate (Prado Exploration Ltd, Gui-Por Uranium Mines Ltd, Lion Nickel Mines of Canada Ltd and Indian Mountain Metal Mines Ltd), which carried out grid soil sampling in 1970. The Wing cl 1-96 (Y40777) were staked south of the Frog claims in 1969 by Sabina Mines Ltd but were not explored. The PDY cl 1-48 (Y53415) were staked on the western border of the Frog claims in 1970 by Phelps Dodge Corp of Canada Ltd, which carried out grid soil sampling. The Pro cl 1-196 (Y58269) were staked to the east in Sep 1970 by Occidental Minerals Corporation of Canada, which carried out geological mapping and geochemical soil sampling in 1971.
Restaked as Lilypad cl 1-16 (YA25267) in August 1979 by Archer, Cathro and Associates Ltd and sold at cost to the Nat Joint Venture (Armco Mineral Exploration Ltd and Chevron Canada Ltd), which staked Lilypad cl 17-270 (YA51163) and Newt cl 1-155 (YA51157) and carried out prospecting and geochemical sampling in 1980. The joint venture carried out airstrip construction, extensive bulldozer trenching, geological mapping and geochemical sampling in 1981; geological mapping and drilling of 7 holes (637 m) in 1982; grid soil sampling in 1983 and drilling of 4 holes (884 m) in 1984.
Chevron subdivided the property into four blocks in spring 1989 and optioned them to Yukon Spirit Mines Ltd, Rinsey Mines Ltd, Tallow Gold Corp and Renoble Holdings, then sold its underlying interest to Yukon Spirit in the fall of that year. The optioners jointly constructed a road to the property in spring 1989 and completed it after freeze-up in the fall. Renoble and Yukon Spirit entered into a joint venture agreement with Rinsey Mines in 1990 and optioned all of the Lilypad and Newt claims. Rinsey performed trenching in 1992 before dropping its option in March 1993.
Restaked as Hayes cl 1-112 (YB66122) by D. Poliquin in September 1995. In Dec 1996 Republic Resources Inc staked Hayes cl 113-239 (YB97178). Poliquin transferred his claims to Republic in June 1997. Troymin Resources Ltd optioned the claims and formed a joint venture with Almaden Resources Corp in 1997 and carried out geochemical sampling of the claim group later that year, before staking Sam cl 240-272 (YC08343) in October 1997 on the southeast corner of the existing claim group. In 1998, Troymin carried out geological mapping, prospecting, rock geochemical sampling, IP, magnetic and radiometric geophysical surveying. Diamond drilling of two holes (336 m) was carried out in 1999.
Tarsis Resources Ltd. optioned the property from Almaden Minerals in 2008. Tarsis reassessed vein zones in historic trenches on the west part of the claim block and soil sampled. Tarsis also mapped and rock-sampled the Bonanza Zone, a porphyry target in the eastern part of the property, in 2009.

Capsule Geology

The 1969-70 claims were staked on lead and silver silt anomalies in an area underlain by Paleozoic(?) Yukon Tanana Terrane schist and gneiss overlain by Late Cretaceous Carmacks Suite volcanic flows, tuffs, tuffaceous sediments, agglomerates and flow breccias, and intruded by a coeval monzonitic laccolith of the early Tertiary Prospector Mountain Suite. Soil sampling located several areas anomalous in copper, lead and zinc, and prospecting located minor chalcopyrite and galena in narrow quartz veins cutting Carmacks volcanics on the Frog group, minor amounts of galena and sphalerite in a contact zone on the PDY group, disseminated pyrite within a syenite intrusive and sphalerite and fracture controlled malachite, tetrahedrite and enargite associated with acid dykes on the Pro claims.
Work on the Lilypad group was directed toward the gold and silver content of a swarm of steeply dipping, sporadically mineralized veins that strike north-northeast and range up to several metres in width. Individual veins have been traced for lengths of several hundred metres. Mineralization consists of silver and gold-bearing sulphosalts, galena and chalcopyrite in a pyrite quartz-carbonate, clay gangue with occasional specular hematite and tourmaline. A specimen of galena from one of the veins assayed 69.0% Pb and 3361 g/t Ag. Soils over the veins assayed as high as 5 g/t Au. Drilling in 1982 indicated that the veins are leached to a depth of at least 150 m.
Very few new veins were discovered in 1997 and work that year confirmed the sporadic nature of the vein mineralization. Sampling in the eastern portion of the claim group (No Sweat grid) indicated some potential for porphyry style mineralization and followup in 1998 identified a number of chargeability anomalies, the eastern most of which is coincident with copper and molybdenum soil anomalies outlined in 1972. A second area (Lightening grid) of previously identified anomalous copper and molybdenum, on the southwest flank of Prospector Mountain, was found to be associated with an IP chargeability anomaly that was also identified by magnetic and radiometric surveying. The area is host to an extensive zone of quartz-k-feldspar-sericite alteration and pyrite mineralization that has been mapped on surface over a distance of 800+ m in length and up to 250 m in width. Low copper, gold, molybdenum and silver values were attributed to surface leaching that has been noted elsewhere in the district. Drilling on the Lightening grid in 1999 intersected disseminated pyrite mineralization that was believed to be the cause of the chargeability anomalies. No significant base or precious metal values were returned from sampling of the drill core.
Exploration in 2009 focussed on the porphyry target in the eastern part of the project referred to as the Bonanza zone. The mineralization at the Bonanza zone occurs along a 1200 m north-northwest structural trend near the contact between potassic-altered monzonite and overlying volcanic rocks. Vein material consisted of vuggy quartz and quartz breccia with hematite, tourmaline, hematized siderite and limonite. Some samples contained malachite and azurite as breccia clsts, matrix fillings or fracture fillings and rare pyrite and chalcopyrite. Vein material collected during the season assayed 82.8 g/t Au, 299 g/t Ag and 1.49% Cu. Rock samples from the Bonanza zone also generally exhibited elevated bismuth, arsenic, antimony and lead values.
Tarsis also reassessed vein zones in historic trenches on the west part of the claim block and soil sampled in 2009. Highlights include a channel sample from Area A (trench TR-09-21) of 1840 g/t Ag, 28.78% Pb, 0.70 g/t Au across 0.72 m. The Hart showing, a historical gold occurrence 1 km southwest of the Bonanza zone, was also sampled. It yielded 5.61 g/t Au, 65.8 g/t Ag, 0.34% Cu and 1% As in a rock sample.

References

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MINERAL INDUSTRY REPORT 1969-70, p. 73; 1971-72, p. 58, 70.

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YUKON EXPLORATION AND GEOLOGY 1979-80, p. 261.

YUKON EXPLORATION AND GEOLOGY 1981, p. 216; 1982, p. 201-202; 1983, p. 252; 1997, p. 30-31; 1998, p. 15; 1999, p. 18.

VANCOUVER STOCK EXCHANGE 1990, Open File.

Work History

Date	Work Type	Comment
12/31/2009	Geochemistry	Bonanza zone
12/31/2009	Geochemistry	
12/31/1999	Drilling	Two holes, 336 m.
12/31/1998	Geochemistry	
12/31/1998	Geology	
12/31/1998	Ground Geophysics	Also magnetic and radiometric surveying.
12/31/1998	Other	
12/31/1997	Geochemistry	
12/31/1989	Development, Surface	
12/31/1984	Drilling	Four holes, 884 m.
12/31/1983	Geochemistry	
12/31/1981	Geochemistry	
12/31/1981	Trenching	
12/31/1980	Geochemistry	
12/31/1980	Other	
12/31/1970	Geochemistry	
12/13/2009	Geology	
12/13/1992	Trenching	
12/13/1982	Drilling	Seven holes, 637 m.
12/13/1982	Geology	
12/13/1981	Development, Surface	
12/13/1981	Geology	
12/13/1971	Geology	

12/13/1971	Geochemistry	

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
095469	2011	2011 Airborne Geophysical Survey on the Prospector Mountain Property, Yukon	Electromagnetic - Airborne Geophysics, Gamma-Ray Spectrometry - Airborne Geophysics, Gamma-Ray Spectrometry - Airborne Geophysics, Magnetic - Airborne Geophysics		
095182	2010	Prospecting and Hand Trenching at the Prospector Mountain Property	Soil - Geochemistry, Petrographic - Lab Work/Physical Studies, Prospecting - Other, Hand - Trenching		
090976	1981	Geological, Geochemical and Geophysical Report-Lilypad 1-429 Claims	Interpretation - Airphotography, Air Strip - Development, Surface, All Weather Road - Development, Surface, Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Detailed Bedrock Mapping - Geology, Prospecting - Other, Mechanical - Trenching		
091435	1980	Nat Joint Venture Diamond Drilling Report Lilypad 1-429 and Newt 1-132, 135-163 Claims	Diamond - Drilling, Drill Core - Geochemistry, Bedrock Mapping - Geology	7	637
060605	1970	Geochemical Assessment Report on the Frog Claim Group	Silt - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology		

Drill core at YGS core library

Number	Property	Year Drilled	Core Size	Photos	Data
PM-11-11	Prospector Mountain	2011	NTW	8	3
LP-84-10	Prospector Mountain	1984	NQ	22	0
LP-84-7	Prospector Mountain	1984	NQ	29	0
LP-84-8	Prospector Mountain	1984	NQ	20	0
LP-84-9	Prospector Mountain	1984	NQ	22	0
LP82-1	Prospector Mountain	1982	NQ	10	2
LP82-2	Prospector Mountain	1982	NQ	6	2
LP82-3	Prospector Mountain	1982	NQ	26	2
LP82-4	Prospector Mountain	1982	NQ	8	2
LP82-4A	Prospector Mountain	1982	NQ	12	2
LP82-5	Prospector Mountain	1982	NQ	12	2
LP82-6	Prospector Mountain	1982	NQ-BQ	6	2