Occurrence Details

Occurrence Number: 105D 240
Occurrence Name: Byng R-17 Zone
Occurrence Type: Hard-rock
Status: Showing
Date printed: 12/16/2025 6:49:12 PM

General Information

Primary Commodities: copper, gold, silver
Aliases: Byng
Deposit Type(s): Vein Au-Quartz
Location(s): N - W
NTS Mapsheet(s): 105D16
Location Comments: Location from map in AR 097225
Hand Samples Available: No
Last Reviewed:

Capsule

Exploration History
The first documented exploration in the Mt Byng area was in 1981, when Dupont Canada Exploration Ltd. staked the Utshig claims approximately two kilometres to the west of Mt Byng, to cover anomalous results from a regional reconnaissance exploration program.
In 1985, the Geological Survey of Canada conducted a regional stream survey on NTS map sheet 105D. The survey identified weakly anomalous gold values in the Mt. Byng area (Carlyle, 1987).
In 1986, Aurum Geological Consultants Inc. staked the Byng claim group and, later that year, conducted geological mapping, rock, soil and silt sampling.
Also in 1986, the BM claims were staked three kilometres north of Mt. Byng by Larry Carlyle and Drew MacDonald. A program of blast trenching, prospecting and soil sampling was performed. In 1987, two claims were added to the BM claim group.
In 1988, Carlyle and MacDonald staked 37 additional claims to the BM claims and conducted geological mapping, hand and blast trenching, soil sampling and VLF-EM surveys. The best rock sample from the Main Zone graded 80.7 g/t gold and 70.6 g/t silver, while soil sampling returned up to 1660 ppb gold and 1018 ppm arsenic (Carlyle, 1989). During this program, the R-17 and R-7 Zones were discovered to the northwest of the Main Zone.
In 1990, the BM claims were optioned to Aurora Gold Ltd., which conducted prospecting, blast trenching and soil sampling around the Main and R-17 Zones, along with a VLF-EM survey at the R-17 Zone. Grab samples from shallow trenches at the Main Zone returned values up to 126.9 g/t gold and 164.5 g/t silver.
In 1994, Aurora dropped its option and the BM claims were consolidated into a single group of 16 claims. After the option expired, Carlyle and MacDonald resumed work, completing a hand trenching program at the R-17 and Main Zones. Two float samples taken from the Main Zone yielded greater than 6.67 g/t gold (Carlyle, 1994).
In 1995, Carlyle conducted prospecting, blast trenching and soil sampling around the R-17 and Main Zones. A rock sample from a vein returned 6.721 g/t gold and 372 ppm arsenic. Following this program, Carlyle added the BC claims to the southeast, to cover the Creek Showing and recover the R-Zone.
In 1996, Carlyle and MacDonald performed blast trenching and soil geochemical sampling on the BM claims. Eight trenches were started along VLF-EM and soil geochemical anomalies north of the Main Zone, but only one trench reached bedrock, where a rock sample returned 307 ppb gold and 645 ppm arsenic. Soil sampling yielded weakly anomalous values for copper, up to 113 ppm (Carlyle, 1996a). On the BC claims, soil sampling, geological mapping and a ground magnetometer survey were completed near the R-Zone and Creek Showing. Soil sampling returned up to 65 ppb gold, 602 ppm arsenic and 226 ppm copper around the R-Zone (Carlyle, 1996b).
In 1998, Carlyle conducted soil sampling and magnetometer surveys across parts of the BC and BM claims. Soil samples returned up to 346 ppb gold at the R-17 Zone and 166 ppb gold at the R-Zone (Carlyle, 1998). The claims were later allowed to lapse.
In 2005, ATAC Resources Ltd. staked the Byng 1-20 claims to cover zones identified by previous work.
In 2006, the property was optioned to New Shoshoni Ventures Ltd., which that year conducted helicopter-borne magnetic and VTEM geophysical surveys on the claim block. New Shoshoni later dropped its option.
In 2010, ATAC Resources sold the Byng property to Strategic Metals. Following the sale, the Byng 21-42 claims were staked.
In 2011, the property was optioned to Alix Resources Corp., but no work was completed. Also in 2011, Golden Predator Mining Corp. staked claims along the eastern side of the current Byng property. No record of work has been found, and Golden Predator claims expired in 2013.
In 2012, Alix Resources dropped its option on the property. Later in the year, Strategic Metals conducted a soil and rock sampling program. A rock sample taken from a historical trench at the Main Zone returned 13.45 g/t gold, 35.8 g/t silver, 2080 ppm arsenic, 635 ppm copper and 1000 ppm lead. Soil sampling returned up to 1770 ppb gold from the bottom of an old trench (Drechsler, 2012).
In 2015, Strategic Metals conducted a LiDAR survey over the Byng property.
In 2016, Strategic Metals staked the Byng 43-90 claims and compiled exploration data onto LiDAR images in order to identify prospective areas for future programs (Willms, 2016).
In 2017, Strategic Metals conducted a one-day property tour. Four rock samples were collected from the Main Zone, which returned peak values of 17.6 g/t gold, 22.1 g/t silver, 898 ppm arsenic, 14.3 ppm bismuth, greater than 2.32% copper and 801 ppm antimony.

Regional Geology
The Byng property is located near the northern end of the Stikinia Terrane. Stikinia comprises a variety of Paleozoic to Mesozoic metavolcanic, metasedimentary and metaplutonic rocks formed in arc environments (Israel et al., 2016). It represents an accretionary arc that developed along the ancient Pacific margin of North America.
The Whitehorse Trough overlaps Stikinia Terrane to the west and is a fault-bound trough composed of fore-arc basin metasediments.
Regional-scale mapping shows the Byng property is underlain by an amalgamation of faulted and deformed lithologies. The units primarily consist of basalt flows and a gabbro stock of the Joe Mountain Formation, and overlying Aksala Formation clastic and carbonate sediments. This basement package is intruded by a centrally located stock of hornblende-biotite granite belonging to the Teslin Suite. Other Teslin and Whitehorse Suite plutons are exposed along the southern edge of the property.

Property Geology
The Byng property is mostly underlain by Joe Mountain Formation volcanics, which are subdivided into two main groups: 1) a thick unit of basaltic volcanic rocks; and 2) intrusions of coarse grained pyroxene-anorthosite gabbro.
Mount Byng Felsite, which occurs in a stock within the central portion of the property, is composed of fine-grained to porphyritic, feldspar-hornblende felsite and hornblende granodiorite. These rocks were likely emplaced during faulting (Carlyle, 1998).
Rhyolite intrusions belonging to the Byng Creek volcanic complex cut all units on the property. They consist of locally flow-banded quartz-phyric rhyolite and quartz-feldspar porphyry plugs, dykes, sills and breccias. Where the rhyolites intrude sediments, local hornfelsing is documented (Carlyle, 1998).
The youngest igneous phase on the property is a small diatreme of heterolithic breccia containing angular fragments of all of the major rock types found in the area, which have been welded by granodiorite porphyry. This diatreme lies within the Mount Byng Felsite stock.
Two major northerly trending strike-slip faults are mapped on the property. This fault set may partially control mineralization on the property (Carlyle, 1998). Another set of faults, which strikes northwesterly, cuts the northerly trending faults.
The Byng property hosts gold- and silver-bearing epithermal-style mineralization that occurs within vuggy to banded quartz veins and quartz-carbonate breccias. Five prospective zones have been identified on the property to date: the R-17, R-7, Main, R and Trophy Zones. Gold- and silver-bearing veins on the property are hosted in mafic volcanic rocks belonging to the Joe Mountain Formation, and are typically associated with rhyolite dykes.
The R-17 Zone is a gossanous area, which is situated along a north-trending fault gully in the northern part of the property. It comprises a 100 m in diameter, silicified chalcedony breccia/vein system hosted by Joe Mountain gabbro. Historical rock sampling and blast trenching at the R-17 Zone largely failed to reach bedrock. The best rock sample returned less than 100 ppb gold.

Work History

Date	Work Type	Comment
6/1/2016	Pre-existing Data	
6/1/2015	Remote Sensing	
6/1/2012	Geochemistry	
6/1/2012	Geochemistry	
6/1/2006	Airborne Geophysics	
6/1/2006	Airborne Geophysics	
6/1/1998	Geochemistry	
6/1/1998	Other	
6/1/1996	Trenching	
6/1/1996	Geochemistry	
6/1/1996	Geology	
6/1/1996	Geochemistry	
6/1/1996	Ground Geophysics	
6/1/1996	Ground Geophysics	
6/1/1995	Trenching	
6/1/1995	Geochemistry	
6/1/1995	Other	
6/1/1995	Geochemistry	
6/1/1995	Other	
6/1/1994	Trenching	
6/1/1994	Geochemistry	
6/1/1990	Geochemistry	
6/1/1990	Geochemistry	
6/1/1990	Ground Geophysics	
6/1/1990	Ground Geophysics	
6/1/1988	Trenching	
6/1/1988	Geochemistry	
6/1/1988	Geology	
6/1/1988	Geochemistry	
6/1/1988	Ground Geophysics	
6/1/1988	Ground Geophysics	

Related References

Number	Title	Page(s)	Reference Type	Document Type
95-034	Prospecting Report on the Mt. Byng Area		Yukon Government: Energy, Mines and Resources	YMEP Report
96-019	Report on1996 Target Evaluation Program on MT Byng Propertyt		Yukon Government: Energy, Mines and Resources	YMEP Report
98-012	1998 Work Program on Mt. Byng Property		Yukon Government: Energy, Mines and Resources	YMEP Report