Occurrence Details

Occurrence Number: 105B 151
Occurrence Name: Gem Lake South
Occurrence Type: Hard-rock
Status: Showing
Date printed: 8/5/2025 9:03:24 AM

General Information

Secondary Commodities: silver, tin, zinc
Deposit Type(s): Vein and Greisens Sn
Location(s): 60°12'30.02" N - -131°38'47.39" W
NTS Mapsheet(s): 105B04
Location Comments: Based on location of rock sample 67630 (AR 090778)
Hand Samples Available: No
Last Reviewed:

Capsule

Work History

Staked as part of a large block of DU claims (1-239, YA28903) between June and Jul/78 by the Klinkit Joint Venture (DuPont of Canada Exploration Limited & Duval International Corporation), which explored with detailed geological mapping and soil sampling to the west in 1978 and soil sampling in 1979.

The DC Syndicate (Dome Mines Limited & Cominco Limited) tied on Zinc cl 1-16 (YA33021) to the west in Jun/78. In 1981, a ground magnetic survey and a grid soil survey were carried out west of the occurrence. In 1993, sampling occurred east of the occurrence. In 2006, the Seagull claims were staked over the occurrence. In 2012, widespread rock sampling across the Seagull Batholith took place, although none were taken at the occurrence. In 2014, an airborne magnetic and radiometric survey covered almost the entire Seagull Batholith. In 2018, the area was restaked as the JC 1-101 claims and an airborne magnetic and radiometric survey was flown over the property.

Capsule Geology

This occurrence lies within a belt of Yukon-Tanana Terrane rocks. This belt of rocks is part of an accreted island arc assemblage consisting of biomodal volcanics, coeval plutons and sedimentary rocks, as well as younger Jurassic intrusive rocks and overlap assemblages and Cretaceous intrusions. The occurrence is hosted in mid-Cretaceous Seagull Batholith quartz monzonite.

The occurrence is located along a rock sampling traverse line at the south end of "Gem Lake". In 1981, Chip sampling was undertaken on manganese-stained fracture zones in the quartz monzonite. The zones contain quartz and tourmaline, fluorite(?) and small amounts of pyrite, sphalerite, galena and arsenopyrite. The best value was sample 67630, which assayed over 1000 ppm Sn over 1.8 m. Another sample on the line assayed 595 ppm Sn, 1600 ppm Zn and 1.0 ppm Ag over 0.9 m. Rock sampling in 2006 confirmed the tin values; one grab sample at the occurrence assayed 0.91% Sn.

Soil sampling in the area in 1979 gave very high values for Sn, but these values were determined using a portable XRF analyzer, and were later deemed unreliable.

Work History

Date	Work Type	Comment
12/13/2018	Airborne Geophysics	
12/13/2018	Airborne Geophysics	
12/13/2014	Airborne Geophysics	
12/13/2014	Airborne Geophysics	
12/13/1981	Geochemistry	Grid soil survey to the west
12/13/1981	Ground Geophysics	Ground magnetic survey to the west
12/13/1979	Geochemistry	
12/13/1978	Geology	mapping to the west
12/13/1978	Geochemistry	soil sampling to the west
12/13/1978	Other	staking

Related References

Number	Title	Page(s)	Reference Type	Document Type
12-054	Airborne Geochemical Sample Survey - Seagull Tin Project		Yukon Government: Energy, Mines and Resources	YMEP Report
2004-2	Bedrock Geology, Dorsey Lake (NTS 105B/4), southern Yukon (1:50,000 scale)		Yukon Geological Survey	Open File (Geological - Bedrock)

YEG1999_11	Wolf Lake project: Revision mapping of Dorsey Terrane assemblages in the upper Swift River area, southern Yukon and northern B.C.		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report Paper
93-043	Report on Prospecting Work in the Dorsey Lake Area		Yukon Government: Energy, Mines and Resources	YMEP Report