

Occurrence Details

Occurrence Number: 105M 093 Occurrence Name: Bluebird Occurrence Type: Hard-rock

Status: Showing

Date printed: 4/29/2025 12:57:25 AM

General Information

Secondary Commodities: cadmium, lead, silver, zinc **Deposit Type(s):** Vein Polymetallic Ag-Pb-Zn+/-Au

Location(s): N - W

NTS Mapsheet(s): 105M14

Location Comments: Location coordinates provided by Alexco

Hand Samples Available: No

Last Reviewed:

Capsule

Work History

The Keno Hill Silver District has a rich history as one of the world's highest-grade silver districts. The first discovery of silver-lead veins was by H. W. McWhorter about 1906 on Galena Creek. Between 1913 and 1989 the District produced in excess of 200 Moz silver from over 5.3 Mt of ore with average grades of 1377 g/t (44 oz/t). In 1989, with falling metal prices and increased environmental standards, the former owners of Keno Hill, United Keno Hill Mines Limited, terminated their mining activities in the District. Keno Hill continues to boast significant mineral resources at grades far higher than most of the world's primary silver producers.

In 1920, T Hinton staked the Blue Jacket claim and drove a short adit on the showing. The claim was later acquired by Untied Keno Hill Mines Ltd, which lapsed in 1999. Later in 1999, WD Mann prospected the area including the adit and collected some soil samples.

In 2006, under a unique contractual arrangement with the Government of Canada, Alexco Resource Corp purchased the rights to the majority of the District and has been actively exploring and developing the camp since that time. The arrangement, allows Alexco to produce from historic and newly discovered deposits within the District while also undertaking reclamation activities to remediate historic environmental impacts. The first mine operated by Alexco was the Bellekeno mine, in 2011.

Geological Setting

The Keno Hill Silver District is located within the northwestern part of the Selwyn Basin in the central Yukon. The District is underlain by Devonian phyllite, felsic metatuffs, and metaclastic rocks of the Earn Group that are conformably overlain by the Mississippian Keno Hill Quartzite Formation. The stratigraphy is locally thickened due to folding and/or thrusting and the basal part of the Keno Hill Quartzite is the predominant host of the silver-lead-zinc mineralization.

Four periods of intrusive rocks are recognized in the region. During the Late Triassic, at about 232 million years ago (My), gabbro to diorite formed sills within the Tombstone Thrust Sheet. A second phase of plutonism took place approximately 92 My ago in the early Cretaceous and resulted in the widespread and voluminous felsic Tombstone intrusions of granitic to granodioritic composition that are regionally associated with gold mineralization. Cretaceous lamprophyre dated at 89 My occurs as metre scale dykes and sills. The youngest intrusions are peraluminous megacrystic potassium feldspar granite of the Upper Cretaceous McQuesten suite dated at approximately 65 My.

The mineralized vein in the Bluebird adit contains 200 g/t silver (6.44 oz/t Ag) and 7.11 % Pb (Mann, 1999). The soil sample program returned anomalous gold (to 53 ppb), silver (144 to 397 ppb), Cd, Sb, As and Hg. The vein fault exposed on the claim is hosted in schist and phyllite.

Work History				
Date	Work Type	Comment		
9/9/1999	Other			
6/1/1920	Development, Underground	First staked and worked by Thomas Hinton		
12/13/1999	Geochemistry			
12/13/1999	Geochemistry			

Related References					
Number	Title	Page(s)	Reference Type	Document Type	
99-058	Summary Report YMIP Grant #99-058 - 1999 Prospecting and Geochemical Surveys on the Highland Lake, Little Salmon Lake, and Keno Hill Areas		Yukon Government: Energy, Mines and Resources	YMEP Report	