



Occurrence Details

Occurrence Number: 116C 045
Occurrence Name: Ethelda
Occurrence Type: Hard-rock
Status: Showing
Date printed: 6/16/2025 1:15:49 AM

General Information

Secondary Commodities: copper, lead
Aliases: Ethelda Copper
Deposit Type(s): Skarn Cu
Location(s): 64°20'11" N - -140°9'26" W
NTS Mapsheet(s): 116C08
Location Comments: .5 Kilometres
Hand Samples Available: No
Last Reviewed:

Capsule

Work History

Staked as claim 703 in June, 1895 by R. Matheson and W. Cornell, and restaked as Pyramid cl (1203) in May/01 by Ole Tweeden and Polly Copper cl (1206) in Oct/01 by D.F. Watson; as Metre Hill, etc cl (7037) in Feb/05 by J. Cameron who drove a 6 m adit later in the year; and as Ethelda Copper cl (10735) in Apr/08 by G.S. Richards. Restaked as Road cl 1-4 (YA32570), Rail cl 1-4 (YA32574) and cl 5-166 (YA32666) and Track cl 1-28 (YA32570) between in June and Aug/79 by Noranda Exploration Company Ltd, which explored with geochemical and geophysical surveys in 1979, 1980 and 1981. The occurrence was explored in conjunction with Minfile Occurrence 116C 137 located 6 km to the north. Nordac Resources Ltd staked River cl 1-10 (YB53090) 1 km to the southeast in Apr/95. The company acquired helicopter-borne geophysical data from a third party in May/95 and carried out a geochemical sampling and prospecting program in Aug/95. The company staked River cl 11-24 (YB54127) during the latter work program.

Capsule Geology

The area lies within the Klondike segment of the Yukon-Tanana terrane. Re-construction of movement along the Tintina Trench suggests that the Klondike segment is probably a direct along-strike continuation of the Finlayson Allochthon which contains the Kudz Ze Kayah (Minfile Occurrence 105G 117) and the Wolverine (Minfile Occurrence 105G 072) volcanic massive sulphide deposits. The occurrence is underlain by Devonian to Mississippian Nasina Assemblage (formerly called Nasina Series) quartzite and quartz-muscovite-biotite schist and marble that have been intruded by the Mid-Cretaceous Mount Carmacks Pluton. Chalcopyrite occurs in narrow pyritic skarn horizons that have developed in limy beds within quartzite located near the contact of the granodiorite to quartz diorite intrusion. The original showing was not located by Noranda during their 1980s work program and most of their exploration work was concentrated north and west of the occurrence. Nordac staked the River claims to cover galena, sphalerite and pyrite occurrences discovered along the banks of the Yukon River by Dr. J.K. Mortensen during the course of regional geological mapping in 1986. Host rocks were reported to be siliceous quartz-muscovite schists of a Lower to Middle Paleozoic metavolcanic sequence, however recent developments suggest the host rocks are probably mid-Devonian or younger. Nordac reported concordant seams, layers and lenses of massive pyrite up to several centimeters thick near the lower contact of the metavolcanic unit with underlying marble and quartzite. Abundant float of this material was observed along the river bed downstream for over 1 km. Although Mortensen sampled pyrite mineralized with galena and sphalerite Nordac failed to locate his sample site. Reconnaissance soil samples collected across the property failed to return any anomalous values for Cu, Pb or Zn. Samples of pyritic float and bedrock returned weakly anomalous values for Cu, Pb and Zn. The magnetic survey returned several spot magnetic highs while the EM survey identified several weak to moderate conductors which matched the prospective trend of the pyritic horizon.

Work History

Date	Work Type	Comment
12/31/1995	Geochemistry	
12/31/1995	Pre-existing Data	Re-interpreted airborne geophysical data flown by third party.
12/31/1995	Other	
12/31/1981	Geology	
12/31/1981	Geochemistry	
12/31/1981	Other	
12/31/1980	Geology	
12/31/1980	Airborne Geophysics	Also VLF-EM survey. Regional survey.
12/31/1980	Other	
12/31/1979	Geochemistry	
12/31/1979	Ground Geophysics	
12/31/1905	Development, Underground	Dug 6.1 m adit.
12/13/1980	Geochemistry	

12/13/1980	Ground Geophysics	Also VLF survey.
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Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
090843	1981	Report on the Airborne Geophysical Survey on the CASSIAR CREEK Property and Adjacent Area	Electromagnetic - Airborne Geophysics, Magnetic - Airborne Geophysics		