Occurrence Details

Occurrence Number: 106C 016
Occurrence Name: Mueller
Occurrence Type: Hard-rock
Status: Showing
Date printed: 12/16/2025 3:19:37 PM

General Information

Secondary Commodities: copper
Deposit Type(s): Iron Oxide Breccias & Veins (Wernecke Breccias)
Location(s): 64°53'6" N - -133°27'29" W
NTS Mapsheet(s): 106C14
Location Comments: .5 Kilometres
Hand Samples Available: No
Last Reviewed:

Capsule

Work History

Staked as Lad & Ent cl (Y32402) in Apr/69 and acquired by Vulcan Mining Ltd, which prospected the claims in 1970. Restaked as Lad cl (Y57423) in March/72 by Cypress Resources Ltd, which added additional Lad cl(Y68406) in Aug/72.
The showing was partially covered by the southeast corner of the Ore cl (Y88612), which was staked in May/74 by D. Waugh and mapped and sampled later in the year by Phelps Dodge Corporation of Canada Ltd.
In Oct/94 D & J Hajek staked the Bloom cl 1-38 (YB43576) north of the showing. In Feb/95 Hajek transferred the Bloom claims to West Lake Ltd which carried out a trenching and prospecting program later in the summer. Hajek staked BL cl 55-62 (YB65749) to the northeast in Jul/96.

Capsule Geology

The region is underlain by a metamorphosed and altered sequence of Early Proterozoic Wernecke Supergroup clastic and carbonate rocks (Fairchild Lake Group, Quartet Group and Gillespie Lake Group, from oldest to youngest) that are intruded by Early to Middle Proterozoic mafic sills and dykes, and cut by Middle Proterozoic Wernecke Breccia. To the east, Wernecke Supergroup rocks are unconformably overlain by Middle Proterozoic Pinguicula Group rocks. According to Thorkelson (2000), Wernecke Breccia development is best modeled as a set of hydrothermal and/or phreatic breccias; brecciation being caused by explosive expanson of volatile-rich fluids. Hunt (2005) attributed Wernecke Breccia formation to periodic over-pressuring of dominantly basinal fluids, which lead to repeated brecciation of host strata and mineral precipitation.
Several small chalcopyrite showings are associated with limy argillite of the Fairchild Lake Group. One showing containing disseminated chalcopyrite was reported to have a length of 45 to 60 m. Although the nearest breccia occurrence is over 1 km to the north (Thorkelson, 2000), mineralization is similar to that found in and around other breccia zones in the Dolores Creek area.

References

CYPRESS RESOURCES LTD, Apr/72. Prospectus Report by R.S. Adamson.

GEORGE CROSS NEWSLETTER, 15 Sep/72.

HUNT, J., 2005. The geology and genesis of iron oxide-copper-gold mineralisation associated with Wernecke Breccia, Yukon Canada, PhD thesis, James Cook University, Australia, 2 volumes, 120 p.

THORKELSON, D.J. AND WALLACE, C.A., 1995. Geology and mineral occurrences of the "Dolores Creek" map area (106C/14), Wernecke Mountains, northeastern Yukon. In: Yukon Exploration and Geology, 1994. Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, p. 19-30.

THORKELSON, D.J. AND WALLACE, C.A., 2000. Geology and mineral occurrences of the Slats Creek, Fairchild Lake and Dolores Creek areas, Wernecke Mountains, Yukon (106D/16, 106C/13, 106C/14). Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada, Bulletin 10, 73 p.

WEST LAKE LTD, Mar/96. Assessment Report #093510 by J.H. Hajek.

Work History

Date	Work Type	Comment
12/31/1995	Trenching	
12/31/1995	Other	
12/31/1974	Geology	
12/31/1974	Other	
12/31/1974	Other	
12/31/1972	Other	
12/31/1970	Other	
12/31/1969	Other	

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
095634	2007	YUP February Internal Technical Report, Season 2007 Describing Mapping, Prospecting and Diamond Drilling at the Lumina Property	Gamma-Ray Spectrometry - Airborne Geophysics, Diamond - Drilling, Drill Core - Geochemistry, Rock - Geochemistry, Detailed Bedrock Mapping - Geology, Regional Bedrock Mapping - Geology, Scintillometer - Ground Geophysics, Prospecting - Other	15	4367.20
095646	2007	2007 Geological, Geochemical and Geophysical Report on the Werneckes Project	Diamond - Drilling, Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Regional Bedrock Mapping - Geology, Magnetics - Ground Geophysics, Scintillometer - Ground Geophysics, Prospecting - Other, Backhoe - Trenching, Hand - Trenching, Handblast - Trenching	28	6537.96
094953	2006	Assessment Report Describing Airborne Geophysics, Mapping, Prospecting and Diamond Drilling	Gamma-Ray Spectrometry - Airborne Geophysics, Magnetic - Airborne Geophysics, Diamond - Drilling, Drill Core - Geochemistry, Bedrock Mapping - Geology, Prospecting - Other	22	2602.89
094956	2006	2006 Geological, Geochemical and Geophysical Report on the Werneckes Project	Reverse Circulation - Airborne Geophysics, Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Scintillometer - Ground Geophysics, Prospecting - Other		
019048	1968	Engineering Report, Year 1968 on the Mammoth Copper Property	Air Strip - Development, Surface, Winter Road - Development, Surface, Silt - Geochemistry, Detailed Bedrock Mapping - Geology, Prospecting - Other, Backhoe - Trenching		