



Occurrence Details

Occurrence Number: 106C 010
Occurrence Name: Key Mountain
Occurrence Type: Hard-rock
Status: Showing
Date printed: 12/16/2025 3:20:42 PM

General Information

Secondary Commodities: copper
Deposit Type(s): Iron Oxide Breccias & Veins (Wernecke Breccias)
Location(s): 64°51'43" N - -133°25'0" W
NTS Mapsheet(s): 106C14
Location Comments: 1 Kilometres
Hand Samples Available: No
Last Reviewed:

Capsule

Work History

Staked as Key cl (Y32728) in May/69 by P. and A. Van Bibber and optioned to Vulcan Mining Ltd, which prospected in 1970.

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. According to Thorkelson (2000), Wernecke Breccia development is best modeled as a set of hydrothermal and/or phreatic breccias; brecciation being caused by explosive expansion 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. Minor amounts of chalcopyrite occur in Quartet Group argillite near the margin of a diorite dyke of the Early Proterozoic Bonnet Plume River Intrusions and peripheral to a Wernecke Breccia body.

References

BONNET PLUME RIVER MINES LTD, Aug/68. Assessment Report by F.M. Smith, included as appendix in #019048.

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., 2000. Geology and mineral occurrences of the Slat 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.

Work History

Date	Work Type	Comment
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 Wernecke 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 Wernecke Project	Reverse Circulation - Airborne Geophysics, Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Scintillometer - Ground Geophysics, Prospecting - Other		

061207	1974	Report on Geological and Geochemical Field Work 1974 EG Claim Group	Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Prospecting - Other		
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Related References

Number	Title	Page(s)	Reference Type	Document Type
ARMC013549	Preliminary report - Key claims - Bonnet Plume River Mines Ltd.		Property File Collection	Report
ARMC013550	Map sheet 106-E-1 with geochemical locations and results		Property File Collection	Geochemical Map
ARMC013548	Progress report on Bonnet Plume River Mines Ltd.- June 9th to August 15th, 1969		Property File Collection	Report