Occurrence Details

Occurrence Number: 106E 027
Occurrence Name: Five
Occurrence Type: Hard-rock
Status: Prospect
Date printed: 12/16/2025 4:58:53 PM

General Information

Secondary Commodities: copper, uranium
Deposit Type(s): Iron Oxide Breccias & Veins (Wernecke Breccias)
Location(s): 65°5'13" N - -134°30'27" W
NTS Mapsheet(s): 106E02
Location Comments: .5 Kilometres
Hand Samples Available: No
Last Reviewed:

Capsule

Work History

Staked in Jan/76 as MAR cl (YA1546) by Mark V Pet & ML and adjoining TET cl (YA1492) to the south by Thor EL, both of which explored with reconnaissance, prospecting, geochem and radiometric surveys in 1976. Thor performed additional rock sampling in 1977.
Restaked as Drake 1-8 (YB43999) by Westmin Resources Ltd in Mar/95. Westmin subsequently transferred the claim to the Fairchild Joint Venture (Westmin & Newmont Exploration Ltd). In 1995 the joint venture group hired Pamicon Developments Ltd and Equity Engineering Ltd to supervise a geological mapping and rock sampling program on the claims.

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 west, Wernecke Supergroup rocks are unconformably overlain by Cambrian carbonate and siliciclastic 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.
The property is are underlain by Early Proterozoic Quartet Group limy argillite and Fairchild Lake Group chlorite schist and phyllite, cut by small bodies of Wernecke Breccia and diorite. A sinuous north-south trending diorite-breccia complex underlies the west half of the property. The diorite is weakly brecciated at its margins and has been mapped as a homolithic breccia. This unit is centred over the centremost of the 3 showings within this MINFILE occurrence.
Copper mineralization is of three types: (1) chalcopyrite in quartz veins; (2) chalcopyrite, with minor bornite, pyrite, magnetite and hematite in lenticular quartz masses; and (3) chalcopyrite and pyrite disseminated in breccia.
Mark V Pet & ML reported scattered brannerite-bearing quartz veins and minor malachite-stained fractures peripheral to breccia bodies on the MAR claims.
There are two main zones on the TET claims. The West Showing consists of chalcopyrite in quartz veins that parallel and crosscut bedding. The mineralization has been traced for a length of 600 m and returned assays up to 0.64% Cu across 3 m. Minor disseminated brannerite occurs in silicified and hematized rocks nearby and grab samples returned up to 215 ppm U_3O_8. The North Showing lies 1.5 km to the east and consists of chalcopyrite with bornite in rusty weathering quartzite. A chip sample of well mineralized quartzite assayed 5.40% Cu across 1.7 m.

References

GORDEY, S.P. AND MAKEPEACE, A.J., 2003. Yukon Digital Geology, version 2.0, S.P. Gordey and A.J. Makepeace (comp); Geological Survey of Canada, Open File 1749 and Yukon Geological Survey, Open File 2003-9 (D).

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.

MINERAL INDUSTRY REPORT 1976, p. 129-130; 1977, p. 45.

MARK V PETROLEUMS AND MINES LTD, Jan/77. Assessment Report #090177 by R.S. Adamson.

THOR EXPLORATIONS LTD, 1976. Assessment Report *#090170 by C.K. Ikona and D.A. Yeager.

THOR EXPLORATIONS LTD, Aug/77. Prospectus Report #062012 by C.K. Ikona and D.A. Yeager.

THOR EXPLORATIONS LTD, 1977. Assessment Report *#090314 by C.K. Ikona et al.

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.

WESTMIN RESOURCES LTD, Dec/95. Assessment Report #093377 by M.I. Jones.

YUKON EXPLORATION & GEOLOGY 1995, p. 12, 16.

Work History

Date	Work Type	Comment

12/31/1995	Geochemistry	
12/31/1995	Geology	
12/31/1977	Geology	
12/31/1976	Geochemistry	
12/13/1977	Ground Geophysics	Also magnetic survey.
12/13/1977	Geochemistry	

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
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
094954	2006	Mineral Exploration Report for the Curie Property, North Central, Yukon Territory	Electromagnetic - Airborne Geophysics, Gamma-Ray Spectrometry - Airborne Geophysics, Magnetic - Airborne Geophysics, Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Gravity Survey - Ground Geophysics, Research/Summarize - Pre-existing Data, Backhoe - Trenching		
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		
093377	1995	1995 Geological and Geochemical Assessment Report on the Drake 1-8 Claim Group Tet Project	Rock - Geochemistry, Bedrock Mapping - Geology, Research/Summarize - Pre-existing Data		
090314	1977	Geological and Geophysical Report on the Tet Mineral Claims	Rock - Geochemistry, Bedrock Mapping - Geology, Gamma-ray Spectrometry - Ground Geophysics, Magnetics - Ground Geophysics		