



Occurrence Details

Occurrence Number: 106E 026

Occurrence Name: Helikian

Occurrence Type: Hard-rock

Status: Prospect

Date printed: 12/16/2025 3:19:42 PM

General Information

Secondary Commodities: copper, uranium

Deposit Type(s): Iron Oxide Breccias & Veins (Wernecke Breccias)

Location(s): 65°3'26" N - -134°26'8" W

NTS Mapsheet(s): 106E01

Location Comments: .5 Kilometres

Hand Samples Available: No

Last Reviewed:

Capsule

Work History

Staked as the Thor cl (YA1755) in Feb/76 by Great Bear Mg L, which changed its name to Aries Res, Inc. in 1977 and performed mapping and radiometric surveys in 1976 and 1977. The Sol cl (YA6891) were fringe staked to the west in Sep/76 by A. Harman. The GSTD cl (YA1818) were tied on to the north in Feb/76 by A. Harman and optioned to Golden Standard ML, which conducted geochemical surveys later in the year.

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 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.

Disseminated brannerite and chalcopyrite are found in an area 15 by 90 m, in hematitic, weakly bleached, chloritized and feldspathized Early Proterozoic Quartet Group argillite peripheral to a 30 m thick Wernecke Breccia body. Chalcopyrite was also found in quartz veins in argillite.

A grab sample from a 3 m square area of the breccia assayed 0.04% U3O8, while a chip sample across a 3 m section of mineralized breccia assayed only 0.04% Cu and 0.002% U3O8. Two weak uranium geochemical anomalies were reported on the GSTD cl but no mineralization was discovered.

References

ARIES RESOURCES LTD, Aug/77. Assessment Report #090304 by C.K. Ikona.

GEORGE CROSS NEWSLETTER, 20 Sep/76, 14 Dec/76.

GOLDEN STANDARD MINES LTD, Oct/76. Assessment Report #090171 by C.K. Ikona.

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).

GREAT BEAR MINES LTD, Dec/76. Assessment Report #090208 by C.K. Ikona.

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. 128-129; 1977, p. 26.

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
12/31/1977	Geochemistry	
12/31/1977	Geology	
12/31/1977	Ground Geophysics	Also magnetic survey.
12/31/1976	Ground Geophysics	
12/31/1976	Geology	
12/31/1976	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 Wernekes 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 Wernekes Project	Reverse Circulation - Airborne Geophysics, Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Scintillometer - Ground Geophysics, Prospecting - Other		
090969	1981	Geological, Geochemical and Geophysical Report on the Pike Claims	Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Gamma-ray Spectrometry - Ground Geophysics, Hand - Trenching		
090304	1977	Aries Resources Ltd. Geological & Geophysical Report on the Thor Mineral Claims	Bedrock Mapping - Geology, Gamma-ray Spectrometry - Ground Geophysics, Magnetics - Ground Geophysics, Prospecting - Other		
090171	1976	Geological and Geochemical Report on the Thor Mineral Claims	Silt - Geochemistry, Bedrock Mapping - Geology, Prospecting - Other		