

Occurrence Details

Occurrence Number: 106F 002 Occurrence Name: Beaver Occurrence Type: Hard-rock

Status: Showing

Date printed: 4/29/2025 1:26:45 PM

General Information

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

Location(s): 65°1'11" N - -133°49'18" W

NTS Mapsheet(s): 106F04 Location Comments: .5 Kilometres Hand Samples Available: No

Last Reviewed:

Capsule

Work History

Pamicon Developments Ltd carried out prospecting traverses in the area in the late 1970'3. In Sep/93 Newmont Exploration flew an airborne geophysical survey over the property as part of a larger regional survey sponsored by Newmont and joint venture partner Westmin Resources Ltd. In 1994 Newmont spent two days in the area collecting silt samples. In Jul/95 Westmin staked Beav cl 1-4 (YB64442) on behalf of Newmont and itself. Later in the summer geological mapping and soil sampling outlined the showing.

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 Thorkson (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 overpressuring of dominantly basinal fluids, which lead to repeated brecciation of host strata and mineral precipitation.

The claim area is underlain by Fairchild Lake Group carbonate-rich sediments and Quartet Group carbonaceous clastic rocks, which have been intruded by Wernecke Breccia and diorite. On the Beav claims, the correlation of stratigraphic units is complicated by extensive faulting, metamorphism and intense pervasive alteration. A fault north of the claim group separates Quartet Group to the north from Fairchild Lake Group. Effects of this fault are most pronounced in the Quartet Group carbonaceous black shale where bedding surfaces are crenulated and drag folded, and strong graphite is developed.

The 1995 exploration program on the Beaver project discovered chalcopyrite mineralization in talus and outcrop in the Leavittoo Zone. The host Fairchild Lake Group phyllite is altered to buff albite. Chalcopyrite commonly occurs as fracture fillings; less commonly as disseminations. Bedrock sample results gave copper grades in the 0.3% range with gold grades less than 50 ppb. The albite zone contains very little pyrite or iron oxides minerals but is enveloped by magnetite (specular hematite)-chlorite-calcite alteration. The entire alteration system parallels a breccia body trending northwest and covering an area of 300 by 700 m.

The source of a coincident uranium-potassium airborne radiometrics anomaly at the headwaters of Beaver Creek needs to be investigated.

References

EQUITY ENGINEERING LTD, Jan/96,. Assessment Report *#093375 by D.A. Caulfield.

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.

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.

Work History

Date	Work Type	Comment			
12/31/1995	Geology				
12/31/1995	Geochemistry	Also rock sampling.			
12/31/1994	Geochemistry	Newmont spent two days on a regional silt sampling program.			
12/31/1993	Airborne Geophysics	Also magnetic and radiometric surveys.			
12/13/1995	Airborne Geophysics	Also magnetic and radiometric survey. Following up anomalies found in 1993 survey.			

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled

<u>095646</u>	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
<u>094956</u>	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		
<u>093375</u>	1995	1996 Geological and Geochemical Assessment Report On the Beav 1-4 Claims	Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology		
090817	1981	Assessment Report on the Eagle, Otter, and Vole Claims	Diamond - Drilling, Rock - Geochemistry, Silt - Geochemistry, Bedrock Mapping - Geology, Magnetics - Ground Geophysics, Scintillometer - Ground Geophysics, Prospecting - Other, Backhoe - Trenching, Handblast - Trenching	14	1590.16