

Occurrence Details

Occurrence Number: 106C 070 Occurrence Name: Noranda Occurrence Type: Hard-rock Status: Showing Date printed: 4/29/2025 4:17:47 PM

General Information

Secondary Commodities: cobalt, copper, molybdenum, uranium Deposit Type(s): Iron Oxide Breccias & Veins (Wernecke Breccias) Location(s): 64°53'28" N - -133°57'41" W NTS Mapsheet(s): 106C13 Location Comments: .5 Kilometres Hand Samples Available: No Last Reviewed:

Capsule

Work History

Staked as Pat cl (YA7008) in Sep/76 by Noranda Mines Ltd following airborne radiometric and magnetic surveys. Restaked as LFV cl (YA43152) in Oct/80 by Pan Ocean Oil Ltd. Wernecke Joint Venture (Chevron Canada Ltd & Acquitaine Company of Canada Ltd) tied on Ape cl 1-24 (YA62415) in Jun/81 and explored with mapping, radiometric surveys and soil and chip sampling later in the year.

Pamicon Developments Ltd restaked the showing with Vulture cl 44-62 (YB43980) in Mar/95. The Vulture claims were transferred to the Fairchild Joint Venture (Westmin Resources Ltd and Newmont Exploration Ltd). In the summer of 1995 Pamicon and Equity carried out detailed mapping and rock sampling over the Vulture Zone and other smaller zones located on the claim block. A small number of soil samples were also collected.

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

Reports of the Noranda occurrence by Noranda and Pan Ocean described pitchblende in hairline fractures cutting phyllite and argillite, disseminated brannerite in breccia bodies, and chalcopyrite and cobaltite in veins and open fractures along breccia margins and faults.

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.

NEWMONT EXPLORATION LTD, Feb/95. Assessment Report *#093263 by K.A. Owerko.

THORKELSON, D.J. AND WALLACE, C.A., 1994. Geological Setting of mineral occurrences in Fairchild Lake map area, (106C/13), Wernecke Mountains, Yukon. In: Yukon Exploration and Geology, 1993, Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, p. 79-92.

THORKELSON, D.J. AND WALLACE, C.A., 1998. Geological Map of Fairchild Lake area, (106C/13), Wernecke Mountains, Yukon. Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada, Gesocience Map 1998-10, 1:50,000 scale.

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.

WERNECKE JOINT VENTURE, Feb/82. Assessment Report *#090967 by W.D. Eaton.

WERNECKE JOINT VENTURE, Feb/83. Assessment Report *#091444 by W.D. Eaton.

WESTMIN RESOURCES LTD, Dec/95. Assessment Report #093369 by M.I. Jones.

Work History

Date	Work Type	Comment
12/31/1995	Geochemistry	
12/31/1995	Geology	
12/31/1995	Geochemistry	
12/31/1981	Ground Geophysics	

12/31/1981	Geochemistry	
12/31/1981	Geology	
12/31/1981	Geochemistry	
12/31/1981	Other	
12/31/1976	Other	Originally staked after airabrone radiometrics and magnetic survey
12/13/1976	Airborne Geophysics	Also magnetic 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>093369</u>	1995	1995 Geological and Geochemical Assessment Report on the Vulture 1- 62 Claims	Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology						
<u>093263</u>	1994	1994 Geological and Geochemical Assessment Report on the Vulture 1- 42 Claims	Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Prospecting - Other						
<u>091444</u>	1982	Geological and Geochemical Report Ape 1-24 Claims	Rock - Geochemistry, Soil - Geochemistry, Prospecting - Other						
<u>090967</u>	1981	Geological, Geochemical and Geophysical Report, Ape 1-24 Claims	Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Scintillometer - Ground Geophysics, Prospecting - Other						