



Occurrence Details

Occurrence Number: 106C 012

Occurrence Name: Cirque

Occurrence Type: Hard-rock

Status: Prospect

Date printed: 12/16/2025 3:56:46 AM

General Information

Secondary Commodities: cobalt, copper, silver

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

Location(s): 64°56'40" N - -133°18'21" W

NTS Mapsheet(s): 106C14

Location Comments: .5 Kilometres

Hand Samples Available: No

Last Reviewed:

Capsule

Work History

Discovered by L. Brown and staked for him in Jun/67 as Mammoth cl (Y6719) by Nordex Exploration Ltd. A new company, Bonnet Plume River Mines Ltd, was formed to develop the claims. Following sampling and prospecting in 1967, a winter road was constructed in early 1968. Work in 1968 and 1969 consisted of additional mapping and sampling. Restaked in Apr/74 by D. Waugh as part of the WA cl (Y87980) and in Jul/75 by Wernecke Joint Venture (Standard Oil Company of British Columbia Ltd and Aquitaine Company of Canada Ltd) as Pnerd cl (Y98240), which were explored by Eldorado Nuclear Ltd under option with mapping and radiometric surveys in 1976. After the Eldorado option expired early in 1981, Wernecke Joint Venture performed mapping and soil and chip sampling. Aquitaine changed its name to Kidd Creek Mines Ltd in 1981. Restaked Oct/92 as Dolores 1-48 cl (YB29240) by Pamicon Developments Ltd and Equity Engineering Ltd. In Jul/93, International Prism Resources signed a letter of intent to acquire 100% interest in the 48 claim block from Equity and Pamicon. Pamicon and Equity who were retained to supervise the exploration program, carried out geological mapping and geochemical sampling in the summer of 1993. The Dolores 49-78 cl (YB22529) were added in Aug/93. In Jul/95 the claims were transferred to Newmont Mines Ltd. Further geological mapping and rock and soil sampling was carried out in the summer of 1995.

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. Unconformably overlying Middle Proterozoic rocks of the Pinguicula Group occur to the east. 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. The original Dolores claims are underlain by extensively folded and faulted strata of Gillespie Lake and Fairchild Lake group rocks intruded by Wernecke Breccia and diorite and syenite stocks. Faults including strike-slip faults with multiple generations of low angle slickensides juxtapose lithological units against one other. The Cobalt Cirque showing is in dolomitic fine clastic rocks, siltstones, limestones and phyllites of the Fairchild Lake Group. The area is quite rugged and most of the mineralization outcrops on a steep, almost inaccessible, cirque headwall. The host rocks are broadly folded onto a single anticline that occupies the head of the cirque, with an axis trending roughly east-west and plunging shallowly to the west. Light grey crystalline dolostone is exposed on the northwest wall of the cirque, part of which is strongly altered imparting a bright orange-red coloration. Maroon-weathering heterolithic breccia with maroon siltstone fragments and possible diorite fragments, outcrops in a small area on the south wall. Intrusive rocks include monzo-diorite which is a medium-grained greyish green intergrowth of plagioclase, potassium feldspar, quartz, pyroxene, amphibole, pyrite and magnetite. The monzodiorite is variably textured with local coarse, and rare pegmatitic, segregations, suggesting a high level of emplacement. Bonnet Plume River Mines Ltd described the best mineralized zone as being approximately 120 m by 40 m in size and located near the crest of the anticline. Reconnaissance chip samples collected by the company across the zone averaged 0.2% Cu and 0.02% Co and trace Ag.

References

- BONNET PLUME RIVER MINES LTD, Sep/68. Prospectus Report by A.R. Archer, included as appendix in #019048.
- BONNET PLUME RIVER MINES LTD, Apr/69. Assessment Report *#019048 by C.D.N. Taylor.
- FINDLAY, D.C., 1968. The Mineral Industry of Yukon Territory and southwestern District of Mackenzie, 1967, Geological Survey of Canada, Paper 68-68, p. 30-31.
- FINDLAY, D.C., 1969. The Mineral Industry of Yukon Territory and southwestern District of Mackenzie, 1968, Geological Survey of Canada, Paper 69-55, p. 16-17.
- GEORGE CROSS NEWSLETTER, 6 Jul/93.
- 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.
- INTERNATIONAL PRISM EXPLORATION LTD, Feb/94. Assessment Report #093182 by D. Caulfield et al.
- LAZNICKA, P., 1977, Geology and mineralization in the Dolores Creek area, Bonnet Plume Range, Yukon. Geological Survey of Canada, Paper 77-1A, p. 435-439.
- MINERAL INDUSTRY REPORT 1969 and 1970, p. 27-28.
- NEWMONT EXPLORATION LTD, Dec/95. Assessment Report #093370 by K.A. Owerko.
- 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.
- YUKON EXPLORATION & GEOLOGY, 1994. p. 6.

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Work History

Date	Work Type	Comment
12/31/1995	Geochemistry	
12/31/1995	Geology	
12/31/1995	Geochemistry	
12/31/1993	Geochemistry	Also soil sampling.
12/31/1993	Geology	
12/31/1981	Geochemistry	
12/31/1981	Geology	
12/31/1981	Geochemistry	
12/31/1976	Ground Geophysics	
12/31/1976	Geology	
12/31/1969	Geology	
12/31/1969	Trenching	
12/31/1968	Geology	
12/31/1968	Development, Surface	
12/31/1967	Geochemistry	Also rock sampling.
12/31/1967	Ground Geophysics	
12/31/1967	Other	
12/13/1969	Drilling	Seven holes, 609.9 m.

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 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
095241	2006	Assessment Report Describing Airborne Geophysics, Mapping and Prsopecting at the Dolores Property	Gamma-Ray Spectrometry - Airborne Geophysics, Magnetic - Airborne Geophysics, Rock - Geochemistry, Bedrock Mapping - Geology, Prospecting - Other		
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 Werneckes Project	Reverse Circulation - Airborne Geophysics, Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Scintillometer - Ground Geophysics, Prospecting - Other		
093370	1995	1995 Geological and Geochemical Assessment Report on the Dolores 1-78 Claims	Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology		
093182	1993	Geological and Geochemical Assessment Report on the Dolores 1-48 Claim Group	Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Line Cutting - Other, Prospecting - Other		
091456	1983	Exploration, 1982, Gold, Silver and Uranium Deposits, Glacier Lake Region	Rock - Geochemistry, Silt - Geochemistry, Detailed Bedrock Mapping - Geology, EM - Ground Geophysics, Scintillometer - Ground Geophysics, Petrographic - Lab Work/Physical Studies, Prospecting - Other, Hand - Trenching		
090965	1981	Geological, Geochemical and Diamond Drilling Report, Pterd,Knit,Ptoes and Skin Claims	Diamond - Drilling, Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Scintillometer - Ground Geophysics, Prospecting - Other	3	607
019050	1976	Report on the Mammoth Copper Property	Silt - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Magnetics - Ground Geophysics, Prospecting - Other		
061565	1976	Report on Diamond Drilling Program Pterd, Knit, Ptoes Claims	Diamond - Drilling	5	470.61

Related References

Number	Title	Page(s)	Reference Type	Document Type
ARMC003049	Map - Preliminary section through access decline - Revised - Cirque project		Property File Collection	Geoscience Map (General)