



Occurrence Details

Occurrence Number: 106C 011

Occurrence Name: Mammoth

Occurrence Type: Hard-rock

Status: Showing

Date printed: 12/15/2025 10:15:20 PM

General Information

Secondary Commodities: copper, silver

Deposit Type(s): Vein Cu+/-Ag Quartz

Location(s): 64°55'36" N - -133°16'59" W

NTS Mapsheet(s): 106C14

Location Comments: .5 Kilometres

Hand Samples Available: No

Last Reviewed:

Capsule

Work History

Earlier versions of Yukon Minfile have mistakenly switched the location of minfile occurrence #106C 011 with Minfile Occurrence #106C 013.

Discovered by L. Brown and staked for him in Jun/67 as Mammoth cl (Y6719) by Nordex Exploration Ltd. A new company, Bonnet Plume Mines Ltd, was formed in 1968 to develop the claims. Following prospecting and hand trenching in 1967, a winter road was constructed in early 1968. Restaked in Apr/73 as Air cl (Y69051) by Cypress Resources Ltd. Restaked Oct/92 by Pamicon Developments Ltd and Equity Engineering Ltd as part of a block of Dolores 1-48 cl (YB29240). The claims were optioned to International Prism Exploration Ltd in the spring of 1993, with Equity and Pamicon retained to supervise the 1993 work program. In Aug/93 the Dolores cl 49-78 (YB22529) were added to the claim block. In Jul/95 the claims were transferred to Newmont Mines Ltd which funded a work program consisting of soil and rock sampling and detailed geological mapping.

J. Hajek staked Ra cl 33-36 (YB65734) 3 km to the south in Sep/96 and Ra cl 25-26 (YB65937) 1.5 km to the southwest in Oct/96. Hajek also staked Rat cl 41-44 (YB65932) 4 km to the southeast in Oct/97.

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. 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.

Exploration work by Bonnet Plume Mines Ltd uncovered a vein or lens of chalcopyrite about 100 m long within altered limy argillite of Middle Proterozoic age on the east bank of a small tributary of Dolores Creek. A chip sample over the widest and best mineralized section assayed 14.7% Cu and 13.7 g/t Ag across 2.4 m. Laznicka described nine additional minor copper occurrences (9-11, 14-16, 34-36) situated between this occurrence and Cobalt Cirque, 2.5 km to the northeast. All consist of chalcopyrite in a breccia matrix, or in small fractures cutting argillite or dolomite of the Wernecke Supergroup.

The Dolores claims cover Minfile Occurrences #106C 011, 012, 013 and 015. In 1993 Pamicon and Equity carried out the bulk of their work on Minfile Occurrences # 106C 012 and 013.

The companies described the Mammoth occurrence as a typical quartz-carbonate vein hosted in carbonate strata of the Gillespie Lake Group. The vein is believed to be fault-related, is narrow (<30 cm), and is of minor extent. In one area, 2.5 m by 3.7 m, the host carbonate unit has been replaced adjacent to the vein and this zone has been well mineralized with chalcopyrite assaying 6.91% copper over 2.8 m. A second sample from this area assayed 32.4 % Cu, 40 ppb Au, 36.0 ppm Ag, 230 ppm Mo and 612 ppm Zn. The Mammoth showing was judged too small to warrant further work. Thus Pamicon and Equity concentrated their exploration efforts on other parts of the claim group.

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 *#019050 by C.D.N. Taylor.

BROWN, L.J. and PROCTOR, L.I., Jun/68. 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.

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.

MINERAL INDUSTRY REPORT 1969-70, 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.

Work History

Date	Work Type	Comment
12/31/1995	Geochemistry	
12/31/1995	Geology	
12/31/1995	Geochemistry	
12/31/1993	Geochemistry	
12/31/1993	Geology	
12/31/1993	Other	
12/31/1993	Other	
12/31/1973	Other	
12/31/1968	Development, Surface	
12/31/1967	Trenching	
12/31/1967	Other	
12/31/1967	Other	

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
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 Wernekes 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		
019050	1976	Report on the Mammoth Copper Property	Silt - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Magnetism - 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
ARMC013550	Map sheet 106-E-1 with geochemical locations and results		Property File Collection	Geochemical Map
ARMC013548	Progress report on Bonnet Plume River Mines Ltd.- June 9th to August 15th, 1969		Property File Collection	Report
ARMC018620	Field notes - Prosp. Trav.- Mammoth Copper prospect		Property File Collection	Miscellaneous Company Documents