



Occurrence Details

Occurrence Number: 105F 074

Occurrence Name: Pinnacle

Occurrence Type: Hard-rock

Status: Prospect

Date printed: 10/4/2025 3:36:59 AM

General Information

Secondary Commodities: barite, copper, gold, lead, silver, zinc

Aliases: H, Peak

Deposit Type(s): Vein Polymetallic Ag-Pb-Zn+/-Au

Location(s): 61°37'6" N - 132°47'33" W

NTS Mapsheet(s): 105F10

Location Comments: .5 Kilometres

Hand Samples Available: No

Last Reviewed:

Capsule

Work History

Occurrence 105F074 was staked as H cl 1-29 (Y83823) in Oct/74 by Canol Mines Ltd but later transferred to P. Versluis. Noranda Exploration Company Limited tied on Peak cl 1-35 (YA865) (occurrence 105F074) to the west in Sep/76 and explored with mapping, EM and geochemical surveys in 1976 and 1977, expanded the property in 1977, drilled 3 Winkie holes (89 m) on Peak claim #4 in 1978, hand trenched in 1979 and mapped and sampled in 1980.

Noranda optioned the 23 remaining H claims in 1978 and explored with geochemical surveys, bulldozer trenching and 6 drill holes (466 m) in 1979, EM surveys and 3 holes (273 m) in 1980. In Mar/82, T. McCrory and Associates staked Whistler cl 1-8 (YA67717) immediately south of the Peak claims and carried out bulldozer trenching and prospecting in 1987.

The 105F074 occurrence was restaked as Bro cl 1-4 (YB51604) by G. Macdonald in Aug/94. Macdonald restaked the 105F074 occurrence as Bro cl 5-48 (YB56452) in Oct/94. In Nov/95 the Bro claims were transferred to Brett Resources Inc who conducted prospecting, mapping, soil sampling and cat trenching later in the year. In 1998 Brett Resources carried out a short program of mapping, sampling and prospecting.

Capsule Geology

The occurrence is located southwest of the Tintina Fault in the Ketza-Seagull district of the Cassiar Terrane (Platform). The Ketza-Seagull district is underlain by thick (400 m or greater) successions of miogeoclinal clastic, volcanic and carbonate rocks, ranging in age from Upper Proterozoic to Mississippian that were deformed during Mesozoic arc-continental collision, and by mid-Cretaceous intrusions. A series of thrust faults combined with crustal shortening associated with the Seagull Uplift has resulted in older rocks being thrust overtop younger rocks. Fault structures within the calcareous units are host to veins containing argentiferous galena and gold rich mantos. The latter occur below an unconformity within lower Cambrian limestone and the former occur throughout the calcareous members above the unconformity.

Fonseca (1998) attributes mineralization in the Ketza mine area, (Minfile Occurrence 105F 019) consisting of gold rich manto, magnetite-gold skarns and oxide gold occurrences and deposits, to mineralizing fluids ascending D4 extensional event structures. A similar event, possibly associated with the Seagull uplift, may be responsible for mineralized structures in the Seagull Creek area (this occurrence area). The source for the fluids is unknown. The only igneous rocks exposed in the area are Mississippian age volcanic and intrusive rocks which have no spatial association with the ore bodies (Abbott, 1986). A small, mid-Cretaceous stock is exposed in the central portions of the Seagull Uplift and the area is cut by numerous mafic dykes. There is sufficient evidence to suggest mid-Cretaceous intrusions sit unexposed beneath the Ketza-Seagull Arch which may have provided the structural extension - uplift and heat source for driving the mineralizing fluids.

The Pinnacle occurrence consists of two occurrences/work areas, The eastern most one, (occurrence 105F074) is commonly referred to as the H-Zone, while the western most, (occurrence 105F074) is called Showing #3.

Abbott (1986) describes the western occurrence (Showing #3) as consisting of boulders of arsenopyrite, pyrite, quartz, and pyrrhotite, up to 30 cm across, ... exposed for 30 m along a creek bank. He also reports the existence of Cretaceous mafic dykes in the area. The boulders are located down slope to the west of the western most 'Pinnacle' showing. Noranda's drilling on the Peak #4 claim was designed to test geochemical and geophysical anomalies obtained in earlier surveys (Macdonald, 1978). The drilling revealed brecciated quartzite cemented with barite, quartz and calcite with minor galena, sphalerite and pyrite. Assays of the best mineralized material returned less than 32 g/t Ag and less than 1% Pb and Zn. Noranda's diamond drilling in 1979 and 1980 was located on the eastern most occurrence, the H-Zone. This occurrence is also referred to as the Hayden occurrence by Abbott (1986). It is described as consisting of partially oxidized float boulders up to 1m across containing pyrite, galena, and minor chalcopyrite, sphalerite, and tetrahedrite in a siderite and quartz matrix sitting on Silurian to Devonian dolomite. The drilling intersected carbonaceous shale, grey dolomite, and minor 'chert'. Holes 79-H-1 and 79-H-2 also intersected pyritic alkaline volcanic rocks and up to 10 metres of variably brecciated and mineralized 'chert'. DDH 79-H-2 returned as high as 4.98% Zn with 1.08% Pb over 5 feet. The sulphide mineralization is described as brecciated chert and chert breccia - disseminated, veined, bedded and massive sulphides - high Pb-Zn (10-15%) sections. DDH 80-7 intersected 1.5 m of up to 40% sulphides (pyrite, chalcopyrite, minor galena) hosted in quartz stringers cutting highly contorted shale (Macdonald, 1980). Trenching in frozen glacial till revealed nothing. Brett Resources (1996) cleaned out, mapped and sampled the trenches which comprise the H-Zone and reinterpreted previous Noranda drilling. The best results were returned from float boulders found at the H-Zone, which returned highs of 2.19% Cu, 26.13% Pb, 1.3% Zn and 744 g/t Ag.

Tulk and Tucker (1998), cited the presence of weakly mineralized felsic tuffs, flows and a possible coeval syenite body and barite +pyrrhotite mineralization as indications of potential VMS style mineralization, similar to the VMS type Wolf deposit (Minfile Occurrence #105G 008). Assay results from the main trench area located at the H-Zone yielded up to 34.06% Pb, 1.44% Zn and 611 g/t Ag from float samples. Soil samples over the H-Zone outlined a 200 m by 400 m coincident Pb-Zn-Cu-Mo over the main trench area. Rock sampling of massive arsenopyrite+pyrite+quartz, in an area of collapsed trenches, located at Showing #3, yielded up to 23.4 ppm Ag, 1.155 ppm Au and >10 000 ppm As.

References

ABBOTT, J.G., 1986. Epigenetic mineral deposits of the Ketza-Seagull district, Yukon; In: Yukon Geology, Vol. 1, Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, p.56-66.

BRETT RESOURCES INC, Feb/96. Assessment Report #093361 by E.G. Olfert.

BRETT RESOURCES INC, Oct/98. Assessment Report #093909 by L.A. Tulk and T.L. Tucker.

BRETT RESOURCES INC, Jan/2003. Web Site: www.bmts.bc.ca/brr/

FONSECA, ANA, 1998. Structural evolution of the Ketza River gold deposit. In: Yukon Exploration and Geology 1997, Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, p.77-81.

GEORGE CROSS NEWSLETTER, 18 Nov/86; 11 Sep/87.

MINERAL INDUSTRY REPORT 1976, p. 196; 1977, p. 84; 1978, p. 63.

NORANDA EXPLORATION COMPANY LIMITED, 1977. Assessment Report #090258 by B. Fairbank and L. Bradish.

NORANDA EXPLORATION COMPANY LIMITED, Nov/78. Assessment Report #091146 by G. MacDonald.

NORANDA EXPLORATION COMPANY LIMITED, Jan/80. Assessment Report #091147 by G. MacDonald.

NORANDA EXPLORATION COMPANY LIMITED, Jan/80. Assessment Report #090529 by G. MacDonald.

NORANDA EXPLORATION COMPANY LIMITED, Apr/80. Assessment Report #090572 by G. MacDonald.

NORANDA EXPLORATION COMPANY LIMITED, Jan/81. Assessment Report #090701 by G. MacDonald.

T. McCrory and Associates, Jan/88. Assessment Report *#092091 by G.S. Davidson.

Yukon Exploration 1987, p. 156, 162-163.

Work History

Date	Work Type	Comment
12/31/1998	Geochemistry	
12/31/1998	Geology	
12/31/1998	Other	
12/31/1995	Geology	
12/31/1995	Geochemistry	
12/31/1995	Other	
12/31/1995	Trenching	
12/31/1980	Drilling	Three holes, 273.
12/31/1980	Geology	
12/31/1980	Ground Geophysics	
12/31/1979	Drilling	Six holes, 466 m.
12/31/1979	Trenching	
12/31/1979	Trenching	
12/31/1979	Other	
12/31/1978	Drilling	Three holes, 89 m.
12/31/1977	Geology	
12/31/1977	Geochemistry	
12/31/1977	Geochemistry	
12/31/1977	Ground Geophysics	
12/31/1976	Geology	
12/31/1976	Geochemistry	
12/31/1976	Geochemistry	
12/31/1976	Ground Geophysics	

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
093909	1998	Assessment Report on Geological Mapping, Rock Sampling and Prospecting on the BRO Claims	Rock - Geochemistry, Bedrock Mapping - Geology		
093361	1995	Exploration Summary Report on the BRO Claims	Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Backhoe - Trenching		
092091	1987	Assessment Report, Whistler 1-8 Claims	Rock - Geochemistry, Bedrock Mapping - Geology, Backhoe - Trenching		
			Soil - Geochemistry, Bedrock Mapping - Geology, EM - Ground		

092096	1987	Geological, Geochemical & Geophysical Report on the Ram 1-178 & Mat 1-12 Mineral Claims	Soil - Geochemistry, Bedrock Mapping - Geology, EM - Ground Geophysics, IP - Ground Geophysics, Magnetics - Ground Geophysics		
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Related References

Number	Title	Page(s)	Reference Type	Document Type
ARMC019522	Yukon Minerals Corporation company brochure with maps, reports and news releases		Property File Collection	Miscellaneous Company Documents