Occurrence Details

Occurrence Number: 105G 133
Occurrence Name: Area 18
Occurrence Type: Hard-rock
Status: Prospect
Date printed: 6/15/2025 11:41:34 AM

General Information

Deposit Type(s): Volcanogenic Massive Sulphide (VMS) Kuroko Cu-Pb-Zn
Location(s): 61°32'12" N - -131°37'22" W
NTS Mapsheet(s): 105G12
Location Comments: .5 Kilometres
Hand Samples Available: No
Last Reviewed:

Capsule

Work History

In 1955 K.G. Sanders and J. Ryan of Newmont Mining Corporation of Canada Ltd discovered mineralized float in the area but did not stake the occurrence. The occurrence was staked within Hoo cl 1-123 (90072) in Jan/66 by Northlake Mines Ltd (a syndicate consisting of Augustus Exploration Ltd, Copper Ridge Mines Ltd, Silver Standard Mines Ltd, Transcontinental Resources Ltd, North Pacific Mines Ltd). In the spring of 1966, Northlake flew an airborne magnetic and EM survey over the area. Follow-up Ronka and Turam geophysical surveys located an EM conductor which the company tested with 4 drill holes (486.5 m of NX, AX and BX core).
Although other companies have explored in the immediate area, the actual occurrence has never been restaked. Please see Minfile Occurrence #105G 013 for related information.

Capsule Geology

Geological mapping (Murphy et al., 2001) shows the region is dominantly underlain by a layered sequence of Devonian to Early Mississippian metavolcanic and metasedimentary rocks belonging to the Yukon-Tanana Terrane (YTT). The YTT is a volcanic-plutonic pericratonic arc assemblage that was strongly deformed and metamorphosed by Late Triassic time. Volcanic-hosted massive sulphide deposits exist at different stratigraphic positions within the YTT.
The occurrence lies within an area mapped as Upper Devonian and Older(?) biotite-muscovite-feldspar-quartz schist and quartz-biotite-muscovite schist with minor marble and calc-schist (unit Dq). The Tintina Fault lies to the south.
The 1966 drilling program was centred on the southwest side of the Hoole River and tested an EM conductor. Results suggest that the probable cause of the conductor was carbonaceous schist (of probable Devonian to Mississippian age), containing minor pyrrhotite, pyrite and trace chalcopyrite (MacDonald, 1966). The carbonaceous schist outcrops in the area and is described as striking 50 degrees northeast and flat lying.
In general drilling intersected a sequence consisting of: pyritic carbonaceous schist; thick intersections of variably composed calcareous to silicified, quartz+/-chlorite+/-sericite+/-graphite+/- biotite schists; and, thin to thick intersections of gneissic rock of varying composition. All units contained varying amounts of fine grained pyrite and some of the chlorite schists contained minor amounts of chalcopyrite. Hole 2-18 appears to have intersected ultrabasic (ultramafic (?)) rocks overlying graphitic schist at the top of the hole. Hole 4-18 intersected 2.5 m of quartz-sericite-chlorite schist containing variable amounts of fine grained pyrite and arsenopyrite.

References

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HUNT, J.A., 2001. Volcanic-associated massive (VMS) mineralization in the Yukon-Tanana Terrane and coeval strata of the North American miogeocline, in the Yukon and adjacent areas. Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada, Bulletin 12, 107 p.

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MURPHY, D.C. AND PIERCEY, S.J., 2000. Syn-mineralization faults and their re-activation, Finlayson Lake massive sulphide district, Yukon-Tanana Terrane, southeastern Yukon. In: Yukon Exploration and Geology 1999, D.S. Emond and L.H. Weston (eds.), Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, p. 55-66.

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MURPHY, D.C., COLPRON, M., ROOTS, C.F., GORDEY, S.P. AND ABBOTT, J.G., 2002. Finlayson Lake Targeted Geoscience Initiative (southeastern Yukon) , Part 1: Bedrock geology. In: Yukon Exploration and Geology 2001, D.S. Emond, L.H. Weston and L.L. Lewis (eds.), Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada, p. 189-207.

NORTHLAKE MINES LTD, 1966. Assessment Report #019114 by A.J. MacDonald.

NORTHLAKE MINES LTD, 1966. Assessment Report #019117 by P.H. Sevensma.

NORTHLAKE MINES LTD, 1966. Assessment Report *#060253 by P.H. Sevensma.

NORTHLAKE MINES LTD, 1967. Assessment Report #060250 by P.H. Sevensma and R.T. Heard.

Work History

Date	Work Type	Comment
12/31/1966	Drilling	Four holes, 486.5 m.
12/31/1966	Airborne Geophysics	Also magnetic survey.
12/13/1966	Ground Geophysics	Ronka and Turam surveys.

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
060148	1972	Geology and Geochemistry, Hoo Occurrence	Silt - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology		
060250	1966	Geological, Geochemical, Geophysical & Physical Work Report on the Hoo, EL, Gee Leo, P.S., P.G., C.W. and Z Claim Groups	Electromagnetic - Airborne Geophysics, Magnetic - Airborne Geophysics, Diamond - Drilling, Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, EM - Ground Geophysics, Backhoe - Trenching	4	486.46
019114	1966	Report on the Hoo, EL, Gee Leo, P.S., P.G., C.W. and Z Group of Mineral Claim Groups	Electromagnetic - Airborne Geophysics, Magnetic - Airborne Geophysics, Diamond - Drilling, Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, EM - Ground Geophysics, Backhoe - Trenching	4	486.46
019117	1966	Report on Airborne Geophysical Survey	EM - Ground Geophysics, Magnetics - Ground Geophysics		

Related References

Number	Title	Page(s)	Reference Type	Document Type
ARMC008063	Pelly project economic geology map - Figure 16a		Property File Collection	Geoscience Map (Geological - Bedrock)
ARMC008066	Regional geochemical map - Copper, lead and zinc - Pelly project		Property File Collection	Geochemical Map
ARMC014107	Property submission - Memo and notes - Ho-Ho claim group - 105G/12 - Ref. 2066-CVL		Property File Collection	Report
ARMC016589	Geochemical map -105G/12 - Starr Creek		Property File Collection	Geochemical Map
ARMC016583	Geology map - 105G/12 - Star Creek		Property File Collection	Geoscience Map (Geological - Bedrock)