



Occurrence Details

Occurrence Number: 105G 140

Occurrence Name: Nad

Occurrence Type: Hard-rock

Status: Prospect

Date printed: 12/15/2025 1:07:14 PM

General Information

Secondary Commodities: copper, lead, silver, zinc

Deposit Type(s): Volcanogenic Massive Sulphide (VMS) Kuroko Cu-Pb-Zn

Location(s): 61°20'25" N - -130°7'45" W

NTS Mapsheet(s): 105G08

Location Comments: .5 Kilometres

Hand Samples Available: No

Last Reviewed:

Capsule

Work History

Staked as Nad cl 1-4 (YB47430) in Apr/94 by Cominco Ltd, to cover an airborne geophysical target. In Apr and May/94 Cominco staked Go cl 1-81 (YB47402) 5 km to the north, to cover additional targets. In Aug/94 the company staked Go cl 82-124 (YB52227). Later in the month Cominco staked Mony cl 147-348 (YB55437), (Minfile Occurrence 105G 081) in between the Go and Nad claim blocks. During the 1994 field season, Cominco carried out preliminary soil sampling, geological mapping and prospecting programs on the Nad and Go claims. In 1995 Cominco carried out detailed geological mapping and contour soil sampling on the Go claims and geological mapping, detailed soil sampling and ground HLEM and magnetic geophysical surveys on the Nad claims. In 1996 the company carried out further HLEM and magnetic surveys on the Nad claims, the results of which Cominco used to locate and drill 1 diamond drill hole (95.7m). In Jan/96 Expatriate Resources Ltd stake Offside cl 1-90 (YB71851) and Onside cl 1-43 (YB73842) to the west and northwest of the occurrence location marker and carried out geological mapping, prospecting and geochemical soil sampling later that year.

Capsule Geology

The Finlayson Lake district is underlain by the Yukon-Tanana Terrane: a Late Proterozoic to Paleozoic metamorphosed volcano-sedimentary assemblage. It is regionally bounded to the southwest by the Tintina Fault. This terrane hosts several known volcanogenic massive sulphide (VMS) deposits and occurrences, including Kudz Ze Kayah (Minfile Occurrence #105G 117), Wolverine (Minfile Occurrence #105G 072) and Ice (Minfile Occurrence #105G 118). Both claim groups lie within an area recently re-mapped in detail by Murphy and Piercey (1999) of the Yukon Geology Program. The Nad claims (this occurrence) are underlain by a layered sequence of felsic volcanic and interbedded metasedimentary rocks. Unit MK, Kudz Ze Kayah felsic metavolcanic unit, is the oldest unit exposed on the claim block. Cominco and Murphy and Piercey interpreted this unit as being similar in age and composition to that which hosts the Kudz Ze Kayah deposit (Minfile Occurrence #105G 0117). Unit MK is overlain to the east by a sequence consisting of unit CWcl, coarse feldspathic meta-sandstone and grit and unit CWq, quartz-feldspar augen phyllite, both of which are assigned to the Carboniferous, Wolverine Lake Succession. To the west, a Cretaceous granitic intrusion, intrudes unit MK. As Cominco's maps and reports do not mention the intrusion, it is likely the intrusion outcrops further west than Murphy and Piercey's map indicates.

The Go claims are located approximately 5 km south of Expatriate Resources Ltd's Wolverine deposit (Minfile Occurrence #105G 072). The claims are underlain by Carboniferous metamorphic rocks belonging to the Wolverine Lake Succession. The oldest exposed rocks belong to unit CWq, quartz-feldspar augen phyllite of felsic volcanic and subvolcanic intrusive protolith. It is overlain by unit CWcp, carbonaceous phyllite and quartz sandstone. Further, east off the claim block unit CWcp is overlain by unit CWt, thinly interbedded, massive to granular siliceous rock and light coloured phyllite (metatuff and exhalite). At the Wolverine deposit, massive sulphide mineralization occurs near the contact between units CWcp and CWt. A single line of soil samples (1994) collected on the Nad claims, downslope of pyritic felsic volcanics returned several coincident, weak to strong Zn and Pb anomalies with elevated Cu values. Rock samples from these outcrops returned no anomalous base or precious metal values. On the Go claims contour soil sampling along the western side of the claim block returned elevated Ag, Pb and Zn values downslope of interbedded, pyritic felsic volcanics and mudstones. A line of samples collected from the southeast side of the claims returned elevated to strongly anomalous Zn and Cu values from an area underlain by siltstone and mudstone.

In 1995 soil sampling on the Nad claims returned several samples coincidentally anomalous in Pb and Zn on the eastern half of the claims, where they overlie felsic volcanics. Ground HLEM and magnetic surveys outlined a weak narrow conductor and numerous magnetic features. On the Go claims, contour soil sampling along six lines returned moderately anomalous results for Pb and Zn. The elevated results were scattered throughout the claims.

In 1996 Cominco re-ran the HLEM survey conducted on the Nad claims, using wider line spacing in hope of better defining the conductor. Results indicated a second weaker conductor which distorted the main conductor. Cominco used the results to adjust the location of a planned drill hole. The hole intersected a layered, strongly foliated sequence of felsic metavolcanic and isoclinally folded metasedimentary rocks. Cominco reported a 20 cm thick band containing 80% sulphides including pyrrhotite-pyrite-marcasite-chalcocopyrite-sphalerite-magnetite which graded 2.6% Zn, 0.6% Cu, 0.3% Pb and 23.0 g/t Ag.

References

COMINCO LTD, Feb/96. Assessment Report #093336 by P.A. MacRobbie.

COMINCO LTD, Apr/96. Assessment Report #093402 by P.A. MacRobbie.

COMINCO LTD, Apr/97. Assessment Report #093613 by D.A. Senft.

EXPATRIATE RESOURCES LTD, Jun/1997. Assessment Report *#093683 by A. Burgert.

MINERAL INDUSTRY REPORT 1975, p. 166.

MURPHY, D.C. and PIERCEY, S.J., 1999. Geological map of parts of Finlayson Lake (105G/7, 8 and parts of 1, 2, and 9) and Frances Lake (parts of 105H/5 and 12) map areas, southeastern Yukon (1:100 000-scale). Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Open File 1999-4.

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.

Work History

Date	Work Type	Comment
12/31/1996	Drilling	One hole, 95.7 m.
12/31/1996	Ground Geophysics	Also HLEM survey.
12/31/1995	Geology	Geological mapping completed on Nad and Go claims.
12/31/1995	Geochemistry	Soil sampling completed on Nad and Go claims.
12/31/1995	Ground Geophysics	Also HLEM survey. Completed on Nad claims.
12/31/1994	Geology	
12/31/1994	Geochemistry	
12/31/1994	Other	

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
093762	1997	1997 Assessment Report Mony/Jays/Nad/Tua Properties Geologic Mapping, Prospecting, Diamond Drilling, Geochemical Sampling, Linecutting and Geophysics	Diamond - Drilling, Soil - Geochemistry, Bedrock Mapping - Geology, EM - Ground Geophysics, Gravity Survey - Ground Geophysics, Magnetism - Ground Geophysics, Line Cutting - Other	1	54.30
093584	1996	Dighem V Survey for Westmin Resources Limited Wolverine Lake Project Yukon	Electromagnetic - Airborne Geophysics, Magnetic - Airborne Geophysics		
093613	1996	1996 Assessment Report Mony and NAD Properties	Diamond - Drilling, Soil - Geochemistry, Bedrock Mapping - Geology, EM - Ground Geophysics, Gravity Survey - Ground Geophysics, Magnetism - Ground Geophysics, Line Cutting - Other, Prospecting - Other	1	95.70
093428	1995	1995 Assessment Report Mony Property Linecutting, Ground Geophysical Surveys (HLEM/MAG), Soil Geochemistry and Geological Mapping	Soil - Geochemistry, Bedrock Mapping - Geology, EM - Ground Geophysics, Magnetism - Ground Geophysics, Line Cutting - Other		
093427	1995	Geophysical Surveys on the Expo/Mony Claims of the Pelly Mtn Properties Watson Lake Mining District Yukon	EM - Ground Geophysics, Magnetism - Ground Geophysics		
093402	1995	1995 Assessment Report Go and Nad Properties Soil Geochemistry and Geological Mapping	Soil - Geochemistry, Bedrock Mapping - Geology		
093336	1994	1994 Assessment Report Go and Nad Properties Soil Geochemistry and Geological Mapping	Rock - Geochemistry, Soil - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Bedrock Mapping - Geology		