



Occurrence Details

Occurrence Number: 105L 063

Occurrence Name: Highway

Occurrence Type: Hard-rock

Status: Showing

Date printed: 5/31/2025 3:11:47 AM

General Information

Secondary Commodities: copper, gold, lead

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

Location(s): 62°11'31" N - -134°37'1" W

NTS Mapsheet(s): 105L02

Location Comments: .5 Kilometres

Hand Samples Available: No

Last Reviewed:

Capsule

Work History

In Nov/98 P. Andrietz staked VMS cl 1-4 (YC09162) 550 m to the west.

Staked as Nina cl 1-8 (YC09182) in Dec/98 by Copper Ridge Exploration Inc. The company staked Nina cl 9-18 (YC14619) in May/99 and carried out a reconnaissance scale rock, soil and silt sampling program later in the year.

The actual showing was discovered in 1999 by Maurice Colpron of the Yukon Geology Program.

Capsule Geology

The occurrence lies within the Little Salmon Range located southwest of the Tintina Fault, in the main body of the Yukon-Tanana Terrane. Detailed mapping in the Little Salmon Range completed in 1999 by Colpron of the Yukon Geology Program, shows that the Yukon-Tanana Terrane consists of coherent stratigraphic units that can be followed for tens of kilometres and that primary textures are commonly well preserved.

In the Little Salmon Lake area, geological mapping by Colpron shows that mid-Mississippian to early Pennsylvanian volcanic rocks of the Little Salmon volcanic succession (Colpron's unit 3, in earlier maps), unconformably overlie two distinct map units. To the east, the Little Salmon volcanic succession rests above the Drury assemblage (unit 1 in earlier maps), an arkosic grit and quartzite unit, which is intruded by an early Mississippian granodiorite. To the west, the volcanic rocks overlie a mixture of meta-sedimentary and meta-igneous rocks, the Snowcap assemblage (unit 2 in earlier maps), which record a poly-metamorphic history. These rocks are intruded by diorite plutons of the Tatmain/Little Salmon suite (ca. 340 Ma), which are likely subvolcanic to the Little Salmon volcanic succession. Accordingly, the Snowcap assemblage forms the basement onto which volcanic rocks of the Little Salmon volcanic succession were erupted.

The Little Salmon volcanic succession is dominated by volcanoclastic rocks (both epiclastic and tuffaceous). A prominent marble unit of Late Mississippian to early Pennsylvanian age occurs in the lower part of the Little Salmon volcanic succession. Dacite and quartz-feldspar porphyry, dated at ca. 340 Ma, mark the base of the sequence near Little Salmon Lake. The felsic volcanic unit hosts a small sulphide occurrence (Minfile Occurrence #105L 062, located 200 m to the east). Near Little Salmon Lake, volcanic rocks of the Little Salmon volcanic succession are typically of calc-alkaline composition; they record a second cycle of continental arc magmatism in the area. These rocks pass along strike to the northwest into a sequence of alkali basalt, which contains manganese exhalative rocks.

The occurrence occurs in a roadcut located on the north side of the Robert Campbell Highway, about 200 m west of Minfile Occurrence #105G 062. It consists of small veins of pyrite, generally less than 1 cm wide in an outcrop containing Snowcap assemblage black marble, unit PSbp and felsic schist, unit PSq. (Colpron's earlier preliminary map placed these units in the Little Salmon volcanic assemblage). These veins may be related to sulphide mineralization located 200 m to the east at Minfile Occurrence #105G 062. A sample collected from one of the pyrite veins returned anomalous concentrations for Cu (764 ppm), Pb (230 ppm), As (91 ppm) and Au (96 ppb). Mapping indicates that the felsic schist unit gets thicker to the northwest. No other sulphide occurrences were observed along the contact to the northwest, much of which is covered by overburden.

Copper Ridge personnel concentrated on prospecting the quartzite/ meta-rhyolite boundary associated with the mineralization observed at Minfile Occurrence #105L 062, located to the northeast. The company did collect silt samples from streams draining the marble/felsic schist unit associated with this occurrence but the samples failed to prove anomalous.

References

COLPRON, M., 1999a. A new mineral occurrence in Yukon-Tanana Terrane near Little Salmon Lake, central Yukon (NTS 105L/2). In Yukon Exploration and Geology 1998, C.F. Roots and D.S. Emond (eds.), Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, p. 255-258.

COLPRON, M., 1999b. Preliminary geological map of Little Salmon Range (parts of NTS 105L/1, 2 & 7), central Yukon. Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Open File 1999-2, 1:50 000 scale.

COLPRON, M., 2000. Geological map of Little Salmon Lake (parts of NTS 105L/1, 2 & 7), central Yukon (1:50 000 scale). Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Open File 2000-10.

COLPRON, M., AND REINECKE, M., 2000. Glenlyon project: Coherent stratigraphic succession of Yukon-Tanana Terrane in the Little Salmon Range, and its potential for volcanic-hosted massive sulphide deposits, central 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. 87-100.

COLPRON, M. AND YUKON-TANANA WORKING GROUP, 2001. Ancient Pacific Margin to An update on stratigraphic comparison of potential volcanogenic massive sulphide-hosting successions of Yukon-Tanana Terrane, northern British Columbia and Yukon. In: Yukon Exploration and Geology 2000, D.S. Emond and L.H. Weston (eds.), Exploration and Geological Services Division, Yukon Indian and Northern Affairs Canada, p. 97-110

COLPRON, M., 2001. Geochemical characterization of Carboniferous volcanic successions from Yukon-Tanana Terrane, Glenlyon map area (105L), central Yukon. In: Yukon Exploration and Geology 2000, D.S. Emond and L.H. Weston (eds.), Exploration and Geological Services Division, Yukon Indian and Northern Affairs Canada, p. 111-136.

COPPER RIDGE EXPLORATIONS INC. Feb/2000. Assessment Report #094085 by B. Kreft.

Work History		
Date	Work Type	Comment
12/31/1999	Geochemistry	
12/31/1999	Geology	
12/31/1999	Geochemistry	Program was reconnaissance in nature.
12/31/1999	Geochemistry	
12/31/1998	Geology	

Assessment Reports that overlap occurrence					
Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
094085	1999	Assessment Report for the Nina 1-18 Quartz Claims Little Salmon Lake Area	Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Prospecting - Other		