



## Occurrence Details

**Occurrence Number:** 105G 158

**Occurrence Name:** Gam

**Occurrence Type:** Hard-rock

**Status:** Showing

**Date printed:** 12/16/2025 12:11:09 PM

## General Information

**Primary Commodities:** magnesium

**Secondary Commodities:** chromium, gold, nickel

**Deposit Type(s):** Ultramafic - Nickel

**Location(s):** N - W

**NTS Mapsheet(s):** 105G11

**Location Comments:** Location from map in AR 095801

**Hand Samples Available:** No

**Last Reviewed:**

### Capsule

The Gam property is in Finlayson Lake district within an outlier of Yukon-Tanana and Slide Mountain terranes in southeastern Yukon. The district is bounded by the Tintina Fault to the southwest and the Inconnu Thrust Fault to the northeast.

The Yukon-Tanana and Slide Mountain terranes represent continental arc and back-arc basin sequences that developed along the ancient Pacific margin of North America during late Devonian through. The pericratonic rocks of the Yukon-Tanana Terrane and oceanic rocks of the Slide Mountain Terrane are juxtaposed against rocks of the North American continental margin sequence along the post-Late Triassic Inconnu Thrust Fault. Rocks of the Yukon-Tanana and Slide Mountain terranes in the Finlayson Lake district are characterized by variably deformed and metamorphosed, lower greenschist to amphibolite facies metasedimentary and metavolcanic rocks and affiliated metaplutonic suites.

Prior to the Late Triassic, the Yukon-Tanana Terrane experienced regional shortening and uplift. This terrane was imbricated with mid-Paleozoic Slide Mountain Terrane after the Late Triassic and the resultant structural stack was subsequently thrust onto the North American continental margin before the Mid-Cretaceous (Murphy et al., 2006).

During the Mesozoic era two types of intrusion were emplaced in the Finlayson Lake area. The first includes several unmetamorphosed Early Jurassic mafic and intermediate composition plutons. The second consists of Late Cretaceous two-mica quartz monzonite and granite (Mortensen and Jilson, 1985).

In the Gam property area, Yukon-Tanana Terrane is juxtaposed against an overlying klippe of Slide Mountain Terrane. Yukon-Tanana Terrane is represented by Devonian to Mississippian Nasina Assemblage metasedimentary rocks, while Carboniferous to Permian Slide Mountain Terrane is characterized by Anvil Assemblage (CPA) mafic volcanics and ultramafics. Both units, and their sub-units, are described in greater in detail in Table II.

The Gam showing is underlain by a basement of Nasina Assemblage metasedimentary rocks, which have been overthrust by mafic to ultramafic rocks of the Anvil Assemblage. Nasina Assemblage comprises black carbonaceous and/or siliceous argillites, quartzites, phyllite, quartz mica schist, limestone and greenstones. This unit is sporadically exposed on lower slopes.

The Anvil Assemblage klippe is separated from the underlying Nasina Assemblage by a thrust plane that occupies one or more undulating, generally horizontal horizons. Rocks along this plane are intensely sheared.

Anvil Assemblage consists of four sub-units: basalt, peridotite and dunite, serpentinite and listwaenite. The basalt lies at the top of the sequence and is dark green weathering, massive and resistant. It is underlain by discontinuous remnants of dunite and peridotite that are characteristically massive, dull red to brown weathering with dark green fresh surfaces. The ultramafic rocks overlie yellow to green, moderately resistant to recessive serpentinite, which is either massive or intensely sheared. Contacts between the serpentinite and ultramafic rocks are rarely exposed. Listwaenite is the basal sub-unit of the Anvil Assemblage. It weathers orange but fresh surfaces display a wide spectrum of colours in accordance with varying composition. These colours include green (fuchsite/mariposite, actinolite, and chlorite), greys, buffs and white (talc, carbonates, quartz). The listwaenite also shows a variety of textures, which reflect its complex history of deformation and brecciation. It commonly occurs along the base of the klippe, immediately above the fault plane. It generally forms lenticular to tabular bodies up to fifty metres thick and several hundreds of metres long.

The Gam magnesium occurrence is altered ultramafic rock which contained up to 18% magnesium.

### Work History

Date	Work Type	Comment
5/1/2011	Geochemistry	
5/1/2011	Geochemistry	
5/1/2011	Trenching	
5/1/2011	Other	
5/1/2004	Geochemistry	
5/1/2004	Geochemistry	
5/1/2004	Geochemistry	
5/1/2004	Other	
5/1/1996	Geochemistry	
5/1/1996	Ground Geophysics	
5/1/1996	Ground Geophysics	
5/1/1996	Geology	
5/1/1996	Other	
5/1/1988	Geochemistry	
5/1/1988	Geochemistry	

5/1/1988	Geology	
5/1/1988	Geology	
5/1/1988	Other	
5/1/1972	Geology	
5/1/1972	Geochemistry	
5/1/1972	Geochemistry	
5/1/1966	Geochemistry	
5/1/1966	Geology	
5/1/1966	Geochemistry	
5/1/1966	Geochemistry	
5/1/1960	Airborne Geophysics	

Related References				
Number	Title	Page(s)	Reference Type	Document Type
<a href="#">Contrib2006-5</a>	Mid-Paleozoic to early Mesozoic tectonostratigraphic evolution of Yukon-Tanana and Slide Mountain terranes and affiliated overlap assemblages, Finlayson Lake massive sulphide district, southeastern Yukon		Yukon Geological Survey	Contribution
<a href="#">04-075</a>	A Report of Prospecting and Geochemical Surveys Chris Property		Yukon Government: Energy, Mines and Resources	YMEP Report