

## **Occurrence Details**

Occurrence Number: 105C 066 Occurrence Name: Rosy-R4 Occurrence Type: Hard-rock Status: Showing Date printed: 6/16/2025 1:09:39 AM

## **General Information**

Primary Commodities: arsenic, copper, gold, silver Aliases: Rosy Deposit Type(s): Vein Polymetallic Ag-Pb-Zn+/-Au Location(s): N - W NTS Mapsheet(s): 105C13 Location Comments: Location from map in AR096955 Hand Samples Available: No Last Reviewed:

## Capsule

The regional geological setting of the Rosy property shows that it is underlain by metamorphic schist, gneiss, quartzite and marble that are believed to be Devonian or earlier in age. These units are intruded by Early Jurassic and Cretaceous plutons. The youngest rocks are a Late Cretaceous quartz monzonite stock and related miarolitic quartz-feldspar porphyry dykes.

The area is structurally complex with large faults that have juxtaposed various metamorphosed volcanic, sedimentary and intrusive rocks, belonging to the Yukon-Tanana, Slide Mountain, Cassiar, and Stikinia terranes. The main structural trend in the area is northerly to northwesterly. The Teslin Fault, a regional scale, post-accretionary, high angle structure is located about five kilometres southwest of the property. Northeast of the Teslin Fault units observed on the Rosy property are assigned to the Nasina Subterrane of the Yukon-Tanana Terrane, an unnamed amphibolite subterrane of the Slide Mountain Terrane and a suite of post-accretion plutons. Rocks southwest of the Teslin Fault are quite different from those on the northeast side and belong to the Whitehorse Trough, also of Stikinia Terrane.

On the property scale, it is predominantly underlain by weakly foliated metadiorite with lesser quartz-hornblende and quartz-feldspar-hornblende gneiss. A fault-bounded package of coarse grained, unfoliated, amphibolite occurs to the northeast and a wedge of massive marble belonging to the Nasina Assemblage occurs to the southeast.

The primary structural features on the property are a series of strong north-south trending linears and a less obvious, secondary set of northeast-southwest trending linears that cuts orthogonally across the main structural trend.

Numerous cream to pink weathering, quartz-feldspar porphyry dykes have been identified on the property. These dykes are generally less than 10 m thick and can be traced along strike for tens to a few hundred metres.

More than 35 quartz-carbonate veins have been mapped on the property. They occur with gouge zones, quartz-feldspar porphyry dykes and carbonate altered wallrocks, usually within the recessive linears. They are rarely seen in outcrop. Where the veins are exposed in bedrock, they are typically less than 80 cm wide and contain milky white to light grey, often chalcedonic, quartz. Carbonate normally occurs with the quartz. It weathers orange to red-brown and is likely a mixture of ankerite and dolomite. The veins often exhibit differential weathering that highlights delicate interbanding of quartz and carbonate. Most of the quartz-carbonate veins are hosted by the metadiorite and are surrounded by one to three metre wide alteration envelopes. These envelopes exhibit rusty weathering surfaces and pervasive yellow to green clay alteration.

The Rosy property hosts two main types of mineralization. The first occurs within quartz-carbonate veins and the second is found in altered intrusive rocks. The veins consists of pyrite, lesser arsenopyrite, and rare chalcopyrite. These sulphides typically total 1 to 10% of the veins. They occur as fine disseminations, blebs and stringers hosted in medium grey quartz. There is a weak positive correlation between the abundance of pyrite and that of arsenopyrite. Arsenopyrite and chalcopyrite abundance is also strongly correlated, but there is little apparent correlation between pyrite and chalcopyrite. On weathered surfaces, the primary sulphide minerals have been oxidized and leached to produce limonitic pits. Alteration envelopes peripheral to veins are generally riddled with white quartz veinlets. These quartz veinlets contain 1 to 5% sulphides, consisting of finely disseminated pyrite and arsenopyrite.

The second style of mineralization consists of disseminate, trace pyrite and rare arsenopyrite in the granodiorite.

The key mineral showings on the Rosy property include the R1-R4 veins and the A-D anomalies. R1 is a 15 to 20 m wide by 20 m long area of rusty orange soil containing quartz-carbonate vein float and minor amounts of altered intrusive rock. Quartz vein material is typically grey and has rare chalcedonic clots. Mineralization consists of finely disseminated pyrite and arsenopyrite, millimeter-scale stringers of arsenopyrite, minor pyrite cubes and rare limonitic pits. Samples of this vein material returned values ranging from 2.14 to 4.42 g/t gold while samples of altered intrusive rock hosting centimeter thick clear to white quartz veinlets with minor disseminated pyrite and trace disseminated arsenopyrite yielded 1.09 and 1.79 g/t gold.

## Work History

Date	Work Type	Comment
2/1/2009	Geochemistry	
2/1/2009	Geology	
2/1/2009	Geochemistry	
2/1/2008	Geochemistry	
2/1/2008	Geology	
2/1/2008	Geochemistry	
2/1/2008	Other	
2/1/1970	Geology	
2/1/1970	Geochemistry	
2/1/1969	Geochemistry	
2/1/1969	Geochemistry	

Number	Title	Page(s)	Reference Type	Document Type
02-086	Prospecting and Basic Exploration on Johnson's Crossing Regional PGE Project		Yukon Government: Energy, Mines and Resources	YMEP Report