

ROYALE GROUP
 Atlas Explorations Limited (40%)
 Dynasty Explorations Limited (60%)
 330 Marine Building, 355 Burrard Street
 Vancouver, British Columbia.

Copper, Zinc
 115 J 14, 15
 (62°47'N, 139°00'W).

Reference: Cairnes (1917).

Claims: ROYALE 1 to 66

Location and Access:

The property is in the Dawson Range on a ridge between the eastern headwaters of Coffee Creek and the western headwaters of Excelsior Creek, eight miles south of the abandoned settlement of Coffee Creek on the Yukon River 95 miles upstream from Dawson City.

Access to the claims was by helicopter during 1969 and 1970 with the men and supplies being flown by fixed-wing aircraft to the Casino, Raris and Uranus airstrips and then to the property.

History:

The Royale claims were staked in September 1969 on the basis of numerous pyritic and sericitic intrusions, observed during the 1969 helicopter geological reconnaissance program, and of an aeromagnetic high near the ridge.

Description:

Two subparallel northwest-trending pendants of coarsely to finely foliated high grade Yukon Group gneiss in the Klotassin Batholith occur in the western part of the claim group. The southern Yukon Group body is composed of granitic and granodioritic gneiss which, at the contact with the granodiorite, is brecciated and shows intense argillitic alteration but lacks sulphides. The second pendant, a wedge of fine grained laminated quartz-feldspar-biotite-hornblende gneiss, occurs in the northwest part

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of the claims and is cut by several intrusions. Pyrite, limonite and argillic alteration were observed in the gneiss at the contact with the Batholith.

The Late Cretaceous Klotassin granodiorite ranges in texture from a fine-grained equigranular phase to a medium-grained phase with coarse-grained euhedral hornblende prisms. The granodiorite grades to quartz monzonite and granite of similar texture to the west of the claims.

The granodiorite is intruded, in the north central part of the claim group, by a Tertiary granite stock at the extremity of a northwest trending dyke intruding the northeast edge of the northern Yukon Group pendant. The granite, sub-porphyrific with euhedral crystals of orthoclase up to $1\frac{1}{2}$ inches long, is cut by numerous aplite dykes and also occurs as dykes in the granodiorite along the stock boundaries. The granite-Yukon Group gneiss and granite-granodiorite contacts are intruded by large west to northwest trending Tertiary latite and dacite porphyry dykes.

Zones of alteration along the contacts of the granodiorite with the granite and gneiss are characterized by chalky feldspars, abundant quartz, abundant limonite, epidote and chlorite. Rocks are sheared and locally brecciated. Minor disseminated pyrite occurs in the gneiss and the dacite porphyry dykes.

Current Work and Results:

The preliminary geological mapping and soil sampling program, started in 1969 at the time of staking, was expanded in 1970 with a grid being cut. The geochemical survey indicated that the geographic distribution of the samples anomalous in copper and zinc is quite irregular with

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only a few weak and scattered anomalies. No anomalies were outlined near the zones of alteration at the contacts of the different rock units.