

GEOLOGY - GAL CLAIM GROUP IN VICINITY OF COINCIDENT AIRBORNE MAG-EM
ANOMALY

INTRODUCTION

Forty-four claims, situated approximately ten miles northwest of the Vangorda Mines Ltd. deposit, and immediately south of Rose Creek, were staked to cover a chain of low relief aeromagnetic anomalies. Dynasty Explorations Ltd. acquired these in April, 1965.

The area lies within the belt of low-grade metamorphic sediments which surround the Anvil Range batholith. In particular it lies along a contact of sericite-chlorite schist and greenstone which comprise Units 7 & 8 of the G.S.C. Tay River Geology, (Roddick and Green, 1961).

The writer and an assistant spent three days reconnoitering the Gal Claim Group plus the neighboring "Irish" Magnetic Anomaly as a preliminary to more advanced exploration. A restricted soil sampling programme and grid was completed on the Irish Anomaly.

CONCLUSIONS

- 1) The aeromagnetic "highs" appear to be caused by magnetite in greenstone-chlorite schist.
- 2) The aeromagnetic "lows" appear to be caused by relatively unaltered chloritic sericite schist, a common rock type of the Vangorda Area.
- 3) One small occurrence of chalcopyrite replacement in fractures is situated near the Irish anomaly.
- 4) No further work is recommended at present.

GEOLOGY

Calc-silicate hornfels underlies the area immediately adjacent to Rose Creek, forming bold outcrops and bluffs. The rock is variably dark grey to dark green, relatively coarse foliated, highly silicious, and very fine-equi-grained. Little alteration is present.

Alternating bands of chlorite schist, sericite schist, with limey lenses mark the transition of the hornfels to the grey sericite schist. One of the members in this sequence is very light, almost white, sericite schist which is discontinuous. Thickness is uncertain but relatively thin. A very limey section bordering the base of the sericite schist contains a small occurrence of chalcopyrite and pyrite which has probably replaced calcite in thin fractures. The lack of alteration suggests little metasomatic activity.

Sericite schist borders the north-eastern boundary of the claim group. Colour varies from medium to dark grey. It is fine-laminated, very fine-grained, soft or hard depending on the quartz content, and is frequently limey.

Greenstone and variety chlorite schist underlies most of the claim group, and with some selected specimens containing approximately 2% magnetite, could account for anomalies. Colour varies from a dark grey green in the chlorite schist to lighter mottled green in blocky greenstone.

STRUCTURE

Foliations are uniform, striking 90 to 120, and dipping 20 to 30 south. Only around an area of secondary folding on the eastern end of the group is there any complexity.