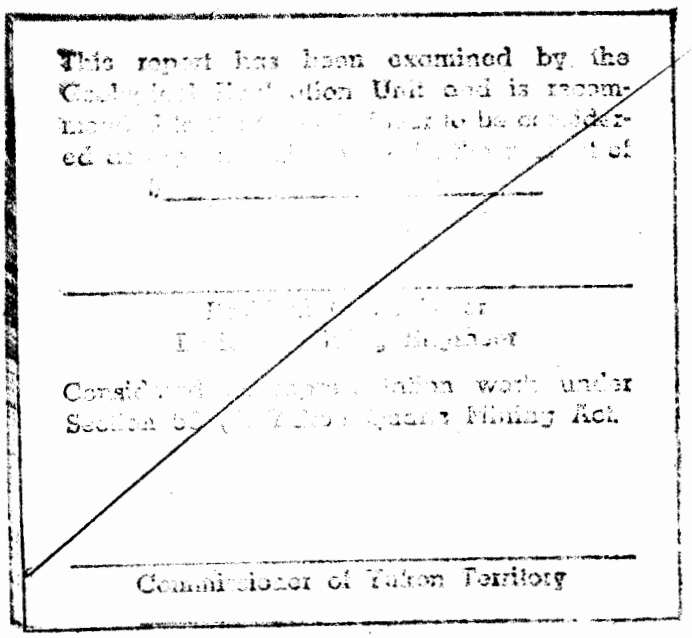
Photogeological Report
Canadian Creek Area
Yukon Territory

Prepared For

Newmar Explorations Ltd.

September, 1970



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Introduction

This report has been prepared at the request of Dr. W.R. Newman acting on behalf of Newmar Explorations Ltd. It consists of photogeological interpretation and map of the New claims located near the headwaters of Canadian Creek.

Claims	Registered Numbers
1 - 4	Y35946 - Y35949
23 - 38	Y35968 - Y35983
55 - 70	Y36000 - Y36015
89 - 102	Y36034 - Y36047

Geological data upon which this report is based have been obtained from interpretation of photographs:

A12069 (131 to 133)
A12105 (127 to 129)
A12110 (187 to 190)

These photographs are over 20 years old and their lack of definition make photo interpretation difficult. Reference material was obtained from publications of the Geologic Survey of Canada (Cairnes, 1916; Cockfield, 1921; and Bostock, 1936)

Location and Geomorphic Setting

The New claims are situated south of the Yukon River, near the headwaters of Canadian Creek. Canadian Creek is a tributary of Britannia Creek, and joins it from the southwest about 5 miles above its mouth.

The area lies within the Yukon Plateau physiographic province. Intersecting stream valleys have incised the gently undulating plateau to a depth of approximately 2000 feet. The main upland has an average elevation of between 3500 to 4000 feet but elevations in excess of 5000 feet are underlain by more resistent rocks in the southeast corner of the map area.

The Canadian Creek area shows no evidence of glaciation. The valleys are decidedly V-shaped and are considered in a youthful stage of geomorphic development. It must be pointed out, however, that two northward-facing bowl-like amphitheatres in the southwest corner of the map show effects of nivation produced by perennial snow banks during a periglacial environment.

Forest growth in the area is not especially heavy; north and east-facing slopes have a thicker forest growth than south and west-facing slopes. Of particular importance is that the light and dark strips composed of alternating vegetation types growing on steep slopes do not reflect bedrock control but instead indicate moisture differences in underlying scree and slide deposits.

Geology

According to Dr. Newman (personal communication), the New claims are underlain by grey quartz-feldspar-biotite granite. Dendritic and locally trellis drainage and irregular topography seen on the aerial photographs is typical of many terrains underlain by intrusive igneous rocks. Numerous widely-spaced fractures (joint) typical of many intrusive masses are conspicuous, although several different orientations of joints, found in most plutonic rocks are not prominent. The occurrence of trees and shrubs predominantly of one variety and lack of conspicuous preferred orientation of vegetation (with the exception of vegetation strips on steep slopes) is suggestive of uniform composition of bedrock throughout most of the map area.

Locally the rocks appear to be banded (gneissic) especially in claims 25, 26, 36, 38 and in the area one mile northeast of claim 90. The contact of granite and gneissic rock is inconspicuous and is largely transitional. The gross surface expression of the gneissic rock is similar to that of the granite, however, subdued very closely-spaced parallel ridges and depressions reflect the gneissic structure on the aerial photograph. Resistant, cliff-forming rocks that rise 500 to 800 feet above the surrounding terrain have been designated on the map.

Photogeological interpretation reveal conspicuous lineaments marked by dark-toned vegetation that occur on the New claims. These fault zones are more easily eroded than surrounding rock areas and probably have a concentration of moisture that supports vegetation growth. The general trend of faults in the map area is north to northwestward.

A major lineament extends 2½ miles from claim 2 northward to a point beyond claim 96. Since the trace of many of these faults is not appreciably affected by relief, the fault planes are considered nearly vertical. Photogeological evidence alone is not sufficient to indicate the direction of fault movement. On the other hand, if one considers only the difference in mean elevation on either side of the lineament then the higher areas on the west side of the faults may represent the upthrown side. Note the strong control of drainage by the faults in claims 59, 60, 96 and along the fault west of claims 69 and 70.

The drainage anomaly as well as the orientation of fractures and gneissic banding in the extreme northeast corner of the map area might be suggestive of a very local domal structure near the margin of the intrusive rocks.

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