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THE PL GROUP

MAGNETOMETER SURVEY

NICOLA M.D.

MERRITT, B. C.

LOCATION AND ACCESSIBILITY

INTRODUCTION

The PL group is located west of Merritt in
south central British Columbia.

From May 12 to July 16, 1958 a magnetometer survey was
conducted over the PL group of mineral claims under the direction
of the writer. The field party consisted of the writer, Shigeo
Saimoto, P. Eng. (Engineering Physics), H. Shuttleworth, J. Tofin,
W. Sommerville, J. Young, A. Bara, and P. Allen.

A camp was set up on Petit Creek and later moved to the
Peters' farm at Lower Nicola.

Along with the necessary camp and field equipment a Wilde
transit was used, a Sharpe D-1-M magnetometer, and a Radar magne-
tometer. The claims area is traversed by the highway and numerous
logging roads, hence it is possible to travel by truck over the
property, and a Land Rover and Jeep Station Wagon were used for
this purpose.

The object of the survey was to investigate the property
systematically with a magnetometer in order that any variance from
the normal magnetic field could be detected and mapped. Such

anomalous zones indicate the presence of magnetic iron mineralization, and in the Merritt area are known to contain copper and other valuable metals.

The PL group is covered by the following surveys which are shown on a map under the Mineral Act of British Columbia, and also shown on U.S. Department of Interior Mineral Claims Map of 1911.

LOCATION AND ACCESSIBILITY

The PL group is located seven miles west of Merritt in south central British Columbia. The Spences Bridge - Merritt highway passes over the southern portion of the property. Canford is located near the southwest corner and Lower Nicola near the southeast corner of the claims group. The Kettle Valley branch of the C.P.R. traverses the Nicola Valley along the south boundary of the property. It is a six to seven hour drive from Vancouver to Merritt. Numerous secondary roads extend from the main highway over the property, many having been constructed by the Canford Sawmills Company who have logged the area.

The PL group extends from the broad valley of the Nicola River northward up and over the southeast flank of the Merritt hills. The Nicola Valley is 4000 feet at its widest, and the highest point on the PL claims near the north boundary is 3000 feet above sea level.

weathering. Near the northeast corner of the property the south side of a prominent hill is composed of steep inaccessible rock bluffs. Similar nearly vertical rock bluffs are located near the southwest corner of the claims area along the north bank of the Nicola River. Elsewhere the property is park-like, and broken only in a few places by small gullies, one of which is occupied by a small creek. Exposures of bedrock are numerous, and overburden thin, over most of the area.

to be located on a rising and continuous stream bank in Nicola valley, however, and this case appears to be the weathered continuation of a similar one located at GEOLOGY

Coyle

Granitic rocks of the Guichon Creek batholith predominate on the PL claims area. These lower Jurassic intrusions are overlain by andesitic, tuffaceous and agglomeratic rocks of the Upper Triassic Nicola group, which near the east boundary of the property are in turn overlain by basaltic and tuffaceous rocks of the Lower Cretaceous Kingsvale group.

The granitic rocks of the Guichon Creek batholith are chiefly quartz diorite and granodiorite on the map area. Altered and brecciated zones contain noticeably more pink feldspar and abundant epidote. Numerous aplitic dykes intrude the older rock.

The Nicola group rock in the area is wholly dark green andesite, in places amygdaloidal. The sheared and brecciated zones are characterized by abundance of micaceous minerals and brown

weathering. The western part of the property is underlain mostly by Nicola andesite. The Kingsvale volcanic rocks are characterized by the light colour and rough weathering. Near the southeast corner of the property, on the highway, cliffs of Kingsvale tuffaceous rock are conspicuously displayed.

Except for local sheared and brecciated zones there is little structure evident on the property. Anomaly number one appears to be located on a strong and continuous shear zone in Nicola andesite, however, and this zone appears to be the southwesterly extension of a similar one located on claims adjoining the PL group on the north.

One highly sheared zone near the southwest corner of the property weathers light brown. Iron stain and minor copper stain are evident, and one small open cut has been excavated thereon.

Anomalous magnetic zones have been indicated by the magnetometer. It is known that these contain magnetic iron minerals, and it is possible that other valuable minerals may be found associated with the iron mineralization.

MAGNETOMETER SURVEY

The magnetometer survey was carried out on a grid pattern tied to a base line which was tied to surveyed corner posts of Land Lots. The base line was accurately laid out by chain and transit in an east-west direction near the southerly location line, not far