92I/3W
92I/5W-57

011018

To: Burlington Mines Ltd.

From: Western Geological Services Ltd.

Re: Pika (M.L.) Option -- Magnetometer and Geochemical Survey
(↑ owner)

Introduction

During the latter part of June 1969, approximately 20 line miles of magnetometer and geochemical surveys were completed on the Pika Option. The work was carried out by staff of Western Geological Services Ltd., Vancouver, at the request of Mr. R. Sostad of Burlington Mines Ltd. (N.P.L.)

Because of the time requirements for the survey, 3 fluxgate magnetometers were used. Considerable care was taken in establishing and using control stations for reduction of magnetic data.

The magnetometer and soil geochemical survey were carried out jointly by 2 man parties along chain and compass flagged lines spaced 400 feet apart. The lines were oriented N60°E and ran 3000 feet on either side of the base line. Magnetic readings were taken at 100 foot intervals and the soil samples at 200 foot intervals. At some locations, soil samples were omitted due to poor or no soil development. The soils represent the top of the "B" horizon where possible and were analysed for copper by atomic absorption.

The paragraphs which follow are a brief description of the technical data.

Discussion

Magnetometer Survey

Although no formal geological mapping programme was undertaken the area covered by the survey is known to be underlain by diorite rocks of the Lytton Batholith. This is supported by the magnetic data which is relatively uniform over the area.

The map area can be separated into two parts which reflect local bedrock conditions. The two areas are separated by a line which runs approximately N45°W through a point approximately 8+00N on the base line. To the north east, the block is characterized by a low to moderate density of contours with a generally high average field. This area is underlain by relatively fresh diorite to quartz diorite rocks. Jointing is wide spaced and minor alteration is restricted to chloritization of the ferromagnesian minerals.

On the south west, the magnetics are characterized by a lower uniform field with a low density of contours. From the brief examination of the rocks in the area, the slightly different magnetic character would not appear to

be due to a more acid phase of the intrusive. The lower average field with low relief is interpreted as being entirely related to alteration. The rocks in this area where exposed are well altered and sheared diorites intruded by pegmatite dykes and in one locality wide lenses of mineralized quartz. The magnetic trends in the claim are approximately parallel to the apparent trend of the zone of altered rocks and the dominant direction of shearing (north west).

Geochemical Survey

The soil sampling consisted of taking inorganic samples from the top of the "B" horizon (at a depth of 8 - 10 inches) using a soil auger. The samples were placed in wet strength kraft bags and sent to T.S.L. laboratories for analysis. The samples were assayed for copper by the atomic absorption method.

The accompanying map drawn on a scale of 1" - 400' shows a plot of the assay values in parts per million copper.

Anomalous values were taken to be 40 parts per million or greater. Aside from scattered, erratic anomalous values, the only definitely anomalous area is the one bounded by 16+00a, 12+00E, L 0+00 and L 16+00N. The peak values occur on the steep slope in the area of the principle showing west of the base line. The values decrease rapidly

down slope to the "grid east" and these lower but anomalous values would appear to be caused by contamination from the showings. A number of high values occur on the road near line 12+00N between the base line and 8+00W. These appear to be related to small local occurrences of malachite in shear zones exposed by the access road between the camp and the drill sight. It is interesting to note that the scattered weakly anomalous values to the "grid south" are vaguely alligned along the zone of alteration inferred from the magnetic data. These local erratic values may be due to small copper occurrences similar to those encountered on the access road to the main showing.

Lines to the west of the base line and south of line 0+00 could not be traversed because of the precipitous nature of the terraine.

Summary

Approximately 20 line miles of magnetometer and geochemical surveys were completed on the Pika Option during June 1969.

A broad zone of more intense alteration was outlined in part by the magnetometer survey.

Other than isolated scattered anomalies, the only geochemical anomaly of significance is one related to

the main showing. The broad weakly anomalous area down slope from the main showing appears to be due to contamination from the main showing.

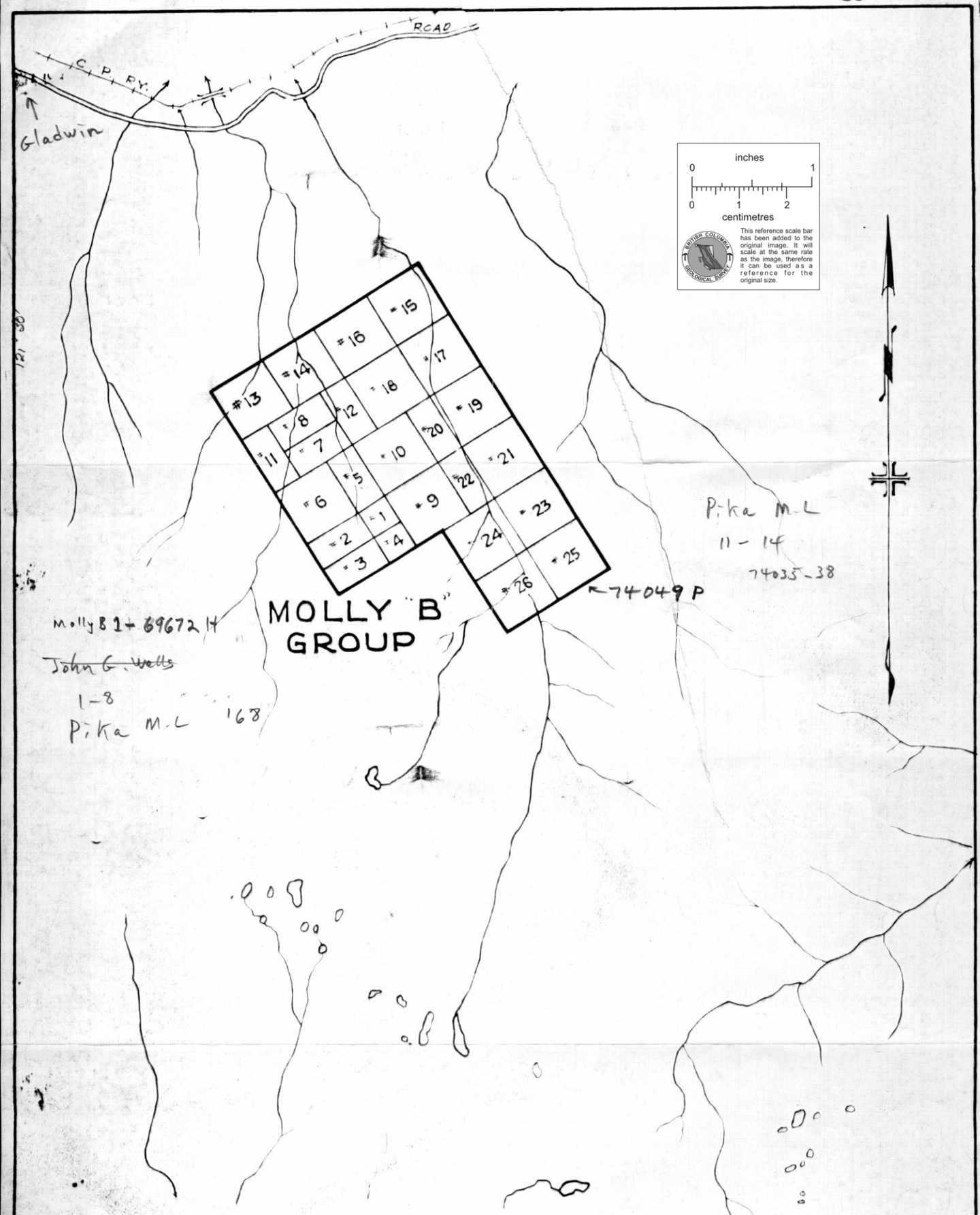
Wm. Meyer

Wm. Meyer

92I/3W

50° 121° SE

50°15'



BURLINGTON MINES LTD. (N.P.L.)

THE MOLLY "B" GROUP

GLADWIN, B.C.

KAMLOOPS MINING DIVISION

B. C.

Scale 0 1500 3000 Feet.