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TELEPHONE MUTUAL 4-7734

616 CREDIT FONCIER BLDG.
850 WEST HASTINGS STREET
VANCOUVER 1, B.C.

1707^c
PART 3

GEOCHEMICAL REPORT

on the

LEX-B GROUP of MINERAL CLAIMS

FOUR MILES SOUTH of GREENWOOD, B.C.

49° 118° S. *E.W*

FIELD WORK DONE FOR

LEXINGTON MINES LTD.

between

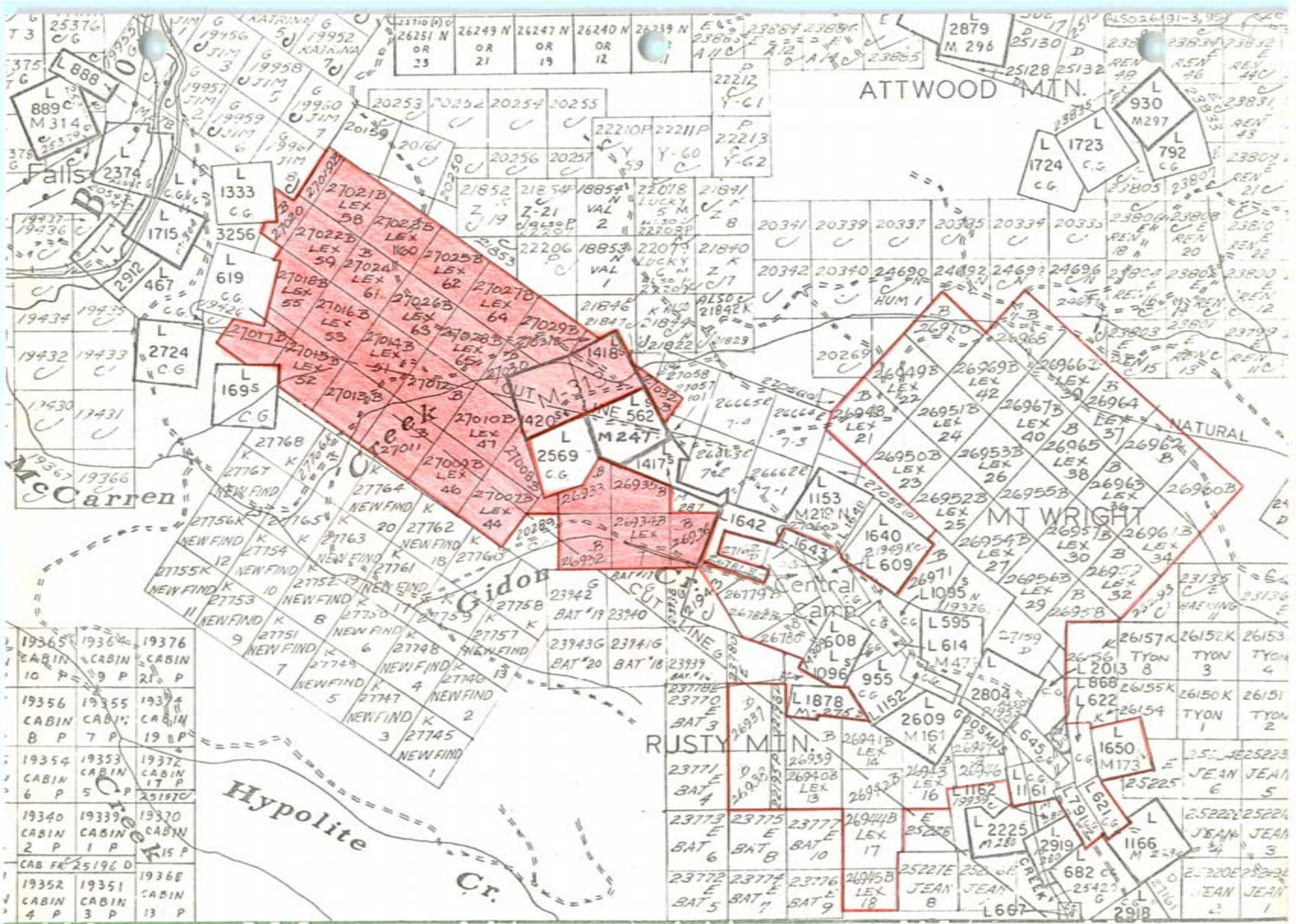
APRIL 25 - AUGUST 15, 1968.

by

F.J. HEMSWORTH, P.ENG.

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International Boundary

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REPORT
on the
GEOCHEMICAL SURVEY
of the
Lex-B Group
LEXINGTON MINES LTD.
GREENWOOD, B.C.

INTRODUCTION

A geochemical survey for copper was carried out on the Lex-B group of mineral claims for Lexington Mines Ltd., during the 1968 field season. The company retained the writer to supervise the field work and to prepare the maps and reports on the survey.

Geochemistry or soil sampling was done as part of an exploration program aimed at finding bodies of copper mineralization. It was planned to conduct an induced polarization survey over the more favorable areas based on the results of the geochemical survey.

All the samples were analysed for parts per million of copper by Coast Eldridge Laboratories using an atomic absorption spectrophotometer.

This report on the soil testing survey, and the accompanying map, are submitted in compliance with the Mineral Act, claiming geochemical work for assessment purposes on the group of claims outlined in the text of the report.

LOCATION

The Lexington Mines property is situated at the headwaters of McCarren creek, between one and three miles east of Boundary Falls, B.C. The Lex-B group of claims are at an elevation of between 3,000-4,000 feet above sea level. Logging roads provide access to all sections of the property. The geographical position is Latitude 49°02' North, Longitude 118°40' West.

PROPERTY

Particulars of the claims are as follows:

<u>LOCATED CLAIMS</u>	<u>RECORD NOS.</u>
Lex 5-9	26932-26936
Lex 44-68	27007-27031
Lex 70	27032
<u>CROWN GRANTS</u>	<u>LOT NOS.</u>
55	1420 (M-313)
66	1418 (M-313)

All claims are contiguous and are situated in the Greenwood Mining Division.

The old survey posts of Lot 1418s and Lot 1420s, held by Lexington Mines under Mineral Lease M-313, were not found, and their position is not shown on the plan. Similarly the posts for Lot 2569, Lot 562 and Lot 1417s, not held by the Company, were not found, and consequently could not be shown on the plan. However, it is considered that these old crown-grants are situated in the middle of the Lex-B group and are totally encompassed by the Lex claims.

GEOLOGY

Argillaceous sediments and volcanics have been intruded by bands of serpentine and stocks of granodiorite along a northwest strike.

There are two types of mineralization, quartz-talc veins, containing precious metals, which occur along contacts of serpentine and granodiorite, and disseminations of copper and iron sulphides which occur in dacite and in the serpentine close to the dacite contacts.

GEOCHEMICAL SURVEY

Survey of Claims and Grid

The location lines of the claims, which run in an east-west direction, were cut out and surveyed with Brunton compass and chain. Survey stations were established at 200-foot intervals along these baselines. At each station, sidelines were run north and south to the property boundaries. Soil samples were taken at 200-foot intervals along these north-south sidelines, and marked with flagging tape on which was printed the station number. The grid thus formed had 200-200 foot intervals as shown on the geochemical plan which accompanies this report.

Soil Sampling Method

At the sample intervals (200 feet) a hole was dug with a garden trowel. The hole was deep enough to get below the surface humus, and to reach the top of a layer of gray clay soil (A3 horizon). This horizon was usually at a depth of six to twelve inches. Extraneous material, such as pieces of root or bark, and small stones, were picked out. About 200 grams of soil was placed in a small bag, and labelled with the station number. At the completion of the job, all the samples were brought to Vancouver, and delivered to Coast Eldridge Laboratories for analyses in parts per million of copper by hot acid extraction and atomic absorption.

Interpretation

A plan of the claims, on a scale of 300 feet to one inch, showing the results of the geochemical analyses is contained in the report envelope. A total of 1,198 samples were taken and the analyses in parts per million of copper are shown on the plan.


The results were generally low, the background count averaging 10 parts per million. Samples containing over two times the background count are considered slightly anomalous, while samples containing over four times the background are anomalous. Consequently, areas containing 21-39 ppm are colored green on the map, and areas containing more than four times the background are colored blue.

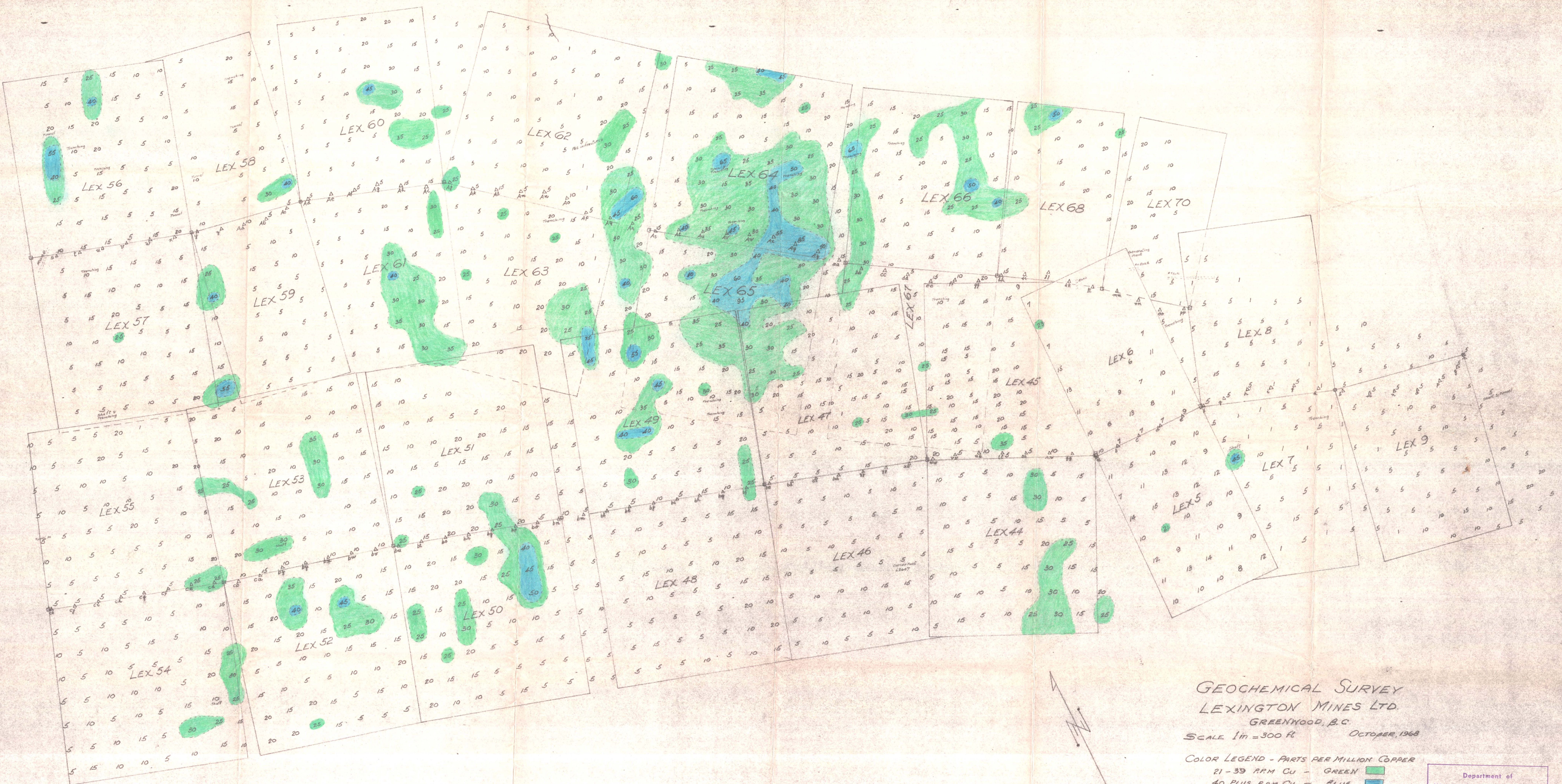
Examination of the colored plan shows the largest concentration of higher readings on Lex 64 and Lex 65 claims, with smaller anomalies on Lex 50, 56, 59, 62 and 63.

To determine the significance of these geochemical anomalies it is recommended that an I.P. survey be conducted on Lines Ar, At, Av, Ax, and Aq, for 1,500 feet north and south of the location line.

Respectfully submitted,

November 6, 1968.


F. J. Hemsworth, P. Eng.,
Consulting Mining Engineer.



GEOCHEMICAL SURVEY
 LEXINGTON MINES LTD.
 GREENWOOD, B.C.
 SCALE 1 in = 300 ft OCTOBER, 1968

COLOR LEGEND - PARTS PER MILLION COPPER
 21-39 PPM CU - GREEN
 40 PLUS PPM CU - BLUE
 BACKGROUND AVERAGE 10 PPM COPPER

Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 1707 MAP 1
 PART 3

TO ACCOMPANY REPORT OF J. J. Hensworth PENG

1707