EXTENTION OF GEOCHEMICAL SURVEY OF AREA "I" FRASER LAKE, B.C.

BARRINGER RESEARCH LIMITED
TORONTO, CANADA

EXTENTION OF GEOCHEMICAL SURVEY OF AREA "I" FRASER LAKE, B.C.

93 K 2

PREPARED FOR:

CYPRUS EXPLORATION CORP. LIMITED

510 W. HASTINGS STREET

VANCOUVER, B.C.

PREPARED BY:

BARRINGER RESEARCH LIMITED

304 CARLINGVIEW DRIVE

REXDALE, ONTARIO.

OCTOBER 1969

TABLE OF CONTENTS

LIST OF DRAWINGS

Dwg. No.	Title	Scale
4-118-7R	Geochemical Stream Sediment Survey Copper	1" = 2640'
4-118-8R	Geochemical Stream Sediment Survey Molybdenum	1" = 2640'
4-118-9R	Geochemical Stream Sediment Survey	1" = 2640'

INTRODUCTION

Following the initially encouraging stream sediment results in area "I", the survey was continued to the south-west in order to close off a fairly extensive molybdenum and copper anomaly. The topography, stream sediment developments and soil profile are described in the initial report (July 1969). The maps included here (4-118-7 to 9 revised) replace the maps with the initial report which may be discarded.

Access to this area was moderate to good, but no reliable aerial photographs or topographic maps were available and considerable difficulty was encountered in locating the sample points on the ground. Although the sample positions along any one stream are correct relative to each other, there may be errors between streams and these should be kept in mind when making an assessment of the results. The base map used during this survey was one produced by Alrae Engineering Limited and was taken from the photo mosaic used during the sampling. However a number of the streams shown on the map could not be found on the ground and at least in one location a feature marked as a stream was an old road. In addition, local swamps prevented collection of sediment in several locations. These features are marked on the sample location map in the back pocket.

RESULTS

The molybdenum and copper results and sample locations for the initial survey as well as the present extention of that survey are shown together in the maps in the back pocket. The present results fully corroborate the findings of the initial survey and show an extensive molybdenum-copper anomaly in the north-west corner of the map area. Both the molybdenum and copper results are generally co-incident, although in detail they do not follow each other exactly. This generally anomalous area can be broken down into 3 more or less isolated anomalies as follows:-

Sample numbers 1002 to 1006 show a classical "cut-off" pattern for copper, with no supporting molybdenum anomaly. This feature indicates that there is a source of

copper somewhere between sample numbers 1005 and 1002 or 3. However, the stream to the west shows no anomalous values for copper and the streams to the east, although slightly further away, show only sporatic values for copper. It is thought that this anomaly is due to a local feature of little economic significance.

The series of tributaries draining to the east, forming part of the Foster Lake drainage system show a series of erratic copper and molybdenum highs. There is generally only a poor correlation between molybdenum and copper and the erratic nature of these anomalies is consistent with an interpretation of an altered rock with scattered disseminated mineralization. On the basis of the present geochemical evidence, this ground is thought to be of only limited economic potential.

The streams draining to the south in the south and south-west corner of the map area and the streams draining to the north into Mud Hole Lake present a very extensive and extremely well developed co-incident copper and molybdenum anomaly. The area of maximum interest can be represented by a polygon joining samples 554, 515, 530, 527, 1007 and back to 554. Unfortunately the drainage in the area is poorly developed and this anomaly could not be defined further by the use of stream sediments. The area represented by this anomaly is approximately 3 miles by 2 miles, and when investigated further may well not be a single anomaly but several separate ones.

CONCLUSIONS AND RECOMMENDATIONS

On the basis of the present results a very extensive stream sediment copper and molybdenum anomaly indicate an area, approximately 3 miles by 2 miles, to be of strong economic interest. In addition, several sporatic anomalies are co-incident with the edge of this broad high, but on the basis of the geochemical results would appear to be of only minor interest.

It is recommended that an initial geological appraisal be made of the area indicated by the geochemistry. If this geological investigation is encouraging geophysical and geochemical follow-up should be considered for the whole area of maximum interest,

(approximately 6 square miles). The geochemical follow-up should consist of the soil sampling (B horizon), on a regular grid with lines every thousand feet and samples collected every 200 feet along these lines. This interval is considered adequate for an initial appraisal of this area and in this way the most encouraging zone could be covered with approximately 750 samples. More detailed soil sampling could be used in warranted. The samples should be analyzed for total molybdenum and copper.

BARRINGER RESEARCH LIMITED

Peter M. D. Bradshaw

PMDB:lh

Peter M. D. Bradshaw
Chief Geochemist

Dwg. No. 4-118-7R

Fraser Lake

Fraser Lake

C. N. R.

16

Seas Lake

Drywilliam Lake

C. N. R.

Mudhole L.

Foster L.

Klotz L.

Rock L.

Chowsunkut L.

NOT FOUND

ROAD

NO SEDIMENT

NOT FOUND

NOT FOUND

N

A

LEGEND

COPPER – ppm.

Background	0–15
Threshold	15
3rd. Order Anomaly	16–30
2nd. " "	31–45
1st. " "	>45

/2 Sample value

Work undertaken by
BARRINGER RESEARCH LTD, Toronto, Canada.

inches
0 1 2
0 1 2 3 4 5
centimetres

BRITISH COLUMBIA GEOLOGICAL SURVEY

This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

CYPRUS EXPLORATION CORPORATION LTD.

FRASER LAKE, AREA "I"

GEOCHEMICAL STREAM SEDIMENT SURVEY
COPPER

OCT. 1969 | Scale 1"=2640' | DWG. 4-118-7 R.

Dwg. No. 4-118-8R

N

A

LEGEND

MOLYBDENUM - ppm.

Background	0 - 8
Threshold	8
3rd. Order Anomaly	9 - 16
2nd. " "	17 - 24
Ist. " "	> 24

2 Sample value

Work undertaken by
BARRINGER RESEARCH LTD, Toronto, Canada.

CYPRUS EXPLORATION CORPORATION LTD.

FRASER LAKE, AREA "I"

GEOCHEMICAL STREAM SEDIMENT SURVEY
MOLYBDENUM

OCT. 1969	Scale 1" = 2640'	DWG. 4-118-8 R.

Dwg.No. 4-118-9R

Sample Location

CYPRUS EXPLORATION CORPORATION LTD.

FRASER LAKE, AREA "I"

GEOCHEMICAL STREAM SEDIMENT SURVEY

Work undertaken by BARRINGER RESEARCH LTD, Toronto, Canada.

OCT. 1969	Scale 1" = 2640'	DWG. 4-118-9R.