

2316

GEOCHEMICAL REPORT  
B.C. CLAIMS, BARNARD CREEK  
3 MILES S.E. OF ASHCROFT, B. C.  
50° 121°  
FOR

CROYDON MINES LTD. (N.P.L.)  
SEPTEMBER 16 - OCTOBER 29, 1969

92I/11E

- NO DEPOSIT  
- PLOTTED

J. W. Hogan, P.Eng.  
L. J. Manning & Associates Ltd.  
610 - 890 West Pender Street  
Vancouver 1, B. C.

April 13, 1970

TABLE OF CONTENTS

|   |           |
|---|-----------|
| Introduction  | Page 1    |
| General Geology and Topography  | Page 1    |
| Sampled Soil Horizon  | Page 1    |
| Sampling Procedure  | Page 1    |
| Sample Preparation and Laboratory Analysis                                  | Page 2    |
| Summary and Conclusions   | Page 2    |
| <br>  |           |
| # 1 Geochemical Plan - Scale 1" = 600'                                      | In Pocket |
| # 2 Location of Lines with Respect to<br>Claim Boundaries - Scale 1" = 600' | In Pocket |

Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. **2316** MAP

# L. J. MANNING & ASSOCIATES LTD.

CONSULTING MINING ENGINEERS

610-890 WEST PENDER STREET

VANCOUVER 1, B.C.

OFFICE PHONE:  
683-5861

RESIDENTIAL PHONE:  
L. J. MANNING - 985-5690

## INTRODUCTION

The following report is on a Geochemical Soil Survey over the B.C. Group of Claims, Barnard Creek Area, Highland Valley, B. C.

## GENERAL GEOLOGY AND TOPOGRAPHY

The west half of the property is underlain by the Hybrid Phase of the Guichon Batholith, with the extreme west edge covering the post-intrusive Guichon contact. The east end of the property overlies the pre-intrusive Nicola Group.

Topography is of flat to moderate relief.

## SAMPLED SOIL HORIZON

Soils were taken from the "B" Horizon. In general, the "A<sub>1</sub>" (Humus) horizon was 1"-3" thick, while the "A<sub>2</sub>" leached horizon was from 0"-4" thick.

## SAMPLING PROCEDURE

Samples were taken on a line grid basis. This grid was at a 400' line interval on 200' stations. A shovel or mattock was used to reach the "B" horizon where a 30-40 gram sample was placed in a standard 4" x 9" soil sample envelope. Drainage slope, swamp, etc. were marked on the envelope with the corresponding grid location.

Samples were partially air dried, and all information on the envelopes was transferred to record sheets. Samples were then shipped to Bondar-Clegg, North Vancouver, B.C.

SAMPLE PREPARATION AND LABORATORY ANALYSIS

Bondar-Clegg treated the samples in the following manner:

- Drying
- Visual examination for soil horizon, color texture and organic content
- Sieve to -30 mesh fraction
- Hot extraction by  $\text{HNO}_3\text{-HCl}$
- Atomic absorption analysis for copper Parts Per Million

SUMMARY AND CONCLUSIONS

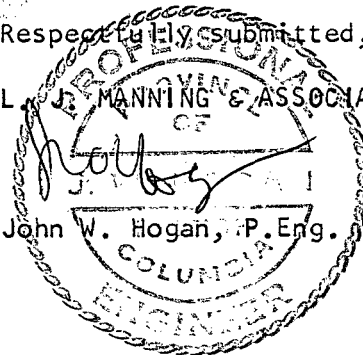
The laboratory determination of organic content of samples eliminated the spurious anomalies resulting from incorrect sampling of the "A" Horizon. The results of these organic samples are shown on the enclosed plan but the analysis were not used for determining threshold values. Threshold values were taken as double the median (range of double minus 5 p.p.m.).

An anomalous zone in copper is centered at line 0-40W. Field observations indicated that this zone is possibly due to drainage from an outcrop area which contains traces of chalcopyrite in "Hybrid" quartz diorite.

Respectfully submitted,

L. J. MANNING & ASSOCIATES LTD.

John W. Hogan, P. Eng.



JWH:mjb

Ashtons Rd. 9 mi.  
Highland Valley Road

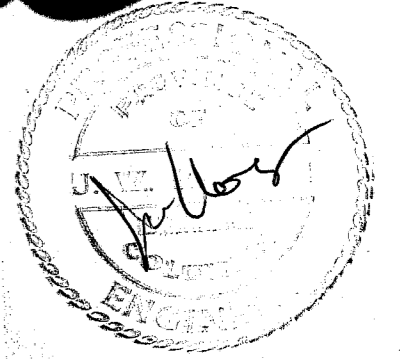
50° 39'  
APPROXIMATE  
CO-ORDINATE



BC 1-36  
GC 63-68  
81, 82

7100  
2100 → 8100

2316



SCALE: 1" = 600'  
600 300 0 600 FT.

Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 2316 MAP #2

"BC" GROUP  
CROYDON MINES LIMITED.  
BARNARD CREEK PROPERTY,  
HIGHLAND VALLEY, B.C.

TO ACCOMPANY GEOCHEMICAL REPORT BY J. HOEHN, P. ENG.  
ON THE "BC" GROUP, BARNARD CREEK, HIGHLAND VALLEY MINING DIVISION  
DATED APRIL 13/70

FILE No. 92-I-11, Roll  
Drg. No. 1

Ref map 92I/11E  
SEPTEMBER, 1969.

50°39'  
APPROXIMATE  
CO-ORDINATE

TO ASHCROFT  
9 MILES

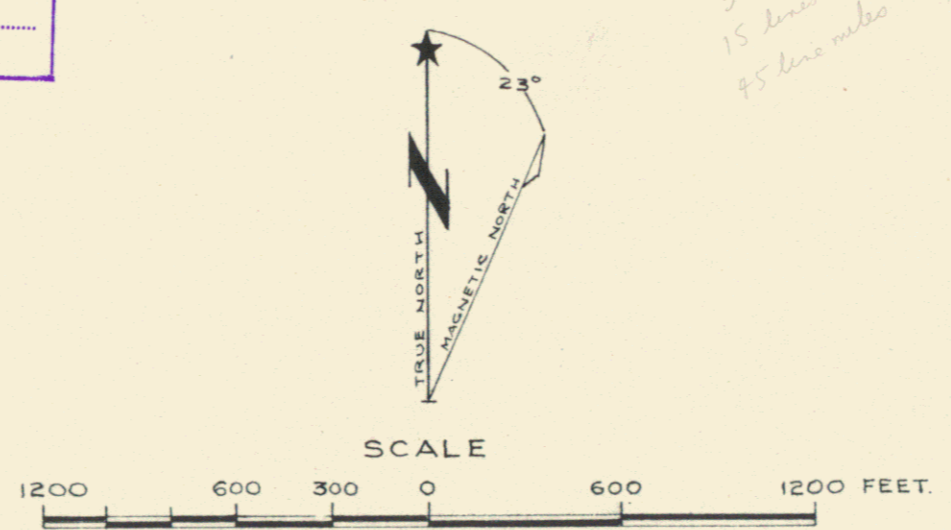
HIGHLAND VALLEY ROAD (PAVED)



**LEGEND**

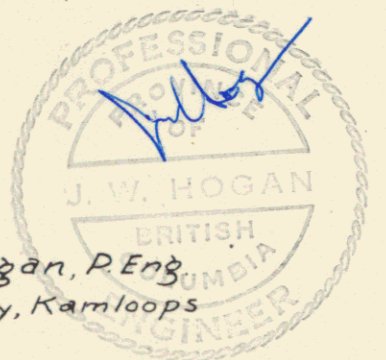
- ANOMALOUS > 38 ppm Cu
- THRESHOLD 33-38 ppm Cu
- [o] Higher than normal organics in soil samples.
- Sample location and Cu value in ppm.
- Claim post [(x) Final post, (1) 2nd/1st post]
- BC MAP 1751
- Creek.....
- Swamp.....
- Road (paved, gravel).....

Department of  
 Mines and Petroleum Resources  
 CLAIMS REPORT  
 NO. 2316 MAP #1



2316

To accompany Geochemical Report by J.W. Hogan, P.Eng.  
 on the BC claims, Highland Valley, Kamloops  
 M.D., dated APRIL 13/1970



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

GEOCHEMICAL PLAN — Cu p.p.m.

BC CLAIMS, HIGHLAND VALLEY,  
KAMLOOPS M.D., B.C.

— CONSULTING ENGINEERS —  
L.J. MANNING & ASSOCIATES LTD.  
VANCOUVER, B.C.

|                     |                                     |
|---------------------|-------------------------------------|
| SURVEYED By:        | DATE: Feb. 25 <sup>th</sup> , 1970. |
| COMPILED By: J.W.H. | FILE No: 92-111, Roll               |
| DRAWN By: F.T.      | DRG. No: 2                          |