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April 18, 1996.

**Assessment report filed to hold the claims for one additional year.**

**On the Cop 1 to 4 claims inclusive. (72 units)  
Atlin mining division  
On behalf of the owner: Paul Sorbara**

**This information is filed as part of a forthcoming report that will be submitted on field work that will be done in the summer of 1996, as proposed by Mrs. Kuran. (Discussed with Talus in Jan. 1996.)**

**Reports were Prepared for: 497281 B.C. Ltd. on behalf of Paul Sorbara the property owner.**

Enclosed are:

- 1) The Satellite Imagery Study - Cost \$16,528.40
- 2) Also is enclosed a copy of the compilation report by Kuran to cross reference to comments referred to in the Satellite survey report.

For any further questions please call or write me:

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#4 - 4916 Argyle St.  
Port Alberni  
B.C. V9Y 1V7

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

FILMED

**24,411**

PART 2 OF 2

Satellite Imagery Study  
COP 1-4 Mineral Claims

Atlin Mining Division  
British Columbia

Prepared for:

497281 B.C. Ltd.  
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Prepared by:

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April, 1996

## 1.0 INTRODUCTION

497281 B.C. Ltd is involved in mineral exploration activities in, and around, the Atlin Mining Division of British Columbia. This exploration is centered on the COP 1-4 claims but is also regional in nature. The exploration is being supported by the use of satellite imagery.

R.A. Jones and Associates of Reno, Nevada was commissioned to acquire, process, and analyze the satellite imagery covering the COP 1-4 claims and the surrounding area. A brief report was requested to describe the results of the acquisition.

The scope of the investigation was as follows:

- a. Acquire the most suitable, cloud-free, snow-free, satellite imagery of the COP Claims (Atlin Division).
- b. Prepare one false color image for aiding geological mapping of structures and lithologies in the region.
- c. Marking the image with UTM tick marks at 5 km spacing, and latitude/longitude tick marks at 5 minute spacing for reference. Mark the property boundary.
- d. Supply an interpretation of the TM (Thematic Mapper) to detail areas of hydrothermal alteration.

- e. Complete a structural overlay of the COP Claim group.

A major constraint in the use of satellite imagery in high northern latitudes is snow cover. Image 2 Map Services of Highlands Ranch, Colorado were retained to locate and process suitable imagery. The image utilized was TM Path 56 Row 19 dated August, 1993. Northeast and west of the property there is approximately 10% snow coverage.

## 2.0 RESULTS

### 2.1 GEOLOGY

#### Lithology

The geology of the Cop claim group was presented to the company in a report dated January 15, 1996 by Kuran Explorations, Ltd. The data in the Kuran report is considered accurate as far as the rock types are concerned. The banded structure of the volcanics is fairly obvious with northwest-southeast striking beds and/or fracture systems. The major part of the claim group is underlain by volcanic sequences.

There are intrusive bodies on the claims. These are shown as massive rocks with essentially no structure. The largest is a semi-circular body in the Southeast corner where the Hackett River is diverted to the east from its southeast trend.

The Kuran geology map shows the presence of small intrusive plugs associated with the known mineral prospects. These bodies are small and not obvious on the satellite image.

The most obvious intrusive body is centered on Mount Kaketsa west of the COP claim group.

### Structure

Faulting is the major structure shown on the satellite imagery. A major fault zone is present trending northwest-southeast in the Valley of the Hackett River and this is shown in the Kuran (1996) report. The Hackett River Fault splits several kilometers north of the claim group and a slice of the fault zone is prominent on the east facing slopes of Mount Kaketsa. The Hackett River Fault system extends northward and crosses the Sheslay River with very little offset in the river basin.

A series of north-northeast striking lineaments are in evidence. They are older than the Hackett River structure and appear to be offset along the Hackett Fault Zone.

The topography of the region is controlled by fracturing. The mineral occurrences discussed in the Kuran (1996) report are located on the north-northeast striking lineaments.

Other than the lineaments there is suggestion of circular

structures in the immediate vicinity of the claim group. These are interpreted as the expression of outcropping, or buried, intrusive bodies. Field checking of these areas is essential.

### Alteration

TM imagery of iron oxide and clay alteration is plotted on an overlay to the data sheet. Within the claim group there are two small clay alteration areas. These correspond to the Dick Creek and Copper Creek Prospects. The lack of additional alteration zones mitigates against locating further outcropping prospects on the property.

It is concluded that argillic type alteration is present in both areas. This has been well documented in the literature. There is no indication in the interpretation that iron oxides are a dominant feature in the area although they appear to be prominent in the reports reviewed by the writers.

The zones of alteration within the claim group are very small and restricted. The better alteration zones occur to the west of the COP claims. The Polar/Pyrrhotite Creek Prospects show up as a vivid clay altered zone within Polar Creek. Another strong clay zone shows up in an un-named creek east of Camp Lake on the east facing slope of Mount Kaketsa. This area should be checked out at some point in time. It could be indicative of a prospect similar to Copper Creek.

In the immediate vicinity of the claims the most spectacular alteration (clay, iron, and a combination) is on the crest and northwest facing slopes of Mount Kaketsa. Whereas this is a large intrusive mass it should be checked for its disseminated mineral potential.

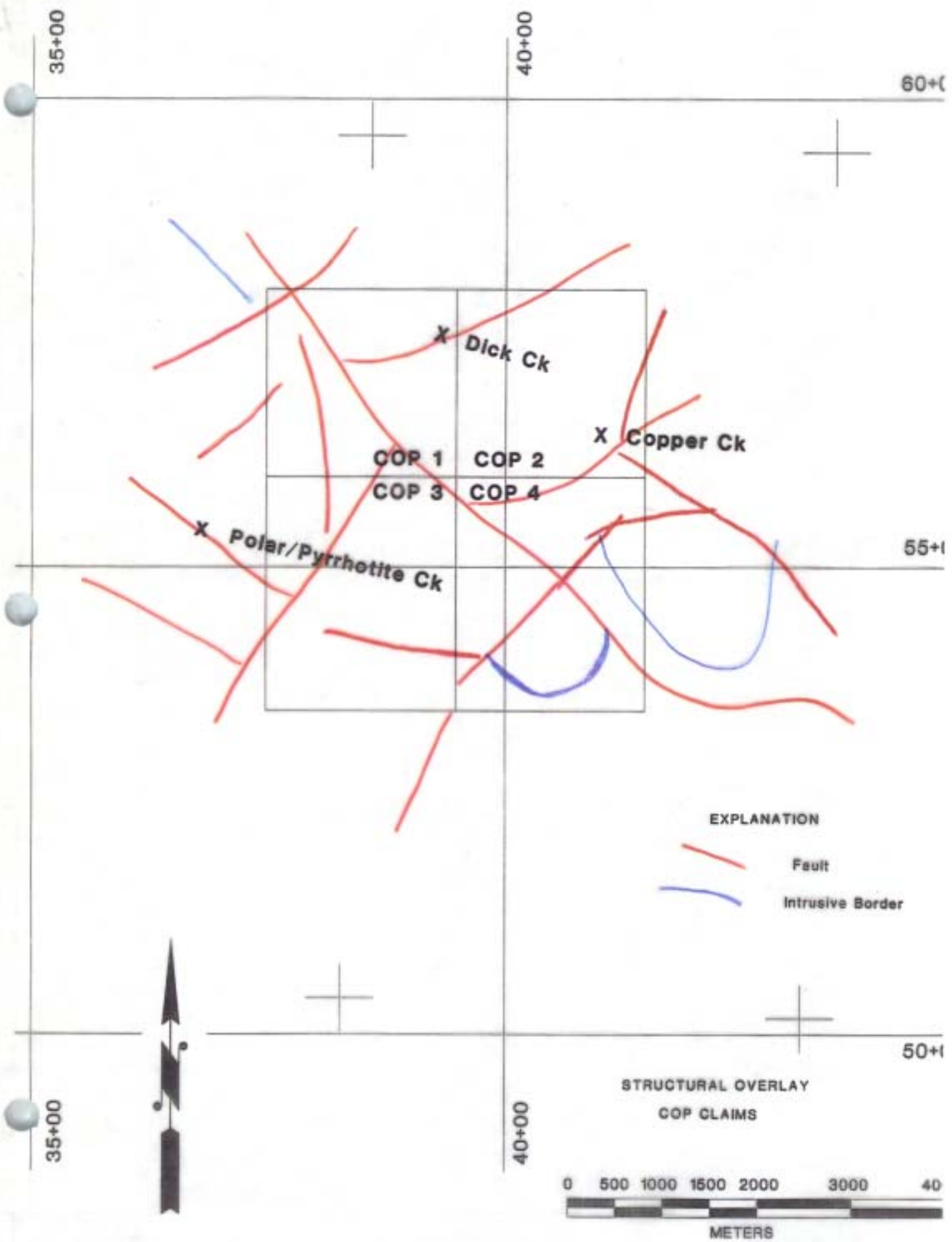
Conclusion

In summary, the remote sensing study has been definitive in delineating new structures and alteration areas which could be indicative of mineralized zones and which could direct further exploration.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "R A Jones". The signature is written in a cursive style with a large, looping "J" at the end.

Dr. Robert A. Jones  
April 1996



35+00

40+00

60+00

X Dick Ck

X Copper Ck

COP 1

COP 2

COP 3

COP 4

X Polar/Pyrrhotite Ck

55+00

35+00

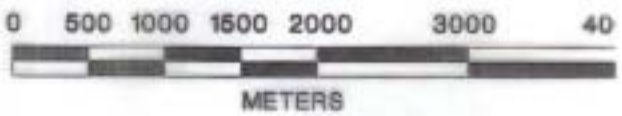
40+00

50+00

EXPLANATION

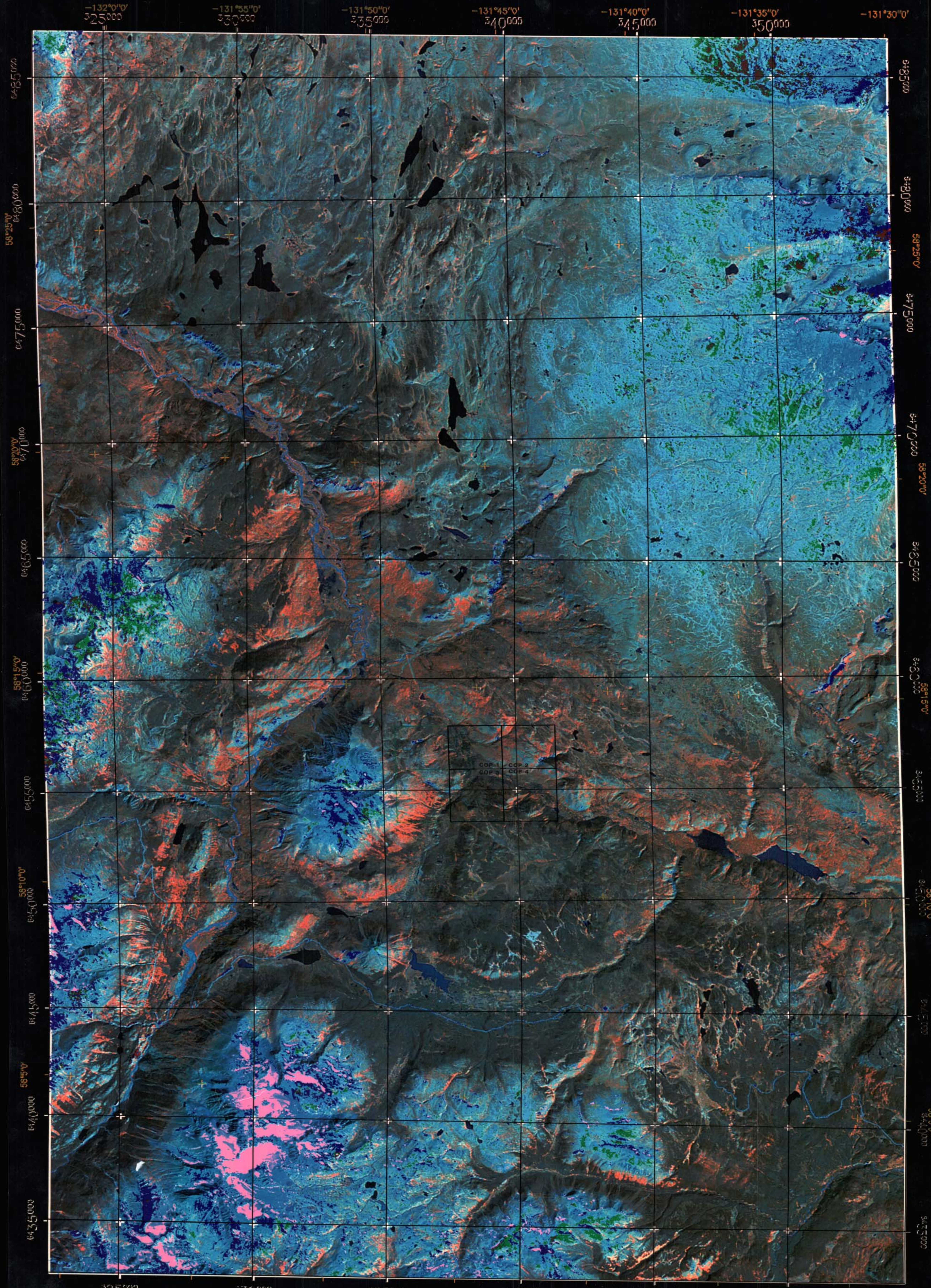
-  Fault
-  Intrusive Border

STRUCTURAL OVERLAY  
COP CLAIMS





# LANDSAT TM FALSE-COLOR IMAGE OF COP 1-4 MINERAL CLAIMS AND VICINITY ATLIN MINING DIVISION, BRITISH COLUMBIA, CANADA



COP 1 COP 2  
COP 3 COP 4

SCALE 1:50,000



497281 B.C. LTD.