PRELIMINARY GEOCHEMICAL REPORT

on the

SUMMIT, EDITOR, MOSS AND EAGLE CLAIMS
(SUMMIT PROPERTY)

Nelson Mining Division - British Columbia

Lat. 49° 21' N

Long. 117° 08' W

for

Mr. Stan Endersby

by

D.G. Allen, P. Eng (B.C.)

October 28, 1982

North Vancouver, B.C.
The Summit, Editor, Moss and Eagle claims (Summit group) are held by Mr. Stan Endersby. They are situated in the Ymir gold-silver camp 8 kilometres northeast of Ymir and 18 kilometres southeast of Nelson and are accessible by logging road.

Ore deposits in the Ymir camp are localized in quartz veins where they intersect granitic wallrocks.

The Summit group covers a prominent quartz vein 3 to 4 metres wide and at least 340 metres long. This vein contains minor gold, silver, lead and zinc values. Host rocks are argillite and phyllite of the Ymir group. Granite (favorable host for many of the Ymir ore deposits) occurs locally in float.

On September 30, 1982, a preliminary program of prospecting and geochemical sampling was carried out by D.G. Allen and S. Endersby to assess the economic potential. The underground workings were examined and found to be in good conditions. Results of soil and silt sampling revealed weakly to moderately anomalous zinc, lead and silver values.

CONCLUSION

The vein on the Summit property is probably part of a major vein system that includes the Pathfinder and Old Timer veins.
The Summit vein is exposed intermittently over a distance of 340 metres. Observed host rock is argillite of the Ymir group. Granitic rocks occur locally in float and are reported in government reports to outcrop north-east of the Summit vein. Because overburden is extensive, the vein has not been exposed or tested in these favorable host rocks.

Results of the preliminary geochemical sampling and assaying indicate that the vein could carry ore shoots that are typical of the Ymir camp.

Detailed geochemical sampling and geological mapping is warranted.

RECOMMENDATION

A flagged grid should be established on the Summit group claims. Soil sampling and VLF-EM surveys coupled with geological mapping should also be carried out.
INTRODUCTION

Mr. Stan Endersby holds the Summit and Editor reverted crown grant claims, Moss 1 and 2, and Eagle 1 to 3 two-post claims (all referred to hereinafter as the Summit group of claims).

The claims are situated in the Ymir gold-silver camp. They cover a prominent quartz vein that is developed by about 100 metres of underground workings in 2 adits, a shaft and several open cuts. The vein contains low-grade gold and silver values.

An examination of the Summit showings and underground workings and reconnaissance prospecting and geochemical sampling were carried out on September 30, 1982. This report summarizes results of this work.

LOCATION, ACCESS, PHYSIOGRAPHY

The Summit claims are situated 8 kilometres northeast of Ymir and 18 kilometres southeast of Nelson (figure 1). Access from the Nelson-Salmo highway is by logging road up Clearwater Creek to the northeast corner of the claims. The Summit workings can easily be reached by foot.

The claims lie between elevations 4500 and 5500 feet on the divide between Huckleberry Creek and the south branch of Clearwater Creek. Slopes are gentle to moderate.
LOCATION MAP
SUMMIT PROPERTY
Nelson Mining Division - British Columbia

Figure 1
CLAIM MAP
SUMMIT PROPERTY
Nelson Mining Division - British Columbia

Donald G. Allen
exploration ltd.
and covered with cedar, fir and larch with a thick undergrowth of alder, huckleberry and false azalea.

CLAIM DATA

The property consists of the following claims (figure 2):

<table>
<thead>
<tr>
<th>Claim Name</th>
<th>Record Number</th>
<th>Type</th>
<th>Anniversary Date</th>
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</thead>
<tbody>
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<td>Summit (L 4229)</td>
<td>720</td>
<td>Reverted Crown Grant</td>
<td>August 8</td>
</tr>
<tr>
<td>Editor (L 5861)</td>
<td>719</td>
<td>Reverted Crown Grant</td>
<td>August 8</td>
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<tr>
<td>Moss 1 and 2</td>
<td>1859, 1860</td>
<td>Two-post</td>
<td>August 8</td>
</tr>
<tr>
<td>Eagle 1 to 3</td>
<td>1273 to 1275</td>
<td>Two-post</td>
<td>October 1</td>
</tr>
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Exact location of the crown grant and two-post claims with respect to topographic features has not yet been determined.

GEOLOGY

The Summit claims are underlain by argillite, slate and phyllite of the Ymir group (Permian? to Lower Jurassic?). Bedding attitudes observed on the western claims are north-south and dips are steep to the west.

Porphyritic granite of the Nelson Plutonic suite outcrops to the west and is reported by Drysdale (1917) and McAllister (1951) to occur throughout the Ymir area.
as tongues or dikes ranging in width from a metre to many kilometres.

MINERALIZATION

Ymir Camp

According to Drysdale (1917), the ore deposits of the Ymir gold-silver camp occur mainly in fissure-type quartz veins. The veins trend east-northeast and dip steeply to the northwest. Ore shoots owe their localization to changes in host rock types or to the intersection of the vein with dikes or other faults. Drysdale reports examples of well-defined fissure veins containing only barren quartz except where they intersect with granite tongues. Best ore material is obtained where wallrock of such veins is granitic rather than sedimentary.

Summit Vein

A prominent quartz vein up to 4 metres wide is exposed discontinuously on the Summit claim. This showing was briefly described by Drysdale (1917) and O'Grady (1928) who reported negligible gold and silver values. The vein trends 050 to 067° and dips 70° to the northwest and has been traced for a distance of at least 340 metres. Overburden covers the extension in both directions. A flat bench on the hillside, possibly a topographic expression of the vein, suggests that the vein extends for a distance
of up to 1000 metres across both the Summit and Editor claims (figure 3). The vein has a similar trend with that of the Pathfinder and Old Timer veins to the east of the Summit group and is in line with both, indicating that all may be part of the same vein system.

The Summit vein consists of milky white quartz with scattered narrow vugs lined with quartz crystals. Minor amounts of pyrite occur in thin seams with manganese oxides parallel to vein walls and as disseminated cubes in wallrock and wallrock inclusions in the vein. Analysis of a sample of the more pyritic vein material indicate minor zinc (3140 ppm), lead (482 ppm) silver (9.6 ppm) and gold (0.13 oz/ton) values.

GEOCHEMISTRY

A total of 11 soil and silt samples were taken on a reconnaissance basis on and around the claim group. Samples were analyzed for 9 elements (Mo, Cu, Ni, Ma, Fe, Ag, Zn, Pb) by standard atomic absorption analysis by Rossbacher Laboratories. Results are presented in Appendix I and zinc, lead and silver values plotted on figure 3. Scattered weakly to moderately anomalous zinc (150 to 264 ppm), lead (24 to 40 ppm) and silver (0.6 to 2.6 ppm) values were obtained over a wide area. Analysis of material from the Summit vein (2 SAT 227 reported above) and Pathfinder vein (2 SAT 237) revealed anomalous values
of molybdenum, nickel, zinc, lead and silver, indicating that geochemical surveys will be useful in locating potential ore shoots.

Donald S. Allen
REFERENCES


CERTIFICATE

I, Donald G. Allen certify that:

1. I am a Consulting Geological Engineer, resident at 4570 Hoskins Road, North Vancouver, B.C.

2. I am a graduate of the University of British Columbia with degrees in Geological Engineering. (B.A.Sc., 1964; M.A.Sc., 1966)

3. I have been practising my profession since 1964.

4. I am a member in good standing of the Association of Professional Engineers of British Columbia.

5. This report is based on fieldwork carried out on September 30, 1982.

6. I hold no interest, nor do I expect to receive any, in the Summit, Editor, Moss or Eagle claims.

North Vancouver, B.C. 
October 29, 1982

D. G. Allen, 
P. Eng. (B.C.)
AFFIDAVIT OF EXPENSES

This will certify that prospecting, and geochemical sampling were carried out on September 30, 1982 on the Summit, Editor, Moss 1 and 2 and Eagle 1 to 3 claims, Nelson Mining Division, Ymir area British Columbia to the value of the following:

Fieldwork

Salaries

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<td>1 day</td>
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<td>$200.00</td>
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<tr>
<td>S. Endersby</td>
<td>1 day</td>
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Vehicle expenses          45.50
Board                      15.00
Geochemical analyses       77.45

Report

Salary

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<td>1.2 days</td>
<td>$200/day</td>
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Draughting, typing, compilation
10.2 hours @ $15/hr. 153.00

Map reproduction and photocopying 49.91

Total $980.86

Donald G. Allen, P. Eng. (B.C.)
APPENDIX I

ANALYTICAL RESULTS
# Certificate of Analysis

**To:** A & M Exploration Ltd.  
4570 Hoskins Road  
North Vancouver, B.C.

**Sample No.:** 32 SAT 227  
**Oz/t Au (fire Assay):** 0.130  

**Date Received:** Oct 28, 1932

**ATTN:**

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**Certified by:** [Signature]

---

**GEOCHEMICAL ANALYSTS & ASSayers**

**Address:** 2225 S. SPRINGER AVE., BURNABY, B.C. CANADA  
**Telephone:** 299-6910  
**Area Code:** 604

**Certificate No.:** 32289 A  
**Invoice No.:** 3006  
**Date Analyzed:** Oct 28, 1932
## Certificate of Analysis

**To:** A & M Exploration Ltd.

**Address:**
4570 Hoskins Road
North Vancouver, B.C. V7K 2R1

**Project:**

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Values in PPM unless noted otherwise.

**Certified by:**

[Signature]

**Date Analysed:** Oct. 12, 1987

**Certificate No.:** 82289-1

**Invoice No.:**

**Address:**
2225 S. Springer Ave., Burnaby, B.C., Canada
Telephone: 299-6910

GEOCHEMICAL ANALYSTS & ASSAYERS