



October 30th, 1969.

Argus Metal Company Ltd., 510 West Hastings St., Vancouver, 2, B.C.

Gentlemen:

This letter will serve as authorization for your company to use my report dated July 15th, 1969, on the Kris, Donna and H.O. Claims, Similkameen Mining Division for the purpose of filing for assessment work.

> Yours very truly, BACON & CROWHURST LTD.

R.h. Plendler

R.W. Phendler, P.Eng.

RWP/ic

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INVOICE

October 30th, 1969.

Argus Metal Company Ltd., 510 W. Hastings St., Vancouver, 2, B.C.

To: Our fee re examination and general mapping of Kris Claim Group, Princeton area, British Columbia, by R.W. Phendler, P.Eng.

Field time - July 7 (½), July 9 (½), July 10 and July 11 Office time- July 15 (½), July 16

Total - 4½ days @ \$150/day

\$675.00

Disbursements

Altair Drafting		\$45.00	
Exp. Acct. R.W. Phendler, dated			
July 11, re trip to property	26.84		
Mileage			
Hotel	12.15		
Meals	9.50	48,49	93.49

Account rendered

\$768,49

BACON & CROWHURST LTD.

per R.W. Fhendler, P.Eng.

A

GEOLOGICAL REPORT

on

THE KRIS, DONNA & H.O. CLAIMS

SIMILKAMEEN MINING DIVISION

PRINCETON, B.C.

for

ARGUS METAL COMPANY LTD.

by

R.W. PHENDLER, B.Sc., P.Eng.

Vancouver, B.C.

July 15, 1969.

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SUMMARY, CONCLUSIONS & RECOMMENDATIONS

Small intrusive stocks northeast of the main Copper Hountain stock have drawn a great deal of interest in recent years but, as yet, no commercial ore deposits have been discovered in their locale.

The 86 claims of the Kris, Donna and H.O. groups are almost completely underlain by Tertiary sediments and minor volcanics. These rocks are of no economic interest.

Sixteen of the claims cover an area which is underlain by part of the Knob Hill augite diorite stock. It intrudes Nicola volcanics. Some interest is warranted here in view of the fact that recent work on adjoining claims disclosed a geochemical copper anomaly and an Induced Folarization anomaly in the same area.

It is recommended that \$5,000 be expended on a soil survey on the sixteen claims-adjacent to the intrusive contact mentioned above.

SCOPE

The Kris, Donna and H.O. claims were geologically mapped on July 9, 10 and 11, 1969. On July 7, Mr. D.S. Barclay, who staked the Kris claims, guided the writer

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to the ground and showed him claim posts and the general layout.

LOCATION AND ACCESS

The property under discussion is from one to five miles south and east of Princeton, British Columbia, at an elevation of 2,400' to 3,300'. The ground is partially timber covered but the lower reaches of the slopes are under cultivation. The northwest corner of the claims covers a tailings dump of the old Copper Mountain mine.

The Copper Mountain road crosses the claims while numerous gravel roads make most parts of the ground relatively easy of access.

PROPERTY AND OWNERSHIP

The group is made up of 86 claims as follows:

Kris group	15 claims
H.O. group	20 claims
Donna group	51 claims

These are presently controlled by Argus Metal Company Ltd., Vancouver, British Columbia. The ground has been previously staked.

HISTORY

No signs of exploratory work were seen during the examination and geological literature on the general area makes no mention of showings on the claims.

Exploration work in 1966 and 1967 on the adjoining Bob and Bon group, that covers Knob Hill, disclosed the presence of a geochemical copper anomaly and a coincidental Induced Polarization anomaly. No further investigation appears to have been carried out on these claims. Work was done on behalf of the A.G.N. Syndicate of Toronto.

GEOLOGY AND MINERALIZATION

The claims lie in the Princeton - Copper Mountain area which is underlain by a series of volcanic rocks intruded by numerous stocks of basic to intermediate composition. Tertiary volcanics cover parts of the area.

Some of the Kris claims are underlain by part of the Knob Hill stock which is believed to be one of the Copper Mountain intrusives. These stocks all lie northeast of Copper Mountain and southeast of Frinceton and consist of dark grey, medium grained, augite diorite or gabbro. They are composed essentially of plagioclase, augite and amphibole with small amounts of biotite and

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orthoclase (which comprises 10 to 20 per cent of the rock). Pyrite, magnetite and hematite are commonly present.

These rocks, when intruded into Nicola volcanics are associated with widespread copper mineralization in the Copper Mountain area. Early workers thought that the augita diorite was the mineralizer but more recent studies appear to indicate that the Lost Horse monzonite intrusive, with its associated, intense hydrothermal alteration may be of greater genetic significance.

Northeast of the Knob Hill stock, the Nicola andesites are dense and fine grained and this is the location on Bob and Bon ground where the geochemical copper anomaly was discovered. The Induced Polarization anomaly is also on Bob and Bon ground, in the same area; it does not extend onto the Kris claims (the survey was carried for 1,800 feet northarly into what is now the Kris claims). The area of high resistivity projects northward for 400 feet into the Kris claims and has been interpreted as indicating the presence of the augite diorite stock probably not mineralized. It is not known whether geological mapping was done in conjunction with the geochemical and geophysical surveys and, consequently, much of the correlation between I.P. results and rock types

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is conjecture.

The presence of a copper geochemical anomaly within the Kris claims indicates that the diorite andesite contact is mineralized. Nothing is known about the southeast limit of the diorite stock as Tertiary sediments cover this area.

RECOMMENDATIONS AND COST ESTIMATE

It appears that most of the Kris claims and four of the adjacent Donna claims are the only ones of interest. These sixteen claims cover the diorite stock - Nicola volcanic contact zone and they merit a limited amount of exploration.

Soil sampling should be carried out on the following claims:

Kris = 1, 2, 3, 4, 6, 8, 10, 11, 12, 13, 14, 15.

Donna - 23, 24, 25, 26.

Lines should be spaced at 400° intervals and soil samples taken at 200° intervals along the lines. This survey should indicate the size of the area of interest.

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Total cost of recommended geochemical survey - \$5,000.

Respectfully submitted, Bacon & Crowhurst Ltd.

R. L. Phandle

R.W. Phendler, B.Sc., P. Eng.

RWP/gp

CERTIFICATION

I, Roy William Phendler, of the City of Vancouver in the Province of British Columbia, HEREBY CERTIFY AS FOLLOWS:

- 1. That I am a registered Professional Engineer in the Province of British Columbia, No. 4421.
- 2. That I am a graduate of McGill University, Montreal, Quebec, with a Bachelor of Science degree in geology.
- 3. That I have practiced my profession as geologist continuously for the past seventeen years in Quebec, Ontario, Saskatchewan and British Columbia in Canada; in some of the western U.S.A.; Mexico; and Peru and Colombia in South America.
- That I have no interest directly or indirectly in the mineral claims of Argus Metal Company Ltd. nor do I expect to receive any.
- 5. That the information contained herein was compiled during an examination of the ground between July 7th and 11th, 1969.

R.W. Fhendler, P.Eng.

Vancouver, Canada. October 30th, 1969.



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