

REPORT on the
CM CLAIMS

ASPEN GROVE AREA, NICOLA M. D.
BRITISH COLUMBIA

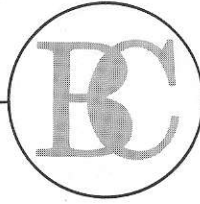
for RAMCO INDUSTRIES LTD.

by: W.R. Bacon, P.Eng.

Feb. 28, 1973.

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BACON & CROWHURST LTD.

1720-1055 West Hastings Street
Vancouver 1, B. C.

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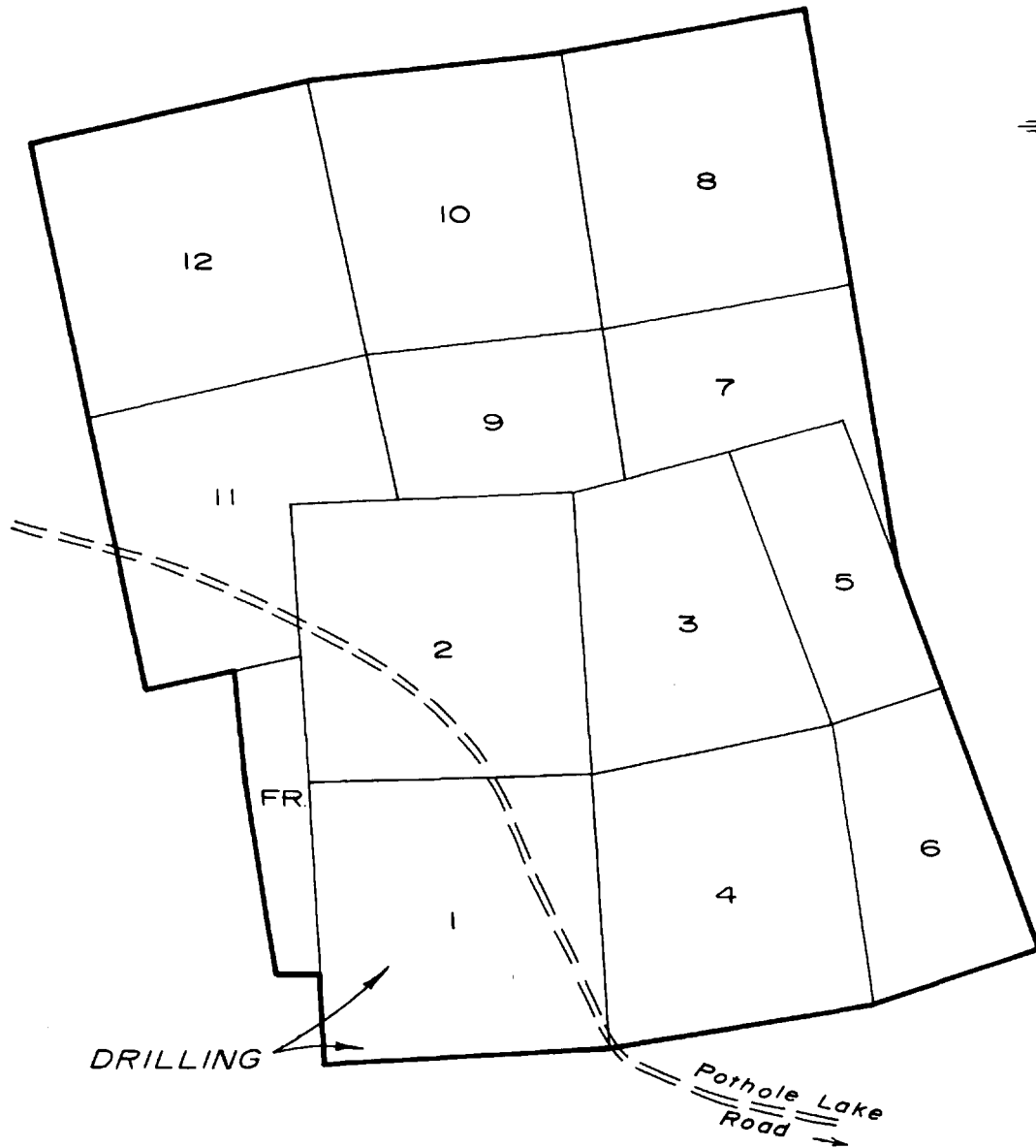
RAMCO INDUSTRIES LTD.

by

W. R. BACON, Ph. D., P. Eng.

Vancouver, B. C.

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SKETCH
OF THE
CM CLAIMS

ASPEN GROVE AREA, B.C.

SCALE: 1" = 1000'

FEB. 27, 1973

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ILLUSTRATION

Sketch of CM Claims - 1" = 1000'

Frontispiece

INTRODUCTION

The CM claims are near the northern end of the Aspen Grove copper camp, in the geologically favourable Princeton-Merritt country. The Aspen Grove camp is on the east side of the Princeton-Merritt Highway and extends eastward from it for a distance of 2-2½ miles. In a north-south direction, it extends from a couple of miles north of Missezula Lake northward for about 8 miles.

Aspen Grove has been designated a camp in spite of the fact that it has no producers, past or present. Numerous interesting copper showings are known, however, and it seems only a matter of time (and persistence) before an economic copper deposit is discovered.

The writer has visited the Aspen Grove area many times. He examined the CM claims on February 27th, 1973, at which time the rolling terrain was partly covered by extensive patches of snow up to one foot in depth.

LOCATION AND ACCESS

The CM claims are in the Nicola Mining Division, 16 miles southeast of Merritt. They are on the west bank of Quilchena Creek near the big bend where the creek turns abruptly north.

Access is south from Merritt along the highway for a distance of 13 miles, thence for 2 miles southeast along a dirt road referred to as the Pothole Lake road.

PROPERTY

The property consists of the 12 CM (1-12) mineral claims and one fractional claim, CM Fraction. They are held in the name of F.J. Hensworth.

HISTORY

The property was staked as the CM claims in 1965 and was turned over to Vananda Explorations Ltd. the following year.

In 1967 Vananda made a deal with Merritt Copper Company whereby Merritt could acquire an interest in the property through work commitments. Merritt undertook magnetometer and induced polarization surveys and followed these up with three diamond drill holes and one percussion hole. This drilling was all done on claim CM 1, in the southwest corner of the property.

Information, mainly from Merritt Copper Company reports, indicates that there was 1091 feet of diamond drilling and 400 feet in the percussion hole.

In 1969, Vananda employed a firm of B.C. Land Surveyors to conduct a complete claim survey of the property.

GEOLOGY

The Nicola Group rocks of Upper Triassic age are the geologically favourable rocks for copper deposits in the Merritt-Princeton area. They cover a wide area and are made up mainly of intermediate to basic lavas. Pyroclastics and sediments form a lesser fraction of the Nicola.

The main outcrop on the property was free of snow at the time of examination. It is a prominent, northerly trending ridge that extends over much of the western part of claims CM-3 and CM-4. The rock is a rather fresh, dark greyish green volcanic that is considered to be Nicola. Geology along Quilchena Creek and west of the claims suggests that, in addition to the Nicola, younger, similar volcanics, Cretaceous and Tertiary, may be present in the vicinity of the claims.

One of the diamond drill holes, No. 3, apparently intersected sediments for its entire length (184').

The diamond drill core is no longer available but, according to Merritt Copper Company Limited, values in copper, silver and gold were encountered in diamond drill hole No. 1. The copper mineral is chalcopyrite and it occurs apparently in quartz veinlets in altered, silicified volcanics.

The writer noted green-copper stain on andesite near the Initial Posts of claims CM-1 and CM-2.

DISCUSSION OF PREVIOUS WORK

The magnetometer survey is not available so no comment on it can be made.

The induced polarization survey was done on east-west grid lines, 400 feet apart, on which stations were established at 100 foot intervals. A total of seven miles of reconnaissance and 0.5 miles of detail surveying were done.

The chargeability values in the surveyed area appear to be rather uniform with a background value of three milliseconds. Two areas of anomalous values were detected which were designated "anomalous area" and "zone of possible interest". Subsequently, drilling (all of it) was undertaken in the "anomalous area".

Six years have passed since this induced polarization survey was undertaken and there have been advances in this type of survey, particularly in instrumentation. Serious consideration should be given to redoing the survey, particularly if the soil sampling recommended below gives favourable results.

With regard to the drilling undertaken, as noted above, it was confined to one small area of the property - the "anomalous area" of the induced polarization survey. Thus the potential of the major part of the property remains virtually untested, at least from a physical standpoint.

RECOMMENDATIONS

Work is recommended for the CM claims for two reasons:

1. Copper mineralization, plus minor gold and silver values were encountered in diamond drill hole No. 1.
2. The CM claims are in an area, i.e. the Aspen Grove copper camp, in which every piece of mining property, by virtue of its location, merits careful examination.

In a situation such as this, there are certain standard work procedures that should be carried out as a matter of course. These include first and foremost a program of soil sampling, then magnetometer work, induced polarization survey and, finally, percussion drilling. The latter, of course, is the most definitive and some major companies are now inclined to go directly from soil sampling to percussion drilling, omitting the geophysical steps. This is not recommended for the CM claims.

It is recommended that the line grid be re-established and that soil sampling be carried out on these lines. Analysis for copper is sufficient. A magnetic survey is recommended because it is fast, inexpensive and may give some clues to the bedrock structure in an area of poor outcrop.

In addition, it is recommended that a new induced polarization survey be undertaken to indicate areas where sulphides may be present.

Percussion drilling should be used to probe areas that emerge as favourable on the basis of the geochemical and geophysical work.

COST ESTIMATEPHASE I

Re-establishment of grid control	\$1,000
Magnetometer survey	750
Soil survey	1,500
Induced polarization survey	3,500
Percussion drilling, 10 holes, 3000 ft. @ \$3/ft.	9,000
Supervision, geology, engineering, assaying	<u>3,000</u>
	\$18,750
Contingencies, say 10 per cent	<u>1,875</u>
	<u>\$20,625</u>

Provision should definitely be made to follow up Phase I, which is solely a preliminary program. Phase 2 would consist entirely of drilling.

PHASE II

Percussion drilling, 3000 ft. @ \$3/ft.	\$9,000
Diamond drilling, 1000 ft. @ \$8/ft.	8,000
Supervision, geology, engineering, assaying	<u>3,000</u>
	\$20,000
Contingencies, say 10 per cent	<u>2,000</u>
	<u>\$22,000</u>

Respectfully submitted,

BACON & CROWHURST LTD.



W.R. Bacon, Ph.D, P.Eng.

CERTIFICATE

I, William R. Bacon, with business address at
1720 - 1055 W. Hastings St., Vancouver, 1, British Columbia, DO
HEREBY CERTIFY THAT:

1. I am a consulting geological engineer.
2. I am a graduate of the University of British Columbia with
B.A.Sc. (1939) and M.A.Sc. (1942) degrees in Geological Engineering.
3. I am a graduate of the University of Toronto with a Ph.D (1952)
degree in Economic Geology.
4. I have practised my profession for thirty years in Canada, South
America and Australia. During the past twenty years, the majority
of my time has been spent in British Columbia; it includes seven
years (1949-56) as geologist with the B.C. Department of Mines.
5. I personally examined the CM claims in the Princeton-Merritt area
of British Columbia, on February 27th, 1973.
6. I have no interest, direct or indirect, in the CM claims, nor do
I expect to acquire any such interest. This statement also applies
to Ramco Industries Ltd.



W.R. Bacon, Ph.D, P.Eng.

Vancouver, Canada.
February 28th, 1972.