

## P. G. LACOMBE & ASSOCIÉS INGÉNIEURS-CONSEILS

Report on

# The Ruby Claims

Kettle River Valley Similkameen District

British Columbia

By: Pierre G. Lacombe, Eng. P.G.Lacombe & Associates Consulting Engineers April 28, 1969.

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# Summary:

The Ruby claims were examined by the author in June 6-9, 1963 and again in April 23-25, 1969.

The property consists of fifteen claims known as the Ruby and Ruby Fraction totalling about 575 acres, in the Kettle Valley, 3 miles south of Greenwood, B.C.

The property is underlain by greenstone and limestone belonging to the Anarchist Group, of the local Permian Paleozoics.

Earlier work has exposed copper as malachite-azurite alteration in several pits and shallow shafts in the greenstone at the contact of overlying porphiritic granite.

Later work has cut wide copper mineralization in the underlying boulder conglomerates and limestone.

The property being part of the Phoenix-Mother Lode complex of large, low-grade copper open pits, it is considered fully justified to proceed with an immediate development program consisting of geophysical survey followed by diamond drilling. Cost estimates of the initial program are estimated at \$15,750.00.

Pierre G. Lacombe, Eng. P.G. Lacombe & Associates, Consulting Engineers.

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## Introduction:

The Ruby claim group is located at the south end of the Okanagan Valley approximately sixty miles east of Osoyoos in the Kettle River Valley.

This area has been well known in the past for its important copper production and the well known Phoenix Mine located east of the property, is in full production at a capacity of 2,000 tons per day. Much exploration and development activity is also being carried out on the north and east side of the property by Aabro Mining and Oils Limited, which expects to come into production by 1970.

The property itself has been examined by the author during a first trip in the spring of 1963 and again in April 1969. Copper mineralization is evident in numerous places on the property and the copper showings of good widths are well exposed. The property does not appear to have been subject to a thorough and scientific exploration in the past and there is no doubt that the copper content and size of the showings presently open on the claims, justify an immediate and systematic development program.

## Location and Access:

The property is located two to three miles due south of Greenwood, B.C., on the west side of the Boundary Creek opposite the agglomeration of Boundary Falls, in the Similkameen Mining District.

It is easily reached from either Vancouver or Penticton via an excellent paved Highway through the Okanagan Valley and to Greenwood, B.C. A good secondary gravel road leads right to the center of the claims and bulldozer trails connect the various showings.

The property lies about 200 feet above the Boundary Creek Valley. Outcrops are numerous and vegetation is thin. Overburden varies from nil close to the summit to thick (40') along the ravines.

#### Previous Work:

The property has been acquired in August 1961 by Rubymac Mines Ltd. from Vancouver. Deep rock trenches and pits were put down on the top of the hill and a shallow shaft was sunk.

Later, a bulldozer was brought to the property and made two cuts, north-south and east-west in the overburden, exposing good copper widths.

Prior to this last work, the property had been shortly optioned to Bralorne which drilled one single 200-foot hole near the pits, intersecting copper values.

The property has not been worked since that time, except for some surface sampling by Canex Aerial Explorations Ltd. with good results.

#### Property:

Surface rights and mineral rights are owned on this property by Act of Title No. 5944 dated August 8, 1961 and covering original District Lots No. L-1333 and L-3256, respectively known as the Ruby and Ruby Fraction claims in the Similkameen District, division of the Yale District, B.C. The title is registered in Volume 861 of the Register under Number 91518-C. The property also includes thirteen claims, having an area of approximately 40 acres each and staked as claims Mo. 1 to Mo. 13 inclusive. Total area is approximately 575 acres.

# Geology:

The area is well known for its past and present mineral production. At the turn of the century, it produced more than 22,000,000 tons of copper ore containing gold and silver, mainly from the camps of Phoenix and Deadwood. This ore supplied smelters at Grand Forks, Greenwood and Boundary Falls, the site of the property.

Other small high-grade mines supplied gold, silver and base metals until the early 1950's. Such were the Hummingbird and the Providence mine at Grand Forks and Greenwood respectively.

In the last few years, a thorough reexamination of the old copper deposits has occurred, culminating in the blocking out of large, low-grade open-pit deposits justifying large-tonnage operations. Such are the Phoenix Mine (operated by Granby Mining) and the newly revived Mother Lode, both lying very close to the Ruby claims.

The geology of these bodies is consistently the same: a replacement of chalcopyrite and other copper minerals in skarn formed by the metamorphism of the limestone in the sediments (Permian?) known as the Anarchist Series. This limestone is known locally as the Brooklyn formation.

The Ruby claims lie 2 miles south of the Mother Lode orebody and 4 miles south-west of the Phoenix orebody.

They are mostly overlain by Brooklyn formation limestone at the base. This limestone is altered into brownish gossan at the top. It appears to be overlain in places by ultrabasic bodies and is covered in the central south part by porphyritic granite of the Nelson Formations (Cretaceous?). The Phoenix volcanics have been observed to the south-west. The limestone beds are nearly flat and, at least locally, appear little disturbed except for slight folding.

# Sampling & Results:

On the enclosed Map, various pits and trenches existing on the property are indicated, along with a sample number.

These samples have been reported by the previous owners. The author took three check samples for verification purposes, the results of which are also given in the Table hereafter.

Sample No.	Width	Owner's	Author's	
1	14' 16' 40' \	2.73% Cu. 1.41% Cu.	1.47% Cu.	
2	Grab Grab 20'	9.10% Cu.	27.88% Cu. 3.37% Cu.	
3	3.5' 5.0'	15.46% Cu. 8.4 oz. Ag. 19.39% Cu. 8.7 oz. Ag.	•	
<b>4</b> ·	5.0'	1.15% Cu.	•	
5	8.0'	1.40% Cu.		
6 ′	1.5'	10.50% Cu.		

The very high values are undoubtedly in almost massive chalcopyrite in 1' to 2' wide veins. The 1% to  $3\frac{1}{2}$ % values represent the permeation of copper in the skarn beds over wider dimensions. Mineralization:

Several pits and one shaft have been excavated at the top of the hill, the highest point on the property, through basic formations adjacent or overlain by porphyritic granite.

These shaft and pits were sunk on malachite occurrences in fractures and broken zones. Probably through lack of funds, the pits were stopped at depths of 15 to 20 feet, at the top of gossan alteration. Malachite is seen as widespread thin colouring in the pit dumps and in place.

At a later date, two cuts were made by means of a bulldozer along the east and north flanks of the hill through overburden varying from 4 to 25 feet.

The western cut exposed malachite and gossan for a few feet in width followed by rich green malachite, azurite and almost massive chalcopyrite under a deeply altered boulder conglomerate. Samples 2 and 2A.

Approximately 150 feet further south-east, a deep cut striking east-west was open in the thick overburden exposing first a rusty gossan bed covering a mineralization of copper (malachite) in flat lying limestone beds altered to skarn. The width of the exposures is 40 feet where copper is seen. The gossan whenfirst examined in 1963 reached 60 feet in width. (Sample 1).

## Conclusions:

The Ruby claims are located close to large copper orebodies in or coming into production in a long known copper producing district.

Numerous showings of malachite have been opened on the property in basic formations by several pits and shallow shafts. Wide copper mineralization has been exposed by two deep cuts made by means of bulldozer through the overburden. Mineralized widths of 20 to 40 feet have been observed.

# The property has been very little explored either from surface or at depth.

The favourable copper geology and the presence of large copper mines in the vicinity justifies a systematic development program on these claims.

# Recommendations:

1. To conduct a close geophysical survey on the whole property after testing the known copper showings with various methods in order to establish the best possible responseto geophysical survey.

2. To explore by diamond drilling the anomalies thus outlined. It is deemed at this stage that a program of 1,500 feet of drilling is justified by the extent of the present showings.

Estimate of Costs:

Line cutting

\$2,500.

Geophysical survey

Diamond drilling 1,500 ft @ \$5.50/ft

8,750.

2,500.

Engineering, travel expenses, assays.

2,000.

\$ 15,750.

Total: ectfully Submitted, SELEVINUL

Pierre G. Lacombe, Eng. P.G.Lacombe & Associates Consulting Engineers

PGL:id April 28, 1969

# Certificate:

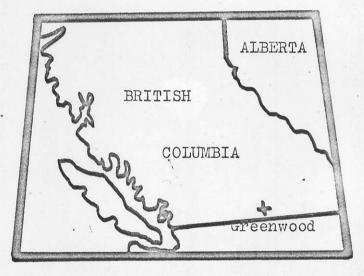
I, undersigned, Pierre G. Lacombe, B.A., B.Eng., a graduate from McGill University (1954) in Mining Engineering and a member in good standing of the Corporation of Engineers of Quebec, state that:-

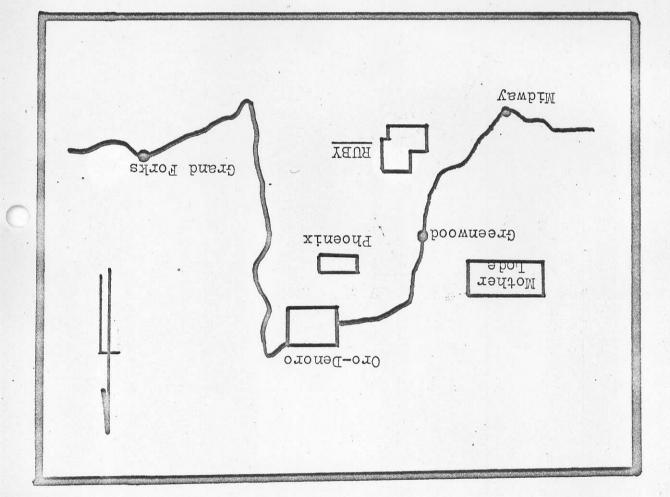
- 1. I have personally examined the Ruby claims described in the above report in 1963 and 1969 and that the facts disclosed herein are conform to the best available information and to the observations made in the field:
- 2. I have no interest, whether direct or indirect in the properties described above as the Ruby claims or in the securities of Rubymac Mines Ltd. or into any other securities owning these properties;
- 3. I do not intend to acquire such interest or securities nor expect to receive any.

MANNA DE COLORADA Fierre G& Lacombe, Eng. B.A., B.Eng. P.G.Lacombe & Associates -Consulting Engineers 

PGL:id April 1969

LOCATION	MAP	OF T	HE GREENWOOD,	B.C.
AREA AND	THE	RUBY	CLAIMS.	





SIMILKAMEEN DISTRICT SOUTHERN BRITISH COLUMBIA

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