HIL HILL

REPORT

RICO COPPER MINES LTD. (N.P.L.)
NEW WESTMINSTER M.D.
LAIDLAW, B.C.

SUMMARY:

The Rico Copper Mine (formerly the Lucky Four) is located 16 miles due south of Laidlaw, a small town on the Trans-Canada High-way and the C.N.R. some 90 miles East of Vancouver.

The company owns 4 Crown Granted Mineral claims and fractions, has 6 Crown Granted Annual claims and fractions under option and holds 80 mineral claims, by right of location. The claims are located on the southern slopes of Peley, Welch & Stewart Mountains, elevations vary from 5,000 to 7,500 feet.

The Rico Copper holdings cover 4 miles of potential ore ground along a Quartz Diorite - Sedimentary contact.

The ore deposits which are of contact metamorphic origin, consist of zones of mealy pure chalcopyrite. They lie in a highly metamorphosed garnetiferous limestone belt near the Quartz Diorite - Sedimentary contact.

Geological mapping followed by channel sampling has indicated the following ore zones.

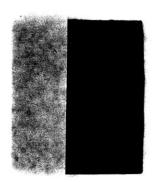
Ore Zone	Oz. Au.	Oz. Ag.	% Cu.	Gross Value
Á	0.23	2.14	8.61	¥39.74
В	0.04	5.58	11.90	47.12
C	0.06	17.26	15.64	69.64
Average	o.11	8.33	12.05	352.17

Ore Zone D, occurring on the face of a very steep cliff, was not sampled. This outcrop appears of the same grade and size as Ore Zone B.

The three outcrops averaging 30 feet in width are exposed over a total area of 2700 sq. ft. Ore zones A and C extend under the ice.

Tons per vertical foot of outcrop - 380.

Gross value of outcrop per vertical foot - \$20,000.00



CONCLUSION

The Rico Copper Mine is considered a prospect of real merit.

Surface outcrops are considered sufficiently attractive to justify an extensive underground development programme to determine the downward extension of the ore bodies indicated on the surface.

RECOMMENDATIONS:

Owing to the nature of the topography and the inaccessibility of the outcrop, the only available means of development is by driving a long low level tunnel. This tunnel should be located at as high an elevation as is practical. Construction of a four mile road will be necessary from Jones Lake to the tunnel site.

LOCATION:

The Rico Copper Mines is situated on the northern elopes of Foley, Welch and Stewart Mountains, near the divide between the Fraser and and Chilliwack River. The water shed is part of the Cheam Range, a subrange of the Cascades. The elevation of the outcrop is 6200 feet but the peaks are over 7500 feet.

CLAIRS:

The Company owns the Epsilon, Camma, Sperry and Delta Fraction
Mineral Claims and holds under option, the Lucky Four Nos. 1 to 6 inclusive
Crown Granted Mineral Claims. 80 Claims adjoining the above claims are
held by right of location. A belt of ground, 1 mile wide by 4 miles long,
comprising about 4100 acres is covered by the above claims.

HISTORY:

The initial discovery was made in 1915 by prospectors from Hope, who traced copper float from Jones Creek to the outcrop. In 1916 the group was purchased by Sperry and White on the advice of A.J. Beaudette. The property was later acquired by Foley, Welch & Stewart. During 1917 an unsuccessful attempt was made to diamond drill the property. Six holes

were collared on the glacier and as they were not surveyed the results are of little value. Dr. Cairns states "Although the results of this drilling were regarded as satisfactory, the operation was attended by so many engineering difficulties that it was suspended."

No work was done on the property until acquired by the present owners, Rico Copper Mines Ltd., a private company with head offices at 511 Credit Foncier Building, Vancouver, B.C.

TRANSPORTATION:

The property is reached from Vancouver via the C.N.R. as far as Laidlaw, some 50 miles up the Fraser from the coast. Laidlas is also located on the Trans Canada Highway.

A 4 mile pack horse trail, now under construction, extends to the approximate location of the proposed low level tunnel. The surface outcrops are reached by following an old trail Easterly from Jones for a distance of 6 miles to the brill Camp at an elevation of 5500 feet. A steep trail $\frac{1}{2}$ miles long, over difficult terrain leads from the drill camp to the surface outcrops at an elevation of 6200 feet.

GEOLOGY:

Mounts Foley, Welch & Stewart, see map accompany this report, are composed almost entirely of badly altered Carboniferous rocks, probably the Rozemeen Group. These rocks are made up of altered tuffs, charts, slates and limestone. The general strike of the formation is North 80 degrees went and the dip appears to be about 70° to the North.

Geological Summary Report 1922, Part A, Page 132.

The above rocks have been invaded by Quartz Diorite and it is near this contact that the mineralization has taken place. Along the contact a belt of limestone has been so metamorphosed as to now be close to garnetite, and it is in this garnetite that the mineralization occurs, in the form of pyrite, chalcopyrite, molybdenite and phrrhotite, with horneblend, chlorite etc. also developed.

The ore body is of the contact metamorphic type and was formed under high temperature conditions.

ORE OCCURRENCES:

result are difficult to thoroughly examine and sample. One ore some sould not be reached. The outcrops are quire spectacular.

Twenty-five channel samples averaged as follows:
Gross

Oz.Au. Value 3 335/oz. Oz.Ag. Value 3 73¢/oz. % Cu. Value 17½ lb. Value

O.11 \$3.55 8.33 \$6.04 12.05 \$42.17 \$52.17

The average width of the three outcrops is 30 feet. The average length exposed is also 30 feet. Outcrop A and C extend under the ice.

A second ore body occurs some 2000 feet to the east. This ore zone was not visited by the writer. It is reported to be about 100 feet long by 50 feet deep by 20 feet wide, and Billingsley's samples are reported to have averaged 7.1% copper. A 80' tunnel, now caved, was driven towards the outcrop.

CLIMATE:

The climate at the outcrops is severe but at the proposed tunnel site will be moderate. Precipitation in the area is heavy.

TIMBER:

A plentiful supply of timber for all mining and camp purposes is available on the company's holdings.

WATER

Up at the outcrop there is no water. An ample supply occurs in Jones Creek for domestic and milling purposes.

PORER:

Power will be available from the B.C. Electric Power Line at Laidlaw, a distance of 14 miles from the proposed tunnel site.

GENERAL:

It is evident from the spectacular surface showings that there is at least a fair sized body of high grade ore. The extent of this ore body cannot be determined until further work has been done.

The deposit is of the contact metamorphic type, a type which has produced the major copper mines of the world.

There is evidence of further mineralization in the area; iron gossan visible on the northern slopes of Welch and Stewart Mountains near the Quartz Diorite - sedimentary contact may indicate underlying copper ore bodies of major importance.

The development of this property is recommended without hesitation.

H.L. HILL Consulting Engineer.

23rd September, 1949

RICO COPPER MINES LIMITED

SAMPLE RESULTS

"A" Zone	Sample No.	Os. Au.	V 9 -\$35.00	Oz. Ag.	₹ 3¢	% Au.	V @ 173€	Cross Value	
	2071	0.10	\$ 3.50	0.70	\$.51	6.00	\$21.00	\$25.01	
	2	0.38	13.30	3.00	2.19	15.60	54.60	70.09	
	3	0.10	3.50	2.10	1.53	6.00	21.00	26.03	
	4	0.06	2.10	1.60	1.16	3.30	11.55	14.81	
		0.12	4.20	2.50	1.82	10.70	37.45	43.47	
	5	0.58	20.30	3.10	2.26	12.00	42.00	64.56	
	7	0.28	9.80	2.00	1.46	6.70	23.45	24.71	
	A v erag e	0.23	\$8.05	2.14	\$1.56	8.61	\$30.13	\$39.74	
HUH 7	2078	0.06	\$2.10	8.40	\$6.13	17.50	\$61.25	\$69.48	
"B" Zone	20 79	0.03	1.05	2.60	1.89	5.25	18.37	21.31	
	2080	0.03	1.05	5.75	4.19	12.95	45.32	50.56	
	2000							+ 40, 30	
	Average	0.04	\$1.40	5.58	\$4.07	11.90	341,65	\$117.12	
"C" Zone	2059	0.01	₩0.35	9.05	\$6.60	4.80	\$16.80		
	2060	0.02	0.70	17.75	12.95	14.50	50.75	64.40	
	1	0.24	8.40	17.45	12.74	12.05	42.17	63.31	
	2 .	0.06	2.10	20.50	14.96	20.00	70.00	87.06	
	3	0.07	2.45	10.75	7.84	12.75	44.62	54.93	
	4	0.04	1.40	8.00	5.84	12.75	44.62	51.86	
	5 6	0.02	0.70	19.60	14.30	18.40	64.40	79.40	
		0.10	3.50	23.20	16.93	19.30	67.55	87.98	
	7	0.06	2.10	23.20	16.93	18.85	65.97	85.00	
	2068	0.04	1.40	23.15	16.89	23.00	86.50	98.79	
,	Average	0.06	2.31	17.26	\$12.59	15.64	\$54 .74	\$69.64	
"A" Zone		0.23	8.05	2.14	1.56	8 .61	30 .13	39.74	
		0.04	1.40	5.58	4.07	11.90	41.65	47.12	
"B" Zone		0.06	2.31	17.26	12.59	15.64	54.74	69.64	
"A" & "B	" & "C" Average	0.11	<u> 33.85</u>	8.33	\$6.0 7	12.05	\$42.17	\$52.12	