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NAME $\qquad$ Geol Data

SUBJECT $\qquad$
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# 82F/4W <br> 82F/3W-93,94 

REPORTon the
IE ROI and WAR EAGLE
Mineral Claims.
Lots 1469 and 1879 Crown Granted
Greenwood Mining Division
British Columia.by
E. Roberts, A. R. S. M.
Mining Engineer,
Royston, V.I.,
B.C.
$\frac{R E P O R T}{}$
On the "Ie Roi" and "War Eagle,"
Mineral Claims, Lots 1469 \& 1879 ,
Greenwood Mining Division, B.C.

Conclusions.
Every facility for mining exists. Ore sitaated in an old established mining district. Good roads and transportation near proximity to railways, cheap power, moderate climate. Accessability: Ore of fair value, in a body evidently of some width and indicated length. Value will probably increase when the leached and oxidized zone is passed through, and deeper development is undertaken.

Ore probably amenable to a combined water and flotation treatment, or flotation alone for concentration, thus rendering it profitable, if values continue. Presuming that a reasonable price is to be paid for the property, I am of the opinion that these clains have attractive possibilities and are worthy of serious development which should be undertaken at an early date.

## SUMMARY

CTAIMS EXAMINED.
Le Roi, Lot 1469, and far Eagle, 1879, both Crowngranted. Owner James Copeland et al. Rock Creek, B.C.

SITUATION. Three and a half miles N.E. of Bridesville, B.C., a station on the Great Northern railway. Also 12 miles West of Rock Creek, B.C. A station on the Kettle Valley Railway. Also close to the main Provincial High-way.

TOPOGRAPHY. Valleys, plateaus, mountains rounded, streams.

EIEVATION.
CLIMATE.

TIMBER.
WATER.
TRANSPORTATION.

GEOLOGY.
WORKINGS.

ORE.

STRIKE OF VEIN.

WIDIT OF VEIN.

TREATMENT.

DEVELOPMENT.

HOUS ING.

POWER.
About 3800 feet above sea level. Temperate comparatively, snowfall 2 to 4 feet. Rainfall moderate.
Well timbered, good supply available. Small Creek (Rice creek) can be piped in. Satisfactory. Close to Main Provincial Highway. No road building necessary for access. Favourable to mineralization. Three prospecting shafts, numerous shallow open cuts and trenches.
Copper, gold, silver, the latter two in small amounts. Not of sufficient value to ship to smelter direct, requires concentration. Probable average value as so far disclosed, about $\$ 10.00$ in all values. See Survey report by Radiore Company of Vancouver, B.C. Probably N.W. \& S.E..Extent surveyed gave favourable indications for 1000 feet. Undetermined, but probably considerable. Not sufficient work done to determine this. Estimated 30 feet. This question, most important, is under consideration. Sample of ore forwarded to Southwestern Engineering Corporation, Los Angeles, for test. Vigorous development recommended, Copeland shaft to be sunk 100 feet, and drifts crosscuts therefrom. \#5000 should be provided for this.
Obtainable on a nearby claim, thus immediate expenditure not necessary.
West Kootenay Hydro-electric Power Line passes 3800 feet distant from workings.

## D E TAIIS.

EXTENT OF PROPERTY. The property at present controlled by the Le Roi \& TITLES. Summit syndicate, contains some 280 acres consisting of the Le Roi, War Eagle, and four other surveyed claims,

SITUATION
and
TRANSPORTATION.

TOPOGRAPHY.
making a compact section. I have not made any examination of the Title Deeds or gone into the extent of acreage, this matter pertains to the management of the syndicate and was not within the scope of my examination.

This acreage however will no doubt give sufficient ground to cover what may turn out to be a valuable deposit on develowment, and also allow room for necessary works and housing.

These claims are situated in a direct line some $3 \frac{1}{2}$ miles N. E. from Bridesville, B.C.

Access to the claims is by the Main Provincial Highway and a short waggon road, a motor-car can be driven on to the claims. Bridesville, 4 miles by road, is a station on the Great Northern Railway connecting with any point desired Rock Creek, a station on the Kettle Valley Railway (C.P.R.) is about 12 miles easterly by road. The situation is ideal as far as connections, transportation etc. is concerned.

The Rock Creek area lies within what is known as the interior Plateau of British Columbia, and is drained by the Kettle River, which eventually joins the Columbia river.

Part of the district is upland and rolling with bunch grass and is suitable for ranching. Gradual slopes coverd with timber rise to rounded mountain tops. The main vallues are $U$ shapped with benches, while that of Rock Creek might be termed $V$ shaped with steep sides. On tributary creeks shallow valleys occur.

The total relief within the area is from 500 feet to 2000 feet, the general view is that of rivers, valleys, plateaus (grass covered) and tree covered mountains with medium slopes. Occasional rugged peaks are to be seen.

CIIMATE.

TIMBER.

WATER•
TRANSPORTATION.

GEOLOGY.

STRIKE \& DIP. OF VEIN.

An example of such being mount Baldy to the N.W. of Camp McKinney.

Moderate, dry as a rule, snowfall 3 to 4 feet. Temperature in winter during general severe weather, probably goes down to zero or 20 below, but not for any length of time.

There is a fair amount of timber on the claims, fir, tamaruc, yellow pine, etc. suitable for mining. Also the neighborhood is well timbered.

This is obtainable from Rice Creek, by gravity. FROM claims to Railway would probably be by motor road, principally over the Provincial Highway to Bridesville.

The claims appear to be situated in an area in which grano-diorite, diorite and gabbro, diabases or geenstones predominate, but the exact character of the immediate surcounding rocks have not been determined. The quartizites, phillitic slates and greenstones of the Anarchist Mountain series are in the near neighborhood, also extrusive and intrusive rhebb porphyry eruptives. Probably these have had something to do with the mineralization in Camp McKinney and adjoining areas, where mineral has been found and claims staked. Thus to a certain extent the geology of the district may be termed favourable. From the Radiore survey made at the time of my visit, the findings show that the strike is in a different direction to that previously supposed by those who endeavoured to tracethe strike by open cuts and trenches. Until the details have been received from the Radiore Company no positive statement can be made on this matter of strike direction, but the said survey obtgined good indications for 850 feet on the "Le Roi" and 150 feet on the "Far Eagle", total 1000 feet, in a S.E.
and N.W. direction.

WIDTH OF VEIN.

WORKINGS.

ORE.

Apparently this is considerable, judging from the three shafts sunk in close proximity to one another, but probably in different streaks of ore. The workings consist of 3 shafts as shew in accompanying sketch, all within a few feet of one another, and in close proximity to the dividing line of the claims. That the workings should be so close together, is prom bably due to the difficulty of prospecting the vein on account of depth of soil, this overburden was made one of the reaons why a Radiore survey was desirable. In addition to the shafts, several open cuts, and trenches have been made, but owing to depth of soil these have not resulted in anything definite. In all probability the Radiore survey will indicate the strike of the vein.

For convenience, the three shafts have been named, the "Phoenix" (60 feet deep and sunk by a syndicate from Phoenix, B.C.) the "old shaft" sunk 50 feet with a 20 ft. drift to earth, sunk by James Copeland and his deep partner, and more recent shaft 12 feet/sunk by J. Copeland alone, called Copeland's shaft.

Copper, gold, silver. The minerals consisting of pyrties, pyrrhotite, (sulphides of iron) and chalcopyrite a copper iron sulphide. These minerals occur in a silicious gangue, and sometimes are quire massive with little or no gangue. Samples of ore for assay gave following results:-

## Dump at Copeland Shaft.



The assays show encouraging returns. Taken in combination with other assays the probability is that the ore runs somewhere in the neighborhood of $\$ 10.00$ in all values. Given a fair body of ore of a reasonable width, this value should prove renumerative, after concentration.

The principal value is in copper. Smelter practise is to make deductions of $1 \%$ on the wet assay for copper and $3 \frac{1}{2}$ cents on the price per lb of refined copper in New York, thus reducing considerably the values on lowgrade copper ore and necessitating its concentration to higher percentages before shipment.

The comparatively small gmount of work that has been done encourages the belief that the copper contents will be greater when the surface ozidization is passed through. A mixed sample of ore, taken from the three dumps of the shafts has been sent to the Southwestern Engineering Corpn. of Los Angeles for a concentration test. The result of their tests and a rough estimate of the cost of a mill will be received in due course and later this information will be added to this report. This is a most important question (apart from the necessary development) with regards to/profitable operation of the
property. Hydro-electric power generated by the West Kootenay Power Company is available for milling and mining purposes.

Formerly copper ore of low gradem unless accompanied by sufficiently high gold and silver values was not an attractive proposition, this however has been altered by the later improved recovery made in oil flotation methods, and thus properties, which did not appeal to capital are now more favourably considered. The Le Roi-War Eagle group is in this category.
DEVEIOPMANT. To test the vein, and develop ore, I consider that copeland's recent shaft now 12 feet deep be continued down to 100 feet, the ore to be followed.

This may necessitate what might be termed a prospecting winze, which may become somewhat out of straight. That is to say the dip might vary, but alignment should be kept in order that it may be utilized as a working shaft at a later date.

When a depth of 100 feet is reached, drifting on the vein should be undertaken and occasional crosscuts made to test the wiath of the vein if necessary.

In sinking, drifting and crosscutting, samples for assay should be taken at frequent intervals.

A vigorous campaign of development should be inaugurated. Every Pacility for so doing exists. Proximity to supplies, short transportation over good roads, and buildings for housing.

Housing for a mine crew is available on the Admiral Dewey Claim, though this claim is not on the property controlled by the Le Roi-Summit syndicate.

Electric power will be available when desired as the West Kootenay Power Line running from Bennington Fall on the Kootenay River, to Allenby, passes at a distance of some 3800 feet from the workings.

RADIORA SURVEY. This survey indicated the presence of mineral along a Iine some 850 feet on the Le Roi mineral claim, and 150 feet on the War Eagle M.C. on what is apparently the strike of the vein. The report on same by the Radiore surveyor, Mr. G.I. Oates, is not yet to hand, but will be forwarded as soon as possible.

OFRICIAL REPORTS.
Reference to these claims and the deposit have been made from time to time in the Annual Reports published by the Minister of Mines for British Columbia. The earliest being that of the first Provincial Mineralogist, W.A. Carlisle in 1897 in which he says:
"The LeRoi and War Aagle Mineral Claims 5 miles S.E. Of Camp McKinney; work exposes a large body of pyrites, pyrrhotite and chalcopyrite and quartz in diabase. Shaft sunk to 50 ft and 20 ft drift to east, all in these sulphide ores, the extent of which is not yet determined. This mass of sulphides said to give fair value in gold up to 费26.00 by assay."

Also in the 1901 Report Fleet Robertson, Provincial Mineralogist, makes mention, $P 1153$.

Later reports by the resident engineer of the \#4. Mineral District, Mr. P.B. Freeland, Minister of Mines report for 1926 P A2ll, gives assay results on a sample of ore taken from bottom of copeland's 12 ft deep shaft as follows:per ton

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Gold.02 oz 304 per oz Silver 4.60 oz (0) \(50 \not \subset\) per oz.

Total value per ton
费17.10

Ditto Report for 1928 p c 256 in which \(H r\). Freeland says re Le Roi \& Wer Eagle:-
"These claims are situated about \(3 \frac{1}{2}\) miles S. B . of Camp McKinney and were reported upon in 1926 Annual Report. Since that time the Consolidated Mining and Smelting Company bonded the claims from James Copeland et al of Rock Creek, and some diamond drilling was done mostly on the War Eagle.

Due to some difficulty about terms the bond was dropped by the Company. The Ie Roi, owned outright by Copeland, is an especially good copper prospect.

Having thoroughly examined the property as far as it is possible to do so I agree with Mr. Freeland's opinion, but with the added recommendation that it warrants vigorous development.

Sketch maps and photographs to illustrate text herewith.
(signed) R. Roberts.```

