REPORT ON

KERR COPPER

DECKER LAKE, B. C.

By

R. H. Seraphim, P.Eng.

Vancouver, B.C., November, 1968

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#### GEOLOGICAL ENGINEERING

427-470 GRANVILLE VANCOUVER 2, B.C.

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## SUMMARY AND CONCLUSIONS:

The 'Kerr Copper' property is located in an easily accessible area within a few miles of black-top highway and reilroad near Burns Lake, in central B.C. Small chalcopy-rite veins with minor galena and sphalerite in a wide zone or zones of strongly altered volcanics have been explored with unfavorable results. The area is, exclusive of the creek canyon containing the showings, practically all overburden.

Apparently no attempt has been made with reconnaissance geophysics or geochemistry to determine if the
showings are on the fringes of a much more important zone.
This work is recommended if the cost of acquiring the necessary ground is low, and no evidence of similar prior work
is found on the ground.

#### INTRODUCTION:

Examination of this property was made initially in June, 1955, with A.B. Goodridge and D.F. Kidd, both now de-

ceased. Goodridge and an associate, Cyril Keyes, had drilled some shallow holes and obtained some good grade vein copper intersections. The core was logged, and the nature of the occurrence ascertained during the examination. The property was subsequently optioned, and frequent trips, with several days to a week spent on the ground during each trip, were made during the early part of the ensuing program. Charles Brown was resident engineer during the latter part of the program. This report reviews the program, and discusses the feasibility of further exploration today.

#### LOCATION AND ACCESS:

The showings are on Gerow (Reed) Creek, about a mile southwest of its mouth, on the south side of Decker Lake. Decker Lake Village is on the north side of the lake, and about five miles northwest of the town of Burns Lake. Both Decker Lake and Burns Lake are on the Prince George - Prince Rupert Highway, and the Canadian Pacific Railway.

#### CLAIMS:

Current ownership was not determined.

## HISTORY:

The showings on Gerow Creek were first reported in the Minister of Mines Publications in 1926 under the name of \*Golden Glory". Several tunnels, from a few tens of feet

veins grading several percent copper and several ounces silver per ton. A. B. Goodridge and C. Keyes in 1955 drilled seven holes with intersections ranging from 3 ft. to 31 ft. core length, and averaging 3.5% Cu and 2.5 oz. Ag across 13.6 ft. The intersections were shallow, starting at 10 to 58 ft. depth in the holes. A plan shows the data concerning them.

The ground was subsequently optioned by Moneta Porcupine Mines and Trico Explorations Ltd. (a Leitch - Highland Bell exploration vehicle) in a joint venture. Six 'A' core holes, 8 to 13, were diamond drilled, and several tunnels were cleaned out. A plan showing this work also accompanies this report. Widespread prospecting failed to disclose further outcrops away from the creek canyon, let alone mineralized outcrop. The old copper showing reported on Boo Mountain, to the southwest of Gerow Creek, was searched for but not found.

Verbal reports are that some bulldozing near the old tunnels was completed by others in recent years, but no published information concerning this work is known.

#### TOPOGRAPHY:

The property is on the Nechako plateau. Relief in the area is only one or two thousand feet. The ridges are well timbered with spruce and pine, the valleys are filled

with lakes or swamps. Outcrops in the immediate area are limited to the 50 ft. deep canyon of Gerow Creek.

### REGIONAL GEOLOGY:

The geology of the erea is published both in G.S.C. map 631A, 'Fort Freser, West Half' and G.S.C. Memoir 252 'Fort St. James Map Area' by J. Armstrong. Numerous intrusives, both the 'Topley Granites' and later granodioritic rocks of the Coast Range sequence, intrude Hazelton Group volcanics.

#### LOCAL GEOLOGY:

The rocks observed (see accompanying maps) are all volcanics or altered equivalents. Those near the showings are andesitic to basaltic, dark grey and greenish, in places aphanitic and in others porphyritic. No definite bedding structures were observed. Near the mineralized areas the volcanics are pyritized and bleached to a buff weathering rock with reticulating veinlets of quartz and minor carbonate. The alteration is particularly intense in the area drilled, and near the old tunnels further upstream.

Fracturing is widespread, with north and northwesterly trends predominant. The showings drilled, and the
altered zone as a whole, were suspected to trend northwesterly,
but if so, many irregular 'horses' of unaltered rock are within the altered zone.

Mineralization in the drilled area is chalcopyrite and pyrite, but fractures with galena and sphalerite are found near the old tunnels further upstream. The altered zone at the upstream tunnels is as large or larger than that near the drilling, at least several hundred feet wide.

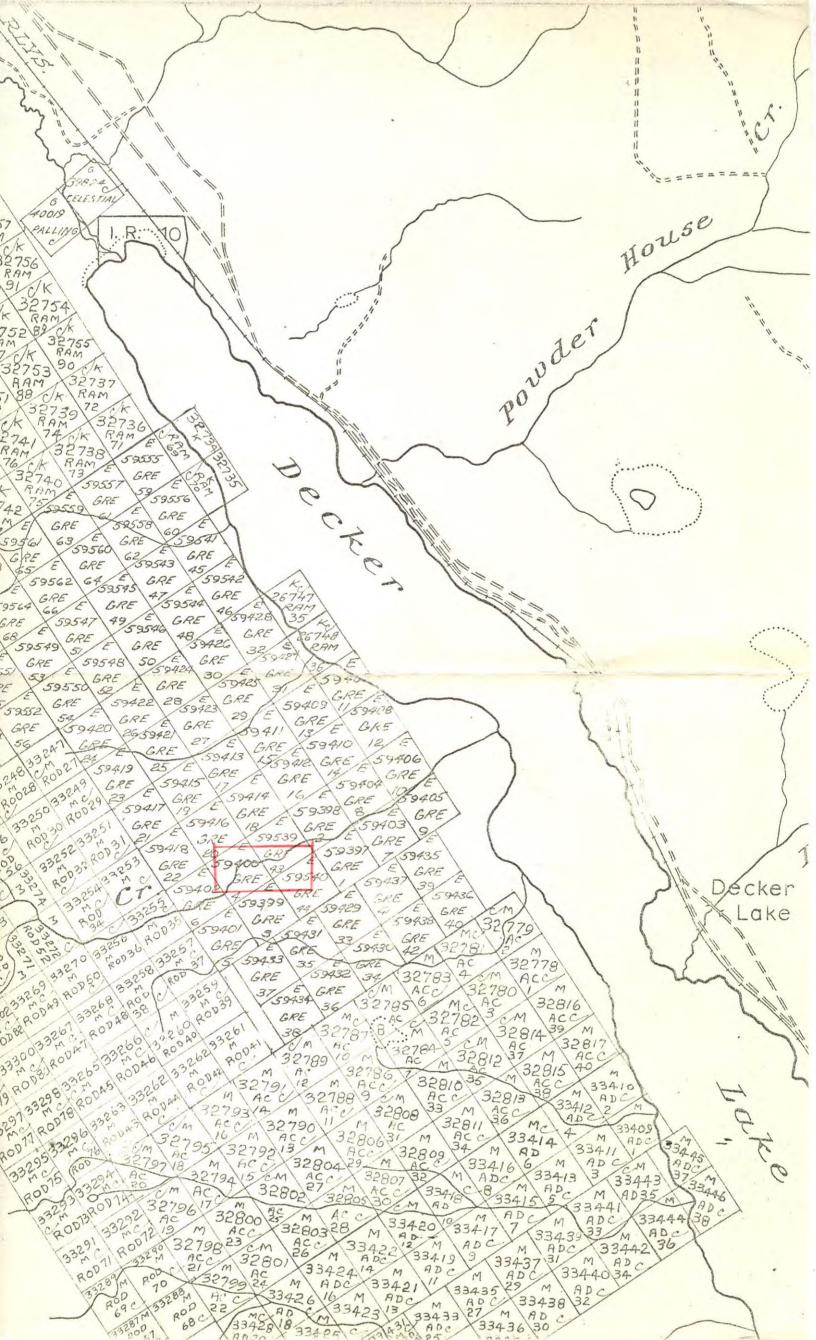
## EXPLORATION POSSIBILITIES:

The alteration and fracturing in and near the drilled showings, and at the upstream tunnels, is so widespread and intense that one is led to suspect that valuable mineral-ization should also be more widespread. Either a major fault and fracture zone, or an intrusive, could be responsible, and could provide much more mineralization than that found.

No outcrops were found except in the creek canyon, although claim line survey traverses and general prospecting covered much of the ground. The ground is thus particularly difficult to explore, but reconnaissance geophysical and geochemical methods might be used to advantage.

R. H. Seraphim

November, 1968.



This map is prepared to serve as a guide only.

Positions of unsurveyed claims and placer leases are plotted from locators' sketches and are not guaranteed.

Letters C.G. indicate claim is Crown-Granted.

Symbol "C" indicates claim has ferfeited.

B. C. DEPARTIMENT OF MINES AND PETROLEUM RESOURCES