SUPPLEMENTARY REPORT ON GEOCHEMICAL SURVEY

93-A

LAR & CHUCK GROUPS OF MINERAL CLAIMS CARIBOO M.D., B.C.

INTRODUCTION

For the purpose of recording assessment work the writer prepared a report on a geochemical survey carried out for Mollusca Oils Limited on the LAR and CHUCK groups of mineral claims located in the Cariboo Mining District, B.C.This report conformed with government requirements for fulfilment of assessment requirements and consequently, in large part, dealt with the techniques employed by the survey.

The present report is intended as an expansion of the conclusions deduced from the survey and outlines suggested additional investigations that should be carried out. It does not purport to repeat in any detail what has already been discussed.

To recapitulate briefly, the survey was conducted by Cariboo Claimstakers of Quesnel, B.C. under the writer's supervision and covered the LAR group of 19 claims and the CHUCK group of 28 claims located south of Morehead Lake and some 45 air miles southeast of Quesnel, B.C. A total of 1197 soil samples were taken at 200-foot intervals along lines 400 feet apart. Each sample was analyzed for its trace copper content expressed in parts per million (ppm) and the results. which ranged from 2 to 420 ppm, were plotted and contoured on a plan of the property scaling 400 feet to 1 inch.

An average "background" of 27 ppm was calculated and it followed that approximately 92% of all samples fell within the range of 2 ppm to 3 times this average "background". The remaining 8% (3 times average "background" or more) were above normal and classed in a possible anomalous category.

After rejecting scattered highs as spot erratics, or as reflecting poor drainage, a total of 7 anomalies or pseudo-anomalies were established, of which one is considered to possess superior characteristics.

DISCUSSION OF RESULTS

The plot of the geochemical results (see 400-scale plan) shows that above - background highs are erratically distributed about the property without any definite overall pattern being apparent. For the following reasons many of these highs are dismissed as spurious and 7 are selected as possessing superior qualities worthy of further consideration:

Erratics: a soil anomaly, unless it reflects a very restricted and hence probably unimportant source, should be comprised of several

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high elements that appear on more than one line and its validity should be reinforced by an area of above upper "background" surrounding the apex and of greater extent than the high area itself. Such generalities are not always necessarily true, but their association with a possible anomaly does strengthen its validity.

It is for the lack of the above characteristics that the highs on CHUCK 5. CHUCK 8. CHUCK 30 and CHUCK 32 (and many more) are dismissed as spot "erratics" of little or no probable importance.

<u>Poor Brainage</u>: a poorly drained area and its accompanying chemical environment is known to to frequently act as a depository for trace elements such as copper in circulating surface waters. Consequently, a high or series of highs spatially related to low, wet, or swampy ground are not considered favorable when, these same highs in a different topographic setting would constitute an interesting anomaly. The following areas on the property are considered to be in this category:

(1) highs along the north boundary of DOLL 6, CHUCK 28

and 27.

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(2) LAR 1 and 6 (3) CHUCK 13 and 15

It should be added that this conclusion is based mainly on the fieldworker's descriptions of sample sites and is subject to revision after a personal inspection of the ground.

Possible Valid Anomalies: On the accompanying 1000-scale plan 7 areas are shown diagrammatically (by cross-hatching) that are interpreted as valid anomalies. Of these, six are considered to be weak, and one (NO.%) is interpreted to possess characteristics that definitely indicate further investigation to be warranted.

<u>No. 7 Anomaly</u>: It will be noted that the number of readings above 3 times "background" (small figure circled on the plan) varies from 2 for the No. 5 anomaly to 18 for No. 7, and it is this spread of highs (mainly on CHUCK 29) that lends considerable strength to the probable validity of the No. 7 as a genuine scil anomaly.

Its importance is weakened by the absence of any excessively high readings as are frequently associated with soil anomalies (15 times "background" is the best) but this is partly countered by the following favorable factors:

(1) probable good drainage on relatively high ground

(2) proximity to Caribbeo Bell property on the east where potentially economic copper deposits are currently being explored.

(3) apparent long-axis trend in the northwest quadrant, which is the prevailing structural trend in the region (though not necessarily of any particular mineralized zone.

The role of bed-rock proximity in the area of the anomaly as reported at the soil sample sites cannot be evaluated until the ground has been examined in the field. However, it may be significant, that of 5 sites where bed-rock was reported, at one locality only (on CHUCK 31) was an above - normal value returned. 5 10 -

CONCLUSIONS & RECOMMENDATIONS

The No. 7 anomaly has sufficient positive features to warrant further investigation to determine if it is a surface reflection of underlying copper mineralization. The other 6 anomalous areas - along with other highs on the property - could likewise be reconnoitred for any meaningful significance at the same time as the No. 7 is investigated.

The following is a suggested sequence that such investigations should follow:

(A) Examine topographic settings of anomalous areas, especially as it pertains to drainage and depth of overburden.

2. Prospect closely and obtain geologic data from those areas where bed-rock is exposed (especially No. 7 anomaly area) and sample bedrock at or near anyscil sample where above-normal ppm copper was obtained.

3. Fill in soil samples on closer lines and spacing where the results of 1. and 2. above indicate its desirability.

4. Extend the sampling in these areas on the property where "isograds" are not closed e.g. on CHUCK 19 and CHUCK 23.

5. Compare the above assembled data with that of others in the area whose efforts have successfully outlined Mineralized target zones.

6. Define and stake any open ground existing around the No. 7 anomaly and the mutual boundary with Cariboo Bell on the east.

(B) Should (A) above be favorable and the information obtained indicates it would be feasible, trenching by ripper-equipped bulldozer in an attempt to reach bedrock in anomalous areas should be employed as a more-advanced step in the program.

PHELIMINARY COST ESTIMATE

A preliminary budget to cover the foregoing work should include provision for the following basic items:

ground	(1) Prospecting, goologic investigations, rock sampling, examination, fraction staking and related costs	\$1200.00
	(2) Soil sampling - fill-ins and extensions	
	say 250 samples	1000.00
	(3) Bulldozing	2500.00
	(4) Engineering & supervision	750.00
	(5) Provision for contingencies	550.00
		\$6000.00

The above program, properly organized, should be completed in about a month and, if encouraging, would lead to a considerably higher requirement of funds for followup exploration, which might include additional soil sampling or bull-dozing, I.P. or magnetometer work, and testing by overburden or diamond drill. The writer recommends that, with the possible exception of staking fractions, any work program be deferred until the ground is bare and it can proceed at greater speed and less cost than is possible under the present winter conditions (the foregoing cost estimates are postulated under summer conditions). On or about May 1 is believed to be, in a normal year, about the time when snow has melted and roads are returning to a passable condition.

In the meantime, developments by other operators in the area, in particular on the Cariboo Bell property to the east, should be kept under continuing review for any possible implications they might have for the LAR - CHUCK property.

A.G. Hodgeon P. Eng.

1338 Walnut Street Vancouver, B.C. 17 February, 1967

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T.B.P.S. JIM ERWIN. Claims recercled - abrest certainly in controvention. Ceres 3x background Cu (Smell) anomely over lake per Cereson Bell. op unlers you knew servetling of area or Erwin. flem, PROP JIM. ERWIN. () Snall D.P. 2 \$1000 to look. 18 claims Goved Will Moreh 71. 3 25 " March - Carlom. chech dim