

## J. R. Woodcock Consultants Ltd.

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December 11, 1970

Mr. Hiroshi Ogata  
Tyee Lake Resources Ltd.  
312 - 510 West Hastings  
Vancouver, B. C.

Re Duckling Creek Program

Dear Mr. Ogata:

I have briefly reviewed the data of Mr. G. D. Ulrich and Mr. C. A. R. Lammle for the drill program on the Rondah Property and I have examined the core from several holes. However I have not logged the core in detail and I have not drawn up my own plans and sections. On the basis of this review and previous work I have the following suggestions:

1. The widespread copper mineralization on all claim groups held by Tyee Lake Resources Ltd. in the Duckling Creek area (as shown by the high values in the stream geochemistry and the widespread copper mineralization detected in the prospecting) indicates that Tyee Lake Resources Ltd. has some good exploration ground. The problem is to find an economic concentration of this copper. The stream geochemistry has indicated several good targets for exploration and all of these targets need additional work.
2. "Syenite" copper deposits are generally more erratic in distribution and grade than the usual porphyry copper deposits. Therefore, as well as looking for a very large open pit disseminated copper deposit, one should be aware of the possibility for a moderate sized target with grade slightly higher than most porphyry copper ore of British Columbia (e.g. 40 million tons grading about 0.6% copper). Such a deposit is not an extremely large target.
3. Zone A of the Rondah claim group has been explored with about 3000 feet of diamond drilling in five holes. The first diamond drill hole was very encouraging with some good values in copper; but subsequent holes had somewhat lower grade. However one must note that copper does occur throughout much of the core, e.g. diamond drill hole No. 2 has an average grade of 0.18% copper for its entire length of 500 feet of core.  
  
The distribution of the copper-bearing float and the extent of the anomalous induced polarization response indicates that Zone A is a large exploration target. The target has not been fully explored and more drilling is necessary to the north and to the south of the present drill holes.
4. It appears that Mr. Gordon Ulrich has done a conscientious and detailed job of logging the core. I believe that many of the dikes and pegmatites mentioned in the logs could be meta-

somatic in origin. In many places it is difficult to differentiate between incipient metasomatism to "syenodiorite" and hydrothermal alteration (pink coloration).

5. Dikes and lenses formed by metasomatism are much more irregular than the usual tabular bodies formed by intrusion of basaltic or diabasic rock. Moreover the type of mineralization found in "syenite" copper deposits is generally very irregular in detail. Therefore it is somewhat risky to project "dikes" and intersections of copper mineralization very far beyond any drill hole. Until we have considerably more drill hole data, it would be best to regard the overall zones of alteration and copper mineralization as the targets.
6. For Zone B, the induced polarization anomaly is the conspicuous target. Trenching on the southern part of the induced polarization anomaly has revealed mainly pyrite mineralization. However one must note that the streams draining the area north and west of this induced polarization anomaly are anomalous in copper and the induced polarization anomaly is still open to the north. This target must be fully explored, first by surveys of induced polarization and geochemical soil sampling.
7. One must be aware that induced polarization anomalies generally indicate abundant pyrite and that the copper-bearing zones may be separate from the pyrite-rich zones. This important factor must be kept in mind when exploring both Zone A and Zone B.
8. For a distance of at least one-half mile, along Rondah Creek, streams draining from the south and southeast are highly anomalous in copper. The uppermost stream (Float Creek) has a value of 490 ppm copper; the lowermost stream (draining part of Zone B) has a value of 940 ppm copper. Tributaries further to the northeast have not been sampled. Between these outer creeks are two more small streams that have values of 640 and 720 ppm copper.

Thus it appears, from the present data, that the area between Zone A and Zone B is anomalous in copper. This central area is a zone of somewhat low magnetic values surrounded by some high magnetic anomalies. The high induced polarization responses on Zone A and Zone B lie on the surrounding zone of magnetic anomalies. The central area has relatively low induced polarization response.

We must not overlook the possibility that the high magnetic and high induced polarization responses of Zone A and Zone B may reflect a pyrite halo around the central area of magnetic lows, subdued induced polarization response, and anomalous stream copper values. This possibility must be tested, preferably with some diamond drill holes in the central area.

9. At least two targets on the Duck claim group warrant investigation (Targets B and C of my report dated September 30, 1970). The initial exploration should include geological mapping followed by soil sampling and induced polarization.

The above suggestions should help you in planning your program for the 1971 season. When the plans and extent of the program are known, some budget estimates can be presented.

Yours very truly,

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