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Dear Ben,

This letter is to serve as a preliminary report on the geophysical measurements that were made on your Torquart Bay Project. I suggest that this information ought to be part of a more formal geological report which would include the geophysics, geochemistry and geological evaluation.

The present geophysical surveys include ground magnetometer and VLF EM, which were undertaken to determine the geophysical characteristics of the ground around the area of the known mineralization (the Lucky Vein).

An orthogonal grid of 20 metres by 20 metres was re-established and measurements of Total Magnetic Field and VLF EM were taken to augment and verify earlier testing (VLF EM, stream sampling, mapping, drilling, etc.)

The validity of using these techniques (Mag, VLF) lies in that overburden covers many areas of interest. Often the overburden cover is such that insufficient geological control exists so that a statistically reliable formulation of the geology can be made.

The geophysical measurements can help in this regard. The data, if well collected and presented appropriately, can often provide a psuedo-geological map of the area, indicating possible faults, different rock types based on magnetic susceptibility or conductivity (at least in a qualitative way) giving the geologist some information on which to systemize the area under study and occasionally (rarely) direct the explorationist to a mineralized zone.

In the enclosed maps, TOTAL MAGNETIC FIELD, VLF EM TILT ANGLE, VLF EM QUADRATURE, VLF EM FRASER FILTER (NORMAL) AND VLF EM FRASER FILTER (ORTHOGONAL) a number of features are evident from the underlying rocks. These are displayed on the MYLAR OVERLAY that is provided.

DISCUSSION OF RESULTS

The Ellswick Lake fault zone appears to be a substantial zone of structural weakness, and may be one of the fault systems acting as a primary "plumbing system" for eptermal solutions.

REMARK: Although no relationship has been established to date, it may be that offshoots of this fault could provide conditions for mineral emplacement. Such could be the case in the Lucky Vein. If so, it may be appropriate to explore in an east-west direction from the Lucky Vein. There is no evidence in the geophysical measurements to date that suggest that a substantial north-south structure exists.

The magnetic map indicates a zone of low magnetic susceptibility in the south-west quadrant. This could be a zone of siliceous alteration, however, it is probably a zone of magnetite-poor volcanic rocks.

The magnetic high in the south-east quadrant may be due to

underlying intrusive rocks.

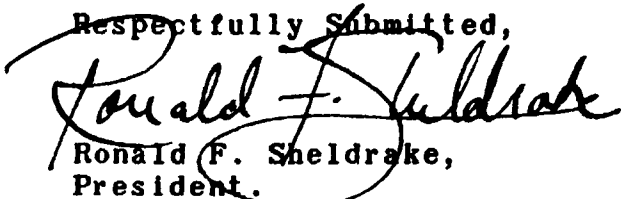
Because I will not be here to personally discuss the matter with Dr. Carter, I will make a comment now regarding his suggestion for resistivity surveying. The suggestion of undertaking resistivity is a valid one, however, there are some qualifications.

1. The vein materials are very narrow (in the order of .2 to .3 metres) in width. An electrode spacing of 5 metres (or less!) would be necessary to map targets of that size.
2. Secondly, the present VLF EM data suggest that the rock in the area of the Lucky Vein is relatively homogeneous in its electrical properties, and the resistivity may not provide definitive data.
3. Resistivity surveying in that area, at the required spacings, will be very expensive.

REMARK: I do not claim to have all the answers with regard to resistivity surveys, and suggest that seeking an alternate opinion is well justified (for example, Dave Mark, 687 6671). Or try a few test lines!

The present interpretation is not complete. Geochemistry surveys are underway and will provide an independent data set which may offer vital guidance in the geophysical interpretation.

Respectfully Submitted,


Ronald F. Sheldrake,
President.