Who will find the next Voisey’s?

BEEP MAT DETECTOR IS AN AFFORDABLE METHOD OF IDENTIFYING NEAR-SURFACE GOSANS

BY PIERRE GAUCHER

Everyone attending the last Prospectors Development Association convention in Toronto heard Al Chialett explain how he and Chris Verbiaski found the Voisey’s Bay mineral showing. In summary, they sampled every gossan spotted while flying more than 500 hours of helicopter traverses, financed by Diamond Fields.

At the end of the season, the last gossan sampled out of several hundreds turned out to be the tail of the Voisey’s Bay tailpole. The grade of the samples collected on that gossan allowed them to obtain a budget from Diamond Fields to check the showing by geophysics and drilling. Practically unlimited additional funds became available after the initial drill results were published.

Their story is an example of how most of near-surface Canadian mines are found today: a prospector or geologist discovers the first showing or float of ore. What is not evident is that for every mine discovered, perhaps a hundred thousand rusty or quartz-bearing outcrops and boulders have probably been sampled and assayed by prospectors and geologists.

Today it is likely that most, if not all, gossans visible from the air in the Voisey’s Bay area have been sampled. Since it is now unproductive to try to spot additional gossans from the air, the next step is to localize the gossans hidden under the moss that are also conductors, with airborne EM. Most of the ground around Voisey’s Bay has been flown, but many of the conductors thus discovered remain to be sampled. Because of the cost of the classical approach, which implies line cutting, geology, geophysics and drilling, many of the conductors may never be sampled by drilling or other methods.

There is another approach which has already been tried out by several innovative junior and senior companies in the Voisey’s Bay area, and that is by using the Beep Mat, a near-surface sulphide detector.

The shallow overburden near the Voisey’s Bay discovery enables a Beep Mat operator with a GPS to outline, with tagging tape, wherever a given airborne conductor comes within two meters of the surface. There, the conductive hidden gossan can be sampled for a few hundred dollars, much less than 10 per cent of the cost of the classical approach.

Line cutting, geology, geophysics and drilling are only done over the ore-bearing conductors.

Such an approach will allow innovative companies to be as cost effective as prospectors Al Chialett and Chris Verbiaski, that is to sample, at a small cost per unit, many hundreds of gossans with a limited budget, and then concentrate the classical ground follow-up on a few valuable targets.

Nobody can predict which conductor will be an ore body. With the same budget, by sampling many more conductors (hidden gossans) than their competitors, those companies using Beep Mats have a better chance to make the next Voisey’s Bay discovery.

In areas of deeper overburden the Beep Mat may also discover high grade floats that will define drill targets.

Finally, many of the mines that were discovered by prospectors cannot be detected by airborne surveys, even today, and sometimes not even by I.P. On the other hand, Beep Mats often signal their subcrops, as even tiny sulphide veins hidden under the moss can be detected and sampled by this approach.

To conclude, a high grade showing or float is much easier and cheaper to discover with the Beep Mat than with the classical approach. Such a high grade showing will help a prospector raise additional exploration funds much more effectively than by defining a swarm of anomalies by ground geophysics, whether such anomalies are still unexplained or already drilled, but barren.