

November 19

Dear Bill,

Many thanks for your interesting letters about the Quebec Object. Art Bridge took it and has been working on it for the past two weeks. His first try was like mine, to cut off a piece on the power saw. All that happened was a shower of sparks and saw teeth! He eventually had to use a tungsten wire saw and abrade off some samples. He got a friend in Mines and Technical Surveys to make a spectroscopic analysis of the sample and got the verdict that it was Magnesium Ferrite. Now, this material is a purely artificial product, made with some considerable effort, and does NOT occur free in Nature to the best of our knowledge, nor is it a "byproduct". The only use for it that I can find is in missile nose cones and rocket motor linings, as it is reasonably resistant to ablation.

A close inspection of the surfaces shows the inclusion of large numbers of very small particles, most of which seem to be light metal silicates. The density of these particles (on the outer surface only) is about 30 per square centimeter. Dr. Peter Milman advises that micrometeorites of this size would occur through a sq. cm. section at about 10^{-6} second so it would take about a year to accumulate such a density.

Your statement about CARDE and the blast furnace does not sound quite right, as it does not seem to me reasonable that scrap from a blast furnace would warrant any unusual method of disposal. Usually, such material is dumped as near as possible to its source, usually within a quarter mile. I am quite sure that the Department of Transport would take a VERY DIM VIEW of dumping such material in the St Lawrence River! However, if CARDE stick to their story, then they should have no objection to either turning the whole Gubbins over to us or allowing us free access to it. Would you look into this angle, please?

How did you make out about there being a second larger piece further out in the river, near the shipping channel? If this is correct and such a piece can be located, I think I can interest some DOT people to lift it. I think we have enough to stimulate an interest.

Many thanks for your efforts which I am sure will prove most worth while when all the facts are in. Meanwhile, we will drop a series of notes from time to time as we get anything significant.

Best regards

Wib.