

The *quartz-ankerite* veins should be carefully examined for *sylvanite*, which mineral contains a large percentage of gold in its composition. *Sylvanite* has a high metallic lustre; of a steel gray colour, is heavy and very easily scratched and altogether closely resembles *galena*, except that it lacks cleavage, and hence does not break into the cubes so characteristic of the latter.

When free gold is present it will usually be found with the *sylvanite* if that mineral is also present. The full value of the gold present cannot be judged from inspection or even by panning, because the amount contained in the *sylvanite* is not shown by either of these processes. For this reason it is very essential that ores should always be tested by fire assay. Simple amalgamation or cyanidation will not recover the gold and silver values of the tellurides. The ore has to be thoroughly roasted before employing these processes.*

Quebec, December, 1910.

*It must be understood that the above observations merely state conclusions arrived at by Mr. Harvie from a comparatively short examination in the field and it is quite possible that on further investigation some of the conclusions may be altered. Bearing this in mind the notes can serve a good purpose in helping the prospector to distinguish between the two different classes of quartz veins such as are found in Opasatica.—
THEO. C. DENIS, *Superintendent of Mines.*