

GEM WATCH

GOLDENITE JADE?

Recently submitted to the lab was an attractive material called “goldenite jade”. Fig.1 . Internet searches confirmed similar material is being sold through several websites. It is composed of a black cabochon with random and natural-appearing gold pattern applied to the surface so as to appear as natural gold ore. It is also seen in a white base material, which we were not able to view and test.

As we are not a metals testing lab, we did no more than basic, preliminary analysis of the gold plating, but it did appear to be gold. The black material tested as a rock composed of primarily

dark amphibole minerals, with no predominant mineral. Neither jadeite nor nephrite minerals were detected by Raman analysis, however FTIR spectroscopy revealed a compositional match to the amphiboles, which we know can cover a wide range. Hardness tests indicated a hardness of between 6 and 6.5. In durability tests, the material was easily broken; revealing an uneven fracture, Fig.2 with no fibrous, felted structure such as would be expected in a jade. Lustre was subvitreous.

Although jades are more properly considered rocks, as they contain more than one mineral; our conclusion is that this material is also a rock, but should

not be classified as a jade. It is more along the lines of a ferro-hornblende amphibole. Dr. Robert Downs, Professor of Mineralogy at the University of Arizona comments regarding this: “There is no mineral known as jade. Jade is a name made up for a rock with certain properties. So, if it looks like jade, smells like jade....” I believe the good doctor may have been suggesting to watch where one steps. Gemmology has a long tradition of naming jades within a certain range of compositional minerals and physical properties. Maw Sit Sit and chloromelanite have far more valid claim to the name jade than this material.



FIG.1
THE ATTRACTIVE MATERIAL CALLED “GOLDENITE JADE”.



FIG.2
THE BROKEN MATERIAL REVEALING AN UNEVEN FRACTURE.

