HOAX DIAMOND

Meenakshi Chauhan



Indian Gemological Institute – Gem Testing Laboratory, Delhi examined a 2.74 ct colorless Natural Topaz which was polished to imitate a rough octahedron crystal, probably to imitate diamond. Rough was beautifully polished depicting striations parallel to octahedron edges and were made as in to show Trigons, natural growth markings present on diamond octahedron crystals. Crystal's edges were also kept little rounded as common with diamond roughs. On first instance any unexperienced person can presume it to be a diamond. Although crystal was not able to mimic adamantine luster of diamond and sharpness of trigons perfectly.

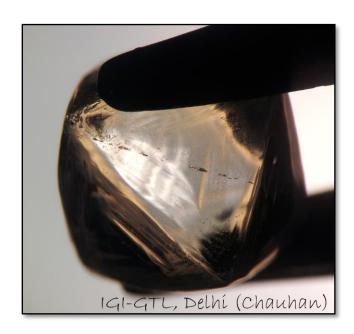
Under UV rough was inert. Specific gravity of rough was 3.50. Under the magnification rough showed large finger prints with big phase inclusions, which is impossible in natural diamond due to the conditions in which the diamond grows. Rough showed typical infrared spectra of natural Topaz.

Rough was concluded to be a natural topaz, smart imitation of diamond..

But not smart enough to fool FTIR.



Striations made parallel to facet edges were kept slightly rounded, forming center of facets appearing like trigon.

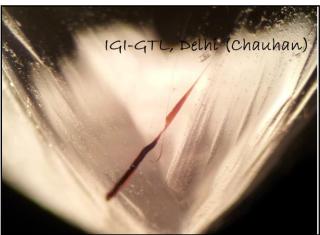




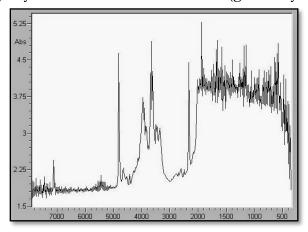


Fingerprint and phase inclusions in rough





Brown color blady crystal and fiber like inclusion (generally observed in topaz).



Topaz crystal imitating diamond rough showed typical natural Topaz Infra Red Spectra.