



## रत्न परीक्षण प्रयोगशाला

रत्न तथा आभूषण निर्यात संवर्धन परिषद  
वाणिज्य मंत्रालय, भारत सरकार द्वारा प्रायोजित, जयपुर

## Gem Testing Laboratory

THE GEM & JEWELLERY EXPORT PROMOTION COUNCIL  
Sponsored by Ministry of Commerce, Government of India, JAIPUR

दूरभाष/Phone : 565740

तार/Grams : GEJEXCON

राजस्थान चैम्बर भवन Rajasthan Chamber Bhawan

मिर्जा इस्माईल रोड Mirza Ismail Road

जयपुर-302 003 भारत JAIPUR-302 003 INDIA

संदर्भ संख्या/Ref. No. : GTL/GJC//JPR/

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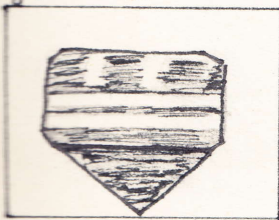
### G.T.L. LAB INFORMATION CIRCULAR -002

In September 1994, we examined a number of different stones. A few interesting stones were

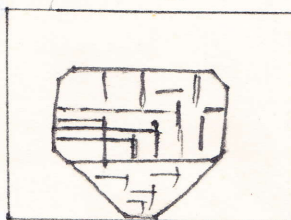
1. Blue Kyanite:- Transparent well cut with a fine ink blue colour. The properties are typical for kyanite with R.I. 1.71 - 1.73, S.G. 3.70 (Hydrostatic), Inert under U.V. light, two absorption bands at 400, 450nm, under chelsea filter appear yellow-green and under magnification distinct colour zoning, parallel needle like inclusions ~~two~~ direction cleavage cracks, crystals and fingerprints. (Fig: 1, 2,)
2. Green Kyanite: Green cabochons of kyanite similar in colour to Green Chrysoberyl. Properties typical for kyanite seen. Under magnification two directional iridescent parallel cleavage cracks, silk like cluster of crystal. (Fig: 3)
3. Transparent Yellow Orthoclase Feldspar: In the rough form with a polished surface. Classic etching marks on the surface (Fig: 4) properties are typical for orthoclase feldspar. R.I. 1.52 - 1.53, S.G. 2.57 (Hydrostatic), Pinkish under U.V. light, under magnification number of liquid fingerprints, transparent crystalline inclusions and iridescent cleavage cracks seen.
4. Hessonite Grossular Garnet: Light yellow transparent (Citrine coloured) hessonite garnet of over 10 cts. in size. The properties are typical for hessonite garnet. Under magnification rounded crystalline inclusions and heat wave effect giving the stone a slightly sleepy appearance.

Fig →

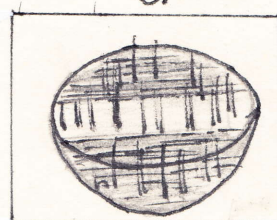
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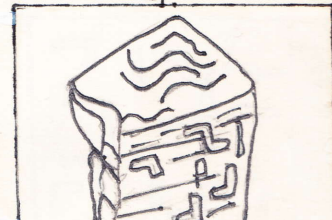
2.



3.



4.



5. Fracture filled Diamond: One light yellow diamond of over one carat with a large, filled fracture was received for testing. The fracture exhibited distinct colour flashes of orange yellow and blue in two directions. Similar to that reported in Yehuda filled diamonds. This effect was also clearly visible with a 10 X lens.

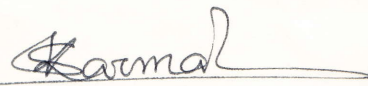
Besides these a number of flux ruby and emerald and also dyed beads of quartz and beryl were examined.

Hope you do find this circular interesting. Once again we request you to kindly acknowledge receipt of the same in writing if you have not already done so, as otherwise you will definitely be struck off our mailing list.

Yours sincerely,



(MRS. SHYAMALA FERNANDES)  
Gemologist.



(SUNIL SARMA)  
Asst. Gemologist.

Would you like to know about heat treatment of Gemstones like Amethyst, Aquamarine, Tanzanite etc . ?

Look out for our next **circular**.



(VIKAS JOSHI)  
RESEARCH GEMOLOGIST.