

वाशिष्य मत्रालय, मारत सरकार द्वारा त्रायाजत, जनहर

Gem Testing Laboratory

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

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राजस्थान चैम्बर भवन मिर्जा इस्माईल रोड

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LAB INFORMATION CIRCULAR No. 015

In the month of November '95 a number of different stones were examined and certified at Gem Testing Laboratory. A few interesting stones were:-

- 1. Sillimanite: Yellow coloured transparent oval mixed stone, the properties were typical for sillimanite. R.I. 1.66 - 1.68, Biaxial optic figure, under magnification parallel needles, fingerprints and doubling of facet edges wêre seen and under U.V. deep red fluorescence was observed.
- 2. Asteriated Quartz: Milky white stone which exhibited distinct six rayed star under reflected light. R.I. 1.54 (Spot); distinct Bull's eye optic figure under polariscope. Under magnification three direction needles and fingerprints were seen.
- 3. Spodumene: 23.38 carat yellow coloured rough with one side polished stone. DR/Biaxial, R.I. 1.665-1.680, under magnification fingerprints and phase inclusions were seen. Hydrostatic S.G. obtained was 3.18.
- 4. Fluorite: Emerald green coloured weighing 43.45 carat over mixed stone. S.R. with R.I. of 1.438, U.V. showed strong violet and under magnification typical triangular two phase inclusions and cleavage cracks were seen.
- 5. Composite: Purple red over mixed D.R./Uniaxial stone with R.I. 1.76 - 1.77 on both crown and pavilion. Under magnification curved lines in pavilion part and fingerprint in crown part were distinctly seen. Junction planed revealed trapped gas bubbles, and the colour of crown was found to be green while of pavilion red. Under U.V. crown girdle part was inert, while pavilion was fluoresing red.

Fracture Filled Synthetic Ruby: In this month one of our regular traders asked as to check a few stones. All stones were purple red in colour, ranged from 2 ct. to 8 cts. in size. The properties were typical for rubies. A majority of the stones showed features characteristic of crackled synthetic verneuil Ruby. All these fractures contained red colour concentration and under U.V. lamp a yellow fluorescence along cracks are seen. These cracks give a natural look to stones.

For Gem Testing Laboratory.