



IIGJ-Research & Laboratories Centre introduces “Origin Certification” Service for Emeralds

IIGJ Research & Laboratories Center, Jaipur, announces the launch of industry’s much-awaited service of providing “Origin Certification”.

25th February, 2022 Jaipur: IIGJ-Research & Laboratories Centre (IIGJ-RLC) is the new brand identity after the merger of two well-established laboratories operated by the GJEPC – the Gem Testing Laboratory (GTL, Jaipur) and the Indian Gemmological Institute – Gem Testing Laboratory (IGI-GTL, Delhi).

The laboratory has now emerged as the leading facility in the country for certification of loose coloured gemstones, diamonds, and studded jewellery.

Colin Shah, Chairman, GJEPC, commented, “The Council aims to adopt a holistic approach to strengthen each vertical of the industry, and the Origin Certification service for emeralds through our top-notch and well-equipped laboratory in Jaipur, the world’s hub for emerald processing, is yet another milestone in advancing our mission. Labs such as IIGJ-RLC are important to establish the provenance, authenticity, and value of the stone.”

Nirmal Kumar Bardiya, Regional Chairman, Jaipur, “Getting a certificate of origin for emeralds is the first step for the IIGJ-RLC. We will extend the service for rubies and sapphires as

well in the coming months.”

Vijay Chordia, Convener - Technical & Education

Sub-committee, Jaipur, notes, “This is a moment of pride for the industry. A certification of origin for emeralds will not only raise the transparency standards across the supply chain, but also protect the confidence of consumer.”

The laboratory infrastructure is on par with international standards. Housed in a sprawling 10,000 sq ft area, the laboratory includes highly sophisticated, sensitive, and unique state-of-the-art instruments such as Laser Ablation - In Coupled Plasma - Mass Spectrometer (LA-ICPMS) for chemical fingerprinting, x-ray microCT for 2D/3D x-ray imaging, automated screening machines for loose and mounted diamonds, in addition to other spectrometers such as Laser Raman, Infra-red, X-ray fluorescence, etc.

IIGJ-RLC has compiled the results of its study on the industry requirements to arrive at a bouquet of new services required for gem and jewellery industry. Based on this study, IIGJ-RLC announced the launch of Origin Certification services for emeralds from 21st February 2022, while similar service for rubies and sapphires will be introduced in the ensuing months.

The origin certification at IIGJ-RLC will be based on gemmological analysis by a highly skilled and experienced team of gemmologists, spectroscopic analysis using UV-Vis-NIR, Laser Raman and FTIR and chemical analysis using highly sophisticated, advanced, and state-of-the-art instrument, LA-

ICPMS, which has the capability of detecting the presence of various elements up to ppb (parts per billion) levels.

IIGJ-RLC is the first and only gemmological laboratory in the country to house LA-ICPMS for its routine certification, thereby, making the reports issued more authentic.

Over the years, the laboratory has been working on collecting the database on emeralds, after carefully sourcing and selecting authentic specimens from various commercially important sources.

In addition to detailed inclusion study, which forms the basis of origin determination by most gemmological laboratories, comprehensive chemical fingerprinting, using LA-ICPMS, will be routinely performed at IIGJ-RLC, before issuing a report on origin.

Detailed chemical fingerprinting becomes more important when two emeralds are formed in similar geological environments but belong to different locations. For example, emeralds from both Colombia and Afghanistan (Panjsher) form in similar geological environments and display similar inclusion scene; but they have different chemical ratios. Chemical fingerprinting will help to separate the two emerald sources. Authentic origin certification ensures actual realisation of commercial value of the stones thereby assuring better returns for the trade members.

Introduction of this new laboratory services in Jaipur, with world-class infrastructure will benefit the pink city and rest of the country's gem and jewellery industry.

The laboratory has already arranged to serve manufacturers, dealers, and retailers in other parts of the country by empanelling experienced and affordable logistics partner.

The laboratory is operational from Sitapura, while samples can still be submitted at the regional office of the GJEPC, situated at 3rd Floor, Rajasthan Chamber Bhawan, M.I. Road, Jaipur.

Contact Details of the Laboratory

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