

HUMBUG OF CHILKA LAKE

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Rare Blue sapphire, emerald, and coral producing mollusks are found in Chilka Lake, of Odisha state on the east coast of India.



Map Chilka Lake

Will a Gemmologist or Geologist ever believe this???

NO...

But it shall be not less than a miracle for anyone, if possible.

Dr. Anurag Kumar Aggarwal* went for a family tour to Odisha, and visited Chilka lake, a beautiful brackish water lagoon (water that has salinity more than fresh water, but not as much as sea water) covering an area of over 1,100 km². Chilka Lake is renowned as India's largest coastal lagoon.

Boat was hired to take the view of lake, boat's coxswain and his helpers showed mollusks in a plastic tub. Boat's coxswain stated that these mollusks may contain precious gemstones like Sapphire, Coral, Emerald and Pearl, which are naturally formed in these

shells under the lake water. To check the luck of buyer, available mollusks in the bucket, which were proclaimed to be collected from deep within the lake, were broken and opened with a wooden hammer. From few mollusks green, blue, red and white stones were obtained in front of buyers. As they were mimicked to be naturally produced gemstones, good amount for each stone was demanded.



Map Chilka Lake



Chilka Lake



Chilka Lake



Chilka Lake

Extractors and boat personnel affirmed that they are having license from the government to perform the extraction of these gemstone from mollusks collected from the Chilka Lake and have permission to do sale of extracted stones.

They also showed red crabs in a plastic tub, covered with a net, and those red crabs were claimed to be a rare species found in Chilka Lake.

It was known that practically it's not possible to get such gemstones from mollusks, but some of the stones were purchased to check the authenticity and identity of stones extracted from Mollusks.

It was observed that these tricksters fetch undue amount from tourists by telling false stories about the formation and extraction of these stones from Chilka Lake.



Mollusks, sellers were carrying in bucket, which were later opened up with wooden hammer to extract Stones



Mollusks and the wooden hammer

Total 11 stones were purchased from the traders at Chilka Lake, 2 red, 1 milky white, 1 green, 1 blue, 1 sky blue and 5 pearls. All stones were gemmologically analyzed by the author.

Under the magnification, all of the stones except pearls showed the properties identical to glass, as were found to be filled with gas bubbles and swirl marks. And other physical properties, like RI and SG, were also found to be identical with glass properties.



Mollusks proclaimed to be carrying gemstones



Seller extracting stone from the mollusk



Red crabs



Polished Glasses of different colours extracted from Chilka lake

Red stones were probably to imitate coral, semi-translucent, bearing white striations as found on natural coral, fashioned in cabochon cut (capsule like), generally corals are polished into cabochon cut.

Blue stone was probably to imitate Blue Sapphire, fashioned in cabochon cut. Under higher magnification blue stone was full of gas bubbles and swirl marks.



Gas bubbles visible in Glass imitation of Coral

Light blue translucent stone was probably to imitate Turquoise, full of gas bubbles and swirl marks.

Green stone was probably to imitate emerald, fashioned in cabochon cut, full of gas bubbles and swirl marks.

Pearls were appearing to be cultured one, which are available in market for mere 50-60 INR. Although these were proclaimed to be natural pearls by the sellers. Nacre layer was peeling off from pearl's surface.

Although for a trained gemologist, it's mere a 2 minute job to catch the game, but a layman would pay high cost for this fake deal.

Natural Emeralds and Sapphires crystallizes deep inside the earth crust, and are to be mined from earth crust. Although sapphires can be found from secondary source, i.e. from river beds but are not found in mollusks or formed by Mollusks.

Coral is found in sea but not found in or formed by mollusks.

Secondly, crystalline material can never be found in cut and polished form from the nature, the way the described glass/stones were found from mollusks.



White striations in glass imitation of Coral

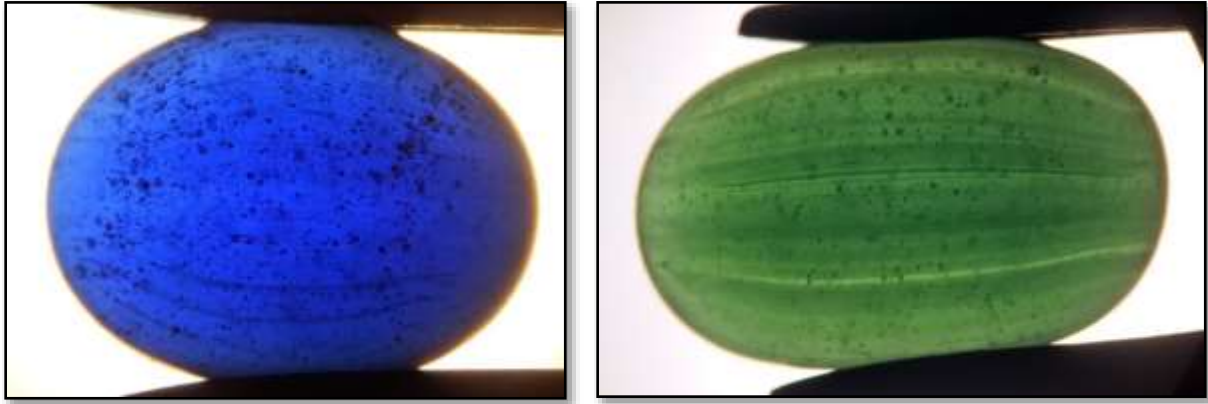
Pearls are found from mollusks and pearl farming is also done, but natural pearls are not practically possible from this breed of mollusks as shown in the pictures.

These tricksters are deliberately putting these cut and polished glasses, fashioned in the shapes in which gemstones are usually traded, inside the mollusks with tweezers and then killing them brutally by opening them in front of buyers to form false authenticity in the eyes of buyers. Rather, actually they are cheating the tourists to earn illegal money and harming the nature too.

Red Crabs were rare “Red Ghost crabs specie”, Odisha forest department is planning to include this specie of crab in the Schedule IV of the Wild Life Protection Act 1972 for its conservation.



Gas bubbles and swirl marks in glass imitation of Turquoise



Gas bubbles and swirl marks in glass imitation of Blue Sapphire (Left) and Emerald (Green)



Pearl layers shedding off (Left) and Imitation of Pearl (Right)

This cheating business is flourishing well at Chilka Lake, Odisha. Concerned authority must take some strict action to stop this ill working, such activities are defaming our country, as foreign tourists do visit this lake and get cheated.

** Stone's courtesy: Dr. Anurag Kumar Aggarwal*