



Office of Public Affairs

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**Mysteries of the Smithsonian's Hope Diamond Solved
with New Scientific Research**

Discovery Channel Special Premieres Feb. 10

Is it possible that the Hope Diamond was cut from another larger blue diamond 200 years ago? Is there another blue diamond out there also cut from this possible "parent stone"? Could the Hope Diamond have a "sister" stone?

New research has provided important insights into the lineage of the Hope Diamond at the Smithsonian's National Museum of Natural History. Conducted over the past year, the research supports the theory that the Hope Diamond was cut from the French Blue Diamond after it was stolen from the French Crown Jewels in 1792. The team of researchers included Jeffrey E. Post, Smithsonian curator of gems and minerals, and Steven Attaway, engineer and gem cutter; as well as Scott Sucher and Nancy Attaway, gem cutting experts.

This extensive research project was captured on film and will be featured on the Discovery Channel. "Unsolved History: Hope Diamond" will premiere on Feb. 10 at 9 p.m. with additional scheduled airings on Feb. 11 at 12 a.m. and Feb. 13 at 2 p.m.

The team used state-of-the-art imaging and computer modeling technology, combined with new measurements of the Hope Diamond and historical records and sketches of the Tavernier Blue Diamond and the French Blue Diamond, to create for the first time ever accurate virtual computer models of the three diamonds. The results of the modeling study clearly show that the Hope Diamond fits exactly within the French Blue Diamond – a clear indication of lineage – and reveal that no sister stone to the Hope Diamond could have been cut from either previous stone. The computer models were used to guide the cutting of accurate replicas of the two precursor stones—in cubic zirconia.

"This new Hope Diamond research would not have been possible ten years ago," said Post. "What is exciting is that we are constantly learning new information about our collections as we apply new high tech research methods. Even the Hope Diamond is grudgingly giving up some of its secrets."

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“The geometric evidence was overwhelming, leading us to conclude that not only did the Hope Diamond fit within the French Blue Diamond, but some of the facets on the Hope Diamond may be relics from the French Blue Diamond,” said Steven Attaway.

The Smithsonian’s National Gem and Mineral Collection is one of the greatest collections of its kind in the world. More than 375,000 individual specimens include such famous pieces as the Hope Diamond and the Star of Asia Sapphire, as well as a research and mineral collection used by scientists around the world.

Background on the Hope Diamond

The Hope Diamond—the world’s largest deep blue diamond—is more than one billion years old. The parent stone of the Hope Diamond formed deep within the Earth and was carried by a volcanic eruption to the surface in what is now India. It was discovered prior to 1668 in the Golconda region of southern India. In 1668, French gem merchant Jean Baptiste Tavernier sold the 115-metric-carat diamond to King Louis XIV of France, who commissioned it to be re-cut to the 69-carat French Blue Diamond. The French Blue was stolen during the 1792 French Revolution.

Twenty years and two days later, after the statute of limitations expired, a 45.52-carat blue diamond was quietly put up for sale in London, and eventually Henry Phillip Hope purchased it. After being passed down through the Hope family, the diamond was sold in 1901.

It then changed hands several times and was eventually sold to Pierre Cartier in 1909. Cartier sold the diamond to Evalyn Walsh McLean of Washington, D.C., in 1911. McLean’s flamboyant ownership of the stone lasted until her death in 1947. Harry Winston, Inc. of New York City purchased McLean’s entire jewelry collection, including the Hope Diamond, from her estate in 1949.

For the next 10 years, the Hope Diamond was shown at many exhibits and charitable events worldwide by Harry Winston, Inc. On Nov. 10, 1958, the company donated the Hope Diamond to the Smithsonian Institution.

The weight of the Hope Diamond for many years was reported to be 44.5 carats but in 1974 it was removed from its setting and found to weigh actually 45.52 carats. It is classified as a type IIb diamond, which are semi-conductive and usually phosphoric. The Hope Diamond phosphoresces a strong red color that lasts for several minutes after exposure to short wave ultra-violet light and the diamond’s blue coloration is attributed to trace amounts of boron in the stone. The pendant surrounding the Hope Diamond has 16 white diamonds – both pear-shapes and cushion cuts – and the necklace chain contains 45 white diamonds.

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