

Hope Diamond Has Photo Op With Two More Blues

The Smithsonian Institution's diamond collection includes the 45.52-ct. blue Hope diamond and the 30.62-ct. Smithsonian blue heart-shape diamond. Its recent exhibit, "The Splendor of Diamonds," included the 27.64-ct. Steinmetz blue heart-shape diamond, which meant that the Smithsonian was temporarily in possession of three extremely large, extremely rare, and extremely valuable fancy deep-blue diamonds. It was the perfect blue storm of a photo opportunity.

But first, the Hope and the Blue Heart had to be removed from their mountings. And afterward, they had to be reset in time for the next morning's museumgoers.

Jeffrey Post, curator for the gem and mineral hall, called his local jeweler for the job. "It was a real pleasure to do this," says Stephen Clarke, goldsmith for Liljenquist & Beckstead Jewelers in McLean, Va.

Clarke, who also set the Steinmetz pink in its temporary pendant for the "Splendor of Diamonds" exhibit, had little problem with the two blues. He gave a hats-off to the late Robert Limon, the AGS jeweler who reworked the original Hope diamond mounting so that the stone could be easily removed and reset.

The Blue Heart was another matter—the Smithsonian has no jeweler's bench (or room for one), no polishing tools, and no jewelry cleaner—but Clarke says the experience was a pleasant one.

A number of top gemologists took advantage of the opportunity to examine the gems while they were free of their mountings. Joining Russell Feather, G.G., FGA, the Smithsonian's staff gemologist, were Shane McClure, Chris Smith, Tom Moses, and John King, all from GIA's Gem Trade Laboratory. The group performed color comparisons and phosphorescence examinations. Elizabeth Johnson, a postdoctoral fellow working with Post, took the opportunity to collect the first infrared (IR) spectra ever from the Hope Diamond.

The researchers determined that all the diamonds were colored by boron, as expected for the color blue. (There are a few blue diamonds colored by hydrogen.) The other noteworthy reaction was the phosphorescent characteristics of each. [Note: Phosphorescence is an afterglow that occurs after ultraviolet light excites a gem and then is turned off.] The Hope diamond has always been known to phosphoresce an "ember-orange" color for some minutes. The Steinmetz heart phosphoresced the same color as the Hope, but not as brightly and for a shorter duration. The Smithsonian Blue Heart phosphoresced a weaker whitish color, and also for a shorter period.

Said Post, "It was just a great opportunity to have three of the great blue diamonds in the world at one time so we could see them all together." ♦

Photo by Chip Clark, courtesy of the Smithsonian Institution



The "Blues Brothers" of the diamond world: The Smithsonian Blue Heart, 30.62 cts.; the Hope Diamond, 45.52 cts.; and the Steinmetz Blue, 27.64 cts.