Module B. Colour from the Cosmos

Lesson 14: Beryl Mineralogy and Gemology

What Does Beryl Look Like When Cut?

This 5.42 carat natural emerald from Muzo with excellent clarity is a top quality stone and would demand a high premium. Photo courtesy of the [Gemological Institute of America](http://www.gia.edu/).

This suite of cut emeralds is from the Tsa Da Glisza emerald occurrence in Yukon Territory. Note the difference in clarity and intensity within one suite of specimens from one location, as well as the darker inclusions in the larger stones. Photo courtesy of [True North Gems](http://www.truenorthgems.com/).

This emerald with a cabochon shape is from the Tsa Da Glisza emerald occurrence in Yukon Territory. It did not have continuous transparent portions so was cut as a cabochon instead of a faceted gem. Photo courtesy of [True North Gems](http://www.truenorthgems.com/).

White and yellow gold pendants set with many small emeralds from Yukon Territory. Photo courtesy of [True North Gems](http://www.truenorthgems.com/).

This famous necklace is called the "Spanish Inquisition Necklace", although there is no known link to the Spanish Inquisition. It comprises two strands of antique-cut emeralds and diamonds. The emeralds are certainly Colombian in origin while the diamonds likely came from India. Photo courtesy of the Smithsonian Institute's [National Museum of Natural History](http://www.mnh.si.edu/).

Emeralds fashioned into beads and set with platinum and diamonds. This Art Deco necklace is called the "Post Emerald Necklace", donated by Mrs Post and designed by Cartier. Photo courtesy of the Smithsonian Institute's [National Museum of Natural History](http://www.mnh.si.edu/).

Emerald and diamond ring. Photo from [Harry Winston Jewellery](http://www.harrywinston.com/).

The "Chalk Emerald" from Colombia, is large at 38.72 carat and is of the finest colour and relatively free of inclusions. Photo courtesy of the Smithsonian Institute's [National Museum of Natural History](http://www.mnh.si.edu/).

Carved Colombian emerald with natural pyrite crystals (which have sequestered the Fe) used as features in the head, 70 carats. This particular specimen displays a strong blue overtone. Photo courtesy of the Smithsonian Institute's [National Museum of Natural History](http://www.mnh.si.edu/).

This 1.04 carat unheated aquamarine with a rectangular step cut is from the Mount Foster area in British Columbia. Collected, cut, and photographed by Brad Wilson.

This 1,000 carat heated aquamarine nicknamed 'Most Precious' is from Minas Gerais in Brazil. Photo courtesy of the Smithsonian Institute's [National Museum of Natural History](http://www.mnh.si.edu/).

This faceted morganite is ~25 carats in weight. This photo provides a detailed view of this moderately well cut stone highlighting how its facets intersect and form other, smaller, unintentional facet planes.

The same crystal as above but viewed from a different angle allows the observer to see inclusions within the stone, likely 'bubbles' filled with liquid and gas from the time when this stone was grown within its host pegmatite.

A 216 carat heliodor with fantastic yellow saturation from Minas Gerais, Brazil. Photo courtesy of the Smithsonian Institute's [National Museum of Natural History](http://www.mnh.si.edu/).

These cut beryl specimens range in weight from 911 to 2054 carats. The 2054 carat Rectangular cut heliodor is the largest faceted beryl specimen in the world. The two "green beryls" are not considered emerald because of their pale colour and also because that colour is not likely due to Cr, but rather Fe. Photo courtesy of the Smithsonian Institute's [National Museum of Natural History](http://www.mnh.si.edu/).