Veberod Bulletin

April 2009

Green Tourmaline & Baguette Diamonds in Gold $2800

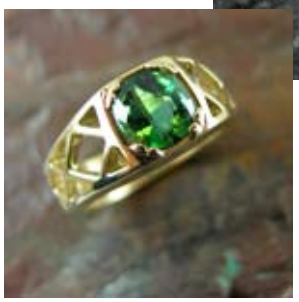
Tourmaline

California Queens, Brazilian Beauties and African Charmers

In 1903 a general store owner by the name of Frank Salmons joined forces with San Diego jeweler C.W. Ernsting to discover and market local gemstones. The prospectors began to scour the mountain just north of the old Spanish Asistencia and within days discovered a weathered pegmatite with eroded tourmaline crystals! After staking a claim, the vein was mined for sixty feet to a depth of ten feet in the first year and produced eighty pounds of gem tourmaline. The Tourmaline Queen mine as it became known, became one of the leading producers of gem tourmaline over the next ten years, exporting mostly raw crystals to China and east coast jewelers. Mining virtually ceased in 1914, until 1971 when Bill Larson of Fallbrook and his partners resumed production. On January 19, 1972 they broke into a pocket over twelve feet in length that contained a large number of big pink tourmaline crystals with bright blue terminations. Most of these crystals found their way to museums around the world.

Rubellite in White Gold $970.

Woven Silver Cuff with Tourmaline Cabs $700.



Checkerboard Tourmaline in Gold $745

Almost every color of tourmaline can be found in Brazil, which supplied the majority of the world's tourmaline in the last half of the twentieth century. Small towns in the state of Minas Gerais survived on the gem trade with many local miners called *garimpeiros* doing small scale mining and small shops set up to perform gem cutting. In 1989 miners in the Brazilian state of Bahia discovered a new variety of tourmaline colored by copper. This new variety came in neon bright colors of blue and green and became known as *Paraiba* Tourmaline.

As the gem trade explodes in Africa, production of tourmaline there is no exception. Finds of note include pink tourmaline from Nigeria, Paraiba-like tourmaline from Nigeria and Mozambique, bright green *Chrome* Tourmaline from Tanzania, golden *Savannah* Tourmaline from Kenya, and yellow *Canary* Tourmaline from Malawi.

Tourmaline's hardness (7-7.5) and color variety make it a favorite for jewelry, but it also has some unusual scientific traits. Tourmalines become electrically charged when heated and cooled. This is known as *pyro-electricity*, derived from the Greek word *pyr*, meaning fire. When pressure is applied in the direction of the polar axis of a crystal of tourmaline a charge of *piezo-electricity* is developed. The scientific property of detecting small variations in pressure is useful for telling the depth of submarines! During World War I crystals were imported from Brazil and Madagascar at great expense for making pressure gauges. Tourmaline crystals also have the ability to act as polarizing filters. If two plates are cut parallel to the long axis of a tourmaline crystal and are held parallel with each other they allow light to pass, but if one is turned ninety degrees, they will block virtually all light from passing. Tourmaline is truly an extraordinary gem!

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