

## Paraiba – A Miner’s Perspective

One of the world’s most prominent companies dealing with gemstones in general and Paraiba tourmaline in particular is Paul Wild OHG. To learn more about the Paraiba operations of this Germany-based family company, *InColor* interviewed its CEO, Markus Wild, grandson of the founder, who joined the company in 1992.

The origins of the Paul Wild company date back to 1927 when Mr. Paul Wild set up a gemstone-cutting facility in Kirschweiler near Idar-Oberstein. The Paul Wild family tree of gem cutters, however, dates back to 1660 so we could say that this precious gem business today is run by the 10th generation.

After Paul Wild passed away in 1962, Hans Werner Wild continued his father’s legacy. Very early on, the company had acquired shares in an aquamarine mine in Africa, and in 1974, Hans began obtaining gemstones directly from the mine. Thus, aquamarine was the very first stone that the Paul Wild Company began mining.

Another milestone was reached in 1988, when Paul Wild OHG set up its own production facility in Thailand, enabling the company to produce large quantities of calibrated gems.

After its first aquamarine mine, the company branched out around the world. With headquarters in Germany, Markus Wild indicates that “it has been a challenge to have mining companies in all different places of the world, among them Brazil, Nigeria, Mozambique and Namibia.”

Among the challenges that can arise in these mining situations are “unstable political situations, infrastructure problems, communications issues and even the power supply.”

Unskilled workers are also a challenge and the company makes a big effort to train them properly. “We also believe in mining under fair conditions, especially concerning the well being of the miners,” he adds. In addition to the miners, Paul Wild OHG has to have a security force to protect the mines and the workers. “About 10-15% of our employees are security guards and we also use bulletproof cars for added protection of our teams.”

Securing the gemstones is a challenge, too. “We have to be creative about where and how the stones are stored. The locations are constantly changed as well as the timing and the employees involved. This makes the process unpredictable, and thus safer. It is exhausting but effective.”

When asked more specifically about Paraiba tourmaline, Markus answered that the company began cutting the gem at the end of the 1980s, shortly after it was discovered in Brazil. “The challenge is to obtain good proportions and

without losing too much weight, which is difficult because of the fractures inside the rough material.”

Paul Wild OHG began mining the neon blue stone in 1995 at the Quintos Mine in Brazil. Later, in 2006, the company began operations in Mozambique. Today, Paraiba mining is the most important project for Paul Wild. “Paraiba is our flagship stone,” he smiles.

“Each location has its own personality,” explains the CEO. “Paraiba from Brazil is more often found in electric tropical blue hues, with sizes over 5 carats being very rare. The Brazilian material also comes in a wider range of shades including fuchsia and violet with a broad range of blues and greens.” He adds that Paraiba from Mozambique has more of a sky blue color and stones over 5 carats are not uncommon. “They are also cleaner with fewer inclusions.”

While some Paraiba is heated to obtain the blue color, he notes that, on average, about 10% coming from the mines are the natural blue color.

With prices hitting records of \$200,000 per carat in recent auctions, how does the company see the evolution of the prices of Paraiba and its demand in the future? “Like in all markets, supply and demand regulate the price. As we know from history, rare gemstones are highly coveted. If we look at how the prices of ruby have behaved, for example, there is still room for Paraiba to rise.”

Given the high prices, Paul Wild OHG is noting a demand for smaller gems as well as lower quality stones. “A number of designers are also using the gem in its matrix, offering original and creative pieces of jewelry.”

Miners inside a tunnel in the Quintos Mine in Brazil.

Rough sample of Paraiba tourmaline in its matrix.

Sample of a rough Paraiba tourmaline crystal.



The Quintos Mine in Brazil where Paul Wild OHG began mining Paraiba in 1995.

**Exploration/Mining/Licensing Concerns**

“The decision to explore for minerals in a particular country depends on various factors,” explains Markus. “Getting a mining license is a very long process, and can even take more than ten years.”

Clearly, the local geology is important as well as the production history of the area and the quality of gems that have already been discovered. And, an area must be available for either sale or a partnership. Once these criteria are met, then the next step is to understand the country’s current mining legislation and, very importantly, the probability of continuity by the government.

“At Paul Wild, our code of conduct for all our mining activities deems that we are in compliance with the laws of each individual country. We set up a local company, which adheres to the State’s rules. Local management is then established in accordance with the rules of conduct of Paul Wild OHG and all local legislation.”

In general, the CEO adds that the procedure for obtaining and maintaining a mining license granted by the government is similar in most countries. This entails:

- Applying for an exploration license,
- Obtaining the license,
- Conducting research that can take three to five years,
- Generation of a research report,
- Preparation of feasibility studies,
- Preparation of an environmental report,
- Agreement with the local community (in some countries, this is the first step),
- Proof of the financial means for the implementation of the mining project.



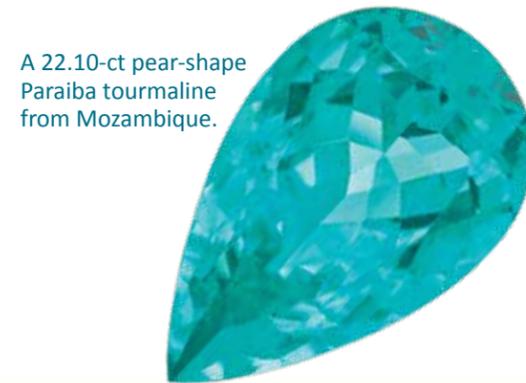
Tools used in the mining process and a bag of the gems recovered.



Above and right center: Inside the tourmaline mine with the crystals of Paraiba clearly evident on the sides and top of the tunnel.



Paraiba comes in a variety of colors including this dark sky blue tone.



A 22.10-ct pear-shape Paraiba tourmaline from Mozambique.



A 5.70-ct pear-shape Paraiba tourmaline from Brazil.



Samples of rough Paraiba tourmaline from Brazil.

**Local Communities and Small-Scale Miners**

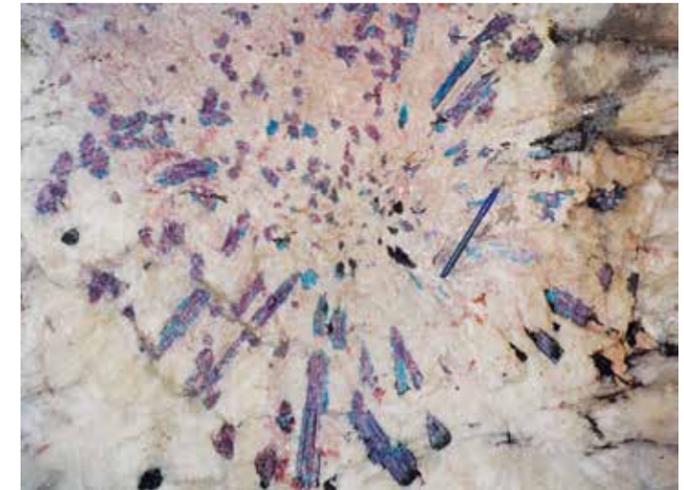
One aspect of the mining licensing process is establishing a good relationship with the local communities. “Although the mining laws of different countries are similar, there are always a number of variations in the treatment of small mining companies or local mining activities.

In African countries, we normally need the consent of the communities or tribes who have the right to obtain the necessary mining licenses on the land. In the case of local tribes, there is an agreement with the king and his advisers that the company pays royalties for the production. These funds are used to build and support schools, hospitals, etc., which are managed by the local Council.”

There is a formal process to obtain approval from municipalities to install a mine. For this purpose, a municipal assembly will be held with representatives of the national government (Ministry of Mines, Ministry of Environment, Ministry of Agriculture) and with those of the provincial government, district, municipality and any kings who may be involved in the project.

“The whole community can participate and make demands regarding a company’s most urgent needs. The communities always select the people who will later work in the mines and are responsible for ‘basic’ security.”

Local small-scale miners (not professional companies) usually work in areas designated by the government for this type of mining. But if the government has not designated areas for local miners, invasions may occur and everyone must take precautions for their own safety. In this case, the licensing agreements made with the municipalities are very important. The municipalities want to protect the mining companies against invasions, otherwise the company and the municipality may suffer financial losses.



A miner removes tourmaline crystals from a pocket of promising material.



Above: Polishing a Paraiba tourmaline in one of Paul Wild OHG's cutting facilities.



Right: The company provides a range of sizes as well as calibrated Paraiba tourmaline.



**Corporate Social Responsibility**

“At Paul Wild, we believe in responsible and sustainable sourcing. We are a family-owned and operated business and our mining projects are subject to the same guidelines and standards.” Markus also visits the mines himself to ensure the proper security and welfare of the employees and make sure that the requirements of the governments are being followed.

Because Paraiba is mined on two different continents, with the Brazilian variety more coveted and therefore more expensive, Paraiba gems from Paul Wild all come with a certification of origin. “It is a question of transparency, as with all our other gemstones such as ruby, sapphire, emerald, etc.,” insists Markus.

With some ten generations of experience, Paul Wild OHG has a uniquely intuitive relationship not only with its precious stones, but also with its employees and with the customers of these remarkable gems.



Above: A set of Paraiba tourmaline from Mozambique showing the various colors of the gemstone.

Above right: A 10.90-ct Brazilian Paraiba, one of the specialized cuts created by Paul Wild.