

The Jewel of Paraíba

The Legend of the Paraíba

Uncover the origins of the greatest Paraíba Tourmaline known

“I always thought my intuition guided me to find the gemstones, but today it has been proven to me that the gemstones actually called upon my intuition.”

—Heitor Barbosa, the visionary who discovered the Paraíba tourmaline

NOTE FROM THE AUTHOR

The story behind the Paraíba tourmaline, the greatest gem discovery in the recent age, is one that has grown to legendary status. Standing at the forefront of this remarkable story is Heitor Barbosa. For almost four decades, I have known him as both a colleague and a friend. Heitor is a steadfast prospector, collector and true visionary in the world of gemology. To Heitor, the Paraíba stones were never a treasure to be won; they were a gift from the earth.

Though I have been intimately involved with the mining, distribution and publication of the Paraíba tourmaline's story almost since the very beginning, when I was introduced to the Jewel of Paraíba, I was astonished to confront such a monumental treasure. With its grand size, remarkable color and unsurpassed rarity, I feel compelled to put pen to paper to qualify the grand nature of this marvel. Beyond the alluring and true story of the stone's discovery, I know of no other Paraíba tourmaline as remarkable as this: unheated, deep blue in color and monumental in size. At 37.34 carats, the Jewel of Paraíba, is certainly the largest of this rare color that I know of, and it deserves its own narrative.

—Brian Charles Cook

Geologist, Gemologist and colleague of the Barbosa Family

THE PARAÍBA TOURMALINE

It is an extremely rare occasion when a newly discovered gem sparks fervor in the world of precious stones. The story of the Brazilian Paraíba tourmaline was one of these revelations. Prior to the unveiling of the Paraíba tourmaline on the global stage in 1990, few beyond the northeastern realms of Brazil had even caught a glimpse of this resplendent gem.

Emitting an inner glow, the multi-hued blue-green Paraíba tourmaline stones has an unparalleled and mesmerizing allure. When the Brazilian Paraíba gemstones made their world entrance at the 1990 Tucson Gem Show, collectors in attendance found themselves in astonishment. Their ethereal presence and blue color seemed almost too good to be true, with many



The outback of northeast Brazil is rugged and sparsely populated, often referred to as thorny scrubland, or caatinga. In the background, the sky islands, or protruding granite massifs, held the Paraíba tourmaline gemstones.



From the village of São José da Batalha, one can see the original mine with its white kaolin clay tailings piles on top of the granite massif.

wondering if the gems were truly natural. Gemologists and enthusiasts alike clamored for a glimpse of the colors that had been only dreamt of in a gemstone.

Since their remarkable introduction to the world, the Paraíba gemstones have witnessed a remarkable surge in value; the majority of the highly coveted

Brazilian Paraíba gems were discovered before 2002. Consequently, this 37.34-carat gem exhibiting the most prized color among all Paraíba stones embodies the awe-inspiring natural forces that first led Heitor to the renowned location.

HEITOR'S DISCOVERY

In 1981, in the barren and parched landscape behind the tiny village of São José de Batalha, Paraíba, Brazil, Heitor Barbosa set foot on a path that would forever alter the gem world. As a well-established prospector driven by an insatiable scientific curiosity, he found himself drawn to a hill that many of his colleagues had ignored. Heitor was not offset by the region's rugged and unforgiving landscape. He had an intuition that the hill held great treasure.

It was on this fated hill that Heitor's keen eyes fell upon a sight that made his prospector heart skip a beat. A mere sprinkling of shimmering neon blue flecks, each no larger than grains of sand, gleamed beneath the harsh sunlight. He believed these fragments to be harbingers

of something extraordinary. Heitor assembled a small band of independent miners, and without electricity or running water, they used candles for light and pickaxes to break through the earth. They forged ahead; together they carved narrow and treacherous shafts into the unforgiving terrain.

The men toiled in their narrow hand-built mines and five years came and went. The treasure they sought eluded their grasp. Heitor's pursuit exacted a toll on his resources and left his family in financial peril. Yet, through the dark and uncertain moments, Heitor remained a beacon of unwavering determination. And then, one day, fortune finally smiled upon Heitor and his crew.



B.C. Cook

*Here are the piles of earth above narrow shafts burrowing into the mountain.
It took Heitor's crew of 13 men seven years to reach a depth of just 40 meters.*

In 1986, the team stumbled upon a meager cache of yellowish-brown tourmaline. While many miners might have been content with such a discovery, Heitor remembered the more striking blue hue. With renewed vigor, Heitor and his comrades continued onward

and eventually unearthed the famed blue Paraíba tourmalines that surpassed all that had come before. The vivid hues of blue with shades of violet, indigo and green left onlooking miners in the region awestruck.

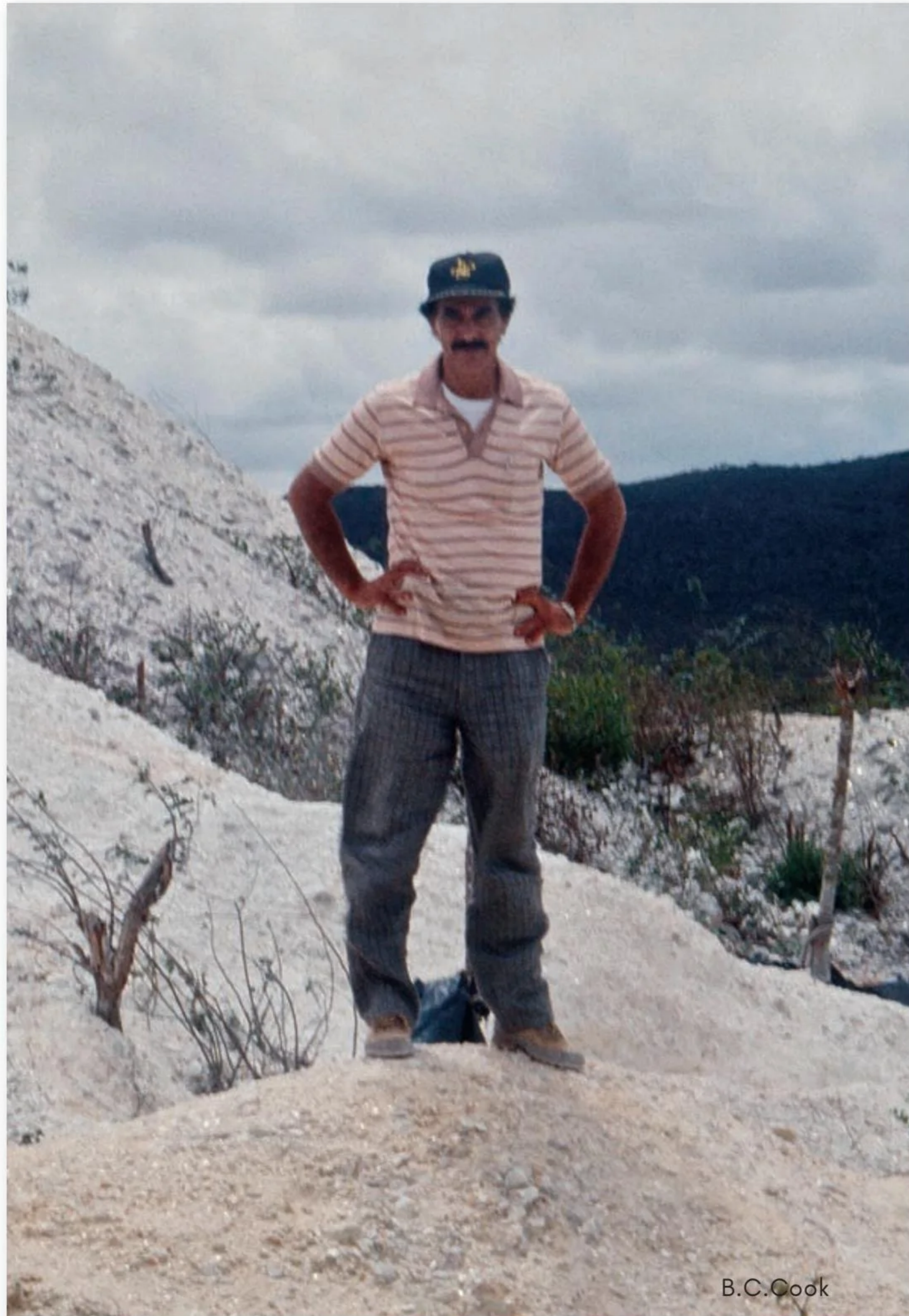


This large tourmaline green and turquoise blue crystal is forming and stretching while encased in quartz and albite feldspar.



B.C.Cook

Using basic tools such as sticks, rope and bits of tire rubber, these men built the Batalha Mine's infrastructure.



Heitor stands on a tailing pile, the ground that had been removed from the earth by hand.

HEITOR'S STRUGGLE

As the word of the stone's existence spread in the region, so did the greed-driven desire by some to usurp Heitor's mine. Despite Heitor's discovery and legal claim to the mine, armed men seized control. It was during this hostile takeover that the stones first began to trickle out of the Paraíba region. When I first saw their unparalleled blue brilliance, I was captivated, dazzled and hypnotized.

I eventually found my way to Heitor's doorstep. As the door swung open, revealing the man behind it, I caught sight of his unyielding countenance and a loaded shotgun resting just a step away. Aware of my status as a stranger, a *gringo* at that, I nonetheless sensed an immediate connection with Heitor. Once invited into Heitor's home, I asked him if he had stones, and Heitor immediately responded no with a sigh. Sensing that something was wrong, I knew I had to quickly earn his trust.

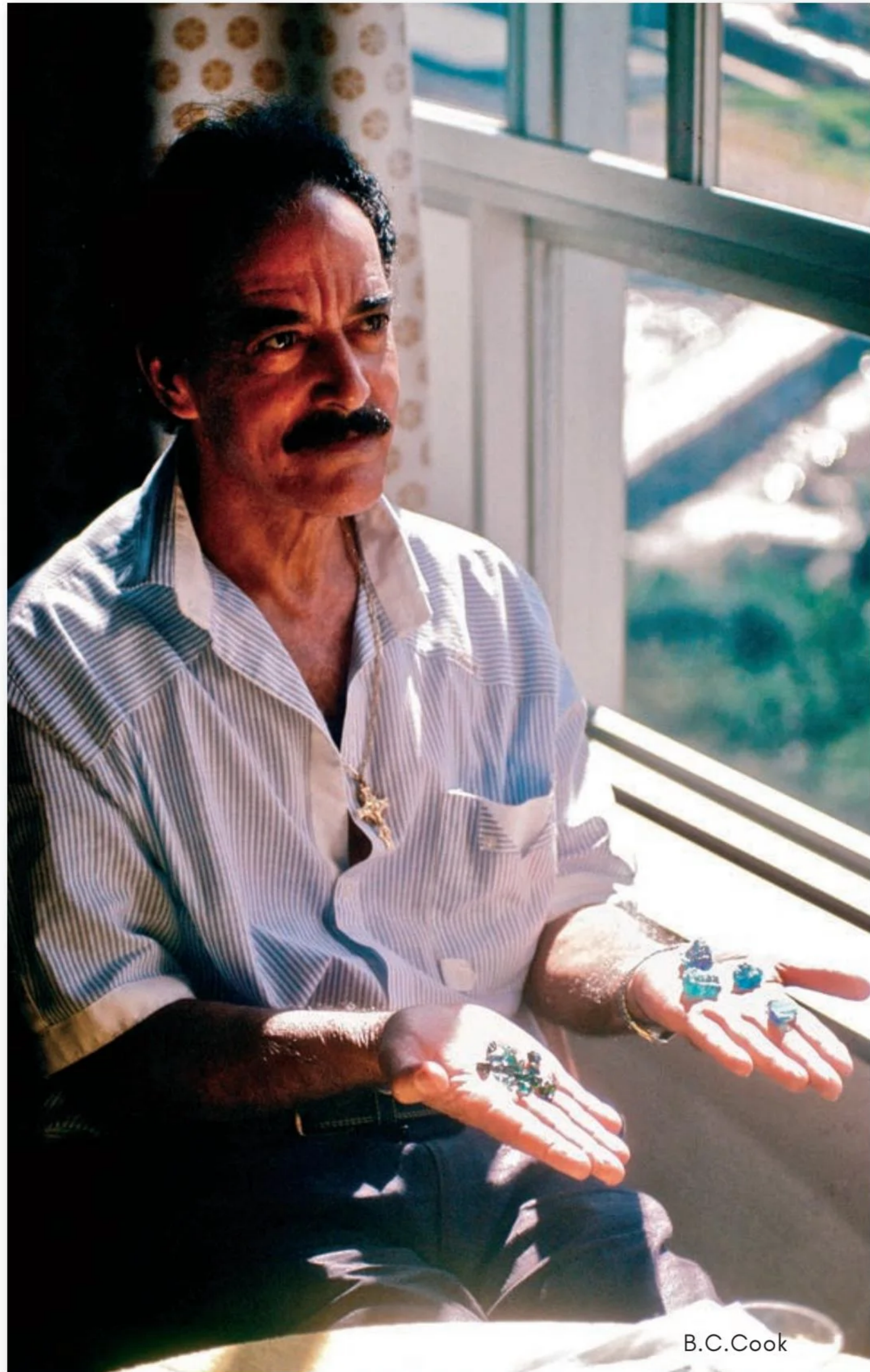
I voiced my admiration for the stone, confessing that its haunting beauty had nestled deep within my mind. It was then that Heitor shared the precarious situation at the mine and I assured him I wanted to help. Something in my demeanor must have struck Heitor as trustworthy, for that day marked the inception of our alliance that endures to this very day.



The author working at Heitor's mine in the year 1989.



This is the assembly to haul the excavated vein material to the surface. Thousands of tons of material were brought out bucket by bucket. Over the years, the miners created several kilometers of steep shafts and interconnected drifts by hand. The only way down was by holding a rope and rappelling at a steep angle.



THE WORLD MEETS THE PARAÍBA

To raise support to reclaim the seized mine, with Heitor's blessing, in 1989 I traveled to California to meet Dr. James Shigley, the Distinguished Research Fellow at the Gemological Institute of America (GIA). As I placed a handful of neon tourmaline rough samples on the table, the gemologist's eyes widened in wonder. Swiftly, Shigley summoned Emmanuel Fritsch, the manager of GIA Research and Alice Keller, the Editor-in-Chief of *Gems and Gemology*, and together we laid out a plan to dispatch the news of this remarkable stone.

With help from many international publications revealing the true story behind the discovery, in 1997, nine years after the Paraíba tourmaline discovery, Heitor's claim to his mine was reaffirmed by the Brazilian National Department of Mineral Production, DNPM. While three contesting groups had been extracting small stones, Heitor knew their methods and intentions were incorrect and believed in his heart the usurpers would not be "allowed to find the quality stones he believed were there."

(left) This photo was first published in Gems & Gemology, Summer 1990, pg. 164. Their publication introduced Heitor and his magnificent gems to the world.

(right) The Paraíba region is known by connoisseurs to have produced the most impressive and sought-after tourmalines.



B.C.Cook

Heitor discovered that most of his meticulously planned out mines had been damaged by reckless assault via explosives and heavy machines. What was left behind was a disarray that would require many thousands of man-hours to fix. With renewed vigor, Heitor and his son Sergio set to work with their team, and with few resources, they began the long task of rebuilding infrastructure.



(above) These three significant pieces of rough exhibit vivid green to piercing indigo color.

(right) This picture illustrates intersecting shafts, one of the dozens of shafts that intersected at three to four levels going down to 45 meters in depth. This helped create a natural airflow.



B.C.Cook

“It was an unexpected find of
tourmaline in 1987...that elevated
the tourmaline from Paraíba to
a status never seen before.”

—Chris Smith, American Gemological Institute

SHADES OF BLUE

Some describe the extraordinary colors and qualities of these gems as having an electric surge. This bright blaze is the result of three distinct factors—a symphony of clean and pleasing hues, an abundance of color saturation and a lighter tone that permits light to flow through the gem.

The importance of the Paraíba tourmaline can be traced back to a serendipitous convergence of both copper and manganese elements. The Brazilian Paraíba gems continue to be the standard in both saturation and hue, and are far superior in quality from “Paraíba-type” tourmalines sourced from African mines.

The high concentration of copper ions in Brazil infuses the Paraíba gems with dazzling blues and greens, while the absorption of manganese yields captivating violets and pinks. Together, this profusion of colors results in a deep saturated blue effect, like looking into the deep abyss of the ocean. Though the combined colors of the Paraíba tourmaline may seem fantastical, they occur completely naturally. It was also discovered that some of these copper ions can be brought out with a slow heat

treatment which reduces the manganese effect. The great majority of Paraíba stones have undergone some heat treatment to achieve their color.

Amidst the treated stones, a handful of extraordinary all-natural gems emerge as true outliers—the legendary *Heitorita* stones from the Batalha Mine. Named after Heitor Barbosa, these stones are deeper in color and are the most beautiful and desirable gems. Naturally, these gems possess a deep-sea blue hue, a saturation that is exceptional and mesmerizing. These gems, especially large ones, are extraordinarily rare. In fact, all the large and unheated *Heitorita* stones ever discovered could easily be cradled in the palms of one’s hands.

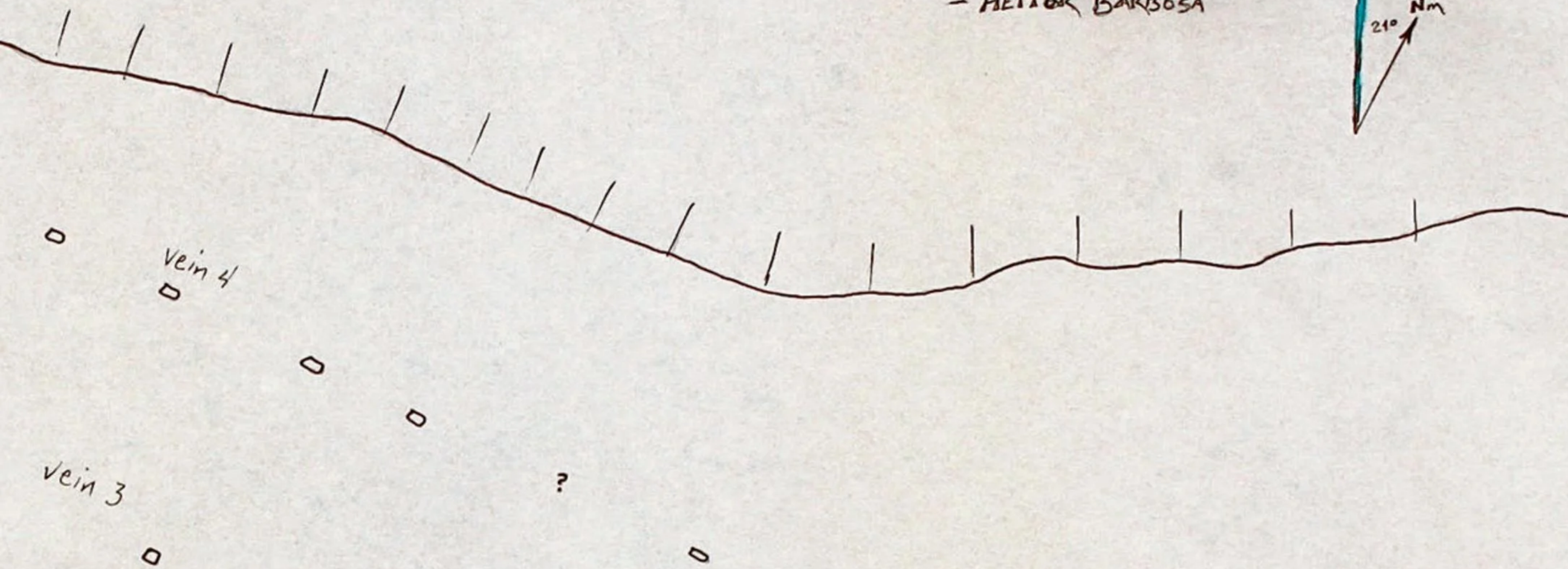
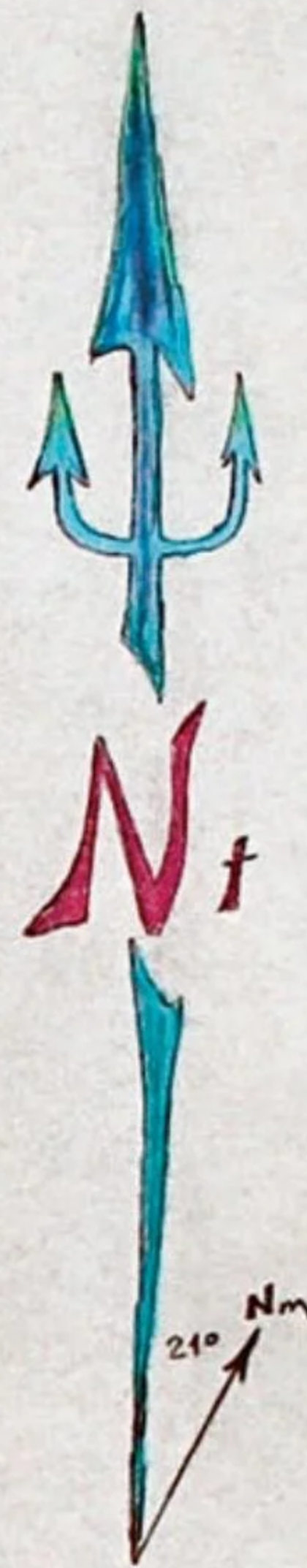


Three remarkable Heitorita stones in the rough.



Generally, the Batalha Mine produced small stones and melee size gems. The largest stone in this picture is only 2 carats. Any stone weighing 3-5 carats is considered large, and a gem over 5 carats is tremendous. Very few examples over 10 carats exist.

. dedicated .
" In this desert, this caatinga ,
who would have thought here
could produce such a marvelous thing ? "
- HEITOR BARBOSA



I presented this hand-made map at the GIA 1991 Gemological Symposium in Century City, Los Angeles.
This is a translated direct quote that Heitor stated to me as he marveled at the stone's immense beauty.

The Jewel of Paraíba

Heitorita. 37.34 carats. Ethereal color.

This stone is the largest unheated Batalha Paraíba known.

THE JEWEL OF PARAÍBA SPECIFICATIONS

- ▼ *37.34-Carats*
- ▼ *Heitorita color*
- ▼ *Deep saturation of blues with traces of violets and greens*
- ▼ *White diamonds totaling 9.19 carats*
- ▼ *Pink diamonds totaling 1.50 carats*
- ▼ *Set in 18K rose gold and platinum*



It is exceedingly difficult to perfectly depict the astonishing beauty of the Jewel of Paraíba through photographs.

To see the true color and brilliance of this magnificent gem, please use the QR code to view the 12-second video.



“At 37.34 carats, the Jewel of Paraíba is certainly the largest of this rare color that I know of.”

—Brian Charles Cook

THE JEWEL OF PARAÍBA

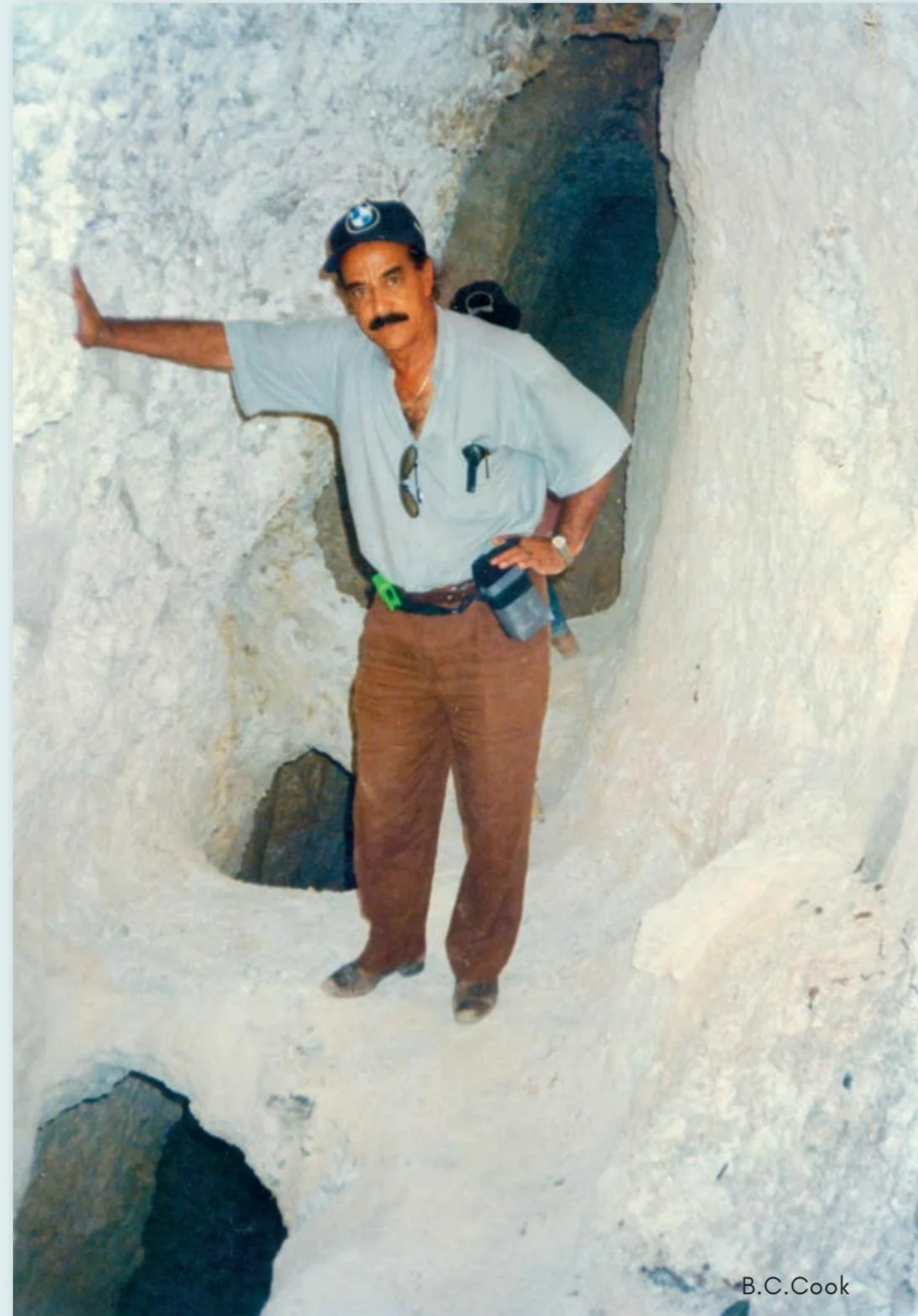
The astonishing rarity of the size and untreated color of this gem would be difficult to overstate. I know of no other untreated Batalha Mine gemstones over thirty carats. To fully grasp the magnitude of this stone's scarcity, one must consider that for every gem-quality Brazilian Paraíba tourmaline over a carat unearthed, there are millions of carats of diamonds mined. To find a stunning *Heitorita* of this magnitude is simply astonishing.

To see the photos of this stone is remarkable, but to see it in person is breathtaking. In natural light, one can discern the oscillating blue, green and violet hues, a particular combination that is only found in the stones from the Batalha Mine. Such a monumental stone deserves a setting of the utmost artistry and refinement. The gemstone is encircled by pink diamonds totaling 1.50 carats and white diamonds totaling 9.19 carats, with a stunning 18K rose gold and platinum setting. The intricate swirling motif of the setting perfectly complements the stone's mesmerizing coloration.



To Heitor, these stones were always personal. He possessed an unwavering dedication to the craft of exploration, mining and prospecting—a true pioneer of his trade. Rather than inundating the market with the finest stones, he chose a path of calculated restraint.

By releasing the best gems in a deliberate and measured manner over the years, he retained a firm grip on the reins of the market, ensuring their scarcity remained intact. Heitor continued to distribute his Paraíba gems with precision until 2004, only entrusting them to the skilled hands of the finest German gem cutters. To Heitor, each release was a bittersweet event.



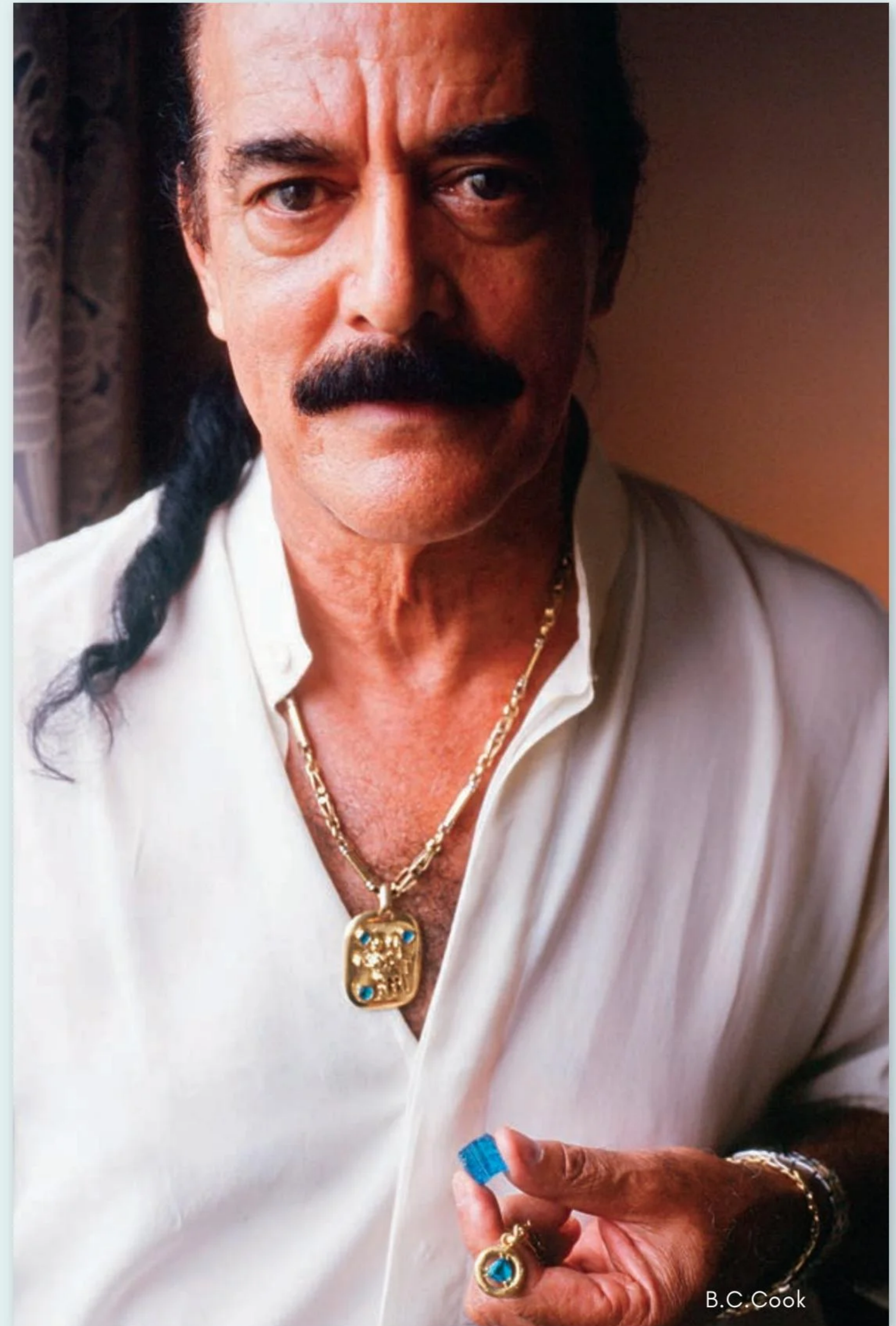
Heitor stands in vein number 2. Just below this narrow bridge, there is a very deep lower-level section.



B.C.Cook

(above) These were some of Heitor's prized uncut Heitoritas.

(Right) Heitor created some early jewelry for himself and his family. The medallion on his neck depicts a miner working the mine and is set with small Heitorita gems.



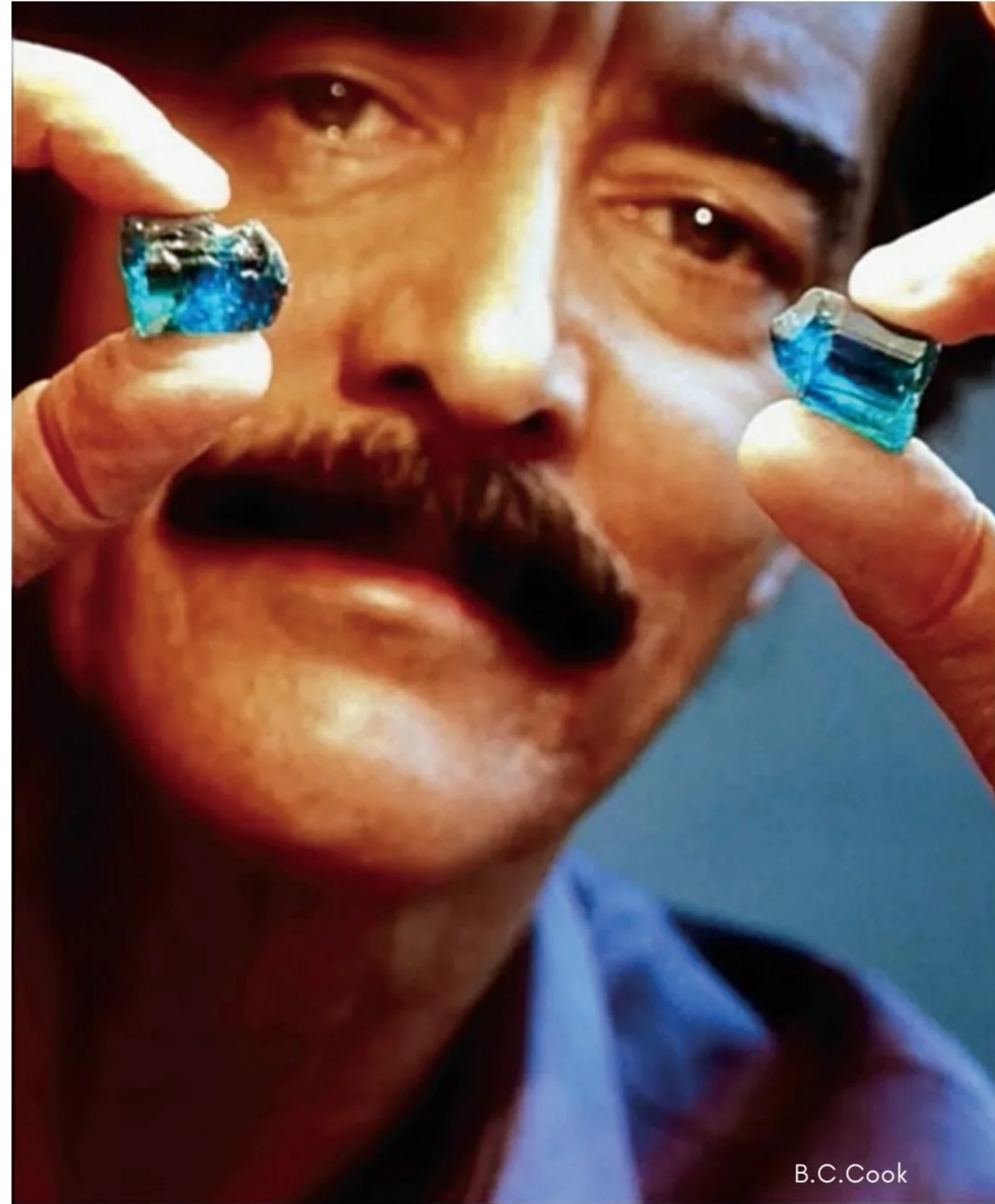
B.C.Cook

A STONE TO REMEMBER

Heitor possessed an uncanny ability to see the raw and uncut stones and envision their potential as cut gems. In this photo, one can see Heitor holding two uncut *Heitoritas*, the one on the left weighing 10.4 grams, or 74 carats. In the most skilled hands, there is a 50 percent reduction in size when transforming rough stones into polished gems. This rough would yield our 37-carat jewel. This would have been Heitor's most cherished treasure, and one that he only released to the market at the very end.

THE EXEMPLARY COLOR

Though some collectors hold the bright "Windex" blue as the most ideal Paraíba color, the much rarer unheated peacock blue coloring, *Heitorita*, is by far the most desirable hue. With its deep saturation and oscillating blues and greens, the unheated coloring of the *Heitorita* is reminiscent of the deepest parts of the ocean. To the most knowledgeable collectors, the unheated color is the ideal and esteemed beauty.

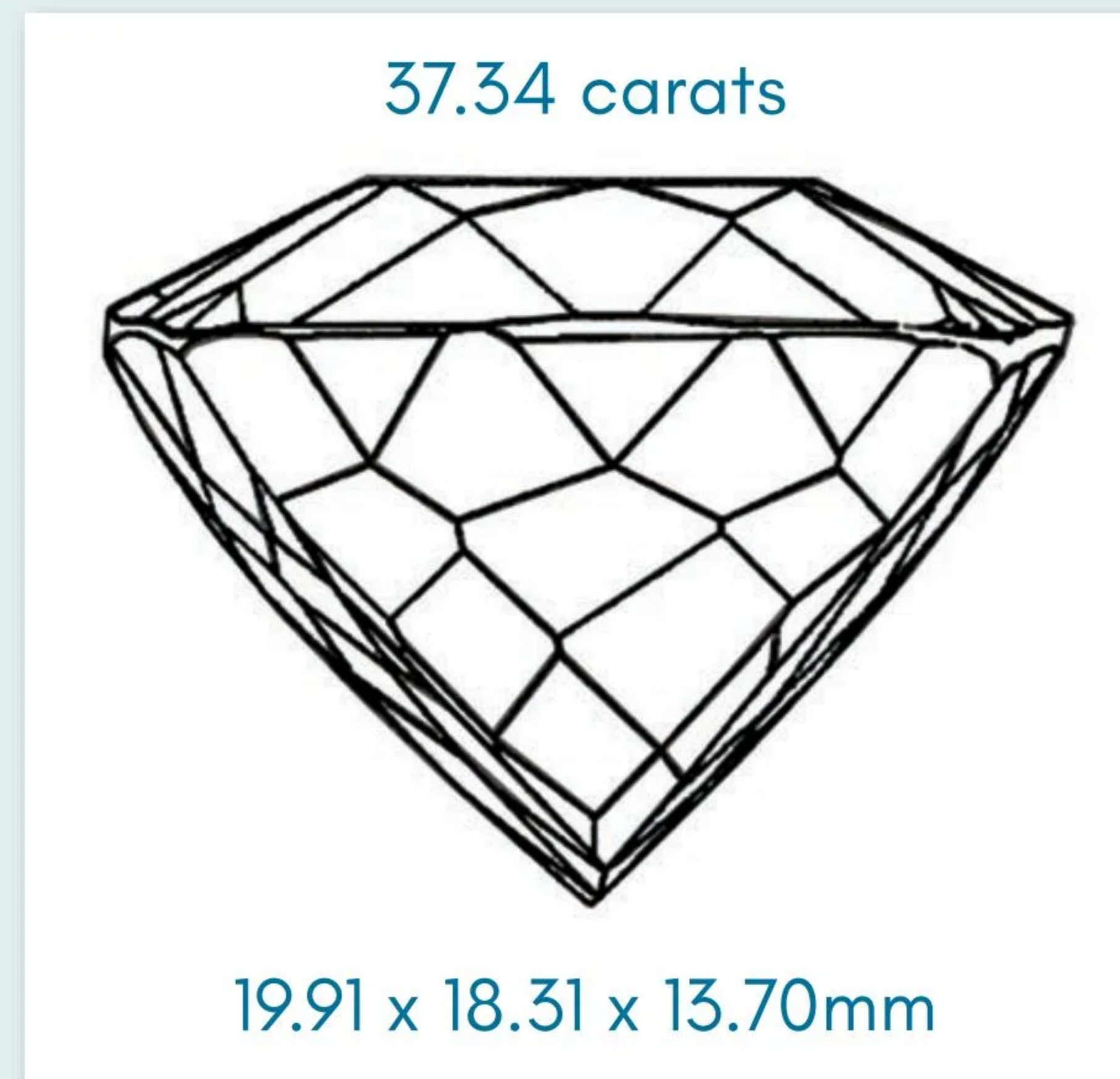


(above) Heitor holds the uncut 74 carat gem.

SENSATIONAL SIZE

Paraíba gem crystals are formed within slender mineralized veins, which by their very nature mostly create small gems. The average Paraíba tourmaline is small; in fact, most gems from the São José da Batalha region typically range from a meager 0.15 to 0.75 carats.

Memorable cut 20-carat and 15-carat Paraíba gems emerged in 2001, standing then as the of the largest superb-quality blue tourmaline crystals ever to hit the market. In astonishing form, the Jewel of Paraíba is roughly two times the size of these previous record-holding gems.



(above) Taken from AGL's Accu-Vu™ imaging, the 37.34-carat Jewel of Paraíba in comparison to a 2.96-carat Paraíba



AGL APPENDIX LETTER:

An appendix letter written by the American Gemological Laboratories (AGL) is one of the highest honors any gemstone can receive. Of the many thousands of quality stones the lab certifies, only a handful of letters are written annually. An even greater honor is to have the AGL write a folio on a stone, which they only do for the finest and most exciting discoveries. This Paraíba gem comes with one such folio book. To accompany this present gem's book, Christopher Smith, President of the AGL, wrote the following letter:

(left) The Jewel of Paraíba.

(opposite page) The American Gemological Laboratories appendix letter.

Tourmaline is one of our industry's most exciting and enchanting gems. Its vast array of colors provides for an endless opportunity to adorn jewelry of all tastes and styles. Even though this gem and its many varieties have a long history of appreciation, it was due to a serendipitous find in the Paraíba State of Brazil in 1987 that would catapult tourmaline to unprecedented heights.

The discovery of copper-rich tourmalines of intense blues, greens and violets near the village of São José da Batalha radically altered the future perception of this area for generations of gemstone lovers. The tourmalines of Paraíba, Brazil now distinguish themselves as the pre-eminent members of the tourmaline family. Their character and intensity of "neon" color ranges have set a new standard of excellence.

Although copper-bearing tourmalines are now recovered from additional deposits in Nigeria and Mozambique, it remains that those from Brazil are heralded as the finest and the most highly sought after by knowledgeable connoisseurs.

The impressive 37.34 cts Brazilian Paraíba tourmaline detailed in this JewelFolio™ is just one of these outstanding rarities. Of significance, this remarkable gem has been spared of the low temperature heating that is so commonplace with this gem variety. The unenhanced color and quality exemplify the rarity of this gem. Additionally, Tourmalines of this color, size and quality were rarely recovered from the original Paraíba deposits during the relatively brief period after their original discovery. Such Paraíba tourmalines as this are seldom found in Brazil any longer. Most of the Paraíba-type tourmalines available in the market today are from the more recent finds in Mozambique and Nigeria. Based on the extent of the original finds, it is not likely that many more Brazilian Paraíba tourmalines of this importance will ever be unearthed.

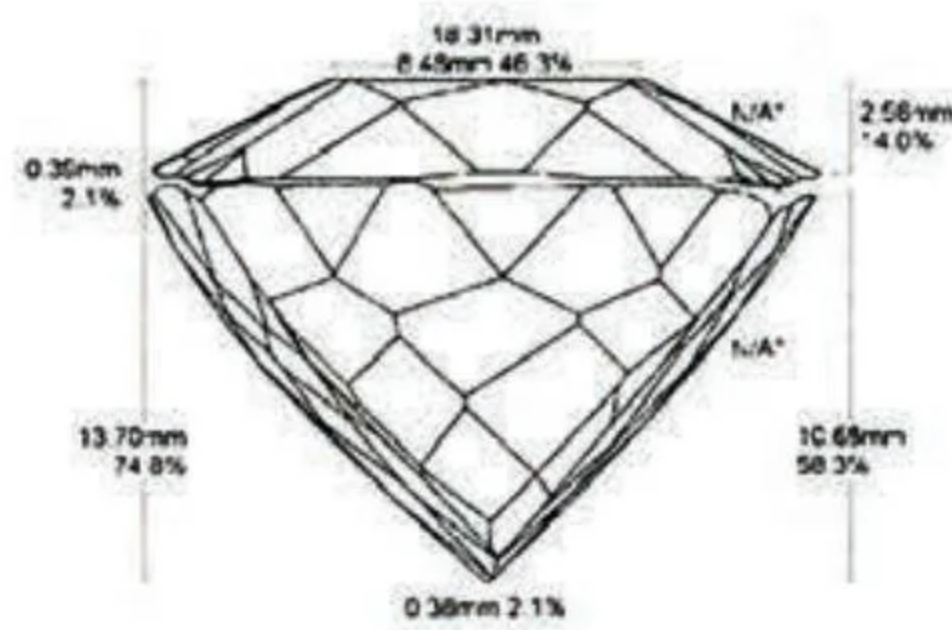


Christopher P. Smith



Images do not accurately portray size or color.

Accu-Vu™ Imaging:



Comments:

General Report Comments:

American Gemological Laboratories
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Document No: 1122598 Validation Date: 7 July 2022

Identification

Mineral Type: Natural Tourmaline Transparency: Transparent
 Variety: Paraiba Color Description: Blue
 Carat Weight: 37.34 cts Shape: Cushion
 Measurements: 19.91 x 18.31 x 13.70 mm Cutting Style: Modified Brilliant Cut

Comments: Paraiba is a trade term/color variety applied by the AGL to the copper-bearing variety of elbaite tourmaline, which was first discovered in the Paraiba state of Brazil.

Origin

Provenance: Brazil

Comments: Based on available gemological information, it is the opinion of the Laboratory that the origin of this material would be classified as Brazil.



Enhancement

Standard: No gemological evidence of heat Additional: Clarity enhancement: None

Comments: Non-heated paraiba tourmaline is scarce. The color of paraiba tourmaline is commonly the result of a relatively low temperature heating process.

1	2	3	4	5	6	7	8	9	10
Excellent	Very Good	Good	Fair	Poor					

Enhancement Stability Index™

None	Insignificant	Minor	Moderate	Strong	Prominent
Extremely Rare	Very Rare	Rare	Uncommon	Common	Very Common

Degree of Clarity Enhancement & Relative Rarity™

M. Chaipaksa
 Monruedee Chaipaksa, Senior Gemologist

Christopher P. Smith
 Christopher P. Smith, President



Imaging

Identification

Origin

Enhancement

About Us

American Gemological Laboratories™
 America's first and most highly respected origin lab.

Founded in 1977,
 AGL is an internationally recognized gemstone testing facility, specializing in comprehensive colored stone analyses.

AGL has the distinction of being the first laboratory in the United States to issue Country-of-Origin reports. Our company and its principals have a long tradition of research into the detection of and reporting on gem identification-and-classification, gemstone treatments and provenance determinations.

Our staff is composed of experts in the field of gemstone testing and reporting. Our findings reflect the latest knowledge and analytical techniques to ensure the highest standards are applied on every stone we test.

AGL's testing and reporting methodology provide you with unsurpassed quality and reliability. We are committed to providing the highest level of service and reporting that our clients and the industry have come to expect from the AGL.

“Without exception, the gemologists were unanimous in their verdict—not since the GIA’s founding had the gem world witnessed a discovery of such profound magnitude.”

—Brian Charles Cook

AUTHOR: BRIAN CHARLES COOK



Brian Cook, a prominent figure in the realm of gemology, has left an indelible mark on the landscape of mineral and gem curation. In 1989, Cook first crossed paths with the initial Paraíba tourmalines as they have just been discovered. From that pivotal moment, he forged a close alliance with the Barbosa family, not only lending his support to Heitor's arduous struggle to help reclaim his mine but also assuming the mantle of the first gemologist to introduce the Paraíba gem rough to the GIA and the world. These achievements have earned Cook a reputation as a respected luminary within the sphere

of gemstones, and his contributions to the field are monumental.

In the present day, Cook presides over a rutilated quartz mine nestled in the village of Remedios, in the historic district of Rio de Contas, Novo Horizonte, a municipality in the beguiling landscape of Bahia's Chapada

Diamantina, Brazil. In 1989, he and his Brazilian wife, Kendra Grace, established the company Nature's Geometry, which creates and markets their unique and striking gemstone creations. Their prowess in the art of lapidary was celebrated when they emerged triumphant, claiming the coveted AGTA 2016 Spectrum Fashion Forward award for their resplendent "Wheel of Light" Numinous Pendant, which was featured on the cover of the esteemed *Gems & Gemology's* Spring 2016 edition.

Throughout his extensive experiences within the industry, Cook has acquired a profound understanding of the intricate processes entwined with the mining, cutting and polishing of these exceptional gems. He nurtures close bonds with miners and cutters in Brazil, including the original Batalha Mine currently presided over by Heitor's son, Sergio. Moreover, he remains steadfast in his commitment to bolster and champion community-led artisan mining endeavors. As the world's authority on Paraíba tourmalines, Cook shares his vast knowledge and reverence for these resplendent stones, ensuring that their magnificence reaches far and wide, embracing the hearts of all who behold them.

Special thanks to the Barbosa family, Brian Cook and the many gemologists who provided expertise and enthusiasm for this treasure.

“In this desert, this caatinga, who would have thought here could produce such a marvelous thing?”

—Heitor Barbosa

