

# The Story Behind the Stone: Mine to market - opal's colorful journey (/columnists/diana-jarrett/2780-the-story-behind-the-stone-mine-to-market-opal-s-colorful-journey)

Parent Category: [Columnists \(/columnists\)](#) Category: [Diana Jarrett \(/columnists/diana-jarrett\)](#) Published: 31 March 2015 Written by [Diana Jarrett GG, RMV](#)



Like Share 0

Tweet 0

G+1

Precious opal has been holding fans spellbound for centuries. The gemstone is unique in more ways than its kaleidoscopic appearance. This stone is a hydrated amorphous form of silica and usually contains between 6 - 10% water by weight. It's not unheard of for specimens to have up to 20% water, either.



UNDERGROUND WITH HYDRAULIC ROTARY HEAD DIGGER; LARGE BLACK PIPE SUCTIONS UP DIRT FOR PROCESSING. COURTESY JOHN TERNUS, OPAL GUY.

The mesmeric play of colors for which opal is revered owes a debt of gratitude to its unusual internal structure. Unlike diamonds and gemstones with a cubic crystal structure, opal is composed of microscopic silica spheres which diffract light into its rainbow hues.

When people get the opal bug, it often bites deep. Take John Ternus for example. Called the Opal Guy for good reason, John's been mining these treasures in Australia for over 35 years. Opal is found around the world in certain geological conditions, but by far, the most renowned region remains Australia. The finest of the fine is said to occur in the famed Lightning Ridge deposits of New South Wales, bordering Queensland. It is the only locale where stable black opal can be found. The deep opaque tone of black opal creates a dramatic contrast for vibrant colors to dance across the face of these majestic gems.

A recent conversation with Ternus illuminates the miner's love for these marvels. "I am continually amazed at the varieties of opal colors in proximity to each other and in combination with the same stone," he confides. The base colors, whether transparent, white, grey, or black, Ternus feels, "are influenced by the inclusion of trace elements in the opal, and the gem color which is dictated by the size of microns of the light refracting silica spheres."

Opal Guy Ternus is still enchanted by what he uncovers in these remote deposits. "In mining, I have found black crystal opal with red and green color-play next to root beer brown body color opal with a globule of gem multi-color crystal opal in the center of it. Trying to imagine what was going on with regards to the geological events that came to form the opal is fascinating." Besides their intrinsic beauty, each opal is distinct in shape, size and color combination. And that aspect has endeared them to both art lovers and devotees of one-of-a-kind jewelry pieces.



PAL AND DIAMOND RING IN YELLOW GOLD. COURTESY: JOHN TERNUS, OPAL GUY.

He also finds these magnificent gems have a story to tell. “Though some might be similar, they are all different and their variety is astounding,” he said. “They are like people, each with their own personality.”

“Personally, when I look at an opal,” Ternus confides, “it’s easy to believe that there is a greater power at work in the universe that would gift such treasures like these stones.” I think we’d all agree there is something out of this world about this multi-color muse.

---

*Award winning trade journalist and gemologist Diana Jarrett is a Registered Master Valuer Appraiser and a member of the Association of Independent Jewellery Valuers (AIJV). She’s a popular speaker at conferences and trade shows. Jarrett writes for trade and consumer publications, online outlets, her blog: Color-n-Ice, and [www.jewelrywebsitedesigners.com](http://www.jewelrywebsitedesigners.com) (<http://www.jewelrywebsitedesigners.com>). Contact her at [info@dianajarrett.com](mailto:info@dianajarrett.com) (<mailto:info@dianajarrett.com>), visit her website at [www.dianajarrett.com](http://www.dianajarrett.com) (<http://www.dianajarrett.com>), and follow her on Facebook and Twitter (Loupey).*