

Colored Stone Market Report



The popular Tanzanian zircon is redefining the price structure for brown zircon. Photo: Robert Weldon. Courtesy Mayer & Watt.

The market is slow but activity is still occurring. With exploration largely stopped, current supplies will not hold long once market participants begin to move back into inventory building. With the economy, we are not sure if we have hit bottom, but there are some signs of improvement. Designers are finding some success by incorporating silver into their colored gemstone lines.

By *Stuart M. Robertson, GG*

The economy remains the big concern as consumers are feeling significant pressure on household budgets. Unemployment and declining incomes are real concerns facing many Americans. However, in spite of the current tough news, the gemstone market, like the broader market, is showing signs of stabilizing. Aggressive movement by major mining and manufacturing firms in the diamond and colored stone industries has helped to begin easing of inventory concerns.

Scaling back of production was painful in the near term but critical if the market was to achieve viable long-term recovery.

One such mining company is Gemfield Resources, the major player in the Zambian emerald industry. Earlier this year they reported plans to scale back their operations. In a report to shareholders the company noted, "With the current economic climate and deteriorating markets for diamonds and other gemstones in mind, Gemfields has reduced the scale of mining at the Kagem emerald mine. In addition, and until the

prospects for a recovery in the gemstone market become clearer,

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Gem Notes

Zultanite Durability

By: Richard B. Drucker, GG

A recent inquiry regarding the use of ultrasonic cleaners with zultanite prompted research and uncovered answers and an update to this color change diaspore from Turkey. (See *Gem Market News*, July/August 2006 for an in-depth look at zultanite.) The color change observed is a pink to green. New information reveals that in many experiments with cutting, the color change occurs when cut along any axis, unlike most color change gems.

Should you encounter a zultanite for appraisal, be aware that this is a branded gemstone and as such, it should be researched and priced accordingly (a price chart appears below). The brand has been established by Zultanite Gems, LLC to distinguish their product from what they claim to be stolen material from the mine that occasionally surfaces. Most other material that does show up is inferior in clarity and in cut. Zultanite Gems cuts to higher standards and has a very low yield from the rough of only 2-3%.

Zultanite properties are as follows. Note that these properties are from the current zultanite deposits and differ slightly from previous diaspore deposits.

Crystal Structure: Orthorhombic

Refractive Index: 1.70-1.75

Birefringence: 0.048

Specific Gravity: 3.39

Moh's Hardness: 6 1/2 -7

Color: Color change from light green to purplish pink or brownish pink

Clarity: Usually eye-clean

Cut: Standard shapes and custom cuts

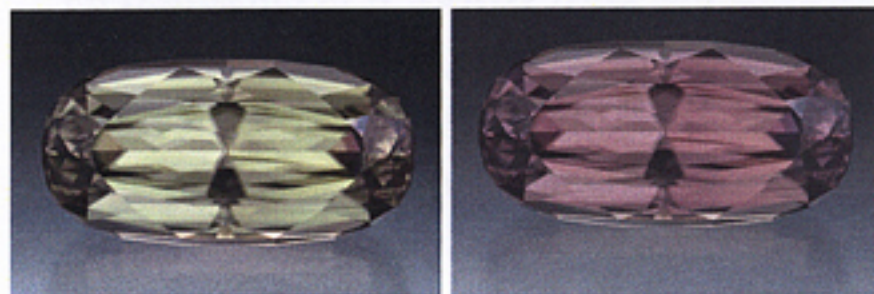
Enhancements: None

Care: No heat, no ultrasonic

When considering the above properties, it is interesting that zultanite is not recommended for ultrasonic cleaning. I asked Jim Fiebig, Global Sales Director, for an answer on the durability issue with ultrasonic cleaners. He stated, "We have no absolute science concerning ultrasonic effect



Curved growth viewed in diffused lighting.



Zultanite in daylight (left) and incandescent light (right). This 80.25ct. zultanite was cut by Stephan Kotlowski. Winner 3rd place Phenomenal category 2009 AGTA Cutting Edge Awards. Courtesy Zultanite Gems, LLC.

on zultanite. It is not the inclusions since virtually all genuine zultanite is quite clean. So far, we know HOT ultrasonic cleaners will cleave zultanite on the C-axis where the single direction of perfect cleavage is. Thermal shock in general seems to be the most destructive force for us. Our cutters even try to orient each crystal so the plane of cleavage is at least 25 degrees away from the girdle and that has proven effective in preventing setting and normal wear issues. So, the 'no ultrasonic cleaners' is more for safety, since most cleaners do heat up by the end of the day."

Knowing this, jewelers must be cautious in doing repairs and cleaning, just as they would with emeralds or tanzanite. However, wearability and durability are very good for this gem and typically pose no problems for jewelry settings of any kind.

For more information go to www.zultanite.com