

# Much Ado About “Trapiche” Pezzottaite

By Elise A. Skalwold

**D**uring 2014 and 2015, this author along with GIA’s analytical microscopist, John I. Koivula, was delighted to study and later publish the first journal report of trapiche pezzottaite crystals (Skalwold and Koivula, 2015). The specimens were obtained from Elaine Rohrbach (Gem-Fare) who purchased them in a marketplace along the Thai-Burma border in 2004 and had them in her personal collection ever since.

Intensive analysis conducted at the GIA Carlsbad laboratory included advanced instrumentation, as well as standard gemological testing and exploration of its microworld. The most important revelation turned out to be the presence of cesium, confirming that these were not morganite beryl, but rather are the relatively newly described gem mineral, pezzottaite.

While the crystals’ included needles, curious blue crystals and white feathery structures (the latter form the trapiche-like zoned growth) could not be conclusively identified at that time without destructive testing, the report’s photomicrographs beautifully document their presence (taken by GIA’s Nathan Renfro, the



**Figure 2 (Bottom):** A second specimen from the same locality in Burma displays multiple crystals which nucleated off both of the larger host’s pinacoid faces, all with trapiche-like growth structures. Along with the 2.33 carat crystal seen in figure 1, all show strong eye-visible pleochroism perpendicular to the optic axis/c-axis (orangey-red/purplish-red in polarized light). 6.17 carats; 11.19 x 10.71 x 8.61 mm. Copyrighted photos by Elise A. Skalwold, 2014.



**Figure 1 (Top):** This rare crystal published in the Spring Issue of *InColor* was incorrectly captioned and credited (see figure 37, Bergmann 2016). It should have correctly stated: “When viewed in transmitted light, this doubly-terminated Burmese pezzottaite crystal reveals its trapiche-like structure (see Skalwold and Koivula, 2015). 2.33 carats; 8.32 mm x 7.60 mm x 5.80 mm. Copyrighted photo by Elise A. Skalwold, 2014”

analytical manager of the gem identification department and analytical microscopist in the inclusion research department). For discussions on what constitutes a true trapiche, see the extensive feature article by Pignatelli, et al in the 2015 Fall issue of *Gems & Gemology* and the letter by this author in the following Winter issue (Skalwold, 2015) The accompanying photomicrographs seen here of the two doubly-terminated prismatic crystals were taken by this author with transmitted fiberoptic light to illuminate the six-spoked appearance which make these delicately pink minerals one of the newest members of the trapiche world (see figures 1 and 2).

**Note:** As well as adding to our knowledge regarding trapiches, this contribution serves as an erratum to Jeffrey Bergman’s terrific Spring 2016 *InColor* feature article on the subject which inadvertently contained an incorrect image credit and some typos regarding the pezzottaite crystal.

## About the Author:

Elise A. Skalwold, B.Sc., is an Accredited Senior Gemologist and author. She serves as Consulting Gemological Curator at her alma mater, Cornell University and is Contributing Editor and author for *Gems & Gemology*’s quarterly column: *G&G Micro-World*.

## References:

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