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**COLORED STONES AND ORGANIC MATERIALS**

**Burmese amber update.** Amber from Myanmar's Hukawng Valley, also called Burmite, has been produced intermittently in commercial quantities from the 20th century to the early part of the 2000s (Summer 2001 Gem News International [GNI], pp. 142–143). In March 2012, Mark Smith (Thai Lanka Trading Ltd., Bangkok) informed GIA about a surge in this amber's availability in the Bangkok market since early 2011, notably as clean faceted stones. The color ranges from light yellow to orange and rarely red, which is most valued by the Burmese. However, the yellow material is appreciated for its strong fluorescence to long-wave UV radiation (figure 1). Mr. Smith indicated that most of the faceted stones weigh 5–20 ct, although the largest he obtained was 32 ct and he knew of samples weighing 40–50 ct. Considering the low specific gravity of amber, pieces of this weight are quite large. Mr. Smith estimated that several thousand carats of faceted stones have been cut since early 2011. The material is polished in both Myanmar and Bangkok.

Burmite is known for the presence of insects and other biological materials, which indicate a Cretaceous age of ~100 million years (see Summer 2001 GNI entry). While most of the recent production is fairly clean, some stones contain ~1 mm spheres that are probably composed of plant matter, and a few have insect inclusions. Mr. Smith obtained one notable example: a 27.55 ct cabochon with a well preserved scorpion (~8 mm long) and various insects resem-



Figure 1. These two faceted pieces of Burmese amber (4.80 ct total weight) show the range of color of the material seen recently in the Bangkok market (top). The lighter colored amber shows strong fluorescence to long-wave UV radiation (bottom). Photos by Prasit Prachagool.

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bling wasps, ants, and a tick; some of these are visible in figure 2. Although faked specimens consisting of molded amber or acrylic with modern scorpions are common, genuine scorpions are extremely rare in Burmese amber; Mr. Smith knew of only a few documented specimens.

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Figure 2. This 27.55 ct cabochon of Burmese amber contains a complete scorpion (on the left) and a variety of insects. Photo by Prasit Prachagool.

#### Aquamarine from San Bernardino County, California.

Southern California's gem pegmatites are world-famous for their production of tourmaline, beryl, spodumene, quartz, and other minerals since the late 19th and early 20th centuries. The pegmatites are associated with the Peninsular Ranges Batholith, and extend from Riverside County into northern Baja California (e.g., J. Fisher, "Mines and minerals of the Southern California pegmatite province," *Rocks & Minerals*, Vol. 86, 2011, pp. 14–35, <http://dx.doi.org/10.1080/00357529.2011.537167>). Further north, San Bernardino County is not known to host many pegmatites, although two localities containing uranium-bearing minerals were documented several decades ago (D. F. Hewett and J. J. Glass, "Two uranium-bearing pegmatite bodies in San Bernardino County, California," *American Mineralogist*, Vol. 38, 1953, pp. 1040–1050). However, no gem mineralization has been noted from those pegmatites in the literature.

It was quite a surprise, then, when in 2006 a local prospector named Dave Schmidt found an aquamarine-bearing pegmatite on BLM (Bureau of Land Management) land north of Yucca Valley in San Bernardino County. He filed a claim, calling it the California Blue mine. He worked the ~1 m thick dike by hand and collected many loose crystals of aquamarine and topaz, but few matrix specimens. In November 2011, he partnered with mineral collector Paul Geffner to mine the deposit for a one-week period using an excavator. They found four aquamarine-bearing cavities that yielded matrix specimens (figure 3) and loose crystals of gem-quality aquamarine (bluish green to greenish blue), topaz (colorless and rarely pale blue), and quartz (colorless to smoky), as well as non-gem spessartine, fluorite, albite ("cleavelandite"), and microcline.

Rough and cut specimens of the aquamarine were exhibited at the 2012 Tucson gem shows by Rick Kennedy

(Earth's Treasures, Santa Clara, California). He indicated that since the California Blue mine has been worked primarily for mineral specimens, fewer than 10 aquamarines have been faceted so far. The best cut stone weighed 7.35 ct and showed an attractive greenish blue color (again, see figure 3). A few pieces of smoky quartz have also been cut.

In March 2012, another one-week mining project at the California Blue mine yielded several more aquamarine crystals of good color and clarity, as well as ~80 g of colorless facet-grade topaz. Mr. Schmidt will continue developing the mine in the near future, and also plans to host fee digging on the property within the next year.

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#### Trapiche aquamarine from Namibia.

In August 2010, GIA was informed about a new find of trapiche aquamarine from the Erongo Mountains in Namibia by Jo-Hannes Brunner (Pangolin Trading, Windhoek, Namibia). The material was reportedly recovered from a small pocket that contained matrix specimens and crystal clusters, as well as a few loose crystals up to 10 cm long. The crystals were typically semi-transparent with etched prism faces, but they displayed a variety of interesting patterns when sliced parallel and perpendicular to the c-axis (e.g., figure 4). Mr. Brunner subsequently donated several rough and cut samples to GIA, and four specimens were examined for this report.

The samples consisted of a crystal (43.60 mm long), an oval cabochon (6.13 ct), a rectangular step cut (8.20 ct), and

Figure 3. These rough and cut aquamarine specimens are from a new find in San Bernardino County, California. The cut stone weighs 7.35 ct and the specimen is 7.9 cm wide. Photo by Jeff Scovil.

