

CONTENT GUIDE FOR EOSC118

Gota de Aceite: Nomenclature for the Finest Colombian Emeralds

Ringsrud, R. (2008), *Gems and Gemology*, Vol. 44, No. 3, p242-245

This 4 page document reviews what produces the finest and rarest colour in emeralds and a little bit of the geography and history of the Colombian emerald deposits. Not only does Colombia produce the finest normal emeralds in the world, but it also produces the most exceptionally fine emeralds in the world. Use the discussion board on Connect to pose questions, since questions that you have are probably being thought by another one of your fellow students.

Use the following questions to help you through the article:

1. Which region of Colombia produces some of the finest emeralds of that country? **Muzo Region**
2. In short, what imparts the *Gota de Aceite* effect to the finest emeralds?
oiled appearance - reminiscent of honey/oil
3. What is the literal translation of *Gota de Aceite*? **"drop of oil"**
4. How rare is this optical phenomenon in emeralds? **"1 in 1000"**
5. Originally, calcite was assumed to play a role in this optical effect. How was this disproved? **- unusual irregularities in internal crystal structure are responsible**
6. Are the growth patterns random, or do they follow the crystal structure of beryl (emerald)? **- no; irregularities - hexagonal terminations and geometric depressions**
7. What does the term "Old Mine Emerald" refer to? **- rare and fine emeralds; refers to age and provenance**
8. What is required for a stone to have a 'distinct gota de aceite effect'?
- clearly visible to naked eye as stone is rocked back and forth
- needs to show liquid-like softening of texture that is hallmark