

***Gems & Gemology* Data Depository**

Supplementary photos to accompany the article: Schwarz D., Pardieu V., Saul J.M., Schmetzer K., Laurs B.M., Giuliani G., Klemm L., Malsy A.-K, Erel E., Hauzenberger C., Du Toit G., Fallick A.E., Ohnenstetter D. (2008) Rubies and Sapphires from Winza, Central Tanzania. *Gems & Gemology*, Vol. 44, No. 4, pp. 322–347.

Category: Photomicrographs



Figure DD-1. Blue/pink color zoning. Photomicrograph © V. Pardieu/GGL; magnified 10x, brightfield illumination.

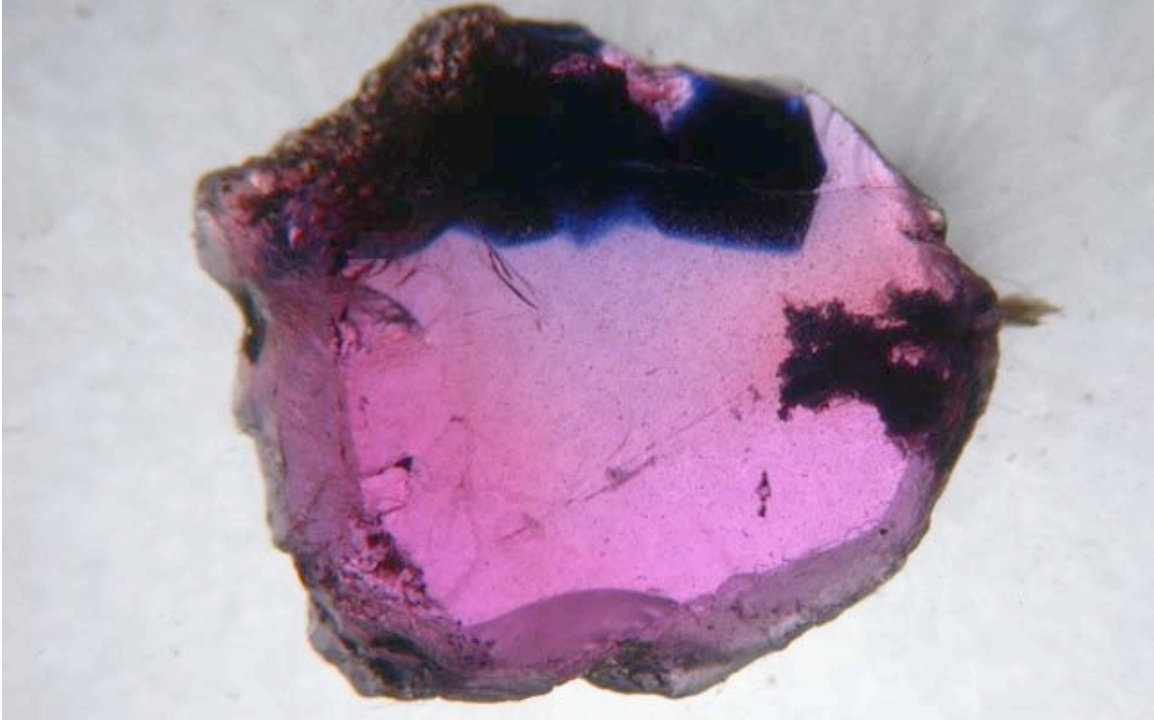


Figure DD-2. Blue/pink color zoning. Photomicrograph © V. Pardieu/GGL; magnified 10x, brightfield illumination.

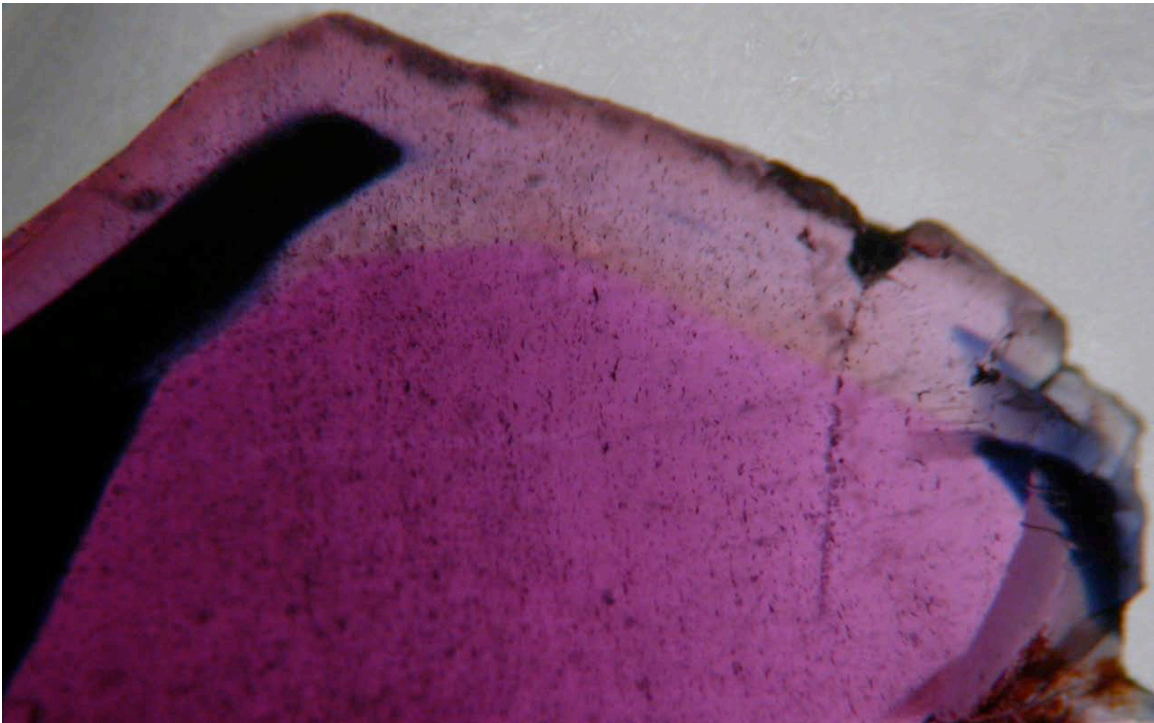


Figure DD-3. Rarely seen are yellowish bands. Photomicrograph © V. Pardieu/GGL; magnified 20x, brightfield illumination.

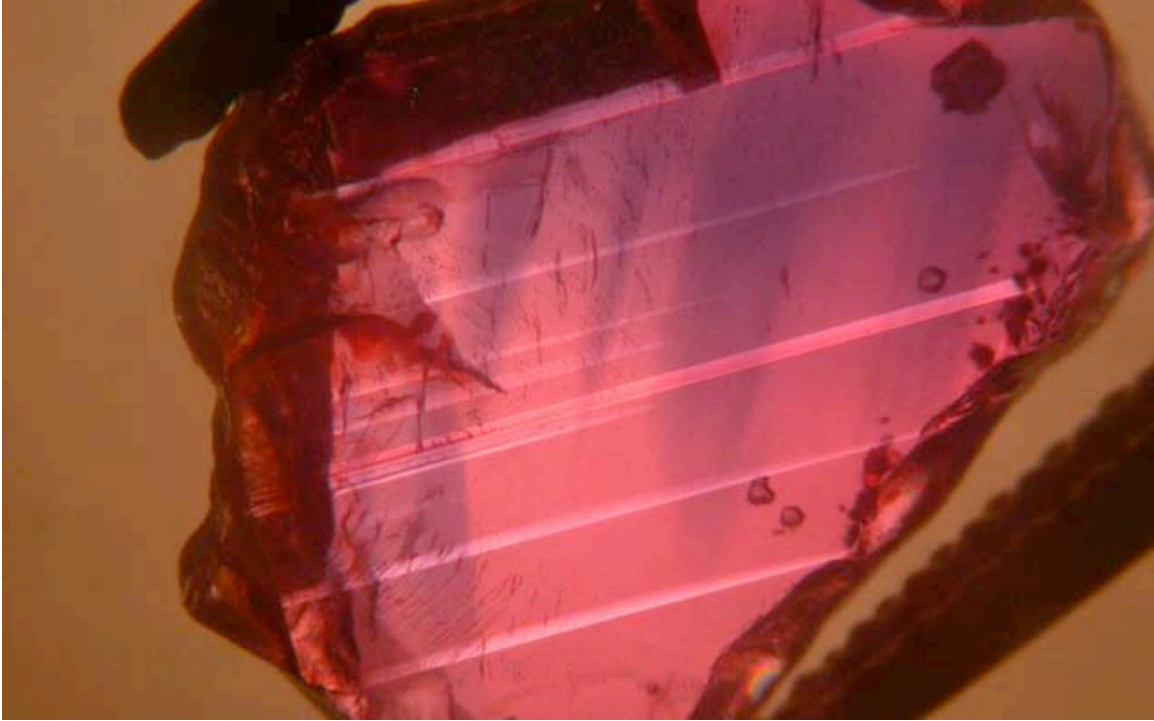


Figure DD-4. Blue/pink color zoning, partial twin lamellae, and included crystals. Photomicrograph © V. Pardieu/GGL; magnified 10x, cross polars.

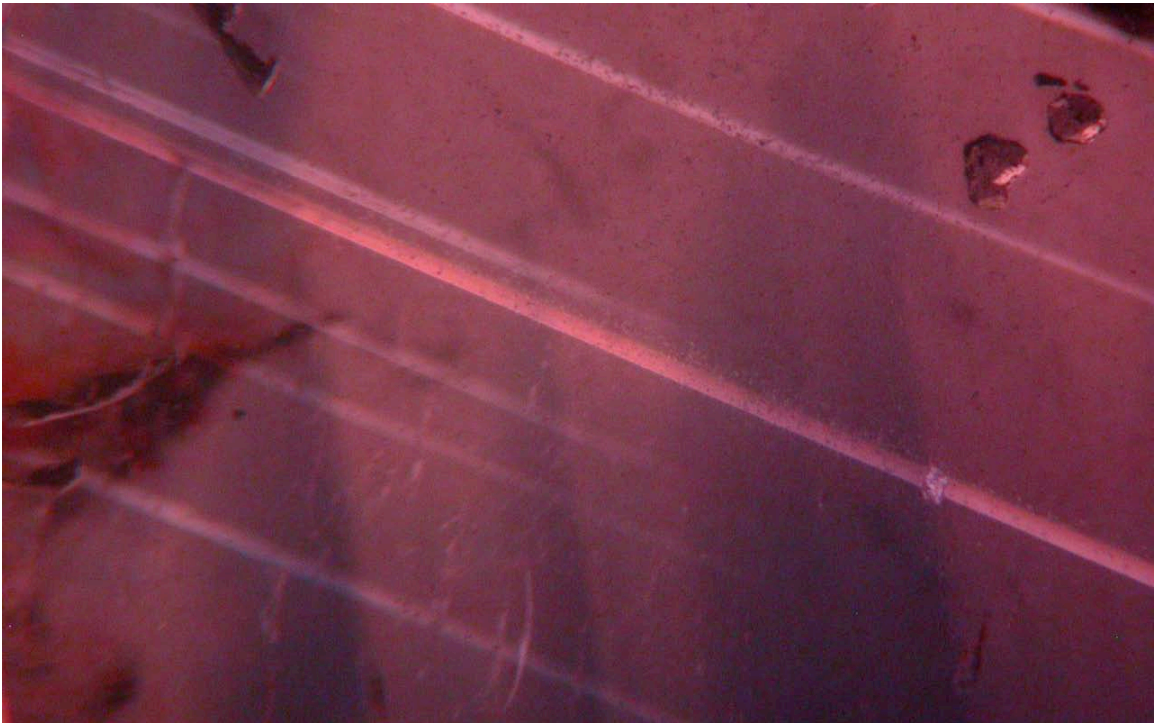


Figure DD-5. Details of blue/pink color zoning and partial twin lamellae. Photomicrograph © V. Pardieu/GGL; magnified 40x, cross polars.



Figure DD-6. Twinning. Photomicrograph © V. Pardieu/GGL; magnified 40x, cross polars.



Figure DD-7. Intersection tubes and blue/pink color zoning. Photomicrograph © V. Pardieu/GGL; magnified 30x.



Figure DD-8. Color zoning. Photomicrograph © V. Pardieu/GGL; magnified 40x, brightfield illumination.

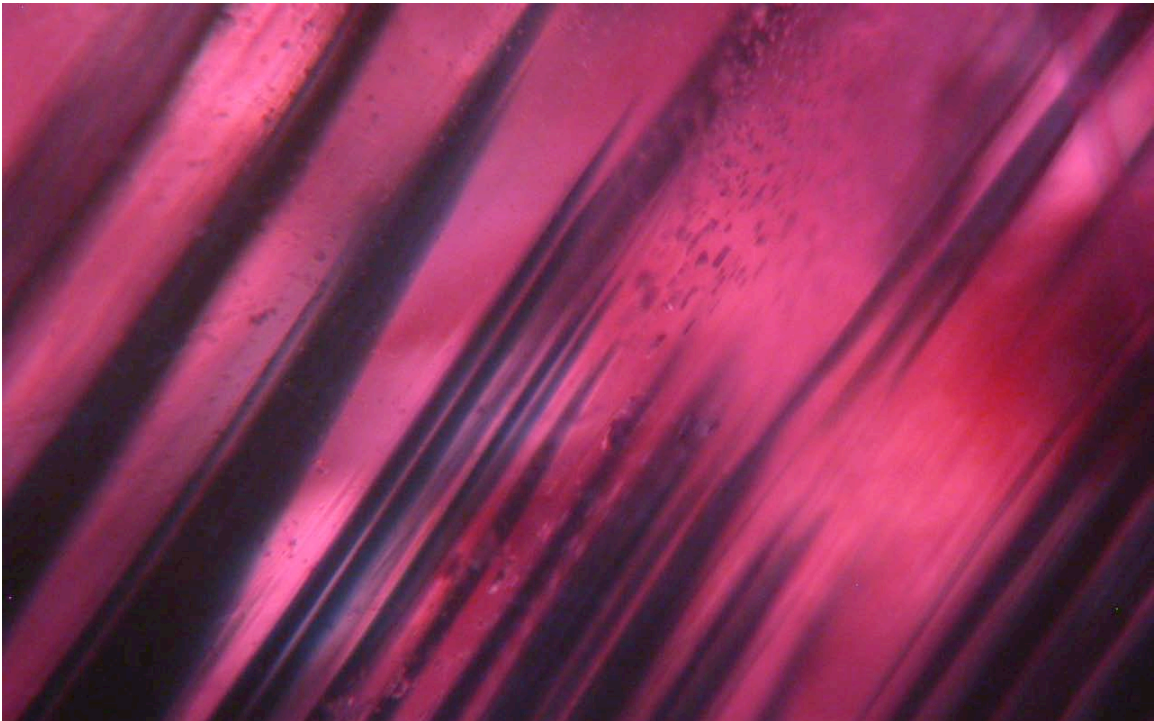


Figure DD-9. Color zoning consisting of delicate, slightly diffuse bluish violet bands. Photomicrograph © V. Pardieu/GGL; magnified 40x.

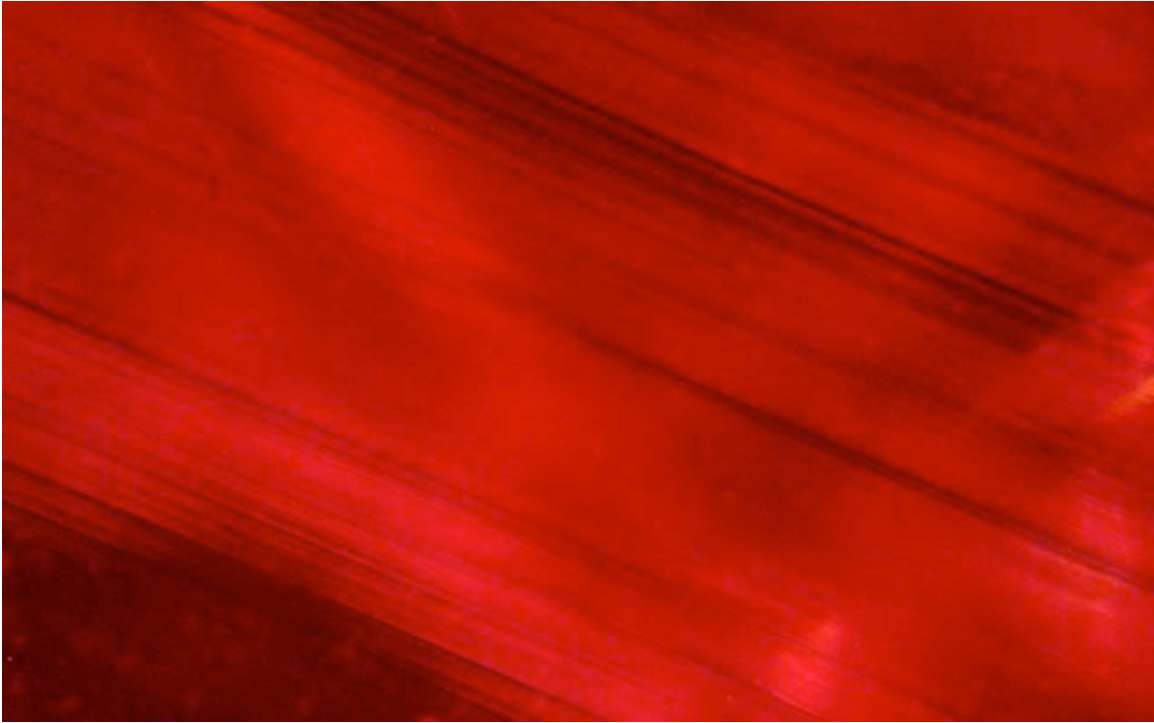


Figure DD-10. Growth features in the form of straight lines/bands sometimes show a slightly “blurred” appearance. Also visible are some bluish violet color zones. Photomicrograph © V. Pardieu/GGL; magnified 40x.



Figure DD-11. Partially healed fissure composed of negative crystals. Photomicrograph © V. Pardieu/GGL; magnified 30x.



Figure DD-12. Partially healed fissure composed of negative crystals. Photomicrograph © V. Pardieu/GGL; magnified 20x.

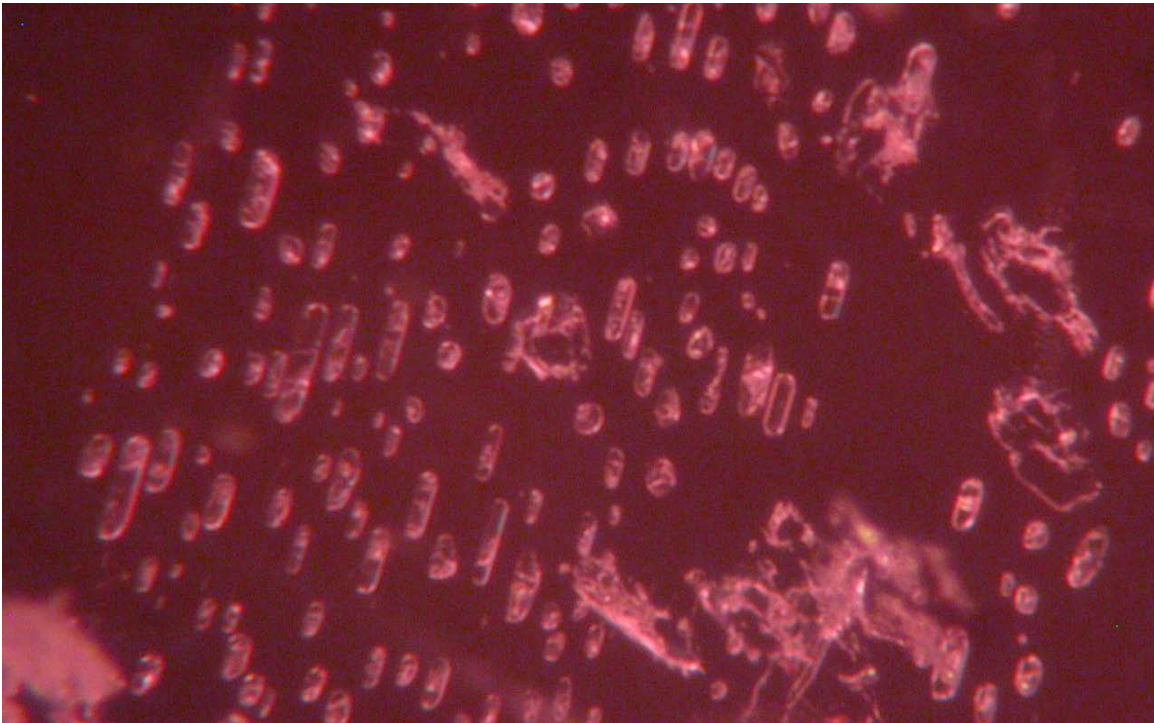


Figure DD-13. Partially healed fissure composed of negative crystals. Photomicrograph © V. Pardieu/GGL; magnified 40x, brightfield illumination.

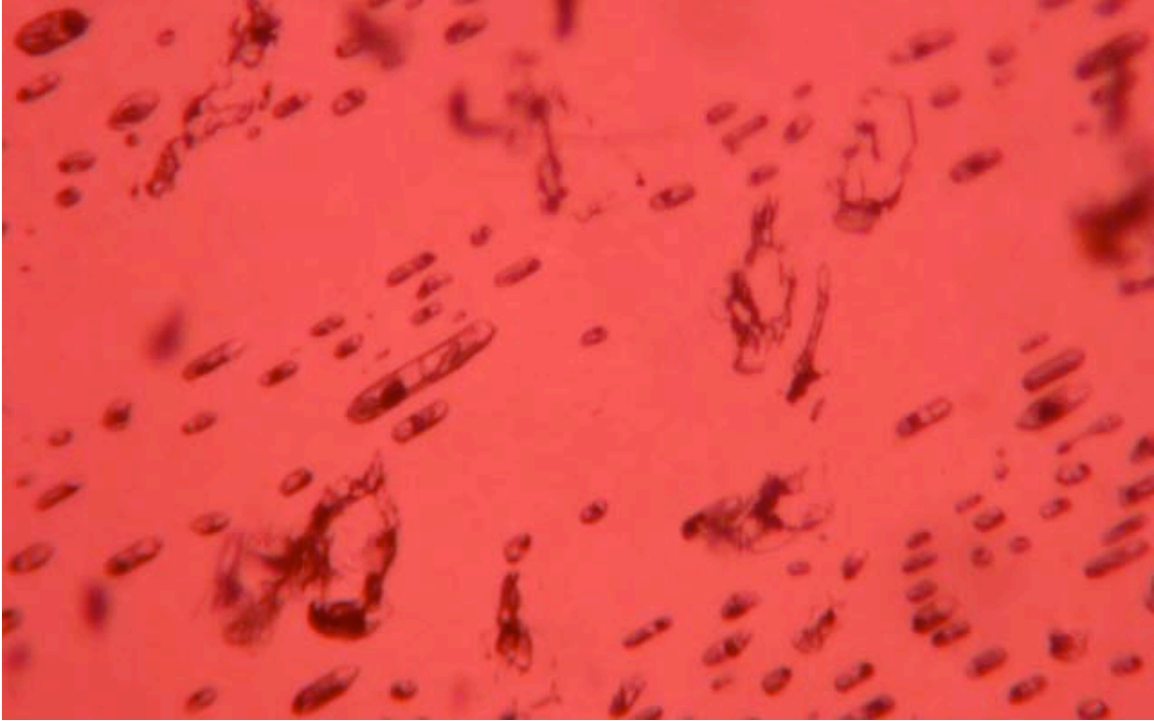


Figure DD-14. Partially healed fissure composed of negative crystals. Photomicrograph © V. Pardieu/GGL; magnified 80x, brightfield illumination.

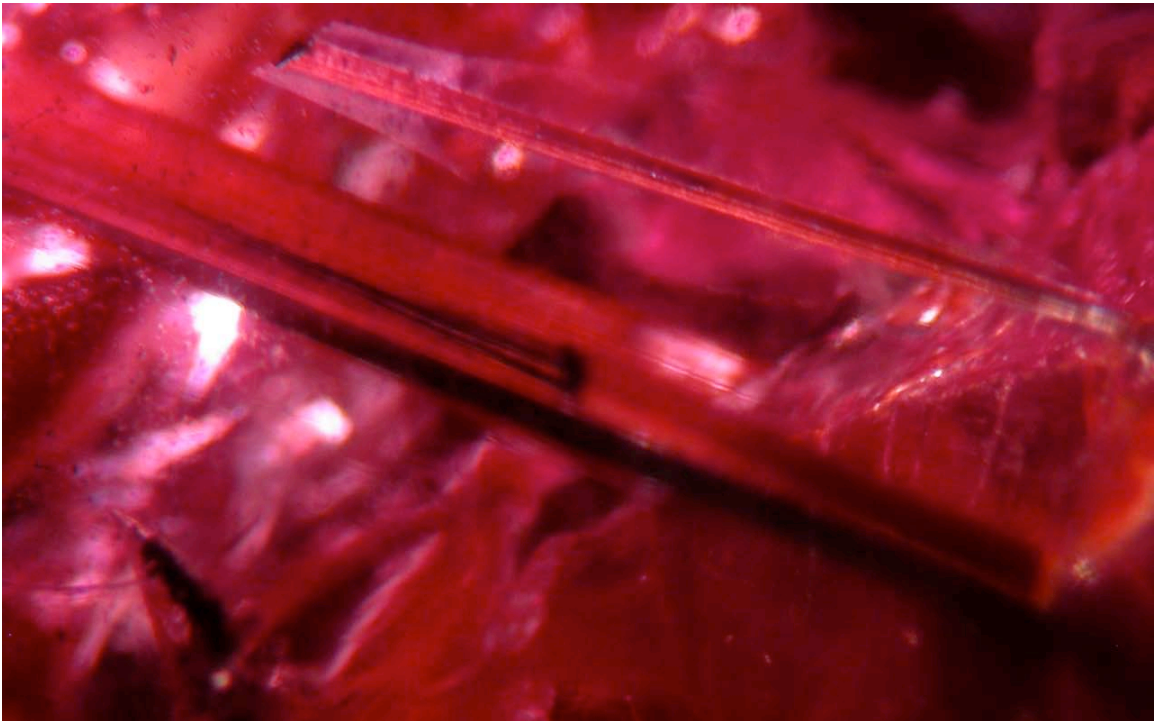


Figure DD-15. Large hollow tubes associated with thin blue bands. Photomicrograph © V. Pardieu/GGL; magnified 40x.

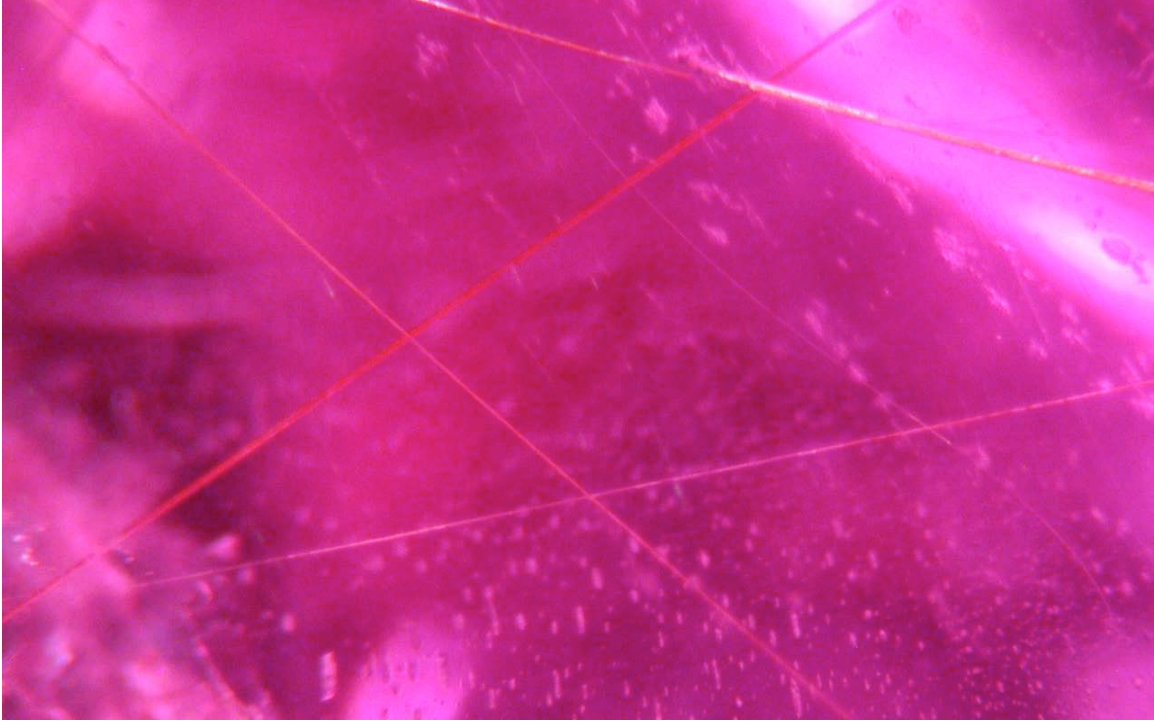


Figure DD-16. Long tube-, fiber-, needle-, or hair-like inclusions are straight, slightly curved, bent, or even (rarely) spiral-like. Photomicrograph © V. Pardieu/GGL; magnified 40x.

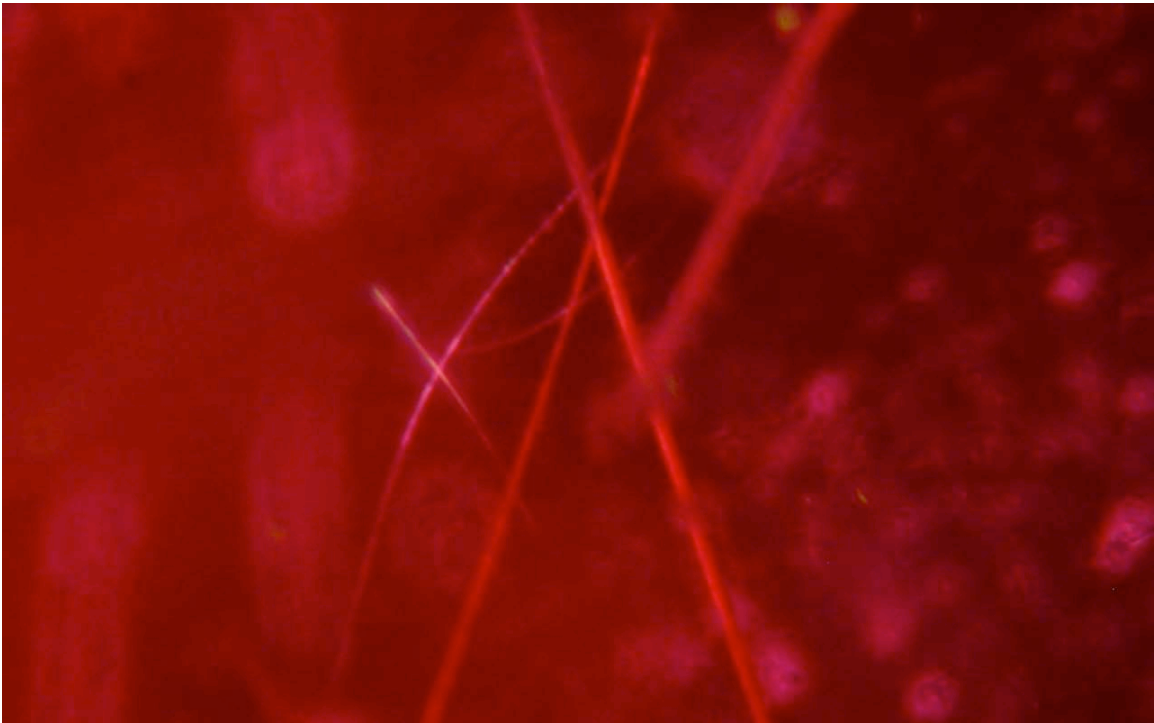


Figure DD-17. The curved needles are typically filled with an orange-brown (probably polycrystalline) solid material. Photomicrograph © V. Pardieu/GGL; magnified 40x, fiber-optic illumination.

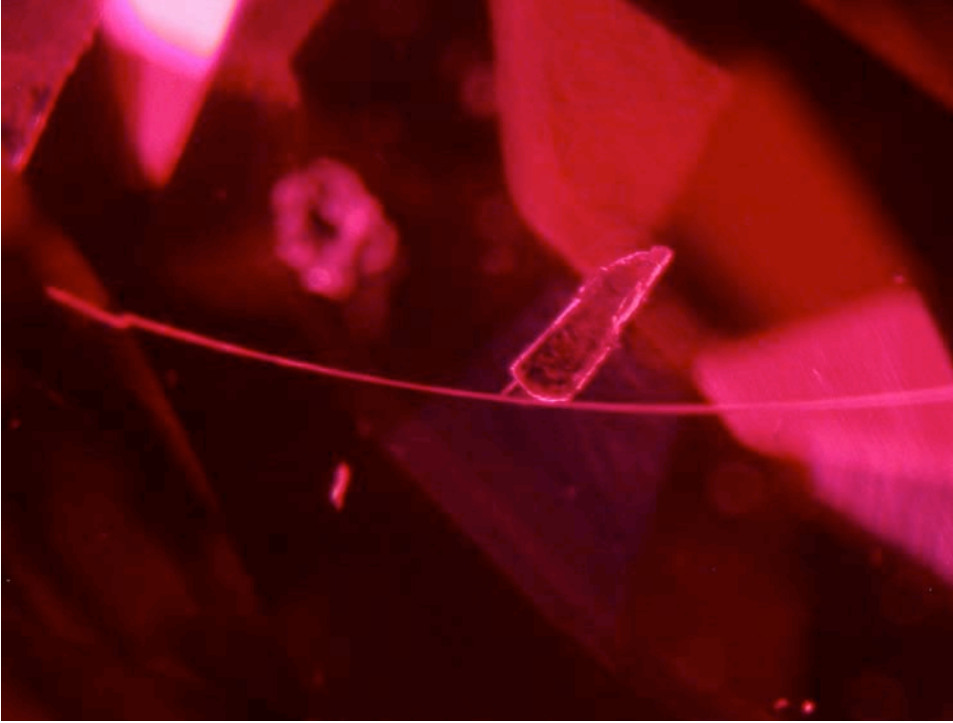


Figure DD-18. Long curved needle associated with an amphibole crystal. Photomicrograph © V. Pardieu/GGL; magnified 40x.

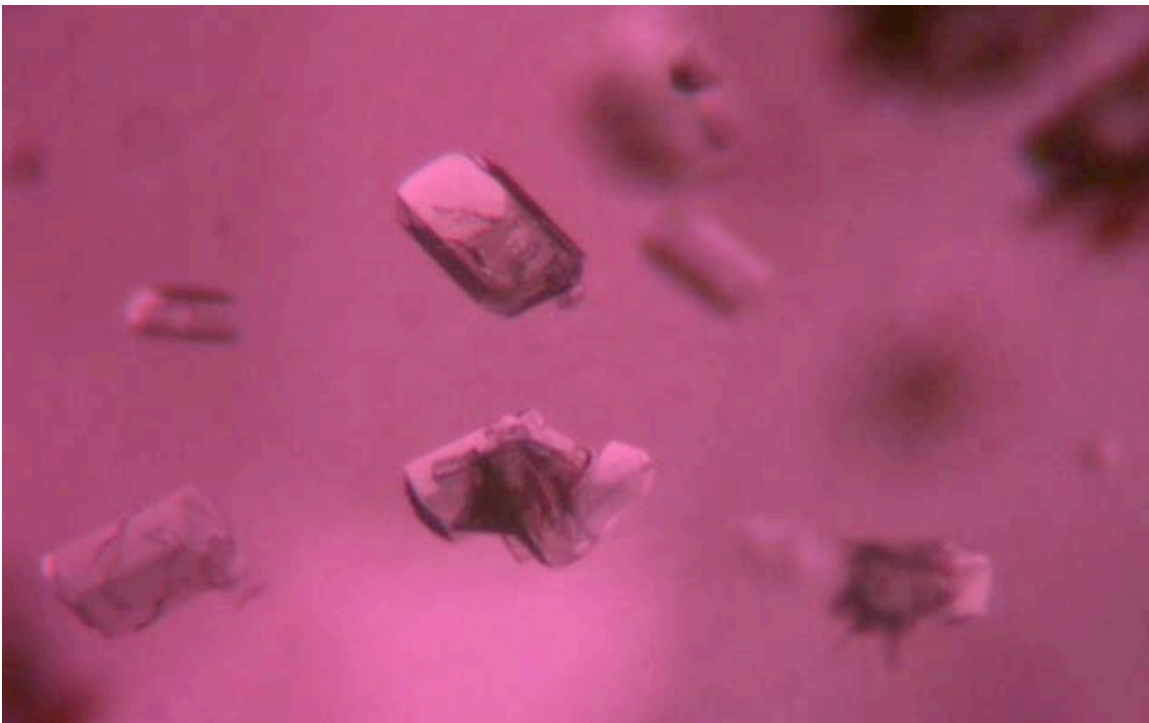


Figure DD-19. Well-developed amphibole inclusions. Photomicrograph © V. Pardieu/GGL; magnified 40x, brightfield illumination.



Figure DD-20. Amphibole inclusion in a sapphire. Photomicrograph © V. Pardieu/GGL; magnified 40x.

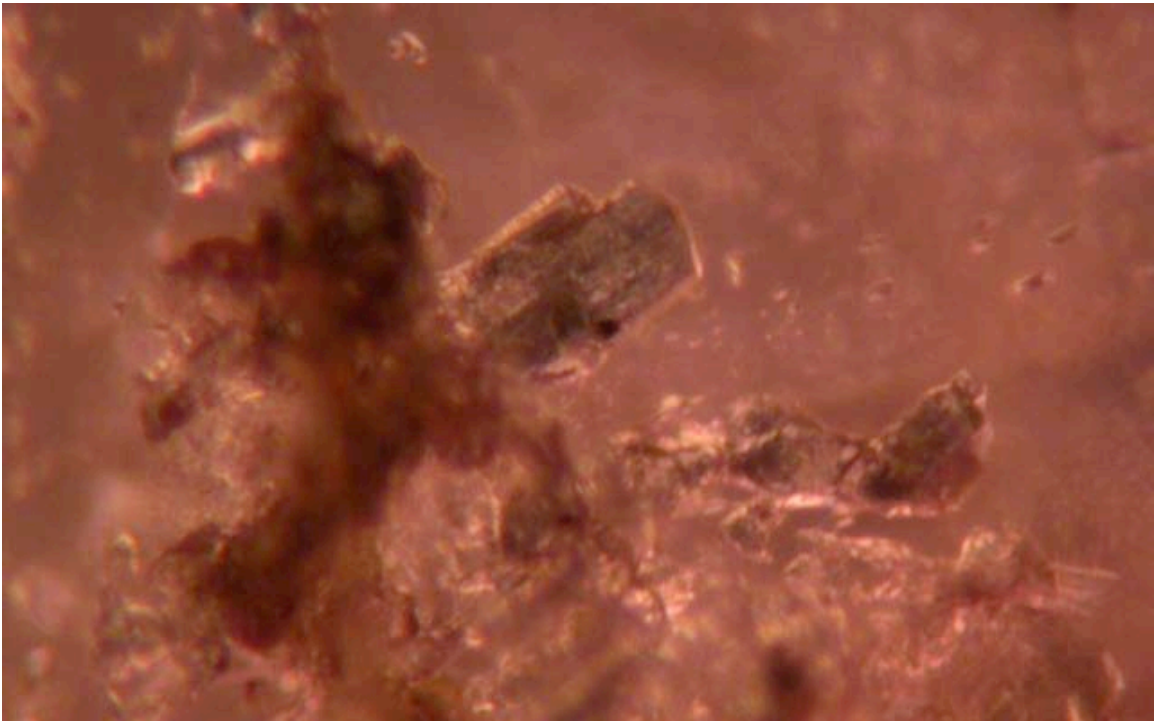


Figure DD-21. A group of amphibole inclusions. Photomicrograph © V. Pardieu/GGL; magnified 40x, brightfield illumination.



Figure DD-22. Elongate amphibole inclusion accompanied by needle-like formations that are oriented nearly parallel to one another. Photomicrograph © V. Pardieu/GGL; magnified 40x, fiber-optic illumination.

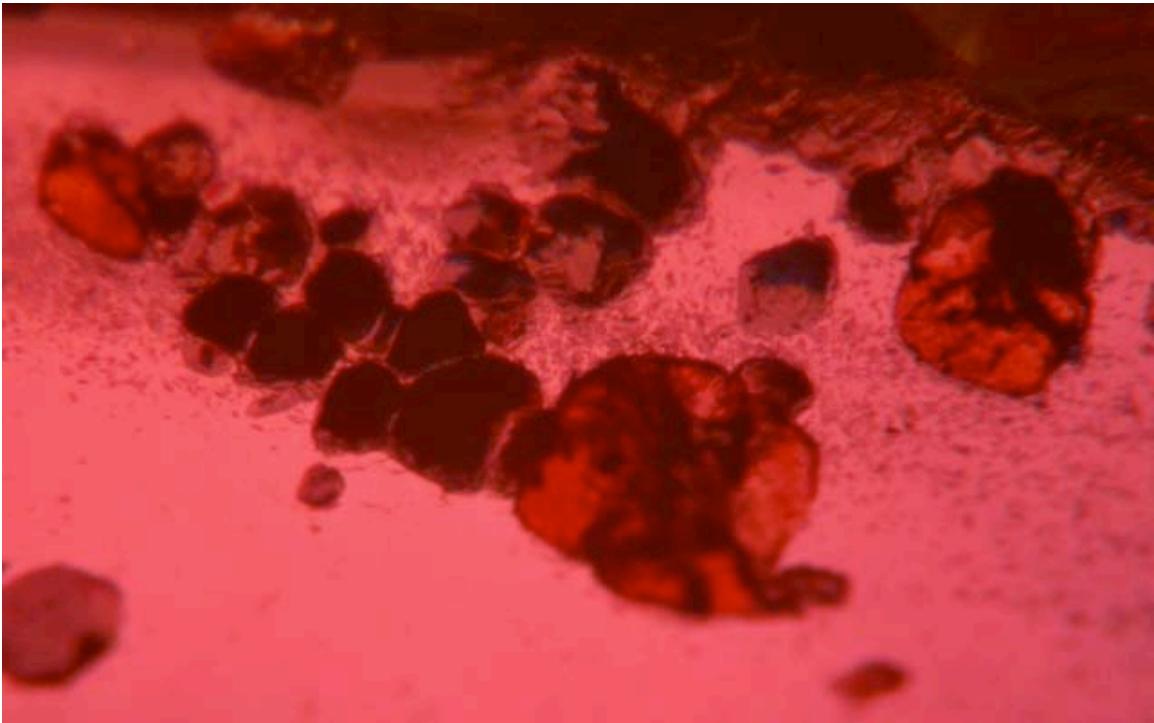


Figure DD-23. Group of yellow-orange, irregularly shaped garnet inclusions (dark areas are dirt). Photomicrograph © V. Pardieu/GGL; magnified 40x, brightfield illumination.



Figure DD-24. Bluish gray, slightly milky domains in the form of clouds, bands, or “growth sections” are common. In general, a milky appearance is caused by the presence of very tiny grayish pinpoints. Photomicrograph © V. Pardieu/GGL; magnified 20x, fiber-optic illumination.

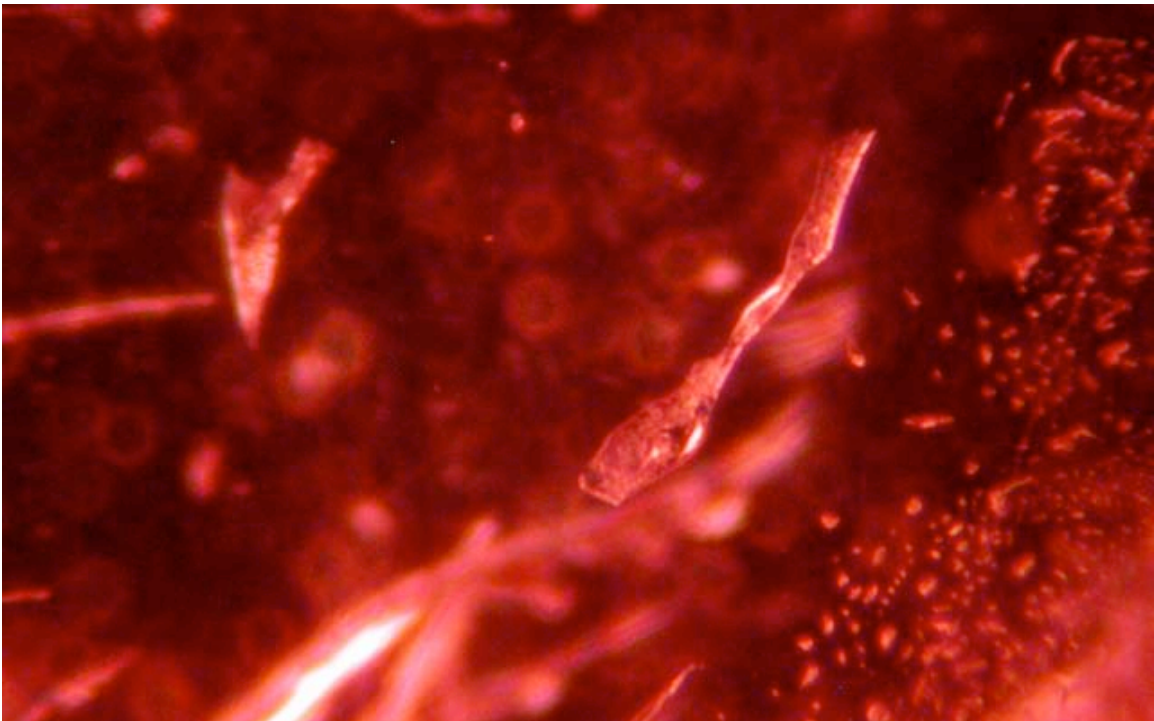


Figure DD-25. Irregularly shaped cavity containing a grayish white to pale yellow solid substance, which may be mistaken for flux material seen in synthetic gems. Photomicrograph © V. Pardieu/GGL; magnified 40x.

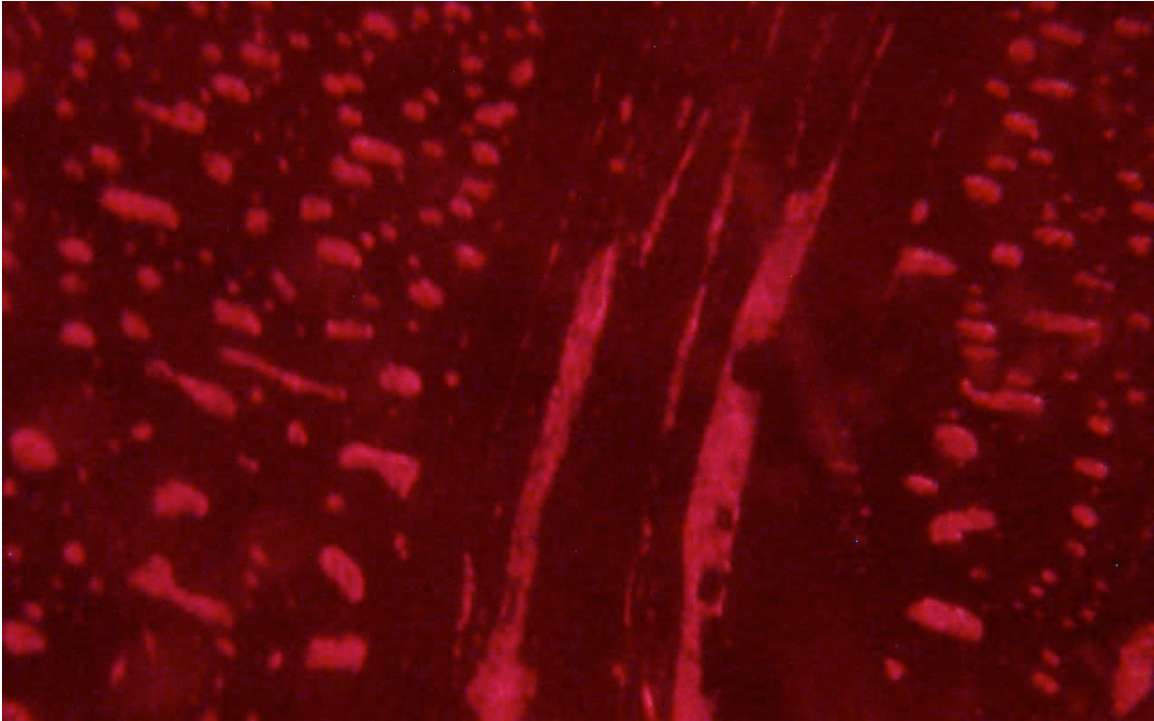


Figure DD-26. Irregularly shaped cavity containing a grayish white to pale yellow solid substance, which may be mistaken for flux material seen in synthetic gems.
Photomicrograph © V. Pardieu/GGL; magnified 60x.