by Wickman (1948) who assumed that Harcourt (1942) really was dealing with a member of the tetrahedrite family.

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SYNTHESIS AND PROPERTIES OF CALCIUM VANADIUM GARNET (GOLDMANITE)

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In the course of a study of garnets containing trivalent ions of the first transition series, $Ca_3V_2Si_3O_{12}$ was prepared hydrothermally at 530° and 3.0 kilobars, in a 30-day run at the oxygen partial pressure of the hematite-magnetite buffer. The starting material was glass with a Ca:V ratio of 3:2, but with excess silica to suppress the substitution of $(OH)_4^{4-}$ for SiO_4^{4-}. Garnet was obtained in theoretical yield, as a dark green equigranular powder, with n 1.834 ± 0.003, a 12.070 ± 0.005, and D_{calc} 3.765.

Moench and Meyrowitz (1964) have recently described a natural vanadium garnet, containing 60% of the Ca-V end-member, for which they have proposed the name *goldmanite*. Their analysis gives the formula:

$$(Ca_{2.91}Mg_{0.08}Mn_{0.02})_{3.01}(Al_{0.47}Fe_{0.33}V_{1.20})_{2.00}Si_{2.99}O_{12}$$

with n 1.821 ± 0.001, a 12.011, and D_{calc} 3.737. Applying corrections for the content of Mg, Mn, and Fe with the aid of Skinner's (1956) data for the garnet end-members, the writer calculates n 1.836 and a 12.086 for the Ca-V end-member, in reasonable agreement with the values found above.

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