Congolite $(Fe^{2+}, Mg)_3B_7O_{13}Cl$

Crystal Data: Hexagonal. *Point Group:* $3m$. As grains, to 0.2 mm.

Physical Properties: Hardness = 7 D(meas.) = 3.58 D(calc.) = [3.52]

Optical Properties: Transparent. *Color:* Pink.
Optical Class: Uniaxial (–). $\omega = 1.755(5)$ $\epsilon = 1.731(2)$

Cell Data: *Space Group:* $R3c$. a = 8.6225(15) $c = 21.054(5)$ Z = 6

X-ray Powder Pattern: Brazzaville, Congo.
2.725 (100), 3.05 (80), 2.061 (75), 2.058 (75), 1.838 (70), 1.834 (70), 2.158 (60)

Chemistry:

	(1)
B_2O_3	[56.42]
FeO	25.54
MnO	0.26
MgO	13.52
Cl	7.83
$-O = Cl_2$	1.77
Total	[101.80]

(1) Penobsquis mine, Canada; by electron microprobe, B_2O_3 calculated for stoichiometry; corresponds to $(Fe_{1.55}Mg_{1.45})_{\Sigma=3.00}B_7O_{13}Cl_{0.95}$.

Polymorphism & Series: Dimorphous with ericaite.

Occurrence: Part of insoluble residue from a drill core into sedimentary evaporites (Brazzaville, Congo); in a marine evaporite deposit (Penobsquis mine, Canada).

Association: Anhydrite, halite (Brazzaville, Congo).

Distribution: From Brazzaville, Congo. In the Penobsquis evaporite deposit, near Sussex, New Brunswick, Canada. At Bischofferode, Thuringia, Germany.

Name: For Congo, the country in which the first specimens were collected.

Type Material: n.d.

References: (1) Wendling, E., R. von Hodenberg, and R. Kühn (1972) Congolit, der trigonale Eisenboracit. Kali und Steinsalz, 6, 1–3 (in German). (2) (1972) Amer. Mineral., 57, 1315 (abs. ref. 1). (3) Burns, P.C. and M.A. Carpenter (1996) Phase transitions in the series boracite – trembathite – congolite: phase relations. Can. Mineral., 34, 881–892.