Tocornalite $Ag_xHg_yI_z$

Crystal Data: n.d. *Point Group:* n.d. Granular, massive.

Physical Properties: Hardness = n.d. D(meas.) = n.d. D(calc.) = n.d.

Optical Properties: Semitransparent. *Color:* Pale yellow, darkening on exposure.
Streak: Yellow.
Optical Class: n.d. n = n.d.

Cell Data: *Space Group:* n.d. Z = n.d.

X-ray Powder Pattern: n.d.

Chemistry:

	(1)	(2)	(3)
Ag	33.80	42.53	45.94
Hg	3.90	4.91	
I	41.77	52.56	54.06
rem.	16.65		
loss	[3.88]		
Total	[100.00]	[100.00]	100.00

(1) Chañarcillo, Chile; remnant is principally silica, loss is nonessential H_2O and probably some I. (2) Analysis (1) recalculated to 100% after deduction of remnant and loss. (3) AgI.

Occurrence: In a very rich hydrothermal silver deposit.

Association: n.d.

Distribution: From Chañarcillo, south of Copiapó, Atacama, Chile.

Name: For S.F. Tocornal, formerly Rector, Santiago University, Santiago, Chile.

Type Material: n.d.

References: (1) Palache, C., H. Berman, and C. Frondel (1951) Dana's system of mineralogy, (7th edition), v. II, 25. (2) Mason, B. (1972) Tocornalite. Smithsonian Contribution to the Earth Sciences, 9, 79-80. (3) Mason, B., W.G. Mumme, and H. Sarp (1992) Capgaronnite, $HgS \bullet Ag(Cl, Br, I)$, a new sulfide-halide mineral from Var, France. Amer. Mineral., 77, 197–200.