diverse points of view.
Upon conclusion of the lecture a vote of thanks was tendered to the 
president, and after a brief "conversazione" the meeting adjourned.

War, r, e c s G o o d L e y s o n, S e c r e t a r y

NEW MINERALS

COlerAINITE

Eugene Poitevin and R. P. D. Graham: Contributions to the mineralogy of 
Black Lake Area, Quebec. Canada Dept. Mines, Museum Bull. 27, 66-73, 
1918.

NAME: from the locality, Coleraine township, Quebec.

PHYSICAL PROPERTIES

Color: colorless to white, faint pink and pale brown. Luster: vitreous, 
dull or pearly. Form: thin hexagonal plates or flakes (1 mm in diameter), 
often aggregated into rosettes or spheres; also fine granular and compact. 
Sp. Gr. = 2.51. H. = 2.5 - 3.

OPTICAL PROPERTIES

Under the microscope the crystal flakes are isotropic; uniaxial, the optic 
axis emerging normal to the flakes; birefringence + and weak, with mean 
refractive index about 1.56.

CHEMICAL PROPERTIES

Composition: H₃Mg₂Al₂Si₂O₈, a hydrated magnesium aluminium silicate, 
near newtonite. An analysis of crystals by M. F. Conner gave: SiO₂ 24.40, 
Al₂O₃ 22.77; Fe₂O₃ 0.45, MgO 32.70, CaO 0.10, (Na,K)₂O 0.30, MnO 0.09, 
H₂O 19.63, sum 100.44 per cent.

B. B. whitens, disintegrates, finally fusing to a white glass which moistened 
and heated with cobalt nitrate becomes blue. In the closed tube whitens and 
decrepitates. Decomposed with difficulty by HCl with the separation of 
flocculent silica.
Colerainite occurs in veins believed to be of pegmatitic origin in serpentine. Found at the old Standard mine and on the dumps of the Union Pit, Coleraine Township, Megantic County, Quebec.

S. G. G.

ABSTRACTS OF MINERALOGIC LITERATURE


This bulletin is descriptive of the minerals of the Black Lake Area, in the "serpentine belt," Megantic township, Quebec. The rocks of the belt are predominantly basic—gabbro, disbase breccia, pyroxenite, peridotite, and serpentine—but include granite and aplite; all are believed to have originated by progressive differentiation from a single parent magma.

A peculiar occurrence is that of calcium silicates, diopside, vesuvianite and grossularite in compact granular dikes in peridotite or serpentinite. It is suggested that these dikes were deposited by hydrothermal solutions as the last stage of the intrusion, deriving much of the lime from the walls of the fissure thru which the solutions passed.

Thirty-four minerals are described, including diamond, chromite, quartz, calcite, aragonite, stichtite, diopside, grossularite, vesuvianite, clinohloere, serpentinite, apatite, and one new mineral, colerainite (described under that heading above).

Microscopic diamonds occur in chromite, the crystals exhibiting parallel growth of the octahedron.

The following doubtful forms were observed on quartz: (13.6.19.6), (9.5.14.5), (13.9.22.9), (6.5.11.3), the last fairly well defined.

The rare mineral stichtite, previously found only in Tasmania, was noted at the old Megantic mine, occurring as small lilac-colored patches or narrow veinlets in serpentine.

Diopside occurs in several varieties, one remarkable absolutely colorless and transparent, in pseudoprismatic crystals due to the unique development of the acute hemi-pyramid α (311). Thirty-nine forms were observed, including the new ones: x₁ (610), D₁ (13.0.4), J₁ (902), I₁ (701), Y₁ (423), r. (15.4.10), s. (534), x₂ (773), δ₁ (8.11.4), N₁ (191), O₁ (10.13.3); and the rare forms: g (210), f (140), F (301), I (702), M (401), V (501), n (102), ρ (332), W (441), L (131), ε (121), and λ₁ (552). An analysis gave: SiO₂ 54.72, Fe₂O₃ 0.17, FeO 0.89, MnO 0.11, MgO 18.46, CaO 26.33, sum 100.73%. The refractive indices were determined by total reflection: α = 1.669, β = 1.676, γ = 1.698.

Grossularite occurs, exhibiting the following forms: a (100), δ (610), e (210), g (320), r (332), m (311), n (211), and s (321); an analysis is given.

Vesuvianite occurs in a variety of colors and fairly rich in forms, including the rare ones v (151), and r (461). An average of 10 fairly good determinations of n by total reflection gave ω = 1.768, ε = 1.705, ω - ε = 0.003. Several analyses are given.

S. G. G.