

Crystal Data: Orthorhombic. *Point Group:* $2/m\ 2/m\ 2/m$. Platy crystals, to 1 mm, with dominant {010}, {111}, minor {100}, {001}, in subparallel aggregates.

Physical Properties: *Cleavage:* Good on {010}; poor on {101}. *Fracture:* Conchoidal. *Tenacity:* Brittle. Hardness = "Soft". D(meas.) = 3.13(3) D(calc.) = 3.01(8)

Optical Properties: Transparent. *Color:* Yellow, pale yellow, colorless in thin crystals. *Luster:* Vitreous.

Optical Class: Biaxial (-). *Orientation:* $X = b$; $Y = a$; $Z = c$. *Dispersion:* $r > v$, weak. $\alpha = 1.588(2)$ $\beta = 1.681(1)$ $\gamma = 1.690(1)$ $2V(\text{meas.}) = 32(3)^\circ$ $2V(\text{calc.}) = 34^\circ$

Cell Data: *Space Group:* $Pbca$. $a = 9.089(1)$ $b = 12.244(1)$ $c = 8.926(1)$ $Z = 8$

X-ray Powder Pattern: Evans-Lou quarry, Quebec, Canada.
6.106 (10), 4.501 (9), 3.179 (7), 2.818 (5), 2.525 (4), 2.749 (3), 2.203 (3)

Chemistry:	(1)
	CO ₂ 17.7
	B ₂ O ₃ 14.4
	Y ₂ O ₃ 35.0
	Ce ₂ O ₃ 0.8
	Nd ₂ O ₃ 1.3
	Sm ₂ O ₃ 1.2
	Gd ₂ O ₃ 3.4
	Dy ₂ O ₃ 3.8
	Ho ₂ O ₃ 1.9
	CaO 0.5
	H ₂ O [20.0]
	Total [100.0]

(1) Evans-Lou quarry, Quebec, Canada; by electron microprobe, average of two analyses, H₂O by difference, (CO₃)²⁻, (OH)¹⁻ confirmed by IR; corresponds to (Y_{0.68}Gd_{0.04}Dy_{0.04}Ca_{0.02}Nd_{0.02}Sm_{0.02}Ho_{0.02}Ce_{0.01})_{Σ=0.85}B_{0.84}(C_{0.84}O₃)(OH_{1.24})₄.

Occurrence: A rare secondary mineral in quartz in a zoned granite pegmatite.

Association: Hellandite, kainosite, lokkaite, caysichite, xenotime, titanite, yttrian fluorapatite, yttrian spessartine, fergusonite, metatuyamunite, metatorbernite, quartz.

Distribution: In the Evans-Lou quarry, near Wakefield Lake, Quebec, Canada.

Name: To honor Louis Moyd (1916–), Canadian mineralogist, Emeritus Curator, National Museum of Natural Sciences, Ottawa, Canada, for his contributions to mineralogy.

Type Material: Canadian Museum of Nature, Ottawa, Canada, 50771, 50772; National Museum of Natural History, Washington, D.C., USA, 162936.

References: (1) Grice, J.D., J. Van Velthuisen, P.J. Dunn, D.E. Newbury, E.S. Etz, and C.H. Nielsen (1986) Moydite (Y, REE)[B(OH)₄](CO₃), a new mineral species from the Evans-Lou pegmatite, Quebec. Can. Mineral., 24, 665–673. (2) (1988) Amer. Mineral., 73, 193–194 (abs. ref. 1). (3) Grice, J.D. and T.S. Ercit (1986) The crystal structure of moydite. Can. Mineral., 24, 675–678.