MICROMOUNTERS OF NEW ENGLAND

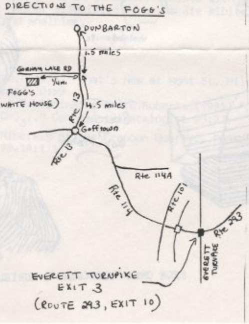
OCTOBER 1985 NEWSLETTER #101

This month the Micromounters of New England will feature two meetings. The next Regular meeting will take place on Saturday, October 5, 1985 at the home of Forrest and Vera Fogg in Goffstown, NH. From reports that I have been receiving, the foliage is coming along handsomely in New Hampshire this year.

The second meeting this month will be an informal one, and will be held on Saturday, October 26, 1985 at the Rhode Island Mineral Hunters Gem and Mineral Show in Warwick, RI. This is a new location for the show so a map is included in this bulletin. We hope as many of you can make it to this meeting. The RIMH is celebrating their Twenty-fifth Anniversary, and the theme for this year's show is: "The Beauty of Silver".

MICROTIP

Solvents and plastic boxes or foam--some get along, others create havoc. For removing the gummy residue left after peeling off a label, petroleum-based solvents or mineral spirits such as "Thin-X"® are most effective. Turpentine also does the job, but it will slowly dissolve plastic foam often used as a mounting base. Acetone, which is often suggested for rapid drying of specimens after washing, is a disaster, dissolving both foam and most types of plastics used in boxes. A good substitute is denatured (grain alcohol) such as "Lynsol"® which takes a little longer to evaporate, but is kind to plastics. It is also less hazardous from the safety standpoint, being less flammable than acetone.--Janet Cares



Hours for Sat. 10-5

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Dues are $3.50 per year and are due on January 1st, payable to the Treasurer.

Contributions of news items for the Bulletin are welcome and should be sent to the Bulletin Editor.

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This bulletin may be quoted if credit is given.

→ NEXT MONTH

The November meeting of the MMNE will take place at the home of Janet and Steve Cares Saturday, Nov. 16, 1985

From Bob Fisher of St. Catharines comes the following ......

Last year Garry Glenn of Niagara Falls, Ontario, found doubly - terminated blue anatase with chlorite and platy brown rutile on a matrix of quartz all embedded in calcite, in the Poudrette Quarry at Mont St. Hilaire, Quebec.

This June he and I went again to the Poudrette to look for more of the same. After much futile looking for the same kind of rock and the same grungy calcite surface, near the end of the afternoon, I found a small surface of calcite with a hint of chlorite; but I didn't have my 10X lens with me and so wasn't sure; so I chisled off a handful of the calcite-rock surface and took it home.

A few days later I put the pieces in acid to remove the calcite. I found a double layer of a white matrix of stubby crystals that looked like albite; I gently pried the layers apart and found two surfaces with the same chlorite as found last year. But instead of anatase, I found splendid black, striated, single and multiple crystal groups of rutile. Some are in beautiful zig-zag formations, just as shown in the textbooks. The rutiles were on one surface only; on the other surface, as well as the rutiles were brilliant, hexagonal, thick plates of molybdenite. None of the brown thin plates of rutile with the fancy surface patterns could be found.

So, typically of Mont St. Hilaire, rocks in close proximity often have great variety in species and form of crystal. See sketches below.

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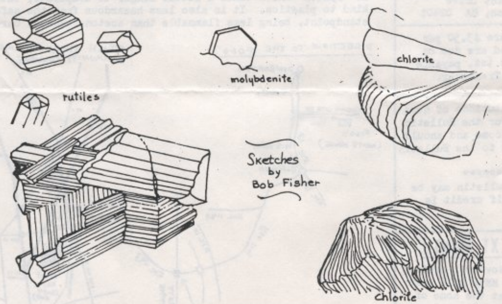

Sketches by Bob Fisher

FROM CMMA "MICRONEWS", MURIEL & ERIC WOOD, EDITORS 9/85

DOYLEITE: A NEW MINERAL FROM CANADA

Chemical Formula	$Al(OH)_3$
Crystal system	Triclinic
Optical Constants	Biaxial (+) $2V=77^0$ α 1.545, β 1.553, γ 1.566 (Sodium light)
Hardness	$2\frac{1}{2}$ - 3
Density	2.48
Cleavage	Perfect (010). fair (100)
Color, luster	Colorless, white, creamy-white or bluish-white; vitreous, pearly or dull.
Streak	White
Solubility	Not attacked by 1:1 HCl, HNO_3, or H_2SO_4
Other	Not fluorescent. Produces water when heated in closed tube. Plates slightly flexible, but inelastic

Doyleite is the previously designated UK45 from Mont St-Hilaire, and unknown No. 11 from the Francon Quarry, Montreal, Quebec. It is named for E. J. Doyle of Ottawa, Ontario, who found the St-Hilaire material.

At St-Hilaire doyleite occurs as rosettes of platy crystals up to 0.8 mm lining vugs in albitite, which consists primarily of albite with about 5% siderite and possible pyrite, molybdenite, zircon, and fluorite. Minerals accompanying it within the vug are calcite and a small amount of pyrite. Doyleite crystals are in places coated with a thin film of dark brown amorphous material, probably iron oxide. Some rosettes have an albite core.

At Francon doyleite is finely granular, forming powdery to compact globules, botryoidal and smooth porcelain-like crusts and sheets, often on cryolite or strontianite crystals, which in some cases have been leached out, leaving shells of doyleite. It is generally admixed with unknown No. 3 which is fluorescent. Other associated minerals are albite, dresserite, dawsonite, fluorite, and analcime.

References:

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Chao, G.Y., J. Baker, A.P. Sabina, and A.C.Roberts (1985) "Doyleite, a New Polymorph of $Al(OH)_3$.." Canadian Mineralogist 23:21

Sabina. A.P. (1979) "Minerals of the Francon Quarry..." Geological Survey of Canada Paper 79-1A:115