

Center Stranord, N. H.

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

of New England Micromonniers

January 26, 1984

Newsletter #86

The next regular meeting of the Micromounters of New England will be held on Sunday, February 12th, 1994 at Boston University in the Geology Building located off of Bay State Road. Our March meeting will be Saturday, March 17th at Harvard University.



The members are reminded that dues are due. We are establishing March 1st, 1984 as our cut-off date. Members who have not payed their dues by this date will not appear on our membership list (to be printed in the next bulletin). In addition, the March bulletin will be the final newsletter received. To find out if you have paid your dues, please check your mailing label. All members who have paid by the time this newsletter has gone to print will have a "P" on their label. In the future, mailing labels will bear the current year's dues (e.g., "84 for 1984 dues, "85 for 1985 dues) much like a subscription magazine.

ANCYLITE -- A NOTE ON COLOR

Collectors at St. Hilaire may have noticed that when they unwrap an ancylite specimen which was a beautiful pink in the quarry now appears a drab bluish-erev under ordinary fluorescent light. If it is then examined under a microscope equipped with the usual incandescent light, the lovely pink color magically returns. This phenomenon, sometimes referred to as the "Alexandrite effect" in reference to the color change in the gemstone of the same name, has been reported to be typical of the ancylite at Cornog, Pennsylvania as well as at St. Hilaire, (Keidel, F. A. et al (1971) "Calcian Azcylite from Pennsylvania: New Data", Mineralogical Record 2:18.) The authors concluded that the basic reason for the color change is the presence of the rare earth element neodymium, which is more or less abundant in cerium-bearing minerals. Compounds of neodymium absorb light in the yellow and green portions of the spectrum, so that the resulting color whould be derived from red, blue, or violet. When illuminated by cool fluorescent light, which is deficient in the warm red colors, only the blue portion of the spectrum would appear, while sunlight or incandescent light, containing a greater proportion of red but little blue, brings out the pink color.

This phenomenon may be used to the collector's advantage. When a St. Hilaire specimen appears to be ancylite by examination under the microscope, it may then be observed under the different types of illumination (with the aid of a hand lens if necessary) to see if there is a color change. If so, this test, plus effervescence in acid, will confirm the identification with great reliability. Occasionally very pale to colorless ancylite occurs which will not show the color change. The authors of the paper mentioned also speculate that the effect would probably be masked by significant amounts of elements such as iron, as in the case of ancylite from Greenland.

A similar color change has been reported in burbankite from St. Hilaire, but it was not evident in any specimen observed by this writer.

An additional reference of interest is Bernstein, L. H. (1982). "Monazite from North Carolina Having the Alexandrite Effect", American Mineralogist 67: 356 -359.

JWC 1/84

CALENDAR OF UPCOMING EVENTS:

April 12-15, 1984, 11th Annual Rochester Mineralogical Symposium, Hilton Inn on the Campus, 175 Jefferson Road, Rochester, New York, Pre-Registration deadline is March 12, 1984. (Space limitations do not permit us to print the entire amount of information concerning the Symposium; However, information will be availabe at our meeting.) *

May 5-7, 1984, The CMMA Annual Micromounter's Workshop Conference, Brock University, St. Catharines, Ontario, Canada,

May 19. 1984. MMNE Northeast Meeting, Greenfield Community College, Greenfield, Mass. Vandal King will be the speaker.

June 23-July 7, 1984 EFNS Geology Tour-"Micromounters Tour of New England. Begins in Connecticut on Sat. June 23 and ends in Maine, Sat. July 7. Copies of reservation forms will be available at our meeting.

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For those members who are always interested in hearing about other micromount groups, the Southern California Micro-Mineralogists. Inc. are having their 19th Pacific Micromount Conference February 3-5, 1984 at the Pasadena City College, Pasadena, CA. The conference will feature speakers, study sessions, trading, and a micromount auction.

* We have been informed that parking for self-contained camping vehicles is available one mile from the Symposium. (anyone interested, see Norm Biggart)

AN INTERESTING NEW MEXICO MINERAL LOCALITY by Erich Grundel

of Arlington Virginia

Several years ago an article in the Mineralogical Secord caught my attention. It was about a nine (actually two nines) with a flamous name. It is called it was about an experience of the second of the Second Mine (s). However, unlike its famous namesake this one's in New Mexico. The mines are located in the Gallinas Mountains, a small group of isolated peaks in the center of the state. During the latter part of December I had an opportunity to visit this locality.

The first thing that impressed me was the fact that the author of the article was very accurate in his directions and his description of the aines. This should not be dismissed lightly if you have never tried to find a little-known locality. Indeed the photographs of the mines looked just like the place when I got there. This was encouraging since I felt this indicated little mining or collecting activity. I was not disappointed in the results.

The Red Cloud Copper Mine consists of a small, fenced-off pit surrounded by several acres of dumps. The surface of the dumps showed plenty of those familiar green and blue colors that indicate copper mineralization. Picking up such pieces and breaking then open revealed such airco minerals as chrysocolla, chonicalcite, wulfenite, calcite and minetite. The minetite deserves special mention. I do not know if there is a better occurrence of this mineral in the U.S. Beautiful transparent yellow primms scattered on purple fluorite is hard to beat.

About 100 yards down the opposite side of the forest road is the Red Cloud Fluorite Nine. Here massive fluorite is peppered full with plates of the rare earth carbonate mineral <u>bastnaesite</u> and beautiful green "Mairs" of an uncommon mineral <u>spartite</u>. A half pound piece of the fluorite broken appropriately into small pieces usually yielded a couple of agardite specimens.

A final note, one of the minerals I found at the copper mine consisted of blue "mair". This did not look like any mineral described in the article, I turned it into the Naturalist Center who in turn took it to the Mineral Science Department. Unfortunately the crystals were too small to be able to do any analysis so until I can find a better example I am stuck with an unknown. Perhaps it will be a mineral previously unknown from this locality.

Another final note. At the fluorite mine one can find the most beautiful hematite or limonite pseudomorphs of pyrite one can imagine. Lustrous crystals that faithfully reproduce every face of the often complex former pyrite crystals.

Every micro collector will enjoy visiting these mines.

REF. Min. Rec. V.11, #2, p. 69

(Our thanks to Erich Grundel for the above article and.....The Mineral Mite.)

via the Ganadian Micro Mineral Association's "Micronews"
