MICROMOUNTERS OF NEW ENGLAND

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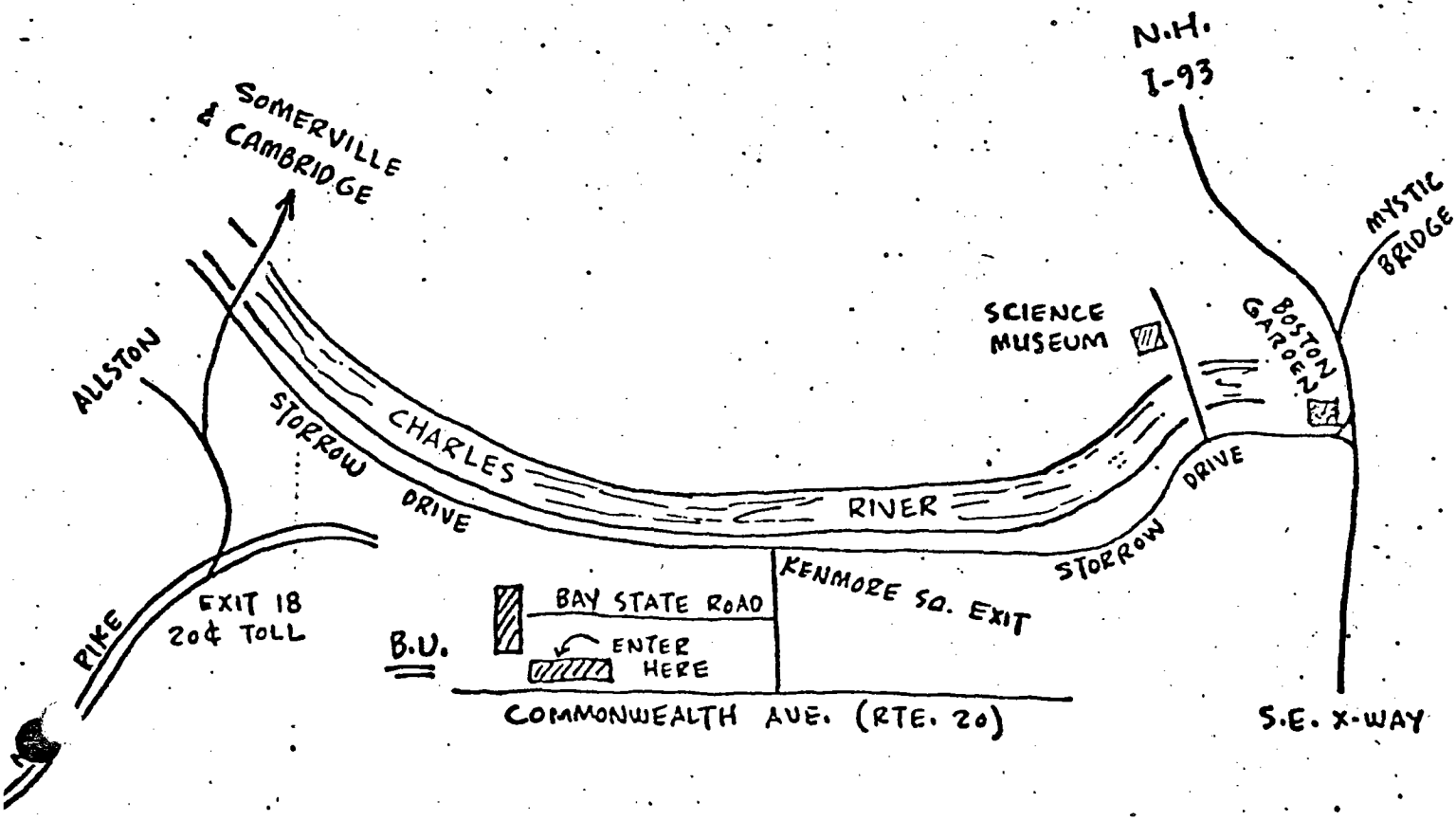
NEWSLETTER #42 — APRIL 20, 1978

The next regular meeting of the Micromounters will be on Saturday, May 6, 1978, at Boston University, from 10 AM to 4 PM.



NOT TO SCALE

The New Haven Mineral Club will tentatively have a trip to St. Hilaire on the May 13-14, 1978 weekend. Last year we were allowed to attend as their guests, and could probably do so again this year. Information on the trip will be available at our meeting.

Our exchange package from the Nassau (Long Island) Mineral Club has arrived and will be ready for our meeting.

Nominations for Club Officers will be accepted at this meeting with the election held at our next regular meeting.

The following information on Babingtonite was taken from the "Natural History of New York", by Lewis C. Beck, copyroght 1842.

It is interesting to note the only known location the mineral had been found at that time.

BABINGTONITE.

[In compliment to Dr. BABINGTON.]

Babingtonite. *Levy, Phillips* and *Thomson.* — Axotomer Augit-Spath. *Moks.*

DESCRIPTION. Colour dark greenish black. It occurs regularly crystallized. The primary form, according to Levy, is a doubly oblique prism. Fig. 481. P on M 92° 34′; P on T 88°; M on T 112° 30′. But it usually crystallizes in eight-sided prisms. Fig. 482. *g* on *m* 132° 15′; *h* on *m* 137° 05′; *h* on *t* 155° 25′ (*Levy*). Sometimes the faces *m* are wanting. Cleavage perfect parallel to P; less so to *t*.

Fig. 481.

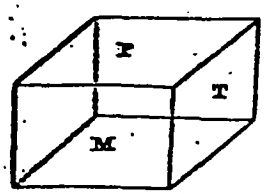
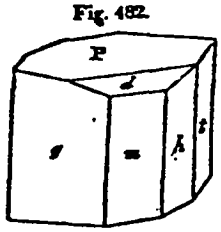


Fig. 482.



Fracture imperfect conchoidal. Lustre vitreous. Thin splinters faintly translucent. Hardness from 5.5 to 6.0. Specific gravity from 3.40 to 3.50. Before the blowpipe alone, it fuses into a black enamel; with borax, it gives a transparent violet globule, which in the reducing flame becomes bluish green.

This mineral resembles some dark varieties of pyroxene, from which it was first distinguished by Mr. Levy. Mr. Children found it to contain silica, iron, manganese, lime, and a minute quantity of titanium.

LOCALITY.

ST. LAWRENCE COUNTY. The only known locality of babingtonite in the United States, is at Gouverneur in this county, where it was first noticed by Prof. Shepard, coating crystals of feldspar.

#42

Collecting at the Big Chief Mine, Glendale, South Dakota

By: David Lehecka

The Big Chief Mine is approximately ½ mile south of Glendale, South Dakota. This mine is known for the phosphate minerals which occur in corroded triphyllite. Many of the minerals that occur here, also occur at the Palermo #1, North Groton, New Hampshire as the paragentic settings are practically identical. The exceptions are the last five listed.

1. Ludlamite - monoclinic - pale apple green and colorless thin to thick tabular crystals.
2. Hureaulite - monoclinic - colorless to pink short prismatic crystals.
3. Vivianite - monoclinic - blue short to long prismatic crystals occuring on ludlamite.
4. Whitmoreite - monoclinic - pale tan to deep brown thin acicular crystals. Mainly found in granular siderite.
5. Jahnsite - monoclinic - tabular brown, yellow, and yellow-orange short to long striated prismatic crystals.
6. Rockbridgeite- orthorhombic - black, greenish-black and red-brown minute slender prismatic crystals and botryoidal crusts.
7. Strunzite - tan to greenish yellow fibers.
8. Laueite - triclinic - orange striated prismatic crystals.
9. Schoonerite - orthorhombic - thin tabular laths and scales. Brown to reddish-brown. Occurs associated with jahnsite, whitmoreite, and siderite in oxidized masses of ludlamite, messelite and vivianite. Described from Palermo #1. Has been reported from Big Chief.
10. Olmsteadite - orthorhombic - thin tabular brown to black crystals. Occurs in granular siderite.
11. Robertsite - monoclinic - black to reddish-brown plates, fibers and wedge shaped crystals.
12. Perloffite - monoclinic - black spear shaped crystals occuring in vuggy ludlamite. Fe^{+3} analogue of bjarebyite.

taken from Canadian Micromineralogists
January 1978

13. Kryzhanovskite - orthorhombic - deep red-brown to greenish-brown prismatic crystals.

14. Phosphoferrite - orthorhombic - colorless to pale green octahedral or tabular crystals.

References

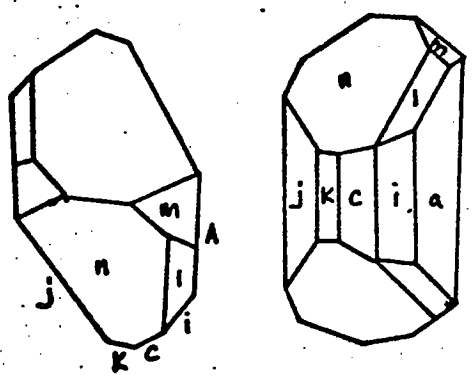
Moore, P.B., and Ito, June (1974). Jahnsite, Segelerite and Robertsite, Am. Mineral., 59, 48 - 59.

_____,(1973 Pegmatite phosphates: Mineralogy and Crystal Chemistry. Mineral. Rec. 4, 103 - 130.

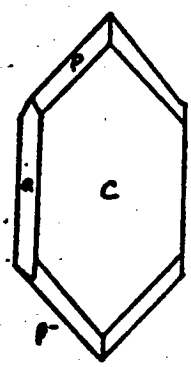
_____, Araki, T., Kampf, A.R. and Steele, I.M. (1976) Olmsteadite, a new species, its crystal structure and relation to vauxite and montgomeryite, Am. Mineral., 61, 5-11.

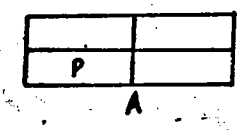
_____, and Kampf, A.R. (1977) Schoonerite, a new zinc - manganese-iron phosphate mineral. Am. Mineral., 62, 246-249.

Kampf, A.R.(1977) Perloffite, the Fe +3 analogue of Bjarebyite. Mineral. Rec. 8,119-120.

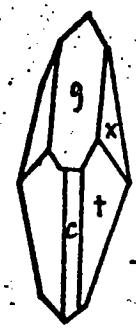


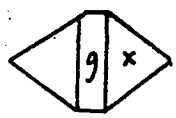
Jahnsite



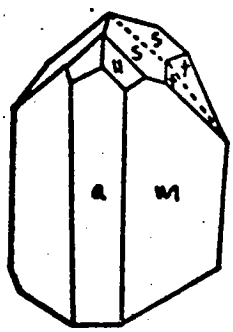


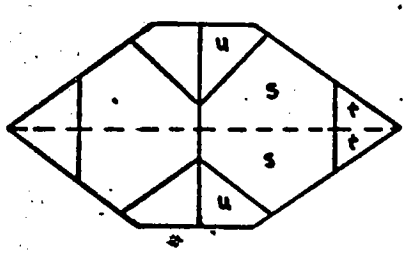
Olmsteadite



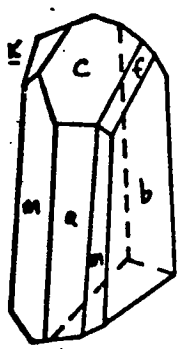


Perloffite

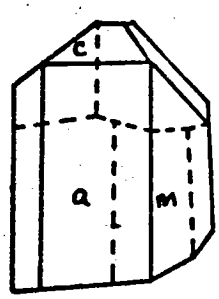




Whitmoreite



Laueite



Hureaulite

MINERALS REPORTED AT MT. ST. HILAIRE, QUEBEC

Numbers refer to pages in Worcester Mineral Club book.
Underlined page numbers indicate descriptive information.

this information from an anonymous source