

MMNE Field trip to the Aggregate Industries Quarry, Raymond, NH

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MMNE club member Peter Cristofono arranged a field trip to the Aggregate Industries Quarry, Raymond, NH for November 29, 2013. Seven members gathered near the quarry gatehouse at 8 a.m. on a sunny but seasonably cool morning. After we all showed proof of appropriate safety equipment and signed the appropriate release forms, we followed the quarry foreman in our vehicles to the interior of the quarry pit. It's hard to beat drive in and open-you-door collecting! Two additional members arrived about 10 a.m. to bring our total to nine.

This is a large, active fifty-acre-plus quarry that supplies crushed stone to the concrete and paving industries. Figure 1 gives you an idea of the quarry size and layout. For the micromounter, the geologic setting is particularly interesting. Drilling and blasting has exposed a large portion of Little Rattlesnake Hill, the site of a Mesozoic Era volcanic caldera. Lithologic units of monzonite, gabbro, and rhyolite may be observed in the quarry pit. The hypersthene monzonite contains abundant miarolitic cavities, most commonly hosting crystals of quartz, feldspar, siderite, and fluorite. Based on their experience with the similar Moat Mtn. and Ossipee Mtns. environments, N. E. Micromounters are aware of other mineral species that may potentially inhabit these small vugs.

Although we brought out eye loupes from time to time, most of our group was content with filling our buckets, packs, and car trunks with rocks containing promising cavities to be inspected later under our home scopes. Based on initial emails and photo exchanges, we have not been disappointed! Our AIQ species list has grown to 35 minerals. However, for truthful disclosure, several candidate species may be different habits of the same mineral.

Not all collected specimens were micro size. Miniature to small cabinet sized samples of ball-mica muscovite, beryl, and schorl were available from a pile of large pegmatite blocks on the quarry floor. Of these, only the ball mica was particularly notable, (figure 4). This is about as fine a ball mica specimen as has been found in NH in many years. At a distant end of the quarry Peter Cristofono turned up a fine calcite specimen exhibiting tan "nailhead" hexagonal prisms. A very nice calcite for New Hampshire! Three MMNE members (Mortimer, Wilken, Cristofono) are preparing a comprehensive newsletter article for inclusion in a coming issue. Our thanks are extended to club member Peter Cristofono, who visited the quarry twice during the summer, with the manager's permission, to explore its potential for this fall field trip. Hopefully, a return visit can be arranged in the spring, 2014.



Figure 1: Google map view of the AI quarry, Raymond, NH



Figure 2: Siderite on quartz crystal. 3 mm FOV T. Mortimer specimen and photo.



Figure 3: Fluorite. P. Cristofono specimen and photo, (from summer 2013 explorations)



Figure 4: Muscovite – ball mica. 7 cm specimen with 2.3 cm mica ball. T. Mortimer specimen & photo