

**Purple, Clear, Tan, Pink, White, Blue, and Green --- Field Trip Report for National Limestone 6-11-2022** by Dave Lines



Just before the safety brief and Christian testimony by the quarry owner, we took a group picture --- ten (10) from Southern Maryland club (Tom Z., Bernie, Vycki, Pam, Joyce, Kurt, Sue, Jill, Rich and me) and six (6) from our sister Montgomery County club (Sam, John, George, Elena, David C. and Dave B.. The rain in the forecast seemed to have stayed just south of us, so it would be a perfect day for collecting --- about 70 degrees with clouds in the morning and some sun in the afternoon.

Our plan was to stay at the Middleburg quarry until 1 o'clock "ish" depending on what we could find, and then shift "en masse" to the Mount Pleasant Mills quarry for the remainder of the afternoon. Our hopes were high as the owner advised us of a brand new shot at Middleburg.

We had six (6) attendees who had *never* collected in a quarry. This would be their first time and it was my job as overall trip leader to make sure they stayed safe and had a good experience. I told them to stick by me until they felt comfortable collecting by themselves. We left the quarry office about 9:45 and caravanned to the new shot. Quickly checking out the new shot, several of the group said it was not going to be productive --- no calcite crystals or other interesting minerals were evident. So, we moved up to the next level to investigate an older shot. We spread out and folks began finding PURPLE fluorite embedded in 2" wide seams of massive white calcite.



Bernie on his 1st trip to a commercial quarry

I took two newbies --- Bernie and Vycki --- on a short walk and talked about the dangers and how to collect specimens safely --- keep their gloves and safety glasses on, stay off the berms and away from the highwalls. I also showed them how to spot rocks with good potential for calcite crystals --- look for “vuggy rocks”. Then I demonstrated how to split apart those rocks using their tools. When I left them about 20 minutes later, they had already started gathering a pile of CLEAR, sparkly calcite crystals.



Kurt at Middleburg -- his 1st quarry visit.

I repeated the same routine with Kurt and Sue.



Dave B. and Jill trying to decide which wavellite to keep at MPM.

And then with Jill and Dave B.. With the basics taken care of, I could then start looking for some specimens for myself. In a few minutes, I found a large rock to start on. It was partially buried under several good-sized rocks, so I carefully rolled them aside and moved the target rock into a better position. It had pockets of calcite crystals showing in a 2- to 3-inch-wide band all the way around the boulder. I spent a little while working with a 3-pound hammer and a small chisel, but I decided that was going to be too much work and take too long. I went back to the truck and got "Big Bertha" – my 20-pound sledge. It did a great job, and, in a few minutes, I had broken the entire 100 pound rock into manageable pieces and separated the waste from the good parts with crystals. I love that hammer! I then used the small chisel and 3-pound hammer to trim the specimens. Wrapping the best ones in old newspapers to protect them from damage, I packed a 5-gallon bucket half full and returned them to the truck.



Pam and Joyce searching for specimens at Middleburg

Checking briefly with the rest of the group, we all decided to move to another part of the quarry. But enroute, Pam and Joyce asked that we look at a large rock they had found. It was a great rock --- vuggy with calcite crystals showing all around the edges. Time for 20 pounder again. After several whacks, Pam's rocks were really for wrapping with newspapers for the trip home. Next, we took the group to an area of the quarry that had some travertine or flowstone --- the remnants of an underground cave formation. The TAN rock, which was banded in various patterns, was suitable for lapidary projects like polished bookends or spheres. Then we made another stop for some purple fluorite embedded in massive calcite. And a few of the chunks of massive calcite also contained PINK or flesh colored dolomite in the same rock. Another thing to collect.



close up of Rich's clear celestite xls from MPM quarry

At 1:00 o'clock pm, we all caravanned over to the next National Limestone quarry at Mount Pleasant Mills (MPM). There, we spread out over the floor of the main part of the MPM quarry and again started looking for vuggy rocks that contained calcite and, hopefully, strontianite and, if we were lucky, celestite. The best potential for strontianite seemed to be in those rocks stockpiled on the other side of a large muddy puddle (pond?) of water. We drove through it and several other vehicles followed. Again, we started finding lots calcite crystals showing in vuggy rocks. I showed some of our new folks what to look for and then I split open some rocks to reveal WHITE snowflake-like clusters of strontianite crystals perched beautifully on top of the calcite crystals. Then, lots of hammering as everyone went after the strontianite specimens.



Rich searching for wavellite and fossils at MPM wavellite location



Rich's beautiful blue celestite xls (this is just the outside layer, there were many more inside the rock)

About an hour later, Rich called to me: "I found some BLUE." Immediately I stopped collecting strontianite and went to Rich. He had found some very pretty blue celestite crystals embedded in yet another vuggy rock. (He can tell the story much better, so ask him.) For the next 90 minutes, I helped him with the delicate dissection of his vuggy rock. It contained many small pockets of celestite

crystals. Some of the celestite had turned from blue to clear due to exposure to sunlight, so we collected both types of crystals. Some were so small, that Rich used tweezers to pick them up. Great stuff for micro mounts. Our progress was slowed due to unexpected pockets of celestite located directly beneath and beside the pockets we were trying to remove. It was slow but rewarding work. Rich had found a really good rock. In the end, he carefully wrapped a full flat of beautiful celestite specimens.

Near where Rich found his mother lode, he saw another similar rock with potential, but after prying it loose with the 6-foot bar and splitting it apart, there was no celestite. I and several others searched carefully in the surrounding area, but alas, no more celestite was located.



Tom Z was ecstatic over his great wavellite find at MPM

By 3:45 pm, many of the others had left to return home, so several of us decided to try the wavellite pits on the back side of the ridge behind the quarry. Just as we were pulling out, Tom Z. returned from the wavellite area. His beaming smile said it all. He showed us his find of the day – a very pretty GREEN wavellite crystals to ½ inch covering a 3 x 4-inch specimen. Nice. He suggested where to look and four of us drove up and around the mountain to find our “couple” (\*) of wavellite specimens (\*suggested limit by the quarry owner). Long story short --- we each collected some wavellite specimens --- maybe not as pretty as Tom's --- but respectable, nevertheless.

It had been a super trip and we had all stayed safe. By 5 pm, we started our long drives home --- each richer (thanks to the generous and caring quarry owner) with his/her collection of some of the great Purple, Clear, Tan, Pink, White, Blue, and Green rocks that we had saved from the crusher at National Limestone.



Dave's finds at Natl Limestone 6-11-22



This spectacular specimen from the MPM quarry was displayed in the quarry office. Beautiful blue celestite crystals to one inch across.