Willis Mountain, Virginia --- a Monadnock of Mineral Specimens

by Dave Lines

From our Field Trip info sheet, we learned that Willis Mountain is a "monadnock" --- pronounced "**mo**-nad-nok" --- a hill or mountain of resistant rock surmounting the surrounding plain. The Trip Sheet stated: "The kyanite exposure at Willis Mountain resisted weathering and, as the surrounding area was eroded and weathered away, the mountain outcrop was left standing. This is very much like the famous Graves Mountain kyanite mine in Georgia. The center of the mountain has been mostly mined away." We were looking for white kyanite blades in the massive kyanite quartzite; pyrite; quartz; hematite; iridescent hematite; red mica, green mica, apatite and possibly some blue kyanite and pale green trolleite. Some of the white kyanite and quartz has a beautiful light blue fluorescence.



We gathered at the Kyanite Mining Corporation office near Dillwyn, Virginia from ten (10) local rock clubs from Delaware, Maryland and Virginia --- 120 of us according to our Trip Leader and organizer Dave Callahan of the Lynchburg Club. By far, the largest local field trip in our area, this event is held once a year thanks to the generosity of the owners. We are most fortunate that they like rockhounds.

A little before 9:00 am, we began a review of the Safety Regulations which we had all read and signed. Mike Morris indicated that they were due for a MSHA (Mining Safety and Health Act) inspection which could occur unannounced at any time. With this in mind, he reminded us to "Stay off the berms" --- footprints must be explained. Stay clear of the top edge of all cliffs. Stay back from all highwalls a distance equal to or greater than the height of the highwall. Chock the downhill side of one wheel each time we stop a vehicle after we move it. Look out for each other. Keep each other safe. Accept a safety warning from another person with gratitude. If a big rock seems precariously

balanced on the side of a hill above you, stay away from it and warn others. Keep our safety glasses on. In other words, stay safe. He asked us to be witnesses that we agreed to his terms. We did. It was effective – we stayed safe – 120 rockhounds in many different types of vehicles all over Willis Mountain looking for specimens and looking out for each other at the same time.





Our Southern Maryland Rock and Mineral Club had nine (9) members attending Rich, Teresa, Alton, Katie and Nate M., John Van W., Pam, Joyce and Dave. For three of us -- Alton, Katie and Nate --- it was the very first time in a commercial mine, so I asked that they stick close to me so I could show them the ropes – or at least get them started safely. When the caravan of vehicles started heading into the mine, Rich and I lead our group straight to the top of the mine where we chocked our wheels and began looking for specimens. I did a quick walk around and spotted some nice iridescent hematite where I asked the group to gather.



Then Rich and I showed them what to look for and how to extract the brightly colored specimens out of the rather soft matrix. We pointed out the hazards of loose rocks above them on a moderately sloping hillside and knocked those rocks down out of the way. We then showed them how to use their chisels and sledge hammers to break apart the larger rocks. And suggested that they carefully wrap each specimen in newspaper to keep them in good condition. For the first hour or so, we gathered iridescent hematite and some other nearby minerals like pyrite in a matrix of white kyanite

and quartz. Plus someone (Katie?) found a good sized chunk of green mica (fushite) which we split apart into several nice specimens so each person would have some.





Then Rich and I temporarily left the group and drove around until we found Mike Morris so we could ask him if we could take our group of four (4) vehicles to the south side of Willis Mountain to get some specimens of blue kyanite. Mike said yes to our request. We promised him we would be back in about an hour. Then we gathered up our group and around 11:00 am, we lead them to the blue kyanite crystal location about half mile away. Once there, we showed our folks where to find some blue kyanite crystals that had weathered out of a vein that crossed an old dirt road in an area that was not being actively mined. Everyone found some specimens, although they were small. I also searched out another nearby location where I had on other occasions found some larger blue kyanite. I came across Pam along the way and showed her where to look. We searched the area very thoroughly and found about 20 or so loose blue crystals up to 1 inch long. I also found a nice cluster about 3 inches across that contained several exposed blue kyanite crystals up to 2 inches by 1/4 inch.





A little before 12 noon, we headed back to the main quarry area via another road. But we stopped and dug out some white kyanite embedded in quartz matrix. Then we split up and went our separate ways for the last half hour. Rich and I went to the flat area beneath

the old portion of the mountain on the north side of the mine. We found various specimens including elemental sulfur, pyrite in kyanite/quartz, red rutilated mica and a large pile of sand --- which was a by-product of the mining operation.



By 12:50 pm, we returned to the Office parking lot where we joined some other rockhounds at the picnic pavilion for lunch and some rest. It was great to see many old friends. It had been a good day in the mine.

A day or so later, I asked two of our new members --- Katie and Nate Merris --- to tell me about their impressions of their first field trip. I will share with you what they wrote: "Good memories are essential components to a happy life. This weekend, my wife Katie and I had the great fortune to add another set of good memories to our collection. This was our first time out with a rock club, and after meeting so many friendly folk, it won't be our last.

We started our Virginia Kyanite mine adventure by driving up a dusty road. After some informative tutelage from Dave, Katie and I were searching for rocks, hammer and chisel in hand. We found a number of oil slicks with amazing rainbow colors. I also learned a great Scrabble word: vug.



Next we drove to another location. We were starting to get the hang of things, and we managed to find a decent looking rock that looked like it might contain a hidden treasure. I carefully split it open, and we were delighted to find a crystal landscape, complete with some purple ovoid areas!



Our team relocated one more time on our way back. I saw an intriguing rock that was half buried near a berm. What piqued my interest were what appeared to be cross sections of kyanite crystal on one side. With great care, Katie and I hammered it in such a way that it split mostly on the same plane as the crystals. What a treat – this turned out to be our best find of the day. The interior of the rock was packed with white crystals! In summary, we had a great time, met some friendly and passionate new folks, and we have great memories that will last a lifetime."