

Field Trip Report --- "Big Pyrite Crystals from Glendon, NC"

By
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Every year for the past four years the Southeast Federation of Mineral Societies (SFMS) invites member clubs to an annual Dixie Mineral Council Trip to the Standard Mineral Company pyrophyllite (pronounced *pie-rof-fi-lite*) mine near Glendon in Moore County, North Carolina. Since I am also a member of the Gem and Mineral Society of Lynchburg, Virginia, which is a member of the SFMS, this trip is always a "possibility" --- a "possibility" since everyone who attends must be quick enough and lucky enough to be among the first 120 people to send in an email as soon as the trip is announced in March.

This year I was the 41st eligible person to be accepted --- a real biggie because this is a highly sought after trip with rockhounds attending from all over the Southeast. In fact, people from all over the United States join clubs in the SFMS just to be eligible for this special trip. Last year, a couple from as far away as Alaska participated.

Glendon is located about 50 miles southwest of Raleigh --- or about 330 miles from the Clearwater Nature Center. Yes, it is a long way, but the speed limit on nearly all the highways along the way is 70 mph.

The weather for the dig on May 4th was perfect this year --- 60 degrees and cloudy with a cool northeast breeze. People started arriving at the gate about 7 a.m. --- I was the 3rd person there at 7:15 and I knew one of the other arrivals --- Bernard from the Lynchburg Club. Bernard is a great rockhound and always does well on every field trip. He has currently been doing a lot of gold panning in Virginia across the road from Willis

Mountain with the Central Virginia Gold Prospectors and he showed me a small vial about 1/3 full of small gold “pickers”. I tried to buy the vial or at least some of the nuggets, but he would not sell --- this time. I’ll keep trying.



By 8 a.m., it looked like everyone had arrived and shortly afterward, we had a safety brief by one of the two mine employees. Then we were on our way across the open pit mine. Although some folks choose each year to concentrate on the beautiful blue and purple fluorite micros found in small vugs inside massive quartz boulders, most folks look for the pyrite crystals. Many of the attendees are veterans, but some are first timers. I met a couple of these newbies before the safety

briefing and told them to follow me.

The pyrophyllite at Glendon is in layers which trend down about 45 degrees. In parts of this deposit, the pyrophyllite contains beautiful, well formed cubic crystals of pyrite which range from tiny up to 6 inches across. It seems that the smaller crystals are found closer to the surface, while the larger ones are deeper (and more difficult to reach). Some of the pyrophyllite matrix is very soft and some almost as hard as the dolomite at Herkimer.

Since I already knew that this year I was going to dig in the same area where I had been last Spring --- where the matrix was the softer variety --- I had pre-selected about a dozen tools that had been the most useful last time. This list is worth keeping until you can attend this trip. My tools were safety glasses, a foam rubber knee pad, work gloves, a 3 pound hammer, a 3 inch wide thin splitting chisel (to split the layers of matrix), a 10 pound sledge hammer (to make the job of driving chisels in easier), 3 foot crow bar (to pry off big chunks of matrix which have splitting chisel driven in), stiff brush (to brush off the face of each layer to check for crystals), small pick (to remove matrix), Army shovel (to remove loose matrix/overburden), jack hammer chisel with pointed tip (for quickly breaking apart and removing matrix areas) and a small ½ inch wide chisel (for more delicate matrix removal around a large crystal) plus a few 5 gallon plastic buckets.

On the other side of the mine --- basically, a large shallow, open pit --- I told these new folks where to start digging and how. And before long, we all started to find crystals as we dug into the matrix. And also before long, they were sharing some of my tools --- after all, I could use only one or two tools at a time.

As an aside, it is possible to find lots of pyrite simply by surface collecting where the rain has washed off the crystals. One gentleman picked up 40 pounds of nice sized crystals

this way. The drawback, of course, is that these loose crystals tend to be more damaged and more weathered. A good metal detector is another way to successfully find pyrite crystals. And I witnessed several people doing so.



I dug in 2 areas about 10 feet apart. The first area had mostly small crystals from 1/8th inch to about 1 inch. I collected about 1/3 of a bucket of crystals both loose and in matrix. After digging there for 2 hours, I had enough little ones and gave the spot to another fellow who had been watching me. He and two others continued to dig that spot for the rest of the day.

Meanwhile, I moved a little further down hill to an unclaimed spot between two holes left from some previous diggers (probably from last Fall on the MAGMA trip). Since the matrix layers were dipping down away from me, my first task was to dig a trench straight down about 3 feet out in front and parallel to me. It took me a couple of hours to clear out that matrix. I found some good crystals along the way, but my intent was to create an open area, so when I split the layers, they would break off cleanly in larger pieces. By noon, this approach started paying off well as I dug deeper and began to consistently find larger crystals up to 2 inches on a side. I also found a layer that contained a great deal of massive quartz interspersed with pyrite crystals. The material is pretty, but impossible to separate out the crystals --- maybe it will cab.

Anyway, as the afternoon progressed, I collected several nicer crystals. My best was actually two which appear to be a penetrating twin. One was 3-3/4 inch on the longest side

and about 2 inches thick and 2-½ inches long. The other was about 2"x2"x2-½". Both are still in matrix with just enough matrix removed to show the crystals.

About 2:30 p.m. Bernard stopped by to see how I was doing and gave me an 8 inch chunk of white quartz with some purple fluorite showing. Later, at home, I cleaned off that specimen with the garden hose and found some small vugs lined with quartz crystals, one of which contained a nice ¼ inch purple fluorite crystal. Thanks, Bernard.

All together, I collected about 3 buckets of material and left the mine by 3 p.m. and was home by 8 p.m. --- a tired, but happy rockhound.

