

## **Incredible Beryl --- and more**

by Dave Lines

Vulcan's Dale Quarry located about 15 miles south of Richmond in Chester, Virginia where 25 members of the Richmond Gem and Mineral Society (RGMS) met for a much anticipated Field Trip on September 14, 2019. Dale Quarry is known among local rockhounds as having a great deal of simple pegmatite rock (feldspar, quartz and mica) with occasional almandine garnets and rarely beryl crystals. In regard to beryl crystals, this day was to be memorable.



At 8:00 a.m. we posed for a group picture (actually several) and then listened to a short safety brief from the Quarry Supervisor (because we had each already read, initialed and signed a detailed sheet of do's and don'ts). His message --- safety is paramount, stay off the berms and away from all highwalls. We then caravanned into the quarry to the lowest level where we spread out to look for specimens. The weather was near perfect --- about 72 degrees and cloudy --- and it remained below 80 degrees all morning.



The country rock in Dale Quarry is generally a gray colored granite gneiss. The quarry also has pronounced pink colored pegmatite veins and dikes due to the pink feldspar in the pegmatite. Under closer examination, this material is laced with shiny biotite (and some muscovite) mica and dark gray smoky quartz.



The quarry floor on the lowest level was generally clear of obstructions on the left side, but on the right side, there was a large area of stockpiled rocks and big boulders --- with many 6 to 8 feet across. It was in this area that Rich Simcsak and I decided to start our search. I dropped off Rich along one edge and then drove to the far side of the stockpiled boulders --- much of which was the pink pegmatite material. I began checking the edges and there was a large amount of pink feldspar --- including nicely formed blocky chunks of pure pink feldspar suitable for lapidary use. I moved (carefully) into the boulders and spotted several garnets protruding from the surfaces --- mostly all were embedded in the pink feldspar, but none that excited me. I collected a few pieces of the feldspar as well as some pegmatite and headed back to the edge where I spoke with Mark Wiley. I showed him a piece of pegmatite that contained a thin bright green vein which looked like epidote crystals. I used his loop but could not really determine what it was.





Rich soon joined me and we searched another part of the edge. A lady and her husband began hammering on a nearby boulder and she brought me a chunk asking if it was garnet. No, it was iron stained rock. A few minutes, I chipped off a piece of feldspar with small tiny garnets and gave it to her --- and she surprised me with her own find of a piece of feldspar with several well formed  $\frac{1}{4}$  inch garnets on top. A nice find. She returned to find more.





Rich and I eventually worked our way further into the boulder field where we came across both Thomas Hale and Tom Leary. Tom was pounding on a huge boulder and breaking off sections of pink feldspar which contained lots of garnets. In fact, Tom had already found several beauties including one about an inch across. Shortly after our arrival Tom decided he had enough garnets and wanted to search for other minerals. Tom gave us the boulder and we continued to extract garnets – mostly small ones --- for the remainder of the morning.



We thought we were doing something worthwhile --- until we headed back to the office a little before 12 o'clock and found Tom grinning from ear to ear. Someone mentioned beryl and motioned to the bed of his truck. Whoa!!! Inside was an incredible beryl crystal --- very gemmy and huge! Almost a foot long and 2-1/2 inches in diameter. And there were dozens more --- all smaller, but gorgeous specimens.

Then various people, including Tom, told us the story. It seems that several people had walked near and around the particular boulder that contained the beryl crystals until finally Wayne Gilmour spotted the green end of the big one. He realized in an instant what it was and got Tom involved. Together, they carefully and methodically began

removing some of the rock around the crystal which turned out to be numerous beryl crystals. Tom – despite a recent painful injury to his hand --- was able to swing a very large sledge hammer to break apart some of the big rock. At the same time, Wayne used a small battery operated diamond wheel saw to cut away critical pieces of the matrix to better expose the crystals. They were really pressed by time since they, with several others watching, worked on removing these beauties right up until the deadline of 12 noon when we were supposed to be out of the quarry. They were super ecstatic when the big one finally came out in one piece. In Tom's words: "Those cable TV prospector shows got nothin' on our day!!!" You can say that again. These were all incredible finds. Well done Tom and Wayne!

You never know what you will find on a field trip --- that's what makes it so much fun.