

Field Trip to U.S. Silica Quarry in Mountpelier, Va. with the Richmond Gem and Mineral Society

by Dave Lines

Pictures by Mark Davis, Richmond Gem and Mineral Society



It is always good to participate in any opportunity to collect rocks in a commercial quarry. One of the great advantages of belonging to a rock and mineral club is that most (not all) local rock clubs have liability insurance. Our home club --- the Southern Maryland Rock and Mineral Club (SMRMC) --- as a member of the Eastern Federation of Mineral and Lapidary Societies (EFMLS) --- is insured by a \$1 million liability insurance policy obtained through EFMLS. This alone --- as well as our adherence to strict safety standards --- is the reason that commercial quarries are willing to allow us to collect specimens on their property. Nowadays, you cannot simply walk in off the street and expect a quarry to allow you to collect rocks. So joining a club like our SMRMC gives you a HUGE advantage if you like to self-collect rocks and minerals.



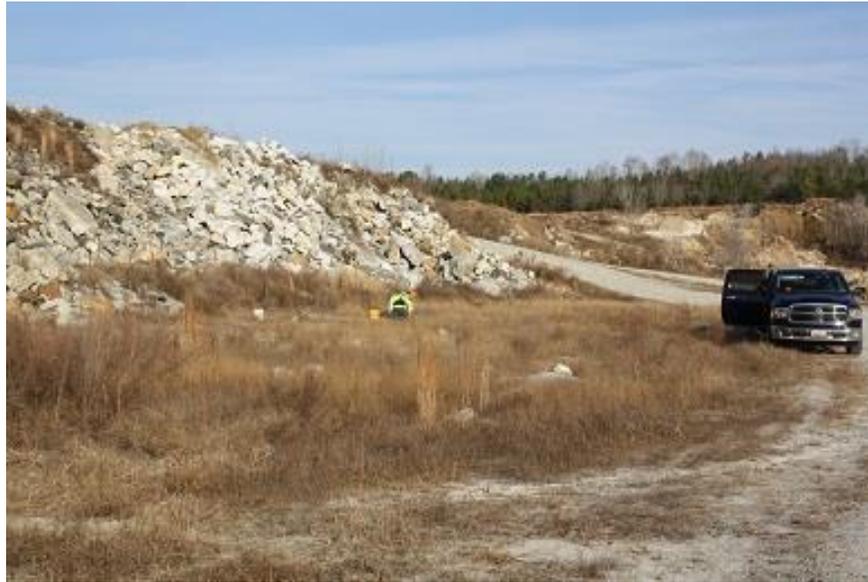
Close-up of the silver flash moonstone with an excellent bright silver flash when oriented correctly.



Dave holding a piece of andesine --- silver flash moonstone.

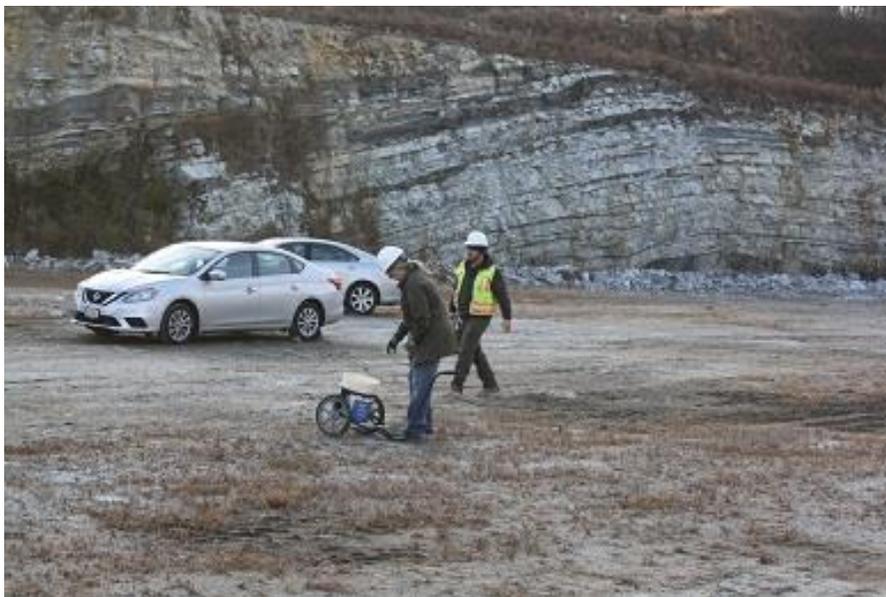
I belong to several different clubs in the local area in order to maximize my chances of going on more field trips. Rich and I (Dave) both also belong to the Richmond Gem and Mineral Society (RGMS) and when we received an email Trip Announcement from their field trip coordinator, we both immediately signed up for the trip. Fast forward a month --- We arrived at the quarry office at the designated time of 8:00 am and greeted the other members of RGMS that we knew and introduced ourselves to the ones we did not know. We were also happy to see an old friend back as the Quarry Manager. The quarry manager held an excellent safety briefing and updated us on all the current conditions inside the pit. They had a rock breaker operating in a portion of the quarry which put a large area off limits. He then led us in a vehicle caravan to one of my favorite areas at this quarry – where we could collect some great specimens of andesine and enstatite. Both of these minerals are fantastic lapidary material. Andesine is better known as “silver or gray flash moonstone”. When polished, it has a beautiful internal adularescence of silver or gray color. Enstatite, known also as “bronzite” has an internal copper-colored flash or chatoyancy that when polished is quite pleasing.





Rich and Dave collecting andesine and enstatite (bronzite) in the floor of the quarry. Both of these minerals are excellent lapidary material that show internal reflections when polished.

When we arrived at the initial area, Rich immediately pulled over and parked his truck where we had found both of these materials on previous occasions. It had been several years since we were here and the weeds and grass had covered much. Nevertheless, we were able to find several places where we dug beautiful specimens out of the floor of the pit. All too soon, our collecting time in that area ended and the Quarry Manager led us to another location where we searched for “white flash moonstone” and quartz crystals. We saw some massive quartz, but no one found a crystal. I did find two pieces of moonstone – one was a very nice piece about 1 inch square and was almost clear with a strong white flash. Shortly afterward, we were directed to search an area just across the road from where we had parked. We found some ½ inch to 1 inch almandine garnets that were very gemmy. At least one other person found another piece of white flash moonstone there. We then moved to another part of the quarry (which is quite large --- about 50 acres by my estimate) where the ground was very sandy.



The northeast portion of the quarry --- note the “anticline” geological formation of “bowed” rock strata.



Andy (from RGMS) immediately spotted some large garnets in the quarry floor and began digging them up. They were not as gemmy as in the other location, but they seemed plentiful. I settled in near Andy and continued digging after he left. My largest garnet was the size of a tennis ball and quite heavy. Amazing. I gave a quick walk around of that area, but found nothing else very exciting. I eventually dug more garnets from that initial spot. At about 11:45 am, we took a group picture and thanked the Quarry Manager profusely for his time (Saturdays are usually his time off --- so when he conducts a field trip, it is done during his free time). We all followed the quarry manager out in a caravan and when we reached the office, most departed for home. I stayed and talked with the Quarry Manager for a while and he agreed to hosting a trip for our Southern Maryland club some time next spring. Super! Hope you will be able to join us.