

Trip Report to US Silica Mine, Montpelier, VA on June 10, 2023 by Dave Lines



We met at 7:30 am in the gravel parking lot in front of the office. There were 13 of us (Allison, Ann and Greg, Bernie, Casey, Dave, Ralph G., Renee, Rich, Sam, Tim and Lorna S., and Tom Z.) from the Southern Maryland Rock and Mineral Club. Since Rich and I were about 20 minutes early and since there were several new folks, I spent the time while everyone was arriving, showing them sample specimens of what we had found there in the past. Hopefully, we would collect similar material again this day.



After the Safety brief by the Mine Superintendent, we presented him with various rocks and minerals from this quarry --- some like bronzesite (enstatite) and andesine (gray flash moonstone) had been polished to bring out their internal flashes. One gift to the mine was a 2-1/2 inch diameter polished sphere of andesine that had an excellent silver flash when turned over in the sunlight.



After a group picture at 7:45 am, we followed the mine sup in a caravan of vehicles into the large open pit mine. The weather was beautiful and about 70 degrees. We went first to the area where we could find andesine and bronzesite. We were not disappointed --- gray flash moonstone was still plentiful and beautiful. In addition, we found massive ilmenite (FeO Ti O_2 – iron titanium dioxide). It was black in color and very heavy ---- almost double the weight of a similar volume of quartz. We also found massive rutile (TiO_2 – titanium dioxide) associated with quartz and feldspar. Blue quartz was also embedded in some of the gray andesine.

After a full 1-1/2 hours at this location, the mine sup moved us up a level to the bench immediately above. Although fairly narrow, the bench contained larger quantities of bronzesite and ilmenite, so the collecting was easy and fast. After 30 minutes here, we moved again --- this time to a location on the other side of the mine --- to search primarily for large, weathered almandine garnets. We had various degrees of success. The better garnet specimens were found in a black, biotite schist, while the largest ones were highly weathered and could be found loose in the dirt. Several of our new members were very happy to find all the garnets --- especially Ann and Greg.



Around 11:00 am, we moved across the mine again to search for rutile and ilmenite, but we had very limited success finding anything of interest at that location. At 11:30 am, we all followed the quarry sup back out of the mine to the office. There we compared our finds and wished each other a safe trip home.