



Mineral News



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A new Celestite/Aragonite(?) Locality near South Carthage, Tennessee

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While vacationing in Tennessee last August, we wanted to stop at Elmwood and look at the famous zinc mine there. Traveling on Hwy 53 to US 70 E, which leads to Elmwood, a new interchange is being built with a large road cut, the lower portion in the Hermitage limestone, the upper part in the Cannon limestone, both Middle Ordovician in age. Due to intensive construction activity, we could not approach the multiple level road cut. We did pull off the road once on US 70 E, and investigate the rock piles along the side.

The limestone is very dense, dark gray to almost black in color. It is micritic, composed of very fine-grained particles. Interspersed are fossil brachiopods, many of which are hollow and lined with brown or whitish scalenohedral calcite crystals, typically 1-3 mm in length. Without approaching the new road cut, no determination was possible as to in which formation the fossil vugs occur.

Associated with this calcite is blades of white celestite up to 3 cm in length. Celestite crystals are frequently intergrown, and tend to be parallel or slightly radiating in appearance. Some specimens are not unlike those reported by this writer from Kentucky, in slightly younger fossils (Goldstein, 1988).

In other brachiopods, there are acicular white crystals, from 1-10 mm in length, less than 0.5 mm in thickness. The white crystals against the brown calcite form very attractive specimens. Though I have not had the time to investigate this mineral, I suspect that it is aragonite. If it turns out to be something else, I will put a note in the Mineral News.

In addition, to brachiopod vugs, there appear to be small solution vugs that may contain small (unattractive) dolomite crystals and wet oil.

The total time spent at the road construction site was about one hour. Further time might have revealed additional mineralization. Despite the proximity to Elmwood and Gordonsville zinc producing mines, no sulfides or fluorite was found.

As a side note, we visited the Elmwood Mine, though a security guard keeps curious people away. The guard I spoke

to was courteous and friendly. Ore removed from the Elmwood Mine is carried to the mill at Gordonsville, a few miles away, in a seemingly never-ending convoy of dump trucks. We did not visit the Gordonsville mill and we saw no dumps at Elmwood. I would say the odds of the casual collector visiting the dumps (where every they may be) are nil.

References

Goldstein, A. 1988, Vugs in Fossils of Kentucky: MN, Vol. 4, No. 5, p. 4.

A Collecting Opportunity in Sherbrooke, Quebec

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The region in and around Sherbrooke, Quebec is well-known for its variety of minerals (Chamberlain, 1989; Grundel, 1987). An excellent opportunity for collectors to obtain minerals such as those described in Chamberlain (1989) currently exists in the city of Sherbrooke.

A construction site has temporarily left behind several acres of broken rock full of specimens. A brief check of the material collected by the author indicates at least some of the minerals of the alpine veins, such as quartz, calcite, feldspar, pyrite, and some unknowns. All are micros, though some of the quartz crystals are nearly 3 cm long. The largest pocket found was about 15 cm in maximum size. Small cavities, less than 1 cm are abundant.

The number of pyrite crystals in the slate(?) which hosts the veins is staggering. This site probably has hundreds of