Minerals of the Red Cloud Mines...revisited

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The annual New Mexico Mineral Symposium provides a forum for both professionals and amateurs interested in mineralogy. The meeting allows all to share their cumulative knowledge of mineral occurrences and provides stimulus for mineralogical studies and new mineral discoveries. In addition, the informal atmosphere encourages intimate discussions among all interested in mineralogy and associated fields.

The symposium is organized each year by the Mineral Museum at the New Mexico Bureau of Geology & Mineral Resources.



Abstracts from all prior symposiums are also available: https://geoinfo.nmt.edu/museum/nmms/abstracts

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The adjacent Red Cloud Copper and Fluorite mines are located in the Gallinas Mountains of Lincoln County, New Mexico near the small town of Corona. The Copper mine dates from 1881 and produced lead, copper, and silver. The Fluorite mine operated from 1943 to 1955 for Rare Earth Element (Ce, La, Y) bearing minerals. Today, only a few concrete foundations, trenches, cuts and shafts mark the mine sites, along with small dumps of the Copper mine. For decades, the mines provided predominantly average quality micro minerals to collectors. However, recently diligent dump digging by energetic collectors uncovered excellent micro, thumbnail and larger specimens of red vanadinite with black mottramite, and wulfenite in a variety of colors and crystal morphologies. As a result, this study was initiated to ascertain what other minerals were being uncovered on the dumps. Analytical tools including X-ray diffraction and energy dispersive spectrometry were used for identifications. The outcome resulted in a compilation of 32 minerals for the Red Cloud mines. Previously unreported minerals of interest to the collector include arsentsumebite, brochantite, fornacite, hemimorphite, linarite, and zalesiite (First occurrence in New Mexico!). Photography by Scott Braley illustrates the aesthetic quality of the micro minerals collected from the dumps. From this study comes a new and greater appreciation of the mineralogy of this small frontier mining effort, and motivation to examine Red Cloud specimens for additional mineral species.

References

Parker, F.J., (2023) Minerals of the Red Cloud Mines. Rocks and Minerals, V.98, #4, 355-362.



Figure 1. agardite-(La) on fluorite, field of view 1.5 mm, Fred Parker specimen. Scott Braley photo.



Figure 2. Vanadinite with mottramite. Fred Parker specimen. Scott Braley photo.