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## *History, location and development of the Johns-Manville perlite deposit, No Agua, New Mexico*

M. B. Mickelson, 1971, pp. 321

in:

*San Luis Basin (Colorado)*, James, H. L.; [ed.], New Mexico Geological Society 22<sup>nd</sup> Annual Fall Field Conference Guidebook, 340 p.

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*This is one of many related papers that were included in the 1971 NMGS Fall Field Conference Guidebook.*

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# HISTORY, LOCATION AND DEVELOPMENT OF THE JOHNS-MANVILLE PERLITE DEPOSITS, NO AGUA, NEW MEXICO

by

M. B. MICKELSEN

Antonito, Colorado

Perlite is a mineral of comparatively recent interest. It has only been in the last twenty-five years that commercial uses have been found. Perlite was first described as a glassy rhyolite, but actually it has a very unique composition when compared with other lava flows. Most present day volcanic flows are basaltic in composition, whereas perlite is actually closer to granite in chemical composition with the exception of the additional combined water. There has been considerable controversy involving the presence of water. The conventional theory has been that the water was dissolved in the volcanic liquid and upon eruption was quenched within the mass. A more recent theory is that the volcanic liquid was erupted as an obsidian and that the water occurred later through a hydration mechanism. The rock is actually an acid volcanic derivation containing 2 to 5 percent water. Upon being heated rapidly to the point where the glass softens, the combined water having reached the point of volatilization, expands rapidly and explodes.

The perlite deposits at No Agua are located in Township 29 N., Range 9 E., in Sections 11, 12, 13, 14, 23, and 24 (fig. 1). The total area covered by these claims is in excess of 2,000 acres. The deposits were located by the author in the fall of 1948. In the summer of 1950 the deposits were sold to F. E. Schundler and Company, of Joliet, Illinois. Erection of the mill was started in November, 1950. Preliminary stripping operations were begun a short time later. By early September of 1951 the plant was placed in operation. The mill crushes, screens and grades into particle sizes desired by various clients. The material is then conveyed into storage bins. The different products in these storage bins are in turn trucked to the railhead at Antonito, Colorado, some 22 miles away.

In the fall of 1959 Johns-Manville purchased the operation from the F. E. Schundler Company and are presently mining, crushing, screening and blending with mostly all new equipment at the mine. New improvements have also been added at the Antonito loading site.



FIGURE 1.  
Johns-Manville operations at No Agua, New Mexico.