

14273

PHYSICAL CHARACTERISTICS

Mass

22.4 g

Dimensions

3.5 x 3.0 x 2.0 cm

Sample 14273 is a medium dark gray, vitric (matrix) breccia.

SURFACE FEATURES

The irregular surface is 20% covered with dark gray vesicular glass. No distinct pits are visible but there may be a few small ones. Vesicles in the glass coating are less than 1 mm and occupy 30% of the glass. There are some non-penetrative fractures present.

PETROGRAPHIC DESCRIPTION

Sample 14273 has a seriate texture and is coherent. Seventy percent of the sample is medium dark gray, aphanitic, vitreous material. Twenty-five to thirty percent of the sample consists of very light gray, angular to sub-rounded, lithic clasts up to 10 mm in size. These fragments are, however, mostly less than 1 mm in size. They are composed of a fine-grained mixture of 60-70% white plagioclase and two light colored mafic minerals. Some light gray subrounded lithic fragments are present ranging up to 1 mm in size. These are equigranular with 0.1 mm grains. Light green olivine mineral fragments smaller than 1.0 mm are present and are subangular to subrounded in shape.

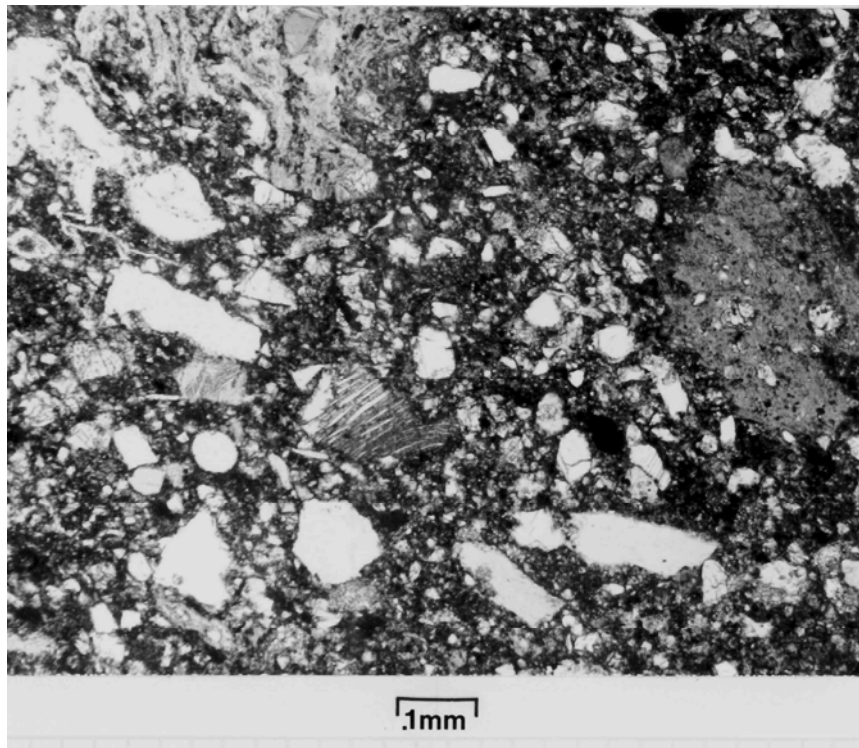
Thin section 14273,4 shows that this rock is similar to 14277 except for having a much larger lithic clast content. The matrix is glass-rich and there are abundant spheres and masses of glass throughout the section. The matrix mineral fragments are approximately 1/3 plagioclase and 2/3 pyroxene fragments, all of which are shocked and fractured. The thin section shows that most of the lithic clasts are devitrified glass and highly shocked and granulated plagioclase-rich rocks with some pyroxene.

DISCUSSION

Sample 14273 is one of those studied by Wilshire and Jackson (1972), who classified it as belonging to their F2 category (friable with light clasts). It was also studied by Eldridge et al. (1972), who analyzed it for K, Th, U, ²⁶Al, and ²²Na.



Width of image is approximately 3.5 cm, S71-26619



14273,4