

14275

PHYSICAL CHARACTERISTICS

Mass

12.46 g

Dimensions

1.2 x 1.2 x 3.1 cm

Sample 14275 is a medium light gray, blocky, polymict breccia.

SURFACE FEATURES

Glass-lined pits up to 2.0 mm in diameter occur over most of the rock surface. There are a few non-penetrative fractures.

PETROGRAPHIC DESCRIPTION

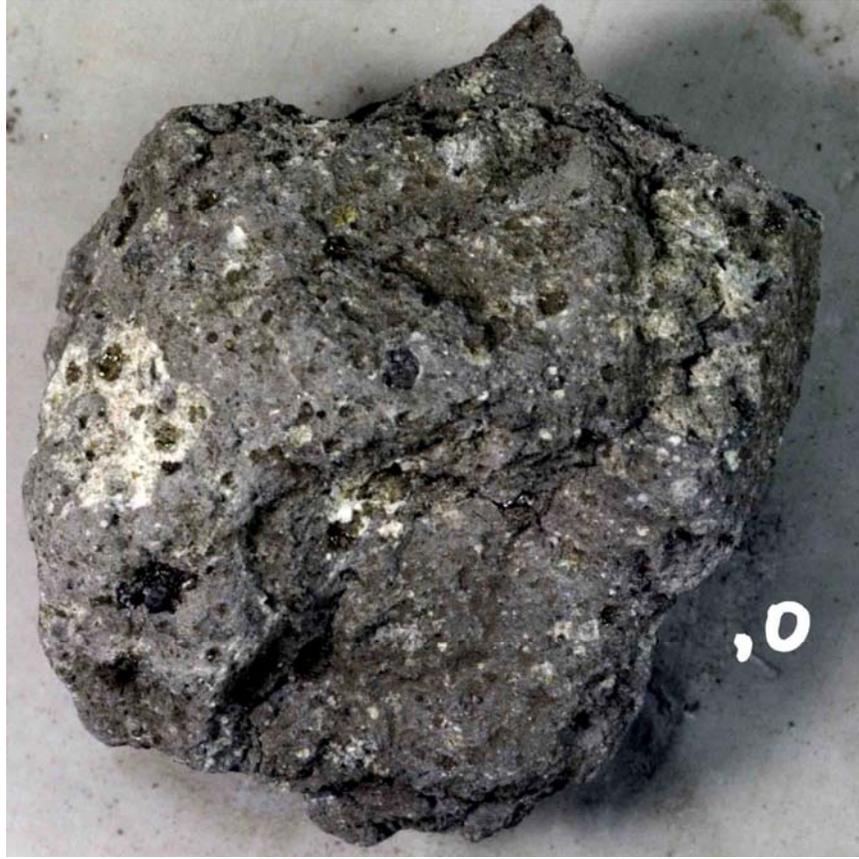
Sample 14275 is a medium light gray, blocky, coherent, low-grade, polymict breccia with a homogeneous texture. Sixty-five to seventy percent of the sample is medium light gray fragmental material which is partially recrystallized. It appears to be a mixture of mostly plagioclase and at least two mafic minerals. This material is smaller than 0.2 mm.

Twenty percent of the sample consists of very light gray, subangular to subrounded, lithic clasts up to 6 mm in size composed of crushed mixtures of plagioclase and mafic material. Some are mostly crushed plagioclase. A second type of lithic clast making up less than 5% of the sample is subangular to sub round in shape, dark gray in color, and up to 2.0 mm in size. These are composed of very fine grained material, some with white specks. The third type of lithic clast is medium gray, subrounded, and as large as 4.0 mm in size. These are mixtures of gray and white material. The gray is partly vitreous. It could contain mixtures of crushed and melted plagioclase. White mineral fragments are subangular to subrounded plagioclase grains in various stages of crushing. Black mineral fragments are subangular, probably pyroxene. Some show cleavage faces.

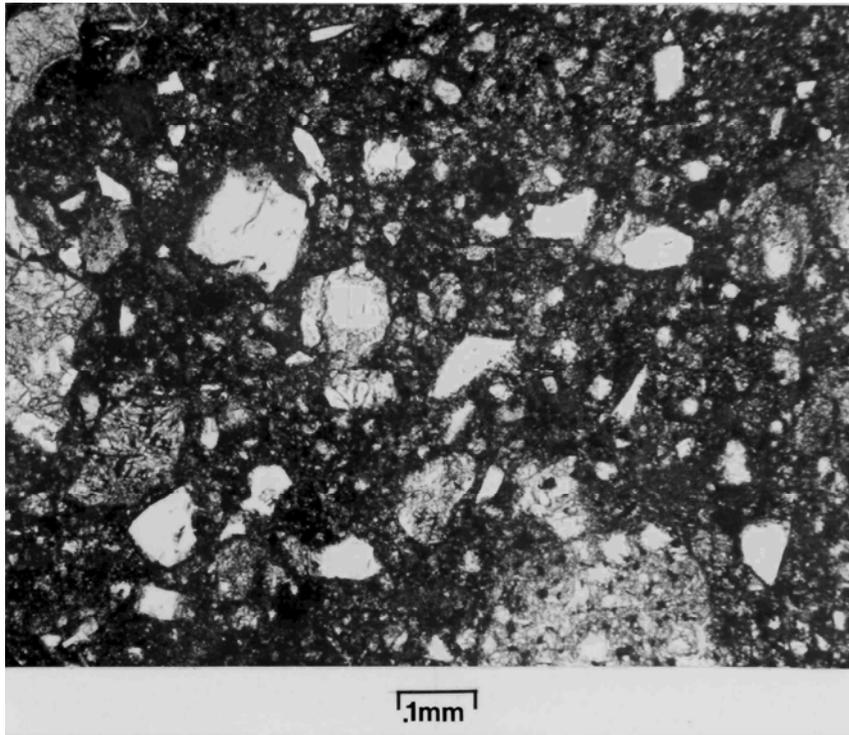
Thin section 14275,4 shows a glassy breccia with approximately 10% glass in the ground mass. The matrix also contains numerous orange to reddish orange spheres of glass as well as colorless shards of glass. There are no clasts present in the section. The fragments in the matrix consist of fine-grained microbreccia with pyroxene and olivine fragments, fine-grained opaque material, plagioclase and pyroxene crystal fragments and devitrified glass masses. One unusual feature is a sphere of a microbreccia with a small glass rim. There appears to be no glass in the sphere as the matrix is very crystalline. It does not appear to be a devitrified product.

DISCUSSION

Sample 14275 was studied by Wilshire and Jackson (1972) and classified by them as an F₂. Simonds et al. (1977) list it as a vitric matrix breccia (VM



Width of image is approximately 3.5cm, S-75-24532



14275,4