

14272

PHYSICAL CHARACTERISTICS

Mass

46.63 g

Dimensions

4.5 x 3.5 x 2.5 cm

Sample 14272 is a blocky medium dark gray coherent vitric (matrix) breccia.

SURFACE FEATURES

More than 30% of the surface is covered with a dark gray glass coating. Glass lined zap pits up to 0.5 mm occur on one side. None is present on the glass or elsewhere. The glass is composed of 30% vesicles 0.5 mm in diameter.

PETROGRAPHIC DESCRIPTION

Seventy percent of the sample is composed of medium dark gray aphanitic vitreous or glassy material. Twenty-five to thirty percent is composed of lithic fragments which are dominantly less than 1 mm but are as large as 20 mm in size. They are angular to subrounded very light gray fragments. They consist of fine-grained mixtures of 60-70% white plagioclase and two light colored mafic minerals. A second type of lithic clast is light gray in color and subrounded ranging up to 1.0 mm in size. It makes up less than 1% of the sample and is composed of equigranular 0.1 mm material. Light green olivine is present in subangular to subrounded grains less than 1.0 mm in size. These make up less than 1% of the sample.

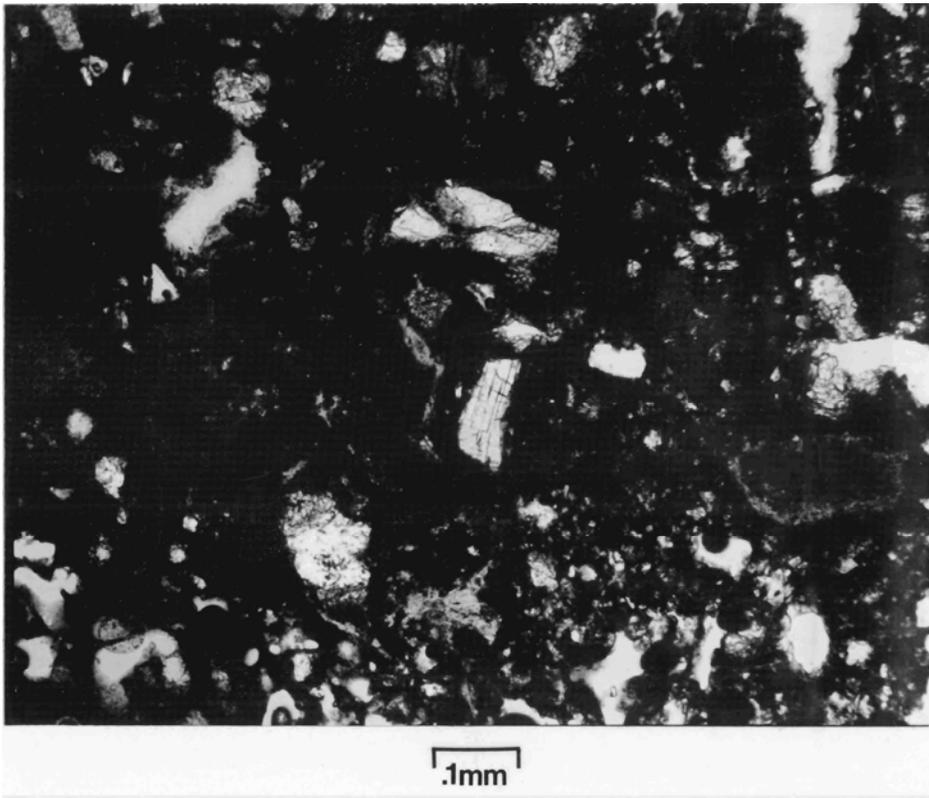
Thin section 14272,6 is composed of a glass-rich matrix with a thick vesicular glass coating on all sides. The coating is full of holes and discontinuous in thin section. The inner matrix has approximately 50% turbid brownish "glassy" material cementing the few clasts (> 1 mm) and the matrix fragments. The only clast present in the thin section was a fine-grained microbreccia with some large pyroxene crystals which are highly shocked. Almost all the mineral fragments seen in the thin section are pyroxene shards with minor olivine and plagioclase.

DISCUSSION

Sample 14272 was examined by Wilshire and Jackson (1972) and classified as being coherent with light clasts (F2). It was analyzed for K, Th, U, ²⁶Al, and ²²Na by Eldridge et al. (1972).



Width of image is approximately 5 cm, S71-30351



14272,6