## 14281

## PHYSICAL CHARACTERISTICS

Mass
12.03 g

Dimensions
$2.7 \times 2.0 \times 1.5 \mathrm{~cm}$

Sample 14281 is a medium dark gray, subrounded to angular block of coherent, vitric [matrix] breccia.

## SURFACE FEATURES

There are a few glass lined zap pits, 0.2 to 0.5 nm in diameter, on one surface, only. Very few penetrative fractures are present on the sample.

## PETROGRAPHIC DESCRIPTION

Sample 14281 is medium dark gray and coherent, with a seriate texture. Seventy to seventy-five percent of the sample is aphanitic, medium dark gray, vitreous material. Light gray, lithic clasts ranging up to 10 mm in size make up $15 \%$ of the sample. They are predominately 0.5 mm in size and are composed of sugary to crushed, white plagioclase mixed with light gray material and scattered opaques with a salt-and-pepper appearance. A second type of lithic fragment, making up to $10 \%$ of the sample, is medium gray, sub-rounded, and up to 1.0 mm in size. They are very fine grained and are mostly smaller than 0.5 mm in size. A third type is similar to these, but has white clasts. It is 10 mm in size, subrounded, and is represented by 1 clast.

Section 14281,3 has abundant yellow/brown glass which contains numerous bubbles and swirls and shows some flowage lines. There are a few reddish-brown glass masses scattered throughout the section.
Only two clasts (> 1 mm ) are present in the section. They are both an anorthositic breccia with minor pyroxene. One of the clasts consists of a granulated mass of plagioclase crystals with a few phenocrysts of shocked and fractured larger plagioclase. The other consists of a more bladed mass of plagioclase crystals which show a somewhat radiating structure. The later type grades to the first type near one edge of the clast.
The matrix consists of approximately $50 \%$ glass and a mixture of lithic (25\%) and mineral (75\%) fragments. All of the lithic fragments also consist of anorthosite type breccia. Most of the mineral fragments are plagioclase shards which are fractured and show shock effects. There are also a few pyroxene crystals present. A few of the pyroxene crystals are bent and show dislocations. A few devitrified glass spheres are also present. The glass in the matrix is very turbid.
A few small vesicles ( $0.1-0.3 \mathrm{~mm}$ ) which are irregular to rounded are scattered about the section. Most of the vesicles are in the glassy portion of the matrix and none show crystals in the cavities.


Width of image is approximately $3 \mathrm{~cm}, \mathrm{~S}-71-26642$


