

INTRODUCTION: 67729 is a dark gray, irregular, coherent and vesicular glass (Fig. 1) largely devitrified or partly crystalline. It contains a few prominent clasts (Figs. 1, 3, and 4) which are basaltic impact melts. It is a rake sample collected halfway between the White Breccia boulders and House Rock, and has many zap pits on one side.

PETROLOGY: 67729 is mainly a vesicular, brown, glassy material - no clear glass is present, all having devitrified or partly crystallized into acicular plagioclases (Fig. 2). In places the glass is flow-banded and vein-like and contains clasts of breccia and impact melts towards which the glass is chilled.



FIGURE 1. Smallest scale subdivision 0.5 mm. S-80-28171.

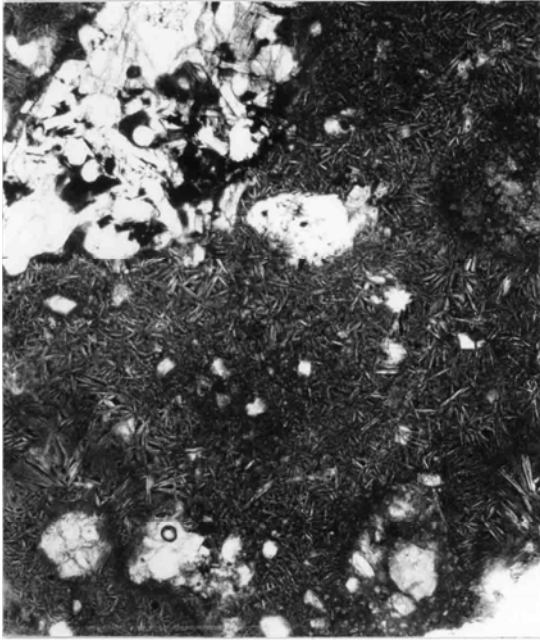


FIGURE 2.

- a) 67729,16. Melt matrix, ppl. Width 2 mm.
- b) 67729,1. Melt matrix, ppl. Width 2 mm.
- c) 67729,14. White clast, xpl. Width 2 mm.
- d) 67729,15. Gray-green clast, xpl. Width 2 mm.

Three prominent clasts larger than a centimeter are basaltic impact melts. The large white clast (,4) macroscopically contains ~30% yellow mafic minerals. In thin section it has lathy plagioclase as well as many anhedral plagioclases, most less than 500 μm , and mafic minerals less than 1 mm. Overall its texture is subophitic to granular (Fig. 2) and it contains interstitial Fe-metal, troilite, phosphate, cryptocrystalline material and glass. The large green-gray clast (,9) is an ophitic basalt with a well-developed plagioclase network enclosed by olivines up to 3 mm in diameter (Fig. 2). Interstitial brown glass is conspicuous. The third clast (,6) has not been sectioned but is macroscopically similar to ,9.

PROCESSING AND SUBDIVISIONS: Initially, small chips of matrix glass were taken to make thin section ,1. For the present study, further chips of matrix glass and clasts were taken for the sections, as shown in Figures 3 and 4.

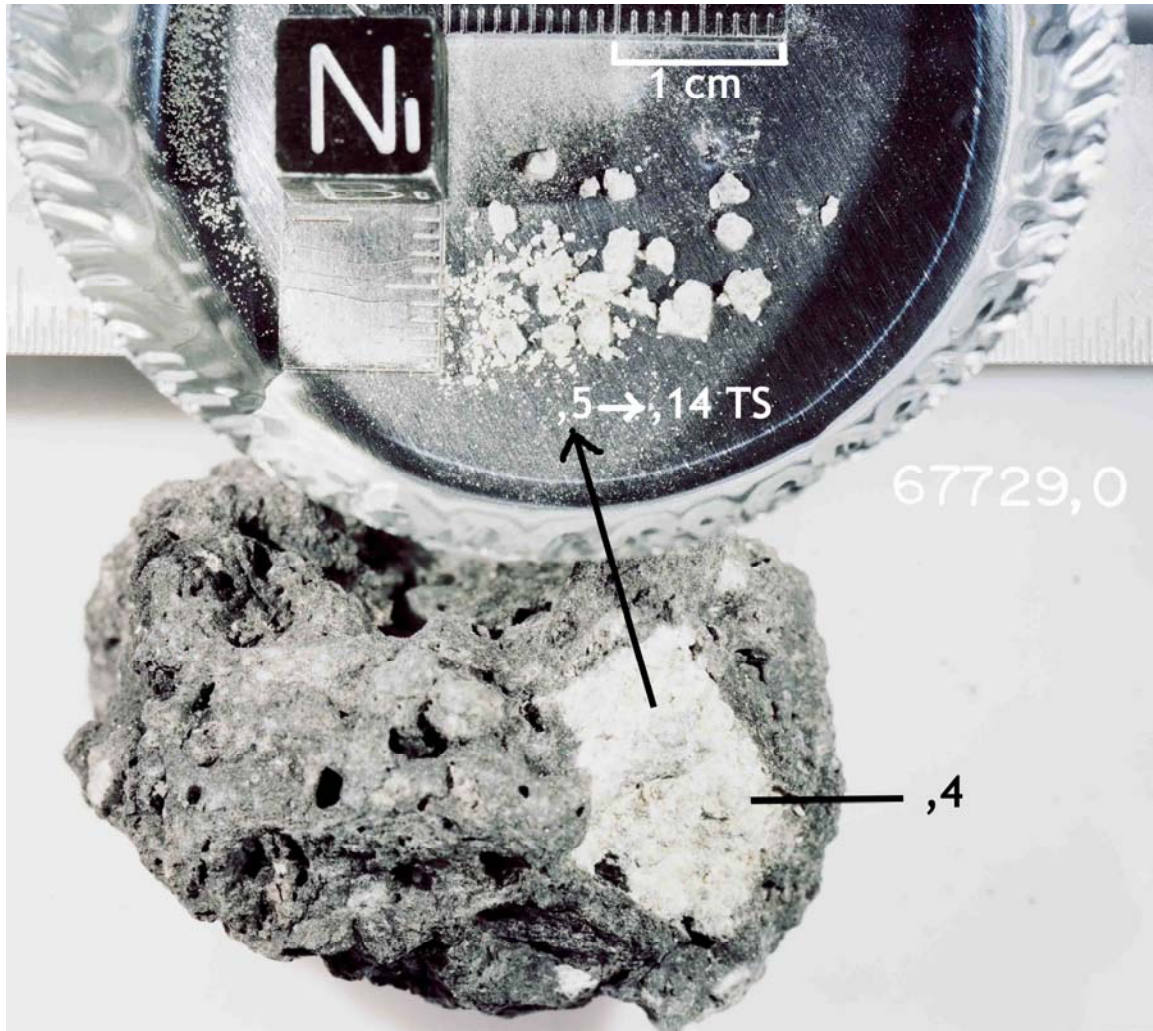


FIGURE 3. S-80-28172.

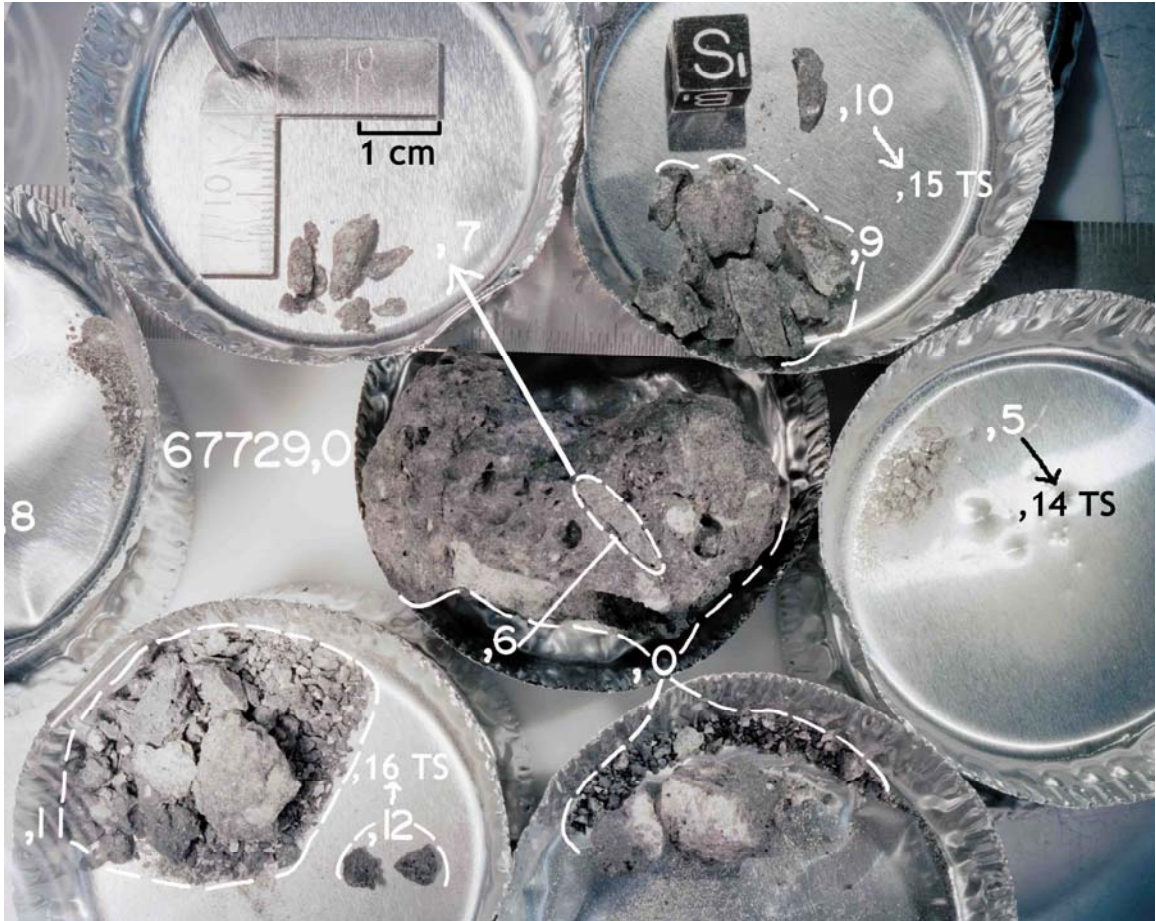


FIGURE 4. S-80-28169.