INTRODUCTION: 15019 is a vesiculated, glassy breccia which could be described as either a glassy regolith breccia or an agglutinatic breccia (Fig. 1). It is medium dark gray, blocky and angular, tough, and has only a few zap pits, which are confined to one side. 15019 was collected and bagged with 15017, 15018, 15027, and 15028; all were lying in a subdued 1-m crater 4m south of the LM + Z footpad. It has not be recognized in site photographs.

Figure 1. Pre-split view of 15019. S-71-43664

PETROLOGY: 15019 is a vesiculated, non-porous, very glassy regolith breccia or agglutinate (Fig. 2). Most of the vesicles are in a restricted band. The clasts include mineral fragments which are dominantly mare debris, and several very pale,
homogeneous glass shards which have tended to devitrify, especially along their edges. Wilshire and Moore (1974) noted 15019 as an example of a rock with a glass selvage, presumably because it grades from a compact interior to a frothy edge.

**PROCESSING AND SUBDIVISIONS:** 15019 was chipped in 1975 to produce ,1 (0.48 g, allocated to Wasserburg); ,2 (for thin sections ,4 to ,6); and ,3 (0.04 g chips and fines). ,0 is now 0.63 g. The chips were intended to represent two distinct lithologies with a sharp contact, one a fine-grained vesicular breccia, the other a coarse basalt. Thin sections indicate that the "coarse basalt" is nonetheless breccia.

![Figure 2. Photomicrograph of 15019.6. Width about 2 mm. Transmitted light. Vesicular band is to left. Pale piece at lower right with "stirrup" shape is a partly-devitrified glass shard.](image)