## 67937 FINE-GRAINED BASALTIC IMPACT MELT, GLASS VEINS 59.7 g

<u>INTRODUCTION</u>: 67937 is a medium gray, fine-grained impact melt cut by glass veins (Fig. 1). It is coherent and slabby. Sharp variations in grain size are apparent macroscopically. It was chipped from Outhouse Rock (see 67915, Fig. 1) to sample a shatter cone, as were 67935 and 67937. Its orientation is not precisely known but a few zap pits on one surface indicate the exterior.



FIGURE 1. S-72-37771.

<u>PETROLOGY</u>: 67937 is a fine-grained, subophitic to ophitic impact melt with plagioclase laths up to 300  $\mu$ m long embedded or partly embedded in mafic minerals 300  $\mu$ m across (Fig. 2). A small amount of mesostasis glass and opaque minerals fills angular interstices. Fe-metal is present. A large clast (4 mm) in thin section ,13 is a crushed anorthosite. Other clasts are mainly plagioclase, but a pink spinel grain is present.

<u>CHEMISTRY</u>: Eldridge et al. (1973) report K (K<sub>2</sub>O 0.19%),U (0.91 ppm) and Th (3.12 ppm) abundances for the whole rock.

<u>EXPOSURE</u>: Eldridge et al. (1973) report  $^{22}$ Na and  $^{26}$ Al data for the whole rock. The values indicate that the sample is unsaturated with  $^{26}$ Al activity (Yokoyama et al., 1974).

<u>PROCESSING AND SUBDIVISIONS</u>: A small chip was used up to make thin sections ,4 and ,13 - ,16. Most of the remainder of the rock occurs as two large pieces which make up ,0 (55.98 g).



FIGURE 2. 67937,13. Basaltic melt, ppl. Width 2 mm.