

INTRODUCTION: 63538 is a dark, coherent rock (Fig. 1), containing vesicles, which are usually elongate, and white clasts. It is extremely feldspathic with abundant shocked and flame-textured plagioclase, and in part is devitrified glass or variolitic melt. It is a rake sample and has zap pits on at least one side.

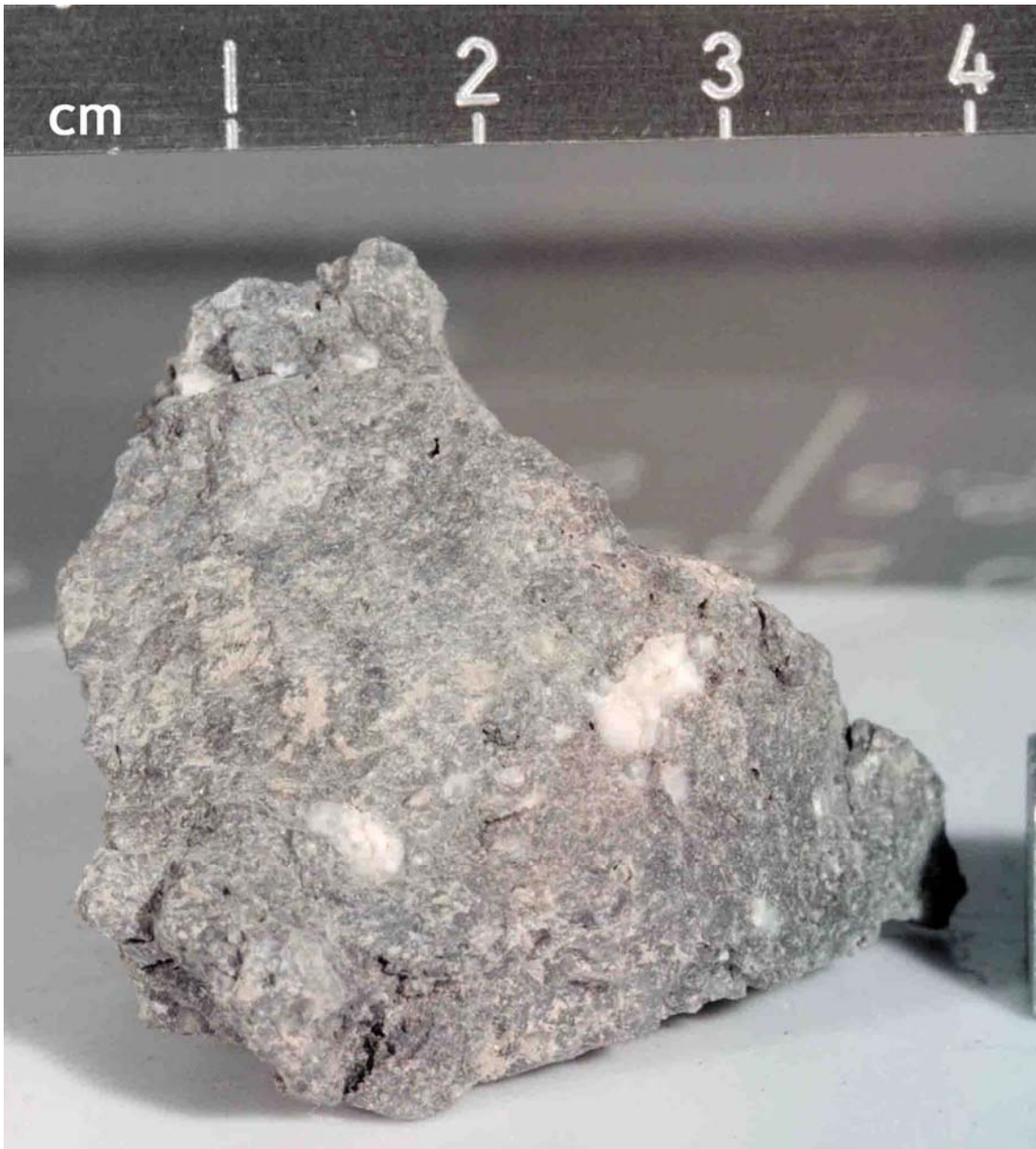


FIGURE 1. S-72-43501.

PETROLOGY: Warner et al. (1973) refer to 63538 as dendritic devitrified glass plus melted matrix breccia. The latter is brown, plagioclase-rich breccia (Fig. 2) with a matrix of fine-grained melt and devitrified maskelynite. It contains abundant clasts of shocked and flame-textured plagioclases which have indistinct boundaries and there is little mafic material. In places the matrix has small subophitic patches and elsewhere cuts shocked plagioclase clasts. Thin section ,8 has a variolitic area, probably devitrified glass, which is finer-grained toward the breccia matrix; the contact varies from sharp to indistinct. The variolites consist of plagioclases up to 500 μm long.

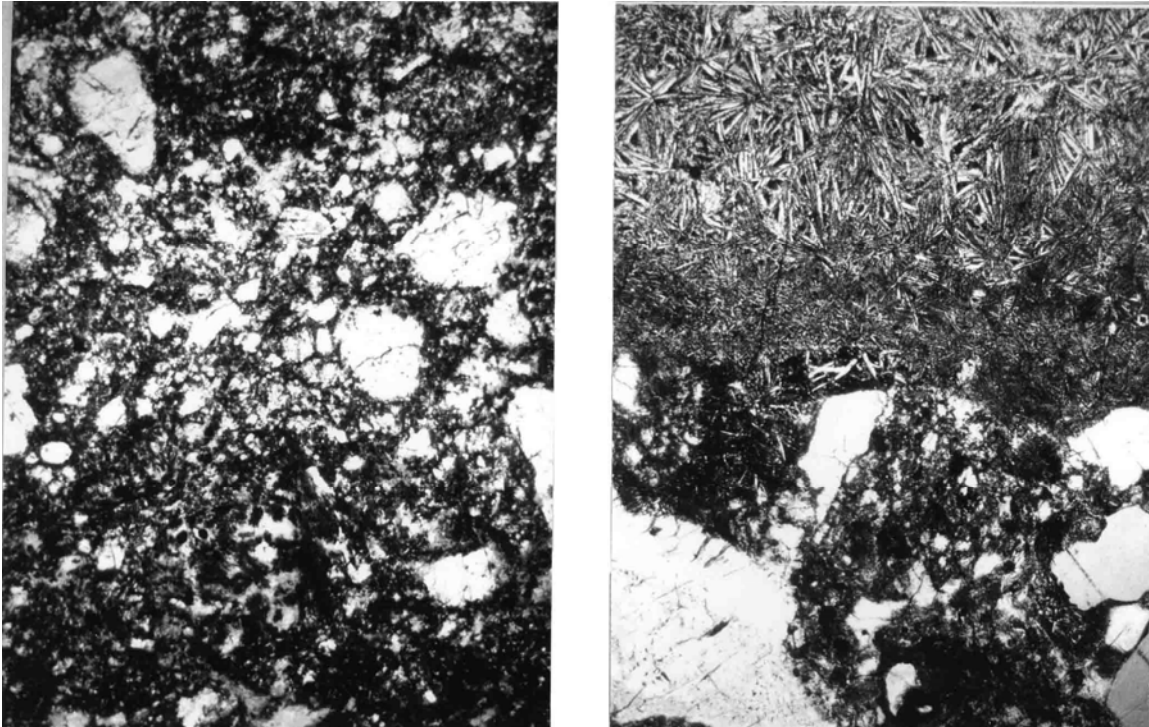


FIGURE 2. a) 63538,7, matrix, ppl. Width 2 mm.
b) 63538,8, variolitic area, ppl. Width 2 mm.

PHYSICAL PROPERTIES: Pearce and Simonds (1974) report magnetic data for 63538. The saturation remanence to saturation magnetization ratio is 0.0. $\text{Fe}^0/\text{Fe}^{2+}$ is 0.0103 and total Fe^0 is 0.024 wt%.

PROCESSING AND SUBDIVISIONS: Two small matrix chips were made into thin sections ,7 and ,9 (from ,1) and ,8 (from ,2). One of the potted butts was used for the magnetic study.