

INTRODUCTION: 64587 is a moderately coherent, light gray, clastic breccia partially coated by greenish, vesicular glass (Fig. 1). It is a rake sample from the rim of a subdued doublet crater on Stone Mountain. Zap pits are absent.



FIGURE 1. Smallest scale division in mm. S-72-55312.

PETROLOGY: Phinney et al. (1976) studied the matrix characteristics of 64587 using SEM techniques. Warner et al. (1973) include this rock in a general petrographic discussion of Apollo 16 rake samples.

64587 is dominated by mineral fragments, principally plagioclase, in a fine-grained matrix, ~20% of which is a discontinuous network of glass (Fig. 2). Fragments and beads of clear and light yellow glass are present. Lithic clasts are relatively rare and include fragments of cataclastic anorthosite, fine-grained poikilitic impact melt and basaltic impact melt.

PHYSICAL PROPERTIES: Pearce and Simonds (1974) report the results of a room temperature hysteresis curve determination on 64587. The saturation remanence to saturation magnetization ratio ($J_{RS}/J_S = 0.025$) indicates that ~3-6% of the metal in this sample is single domain and the remainder is multidomain. The Fe^0/Fe^{2+} is 0.0457.

PROCESSING AND SUBDIVISIONS: In 1972 this rock was broken into several pieces. One fragment of bulk rock (,1) was allocated to Phinney for thin sectioning and petrography. The magnetic studies were done on the potted butt of ,1.

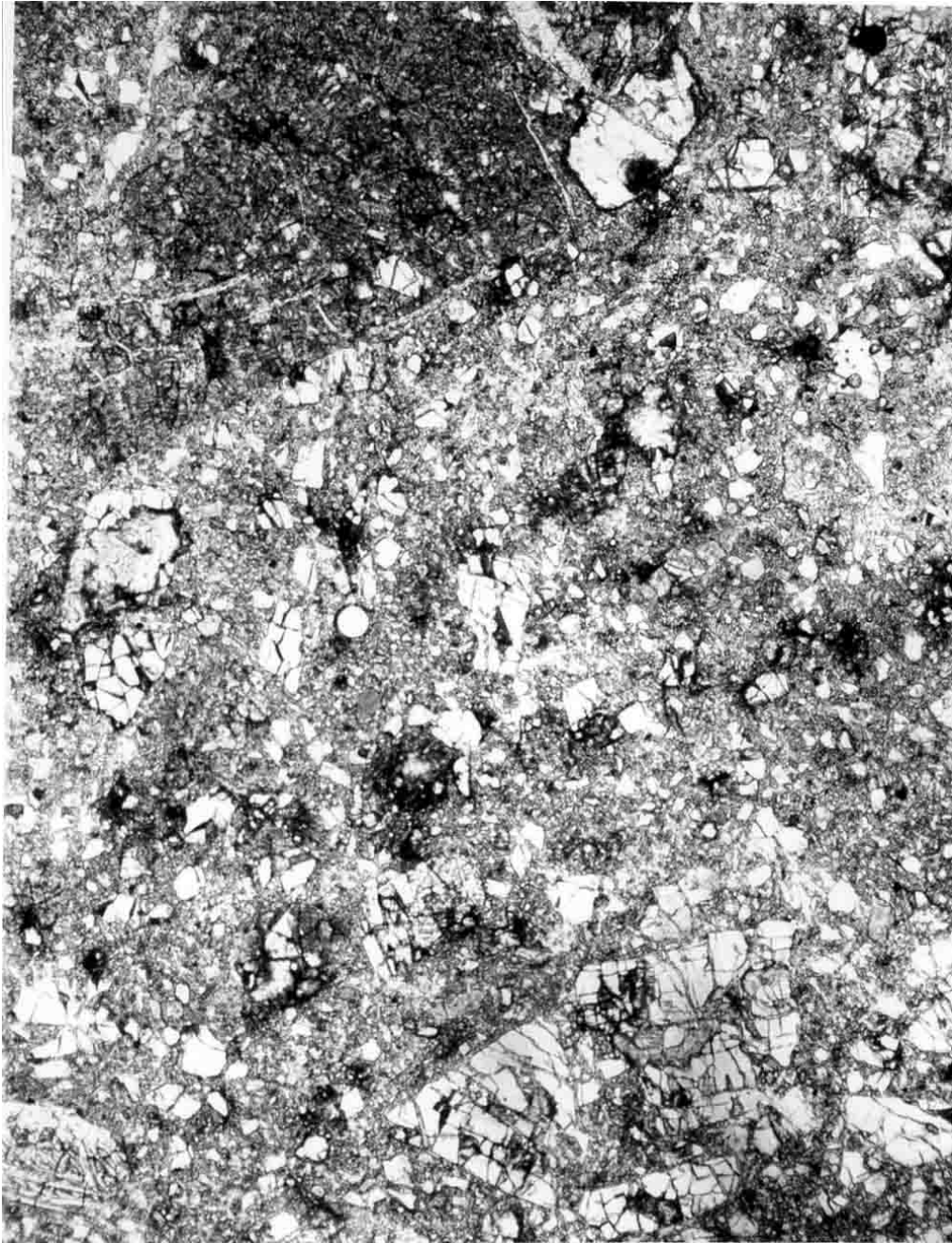


FIGURE 2. 64587,3, general view, ppl. Width 1 mm.