

INTRODUCTION: 64588 is a medium gray, friable, clastic breccia (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-72-55330.

PETROLOGY: Phinney et al. (1976) studied the matrix characteristics of 64588 using SEM techniques. Warner et al. (1973) include this rock in a general petrographic discussion of Apollo 16 rake samples. Mineral and lithic clasts, and shards and beads of clear glass, rest in a porous matrix containing variable amounts of glass (Fig. 2). Phinney et al. (1976) estimate <1% glass in the matrix whereas the thin section shows some areas with considerable glass which lead Warner et al. (1973) to classify this rock as a “glassy breccia.” Lithic clasts includes basaltic impact melt, cataclastic anorthosite and granoblastic anorthosite.

PHYSICAL PROPERTIES: Pearce and Simonds (1974) report the results of a room temperature hysteresis curve determination on 64588 (Fig. 3). The saturation remanence to saturation magnetization ratio ($J_{RS}/J_S = 0.027$) indicates that 3-6% of the metal in this rock is single domain-and the remainder is multidomain. Fe^0/Fe^{2+} is 0.0733.

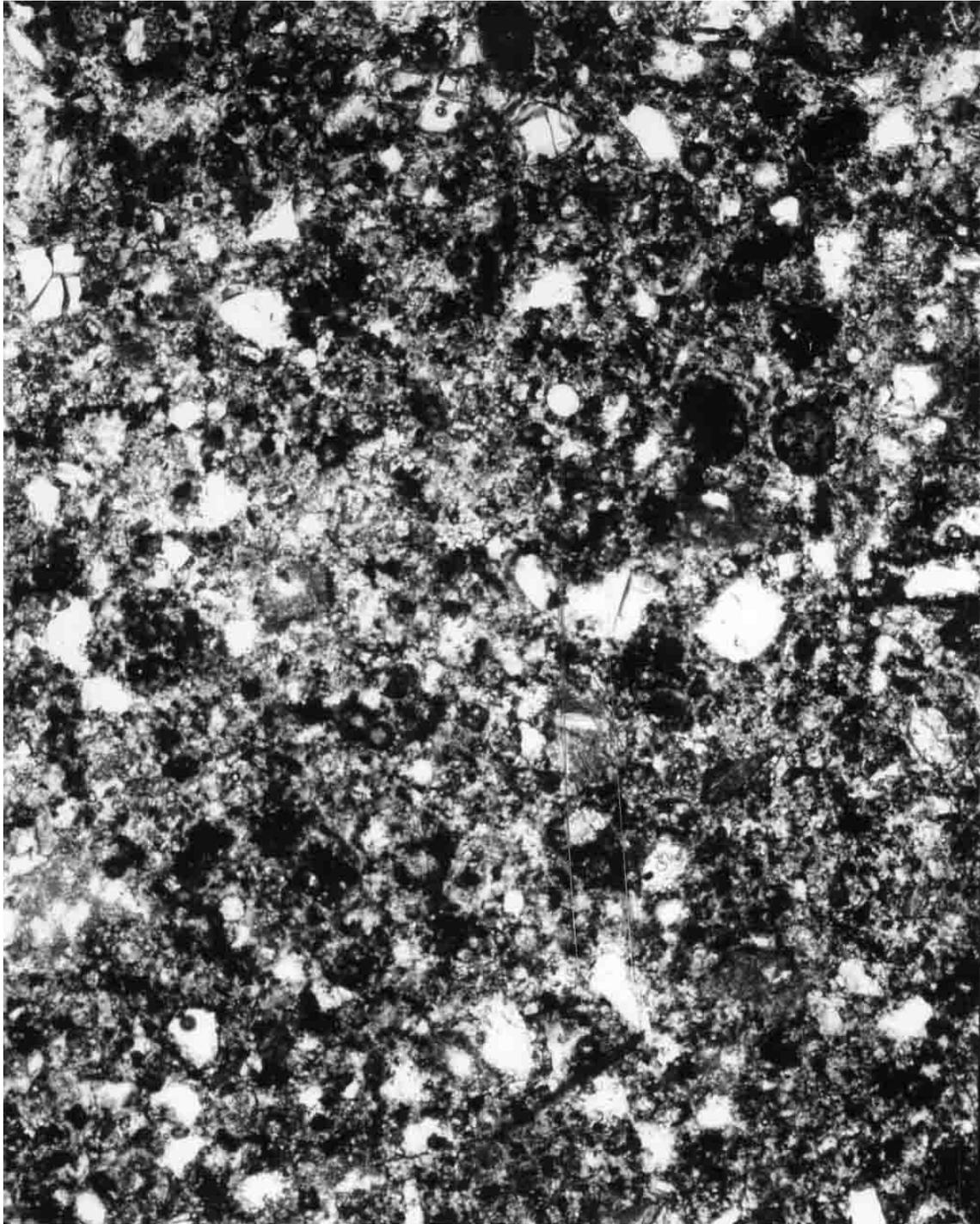


FIGURE 2. 64588,3, general view, ppl. Width 1 mm.

PROCESSING AND SUBDIVISIONS: In 1972 a single chip (,1) was removed and allocated to Phinney for thin sectioning and petrography. The magnetic studies were done on the potted butt of ,1.

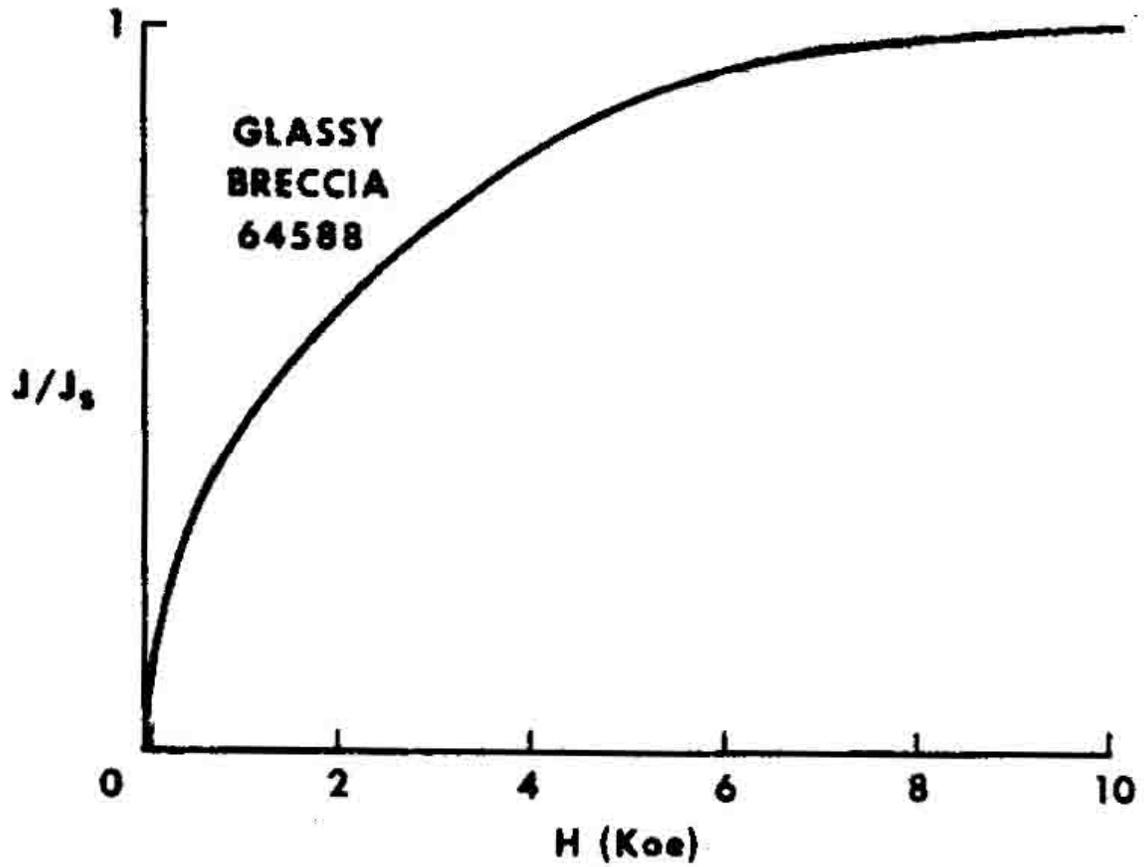


FIGURE 3. Ferromagnetic component of magnetization curves, from Pearce and Simonds (1974).