

INTRODUCTION: 67769 is a homogeneous, coherent and fine-grained poikilitic impact melt (Fig. 1). It is a rake sample collected halfway between the White Breccia boulders and House Rock and has zap pits.



FIGURE 1. Smallest scale division in mm. S-72-51044.

PETROLOGY: Steele and Smith (1973) refer to 67769 as a “breccia with poikilitic pyroxene as matrix,” and report microprobe data. It is fine-grained, homogeneous and contains few clasts (Fig. 2). The pyroxene forms indistinct oikocrysts up to 100  $\mu\text{m}$  in diameter which enclose 20-40  $\mu\text{m}$  long plagioclases. The pyroxenes have a narrow range of compositions (Fig. 3), while plagioclases range from  $\text{An}_{95-85}$  with a wide range Fe, up to 0.8 wt% (Steele and Smith, 1973). Armalcolite (?) is present and Fe-metal blebs usually  $\sim 50 \mu\text{m}$  in diameter are common. Glass is extremely rare. Most clasts, almost all less than 150  $\mu\text{m}$  in diameter, are plagioclase; a single lithic clast in thin section, 1 is 1 mm across, and is a feldspathic breccia.

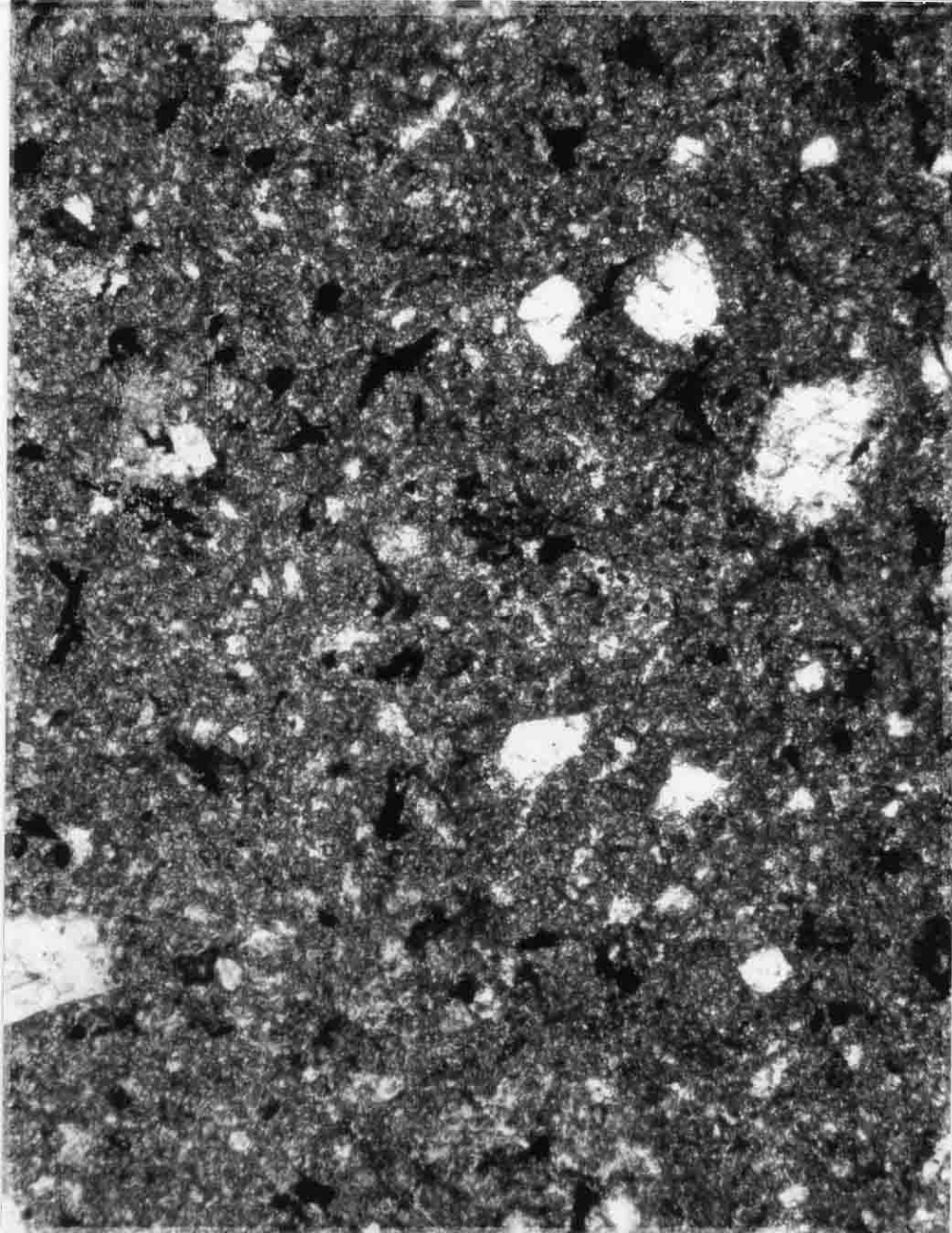


FIGURE 2. 67769,1. General view, ppl. Width 2 mm.

PROCESSING AND SUBDIVISIONS: A single chip was split into three smaller pieces, one of which was used to make thin section ,1.

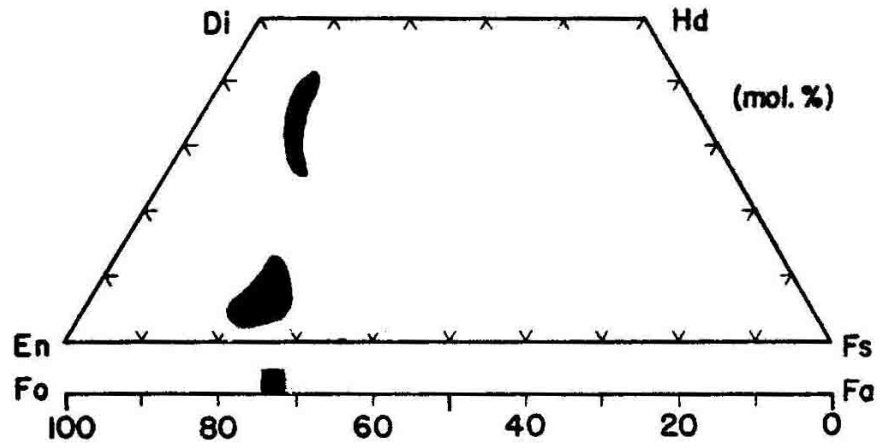


FIGURE 3. Pyroxene and olivine compositions, from Steele and Smith (1973).