67756 CRYSTALLINE (?) POLYMICT BRECCIA 4.82 g

INTRODUCTION: 67756 is a pale-colored, coherent, polymict breccia (Fig. 1) with a crystalline matrix of equivocal origin; restricted mineral compositions suggest possible recrystallization. It is a rake sample collected halfway between the White Breccia boulders and House Rock, and lacks zap pits.

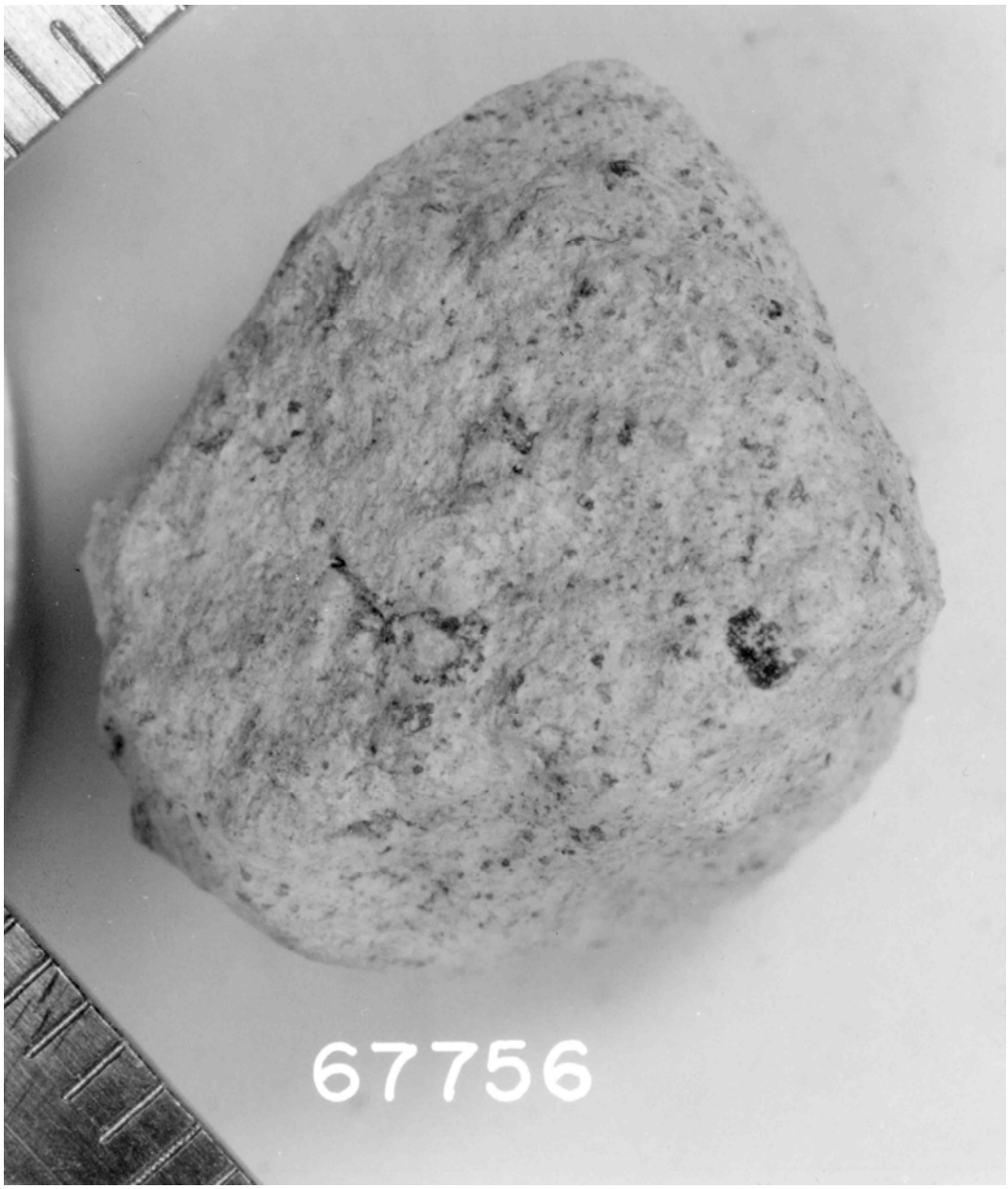

FIGURE 1. Smallest scale division in mm. S-72-51276.

PETROLOGY: Steele and Smith (1973) refer to 67756 as a "recrystallized breccia" with 10% matrix (defined as material less than 5 μm diameter) and provide microprobe data.

The breccia is plagioclase-rich and polymict, and quite heterogeneous in the thin section (,1) (Fig. 2). Clasts larger than 200 μm occupy about 20% of the area, and include angular plagioclases and mafic minerals, mostly unshocked and unstrained. Lithic clasts are mainly light gray and aphanitic with equigranular textures; one is a poikiloblastic impactite.

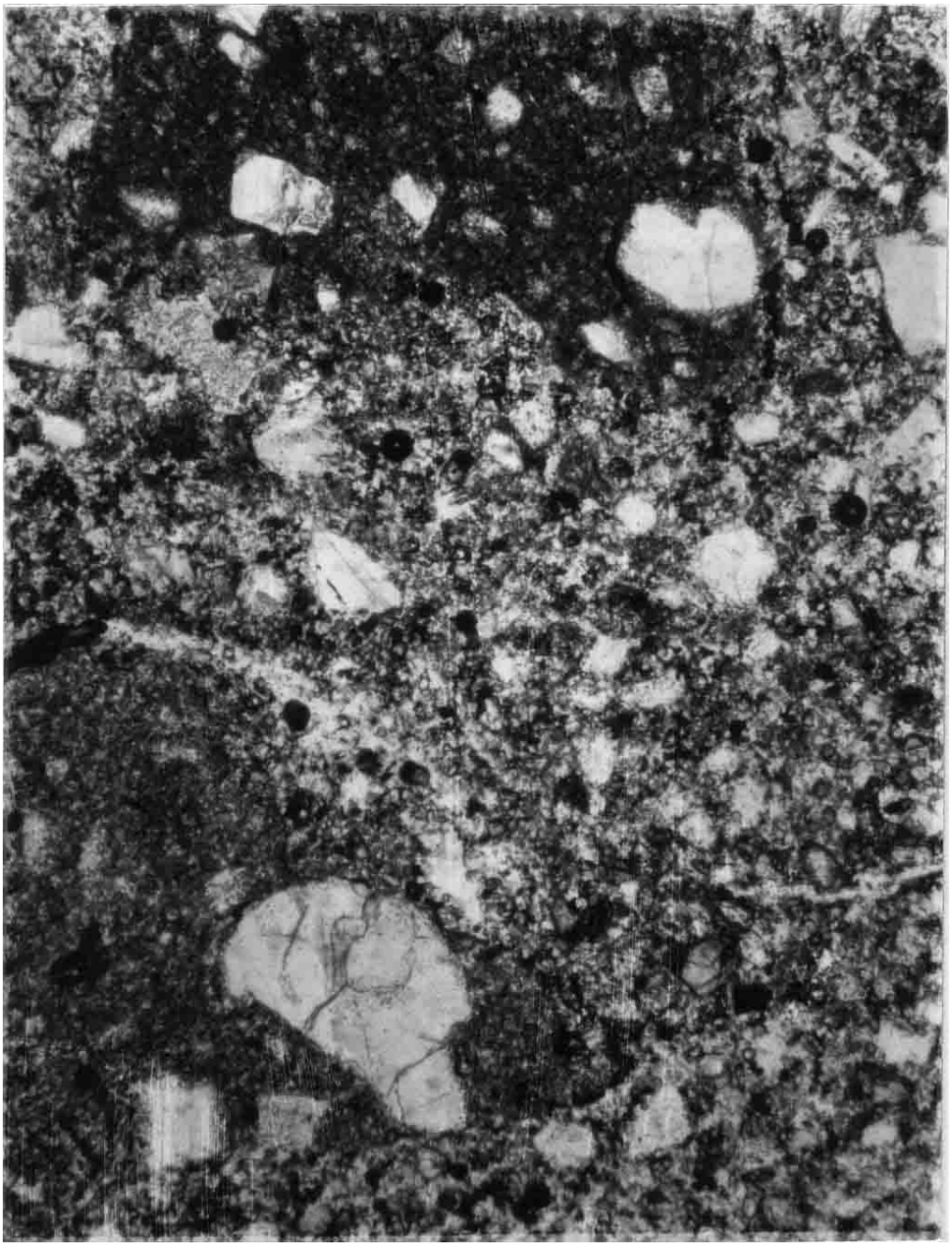

FIGURE 2. 67756,1. General view, ppl. Width 2 mm.

The matrix is coherent and crystalline and contains about 10% mafic minerals. The lack of fine-grained material may be due to recrystallization, a feature also suggested by the restricted mineral compositions: plagioclase An_{98-95} (Fig. 4 of Steele and Smith, 1973) and moderately iron-rich mafic minerals (Fig. 3).

PROCESSING AND SUBDIVISIONS: A single chip was taken to make thin section ,1.

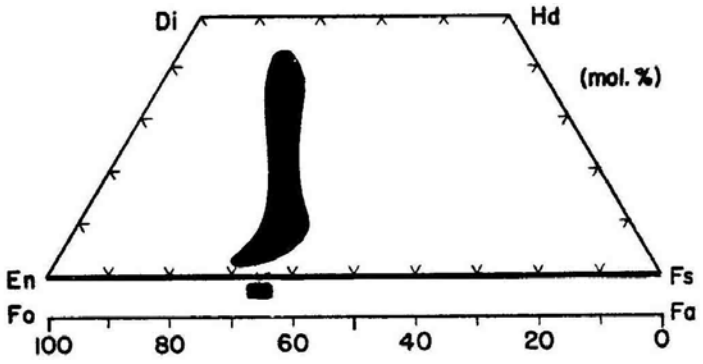

FIGURE 3. Pyroxene and olivine compositions, from Steele and Smith (1973).