

INTRODUCTION: 60659 is a light gray, coherent breccia with many white clasts surrounded by a gray, fragmental matrix (Fig. 1). It is a rake sample collected about 70 m west southwest of the Lunar Module.



FIGURE 1. Smallest scale division in mm. S-73-20471.

PETROLOGY: Petrographic descriptions of the matrix and a large cataclastic anorthosite clast are given by Warner et al. (1976b). The anorthosite is included in a discussion of ferroan anorthosites by Dowty et al. (1974a).

The anorthositic clast has been severely granulated (Fig. 2). Pyroxene is the only mafic mineral observed and occurs as small isolated grains in the matrix. Mineral compositions are shown in Figure 3 and tabulated by Dowty et al. (1976). Accessory phases include spinel and ilmenite.

The matrix is a fragmental breccia with low porosity (Fig. 2).

CHEMISTRY: A defocussed electron beam analysis of the anorthosite clast is presented by Dowty et al. (1974a) and reproduced by Warner et al. (1976b) and here as Table 1. No analysis of the matrix is available.

PROCESSING AND SUBDIVISIONS: In 1973 two chips were removed from one end of the rock. One of these chips was allocated for thin sections as ,1 (Fig. 1).

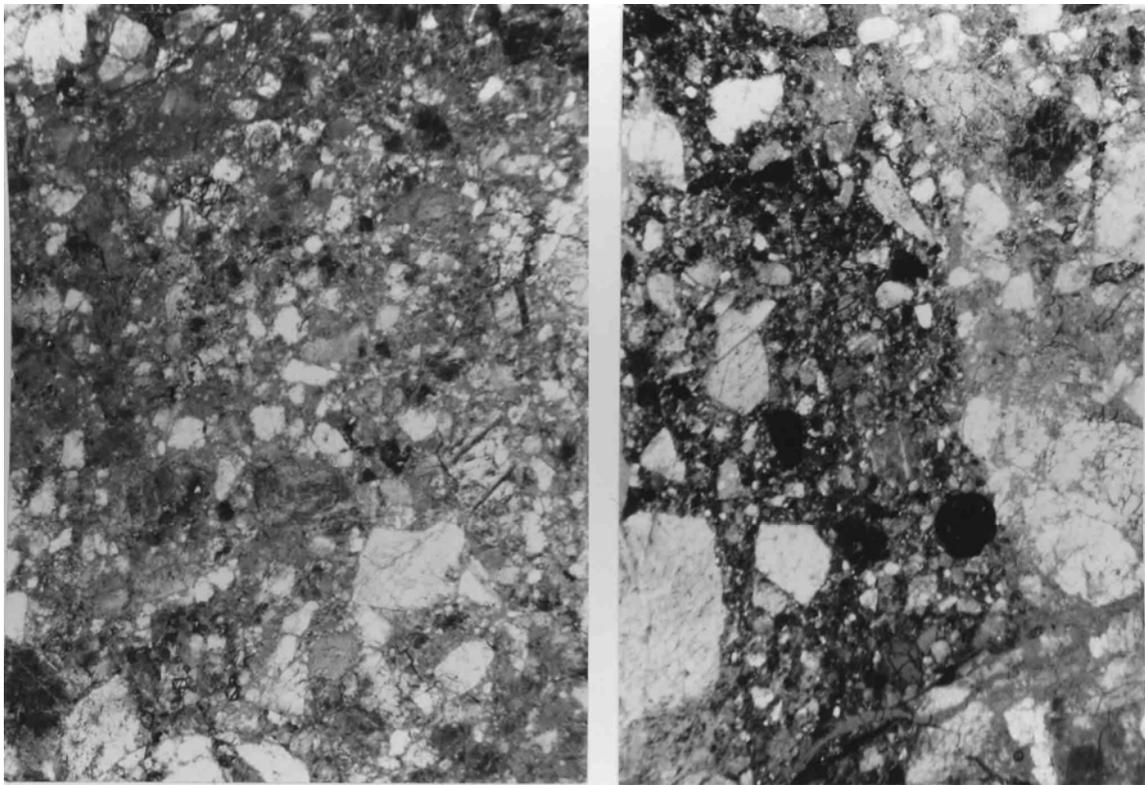


FIGURE 2. 60659,2.

a) Anorthosite clast, partly ppl. Width 2 mm.

b) General matrix (top) and anorthosite clast (bottom), partly xpl. Width 2mm.

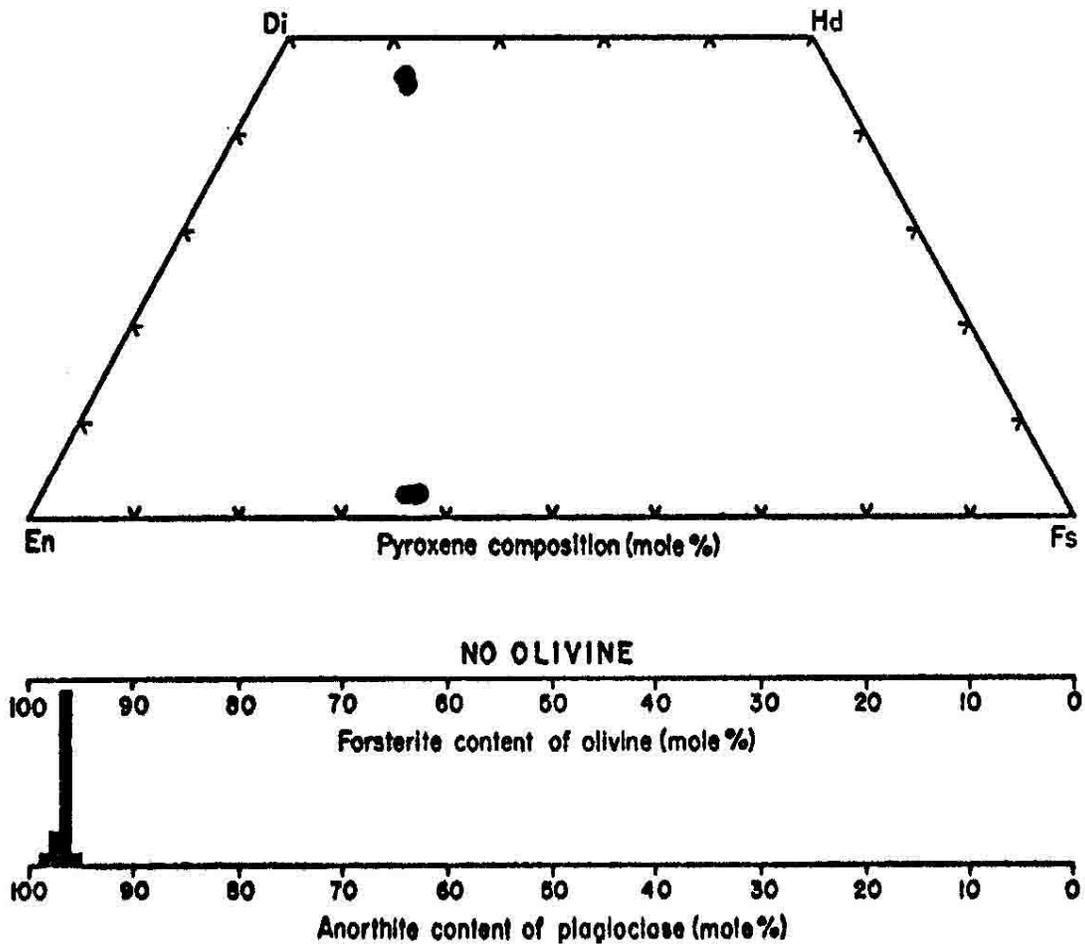


FIGURE 3. Mineral compositions; from R. Warner et al.(1976b).

TABLE 1. Chemistry of 60659 anorthosite clast (DBA, normalized to 100%).

SiO ₂	44.3
TiO ₂	0.02
Al ₂ O ₃	35.4
FeO	0.30
MgO	0.21
CaO	19.3
Na ₂ O	0.43
P ₂ O ₅	0.03