

INTRODUCTION: 65757 is a medium gray, coherent breccia with several anorthositic clasts embedded in a matrix of very fine-grained impact melt (Fig. 1). Dark, vesicular glass coats ~10% of the surface of this rake sample, which has a few zap pits.



FIGURE 1. S-72-47701.

PETROLOGY: Warner et al. (1976b) provide a petrographic description of the matrix and the large anorthosite clast seen in Figure 1. Dowty et al. (1974a) include this clast in a discussion of ferroan anorthosites.

The large white clast is a cataclastic anorthosite with moderately shocked clasts of plagioclase in a granulated matrix (Fig. 2). Pyroxene is the only mafic mineral present. Mineral compositions are shown in Figure 3 and tabulated by Dowty et al. (1976). Accessory phases include spinel and Fe-metal (5.3-7.1% Ni, 0.45-0.48% Co). The metal compositions are within the “meteoritic field” and indicate that the clast is probably not chemically pristine.

The matrix of 65757 consists of laths and tablets of plagioclase in a very fine grained to glassy impact melt (Fig. 2). Angular clasts of plagioclase, and spinel crystals (up to 0.2 mm) are scattered through the glass.

CHEMISTRY: A defocussed electron beam analysis (DBA) of the cataclastic anorthosite clast is presented by Dowty et al. (1974a) and reproduced by Warner et al. (1976b) and here as Table 1.

PROCESSING AND SUBDIVISIONS: In 1973 a single chip was removed (,1) and allocated for Keil for petrography (Fig. 1).

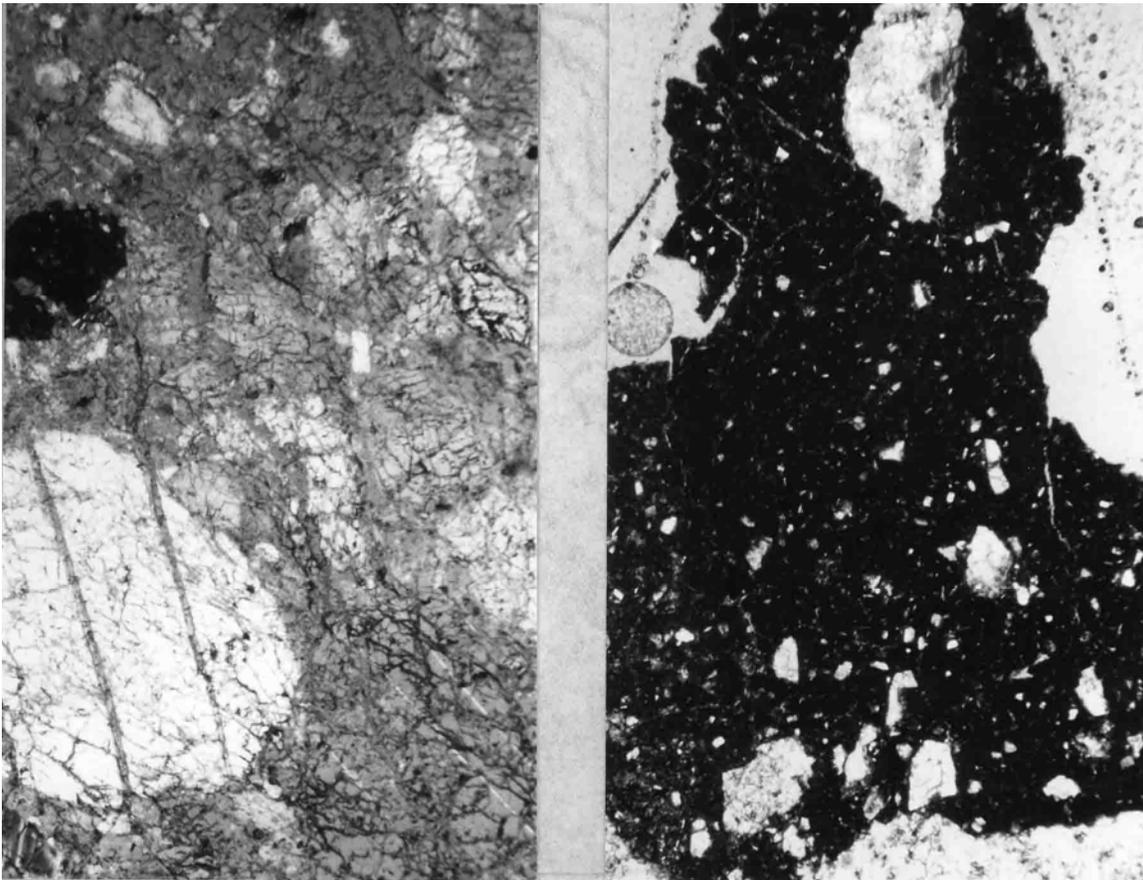


FIGURE 2. 65757,3. Partly xpl.
a) Anorthosite clast. Width 2 mm.
b) Matrix impact melt. Width 2 mm.

TABLE 1. Chemistry of 65757 anorthosite clast (DBA, normalized to 100%)

SiO ₂	44.4
TiO ₂	0.01
Al ₂ O ₃	35.1
FeO	0.50
MgO	0.39
CaO	19.1
Na ₂ O	0.42
K ₂ O	0.02
P ₂ O ₅	0.06

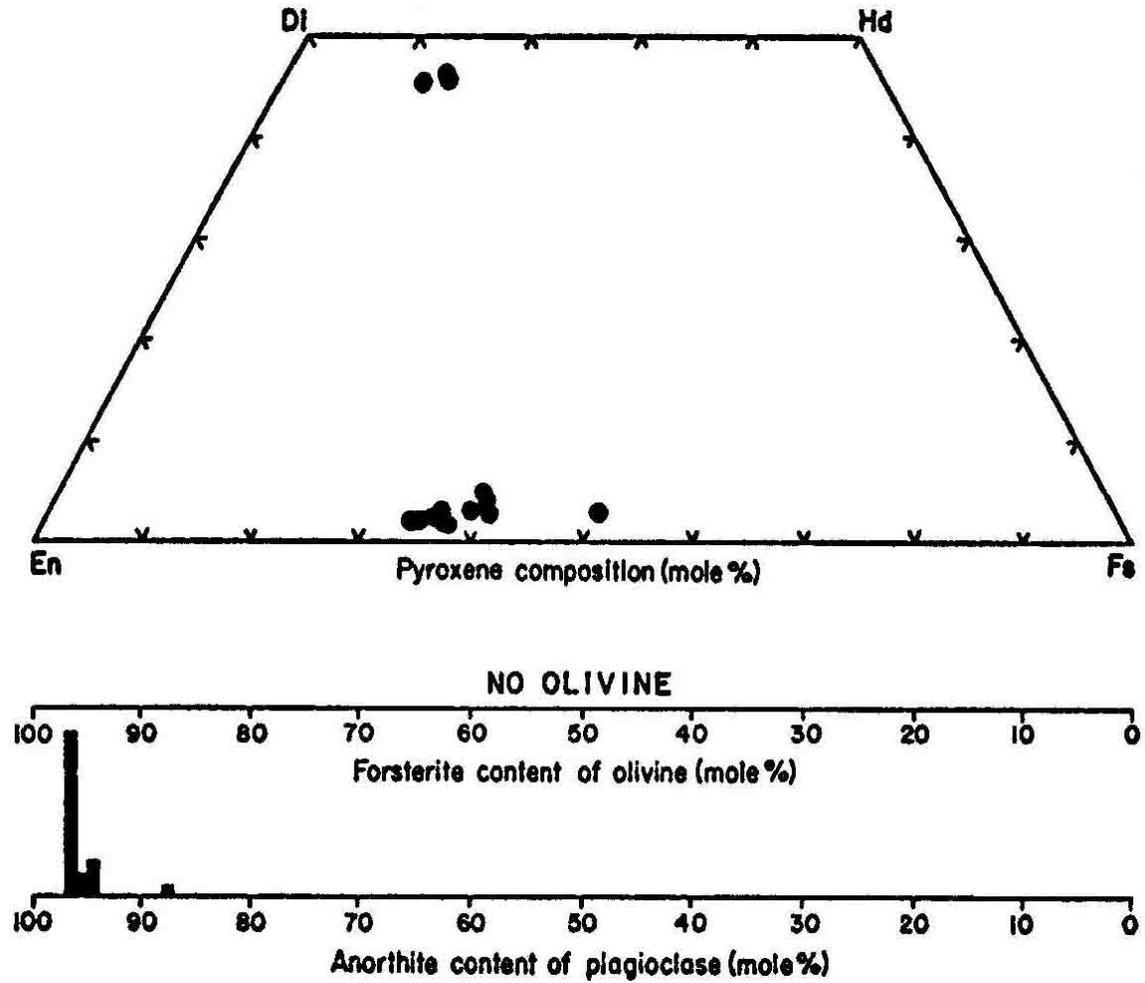


FIGURE 3. Mineral compositions; from R. Warner et al.(1976b).