65795 BASALTIC IMPACT MELT 6.84 g

INTRODUCTION: 65795 is a light gray, friable, basaltic impact melt collected as a rake sample (Fig. 1). A few zap pits and vugs are present.

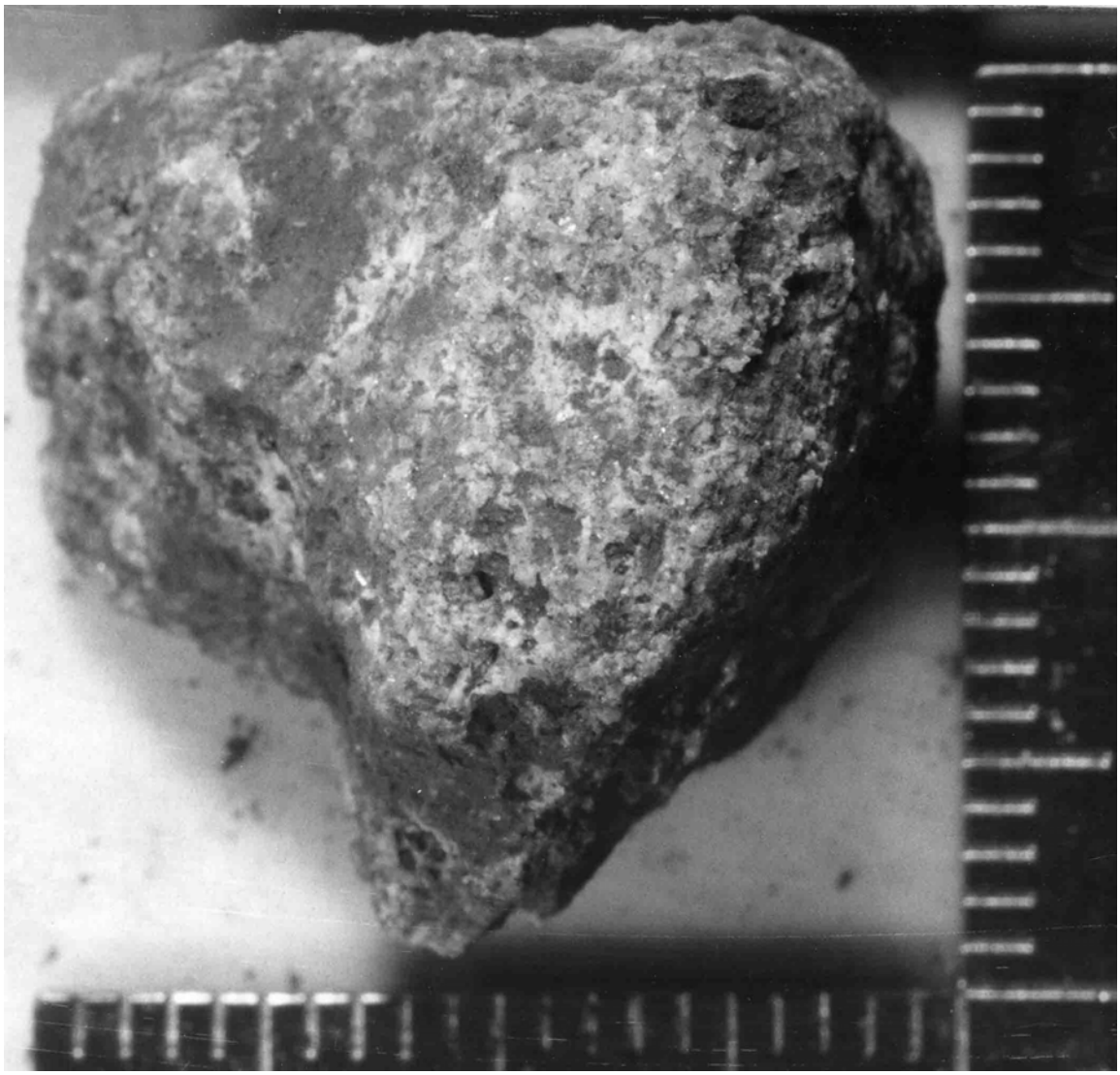

FIGURE 1. Smallest scale division in mm.

PETROLOGY: Dowty et al. (1974b) and Warner et al. (1976b) provide petrographic descriptions. This rock is generally coarse-grained with plagioclase (0.2-1.5 mm) in a variety of crystal forms subophitically to poikilitically enclosed by pyroxene (low Ca > high Ca) and minor olivine (Fig. 2). Some of the larger plagioclases may be xenocrysts. Mineral compositions are shown in Figure 3 and tabulated by Dowty et al. (1976). Accessory phases include ilmenite, Fe-metal (4.7-30.9% Ni, 0.5-1.2% Co), troilite, a high SiO_2 glass (~75% SiO_2, 7-10% K_2O) and a silica phase.

X-ray precession data on two pigeonite grains are given by Dowty et al. (1974b and indicate the presence of submicroscopic exsolution lamellae of augite.

CHEMISTRY: A defocussed electron beam analysis (DBA) is presented by Dowty et al. (1974b) and reproduced by Warner et al. (1976b) and here as Table 1. The analysis shows 65795 to be very aluminous and poor in incompatible elements.

PROCESSING AND SUBDIVISIONS: In 1973 a single chip (,1) was taken for thin sections (Fig. 1).

FIGURE 2. 65795,2. General view, partly xpl. Width 3 mm.

TABLE 1. Chemistry of 65795 (DBA).

SiO_2	45.2
TiO_2	0.19
Al_2O_3	31.4
Cr_2O_3	0.05
FeO	2.25
MnO	0.02
MgO	2.78
CaO	17.3
Na_2O	0.44
K_2O	0.07
P_2O_5	0.08

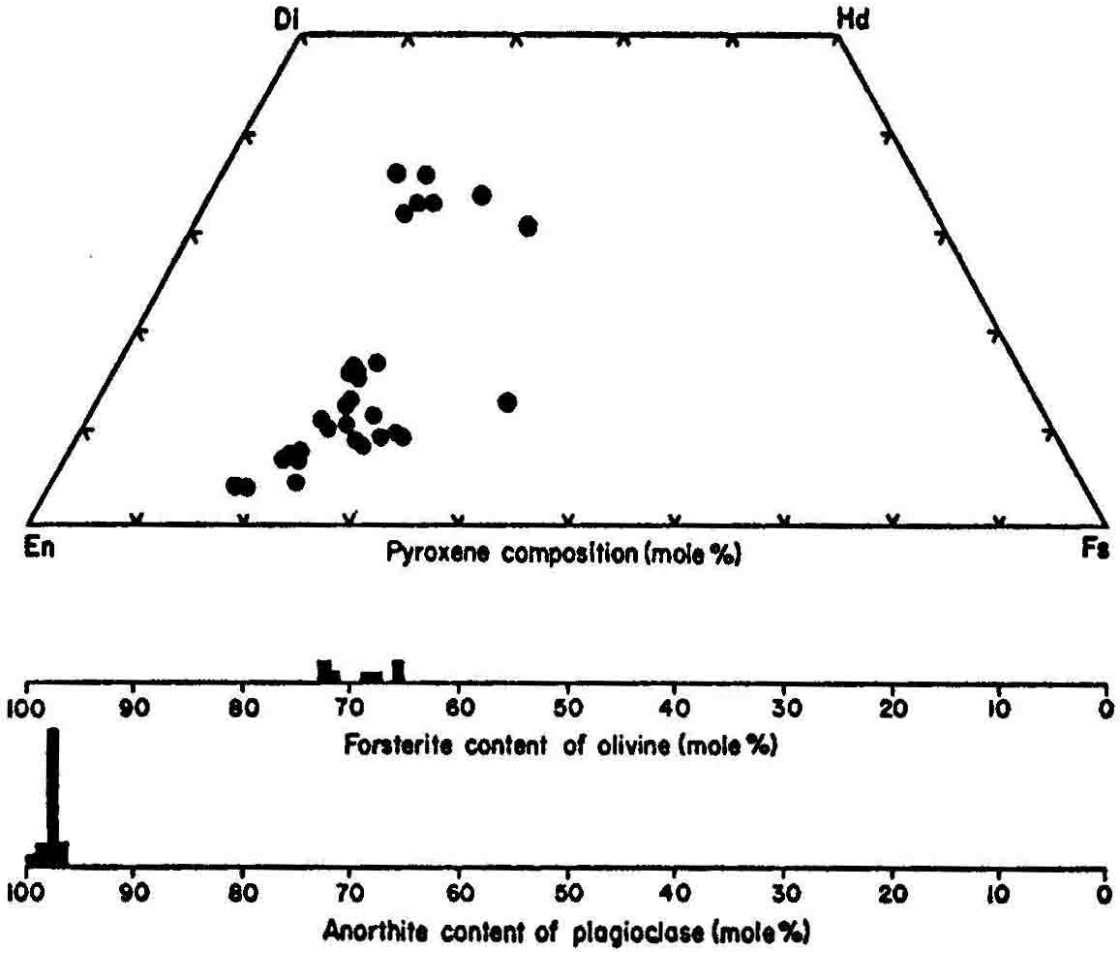

FIGURE 3. Mineral compositions; from R. Warner et al. (1976b).