60616 POIKILITIC IMPACT MELT 3.40 g

INTRODUCTION: 60616 is a medium gray, coherent, poikilitic impact melt (Fig.1). It is a rake sample collected about 70 m west southwest of the Lunar Module and lacks zap pits.

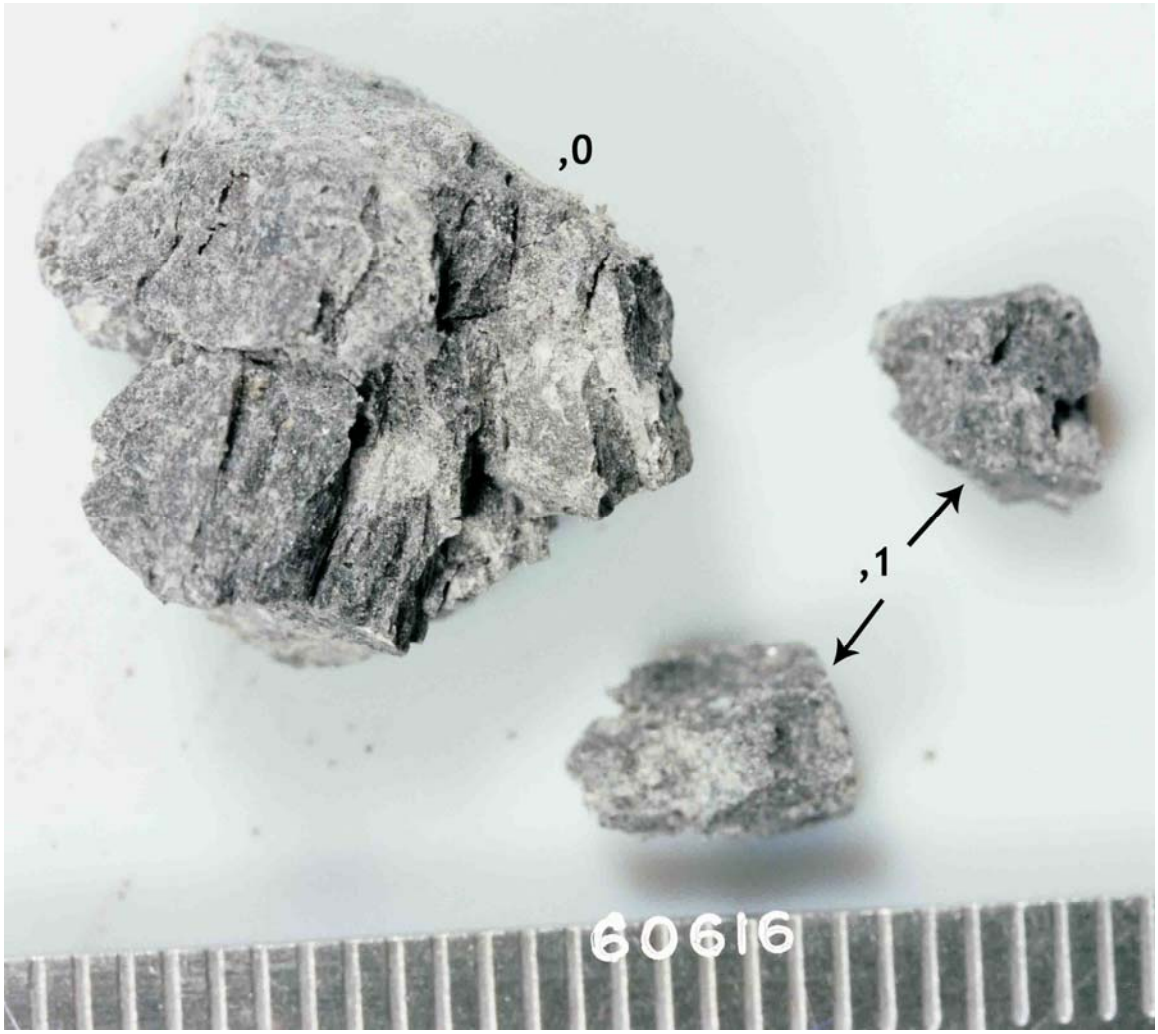

FIGURE 1. Scale division in mm. S-73-20503.

PETROLOGY: Warner et al. (1976b) provide a brief petrographic description and mineral compositions. Oikocrysts are less abundant in 60616 than in most other poikilitic rocks, enclosing only ~60-70% of the area of the section (Fig. 2). Inter-oikocryst areas have a subophitic texture. Clasts are predominantly plagioclase and are abundant. Mineral compositions are shown in Figure 3 and tabulated by Dowty et al. (1976). Minor phases include ilmenite and Fe-metal (6.1-8% Ni, 0.3-0.4% Co).

CHEMISTRY: A defocussed electron beam analysis (DBA) is given by Warner et al. (1976) and reproduced here as Table 1. 60616 is more aluminous than most other Apollo 16 poikilitic rocks.

PROCESSING AND SUBDIVISIONS: In 1973, two chips (,1) were allocated for thin sections (Fig. 1).

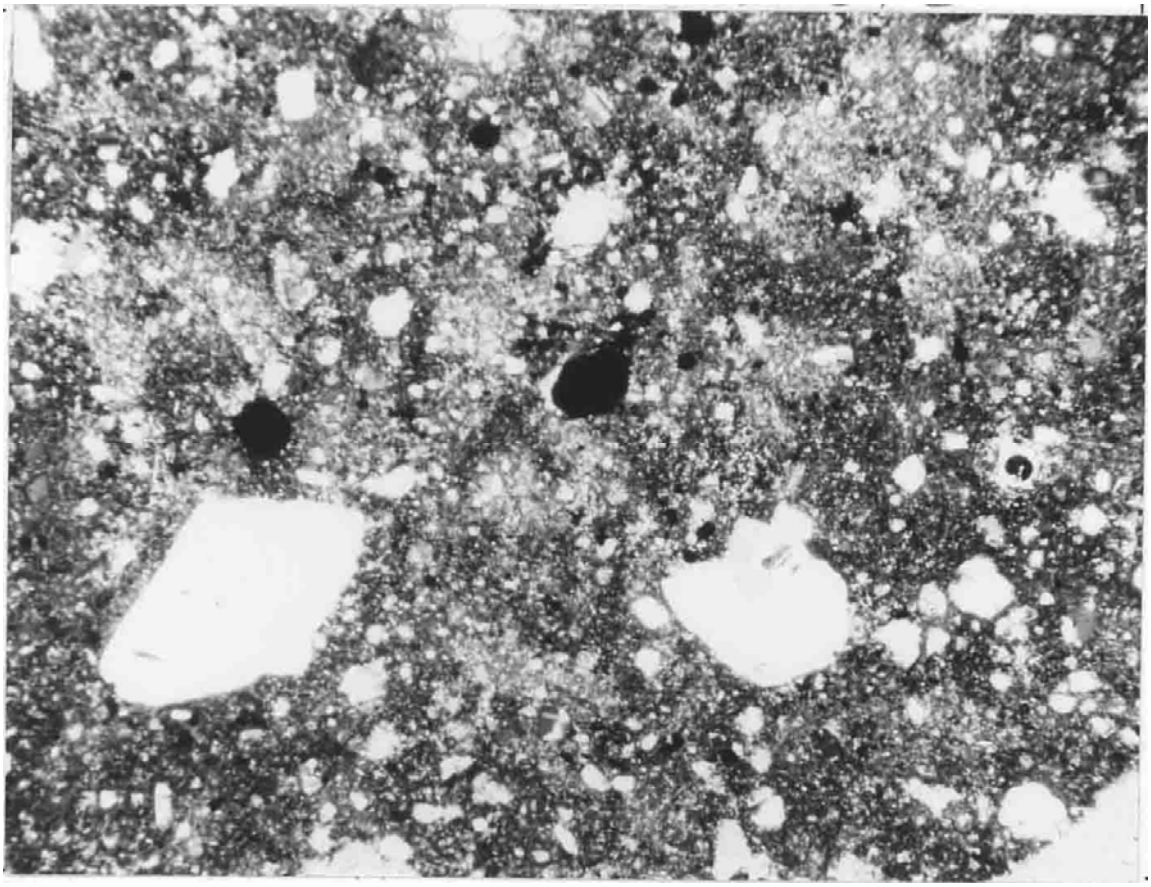

FIGURE 2. 60616,2. ppl. Width 3mm.

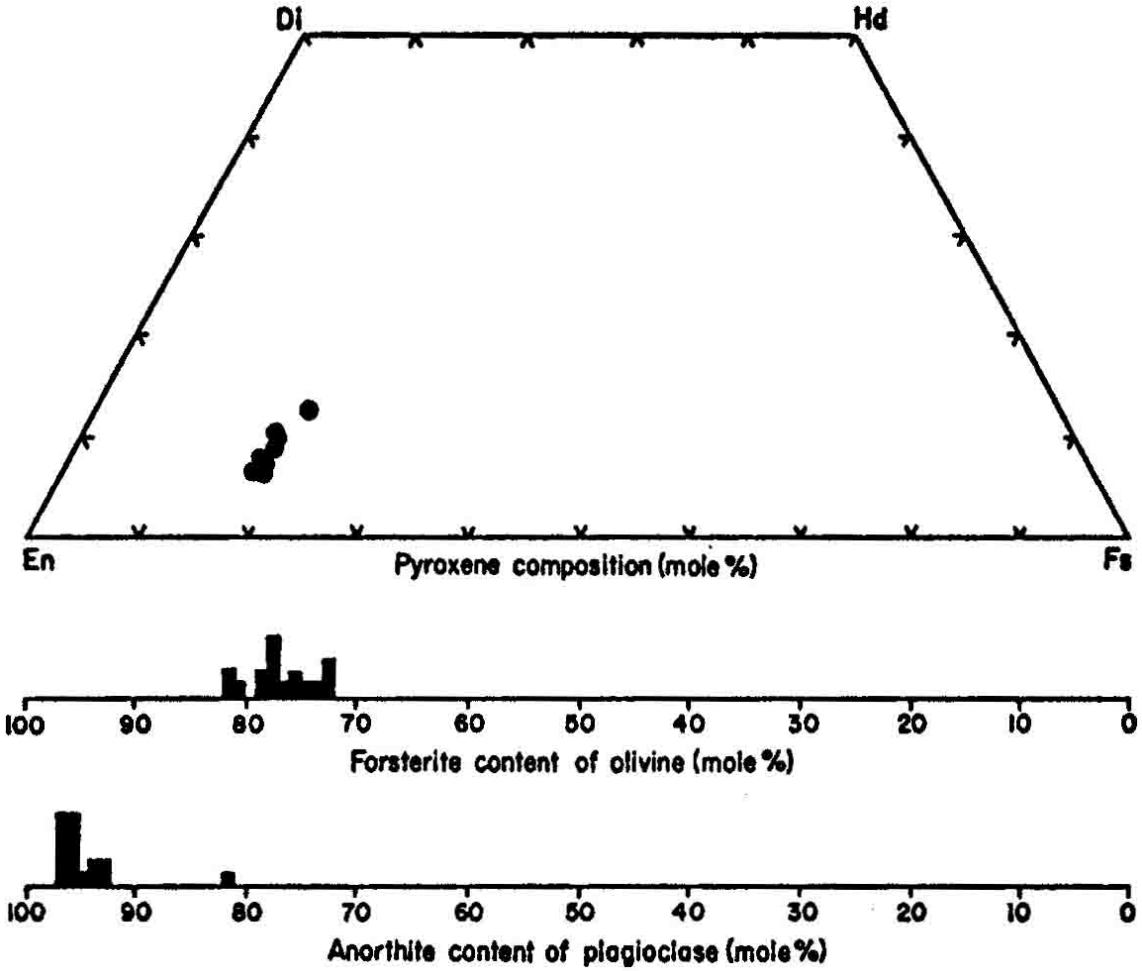

FIGURE 3. Mineral compositions; from R. Warner et al. (1976b).

TABLE 1. Chemistry of 60616 (DBA).

SiO_2	45.5
TiO_2	0.68
Al_2O_3	24.5
Cr_2O_3	0.11
FeO	5.9
MnO	0.06
MgO	8.3
CaO	14.3
Na_2O	0.56
K_2O	0.20
P_2O_5	0.22