<u>INTRODUCTION</u>: 60626 is a light gray, coherent, poikilitic rock that has been extensively fractured. Veins of dark glass cut the rock (Fig. 1). It is a rake sample collected about 70 m west southwest of the Lunar Module. It has zap pits which are heterogeneously distributed.

<u>PETROLOGY</u>: Warner et al. (1976b) provide a brief petrographic description and mineral compositions. 60626 is poikilitic with irregularly shaped oikocrysts of dominantly low-Ca pyroxene. Unlike most Apollo 16 poikilitic impact melts the plagioclase chadacrysts are anhedral and equant. Clasts of plagioclase are abundant (Fig. 2). Mineral compositions are shown in Figure 3 and tabulated by Dowty et al. (1976). Accessory phases include titaniferous spinel (~21% TiO₂), ilmenite, and metal (11.0-1.7% Ni, 0.8% Co).



FIGURE 1. S-73-20493.

<u>CHEMISTRY</u>: Major and trace element data are provided by Laul and Schmitt (1973). A defocussed electron beam analysis (DBA) is given by Warner et al. (1976b).

These data show that 60626 is much more aluminous than most Apollo 16 poikilitic impact melts, at least in part owing to its abundant clasts, and contains low levels of incompatible elements and siderophiles (Table 1).

<u>PROCESSING AND SUBDIVISIONS</u>: In 1973 representative chips were allocated for petrography (,1), chemistry (,3) and Ar geochronological studies (,2).

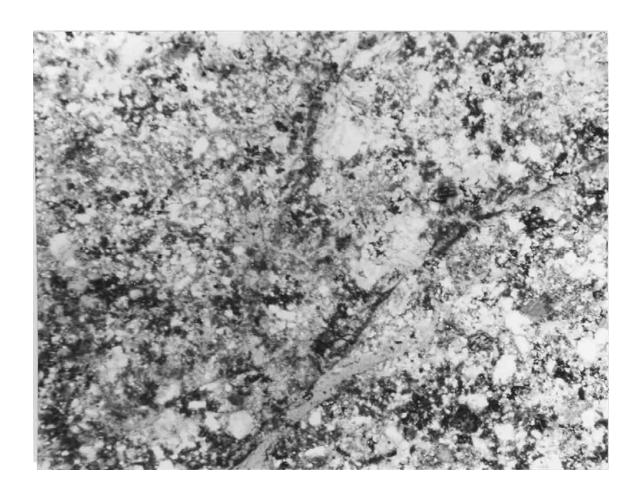


FIGURE 2. 60626,5. General view, ppl. Width 3 mm.

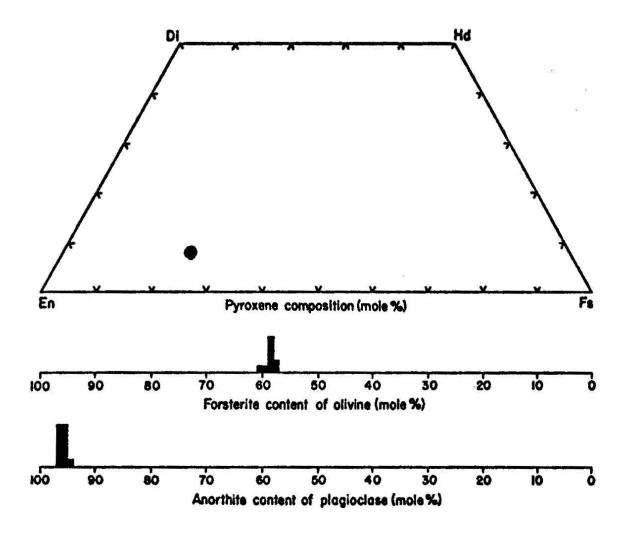


FIGURE 3. Mineral compositions; from R. Warner et al. (1976b).

TABLE 1. Summary chemistry of 60626 (mainly Laul and Schmitt, 1973).

SiO ₂ TiO ₂ O.35 Al ₂ O ₃ Cr ₂ O ₃ FeO FeO FeO MnO MgO SiCaO 16.7 Na ₂ O Na ₂ O O.444 K ₂ O O.10 P ₂ O ₅ Sr La Lu O.14 Rb Sc IO Ni Sc In Sc Zn		
TiO ₂ 0.35 AI ₂ O ₃ 29.4 Cr ₂ O ₃ 0.096 FeO 4.4 MnO 0.061 MgO 3.3 CaO 16.7 Na ₂ O 0.444 K ₂ O 0.10 P ₂ O ₅ 0.04 Sr La 2.1 Lu 0.14 Rb Sc 10 Ni 30 Co 14 Ir ppb Au ppb C N S Zn	S10 ₂	45.3
Cr ₂ O ₃ FeO 4.4 MnO 0.061 MgO 3.3 CaO 16.7 Na ₂ O 0.444 K ₂ O 0.10 P ₂ O ₅ Sr La 2.1 Lu 0.14 Rb Sc 10 Ni 30 Co 14 Ir ppb Au ppb C N S Zn	TiO2	0.35
Cr ₂ O ₃ FeO 4.4 MnO 0.061 MgO 3.3 CaO 16.7 Na ₂ O 0.444 K ₂ O 0.10 P ₂ O ₅ Sr La 2.1 Lu 0.14 Rb Sc 10 Ni 30 Co 14 Ir ppb Au ppb C N S Zn	A1,0,	29.4
FeO 4.4 MnO 0.061 MgO 3.3 CaO 16.7 Na2O 0.444 K2O 0.10 P2O5 Sr La 2.1 Lu 0.14 Rb Sc 10 Ni 30 Co 14 Ir ppb Au ppb C N S Zn	Cr ₂ 0 ₂	0.096
MgO 3.3 CaO 16.7 Na2O 0.444 K2O 0.10 P2O5 Sr La 2.1 Lu 0.14 Rb Sc 10 Ni 30 Co 14 Ir ppb Au ppb C N S Zn		4.4
CaO 16.7 Na20 0.444 K20 0.10 P205 0.04 Sr La 2.1 Lu 0.14 Rb Sc 10 Ni 30 Co 14 Ir ppb Au ppb C N S Zn	Mn0	0.061
Na ₂ 0 0.444 K ₂ 0 0.10 P ₂ 0 ₅ 0.04 Sr La 2.1 Lu 0.14 Rb Sc 10 Ni 30 Co 14 Ir ppb Au ppb C N S Zn	MgO	3.3
K ₂ O 0.10 P ₂ O ₅ 0.04 Sr La 2.1 Lu 0.14 Rb Sc 10 Ni 30 Co 14 Ir ppb Au ppb C N S Zn	Ca0	16.7
K ₂ 0 0.10 P ₂ 0 ₅ 0.04 Sr La 2.1 Lu 0.14 Rb Sc 10 Ni 30 Co 14 Ir ppb Au ppb C N S Zn	Na ₂ O	0.444
P ₂ O ₅ Sr La 2.1 Lu 0.14 Rb Sc 10 Ni 30 Co 14 Ir ppb Au ppb C N S Zn		0.10
Sr La 2.1 Lu 0.14 Rb Sc 10 Ni 30 Co 14 Ir ppb Au ppb C N S Zn	P ₂ 0 ₅	0.04
Lu 0.14 Rb Sc 10 Ni 30 Co 14 Ir ppb Au ppb C N S Zn		
Rb Sc 10 Ni 30 Co 14 Ir ppb Au ppb C N S Zn	La	2.1
Sc 10 Ni 30 Co 14 Ir ppb Au ppb C N S Zn	Lu	0.14
Ni 30 Co 14 Ir ppb Au ppb C N S Zn	Rb	
Co 14 Ir ppb Au ppb C N S Zn	Sc	10
Ir ppb Au ppb C N S Zn	Ni	30
Au ppb C N S Zn	Co	14
Au ppb C N S Zn	Ir ppb	
N S Zn		
S Zn	С	
Zn	N	
	S	
	Zn	
Cu	Cu	

Oxides in wt%, others in ppm except as noted.