60626

Aluminous Impactite

15.9 grams

Figure 1: Photo of 60626. Scale in cm/mm. S73-20493

Introduction

60626 is a highly aluminous impact melt rock that was collected as a rake sample near the LM. It has a poikilitic texture, but the plagioclase chadocrysts have indistinct boundaries. In appearance and in composition, this rake sample is different from other impact melt rocks.

Petrography

Warner et al. (1976) give the only description.

Chemistry

Laul and Schmidt (1973) give an analysis (table 1). The sample as analyzed, has low trace element content.

There is only one thin section – and it may not be representative of the rock.

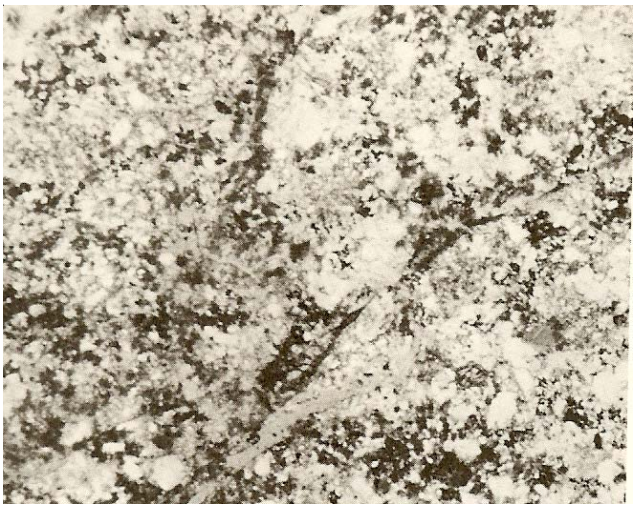

Figure 2: Thin section photo of 60626. Field of view is 2 mm. Warner et al. 1976

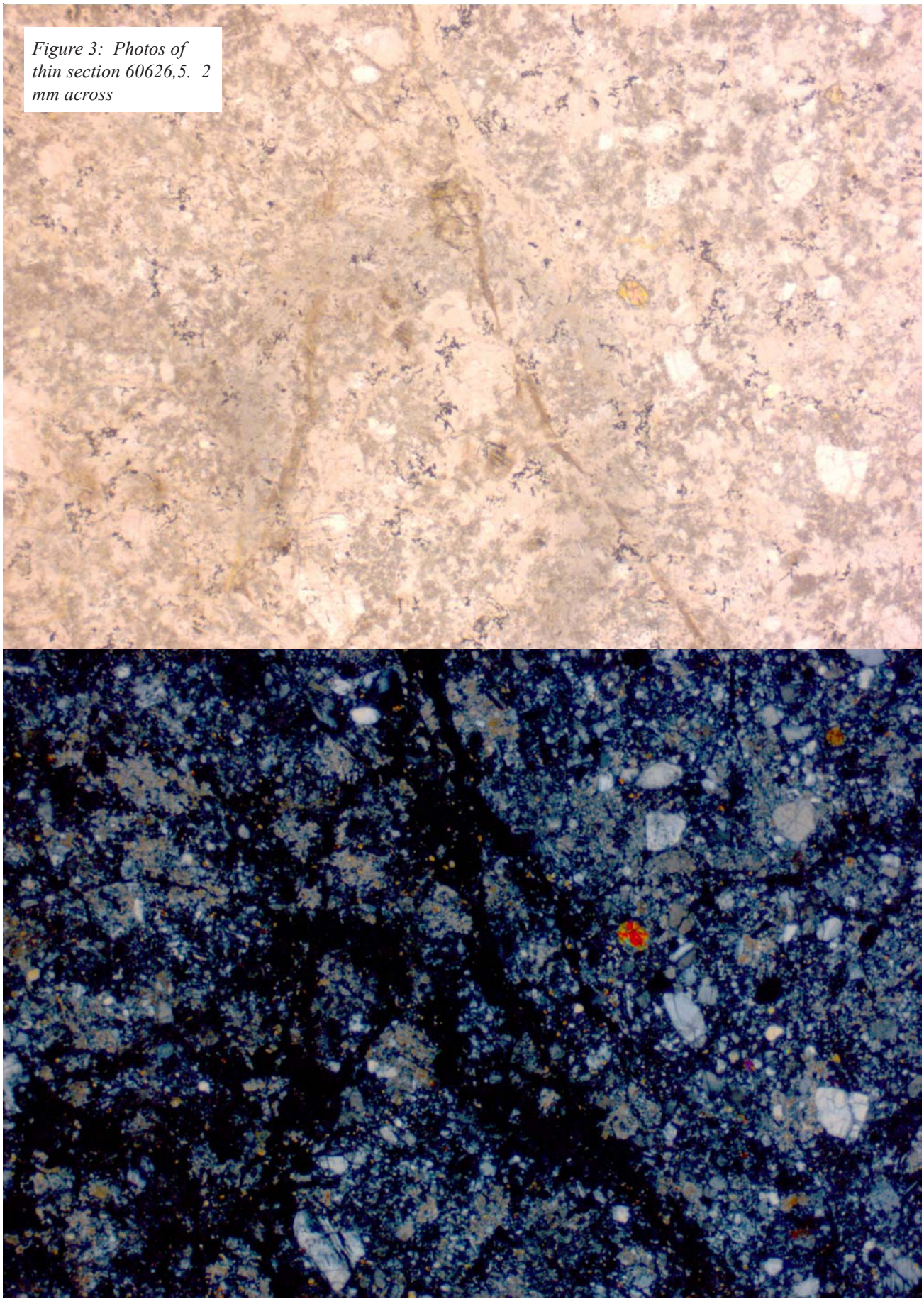

Figure 3: Photos of thin section 60626,5. 2 mm across

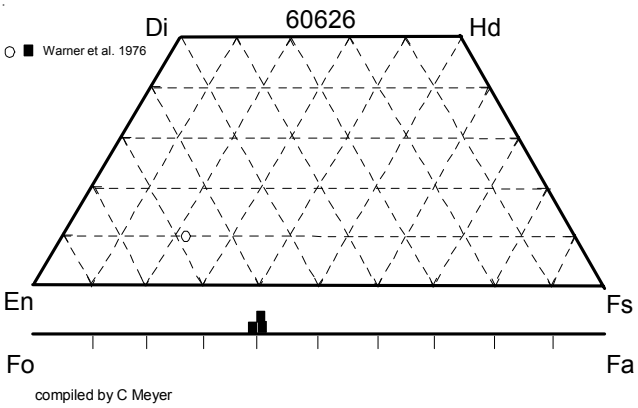

Figure4 : Pyroxene and olivine composition in 60626 (Warner et al. 1976).

References for 60626

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Sutton R.L. (1981) Documentation of Apollo 16 samples. In Geology of the Apollo 16 area, central lunar highlands. (Ulrich et al.) U.S.G.S. Prof. Paper 1048.

Warner R.D., Dowty E., Prinz M., Conrad G.H., Nehru C.E. and Keil K. (1976c) Catalog of Apollo 16 rake samples from the LM area and station 5. Spec. Publ. #13, UNM Institute of Meteoritics, Albuquerque. 87 pp.

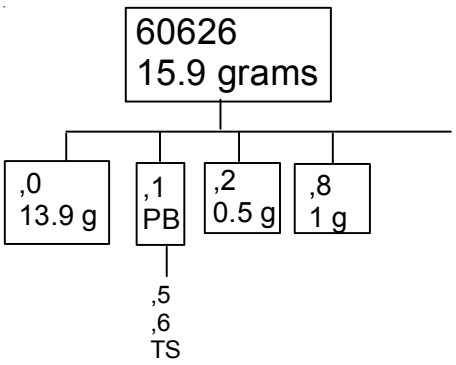

Table 1. Chemical composition of 60626

reference	Laul73		Warner76	
weight				
SiO2 %			45.3	(b)
TiO2	0.37	(a)	0.32	(b)
Al2O3	29.1	(a)	29.6	(b)
FeO	5	(a)	3.7	(b)
MnO	0.061	(a)	0.04	(b)
MgO	3	(a)	3.3	(b)
CaO	16.2	(a)	17.1	(b)
Na2O	0.444	(a)	0.47	(b)
K2O	0.15	(a)	0.05	(b)
P2O5			0.04	(b)
S %				
sum				
Sc ppm	10	(a)		
V	20	(a)		
Cr	657	(a)		
Co	14	(a)		
Ni	30	(a)		
Cu				
Zn				
Ga				
Ge ppb				
As				
Se				
Rb				
Sr				
Y				
Zr	35	(a)		
Nb				
Mo				
Ru				
Rh				
Pd ppb				
Ag ppb				
Cd ppb				
In ppb				
Sn ppb				
Sb ppb				
Te ppb				
Cs ppm				
Ba	40	(a)		
La	2.1	(a)		
Ce	6	(a)		
Pr				
Nd	4	(a)		
Sm	1.1	(a)		
Eu	0.96	(a)		
Gd				
Tb	0.2	(a)		
Dy	1.5	(a)		
Ho				
Er				
Tm				
Yb	1	(a)		
Lu	0.14	(a)		
Hf	0.85	(a)		
Ta	0.12	(a)		
W ppb				
Re ppb				
Os ppb				
Ir ppb				
Pt ppb				
Au ppb				
Th ppm	0.3	(a)		
U ppm				

technique: (a) INAA, (b) broad beam e probe