

**60629**  
Ferroan Anorthosite  
4.9 grams



Figure 1: Photo of 60629 showing black glass attached to anorthosite. Scale marked in mm. S73-20484

**Introduction**

60629 was found as a rake sample from the regolith near the LM.

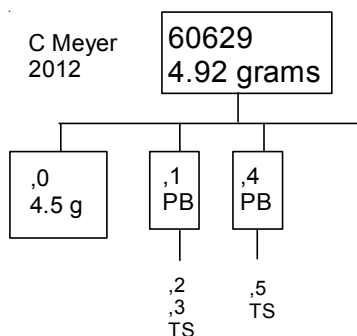
**Petrography**

Dowty et al. (1974) and Warner et al. (1976) reported that 60629 was an anorthosite with attached black glass. The anorthosite has a cataclastic texture (figure 2). The pyroxenes in 60629 indicate that this sample is ferroan anorthosite (figure 3).

The black glass attached to 60629 was analyzed by See et al. (1986) and Morris et al. (1986).



Figure 2: Phot of thin section 60629,2 showing shocked plagioclase with trapped melt inc. by C Meyer 2 mm



**Chemistry**

The composition of the anorthositic part of 60629 was determined by Dowty et al. (1974) and See et al. (1986).

**Processing**

There are two thin sections for 60629.

**Table 1. Chemical composition of 60629**

reference	Dowty74	glass See 86	interior See 86	glass Morris86	
<i>weight</i>					
SiO <sub>2</sub> %	44.6	(a) 45.54	43.94	(b)	
TiO <sub>2</sub>	0.01	(a) 0.3	0.03	(b)	
Al <sub>2</sub> O <sub>3</sub>	35.1	(a) 28.4	33.5	(b)	
FeO	0.36	(a) 4.24	1.63	(b) 6.28	(c)
MnO			0.05	(b)	
MgO	0.26	(a) 5.18	1.76	(b)	
CaO	19.2	(a) 16.28	18.51	(b)	
Na <sub>2</sub> O	0.41	(a) 0.63	0.36	(b) 0.58	(c)
K <sub>2</sub> O	0.02	(a) 0.08	0.03	(b)	
P <sub>2</sub> O <sub>5</sub>	0.03	(a)			
S %					
<i>sum</i>					
Sc ppm				6.15	(c)
V					
Cr				776	(c)
Co				66	(c)
Ni				1321	(c)
Cu					
Zn					
Ga					
Ge ppb					
As					
Se					
Rb					
Sr					
Y					
Zr					
Nb					
Mo					
Ru					
Rh					
Pd ppb					
Ag ppb					
Cd ppb					
In ppb					
Sn ppb					
Sb ppb					
Te ppb					
Cs ppm					
Ba				174	(c)
La				10.27	(c)
Ce				23.4	(c)
Pr					
Nd					
Sm				4.43	(c)
Eu				1.15	(c)
Gd					
Tb				0.94	(c)
Dy					
Ho					
Er					
Tm					
Yb				3.02	(c)
Lu				0.43	(c)
Hf				3.21	(c)
Ta				0.35	(c)
W ppb					
Re ppb					
Os ppb					
Ir ppb					
Pt ppb					
Au ppb					
Th ppm				2.34	(c)
U ppm				0.52	(c)
<i>technique:</i>					
		(a) Broad beam e. probe,	(b) e probe,	(c) INAA	

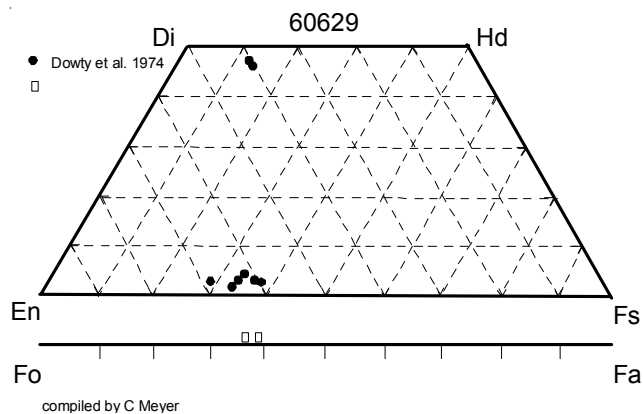


Figure 3: Composition of pyroxene and olivine in 60629 (Warner et al. 1976).

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