

78526
Green Glass
8.8 grams



Figure 1: Photo of 76526. Scale in mm. S73-21027.

Introduction

78526 is a rake sample – see section on 78501. It contains both green glass and basalt clasts. The glass has very low trace element content.

Processing

There are 6 thin sections of 78526.

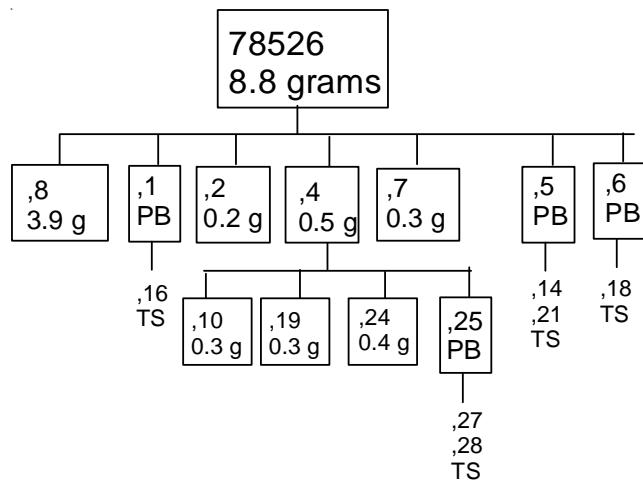
Petrography

Warner et al. (1978) found two textural domains. In one, the green glass has feathery pyroxene and acicular, chain olivine and pyroxene. In the other, the green glass has small, hopper olivines and tiny chromite euhedra.

Relic grains of olivine, pigeonite, plagioclase, chromite and metal occur in the glass and two types of very low-Ti mare basalt are present as lithic relicts – one has porphyric texture, the other a granular texture.

Chemistry

Laul and Schmitt (1975) and Murali et al. (1977) reported analyses (figure 5). Jovanovic and Reed (1978) reported Cl, Br, I, U and P.



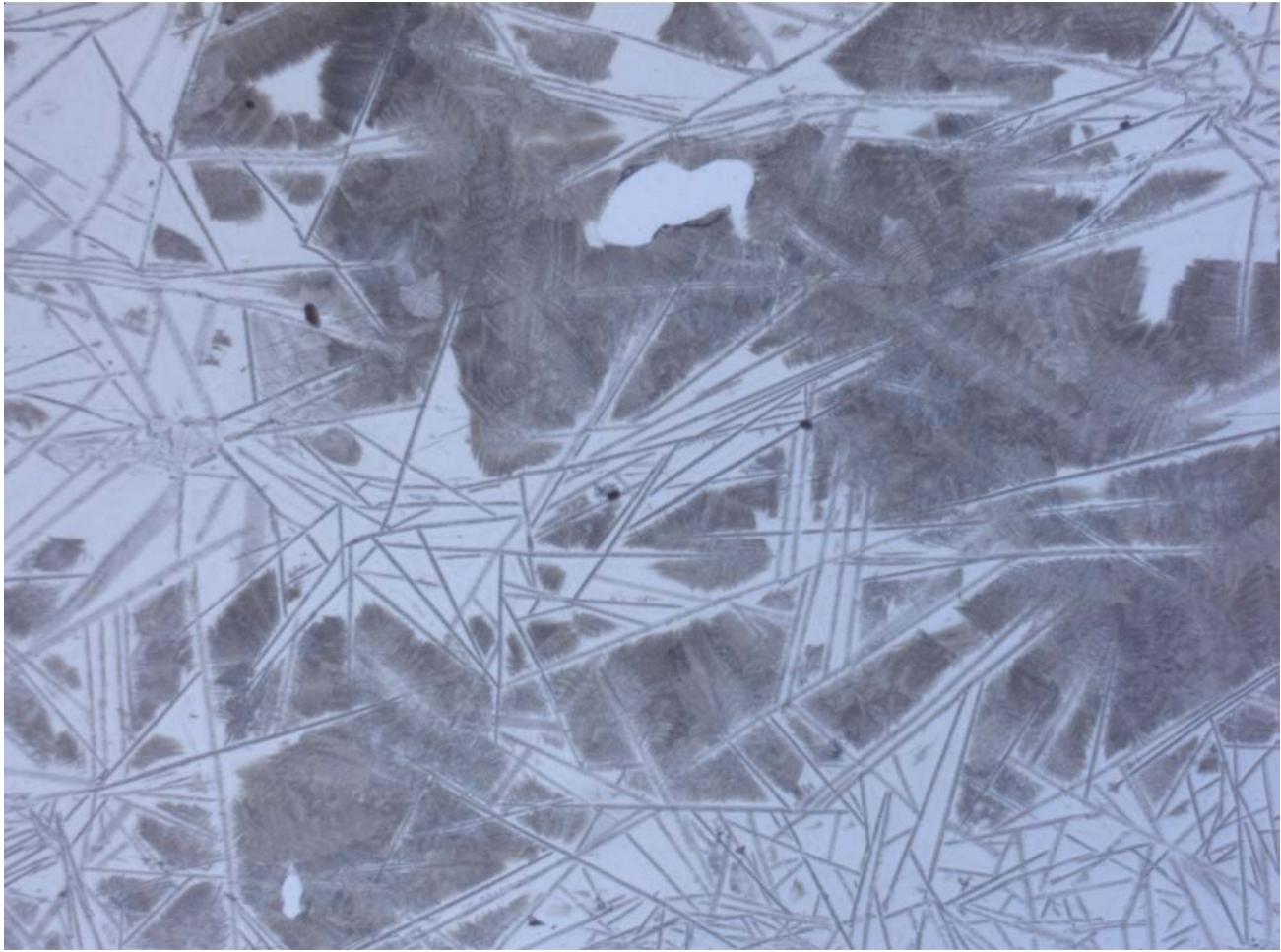


Figure 2: Photomicrograph of 78526, 18. 2 mm across

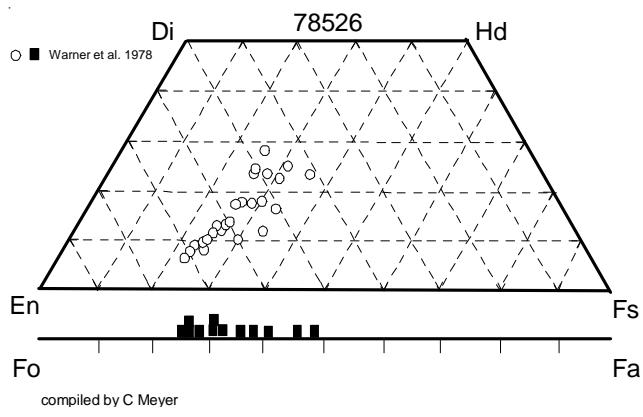


Figure 3: Composition of olivine and pyroxene in 78526.



Figure 4 : Processing photo of 78526. S76-21922.
Scale is metric.

Table 1. Chemical composition of 78526

reference	Warner78		Murali77		Laul75
weight					
SiO ₂ %					
TiO ₂	0.8	1.1	(a)	1.1	0.8
Al ₂ O ₃	11.1	10.7	(a)	10.7	11.1
FeO	17.4	17.6	(a)	17.6	17.4
MnO	0.26	0.28	(a)	0.278	0.26
MgO	11	12	(a)	12	11
CaO	10	9.7	(a)	9.7	10
Na ₂ O	0.15	0.16	(a)	0.16	0.15
K ₂ O	0.02	0.02	(a)	0.015	0.02
P ₂ O ₅					
S %					
sum					
Sc ppm		48		51	(b)
V		237		220	(b)
Cr	5060	7000	(a)		
Co		44		45.4	(b)
Ni					
Cu					
Zn					
Ga					
Ge ppb					
As					
Se					
Rb					
Sr					
Y					
Zr		226			(b)
Nb					
Mo					
Ru					
Rh					
Pd ppb					
Ag ppb					
Cd ppb					
In ppb					
Sn ppb					
Sb ppb					
Te ppb					
Cs ppm					
Ba					
La		1.3		1.2	(b)
Ce					
Pr					
Nd					
Sm		1.1		1	(b)
Eu		0.25		0.3	(b)
Gd					
Tb		0.27		0.28	(b)
Dy		1.8		2	(b)
Ho					
Er					
Tm					
Yb		1.4		1.4	(b)
Lu		0.24		0.23	(b)
Hf		0.7		0.5	(b)
Ta		0.05		0.06	(b)
W ppb					
Re ppb					
Os ppb					
Ir ppb					
Pt ppb					
Au ppb					
Th ppm					
U ppm					
technique:	(a) e. probe, (b) INAA				

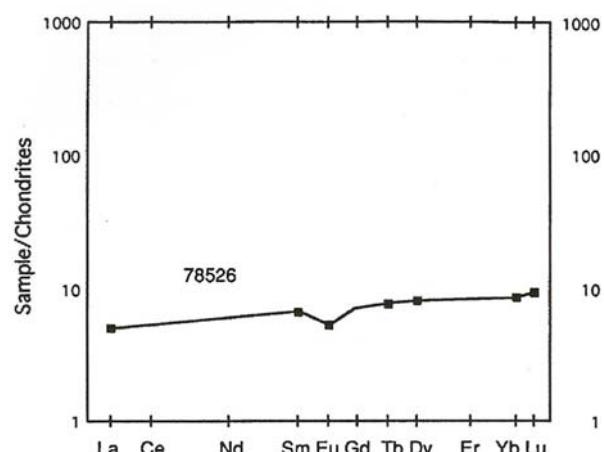


Figure 5: This unusual rare earth element pattern must mean something.

References for 78526

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