76575

Breccia

16.2 grams

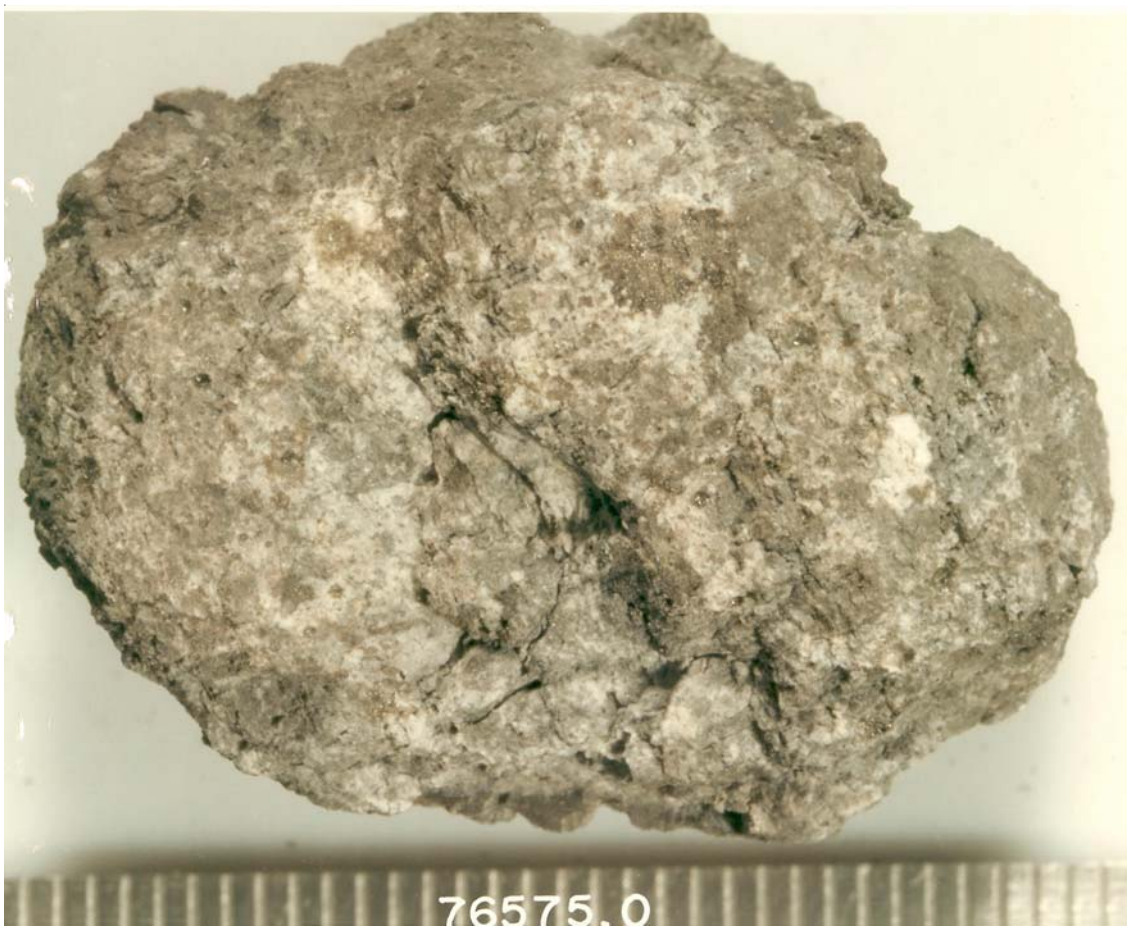


Figure 1: Photo of 76575 with mm scale. S73-19633.

Introduction

76575 is covered with a thin brown patina and many micrometeorite pits (figure 1). It was collected as a rake sample at station 6, on the North Massif - see section on 76501.

Petrography

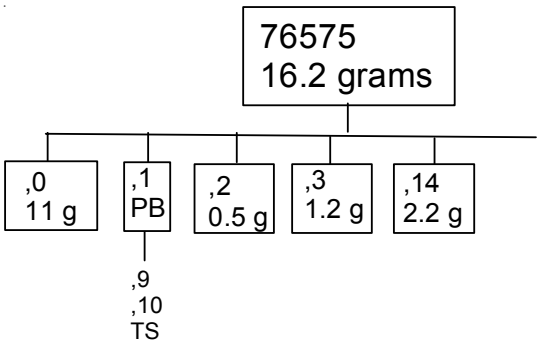
76575 is a different kind of highland breccias (Meyer 1994). It is highly aluminous, with a suevite-like texture (figure 2). It undoubtedly has an impact origin, but didn't reach the melting point.

Chemistry

Wiesmann and Hubbard (1976) provided an analysis (figure 3).

Processing

There are 8 thin section of 76575.



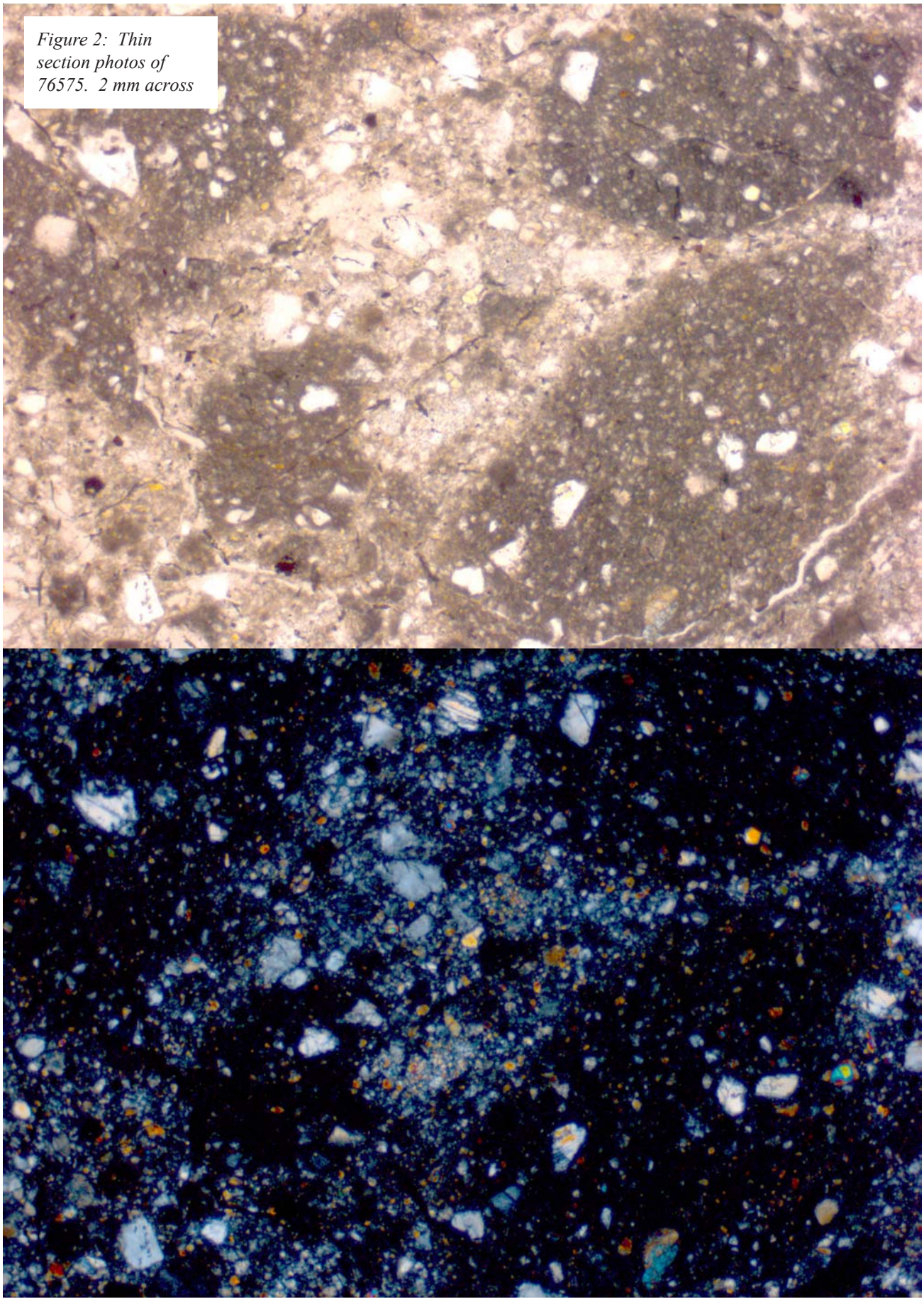


Figure 2: Thin section photos of 76575. 2 mm across

Table 1. Chemical composition of 76575

reference	Wiesman76		Simonds81	
weight				
SiO2 %			44.83	(b)
TiO2			0.34	(b)
Al2O3			25.77	(b)
FeO			5.61	(b)
MnO			0.08	(b)
MgO			7.45	(b)
CaO			15.23	(b)
Na2O			0.35	(b)
K2O	0.032	(a)	0.03	(b)
P2O5			0.04	(b)
S %			0.04	(b)
sum				
Sc ppm				
V				
Cr			752	(b)
Co				
Ni				
Cu				
Zn				
Ga				
Ge ppb				
As				
Se				
Rb	0.697	(a)		
Sr	143	(a)		
Y				
Zr	47	(a)		
Nb				
Mo				
Ru				
Rh				
Pd ppb				
Ag ppb				
Cd ppb				
In ppb				
Sn ppb				
Sb ppb				
Te ppb				
Cs ppm				
Ba	36.7	(a)		
La	2.67	(a)		
Ce	7.02	(a)		
Pr				
Nd	4.49	(a)		
Sm	1.31	(a)		
Eu	0.775	(a)		
Gd	1.75	(a)		
Tb				
Dy	1.9	(a)		
Ho				
Er	1.25	(a)		
Tm				
Yb	1.16	(a)		
Lu	0.169	(a)		
Hf				
Ta				
W ppb				
Re ppb				
Os ppb				
Ir ppb				
Pt ppb				
Au ppb				
Th ppm	0.48	(a)		
U ppm	0.13	(a)		

technique: (a) IDMS, (b) whatever

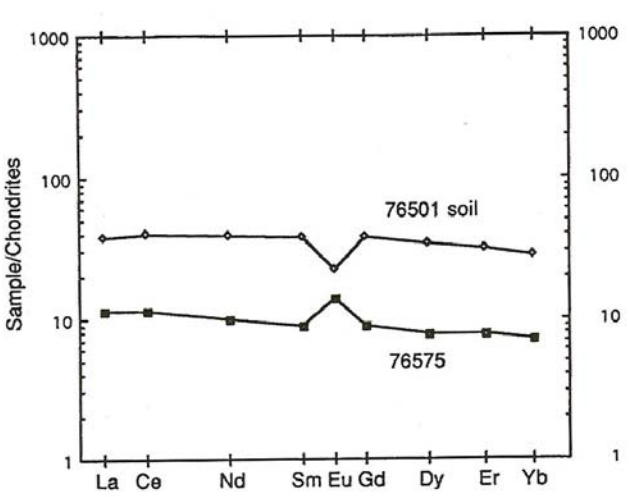


Figure 3: A comparison of the composition of 76575 with the soil weher it was found.

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