

**76577 – 13.5 grams**  
**Impact Melt Breccia**



*Figure 1: Photo of 76577. Scale in mm. S73-19645*

**Introduction**

76577 was collected as a rake sample from the base of the North Massif – see section on 76501.

**Petrography**

It is a light tan, vesicular, impact melt rock with a poikilitic texture (figures 2 and 3). Mineral compositions have not been reported.

**Chemistry**

All we have for analyses of 76577 are data from fused bead electron probe analyses (table).

**Processing**

There are two thin sections of 76577.

**References for 76577**

Butler P. (1973) Lunar Sample Information Catalog Apollo 17. Lunar Receiving Laboratory. MSC 03211 Curator's Catalog, pp. 447.

Meyer C. (1994) **Catalog of Apollo 17 rocks**: Volume 4. Curator's Office JSC 26088 pp. 644

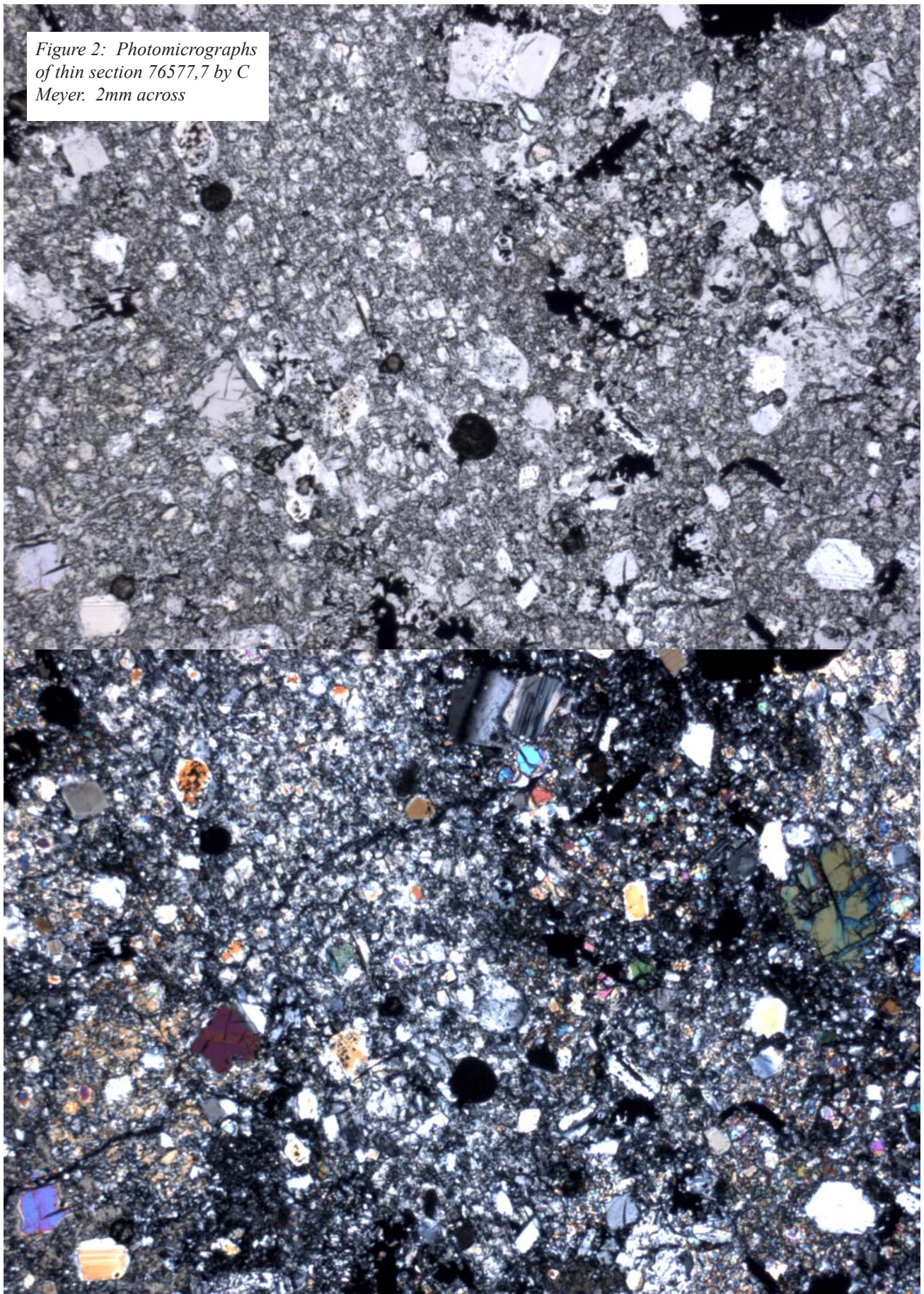
Phinney W.C., Simonds C.H. and Warner J. (1974) Description, Classification and Inventory of Apollo 17 Rake Samples from Station 6. Curator's Catalog, pp. 46.

Simonds C.H. and Warner J.L. (1981) Petrochemistry of Apollo 16 and 17 samples (abs). *Lunar Planet. Sci.* **XII**, 993-995. Lunar Planetary Institute, Houston.

Wolfe E.W., Bailey N.G., Lucchitta B.K., Muehlberger W.R., Scott D.H., Sutton R.L and Wilshire H.G. (1981) The geologic investigation of the Taurus-Littrow Valley: Apollo 17 Landing Site. US Geol. Survey Prof. Paper, 1080, pp. 280.

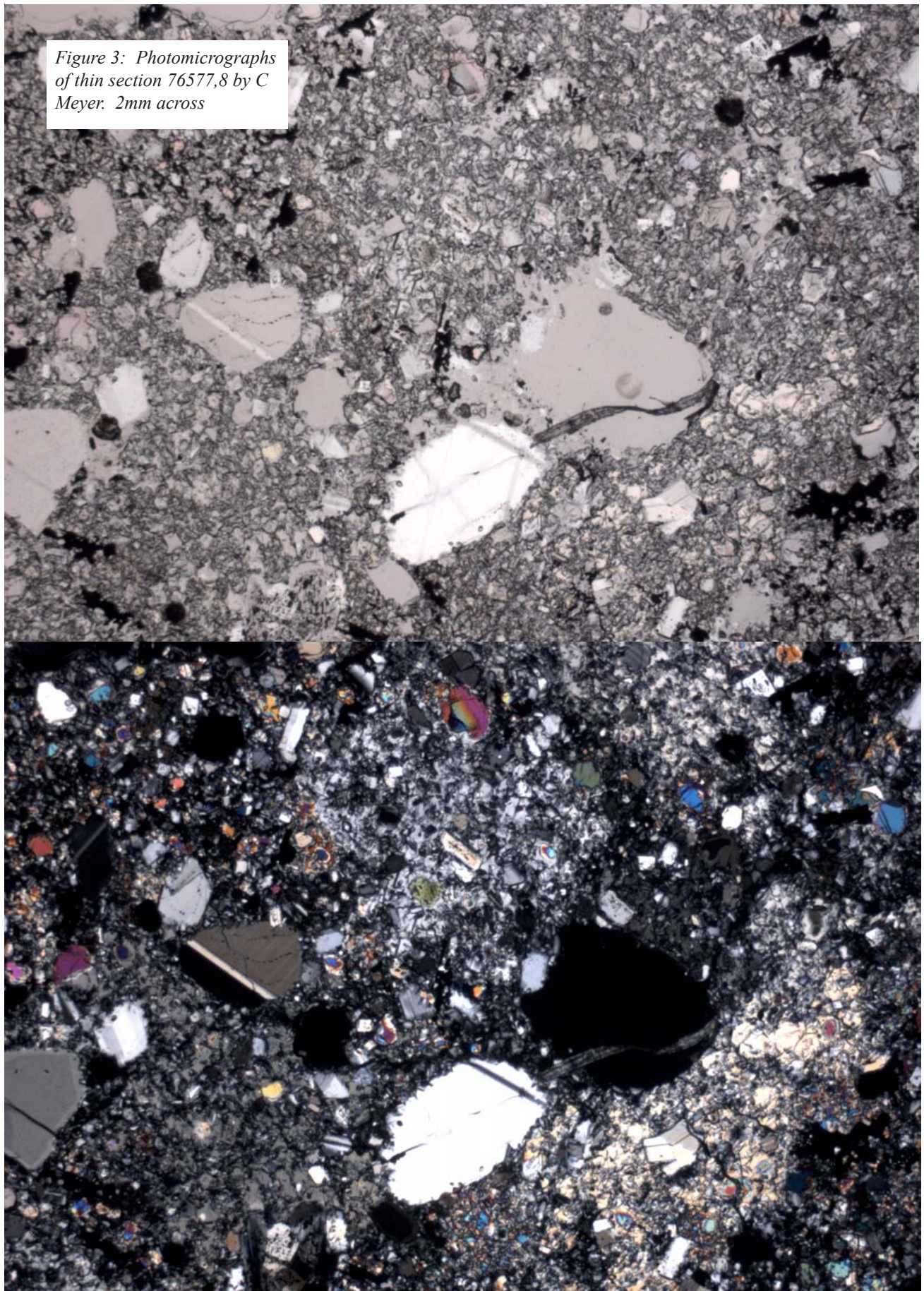


*Figure 2: Photomicrographs of thin section 76577,7 by C Meyer. 2mm across*





*Figure 3: Photomicrographs of thin section 76577,8 by C Meyer. 2mm across*



**Table 1. Chemical composition of 76577.**

<i>reference</i>	Simonds81	
<i>weight</i>		
SiO <sub>2</sub> %	46.34	(a)
TiO <sub>2</sub>	1.49	(a)
Al <sub>2</sub> O <sub>3</sub>	18.07	(a)
FeO	8.02	(a)
MnO		
MgO	11.94	(a)
CaO	11.09	(a)
Na <sub>2</sub> O	0.8	(a)
K <sub>2</sub> O	0.33	(a)
P <sub>2</sub> O <sub>5</sub>		
S %		
<i>sum</i>		

Sc ppm		
V		
Cr	1163	(a)
Co		
Ni		
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		
La		
Ce		
Pr		
Nd		
Sm		
Eu		
Gd		
Tb		
Dy		
Ho		
Er		
Tm		
Yb		
Lu		
Hf		
Ta		
W ppb		
Re ppb		
Os ppb		
Ir ppb		
Pt ppb		
Au ppb		
Th ppm		
U ppm		
<i>technique: (a) fused bead e probe</i>		

