

67235
Impact Melt Breccia
936 grams



Figure 1a,b: Top and bottom of 67235. Cube is 1 cm. S80-30317 and 318

Introduction

67235 is a large special sample that was collected to study the outer surface of a lunar rock. It was returned in a special padded bag (Horz et al. 1972). However, 40 years later, it has still not been studied.

67235 was apparently found to lack special surface features. It breaks into small coherent rhombs. It appears to be homogeneous throughout.

This rock should be dated – probably by Ar/Ar.

Petrography

Two thin section, both from the same location, show 67235 to be a poikilitic impact melt rock (figure 2). Pyroxene oikocrysts enclose fragments of plagioclase.

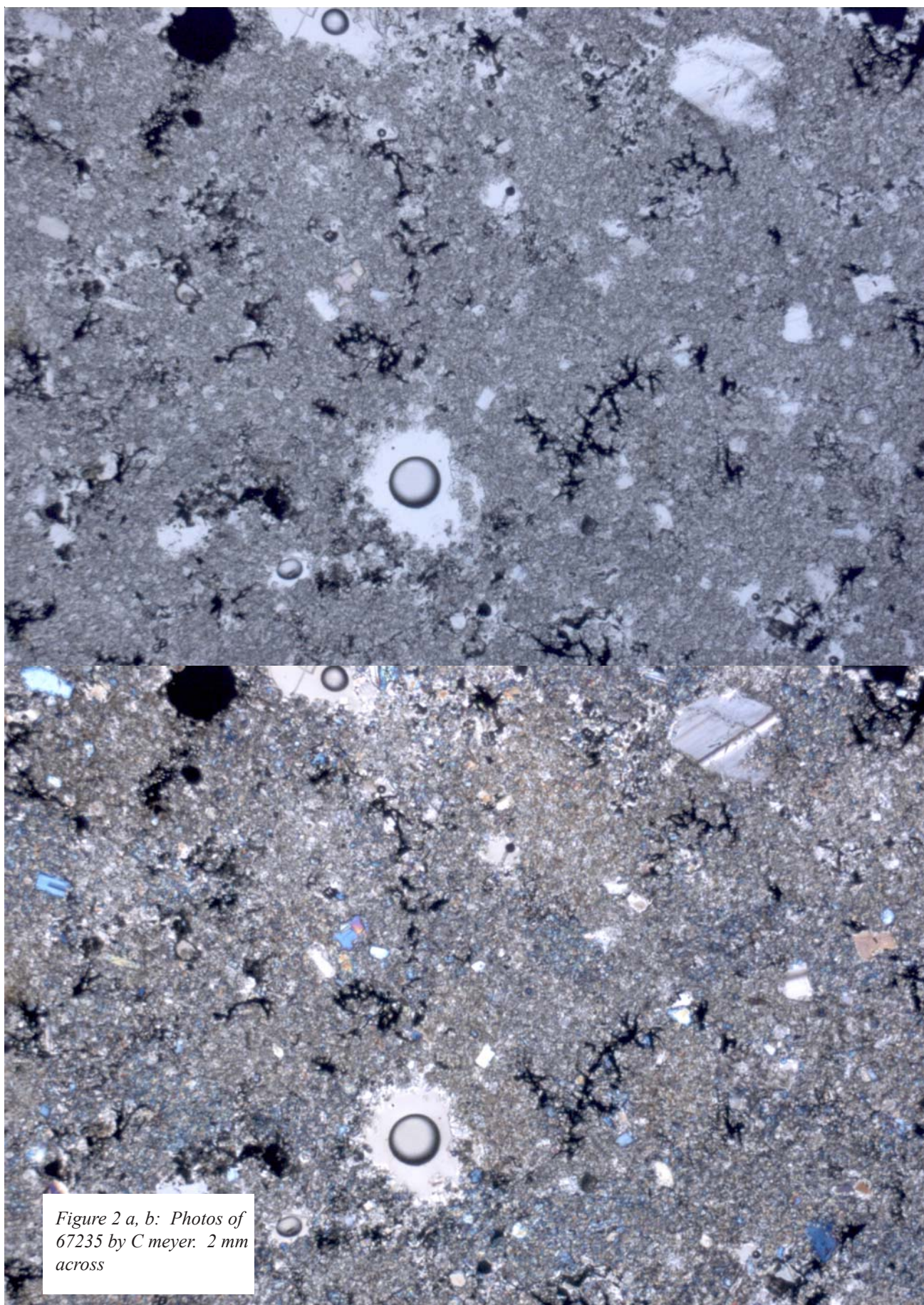
Ilmenite occurs as clumps between pyroxene oikocrysts. This texture is consistent with impact melt rock.

Chemistry

Lindstrom and Salpus (1982) reported an analysis.

Processing

67235 has not been sawn, nor much disturbed.



*Figure 2 a, b: Photos of
67235 by C meyer. 2 mm
across*

Table 1. Chemical composition of 67235

reference Lindstrom 1982

weight

SiO₂ %

TiO₂

Al₂O₃ 20.1 (a)

FeO 7.23 (a)

MnO

MgO 12.4 (a)

CaO 12.8 (a)

Na₂O 0.488 (a)

K₂O

P₂O₅

S %

sum

Sc ppm 12.1 (a)

V

Cr 1153 (a)

Co 29.7 (a)

Ni 465 (a)

Cu

Zn

Ga

Ge ppb

As

Se

Rb

Sr 165 (a)

Y

Zr

Nb

Mo

Ru

Rh

Pd ppb

Ag ppb

Cd ppb

In ppb

Sn ppb

Sb ppb

Te ppb

Cs ppm

Ba 308 (a)

La 28.1 (a)

Ce 76.3 (a)

Pr

Nd

Sm 13.3 (a)

Eu 1.49 (a)

Gd

Tb 2.78 (a)

Dy

Ho

Er

Tm

Yb 9.4 (a)

Lu 1.33 (a)

Hf 10.5 (a)

Ta 1.41 (a)

W ppb

Re ppb

Os ppb

Ir ppb

Pt ppb

Au ppb

Th ppm 4.9 (a)

U ppm 1.33 (a)

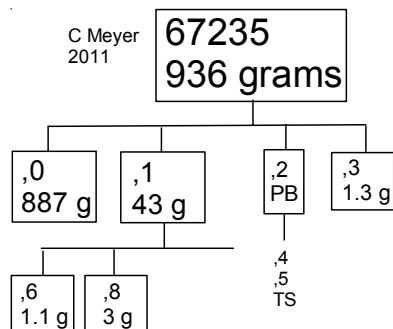
technique (a) INAA



Figure 3a: Thin section 67235,4. 1 cm across.



Figure 3b: Thin section 67235,5.



References for 67235.

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