

**61155**  
**Clast-rich Breccia**  
**47.6 grams**



Figure 1: Surface of 61155. Cube is 1 cm. S72-38378



Figure 2: Freshly broken side of 61155. Cube is 1 cm. S72-38376

### Introduction

61155 was collected near Plum Crater (figure 2) – see section on 61500. It has patiana and micrometeorite pits on the surface (figure 1).

### Petrography

Ryder and Norman (1980) described 61155 as a clast-rich “glassy impact melt”. It has abundant white clasts, thin glass veins and glassy mesostasis (figure 2).

### Chemistry

The only analysis of 61155 is by Eldridge et al. (1973).

### Cosmogenic isotopes and exposure ages

Eldridge et al. (1973) determined the cosmic-ray-induced activity of 61155 for  $^{22}\text{Na}$  = 61 dpm/kg. and  $^{26}\text{Al}$  = 178 dpm/kg.

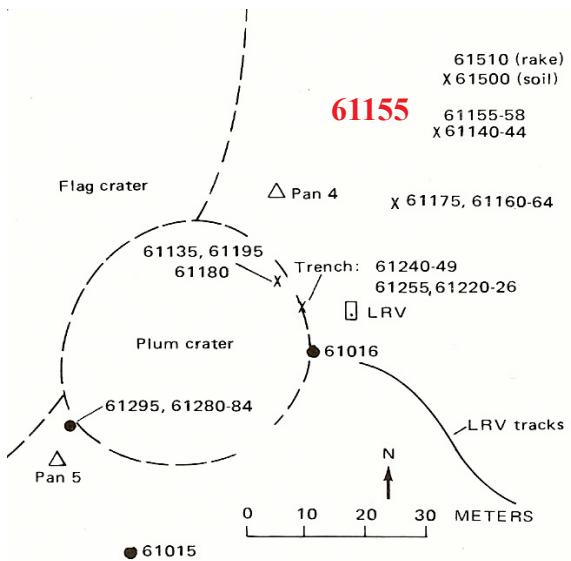


Figure 3: Map of region around Plum Crater, Apollo 16.

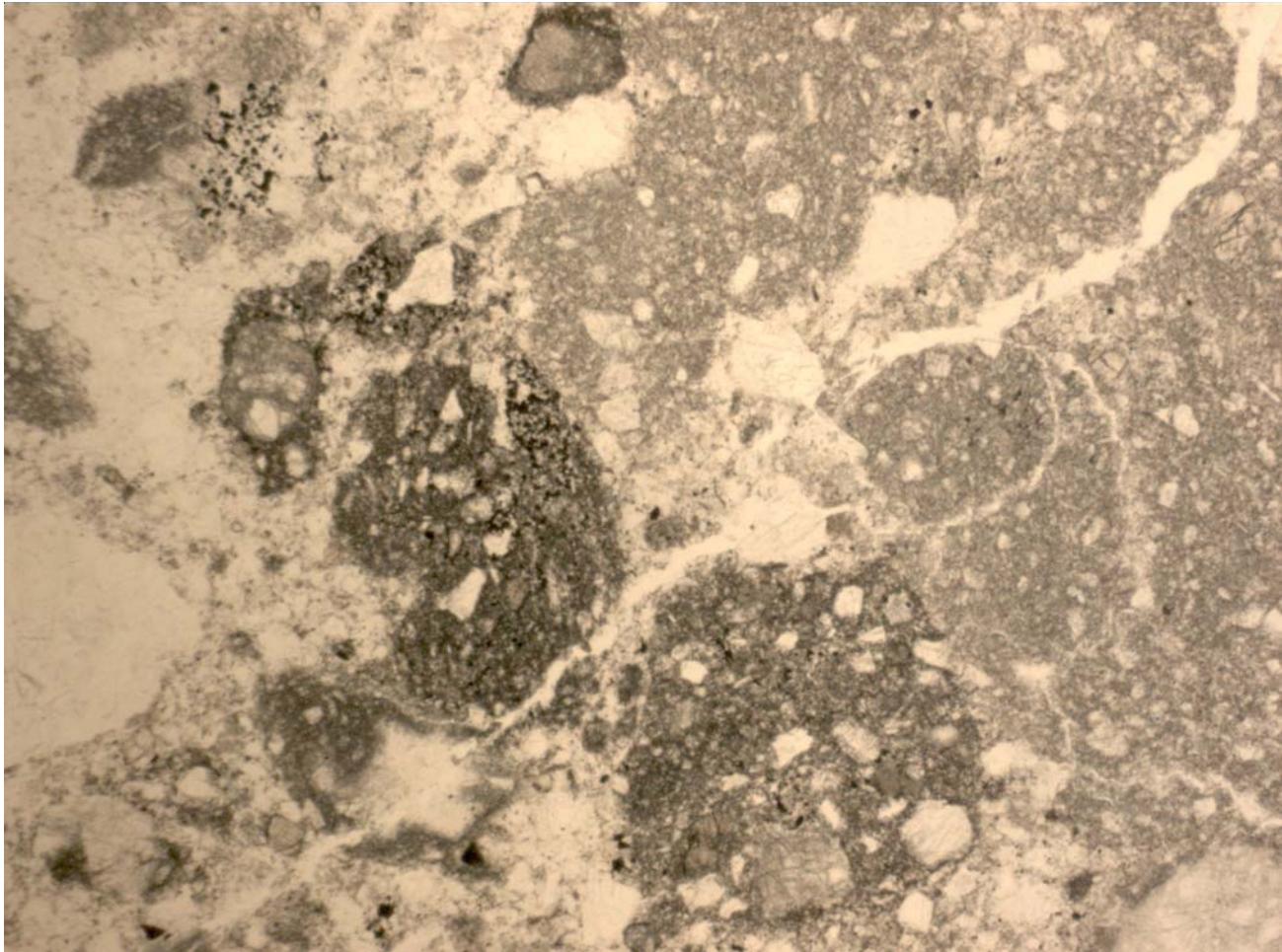
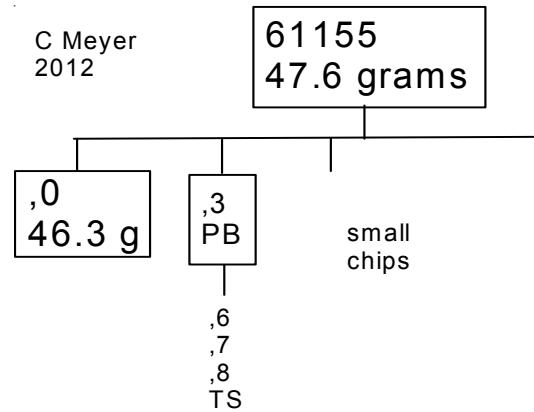


Figure 4: Photomicrograph of thin section 61155,6 by C Meyer. Field of view is 2 mm.



### Processing

There are 3 thin sections, all from the same potted butt.

**Table 1. Chemical composition of 61155.**

reference Eldridge73

weight

SiO<sub>2</sub> %TiO<sub>2</sub>Al<sub>2</sub>O<sub>3</sub>

FeO

MnO

MgO

CaO

Na<sub>2</sub>OK<sub>2</sub>OP<sub>2</sub>O<sub>5</sub>

S %

sum

Sc ppm

V

Cr

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 1.12 (a)

U ppm 0.31 (a)

technique (a) Radiation Count.

**References for 61155**

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Hunter R.H. and Taylor L.A. (1981) Rust and schreibersite in Apollo 16 highland rocks: Manifestations of volatile-element mobility. *Proc. 12<sup>th</sup> Lunar Planet. Sci. Conf.* 253-259.

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LSPET (1972c) Preliminary examination of lunar samples. In Apollo 16 Preliminary Science Report. NASA SP-315, 7-1—7-58.

Ryder G. and Norman M.D. (1980) Catalog of Apollo 16 rocks (3 vol.). Curator's Office pub. #52, JSC #16904

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