65905

Impact Melt Breccia

12.1 grams

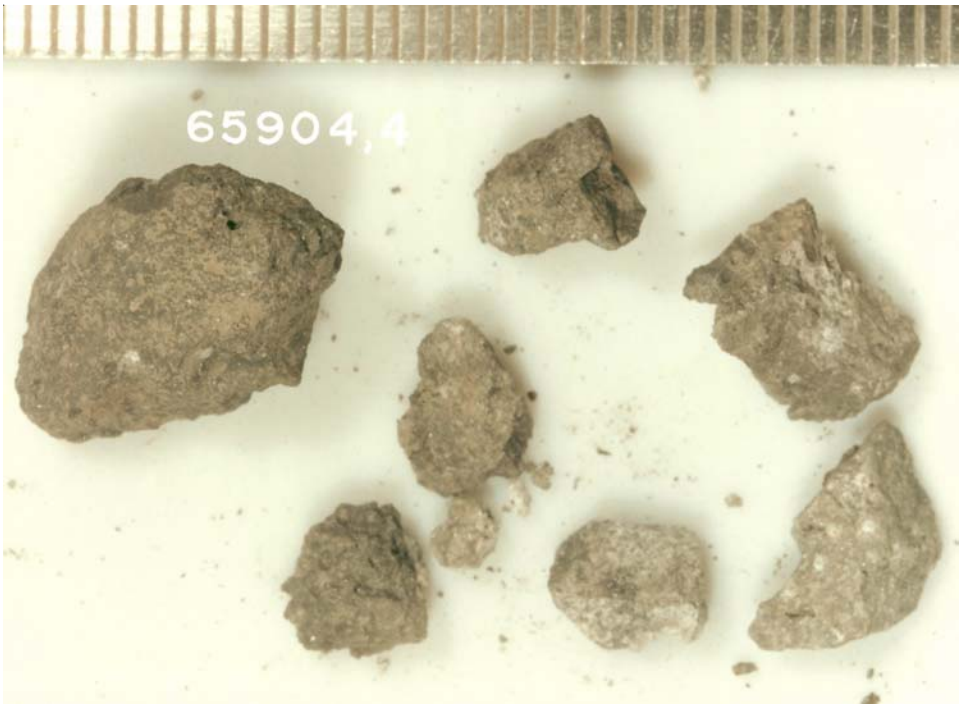


Figure 1: Hard dense particles from same bag as 67905. Scale in mm. S72-46431

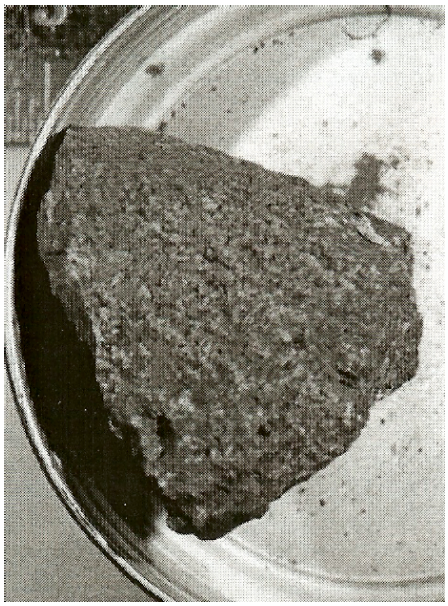


Figure 2: Photo of 65905 from Ryder and Norman 1980. sample is 2.5 cm across.

Table 1. Chemical composition of 65905

reference	McKinley83	
weight		
SiO2 %	47.2	(a)
TiO2	1.24	(a)
Al2O3	23.5	(a)
FeO	5.62	(a)
MnO	0.1	(a)
MgO	6.61	(a)
CaO	13.8	(a)
Na2O	0.67	(a)
K2O	0.71	(a)
P2O5	0.48	(a)
S %		
sum		
(a) ?		

Introduction

65905 is one of several dense particles found in soil sample 65901 (figures 1 and 2). The section on 65901 discusses the location of these samples.

Petrography

Ryder and Norman (1980) termed 65905 "basaltic impact melt" but McKinley et al. (1983) termed it "poikilitic melt breccia". Pieces have been allocated to Randy Korotev and Larry Taylor, but they have not informed the Curator what was learned.

Hey, it's got about the best poikilitic texture I've seen (figure 4 and 5).

Chemistry

McKinley et al. (1983) report the only analysis, without documentation how it was achieved..

Processing

There are 4 thin sections

References for 65905

Butler P. (1972a) Lunar Sample Information Catalog Apollo 16. Lunar Receiving Laboratory. MSC 03210 Curator's Catalog. pp. 370.

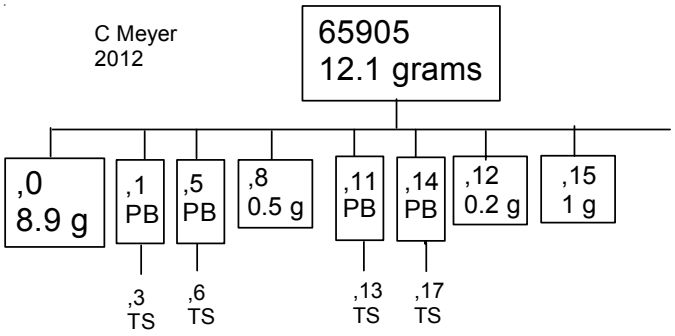
LSPET (1973b) The Apollo 16 lunar samples: Petrographic and chemical description. *Science* **179**, 23-34.

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

McKinley J.P., Taylor G.J., Keil K., Ma M.-S. and Schmitt R.A. (1984) Apollo 16: Impact sheets, contrasting nature of the Cayley Plains and Descartes Mountains, and geologic history. *Proc. 14th Lunar Planet. Sci. Conf.* in J. Geophys. Res. **89**, B513-B524.

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

Sutton R.L. (1981) Documentation of Apollo 16 samples. In Geology of the Apollo 16 area, central lunar highlands. (Ulrich et al.) U.S.G.S. Prof. Paper 1048.



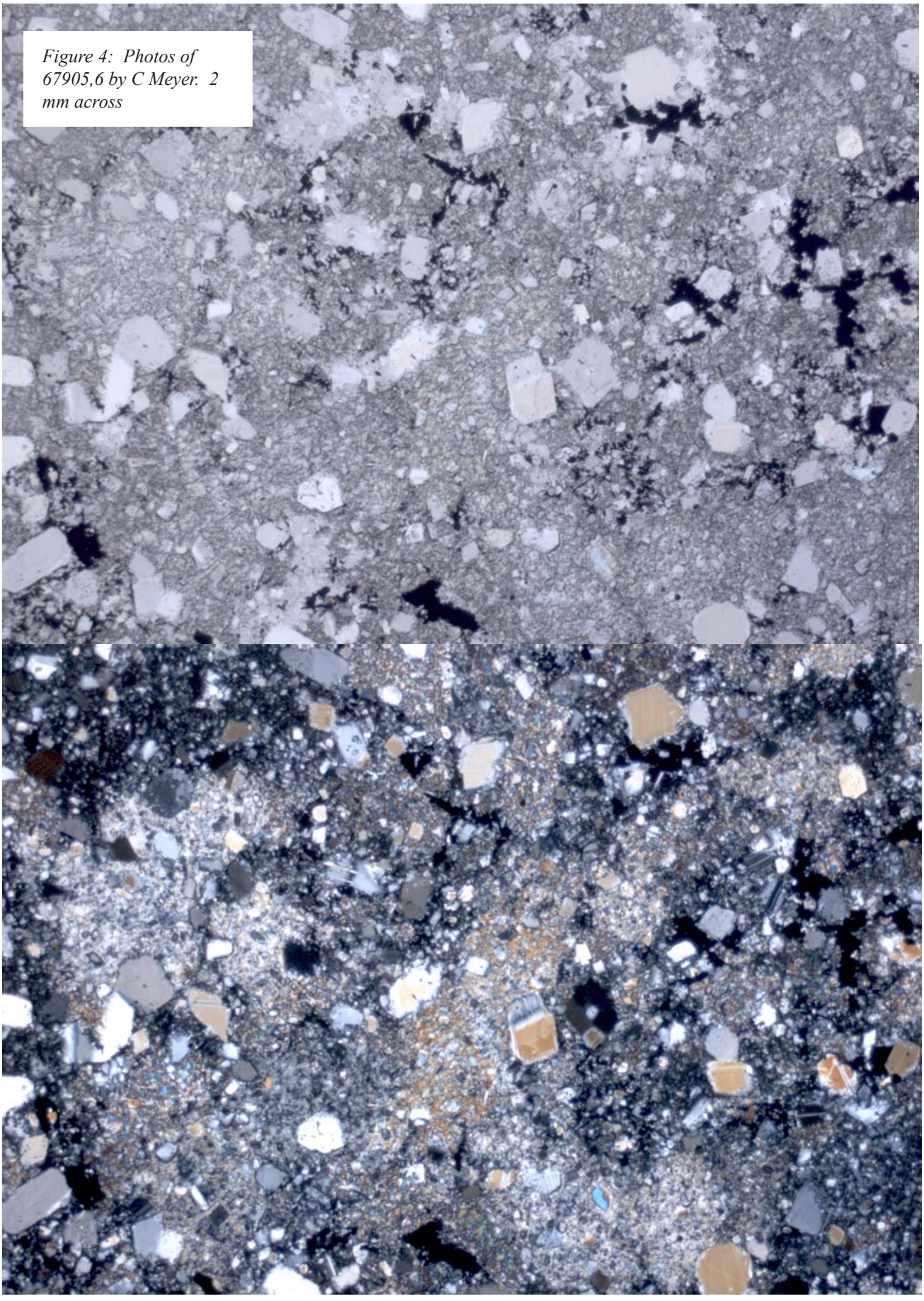


Figure 4: Photos of 67905,6 by C Meyer. 2 mm across

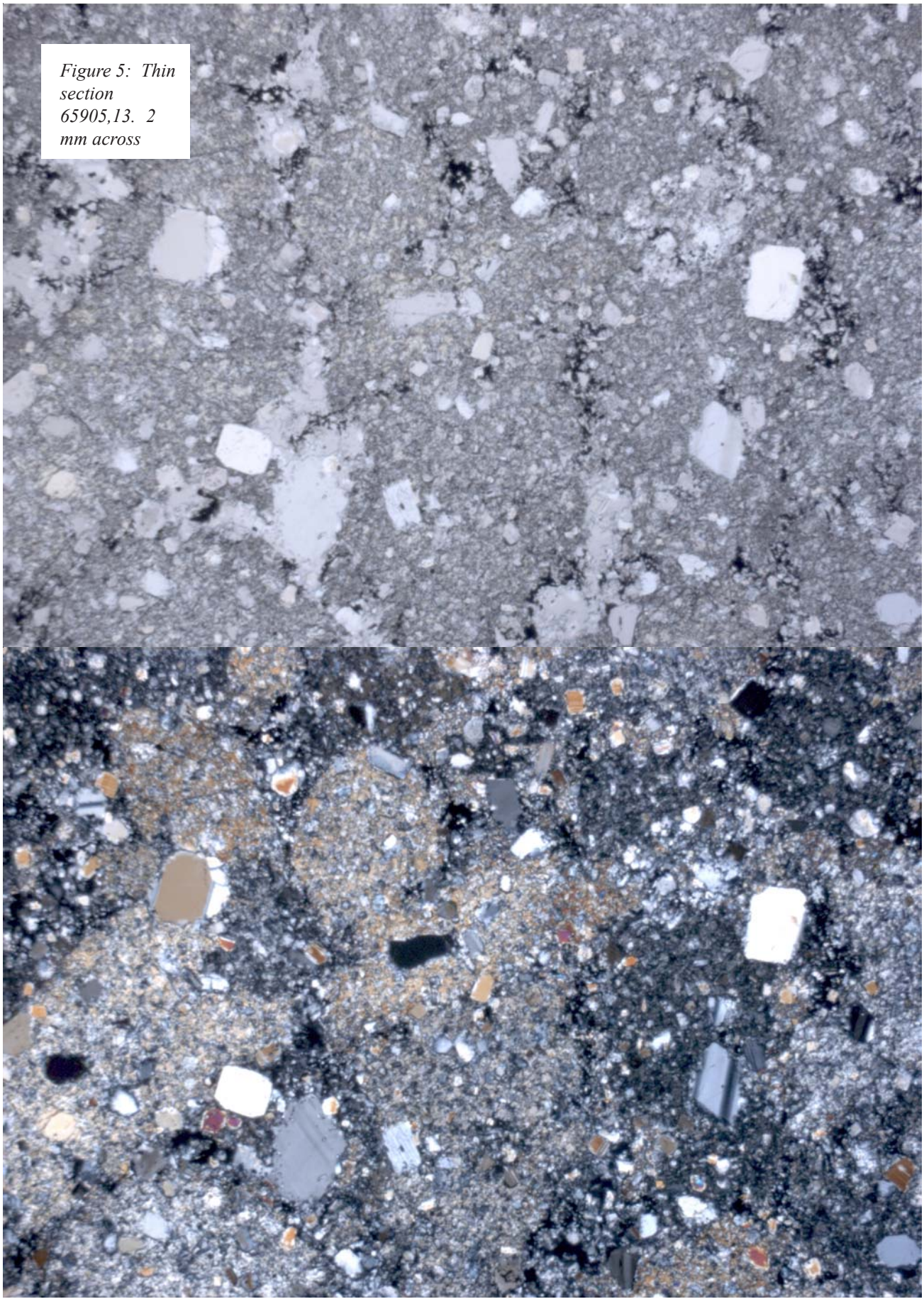


Figure 5: Thin section 65905,13. 2 mm across