67565 – 10.4 grams
67668 – 3.6 grams
Impact Melt Breccia

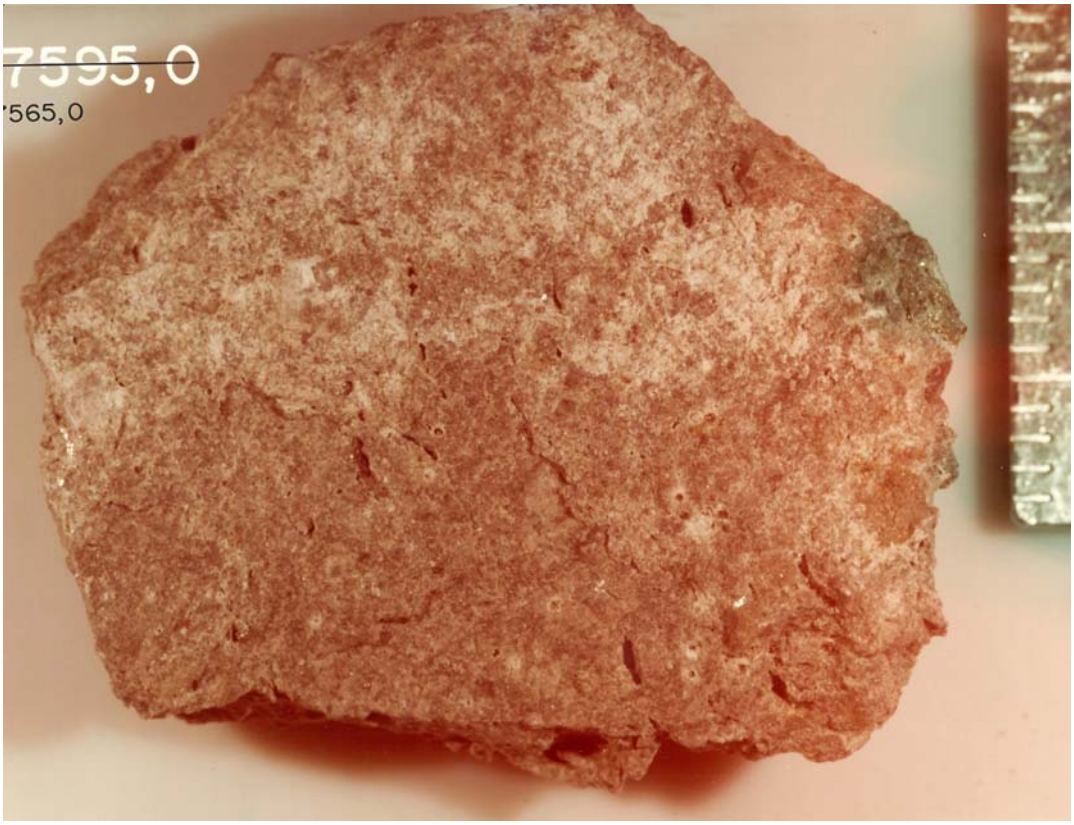


Figure 1: Photo of 67565. Scale in mm. S80-35154

Introduction

67565 and 67668 are rake samples from the south rim of North Ray Crater – see sections on 67481 and 67601. They have similar micropoikitiic texture with interlocking oikocrysts of pyroxene surrounding chadocrysts of plagioclase. Ilmenite is concentrated at the boundaries of the pyroxene oikocysts. They also have similar composition.

Chemistry

Stoffler et al. (1985) reported the bulk composition based on defocused beam analysis of thin sections. Wanke received splits for analysis.

Processing

There is one thin section of each (figure 3).

Table 1. Chemical composition of 67565

	67565	67668	
reference	Stoffler85		
weight			
SiO2 %	46.2	46.5	(a)
TiO2	0.55	0.63	(a)
Al2O3	21.9	20.8	(a)
FeO	5.8	6.3	(a)
MnO	0.07	0.08	(a)
MgO	11.4	11.7	(a)
CaO	13	13.1	(a)
Na2O	0.43	0.44	(a)
K2O	0.21	0.21	(a)
P2O5	0.19	0.2	(a)
S %			
sum			

(a) broad beam e. probe

Figure 2: Photo of 67668. Scale in mm. S72-49541

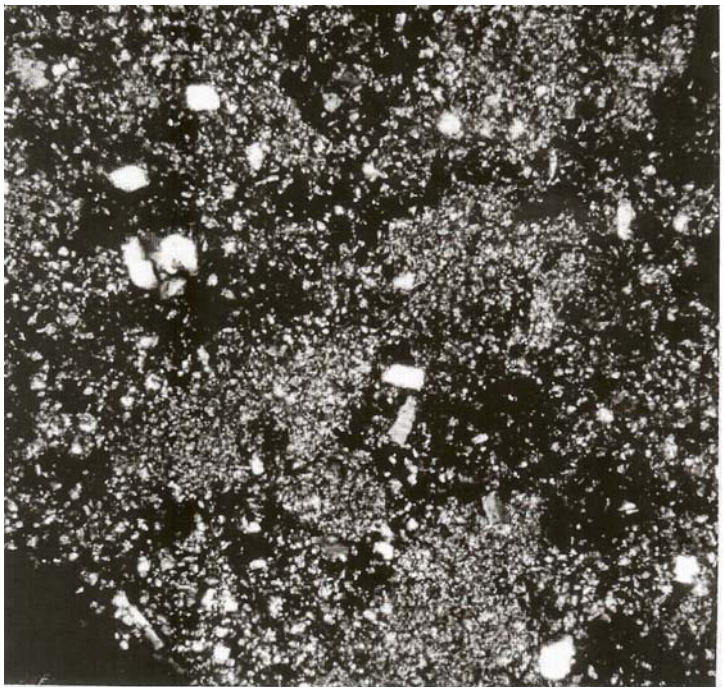
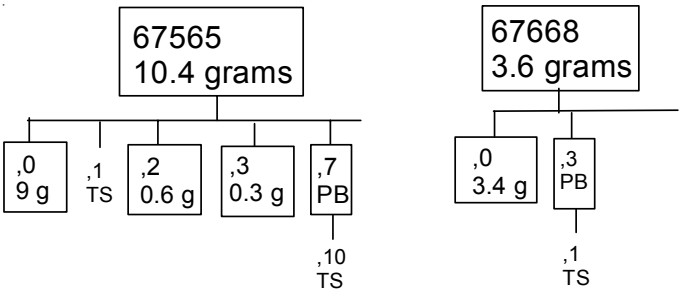


Figure 3: Thin section, with crossed nicols, of 67668 showing poikilotic texture.



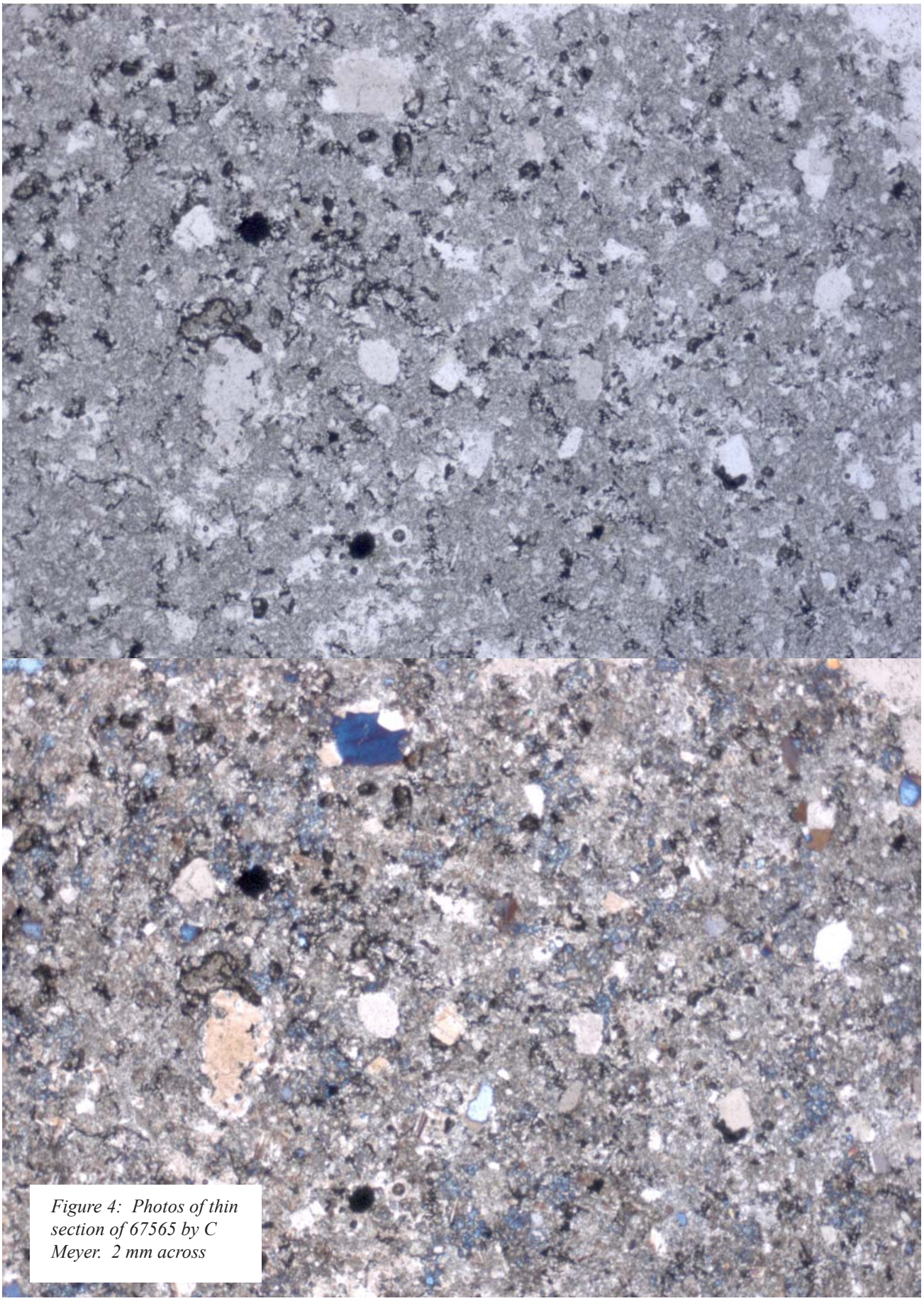


Figure 4: Photos of thin section of 67565 by C Meyer. 2 mm across

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