

67566
Impact Melt Breccia
4.3 grams



Figure 1: Photo of 67566. Scale is cm/mm. S72-51249

Introduction

67566 was collected from the south rim of North Ray Crater – see section on 67481.

Petrography

Ryder and Norman (1980) reported that 67566 had a “granoblastic” texture (figures 2 and 4). The protolith was clearly a breccia.

Chemistry

Stoffler et al. (1985) reported that the composition of 67566 was similar to other granulitic breccia samples from NRC (table and figure 5).

Radiogenic age dating

67566 has been outgassed to yield ages (figure 3).

Processing

There a two thin section.

Table 1. Chemical composition of 67566

<i>reference weight</i>	Stoffler85	
SiO ₂ %	43.7	(a)
TiO ₂	0.11	(a)
Al ₂ O ₃	32.32	(a)
FeO	1.3	(a)
MnO		
MgO	1.99	(a)
CaO	18.22	(a)
Na ₂ O	0.51	(a)
K ₂ O	0.15	(a)
P ₂ O ₅	0.01	(a)
Sc ppm	6.32	(b)
Co	22.7	(b)
Ni	240	(b)
Ba	47	(b)
Sm	1.61	(b)
Yb	1.3	(b)

technique: (a) DBA, (b) INAA

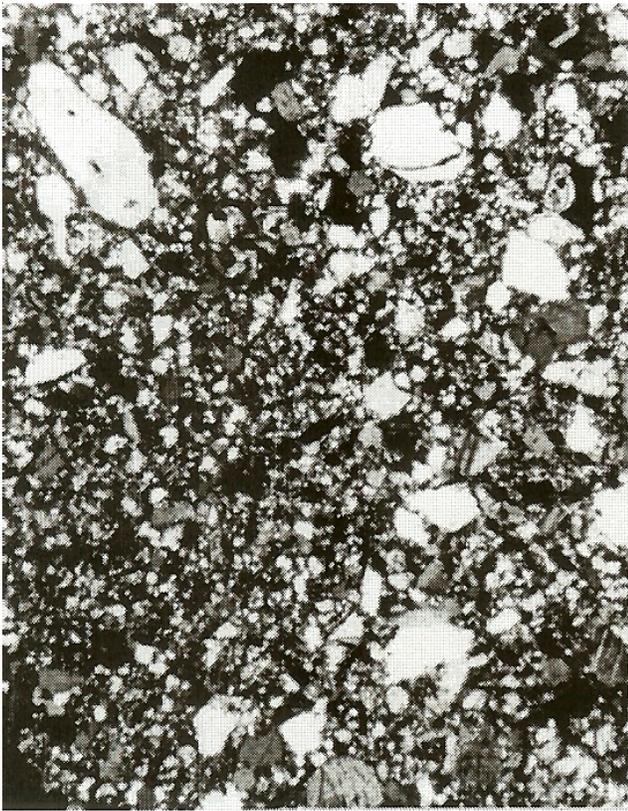


Figure 2a: Photomicrograph of thin section 67566,2 with crossed polarizers. Field of view is 2 mm. From Ryder and Norman 1980.



Figure 2b: Photomicrograph of thin section 67566,1 with crossed polarizers. Field of view is 2 mm. From Ryder and Norman 1980.

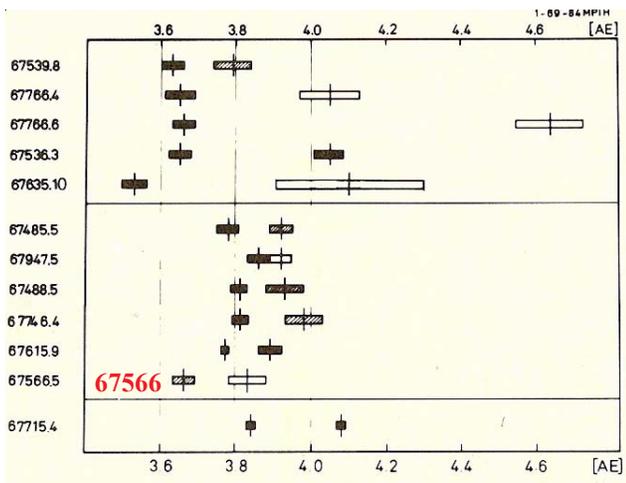


Figure 3: Summary diagram of a lot of hard work showing age of 67566 (from Stoffler et al. 1985).

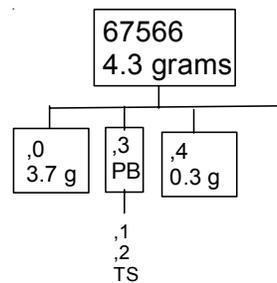
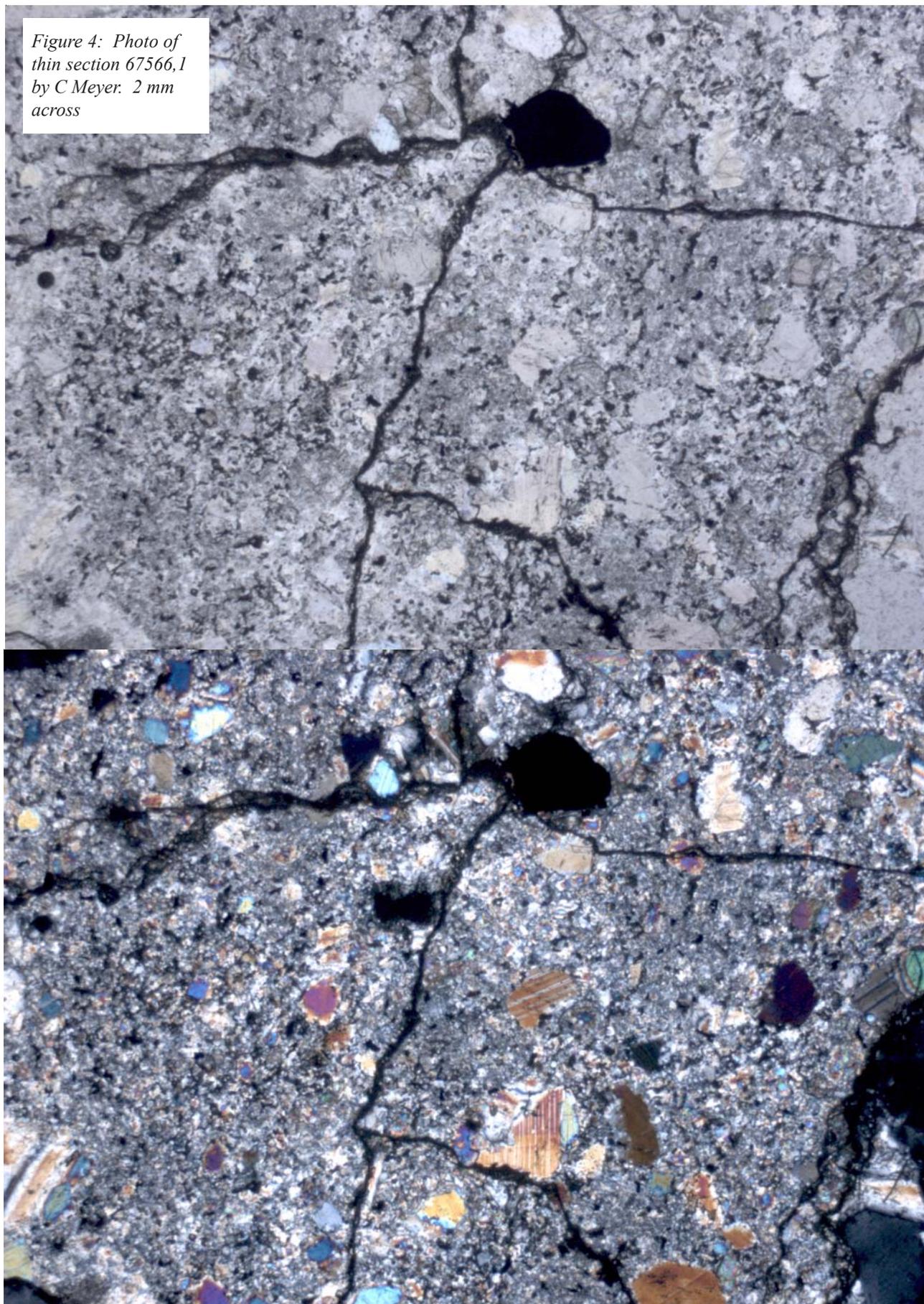


Figure 4: Photo of thin section 67566,1 by C Meyer. 2 mm across



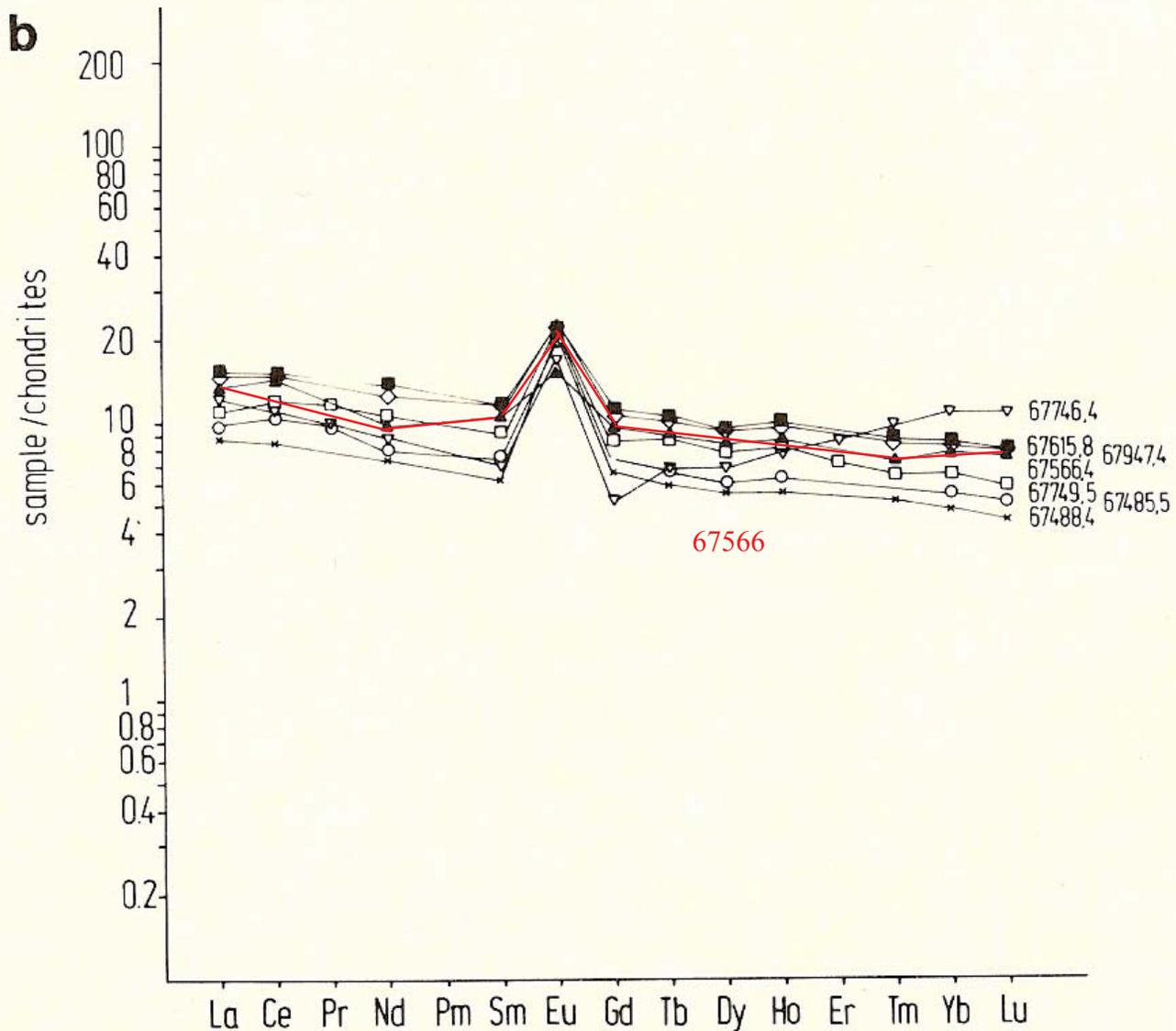


Figure 5: Normalized rare-earth-element diagram for 67566 compared with several granulitic breccias from rake samples taken at North Ray Crater (Stöffler et al. 1985).

References for 67566

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