

67556
Impact Melt Breccia
82.1 grams



Figure 1: Photo of 67556. Scale in mm. S72-51241

Introduction

67556 is a rake sample collected from the rim of North Ray Crater – see section on 67481. It is a friable micropoikilitic impact melt with intrusive glass veins. It has a micrometeorite crater (figure 1).

Petrography

67556 is a micropoikilitic impact melt breccia that has been highly shocked. It is “riddled” with glass veins with abundant metal grains (Ryder and Norman 1980). Mineral analyses are not available.

Chemistry

67556 has been analyzed by the North Ray Consortium (Stoffler et al. 1985). There appear to be three analyses of the thin section by defocused beam analysis and one bulk analysis by INAA (table and figure 3).

Radiogenic age dating

Not

Processing

There is one thin section and no way to know if it is representative.

Figure 2: Photo of thin section 67556,1 by C Meyer. 2 mm across

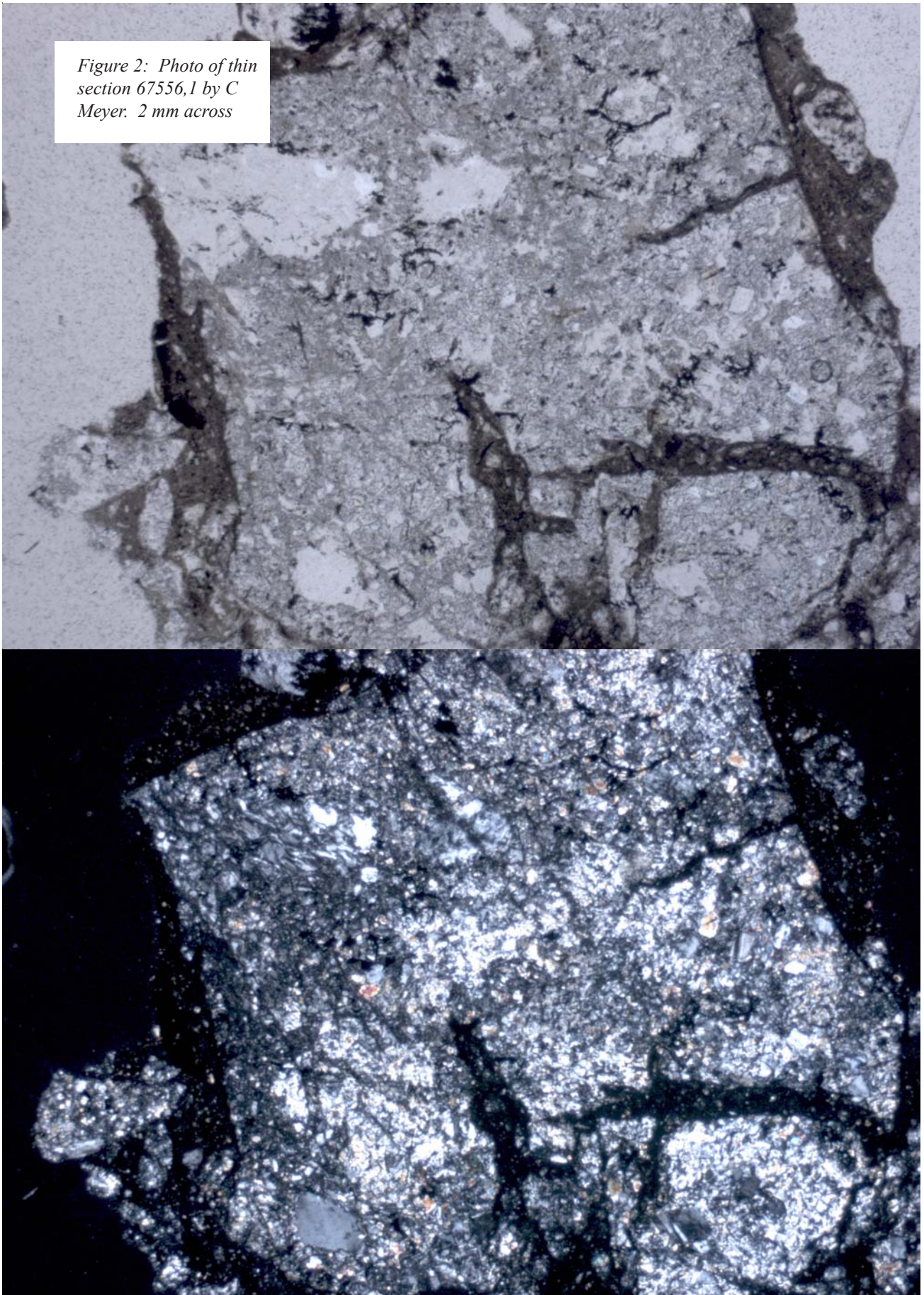


Table 1. Chemical composition of 67556

reference weight	Stoffler85			Borchardt 86 Stoffler85	
SiO ₂ %	45.2	46.4	44.6	45.6	(a)
TiO ₂	0.65	0.31	0.53	1.26	(a)
Al ₂ O ₃	21.5	20.8	22.16	22.4	(a)
FeO	6.3	6.2	6.2	6.03	(a)
MnO	0.02	0.11	0.06	0.09	(a)
MgO	10.6	13	10.9	11	(a)
CaO	14.2	12.3	12.8	12.9	(a)
Na ₂ O	0.53	0.46	0.525	0.42	(a)
K ₂ O	0.26	0.12	0.185	0.17	(a)
P ₂ O ₅	0.56	0.1	0.4	0.12	(a)
Sc ppm	9.27	9.27		9.27	(b)
Cr					
Co	24.4	24.4		24.4	(b)
Ni	368	368		368	(b)
Ba	186	186		186	(b)
Sm	8.68	8.68		8.68	(b)
Yb	5.74	5.74		5.74	(b)

technique: (a) DBA, (b) INAA

References for 67556

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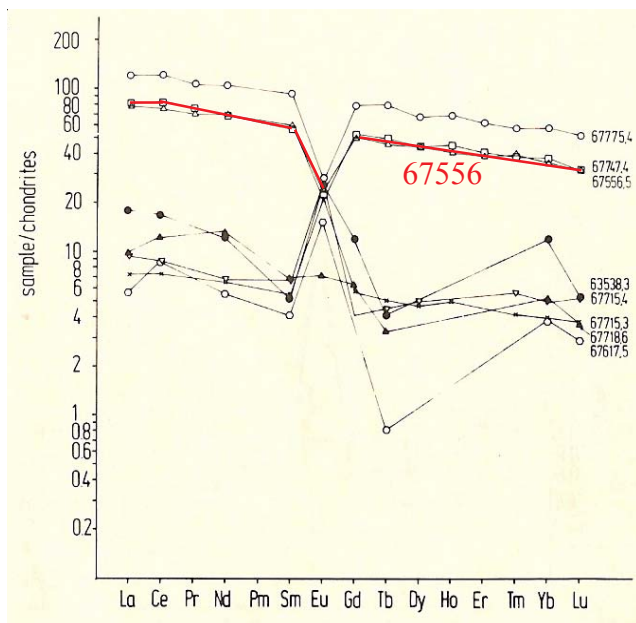


Figure 3: Normalized rare-earth-element diagram for 67556 (Stoffler et al. 1985).

