64585

Vitric Impact Melt Breccia

4.7 grams

Figure 1: Photo of 64585. sample is 1.5 cm across. S72-55315

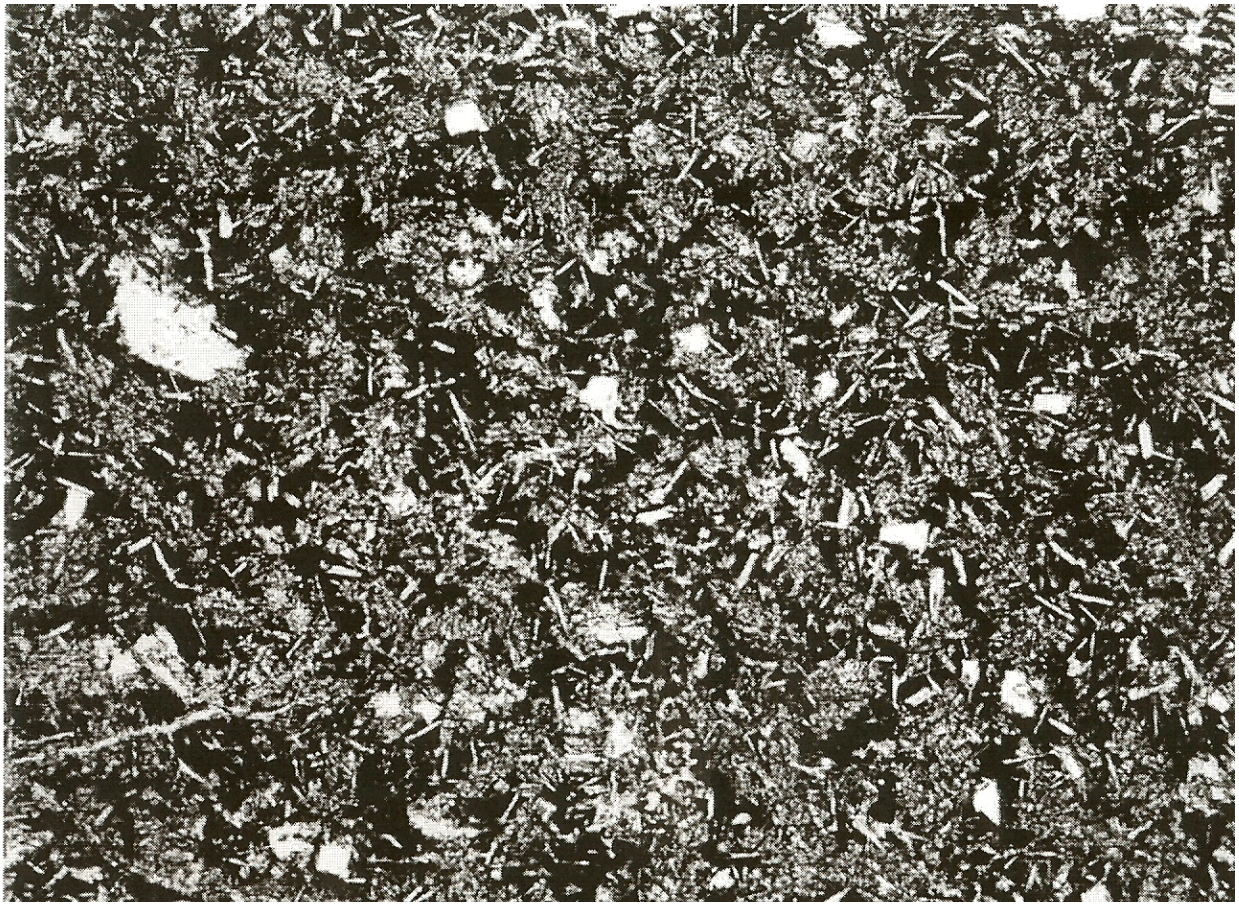
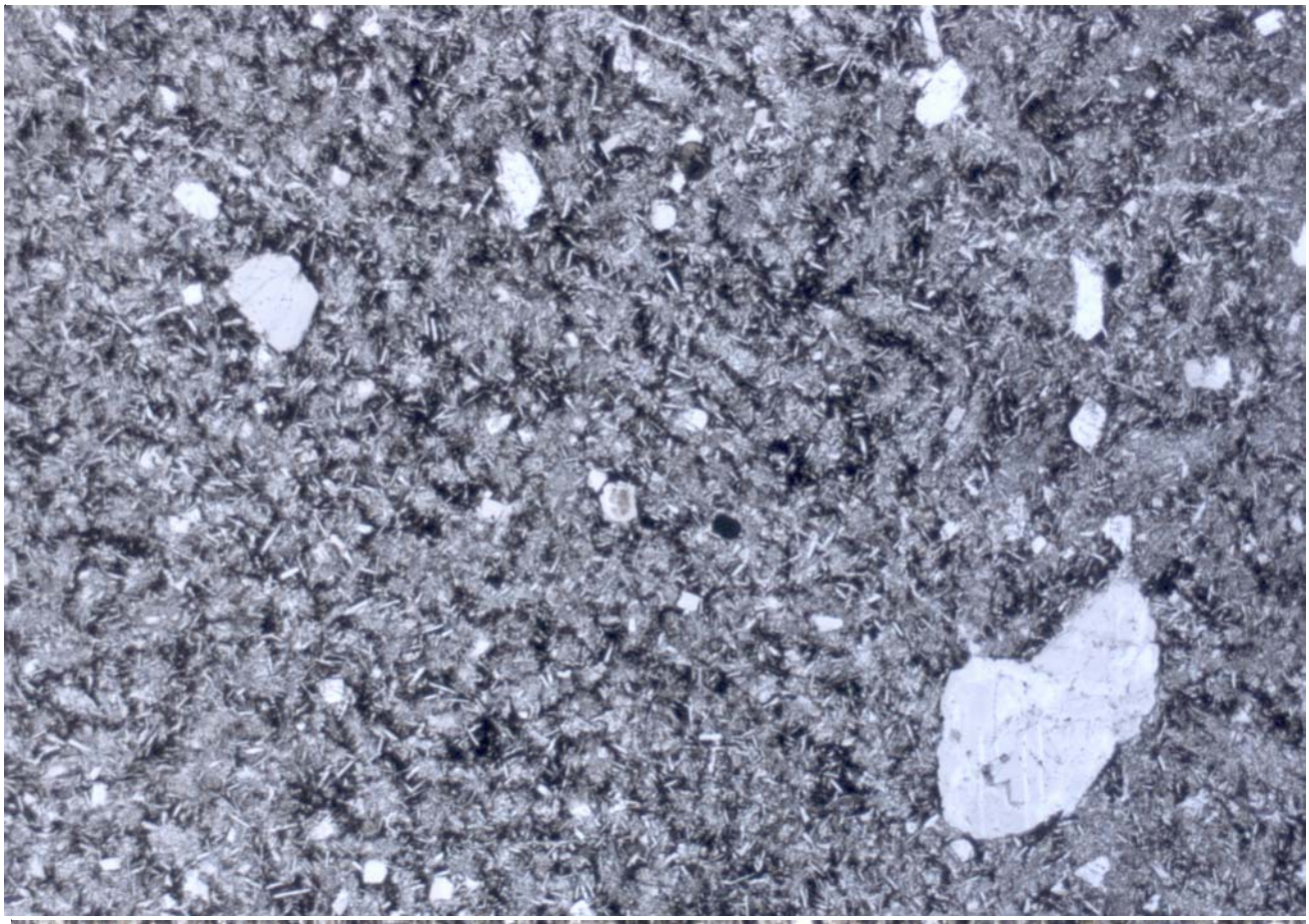


Figure 2: Thin section photo of 64585 about 2 mm across (from Ryder and Norman 1980).



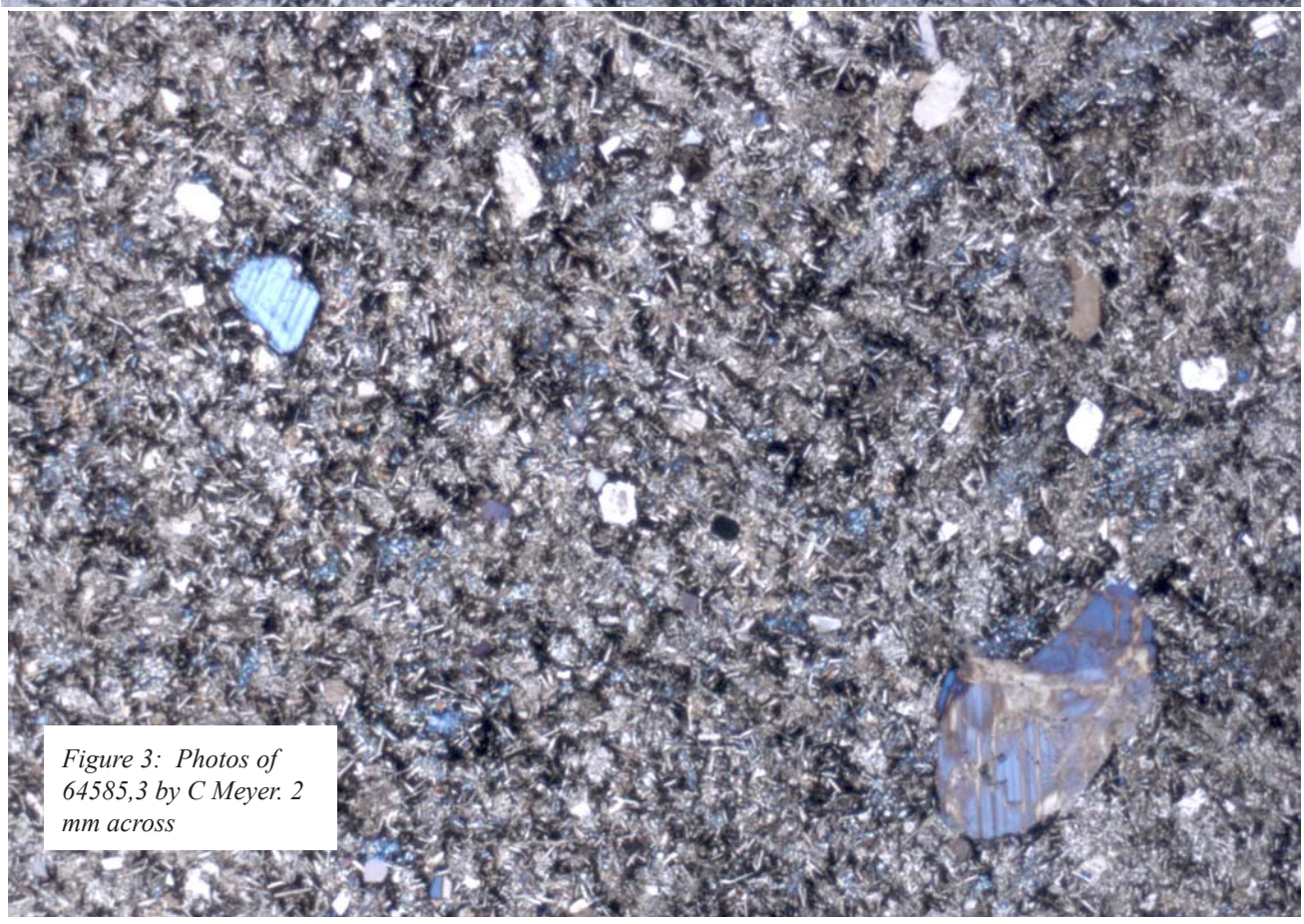


Figure 3: Photos of 64585,3 by C Meyer. 2 mm across

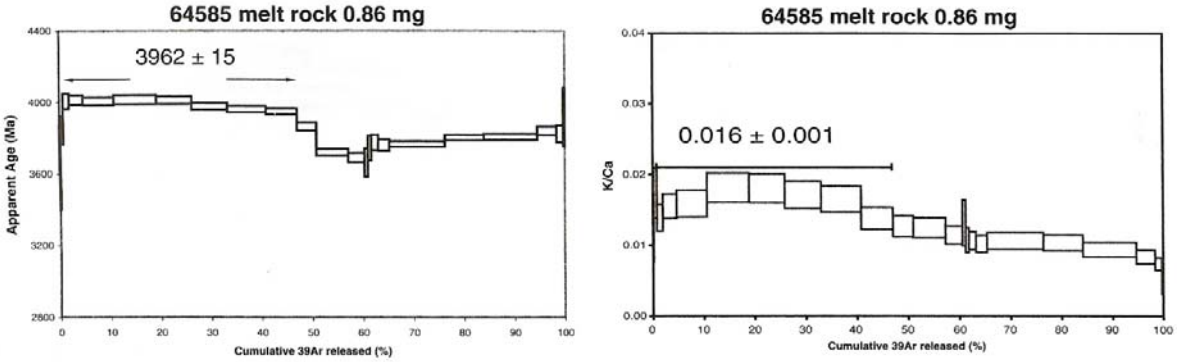


Figure 4: The low temperature release of Ar gives an age older than most Apollo impact melts (Norman et al. 2006).

Introduction

64585 was collected as a rake sample from Stone Mountain – see section on 64501. It is an old impact melt with unique texture.

Petrography

64585 has a brownish color (figure 1) and a devitrified glass matrix (figure 2). Plagioclase laths and xeocrysts are trapped in a devitrified matrix. Warner et al. (1973) give an analysis of the "mesostasis".

Chemistry

none reported – but Korotev says it is "2DB".

Radiogenic age dating

Norman et al. (2006) determined an age of 3.962 ± 0.015 for 64585 by the Ar/Ar plateau technique (figure 4).

References for 64585

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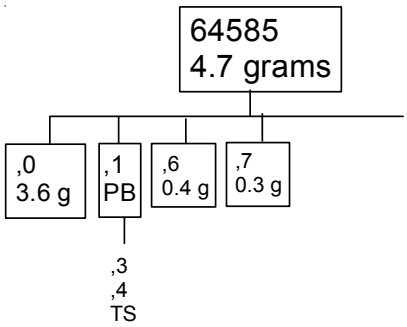
Warner J.L., Simonds C.H. and Phinney W.C. (1973b) Apollo 16 rocks: Classification and petrogenetic model. *Proc. 4th Lunar Sci. Conf.* 481-504.