

64817
Basaltic Impact Melt
9 grams



Figure 1: Photo of 64817. S72-55334 33 mm long

Introduction

64817 is a rake sample collected from the rim of a small crater at station 4 on Stone Mountain – see section on 64801. It is an aluminous basalt with prominent plagioclase laths and an age of 3.84 b.y.

Petrography

64817 has a subophitic basaltic texture (figure 2). Warner et al. (1973) reported the composition of pyroxene (figure 3).

Chemistry

Allocated to Clive Neal

Radiogenic age dating

Norman et al. (2006) determined an age of 3.84 ± 0.02 b.y. for 64817 by the Ar/Ar plateau technique (figure 4).

Processing

There are two thin section of 64817.



Figure 2: Photomicrograph of thin section of 64817 (from Ryder and Norman 1980).

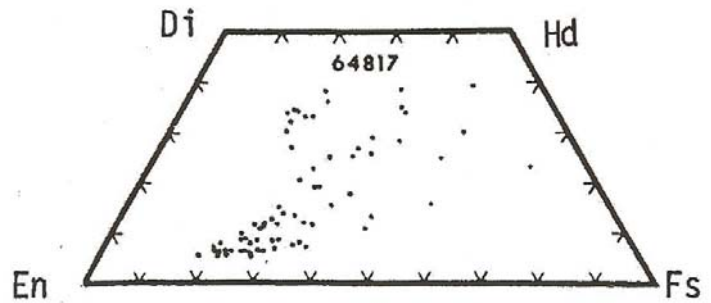


Figure 3: Composition of pyroxene in 64817 (from Warner et al. 1973).

References for 64817

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Phinney W. and Lofgren G. (1973) Description, classification and inventory of Apollo 16 rake samples from stations 1, 4 and 13. Curators Office.

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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.

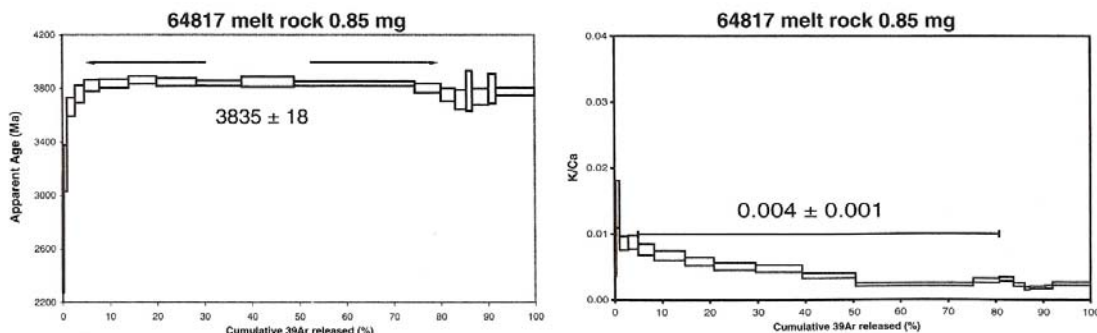


Figure 4: Ar/Ar plateau diagram for 64817 (Norman et al. 2006).

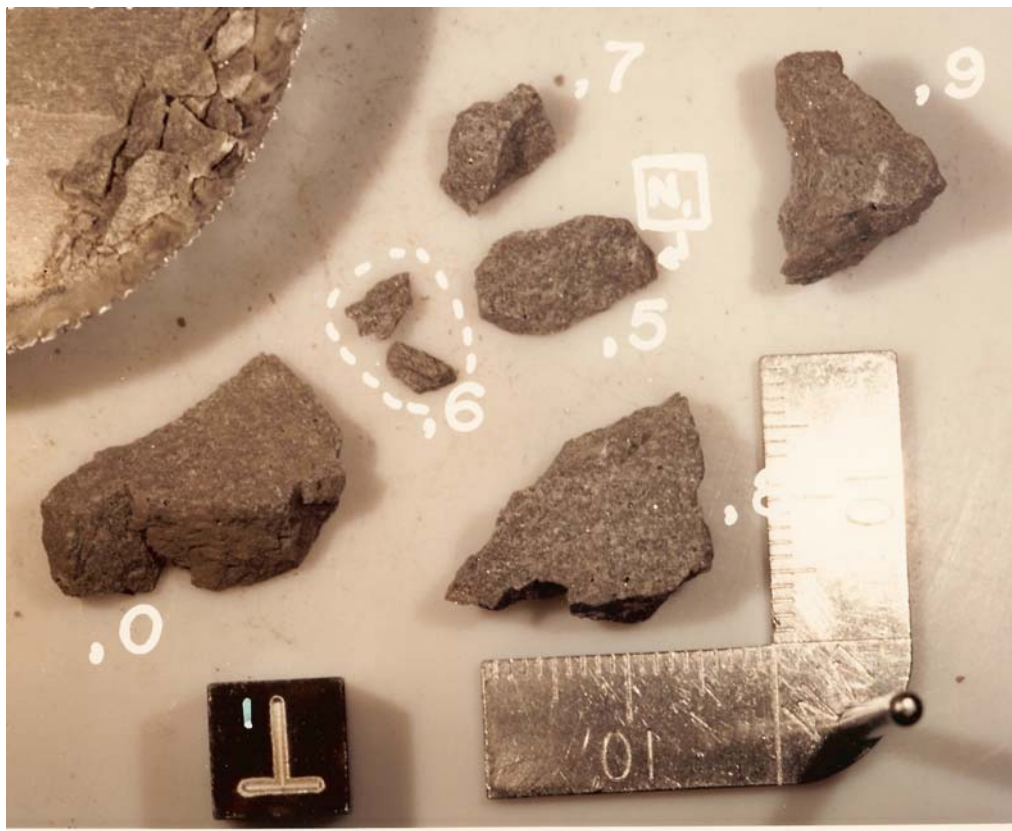


Figure 5: Processing photo of 64817. Cube is 1 cm. S90-34690