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).

References for 64817


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

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

Ryder G. and Norman M.D. (1980) Catalog of Apollo 16 rocks (3 vol.). Curator’s Office pub. #52, JSC #16904


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

Lunar Sample Compendium
C Meyer 2012
Figure 5: Processing photo of 64817. Cube is 1 cm. S90-34690