

**60235**  
Basaltic Impact Melt  
70.06 grams



*Figure 1: Another view of 60235. S79-39951. Cube is 1 cm.*

**Introduction**

60235 is a coherent impact melt rock with a mostly basaltic texture collected near the Lunar Module. There are micrometeorite craters on all sides and some vesicles are obvious. Otherwise, it has not been studied.

**Petrography**

According to Ryder and Norman (1980), “60235 is a plagioclase-rich basaltic melt. It consists of plagioclase laths 200-300 micron long (figure 2) which are frequently hollow and have square cross-sections. Interstitial mineral are mainly pyroxene, with some mesostasis glass with opaque mineral and cristobalite. Clastic material consists of plagioclase and plagioclase-rich breccias.”

Hunter and Taylor (1981) reported that there was abundant ‘rust’ on metal grains in thin sections of 60235.

**Processing**

There are two thin sections ,5 and ,9 from the same potted butt.

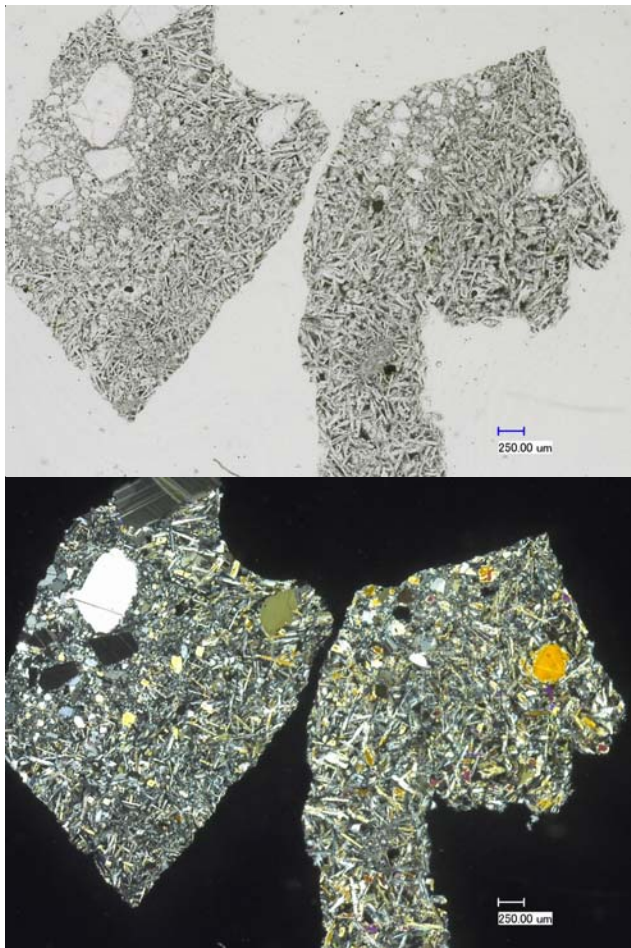


Figure 2: Photomicrographs of thin section 60235,5 by C Meyer @50x.

## References for 60235

Butler P. (1972) Lunar Sample Information Catalog Apollo 16. Lunar Receiving Laboratory. MSC 03210 Curator's Catalog. pp. 370.

Hunter R.H. and Taylor L.A. (1981) Rust and schreibersite in Apollo 16 highland rocks: Manifestations of volatile-element mobility. *Proc. 12<sup>th</sup> Lunar Planet. Sci. Conf.* 253-259.

Korotev R.L. (1996c) On the relationship between the Apollo 16 ancient regolith breccias and feldspathic fragmental breccias, and the composition of the prebasin crust in the Central Highlands of the Moon. *Meteor. & Planet. Sci.* **31**, 403-412.

LSPET (1973) The Apollo 16 lunar samples: Petrographic and chemical description. *Science* **179**, 23-34.

LSPET (1972) Preliminary examination of lunar samples. Apollo 16 Preliminary Science Report. NASA SP-315, 7-1—7-58.

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

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

Sutton R.L. (1981) Documentation of Apollo 16 samples. In *Geology of the Apollo 16 area, central lunar highlands.* (Ulrich et al.) U.S.G.S. Prof. Paper 1048.

Vaniman D.T. and Papike J.J. (1978) The lunar highland melt-rock suite. *Geophys. Res. Lett.* **5**, 429-432.

Vaniman D.T. and Papike J.J. (1980) Lunar highland melt rocks: Chemistry, petrology and silicate mineralogy. In *Proc. Conf. Lunar Highlands Crust* (Papike J.J. and Merrill R.B., eds.) 271-337. Pergamon. Lunar Planetary Institute, Houston.

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