15634 and 15639
Coarse Olivine-normative Basalt
5.2 and 7 grams

Introduction
Lunar samples 15634 and 15639 are rake samples from the edge of Hadley Rille (see section on 15614). They are more coarse grained than others, and apparently have abnormally low trace element contents. They have not been adequately described.

Petrography
Ryder (1985) provides the only description these particles. Although he calls them “coarse grained”, the grain size is still less than 1 mm (figures 5 and 6).

Chemistry
Ma et al. (1978) finds these two basalts “way low in trace elements”. But they have high Ni!

Other Studies
Gose et al. (1972) and Pearce et al. (1973) determined the magnetic properties of these two particles. Nothing unusual.
Figure 5: Photomicrographs of thin section 15634.4 by C Meyer at 50 and 150x. Pretty, huh?
Figure 6: Photomicrographs of thin section 15639.4 by C Meyer at 50 and 150x. Note that I caught this pyroxene "end on"!
Table 1. Chemical composition of 15634 and 15639.

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| technique: | (a) INAA |

References for 15634.

Butler P. (1971) Lunar Sample Catalog, Apollo 15. Curators’ Office, MSC 03209


Ryder G. (1985) Catalog of Apollo 15 Rocks (three volumes). Curatoial Branch Pub. #72, JSC#20787
