

15609 FINE-GRAINED OLIVINE-NORMATIVE ST. 9A 1.10 g
MARE BASALT

INTRODUCTION: 15609 is a fine-grained ophitic olivine-bearing mare basalt (Fig. 1) which is presumably a fine-grained member of the Apollo 15 olivine-normative mare basalt group. It is a blocky, subangular, tough fragment which was originally too dust-covered for surface features to be inspected. The yellow-green olivines are visible macroscopically. 15609 was collected as part of the rake sample at Station 9A.



Figure 1. Pre-chip, dust-covered view of 15609. S-71-44962

PETROLOGY: 15609 is a fine-grained olivine-bearing mare basalt (Fig. 2). Small, sparse, anhedral olivine phenocrysts and small, granular olivines and pyroxenes are embedded in plagioclases which are less than 1 mm long. Opaque phases cluster with the granular mafic grains and range from chromite through ulvospinel to ilmenite.

PROCESSING AND SUBDIVISIONS: A small piece was chipped to make potted butt ,1 which was partly used to make thin sections ,5 and ,6. ,0 is now 0.76 g.



Fig. 2a



Fig. 2b

Figure 2. Photomicrographs of 15609,5.
Width about 3 mm. a) transmitted light; b) crossed polarizers.