

15548 FINE-GRAINED OLIVINE-NORMATIVE ST. 9A 3.3 g  
MARE BASALT

INTRODUCTION: 15548 is a fine-grained, microporphyritic olivine-normative mare basalt, with a few per cent spherical vesicles (Fig. 1). It is one of the finest-grained of the olivine-normative basalt group. The sample is light brown-gray, blocky, angular, and tough. Only one zap pit appears to be present. 15546 was collected in the vicinity of the moderately fresh, blocky, 3-m diameter crater from which 15535 and 15536 were sampled, but it has not been identified in photographs.



Figure 1. Pre-chip, macroscopic view of 15548. S-71-44919

PETROLOGY: 15548 is a very-fine-grained olivine-normative mare basalt, with scattered microphenocrysts of olivine in a groundmass of tiny granular pyroxenes and

ragged plagioclases (Fig. 2). The olivines enclose subhedral chromites and ulvospinels; the dominant opaque phases are ulvospinel and ilmenite. On a fine-scale, some plagioclases optically enclose pyroxenes. Some cristobalites are present but they are not common. There are small patches of residual glass and troilite. Fe-metal is rare.

PROCESSING AND SUBDIVISIONS: Chipping produced several small pieces, all remaining with ,0 except ,1 which was made into a potted butt and partly used to make thin section ,4.

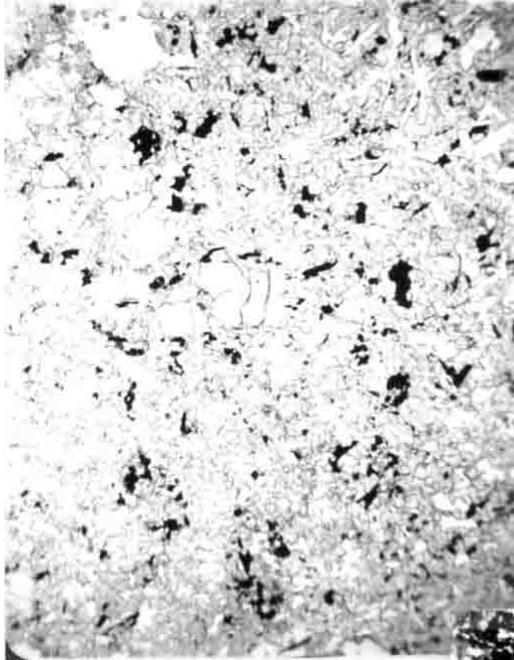


Fig. 2a

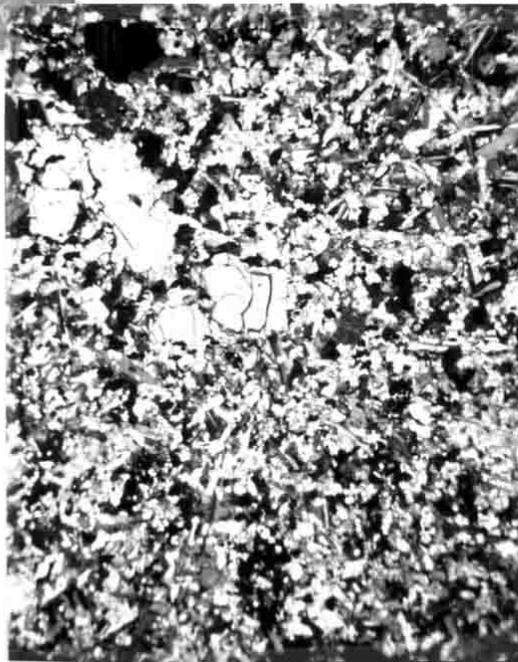


Fig. 2b

Figure 2. Photomicrograph of 15548,4.  
Width about 3 mm. a) transmitted light; b) crossed polarizers.