

**71075****High-Ti Mare Basalt****1.563 g, 1.5 x 1 x 0.5 cm****INTRODUCTION**

71075 (Fig. 1) was described as a dark gray (with faint brownish tint), equigranular basalt (Apollo 17 Lunar Sample Information Catalog, 1973), containing no zap pits. Approximately 5-10% vugs are present, inside of which are euhedral ilmenite, olivine, and pyroxene crystals. These vugs are irregularly distributed and the surfaces are finely hackly. This sample was collected from Station 1A.

**PETROGRAPHY AND MINERAL CHEMISTRY**

The mineralogy and petrography of 71075 has not

been reported before, although three thin sections have been made. During the preparation of this catalog, we examined 71075,27 and,28. This is a fine-grained (~0.1mm), well-crystallized, ilmenite-rich basalt, containing phenocrysts of olivine and ilmenite (up to 0.3mm). Little mesostasis glass is present. Ilmenite is also a groundmass phase with pyroxene and plagioclase. No armalcolite is present. Pink pyroxene masses (up to 0.3mm) exist and a pale pink pyroxene forms "bow-tie" structures with plagioclase. The pink pyroxene masses occasionally contain a core of olivine, indicating their size is due to olivine resorption. Rare Cr-ulvbspinel is present

(0.15mm). Troilite and native Fe form interstitial phases.

**WHOLE-ROCK CHEMISTRY**

No whole-rock composition has been determined for 71075.

**PROCESSING**

Of the original 1.563g of 71075,0, approximately 1.38g remains. 71075,1 was used to prepare thin sections 71075,26-28.



Figure 1: Hand specimen photograph of 71075,0.