

76538**High-Ti Mare Basalt****5.87 g, 1.4 x 2.0 x 1.5 cm****INTRODUCTION**

Sample 76538 is a small, coarse-grained, high-Ti mare basalt collected as part of the rake sample taken at Station 6 (Phinney et al., 1974).

PETROGRAPHY

Mare basalt fragment 76538 has a fresh, hackly surface (Fig. 1). It has a few relict zap pits on all surfaces. Thin section 76538,8 (Fig. 2) shows that it has an equigranular-to-subophitic texture with intergrown ilmenite, plagioclase, and pyroxene.

WHOLE-ROCK CHEMISTRY

The preliminary fused bead electron probe analysis of 76538 (Table 1) shows that it has a high TiO_2 content (~14%). This analysis indicates that this fragment is typical of mare basalts from Apollo 17.

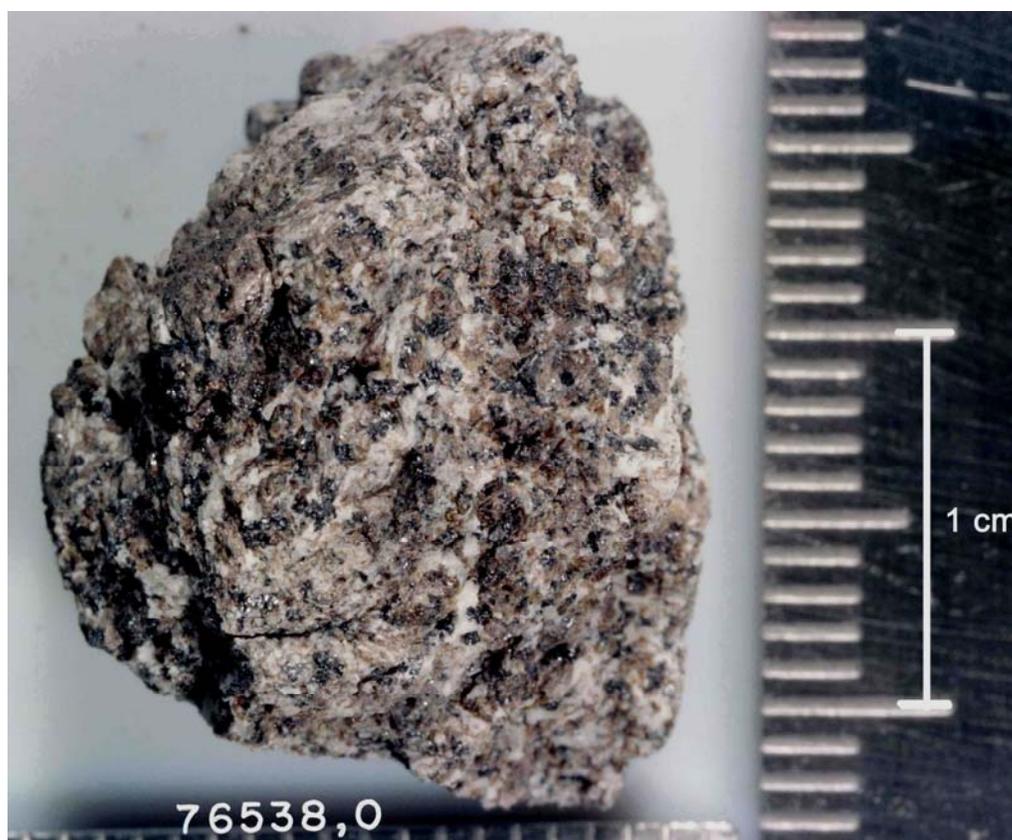


Figure 1: Photograph of 76538. Scale bar is marked in mm. S73-19609.

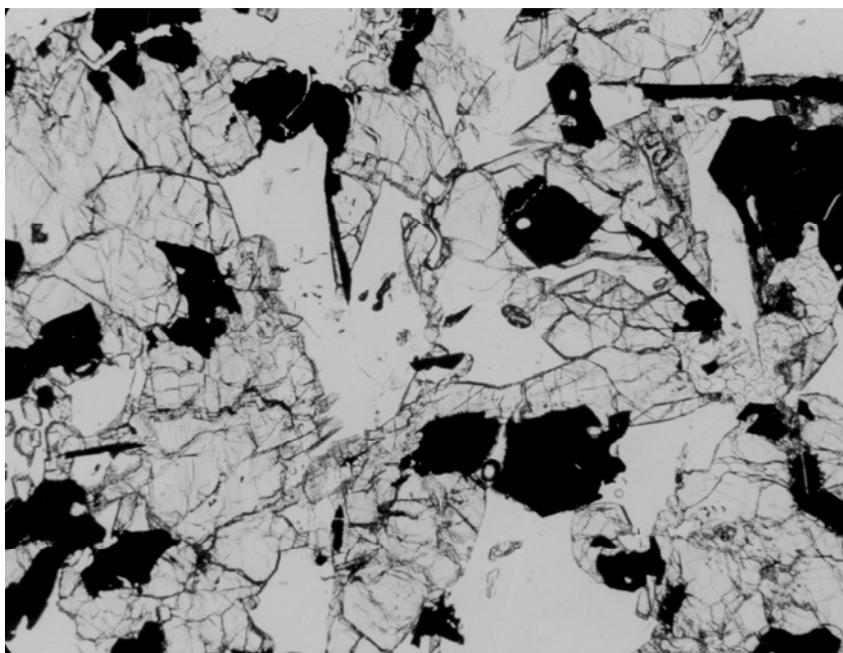


Figure 2: Photomicrograph of thin section 76538, 8'. Field of view is 2 x 3 mm.

Table 1: Whole-rock chemistry of 76538.

From Simonds and Warner (1981).

(Cautionary note: These preliminary analyses were made by fused bead electron microprobe analyses, R. Brown, analyst.)

Split Technique	A EMP
SiO ₂ (wt%)	36.79
TiO ₂	13.87
Al ₂ O ₃	9.70
Cr ₂ O ₃	0.50
FeO	18.58
MnO	
MgO	8.37
CaO	9.63
Na ₂ O	0.54
K ₂ O	0.08