

76506**Dark Matrix Regolith Breccia****2.81 g, ~1.3 x 1 x 1 cm****INTRODUCTION**

This sample was sieved from soil 76501. It is a regolith Breccia with a brown glass matrix and a high percentage of mare component. It is clearly a lithified mare soil.

Simonds and Warner mistakenly label the analysis of 76506 as "clast-bearing fine grained micropoikilitic impact melt rock."

PETROGRAPHY

Sample 76506 is a dark matrix regolith breccia (Fig. 1). Using SEM petrography, Phinney et al. (1976) term 76506 a friable microbreccia with 35% porosity. Thin sections show that this sample contains abundant orange glass beads and broken glass fragments (Fig. 2). It contains numerous mare basalt clasts

and abundant ilmenite and was derived from the mare surface. However, it also contains small white clasts of feldspathic material from the lunar highlands (Fig. 2).

WHOLE-ROCK CHEMISTRY

Simonds and Warner (1981) report an analysis with 4.6% TiO₂ and 11% FeO (Table 1).



Figure 1: Photograph of 76506. Scale bar is in mm. S74-20168.

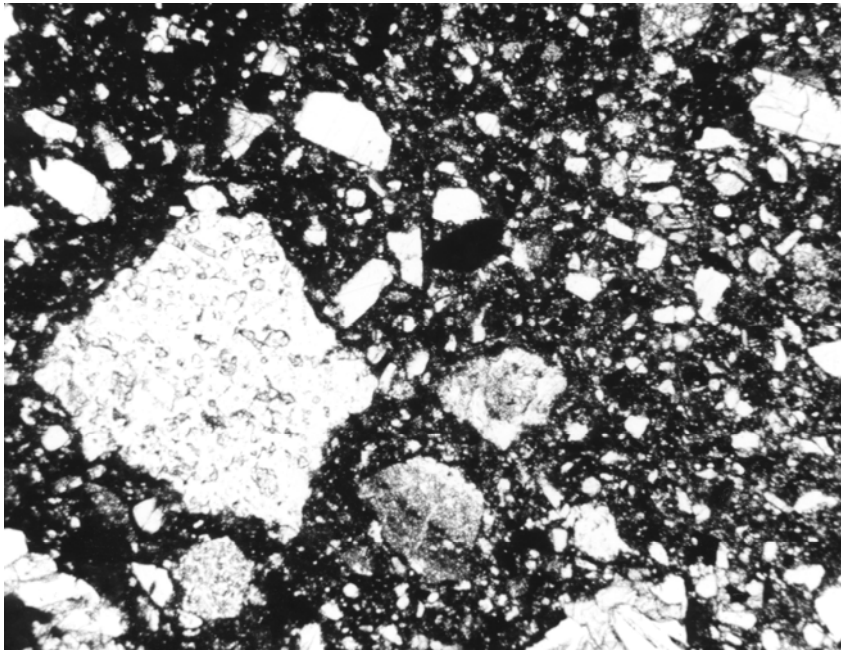


Figure 2: Photomicrograph of thin section 76506 ,7. Dark matrix contains orange glass. Field of view is 2 x 3 mm.

Table 1: Whole-rock chemistry of 76506.

From Simonds and Warner (1981).

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

Split Technique	2 EMP
SiO ₂ (wt%)	42.94
TiO ₂	4.64
Al ₂ O ₃	16.74
Cr ₂ O ₃	0.30
FeO	11.08
MnO	
MgO	10.36
CaO	11.73
Na ₂ O	0.49
K ₂ O	0.12