10026 – 9.3 grams
10027 – 8.9 grams
10028 – 3.5 grams
Regolith Breccia

Figure 1: Photo of 10026,10. Cube is 1 cm. NASA S75-32596.

Figure 2: NASA S75-32188 Cube is 1 cm.

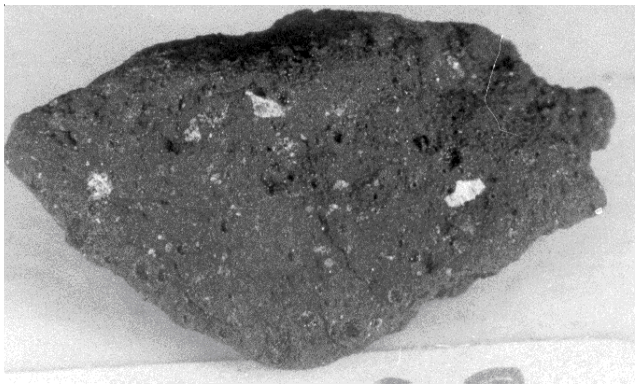

Figure 3: Photo of 10028. NASA S69-46041. Sample is 4 cm.

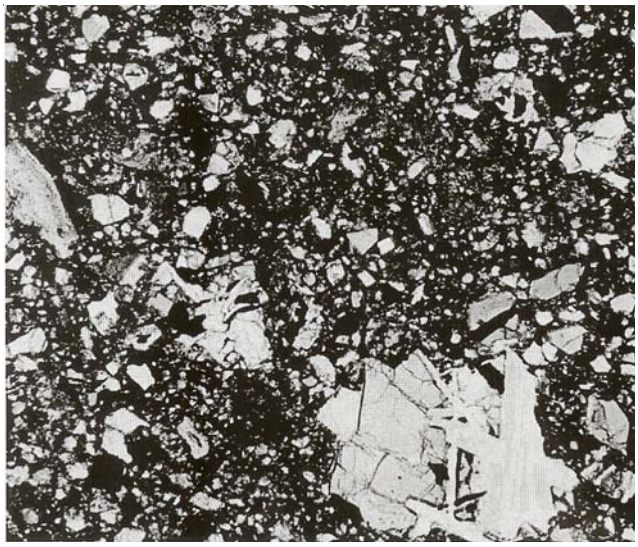

Figure 4: Photomicrograph of thin section of 10026. Field of view is 1.2 mm. S76-26860

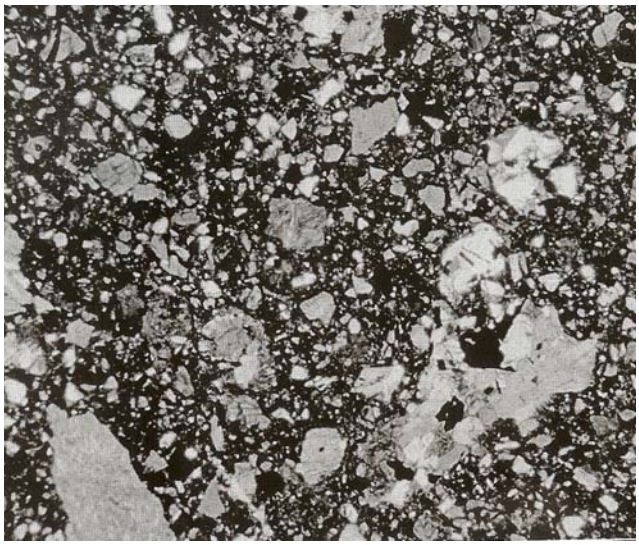

Figure 5: Photomicrograph of thin section of 10027. Field of view is 1.2 mm. S76-26306.

Introduction

10026, 10027 and 10028 were collected as part of the contingency sample from the area immediately in front of the Lunar Module (LM). They are similar to 10023 – 10025 from the same collection area, as well as the other Apollo 11 regolith breccias.

Petrography

Engelhardt et al. (1971) give a modal analysis of 10027. There is an abundance of basalt clasts.

Kramer et al. (1977) noted that 10028 may have a different clast assemblage. Fruland (1983) and Simon et al. (1984) discuss Apollo 11 regolith breccias in general. Phinney et al. (1974) showed how to characterize these rocks by SEM petrography (but did not include these samples).

Chemistry

none

Other Studies

Funkhouser et al. (1970) determined rare gases in 10027 (figure 6).

Processing

Apollo 11 samples were originally described and cataloged in 1969 and "recataloged" by Kramer et al. (1977). 10026, 10027 and 10028 were returned in the Contingency Sample Bag. There are 2 thin sections of 10026, 5 for 10027 and only 1 for 10028.

Mode for 10027 (Engelhardt et al. 1971)

Matrix	50 %
Without matrix	
Basalt	24 %
Anor.	2
Glass	26
Mafic min.	24
Plag.	13
Opaques	8

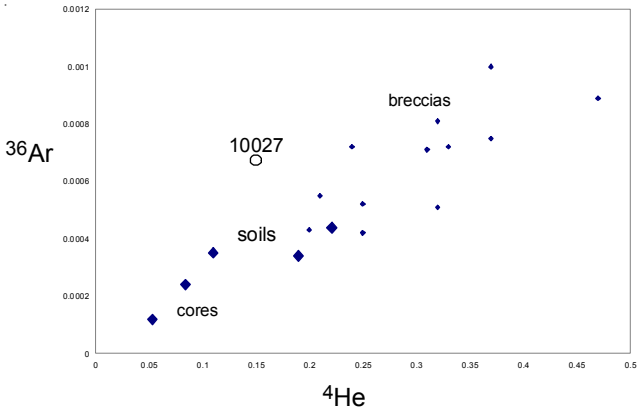

Figure 6: Implanted solar wind in 10027 compared with Apollo 11 soils and breccias (Funkhouser et al. 1070 and Hintenberger et al. 1976). Units STP cc/g.

References for 10026, 10027 and 10028

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