

INTRODUCTION: 15353 is a regolith breccia, containing glass, lithic, and mineral debris in a dark, glassy matrix. The lithic clasts include olivine-normative mare basalt and highlands material. The sample was dusty and fairly angular (Fig. 1). No zap pits were obvious. 15353 was collected as part of the rake sample from the north-east rim of Spur Crater.



Figure 1. Post-chip view of 15353. S-71-57479

PETROLOGY: 15353 is a glassy regolith breccia (Fig. 2). Steele et al. (1977) reported that it contained 35% glass, 15% lithic clasts, 20% mineral clasts, and 30% fine matrix. The glasses include green, yellow, and colorless glass balls. The lithic clasts include mare basalts and breccia fragments. One large clast (A of Steele et al., 1977) is an olivine-bearing basalt (Fig. 2) with 50% equigranular plagioclase, 45% pyroxene, and

some ilmenite. A second clast (B of Steele et al., 1977) contains plagioclase with low iron and is an Fe-rich (En ~50) highlands lithology. Several small fragments are impact melts (Prinz et al., 1973, erroneously referred to 15353 in their text as the source of their glass data, but their sample was 15352).

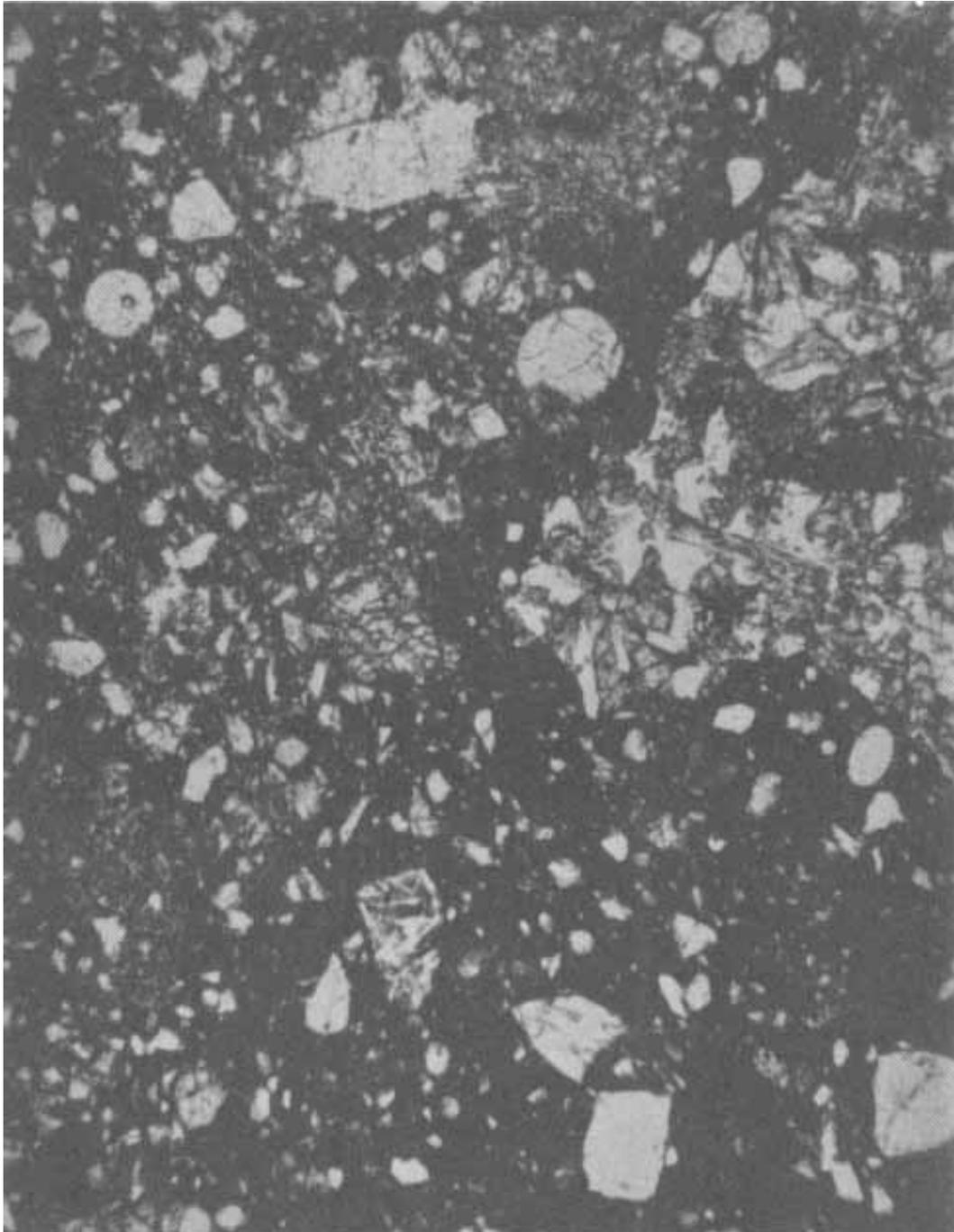


Figure 2. Photomicrograph of general matrix of 15353,2.
Clast in upper right is clast A of Steele et al. (1977), a mare basalt.
Transmitted light. Width about 2 mm.

PROCESSING AND SUBDIVISIONS: 15353 was split by chipping (Figs. 1 and 3). ,0 is now 7.75 g and ,1 is 2.26 g. ,2 was used to produce thin sections ,2 and ,7, with potted butts ,9 and ,10 remaining.

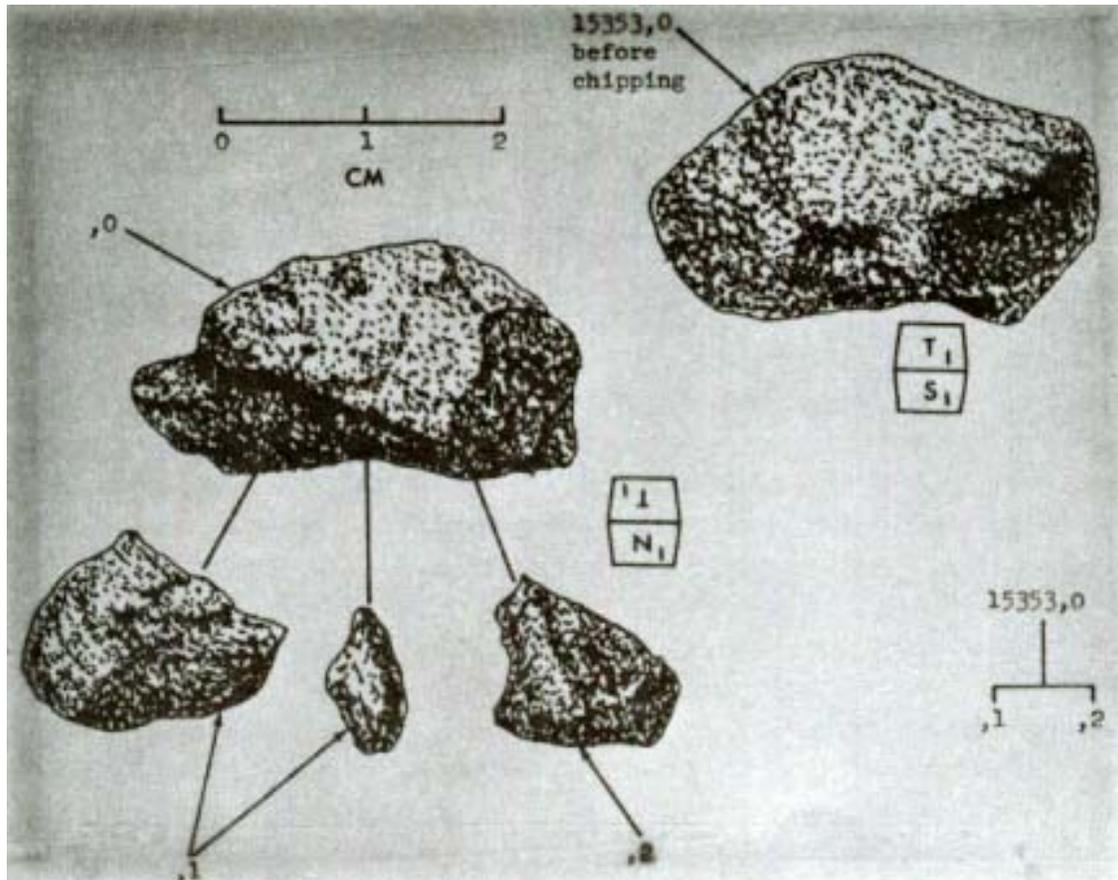


Figure 3. Chipping of 15353.