

INTRODUCTION: 15323 is a glassy regolith breccia (Fig. 1), more coherent and less porous than many others from Spur Crater. It contains small lithic clasts, as well as mineral and glass fragments, and has a vesicular glass coat in part. The glass coat has some zap pits, but more occur on the breccia. It was collected as part of the rake sample from the north-east rim of Spur Crater.

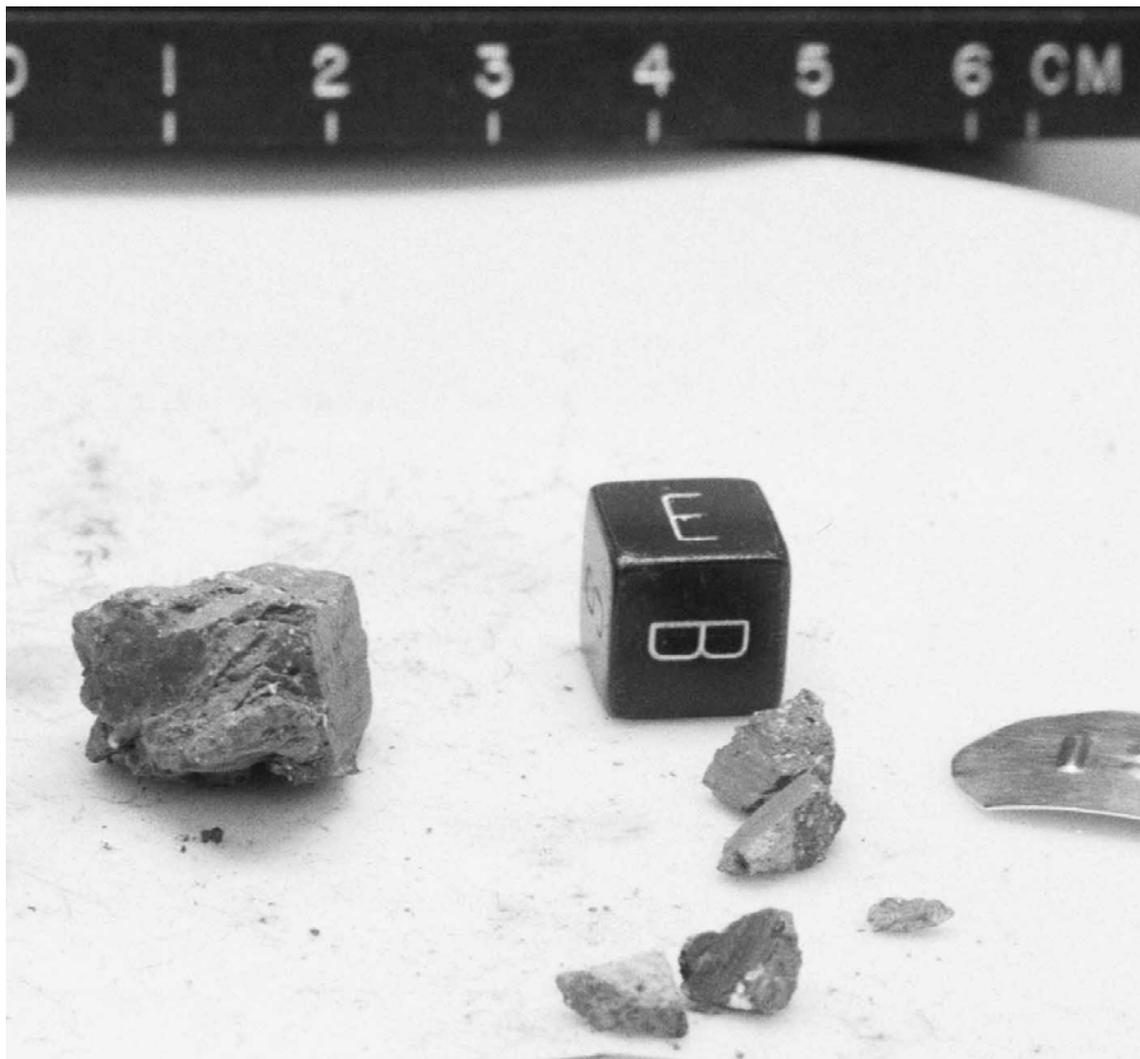


Figure 1. Post-sawing view of 15323. S-71-59575

PETROLOGY: 15323 is a regolith breccia (Fig. 2), with a brown, opaque, glassy matrix which is less porous than most of its ilk. It contains many clear, yellow, and orange glass spherules and fragments (Dowty et al., 1973b), as well as green glass. It also contains

highlands breccia fragments and KREEP basalts. Hlava et al.(1973) reported about 30 glass analyses, which include aluminous highlands and mare glasses. They also reported compositions of pyroxene, olivine, plagioclase (Fig. 3) and Si-K-rich residual glass in a high-alumina basalt fragment. Their olivine analysis is listed as Fo_{16.5} but should be Fo_{85.5}. Their defocussed beam analysis for the fragment is consistent with a KREEP basalt (Al₂O₃ 19.4%, K₂O 0.6%). The glass coat is vesicular, colorless/gray, and faintly banded (Fig. 2b).

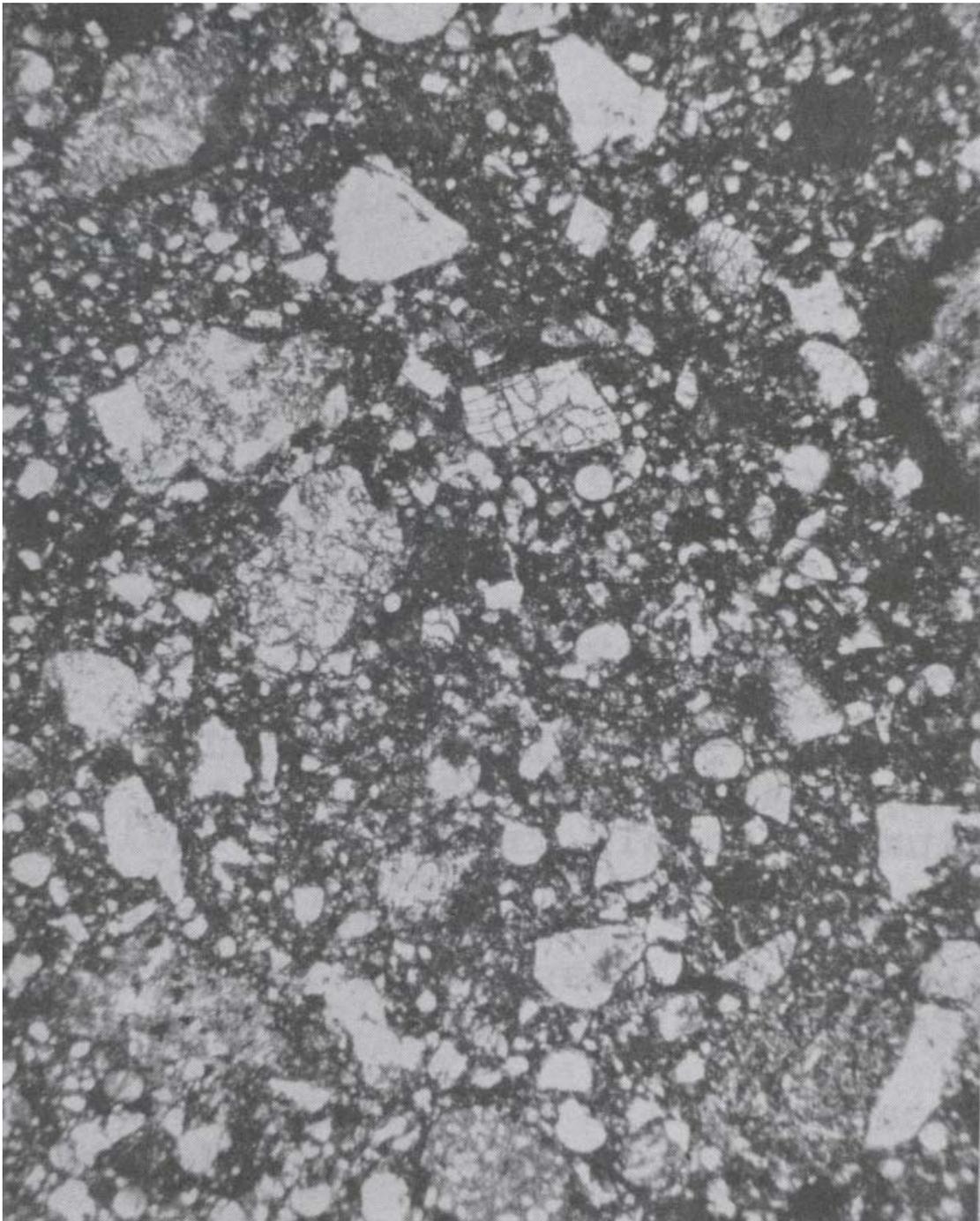


Fig. 2a

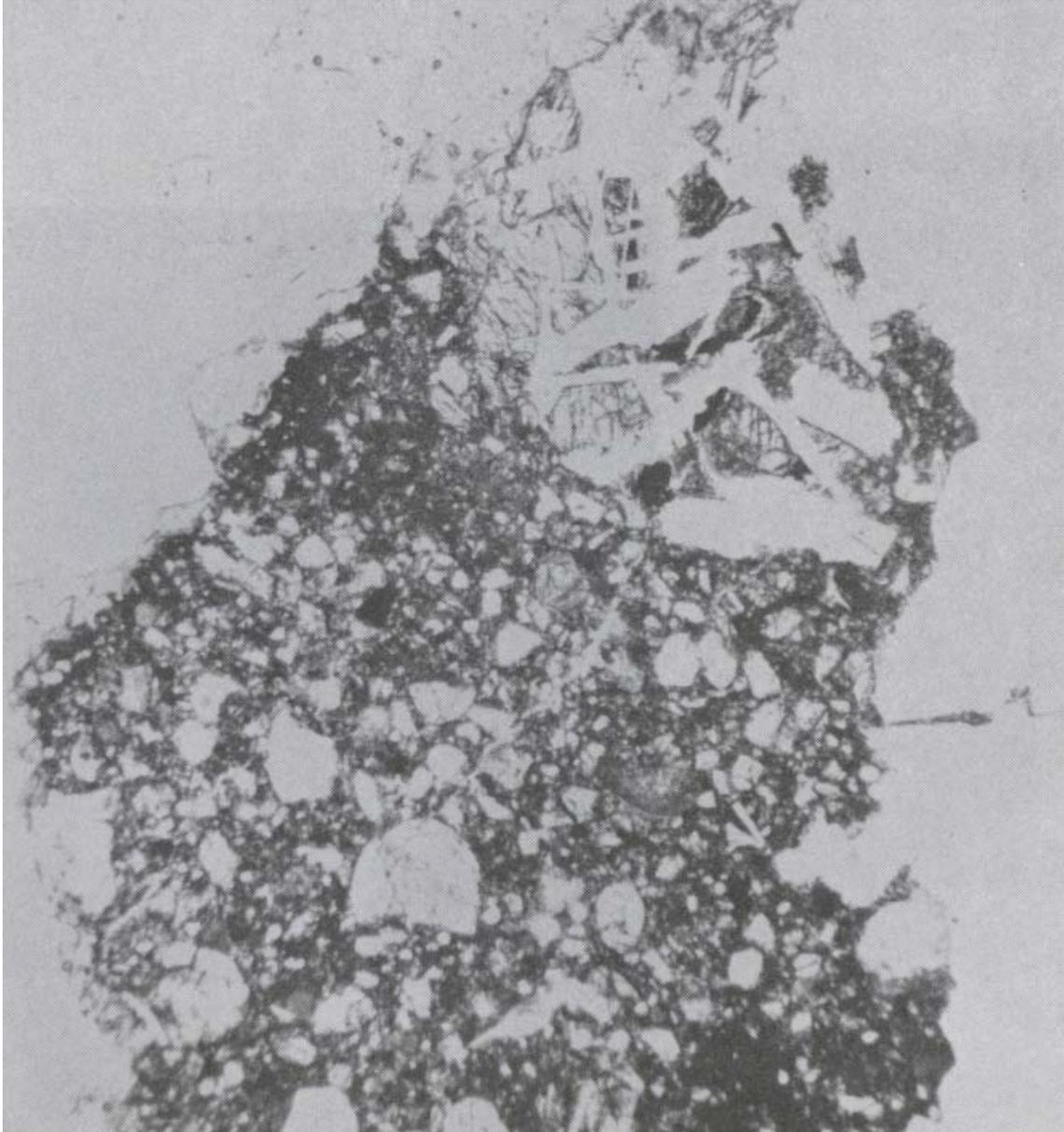


Fig. 2b

Figure 2. Photomicrographs of 15323,8. Transmitted light. Widths about 2 mm.
a) general matrix, showing small highlands breccia fragments (left center);
b) general matrix, showing vesicular glass coat (top, left) and prominent
KREEP basalt fragment (top, right).

PROCESSING AND SUBDIVISIONS: Because of its coherency, 15323 was sawn to produce ,1 and ,2 (Figs. 1, 4). ,0 is now 3.39 g. ,2 was partly used to make thin sections ,7 and ,8.

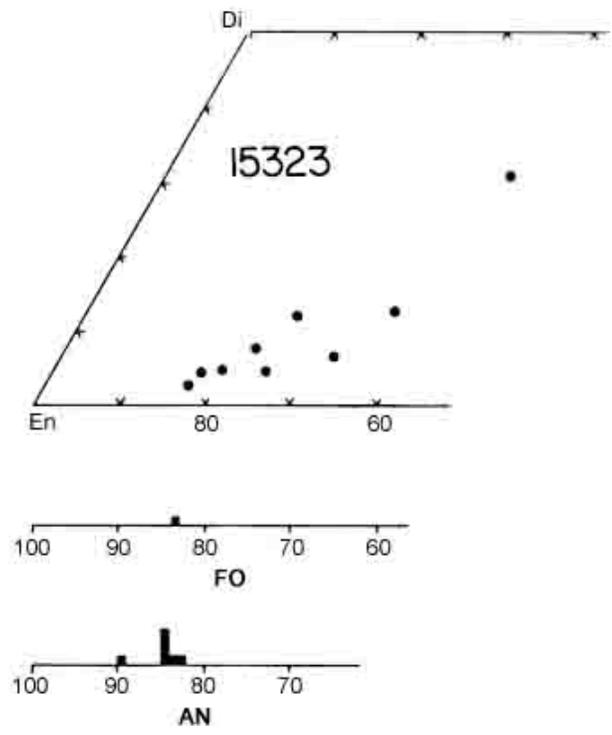


Figure 3. Compositions of minerals in clast of KREEP basalt (Hlava et al., 1973).

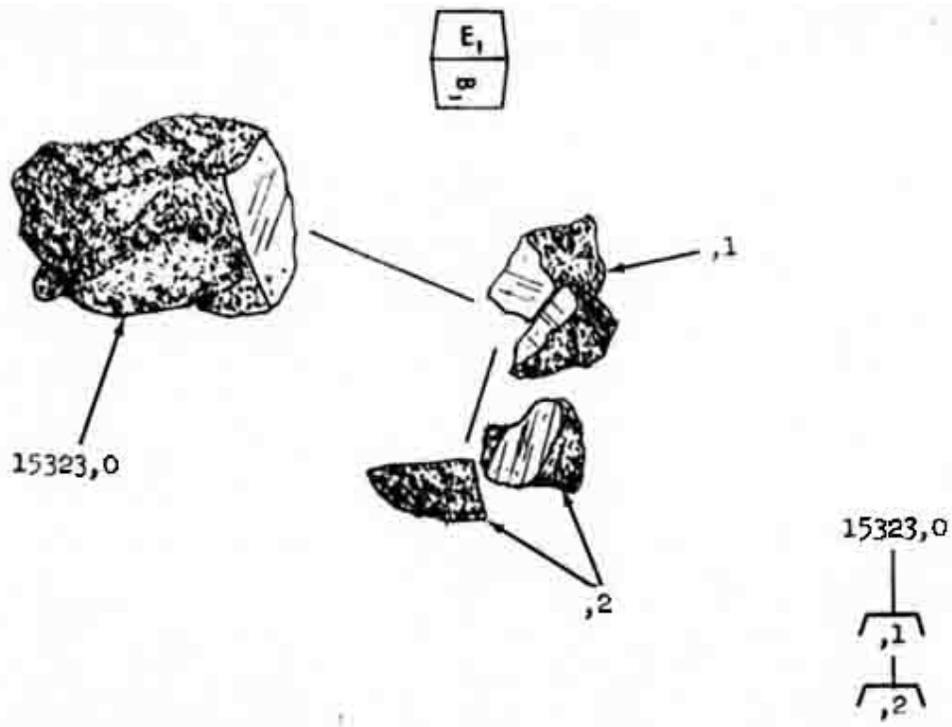


Figure 4. Sawing of 15323.