

**INTRODUCTION:** 15335 is a moderately friable, brown-gray regolith breccia (Fig. 1). It had apparent fresh fracture surfaces on both ends, and glassy slickensides on one surface. No zap pits were obvious. The sample was collected as part of the rake sample from the north-east rim of Spur Crater.



Figure 1. Post-chip view of 15335. S-71-57215

PETROLOGY: 15335 is a glassy regolith breccia with a dense looking, brown matrix (Fig. 2). It contains green, colorless, yellow, and orange/red glass spheres and fragments as well as glassy lapilli and breccias, mineral fragments, and lithic fragments. Steele et al. (1977) found 40% glass, 10% lithic fragments (mare, anorthosite, and breccia), 15% mineral fragments, 25% fine matrix, and 10% porosity (porosity is actually difficult to establish as the thin sections are plucked and bubbled). Steele et al. (1977) tabulated two clasts: A with 80% plagioclase and 20% olivine ( $Fo_{88-90}$ ), very fine-grained, and B, a mare basalt, also very fine-grained, providing some mineral data, including diagramming an exsolved mineral fragment (about  $En_{55}Wo_{12}$ ). Steele et al. (1972b) showed pyroxene and olivine compositions for fragments throughout their sample (Fig. 3). The range of compositions is great and appears to be dominated by KREEP and mare materials.

PROCESSING AND SUBDIVISIONS: 15335 was chipped (Figs. 1 and 4). .2 was used to produce thin sections ,2 and ,6, with potted butts remaining. ,0 is now 4.75 g.



Figure 2. Photomicrograph of general matrix of 15335,6.  
Transmitted light. Width about 2mm.

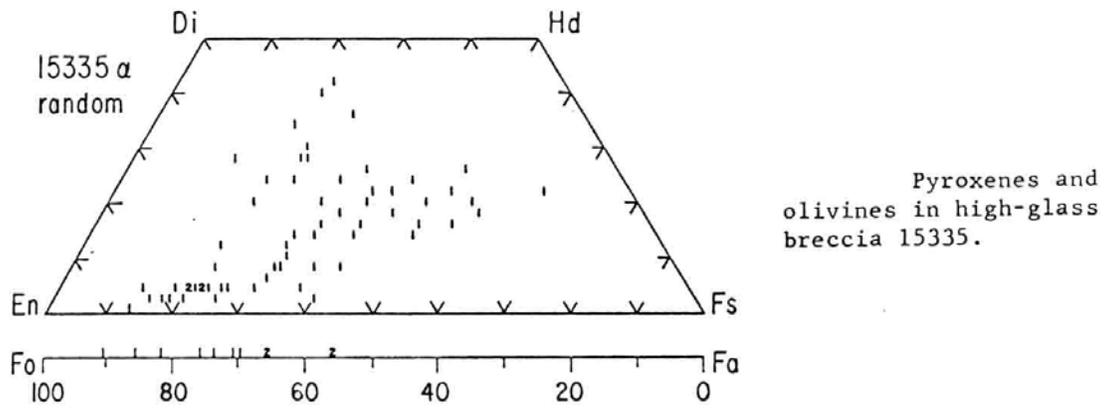


Figure 3. Pyroxenes and olivines in 15335 (Steele et al., 1972b).

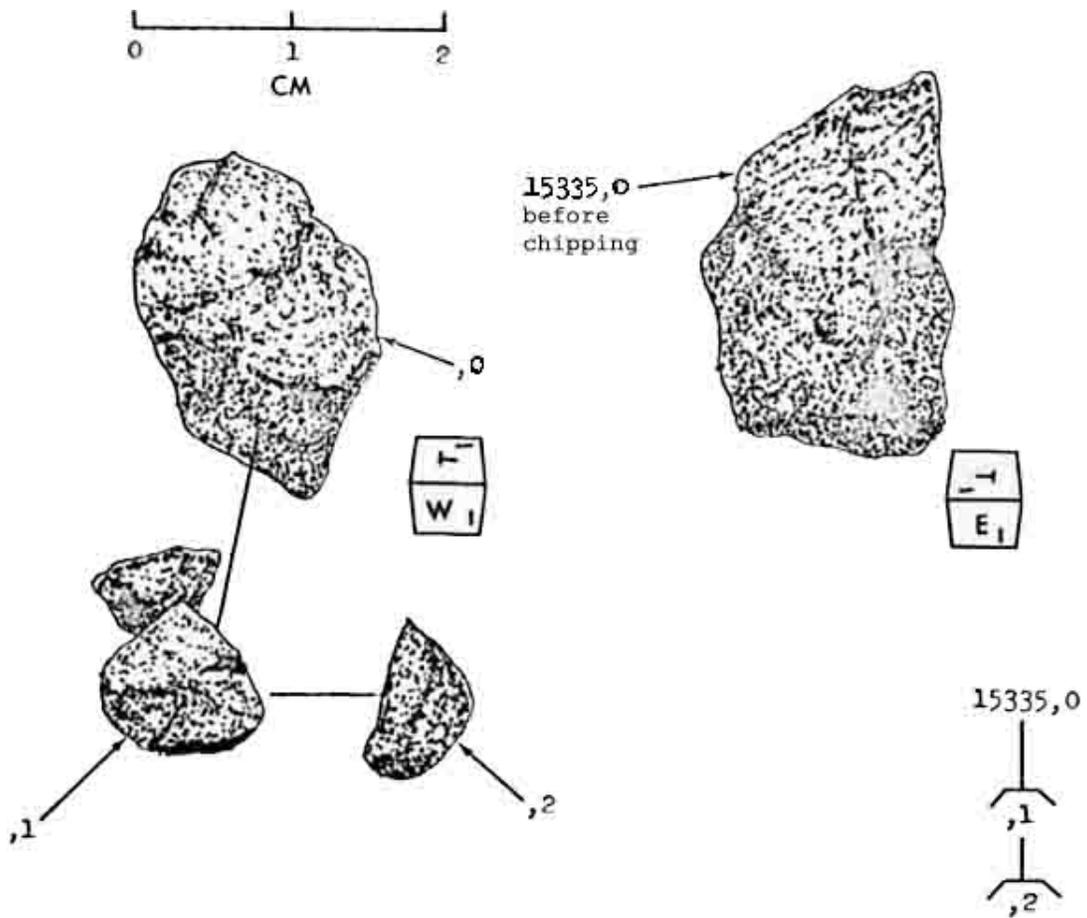


Figure 4. Chipping of 15335.