

**INTRODUCTION:** 15331 is a regolith breccia (Fig. 1) containing glass and mineral fragments, and prominent small lithic fragments, mainly breccias. The sample was a dark slabby fragment with one glassy slickensided surface. Spall areas suggested that one end had been exposed, but zap pits were not obvious. 15331 was collected as part of the rake sample from the north-east rim of Spur Crater.

**PETROLOGY:** 15331 is a glassy regolith breccia (Fig. 2). Neither thin section (,2 and ,6) is of high quality, and the porosity and fine matrix texture are impossible to evaluate. Colorless, green, yellow, and orange glasses occur as spheres and shards. Steele et al. (1977) tabulated 15331,2 as 35% glass, 20% lithic fragments (mare, anorthosite, and breccia), 25% mineral fragments, and 30% fine matrix. They noted several anorthosite clasts, and one large holocrystalline lithic clast. They tabulated two clasts; A had 20% pyroxene (En~58Wo<sub>10-30</sub>) and 80% plagioclase (low iron, high calcium) with a fine grain size. B was a variolitic mare basalt. They plotted an exsolved pyroxene fragment (Mg<sup>1</sup> about 62). Steele et al. (1972b) reported grains of olivine (Fo<sub>87</sub>) and pink spinel in the matrix.

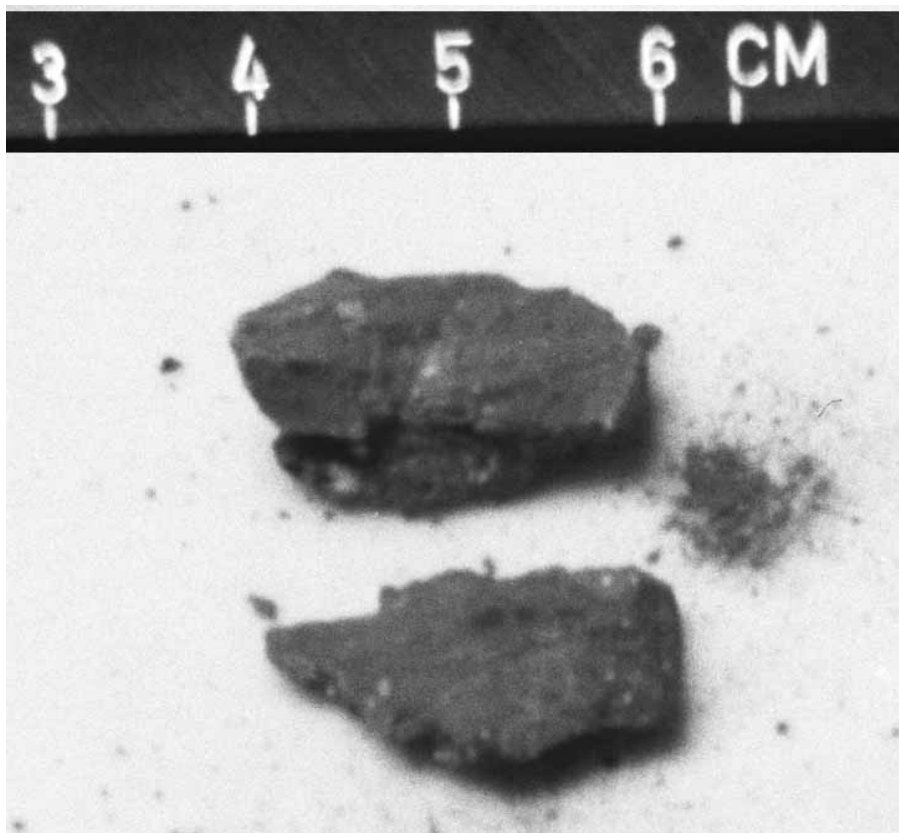


Figure 1. Post split view of 15331,0 and ,1 before ,1 was split into two pieces.  
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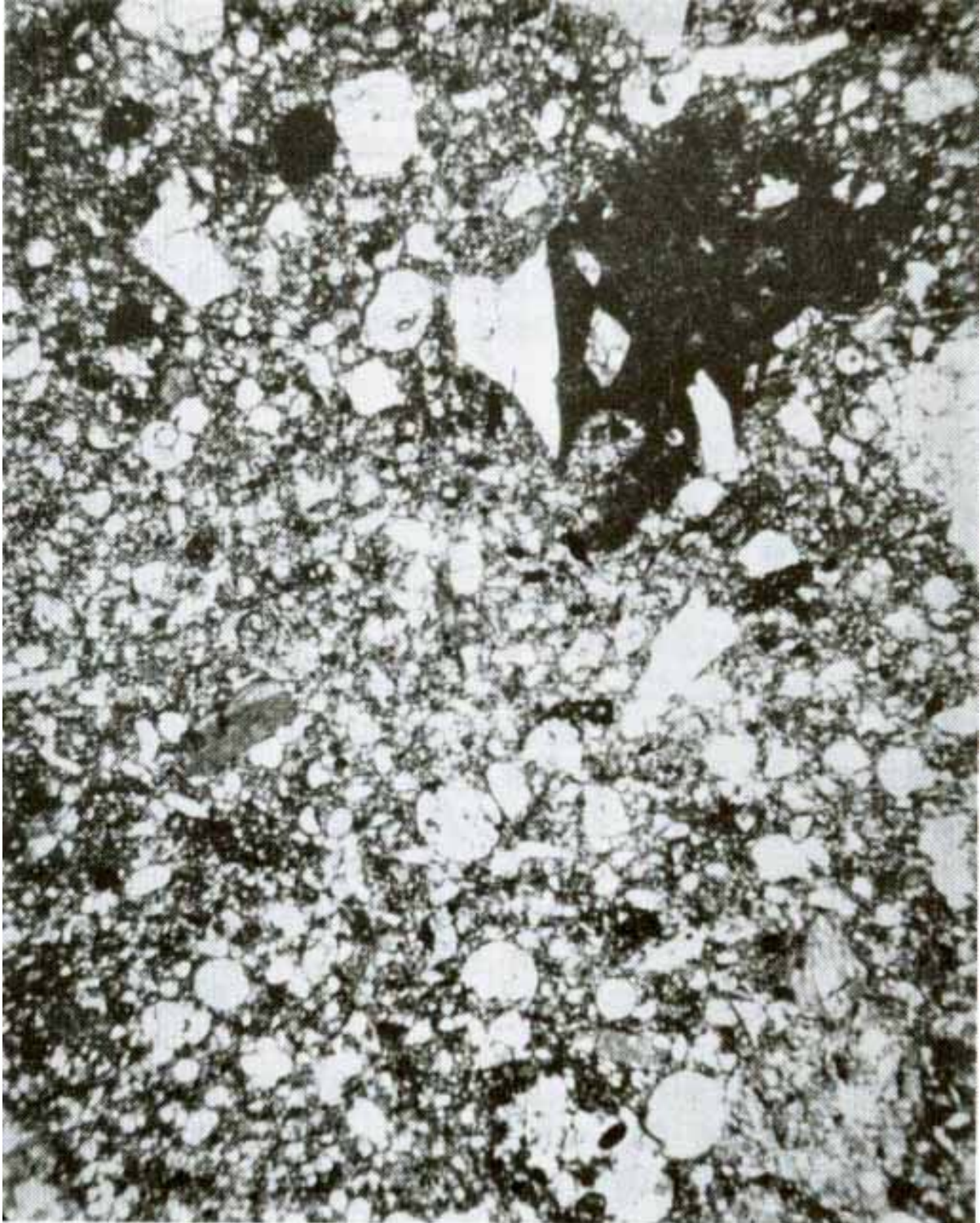


Figure 2. General matrix of 15331,2.  
Transmitted light. Width about 2mm.



PROCESSING AND SUBDIVISIONS: 15331 was chipped to produce ,1 and ,2 (Fig. 3). ,2 was used to make thin sections ,2 and ,6, with small potted butts remaining. ,0 is now 1.69 g.

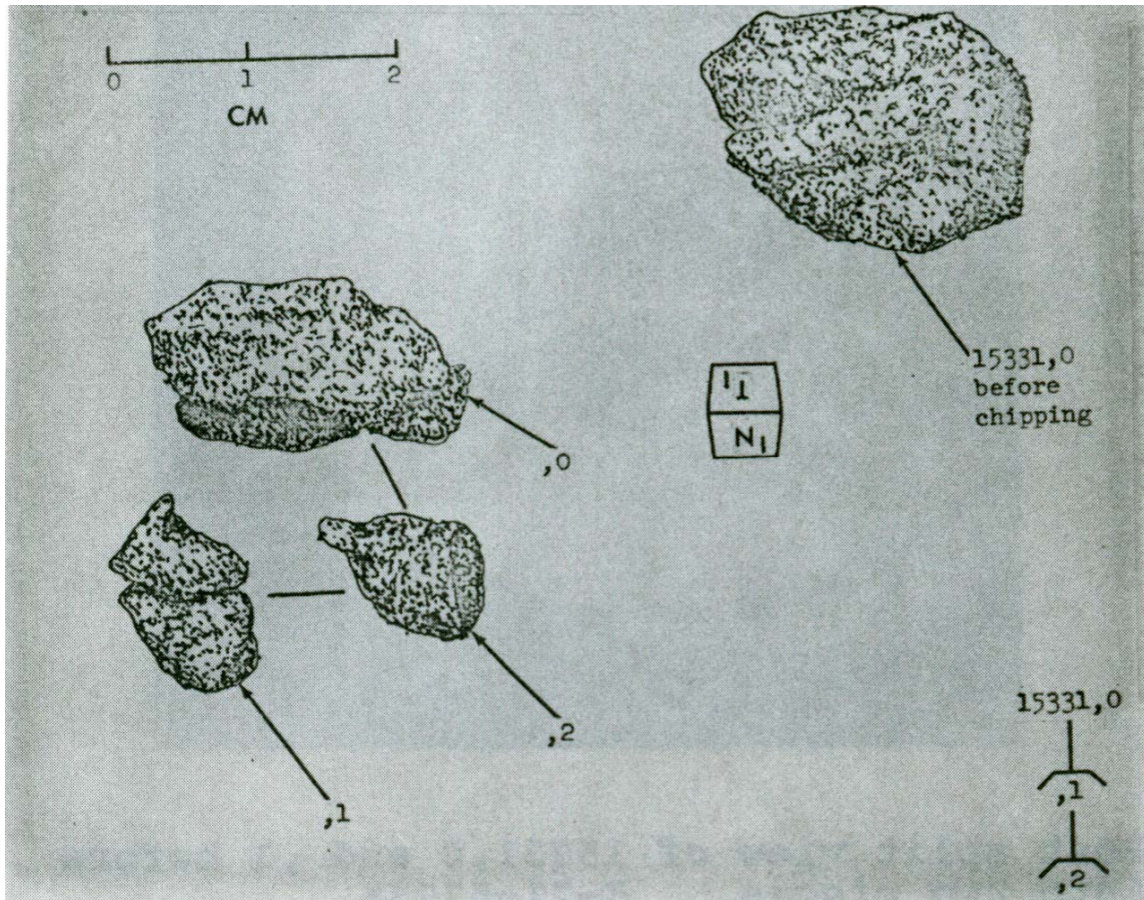


Figure 3. Chipping of 15331.