

61536 GLASSY POLYMICT BRECCIA, PARTLY GLASS-COATED 86.0 g

**INTRODUCTION:** 61536 is a coherent, glassy breccia with light-colored clasts (Fig. 1). A vesicular, debris-filled green glass coats portions of the surface. The large white clast in Figure 1 is a granoblastic troctolitic (?) anorthosite. 61536 is a rake sample collected from the rim of Flag Crater.



FIGURE 1. S-72-43398.

**PETROLOGY:** Thin sections cut for this study show that the matrix of 61536 is glassy to cryptocrystalline. Angular clasts of mildly shocked plagioclase, mafic minerals, basaltic and poikilitic impact melts, brown glassy breccia or devitrified glass, and orange-brown glass shards are common (Fig. 2). Many of the clasts exhibit reaction rims with

the matrix. Metal, troilite, and glass beads are also present but not common. Several of the metal particles are rusty.

The large white clast seen in Figure 1 is a granoblastic troctolitic (?) anorthosite (Fig. 2), composed of anhedral to elongate plagioclase (~85%) and rounded mafic minerals (~15%). Many grains meet in triple junctions. Plagioclases are much larger (200-400  $\mu\text{m}$ ) than the mafic minerals (25-50  $\mu\text{m}$ ). Trace amounts of ilmenite, troilite and metal are scattered through the clast. The clast in thin section ,7 is cut by a brown glassy vein containing lithic clasts. The vein is more uniform and contains fewer clasts than the general breccia matrix and is clearly intrusive.

PROCESSING AND SUBDIVISIONS: Thin section ,5 was made from a chip of matrix. The large white clast was designated ,2 most of which remains part of ,0. Two chips (,3 and ,4) were taken from ,2 and thin sections ,6 and ,7, respectively, cut from them. ,3 was entirely used up.

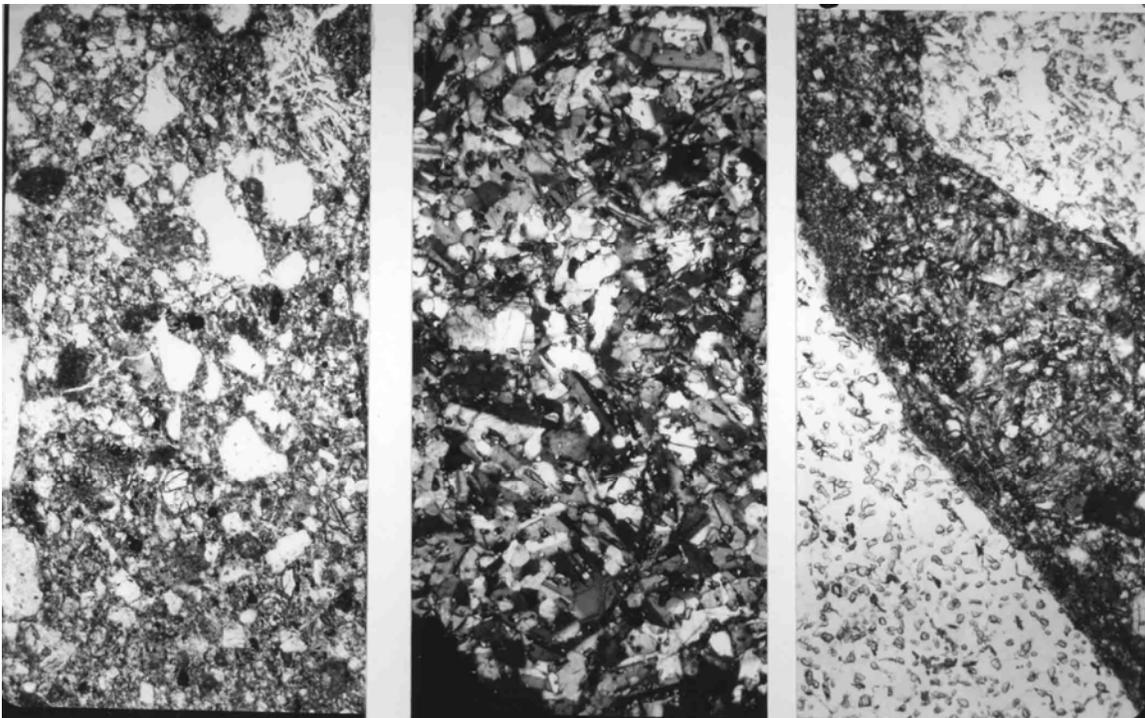


FIGURE 2.

- a) 61536,5, matrix, ppl. Width 2 mm.
- b) 61536,6, granoblastic clast, xpl. Width 2 mm.
- c) 61536,7, granoblastic clast, ppl. Width 2 mm.