

**79175****Glass-Bonded Agglutinate**  
**677.7 g, 14 x 13 x 9 cm****INTRODUCTION**

79175 was described as a medium gray (with brownish tinge), friable to coherent breccia, containing numerous clasts, many of which are nearly free-standing, whereas others are firmly embedded (Apollo 17 Lunar Sample Information Catalog, 1973) (Fig. 1 a,b). The surface is partially coated with individual splashes and flow-banded crusts of vesicular glass; some portions are coated with a fine gray dust. Cavities are abundant in this clast (< 1 mm

to 2 cm). Internal walls of the larger cavities are lumpy, but smooth-surfaced.

79175 is composed of 40% ropy glass, 40% soil breccia clasts (1 x 1 x 1-30 x 15 x 15 mm), 15% basaltic clasts (up to 20 mm), 2% dense, sugary (plagioclase-rich) clasts (30-50 mm), and < 1% white lithic clasts. Glass permeates the rock, welding clasts of soil breccia, basalt (coarse- and fine-grained), and other clasts into a coherent mass. The glass varies from fresh and vitreous to dull and

aphanitic. Luster varies from vitreous to sub-metallic. The glass is coated with dust in many areas. Glass color is generally black, but orange around zap pits. Soil breccia clasts are moderately coherent. They contain small, angular inclusions of rock and mineral fragments and a few gray glass spherules. Basalt clasts have textures ranging from coarse- to fine-grained to dense and aphanitic. One clast is composed of 40% plagioclase laths (up to 3 mm), 45% cinnamon pyroxene (up to 2 mm),



Figure 1a: Hand specimen photograph of 79175,0.



Figure 1 b: Hand specimen photograph of 79175,0.

and 15% black opaques (up to 0.5 mm). Another clast is a very fine-grained, ilmenite-rich basalt. A third clast, on the E face, is a glomeroporphyritic basalt.

Although the processing of 79175 indicates thin sections have been made and samples sent to PIs, we can find no reference to this sample in the literature.

---

### PROCESSING

Of the original sample, 5538 of 79175, 0 remains. The next largest sub-samples are, 1 1 (35.358) and, 7 (15.91g). : 4x thin sections have been made: 79175, 27-, 29; and, 38-,40.