65056 VARIOLITIC IMPACT MELT 64.8 g

INTRODUCTION: 65056 is a coherent, dark gray, glassy impact melt with abundant vesicles and a few large white clasts (Fig. 1). The exterior surfaces of this rock are smooth suggesting that it represents a complete cooling unit.

65056 was collected from the interior wall of a subdued 20 m crater, ~30 cm from 65055. Although its lunar location is precisely known, its orientation could not be determined in the laboratory due to breakage. Zap pits are absent.

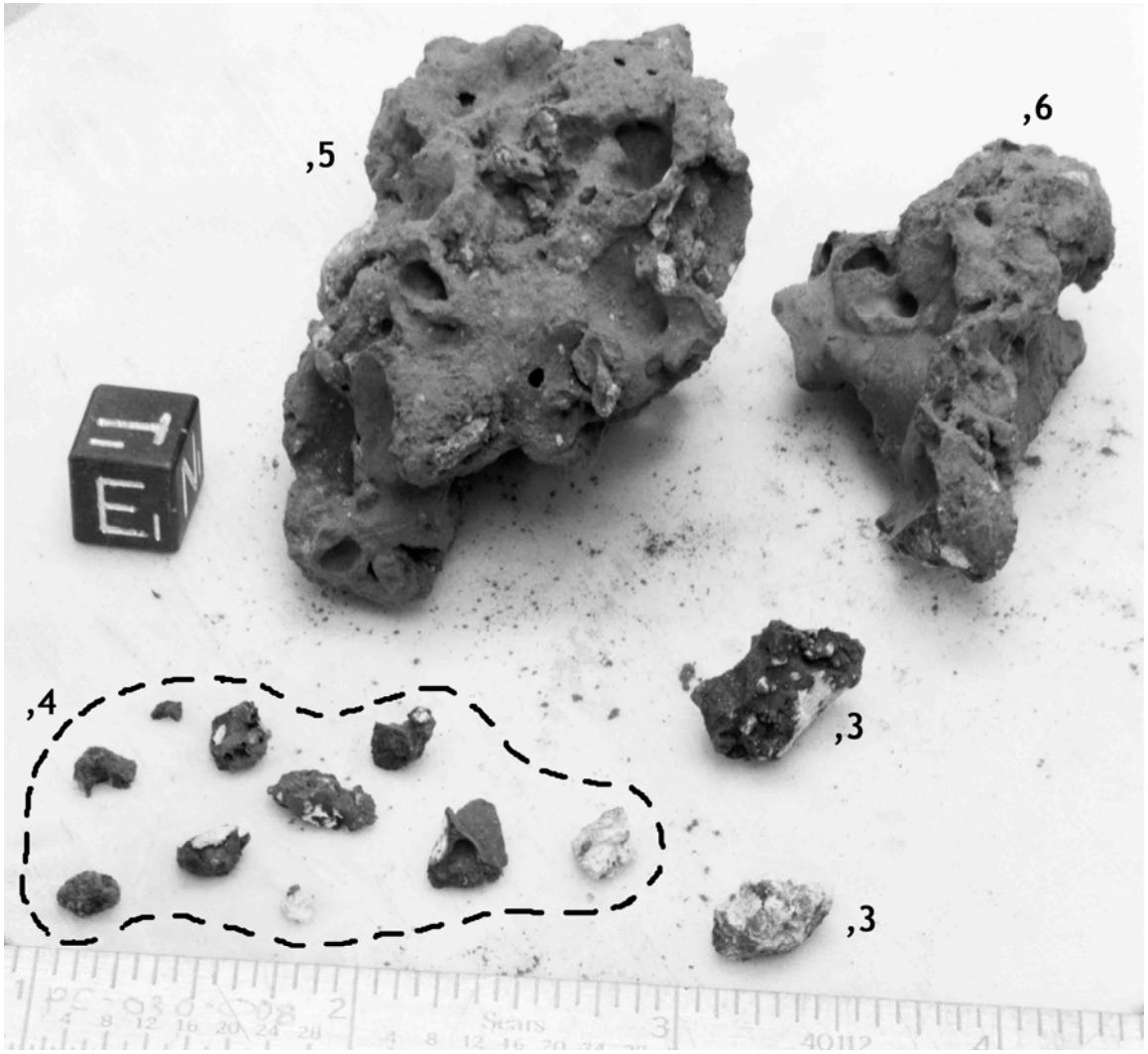

FIGURE 1. S-73-15143.

PETROLOGY: The matrix of 65056 is a mesostasis-rich impact melt with thin laths of plagioclase in sheaves, "bow-tie" structures, and radiating clusters (Fig. 2). Interstices are generally cryptocrystalline, not glassy. Some Fe-metal spherules are present.

One clast of coarse-grained cataclastic anorthosite (plagioclases up to 4 mm) and one clast of mafic-rich, recrystallized breccia are sampled by the thin sections (Fig. 2). Ilmenite, troilite and metal (some rusty) are accessory phases in the mafic-rich clast. Both clasts are ~1 cm long.

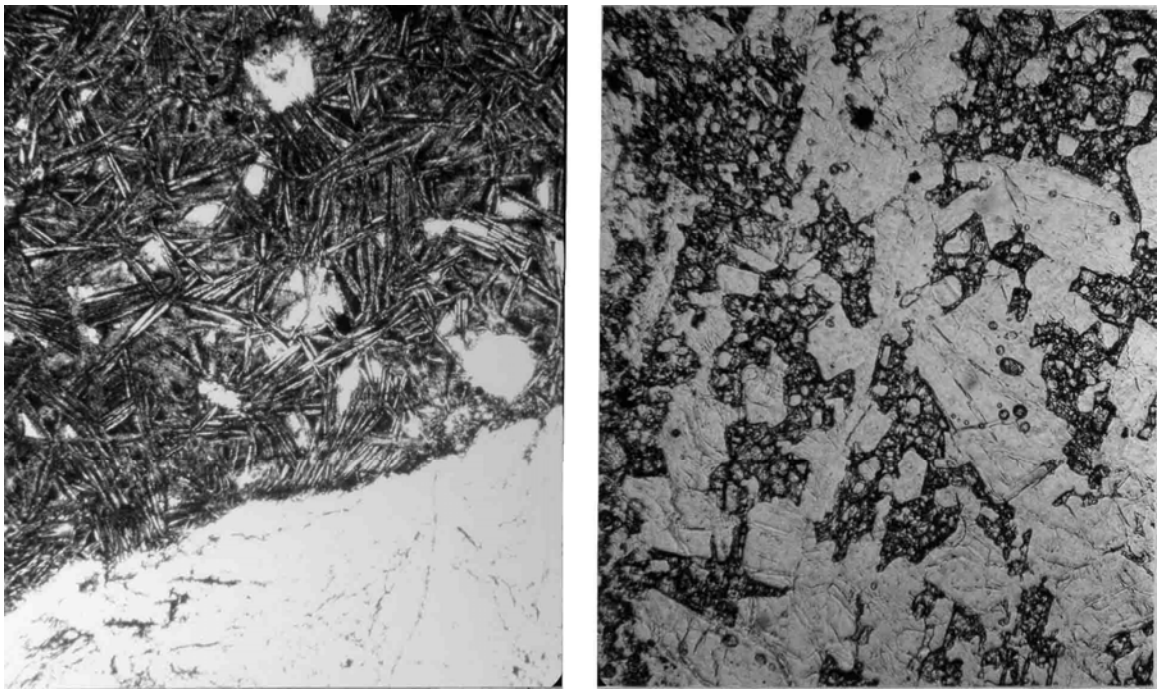

FIGURE 2. 65056,13. a) Spherulitic melt, ppl. Width 2 mm.
b) Poikiloblastic clast, ppl. Width 2 mm.

CHEMISTRY: Rancitelli et al. (1973b) provide whole rock K (K_2O = 0.13%), U (0.41 ppm) and Th (1.55 ppm) abundances by gamma-ray spectroscopy.

EXPOSURE AGE: Rancitelli et al. (1973a) provide whole rock ^{26}Al and ^{22}Na abundance data. From these data Yokoyama et al. (1974) conclude that 65056 is saturated in ^{26}Al activity.

PROCESSING AND SUBDIVISIONS: 65056 was removed from its documented bag as two pieces that fit together. In 1972 several small chips of matrix and clasts were removed as ,3 and ,4 (Fig. 1). ,3 was made into a potted butt from which thin sections ,13 and ,14 were cut. The two large pieces were numbered ,5 and ,6 (Fig. 1).