

INTRODUCTION: 64575 is a coherent, medium gray, poikilitic impact melt (Fig. 1). It is a rake sample from the rim of a subdued doublet crater on Stone Mountain. Zap pits are rare on one surface, absent on other surfaces.



FIGURE 1. Smallest scale division in mm. S-72-55369.

PETROLOGY: A petrographic description and mineral compositions are given by Simonds et al. (1973). Orthopyroxene is the sole oikocryst phase (~0.2 mm). Plagioclase chadacrysts tend to be very equant; many have rounded corners indicating some recrystallization (Fig. 2). A mode by Simonds et al. (1973) is 47% plagioclase + mesostasis, 43% orthopyroxene, 6% augite, 3% olivine and 2% opaques (dominantly ilmenite, a small amount of troilite and very rare Fe-metal). Mineral compositions are shown in Figure 3. Metal compositions are given by Gooley et al. (1973) and reproduced here as Table 1.

PHYSICAL PROPERTIES: Pearce and Simonds (1974) report the results of a room temperature hysteresis curve determination on 64575. The $\text{Fe}^0/\text{Fe}^{2+}$ is 0.126 and the total Fe^0 is 0.696 wt%.

PROCESSING AND SUBDIVISIONS: In 1972 a single chip (,1) was removed and allocated to Phinney for thin sectioning and petrography. The magnetic studies were done on the potted butt of ,1.

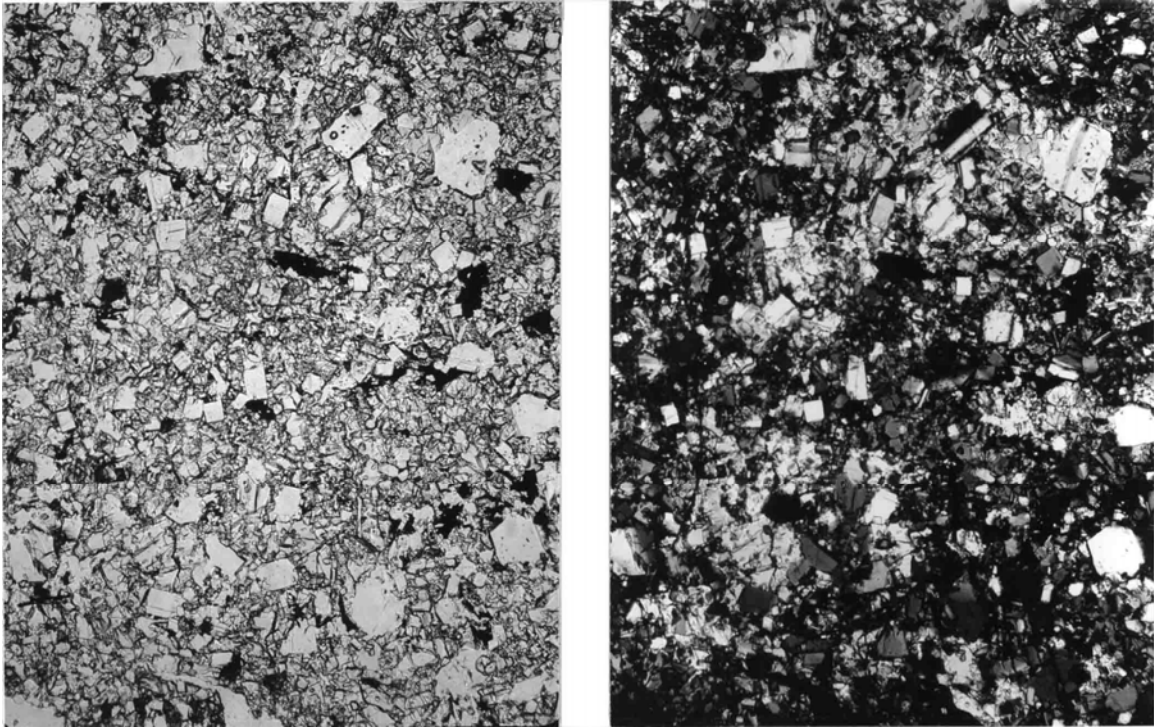


FIGURE 2. 64575,4, general view. Width 1 mm.
a) ppl. b) xpl.

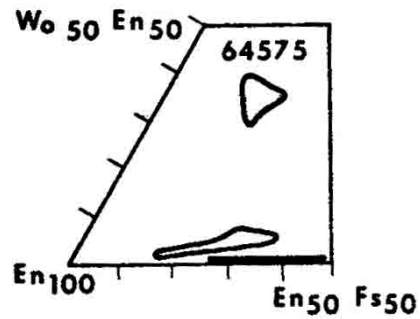


FIGURE 3. Mafic mineral compositions, olivine plotted along base, from Simonds et al. (1973).

TABLE 1. Compositions of metal (wt%) in 64575.

	<u>Ni</u>	<u>Co</u>	<u>P</u>	<u>S</u>
Metal	4.1-6.1	0.5	0.0-0.5	0.02