

INTRODUCTION: 63547 is a dark, coherent, poikilitic impact melt (Fig. 1). It is a rake sample and has zap pits.

PETROLOGY: Warner et al. (1973) and Simonds et al. (1973) classify 63547 as a poikilitic rock, and interpret it as an impact melt. Simonds et al. (1973) provide some petrographic and microprobe data.

The sample consists of pigeonite oikocrysts 200-400 μm across enclosing stubby plagioclases (Fig. 2). Interoikocryst areas contain ilmenite (and armalcolite ?), plagioclase, some glass, and Fe-metal blebs. A mode by Simonds et al. (1973) has 67% plagioclase and mesostasis, 25% pigeonite, and 8% olivine. Pyroxene compositions are quite restricted (Fig. 3). Most clasts are plagioclase, some are olivine; lithic clasts are absent.



FIGURE 1. Smallest scale division in mm. S-72-55389.

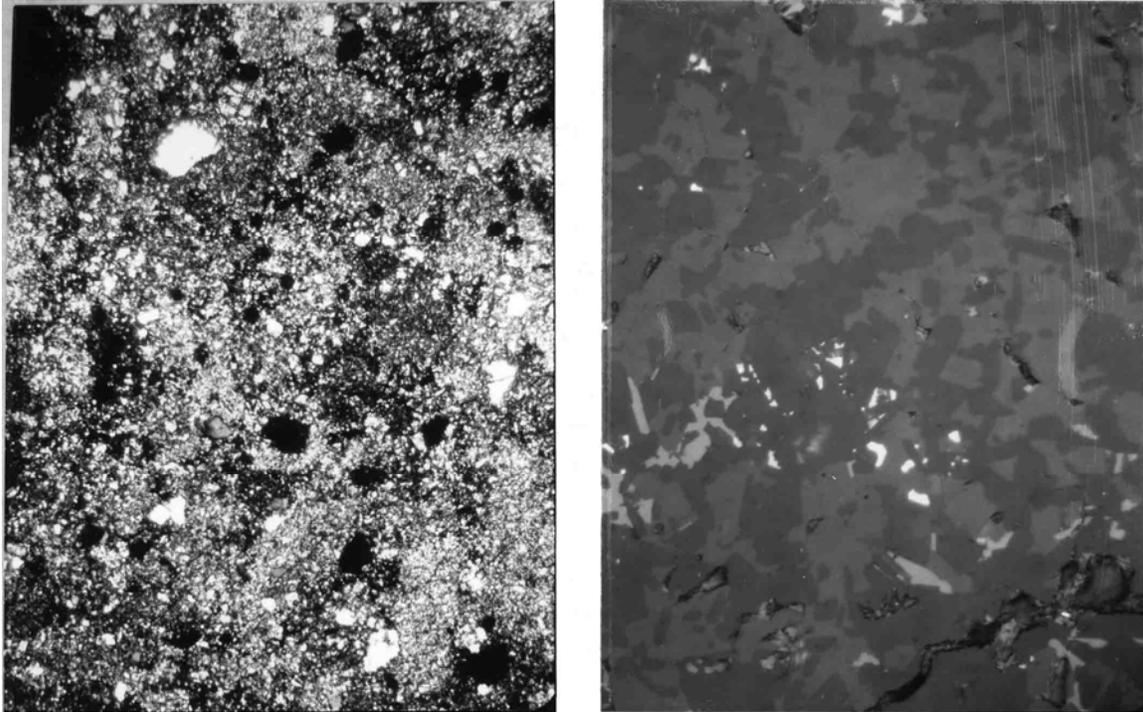


FIGURE 2. 63547,4.
 a) general view, xpl. Width 2 mm. b) close-up, rfl. Width 0.2 mm.

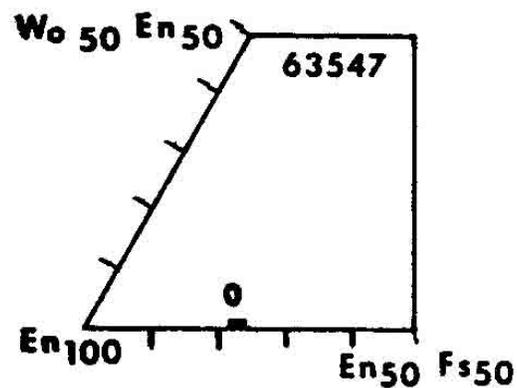


FIGURE 3. Mafic mineral compositions,
 olivine plotted along base, from Simonds et al. (1973).

PHYSICAL PROPERTIES: Pearce and Simonds (1974) report magnetic parameters for 63547. The saturation remanence to saturation magnetization ratio is 0.0017. Fe^0/Fe^{2+} is 0.224 and total Fe^0 is 1.05 wt%.

PROCESSING AND SUBDIVISIONS: A representative chip (,1) was used to make thin sections ,3 and ,4.