

15146 MARE BASALT (MONOMICT?) BRECCIA ST. 2 1.0 g

**INTRODUCTION:** 15146 (Fig. 1) is a breccia consisting almost entirely of mare basalt clasts and debris and may be monomict. It was collected with the rake sample 5 m east of the boulder at Station 2 (see Fig. 15105-2).

**PETROLOGY:** 15146 consists of coarse poikilitic clasts and coarse mineral fragments in a brown, fine-grained (glassy?) matrix (Fig. 2). It was described by Steele et al. (1977) and Steele et al. (1972). According to Steele et al. (1977), 15146 is a near-monomict breccia consisting of 15% lithic clasts, 75% mineral fragments, 10% fine matrix, and traces of glass. Pyroxene compositions are shown in Figure 3. The appearance of the materials is generally coarse mare, but Steele et al. (1977) referred to the pyroxene type as "other," and plagioclase as low-Fe, not like mare plagioclases. Pyroxenes are about  $\text{En}_{55}\text{Wo}_{11}$ ; plagioclases are  $\text{An}_{85-90}$ ; and olivines are  $\text{Fo}_{59}$ . Ilmenite and chromite are also present. The bulk chemistry appears to be similar to green glass, but the  $\text{TiO}_2$  is higher. One clast referred to as pyroxenite is shown as a photomicrograph in Steele et al. (1977) (in the caption misprinted as 15164) and consists mainly of pyroxene and olivine; but some plagioclase is also present. The affinity of the clast is unclear but appears to be mare, perhaps a cumulate.

**PROCESSING AND SUBDIVISIONS:** .0 was chipped to produce .1 (Fig. 1) from which thin sections .1 and .6 were made.

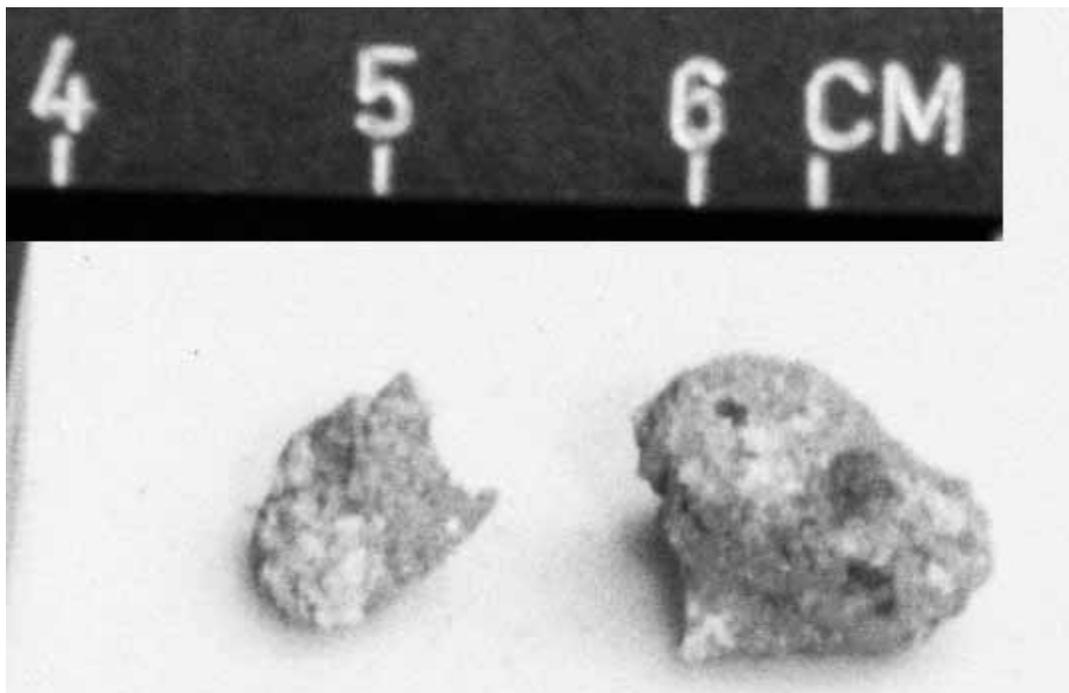


Figure 1. Splits of 15146. S-71-56161

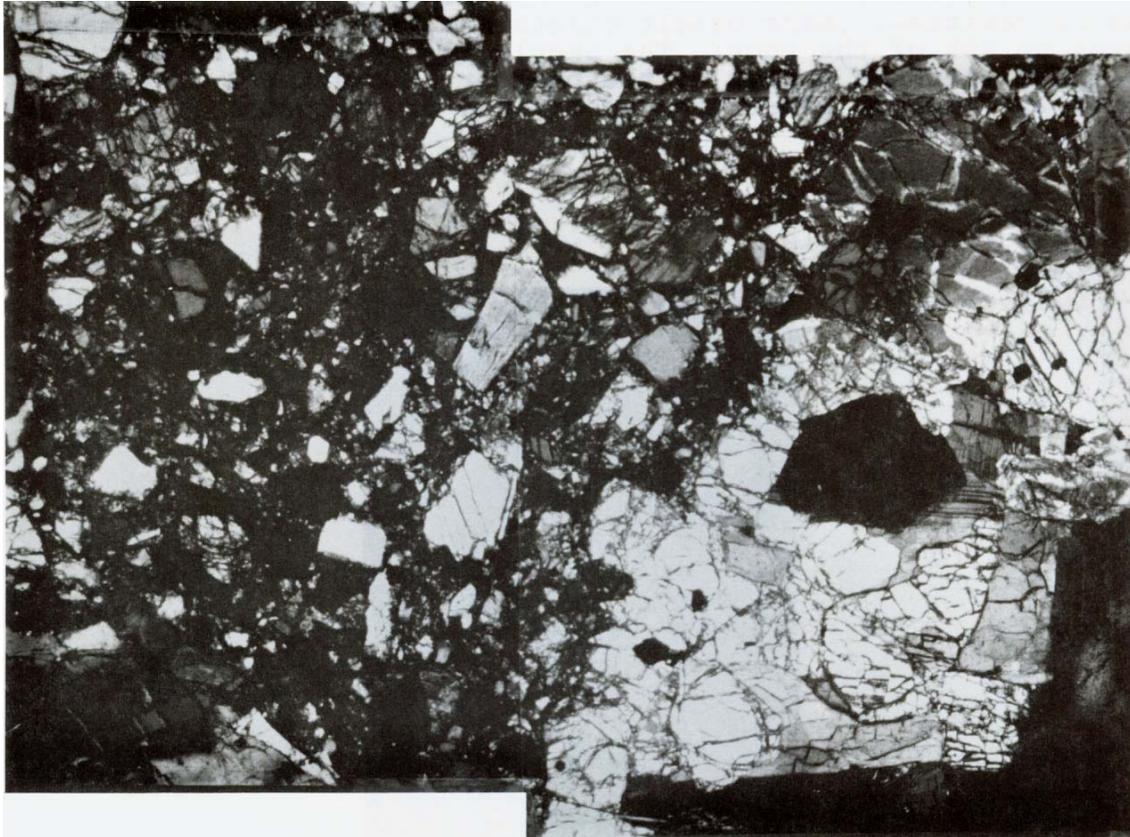


Figure 2. Photomicrograph of 15146,6, showing coarse clasts and mineral fragments. Cross Polarizers. Width about 2.5 mm.

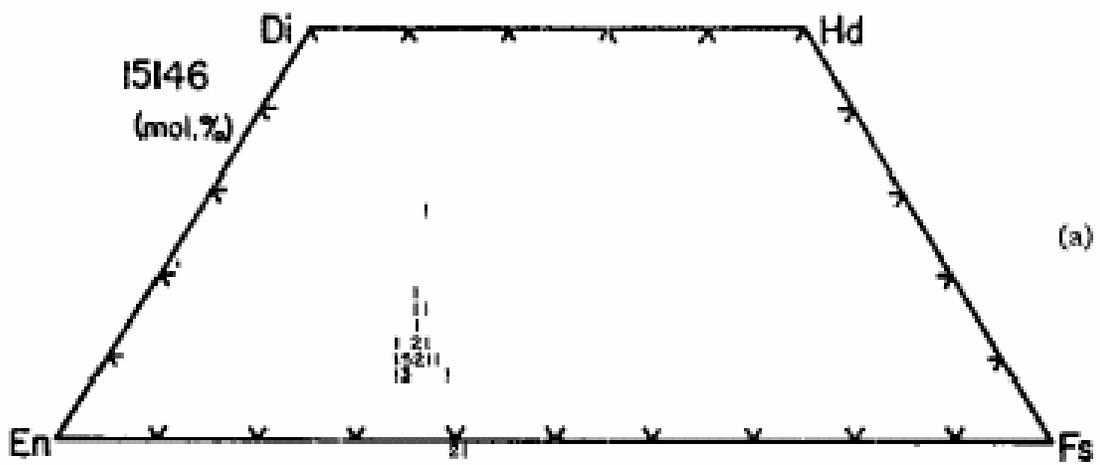


Figure 3. Pyroxenes in 15146,1 (Steele et al., 1977).