

**72505****Impact Melt Breccia (?)****St. 2, 3.09 g****INTRODUCTION**

72505 is an angular tough block (Fig. 1) collected as part of the soil with the first rake sample at Station 2, near Boulder 2. The sample was picked during sieving of soil 72500 as a fragment larger than 1 cm. It has macroscopic characters that suggest that it is an impact melt; identification is uncertain because it has never been allocated or dissected. According to LSIC 17 (1973), 72505 is light gray (N7) to olive gray (5Y 6/11); according to Keil et al. (1974) it is medium dark gray (N4). It is similar

in appearance to several other green-gray breccias from the South Massif that are impact melts (e.g. 72549). Keil et al. (1974) suggested that 72505 was melted or recrystallized. It was originally described as a high grade metaclastic rock, with an equigranular holocrystalline homogeneous fabric (LSIC 17, 1973). The mineralogy was identified as 55% colorless plagioclase, 41% mainly pale gray pyroxene, 3% yellow green olivine, and 1% black opaques. Most grains other than a few clasts are smaller than 200 microns. About 1% of the volume is

crystal-lined vugs, most smaller than about 100 microns. One outer surface is rounded with many zap pits (some of which are also present on parts of adjacent surfaces). The sample is coherent without fractures



Figure 1: Sample 72505. Small scale divisions in millimeters. S-73-33423.