

70295**Dark Matrix Breccia
361.2 g, 12 x 6 x 4.8 cm****INTRODUCTION**

70295 has been described as a homogeneous, wedge shaped, medium-gray breccia (Fig. 1a), with B mostly glass coated and fresh (Fig. 1b). The fabric is clastic. Zap pits are present on all faces except B (Apollo 17 Lunar Sample Information Catalog, 1973). B is mostly glass coated and partly fresh. There is a slickensided smooth surface near the E end, whereas N, S, E, and W are rounded. No cavities are visible, but low density of 70295 indicates the presence of abundant fine pores. The Apollo 17 Lunar Sample Information Catalog (1973) described 70295 as being comprised of 90% medium gray matrix, 6% lithic clasts, 2% plagioclase, and 2% of yellow, green, and brown mafic

clasts. 70295 was collected from the SEP station, approximately 110m east of the Lunar Module.

**PETROGRAPHY AND
MINERAL CHEMISTRY**

Neither the petrography or mineral chemistry of this sample has been reported. However, Shearer et al. (1991) analyzed individual glass beads from 70295, 5 and 70295,26 using a secondary ion mass spectrometer (SIMS). They report VLT, orange Type-I, orange Type-II, and orange 74220-Type glasses in 74219.

WHOLE-ROCK CHEMISTRY

Only the abundance of nitrogen has been determined for 70295,

although the results have been somewhat ambiguously reported (Carr et al., 1985). These authors state that this breccia has low total N contents.

ISOTOPES

Carr et al. (1985) reported the nitrogen isotopic composition of 70295 as being $S^{15}N_{air} \sim +10$ to -30 ‰. Yields were only in the 35% range, although Carr et al. (1985) suggested 70295 exhibits a hint of light nitrogen.



1 a: Photograph of the "N" surface of 70295,0.



1 b: Photograph of the "B" surface of 70295,0.

Figure 1: Hand specimen photographs of 70295,0.