78517

Friable White Cataclasite
1.82 g, 1.1 x 1.0 x 1.0 cm

INTRODUCTION

Sample 78517 was collected as part of a soil sample at Station 8. It appears to be a shocked anorthosite or cataclasite (Fig. 1). It apparently is nonpristine.

PETROGRAPHY

The Preliminary Examination Team described this small sample as a friable white cataclasite (Butler, 1973). During splitting for allocation in 1978, this sample appeared to have the relict texture of a coarse plutonic rock composed of white (80%) and green (20%) minerals. However, the thin sections of a small piece of 78517 (Fig. 2) exhibit a "granulitic" texture with "shear" zones of crushed material (Warren, private communication). Metal grains have high Ni contents (14%) and low Co (0.95%) (unpublished).

CHEMISTRY

Analyses of this sample are not yet published. Sample 78517 has a low rare earth element content; Ir is ~14 ppb, Au is ~9 ppb, and Ni is ~320 ppm (Warren, unpublished).

It should be noted that anorthosites *senso stricto* are rare at the Apollo 17 site (Warren et al., 1991).

PROCESSING

A portion of this sample was allocated to P. Warren in 1978, and two thin sections were made.

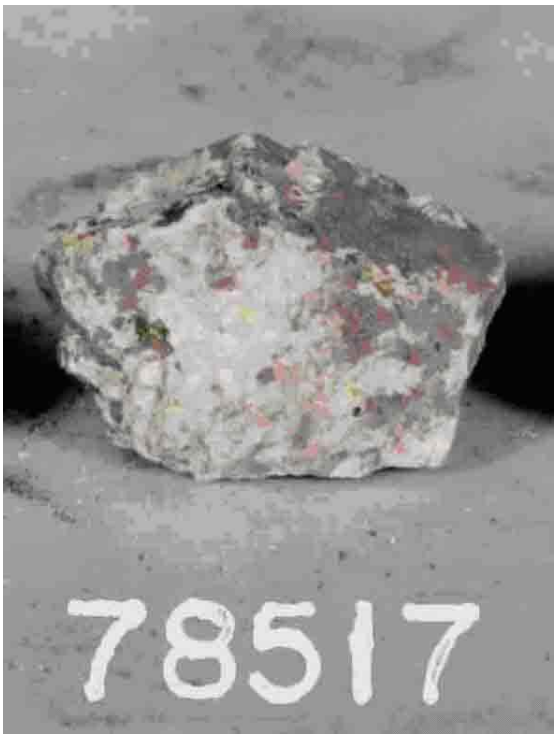

Figure 1: Photograph of 78517. Cube is 1 cm. S73-18607.

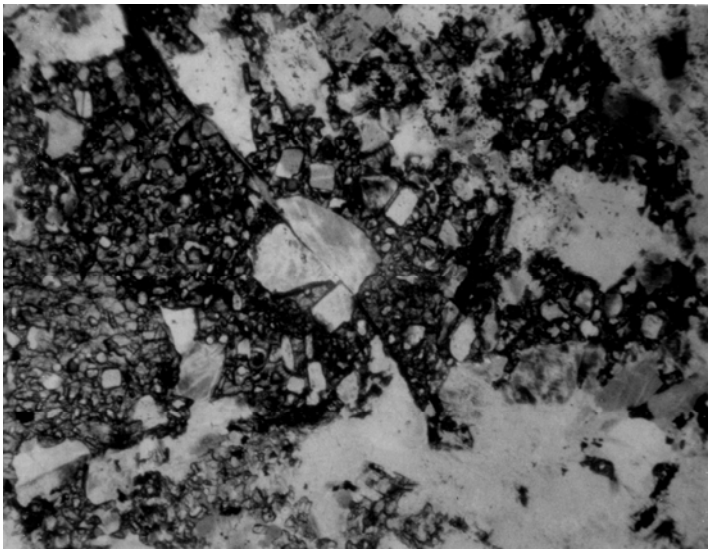

Figure 2. Photomicrograph of thin section 78517,3 with partially crossed polarizers. Field of view is 2.5 x 1.25 mm. (Photo courtesy of Paul Warren.)