

65325

65325 CATACLASTIC ANORTHOSITE, PRISTINE

67.9 g

INTRODUCTION: 65325 is a friable, cataclastic, ferroan anorthosite which is chemically pristine. An irregular crust of dark brown glass partially coats one surface (Fig. 1). This rock was collected as a rake sample from the lower slope of Stone Mountain; lunar orientation is unknown. A few glass-lined zap pits are present.

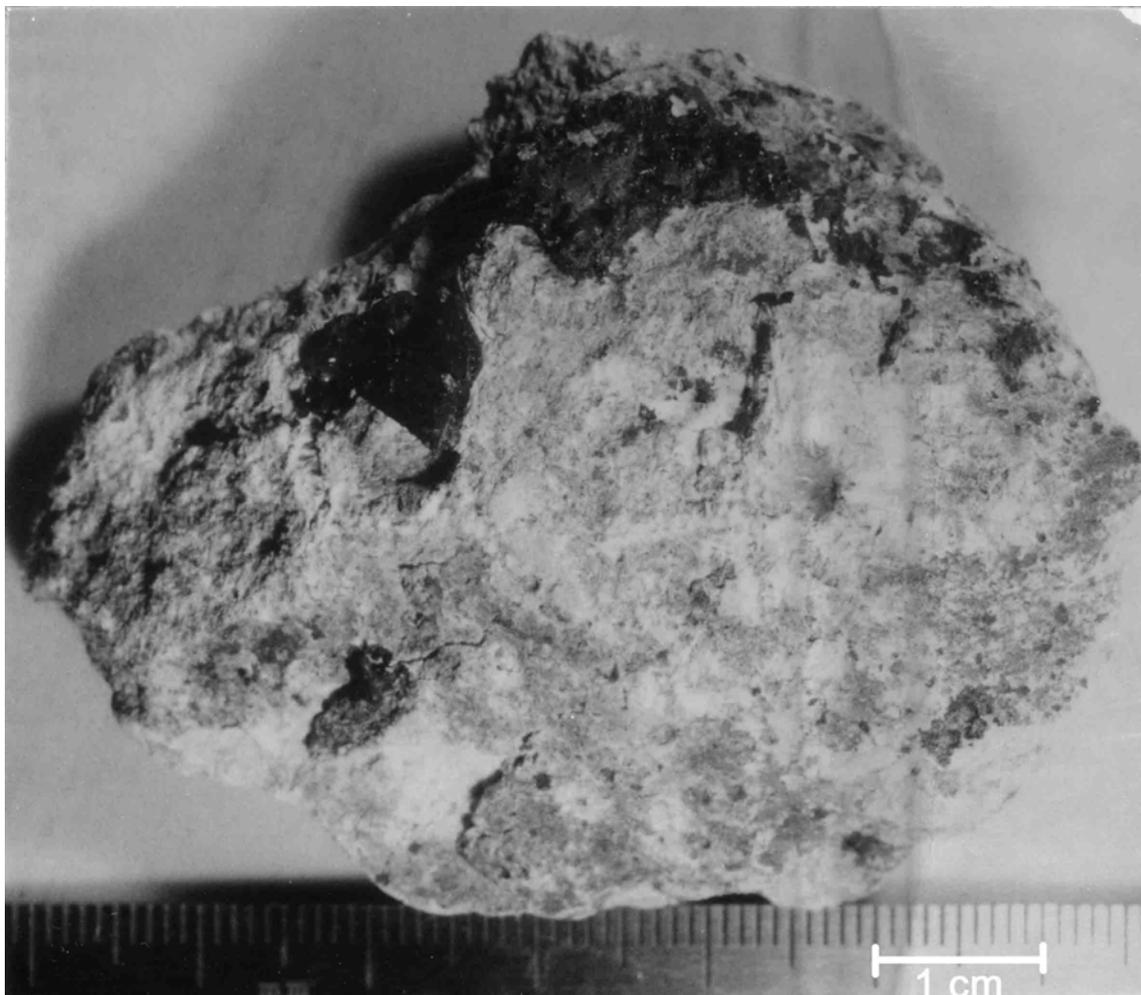


FIGURE 1.

PETROLOGY: Warren and Wasson (1978) provide a petrographic description. Plagioclase (An_{96-97}) accounts for ~99% of the rock with the remainder principally low-Ca pyroxene (Wo_2En_{63}). Traces of ilmenite and rusty metal are also present. The rock has been severely crushed; few grains are more than 1 mm long with most less than ~0.1 mm (Fig. 2).

CHEMISTRY: Warren and Wasson (1978) give a bulk analysis of the anorthosite, summarized here as Table 1. The analysis shows 65325 to be nearly pure plagioclase with levels of rare-earth and siderophile elements typical of pristine anorthosites.



FIGURE 2. 65325,6. General view, xpl. Width 2 mm.

PROCESSING AND SUBDIVISIONS: A few small chips of the anorthosite have been allocated for chemical analyses and for thin sections. Kirsten was allocated chips of a zap pit, and Housley was allocated chips of the glass coat and exterior anorthosite. Otherwise the sample remains nearly intact.

TABLE 1. Summary chemistry of 65325.

SiO ₂	44.08
TiO ₂	
Al ₂ O ₃	35.15
Cr ₂ O ₃	0.004
FeO	0.28
MnO	0.008
MgO	0.23
CaO	19.60
Na ₂ O	0.340
K ₂ O	
P ₂ O ₅	
Sr	
La	0.12
Lu	
Rb	
Sc	0.43
Ni	0.68
Co	1.0
Ir ppb	0.06
Au ppb	0.04
C	
N	
S	
Zn	22
Cu	

Oxides in wt%; others in ppm except as noted.