

65326
Anorthosite
36.4 grams



Figure 1: Photo of 65326 showing bronze-colored streak of "rust" on surface. NASA S72-43410 Cube is 1 cm.



Figure 2: Photo of other side fo 65326. Tick marks are 1 mm. S72-47660

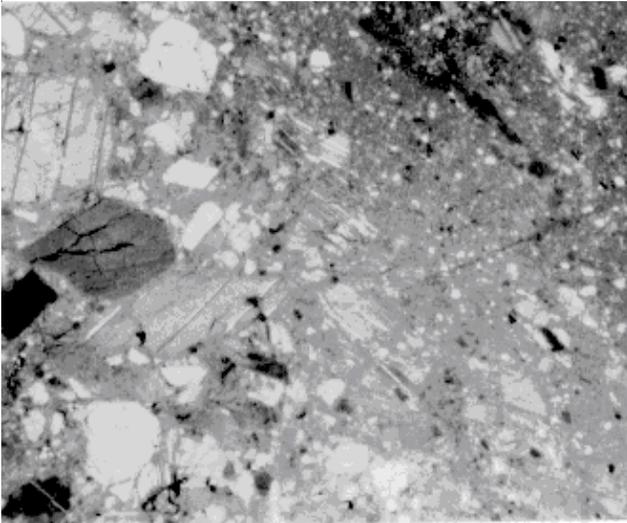


Figure 3a: Thin section photomicrograph of 65326 (from Warner et al. 1976). Width of field about 2.5 mm.

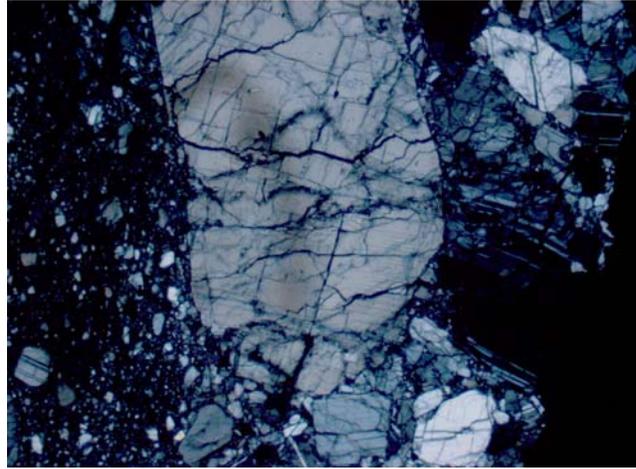


Figure 3b: Crossed-polarizer photo of thin section 65326,3. 2 mm across

Introduction

Although Manny Bass reported the streak of “rust” (figure 1) in the original PET Catalog (Butler 1972), it has apparently not been studied. The color photos show it to have been “bronze colored”. Photos also indicate that there may be more than one lithology to the sample (?), but the sample has not been studied as a whole.

Petrography

Reports are that 65326 is almost entirely made of plagioclase with coarse-grained, clast-rich areas similar to 60516 separated by areas of predominately fine-grained, granulated material (Warner et al. 1976). The plagioclase – pyroxene composition place it in the ferroan anorthosite field (figure 5).

Warren (1994) calls it “pristine”.

Mineralogy

Pyroxene: Dowty et al. (1974) reported the pyroxene composition (figure 4).

Plagioclase: Warner et al. (1976) figure shows plagioclase in 65326 is An₉₇.

Ilmenite: Dowty et al. (1974) reported ilmenite with MgO = 4.6 - 5.3%

“Rust”: Hunter and Taylor (1981) report “rust” in their extensive table.

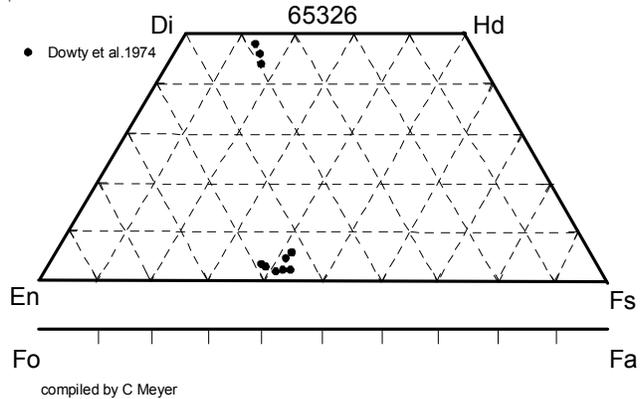


Figure 4: Pyroxene composition for 65326 as reported by Dowty et al. (1974).

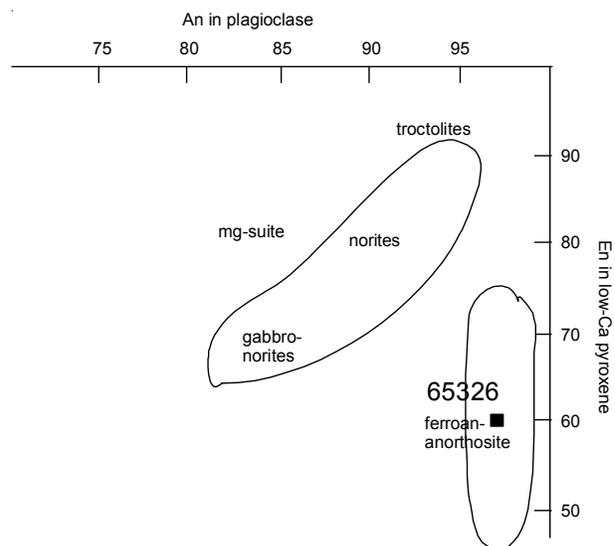


Figure 5: Plagioclase and pyroxene composition of 65326 plotted with fields of known lunar rock types.

Processing

It is unlikely that a streak on the surface of this sample would not have been rubbed off - perhaps to now be found only in the processing fines. There are only two thin sections.

Table 1. Chemical composition of 65326.

reference weight	Dowty74	
SiO ₂ %	44.5	(a)
TiO ₂		
Al ₂ O ₃	35.6	(a)
FeO	0.23	(a)
MnO		
MgO	0.07	(a)
CaO	19.1	(a)
Na ₂ O	0.45	(a)
K ₂ O	0.06	(a)
P ₂ O ₅	0.03	(a)
S %		
sum		

technique: (a) broad beam elec. Probe

References for 65326

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