

**14320**  
Crystalline matrix Breccia  
64.9 grams



Figure 1: Two views of 14320 showing heavily cratered surfaces and white clasts. NASA S71-29196 and 29195. Sample is 6 cm across.

**Introduction**

14317 was picked up at the “North Boulder Field” (station H) about 100 meters northwest of the LM (Swann et al. 1977)(figure 2). It is a slabby, angular rock (figure 1). One side appears fresher than the rest but sides have about the same density of glass-lined pits. Several irregular fractures occur at odd angles to the long axis. The rock is a coherent breccia with a moderate percentage of clasts. Most of the clasts are dark.

**Petrography**

Chao et al. (1972), von Engelhardt et al. (1972), Stoffler et al. (1976) have reported petrographic analysis of 14320 that would do as well for 14321.

Simonds et al. (1977) note that 14320 contains as much as 4 % mare basalt clasts. Hunter and Taylor (1983) determined the mineral composition of two clasts.

**Chemistry**

Christian et al. (1972) reported a composition typical of Apollo 14 CMB.

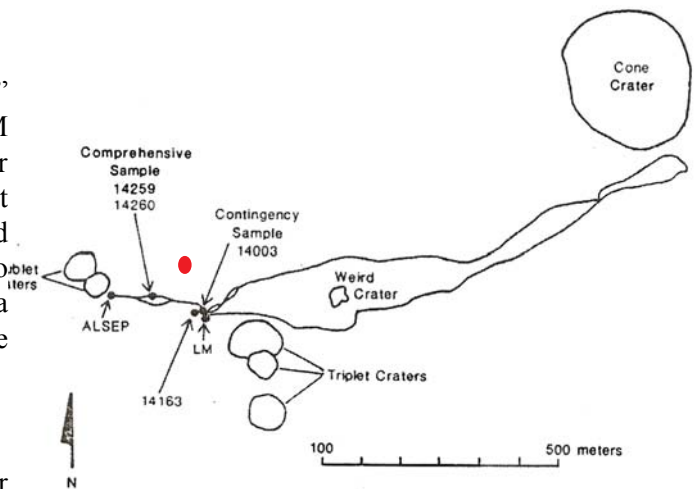


Figure 2: Map of Apollo 14 traverse with location of 14320.

**Processing**

14320 was returned in weigh bag 1038 and first opened in Crew Reception Area, before entering NNPL for description. There are 8 thin sections.

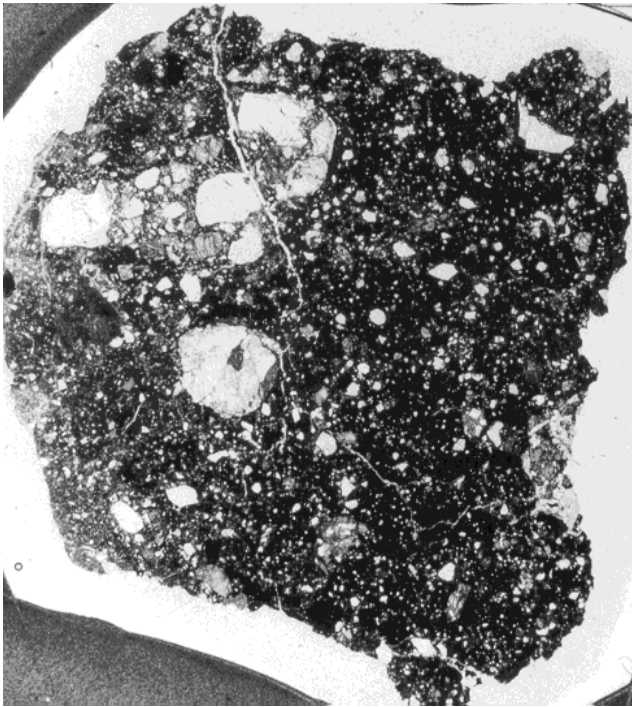


Figure 3: Thin section photomicrograph of 14320,5. Sample is 1 cm. NASA S71-43159.

**Table 1. Chemical composition of 14320.**

reference	Christian76	
weight		
SiO <sub>2</sub> %	47.78	(a)
TiO <sub>2</sub>	2.05	(a)
Al <sub>2</sub> O <sub>3</sub>	17.11	(a)
FeO	10.04	(a)
MnO	0.14	(a)
MgO	10.46	(a)
CaO	9.96	(a)
Na <sub>2</sub> O	0.82	(a)
K <sub>2</sub> O	0.79	(a)
P <sub>2</sub> O <sub>5</sub>	0.65	(a)
S %		
sum		

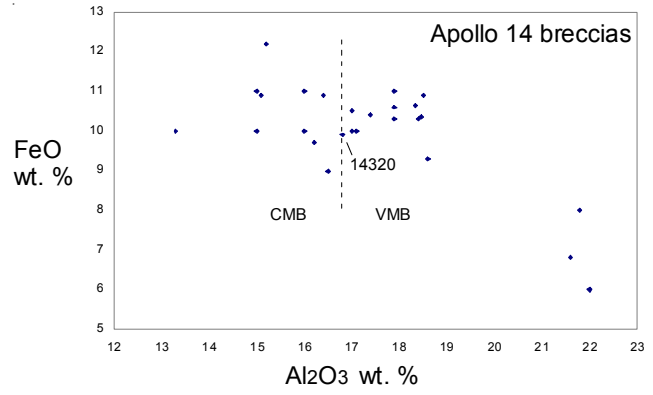


Figure 4: Composition of Apollo 14 breccias with 14320.

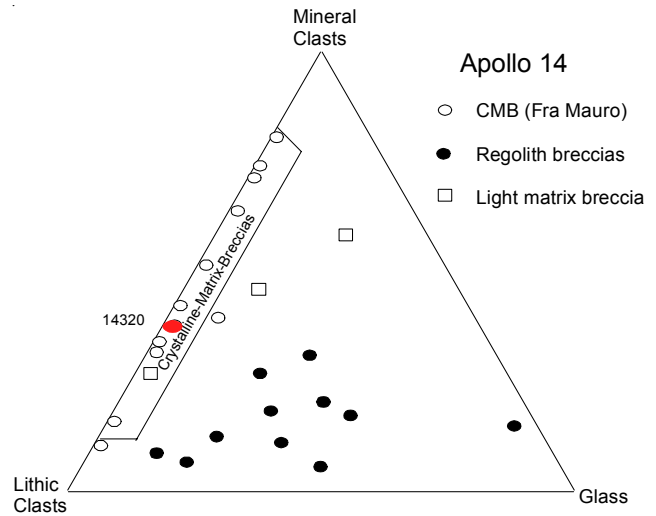
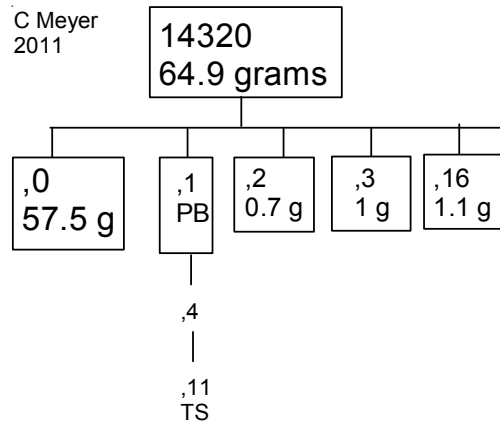
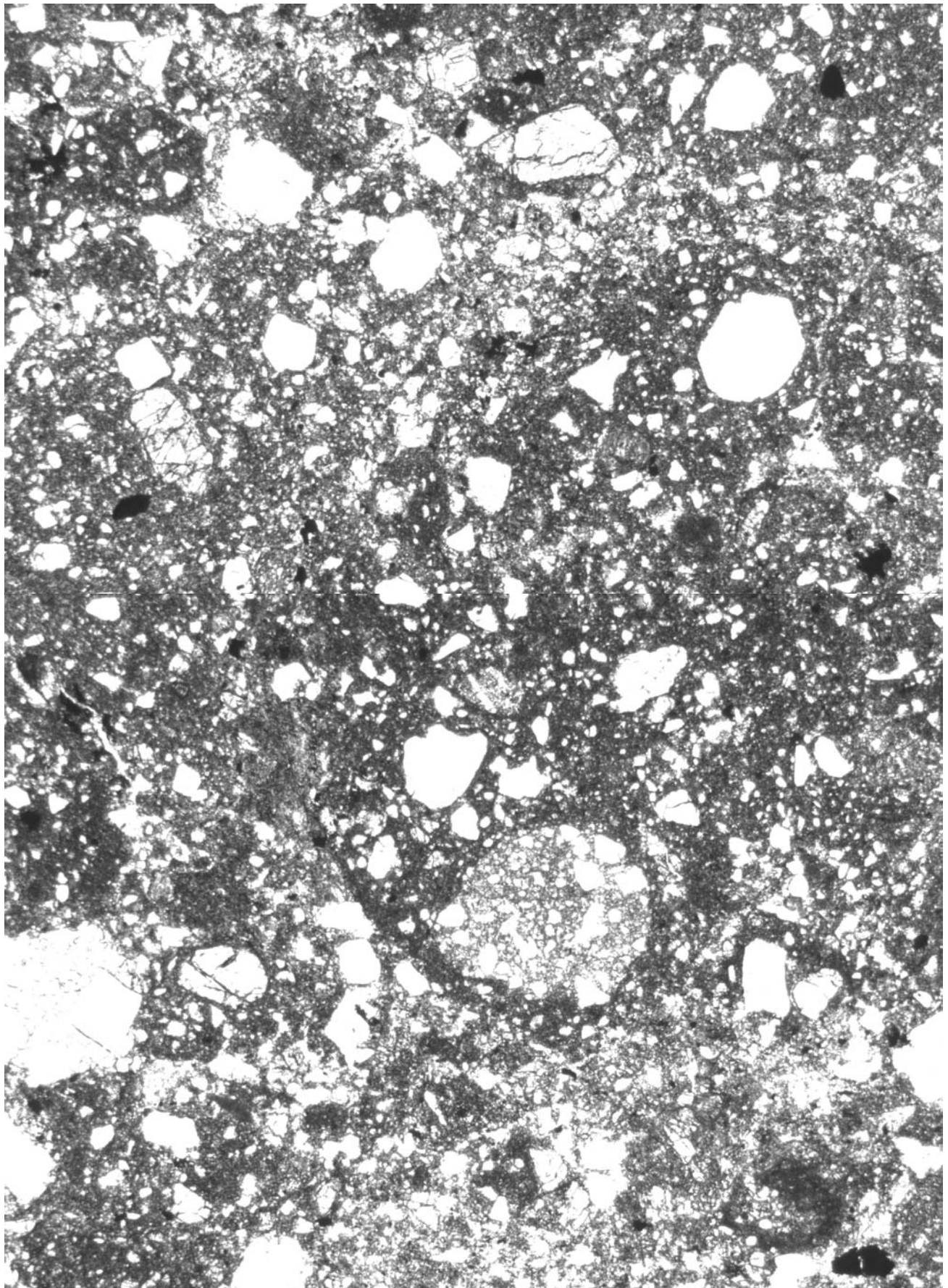


Figure 5: Simonds diagram for Apollo 14 breccias.





*Figure 6: Photomicrograph of thin section 14320,5 by C Meyer. Scale is 2.8 mm across.*

## References for 14320

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