

INTRODUCTION: 15266 is a coherent to friable regolith breccia (Fig. 1). It contains typical regolith breccia constituents such as glass spheres, glassy breccias, and numerous mineral fragments, most of which are little shocked. It is blocky and angular, medium gray, and about one half of its "T" surface is grooved and slicken-sided. Many zap pits are present on several faces. 15266 was collected (along with 15259, 15265, 15267 to 15269, and 15285 to 15289) from the crest of an inner bench on the northeast wall of the 12 m crater at Station 6, downslope 15 m from the LRV. A single large rock was broken by the Commander into three pieces (15265 to 15267). The sample was documented on the lunar surface both before and after it had been broken and moved.

PETROLOGY: 15266 is a porous regolith breccia (Fig. 2) with many glass spheres which are mainly colorless or green. Orange/red and yellow glasses are rare to absent. Small lithic fragments include KREEP and mare basalts, as well as fine-grained impact melts. Glasses, mineral fragments, and lithic fragments are not heavily shocked. Wentworth and McKay (1984) reported the sample to be porous, with a density of only 1.98 g/cc. McKay et al. (1984) found an I_s/FeO of 10-15, which is immature; Korotev (1984, unpublished) listed I_s/FeO of 14. The porosity and maturity are a little lower than for 15265 which is from the same original rock.

CHEMISTRY: An analysis by Korotev (1984, unpublished) (Table 1, Fig. 3) is different from that of local soils and from 15265 in that its incompatible elements are about 50% higher. It is even higher than 15265, which is part of the same rock, and may have been richer in clasts (of KREEP basalts) than typical matrix.

PROCESSING AND SUBDIVISIONS: Several small pieces were chipped from 15266,0 (Fig. 4). Thin sections ,17 to ,20 were made from ,9. The materials allocated to McKay and his coworkers were interior chips from ,4.

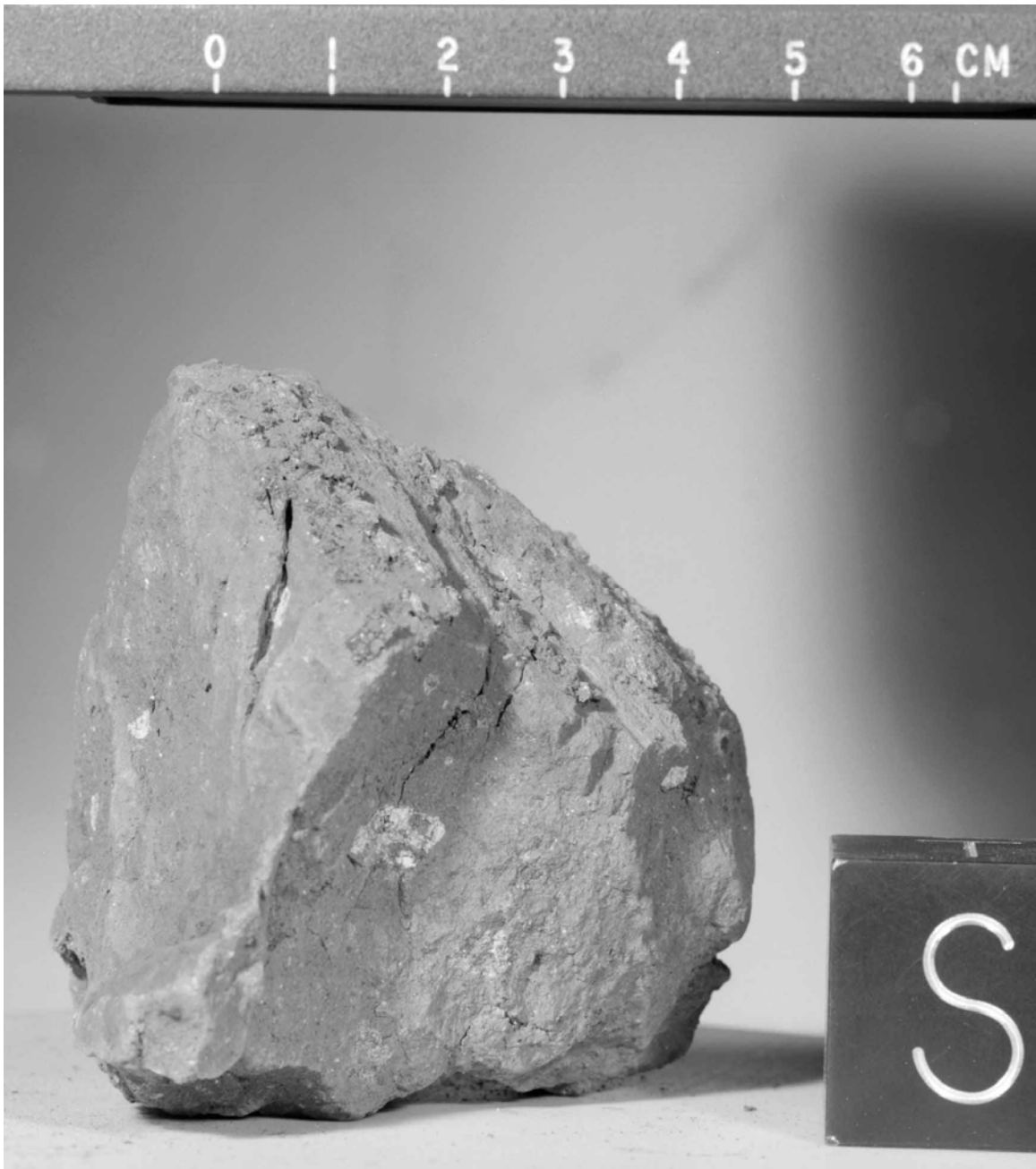


Figure 1. Pre-split view of 15266. S-71-46410

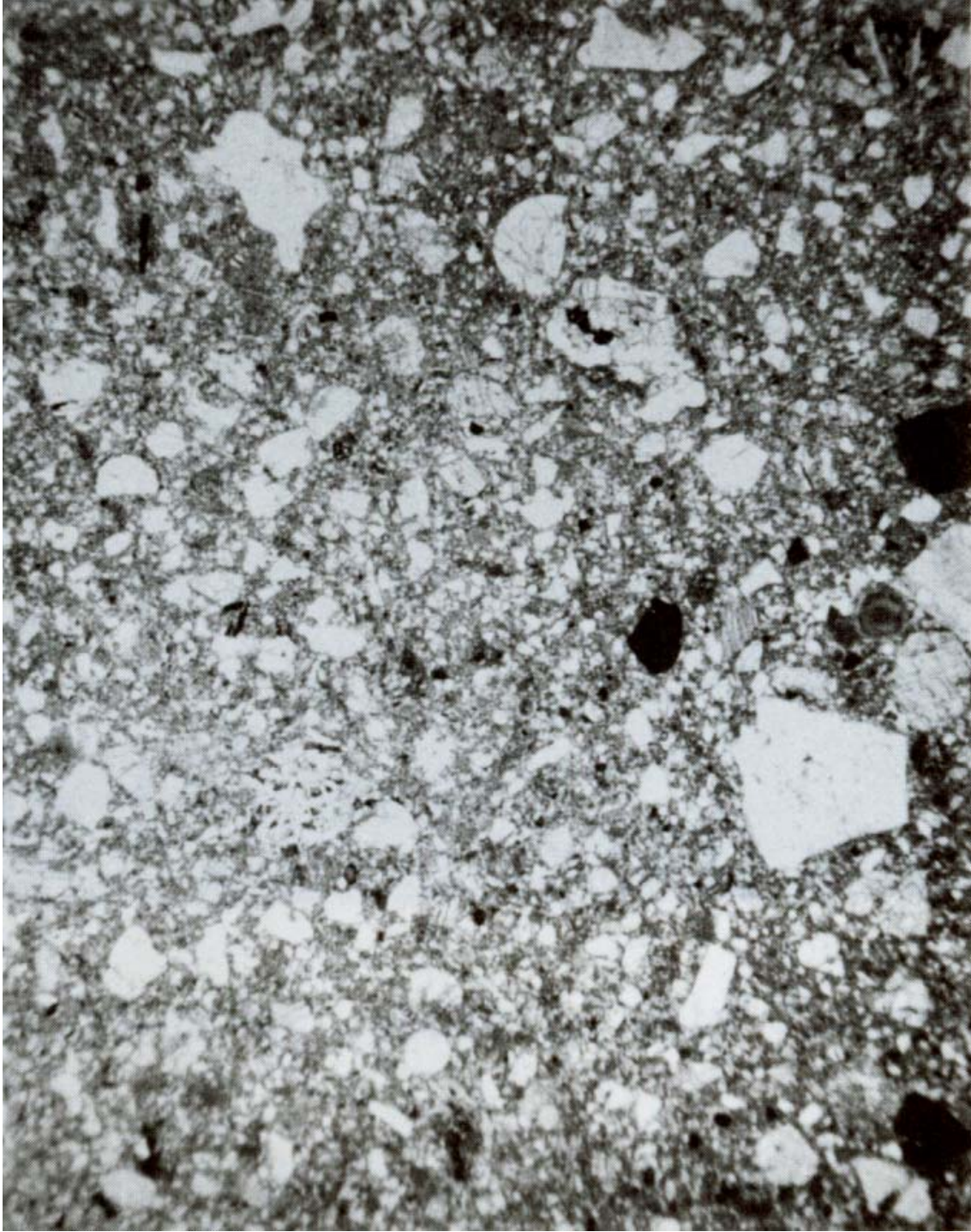


Figure 2. Photomicrograph of 15266,17.
Width about 2 mm. Transmitted light.

TABLE 15266-1. Chemical analysis

		.23
wt %	SiO ₂	
	TiO ₂	
	Al ₂ O ₃	
	FeO	12.2
	MgO	
	CaO	10.8
	Na ₂ O	0.58
	K ₂ O	
(ppm)	P ₂ O ₅	
	Sc	23.7
	V	
	Cr	2290
	Mn	
	Co	34.0
	Ni	151
	Pb	
	Sr	140
	Y	
	Zr	560
	Nb	
	Hf	14.3
	Ba	379
	Th	6.2
	U	1.68
	Pb	
	La	39.0
	Ce	101
	Pr	
	Nd	59
	Sm	17.6
	Eu	1.71
	Gd	
	Tb	3.51
	Dy	
	Ho	
	Er	
Tm		
Yb	12.3	
Lu	1.66	
Li		
Be		
B		
C		
N		
S		
P		
Cl		
Br		
Cu		
Zn		
(ppb)	I	
	At	
	Ga	
	Ge	
	As	
	Se	
	Mo	
	Tc	
	Ru	
	Rh	
	Pd	
	Ag	
	Cd	
	In	
	Sn	
	Sb	
	Te	
	Cs	430
	Ta	1680
	W	
	Re	
	Os	
Ir	3.7	
Pt		
Au	1.0	
Hg		
Tl		
Pb		

References and methods:

- (1) Korotev (1984 unpublished); INAA

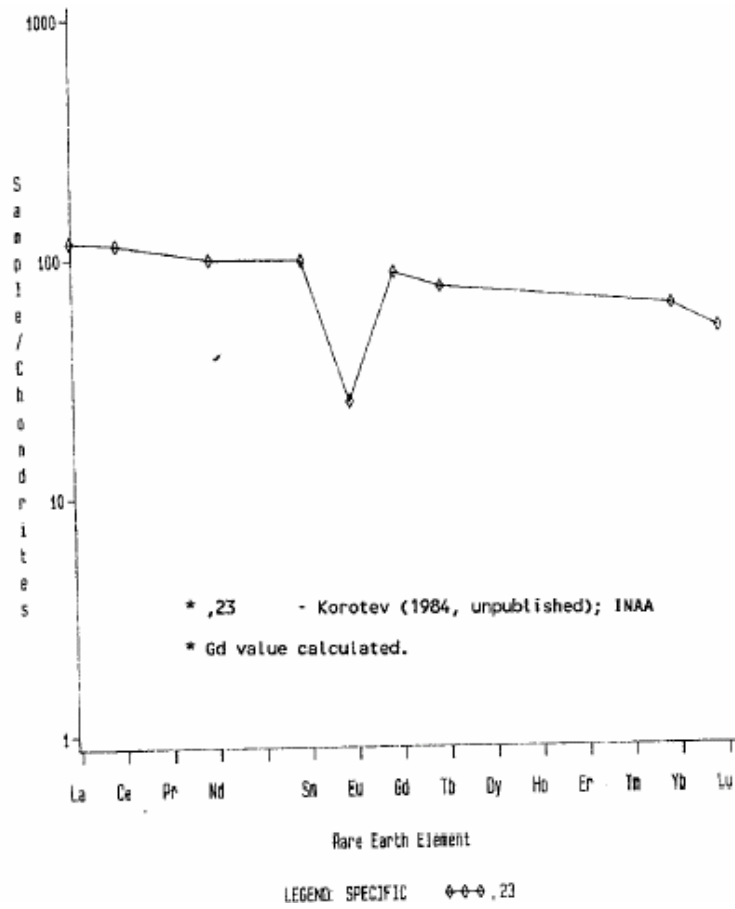


Figure 3. Rare earths in 15266.

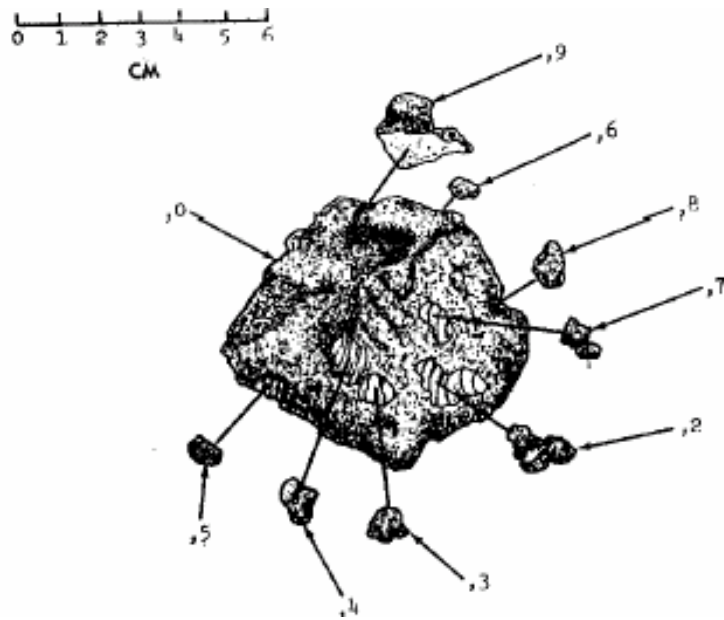


Figure 4. Chipping of 15266.