

INTRODUCTION: 15268 is a coherent regolith breccia with a typical complement of regolith breccia components. It is chemically fairly similar to Station 6 soils. It is medium gray, slabby, subrounded, and fairly homogeneous, except for a white breccia band (Fig. 1). There were a few zap pits dominantly on the "B" side. 15268 was collected (with 15259, 15265 to 15267, 15269, and 15285 to 15289) from the crest of an inner bench on the northeast wall of the 12 m diameter crater, downslope 15 m from the LRV. It was lying very close to 15265-15267 and may have spalled from it.

PETROLOGY: 15268 is a porous regolith breccia, in appearance quite similar to 15266 (Fig. 2). It contains abundant glass as spheres and shards, although red/orange and yellow glasses appear to be very rare. Several small lithic clasts appear to be mare basalts. Few of the constituents are heavily shocked. Gleadow et al. (1974) studied 15268 but did not publish details; in the same study Sewell et al. (1974) reported defocused beam analyses of several clasts ranging from anorthosites to "metabasalts" to breccias. They also analyzed pyroxenes and plagioclases, and several glasses which include medium-K KREEP, mare basalt, green glass, and aluminous varieties. McKay et al. (1984) reported an  $I_s/FeO$  of 22-34, which was reported by Korotev (1984 unpublished) as 32. The pale band visible macroscopically (Fig. 1) does not occur in the thin sections.

CHEMISTRY: A single analysis by Korotev (1984 unpublished) is a little enriched in incompatible elements compared with local soils (Table 1, Fig. 3), and is more like 15265-15267, from which it may have spalled.

PROCESSING AND SUBDIVISIONS: ,1 was originally chipped from ,0 (Figs. 1, 4), and two thin sections (,4 and ,7) produced from it. Interior chips ,8 and ,9 were later removed from ,0 to fulfill the McKay and coworker allocations. ,0 is now 8.9 g.

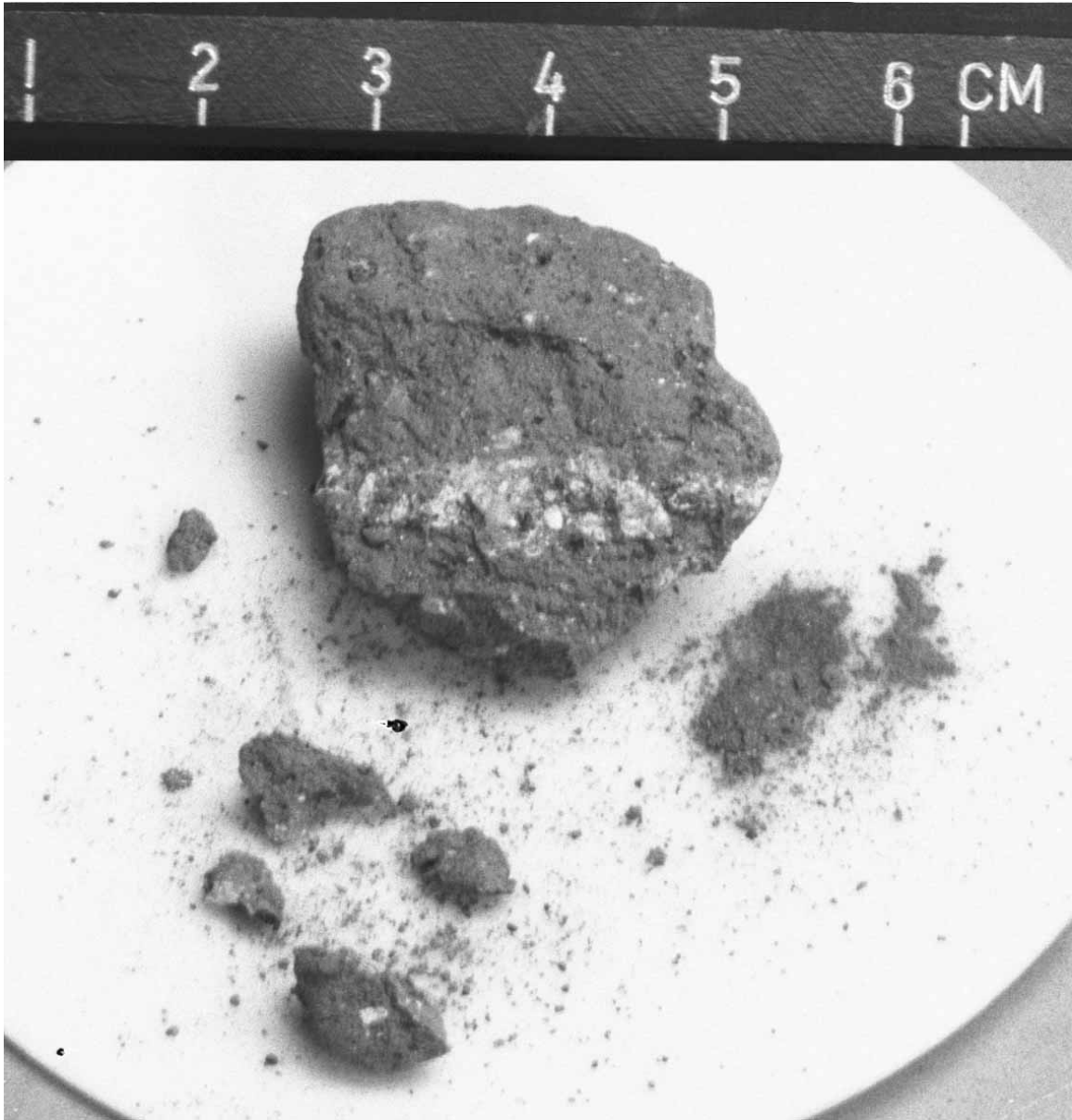


Figure 1. 15268 following chipping. S-71-59880

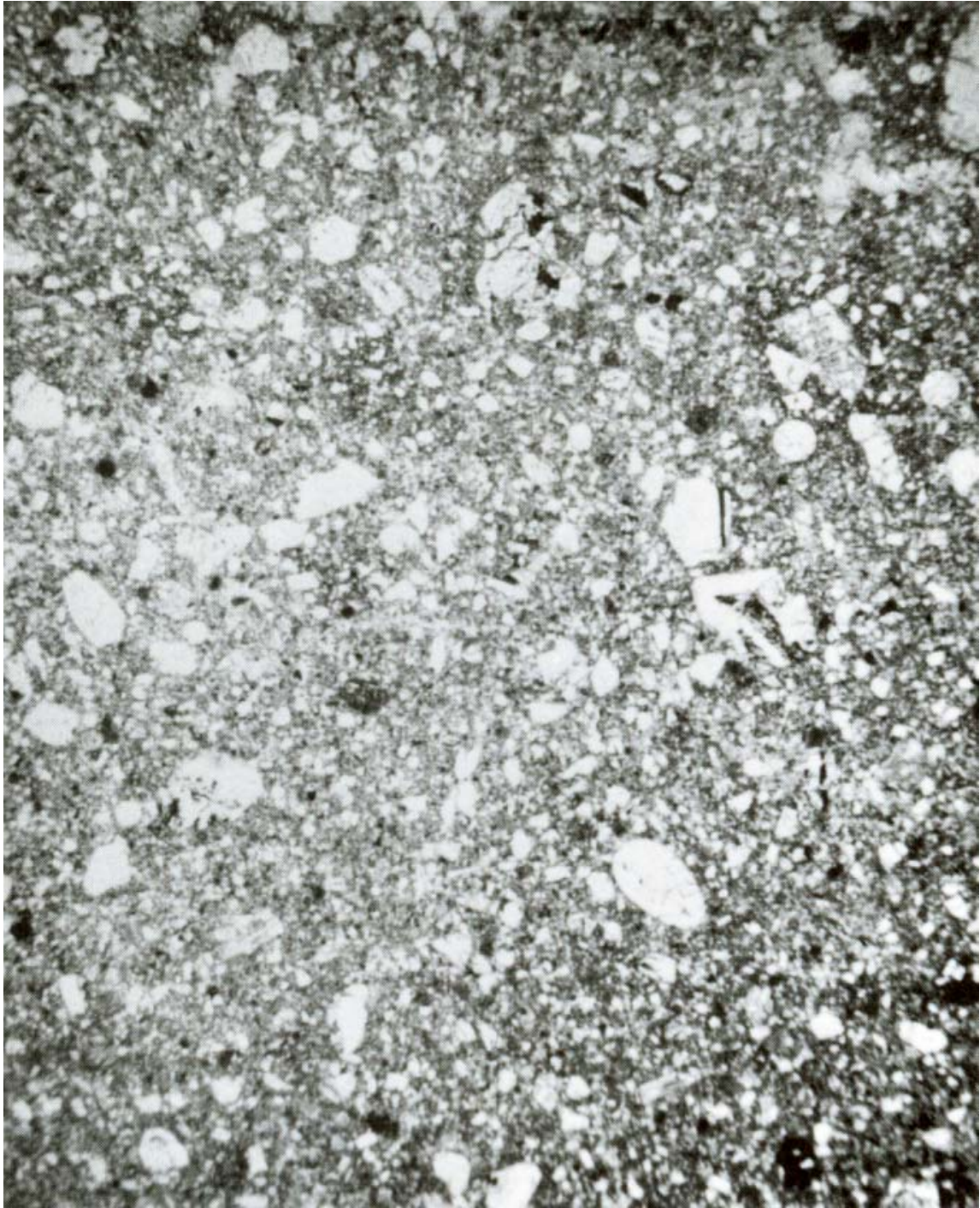


Figure 2. Photomicrograph of 15268,4.  
Width about 2 mm. Transmitted light.

TABLE 15268-1. Chemical analysis

Wt %		,B
	SiO2	
	TiO2	
	Al2O3	
	FeO	11.8
	MgO	
	CaO	11.3
	Na2O	0.53
	K2O	
	P2O5	
(ppm)	Sc	23.2
	V	
	Cr	2150
	Mn	
	Co	36.8
	Ni	217
	Rb	
	Sr	160
	Y	
	Zr	450
	Nb	
	Hf	11.4
	Ba	334
	Th	5.3
	U	1.6
	Pb	
	La	30.7
	Ce	81
	Pr	
	Nd	45
	Sm	14.4
	Eu	1.54
	Gd	
	Tb	2.80
	Dy	
	Ho	
	Er	
	Tm	
	Yb	10.0
	Lu	1.39
	Ll	
	Hg	
	H	
	C	
	N	
	S	
	F	
	Cl	
	Br	
	Cu	
	Zn	
(ppb)	I	
	At	
	Ga	
	Ge	
	As	
	Se	
	Mo	
	Tc	
	Ru	
	Rh	
	Pd	
	Ag	
	Cd	
	In	
	Sn	
	Sb	
	Te	
	Ce	330
	Ta	1340
	W	
	Re	
	Os	
	Ir	6.7
	Pt	
	Au	1.9
	Hg	
	Tl	
	Pb	

References and methods:

- (1) Korotev (1964 unpublished); INRA

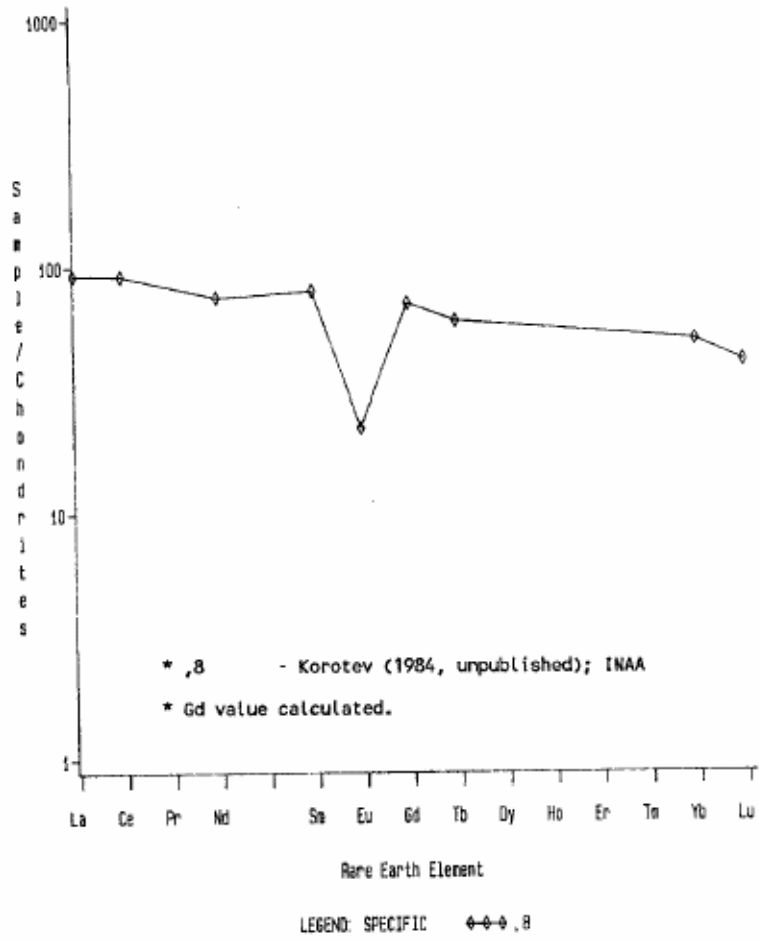


Figure 3. Rare earths in 15268,8.

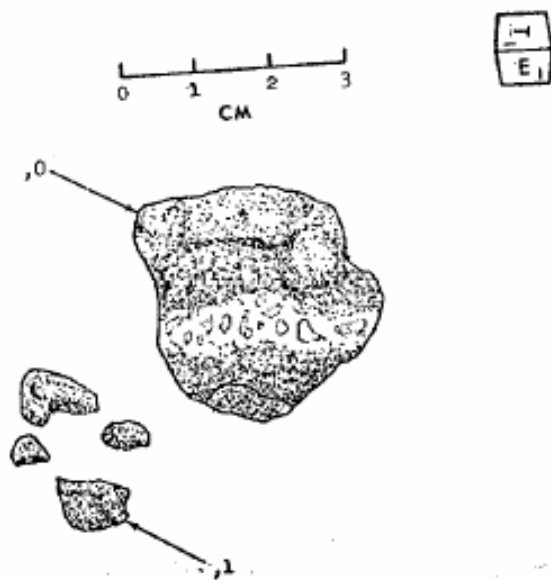


Figure 4. Original chipping of 15268.