<u>INTRODUCTION</u>: 15119 is an olivine-normative mare basalt with a microporphyritic texture. The phenocrysts are small, sparse, and yellow-green olivines. A regolith breccia adheres to the basalt (Fig. 1), hence the basalt is actually a clast. The basalt is tough; the regolith breccia is friable and brownish-gray. Zap pits occur on the regolith breccia, and the basalt has a few vugs. 15119 was collected as part of the rake sample 5 m east of the boulder at Station 2 (see Fig. 15105-2).



Figure 1. Sample 15119 before chipping the basalt. S-71-48776

<u>PETROLOGY</u>: The basalt in 15119 consists of a groundmass of granular-looking pyroxene enclosed in plagioclase, and contains sparse olivine phenocrysts (Fig. 2). It is fairly similar to 15105 except that some of its plagioclases are bigger. The regolith breccia has not been sectioned. Macroscopically it contains glass including green glass spheres, basaltic clasts, and chalky white clasts.



Figure 2. Photomicrograph of 15199,12 (a poor section). An olivine microphenocryst is on the center left edge. Crossed polarizers. Width about 1.25 mm.

<u>CHEMISTRY</u>: Analyses are listed in Table 1 with rare earths plotted in Figure 3. The analyses are of an olivine-normative mare basalt, on the Mg-poor end of the spectrum.

<u>PHYSICAL PROPERTIES</u>: Gose et al. (1972) and Pearce et al. (1973), using a Develco Cryogenic magnetometer, found a natural remanent magnetism intensity of 8.6 x 10⁻⁶ emu/g for the sample, typical of Apollo 15 mare basalts.

<u>PROCESSING AND SUBDIVISIONS</u>: The breccia easily broke from the basalt (Fig. 1). The basalt was chipped to provide allocations and is now ,0 (6.90 g). Thin sections ,3 and ,12 were made from ,3 and are only basalt. The breccia has not been allocated and is dominantly chips ,1 (2.5 g) and ,4 (2.53g).

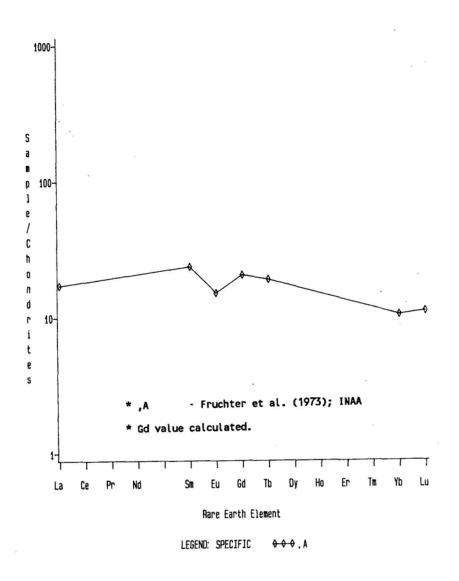


Figure 3. Rare earths in the basalt in 15199 (Fruchter et al., 1973).

## 1 Sign				,5	
TiO2	Wt 8			45.23	
FeO 21.9 22.25 Mag		TiO2	2.86	2.64	
MyO		A1203	8.9	9+24	
CSC		PeO	21.9	0.03	
Nat		MgO		10.55	
R205		N=20	0,290		
P205			0.250	0.05	
V Cr 3400 3220 Mn 2405 Cb 2405		P205		0.09	
Cr 34CO 3220 Mn 2405 Cb 47 Ni 8b Ni 8b Ni 8c Ni 9c Ni	(ppm)		45		
Mn 2405 CD 47 Ni N		V	7400	2020	
Co 47 Nil 8b Sr Y Zr Nb		CF Me	3400	2405	
Ni			47	2403	
Sc Sc Sc Sc Sc Sc Sc Sc		Ni	**		
Y					
72		Sr			
No. 18					
Hr					
Ba			2.8		
Th			210		
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Se Mo Te Ru Rh Pd Ag Cl In Sn Sb Te Cs References and methods: Ta W (1) Pruchter et al. (1973); NRA Re Cs Ir Pt Au Hig Tl Bi		As .			
Mo Te Ru Rh Pd Ag Ci In Sh Sh Sb Te Cr Cr References and methods: Th W (1) Pruchter et al. (1973); INPA Re Cs Ir Pt Au Hg Ti Re Hg					
Ru Rh Pd Ag Cil In Sh Sh Sb Te Cs References and methods: Ta W (1) Pruchter et al. (1973); INPA Re Cos Ir Pt Au Big Til Bi		Mo			
Rh Pd Ag CD In Sh Sb Te Cs References and methods: Th W (1) Fruchter et al. (1973); RPA Re (2) Chappell and Green (1973); XRF Pt Au Hig T1 Bi		Te			
Pd Ag C1 In Sn Sh Sb Te Cs References and methods: Th W (1) Fruchter et al. (1973); RPA Re (2) Chappell and Green (1973); XFF Pt Au Bg T1 Bi					
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