60075

Fragmental Breccia

183.8 grams

Figure 1: Photo of 60075 . Scale in cm/mm. S75-33675

Introduction

60075 was collected about 170 meters from the LM. It is a friable, porous, feldspathic breccia (figure 1). It has not been well-studied.

Petrography

The only petrographic description is that of Ryder and Norman (1980): 60075 is a *"highly porous and fragmental breccia composed of abundant small clasts in a fine-grained clastic matrix. Lithic clasts include granoblastic anorthosites, troctolites and norites, cataclastic anorthosite, spinel-bearing basaltic impact melt and vitric matrix breccia. Plagioclase, pyroxene and olivine clasts are also present as well as metal, troilite, oxide and devitrified brown glass fragments. Pyroxene and plagioclase clasts occasionally contain parallel rod and stringers of exsolved opaques".* None of these phases have apparently been analyzed.

Chemistry

70075 is highly aluminous (Rose et al. 1975). The low value for Ni indicates that a clast was analyzed. Moore and Lewis (1976) and Cripe and Moore (1975) reported carbon = 4 ppm, nitrogen = 66 ppm and sulfur = 630 ppm.

Radiogenic age dating

none

Processing

This sample must have broke up during transit, because there were 13 pieces during PET. There are 6 thin sections, from 2 potted butts.

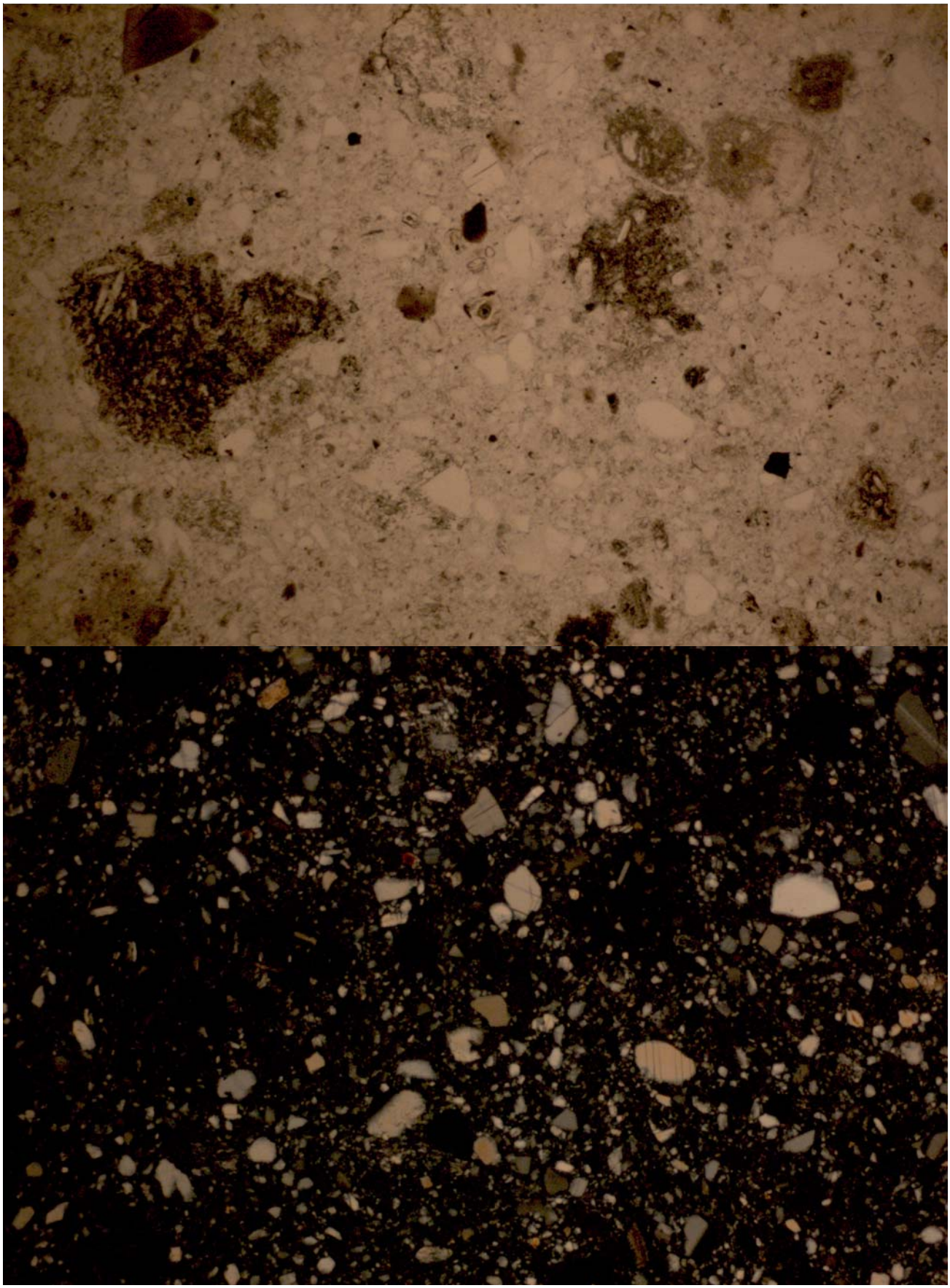
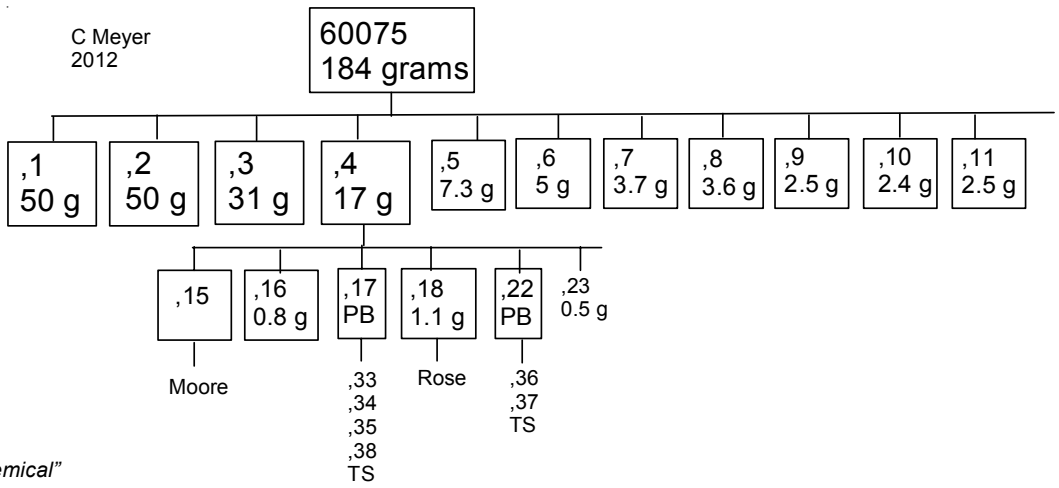


Figure 2: Thin section photos of 60075,34 ppl and xpl, top and bottom. About 2 mm across. Meyer

Table 1. Chemical composition of 60075

reference	Rose 75	
weight		
SiO2 %	45.47	(a)
TiO2	0.2	(a)
Al2O3	32.55	(a)
FeO	1.73	(a)
MnO	0.02	(a)
MgO	1.87	(a)
CaO	17.63	(a)
Na2O	0.67	(a)
K2O	0.05	(a)
P2O5	0.02	(a)
S %		
sum		
Sc ppm	5.1	(a)
V	9.1	(a)
Cr		(a)
Co	7.5	(a)
Ni	50	(a)
Cu	3.4	(a)
Zn	4	(a)
Ga	3.6	(a)
Ge ppb		
As		
Se		
Rb	1	(a)
Sr	174	(a)
Y	7.6	(a)
Zr	28	(a)
Nb		
Mo		
Ru		
Rh		
Pd ppb		
Ag ppb		
Cd ppb		
In ppb		
Sn ppb		
Sb ppb		
Te ppb		
Cs ppm		
Ba		
La		
Ce		
Pr		
Nd		
Sm		
Eu		
Gd		
Tb		
Dy		
Ho		
Er		
Tm		
Yb		
Lu		
Hf		
Ta		
W ppb		
Re ppb		
Os ppb		
Ir ppb		
Pt ppb		
Au ppb		
Th ppm		
U ppm		

technique: (a) "microchemical"



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