63525 – 6.68 grams
63526 – 2.9 grams
63528 – 4.1 grams
63555 – 3.4 grams
Impact Melt Breccia

Figure 1: Photo of 63525. Scale in mm. S80-37425

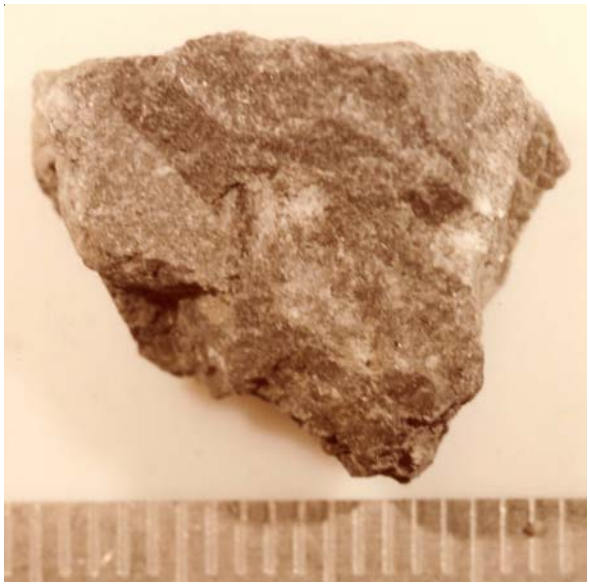


Figure 2: Photo of 63526. Scale in mm. S80-37427

Figure 3: Photo of 63528. 25 mm long. S80-37424

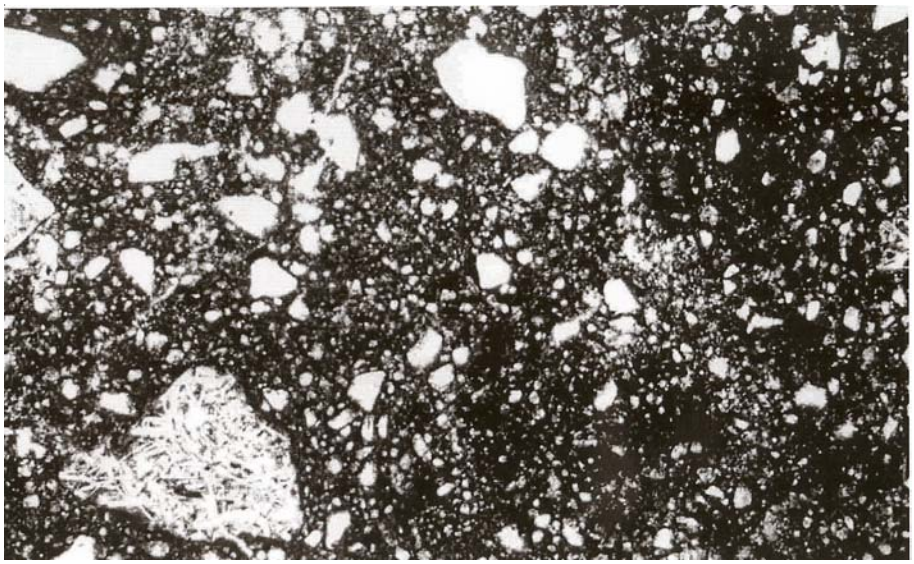


Figure 2: Photomicrograph of thin section 63525,11 showing seriate grain size distribution and various clast types. (from Ryder and Norman 1980). Field of view is 3 mm.

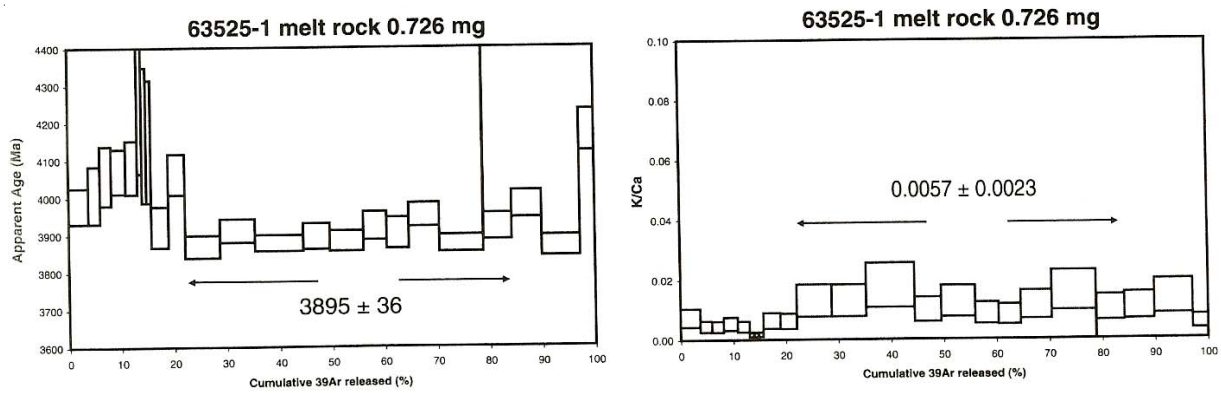


Figure 3: Ar/Ar plateau diagram for 63525 (Norman et al. 2006).

Introduction

63525, 63526, 63528 and 63555 are small rake samples taken from the surface near Shadow Rock – see section on 63501. These samples are impact melt breccia, probably dug up by North Ray Crater.

Petrography

Phinney et al. (1976) describe these samples together as "tough crystalline breccia". Based on examination by SEM, they noted that glass was missing from the matrix of these samples. The grain size distribution is seriate, although they contain many small lithic clasts (figure 2). Thin section 63526,9 contains a nice granoblastic norite clast.

Chemistry

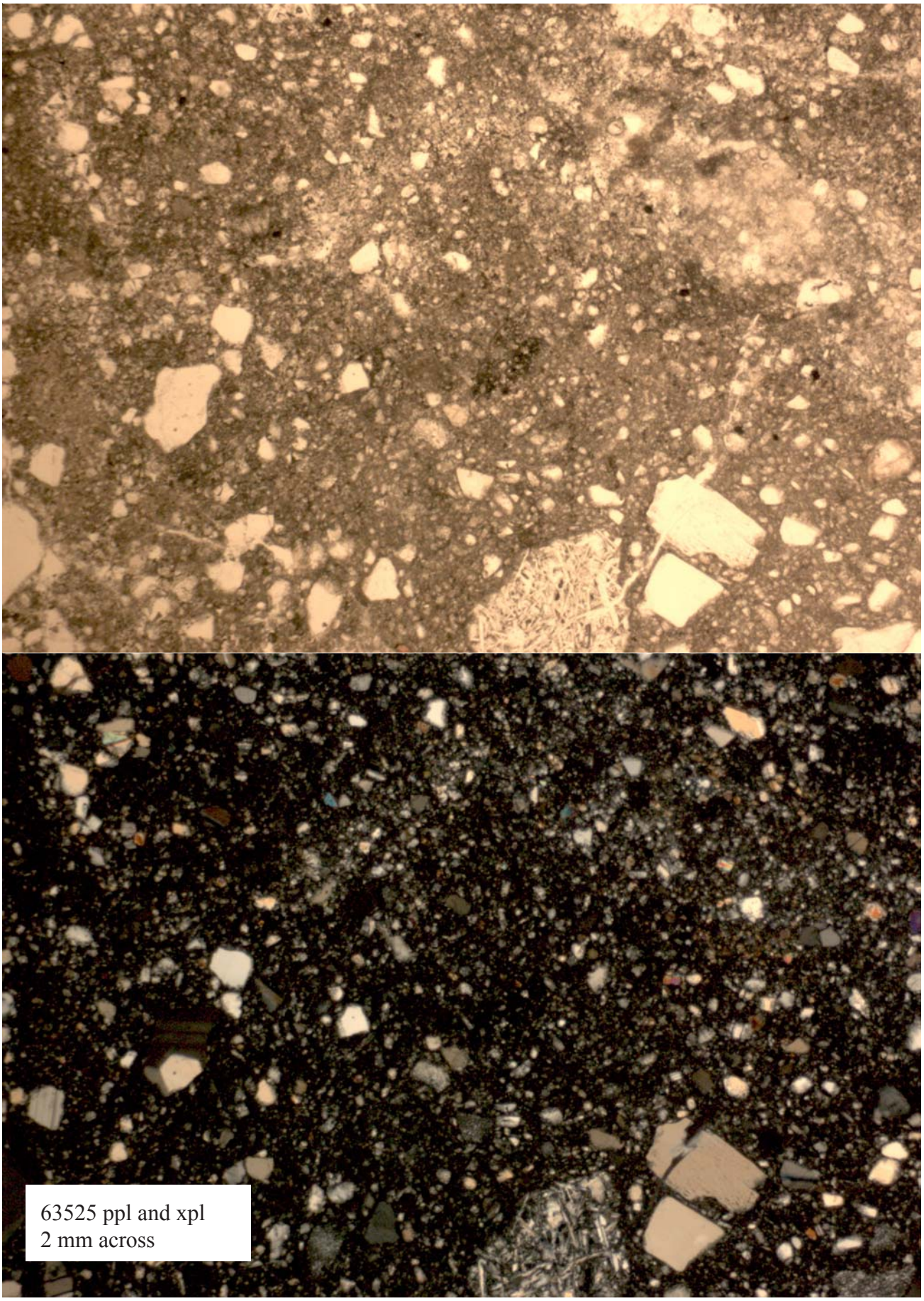
Stoffler et al. (1985) reported the composition of 63526 and 63528.

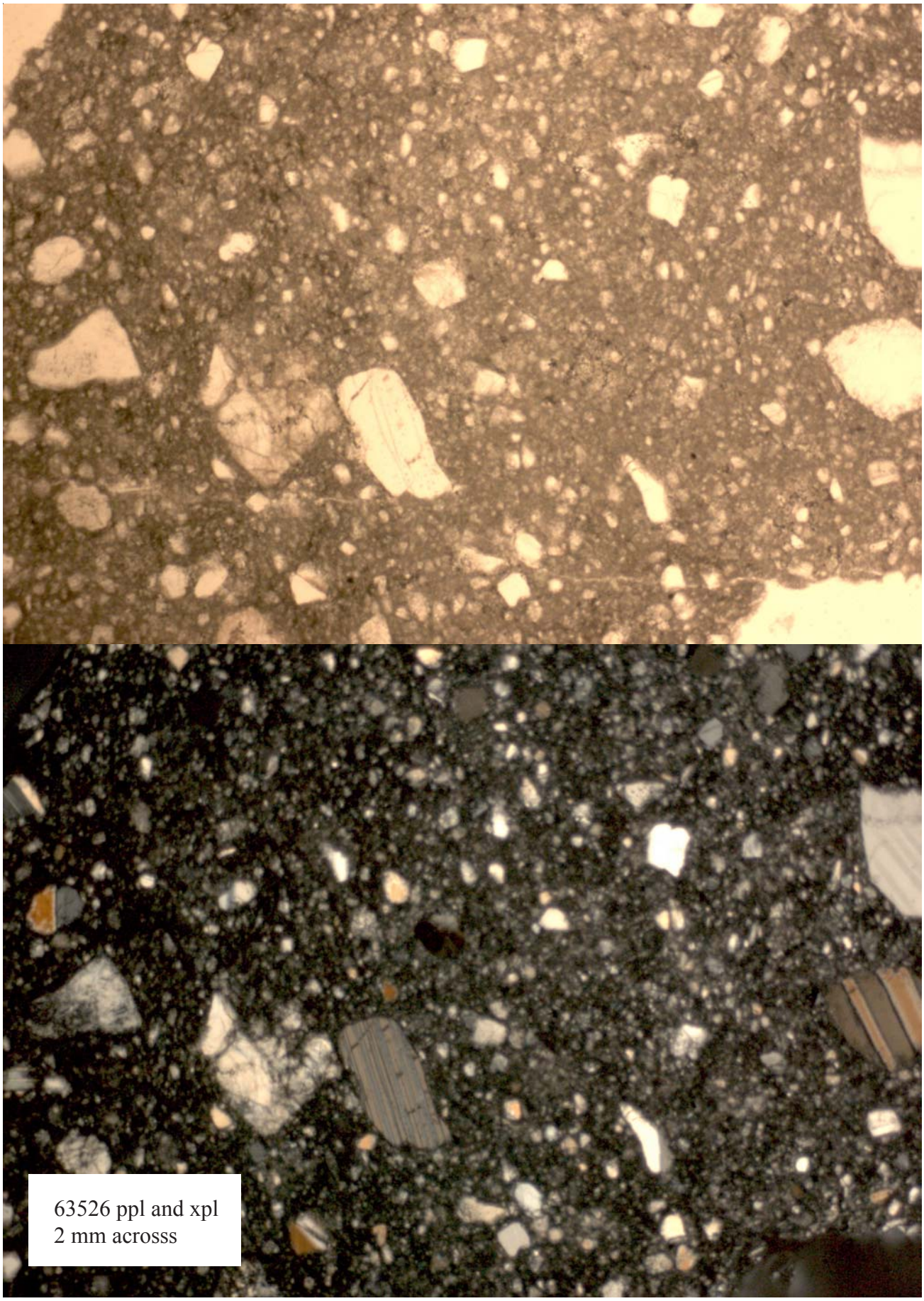
Radiogenic age dating

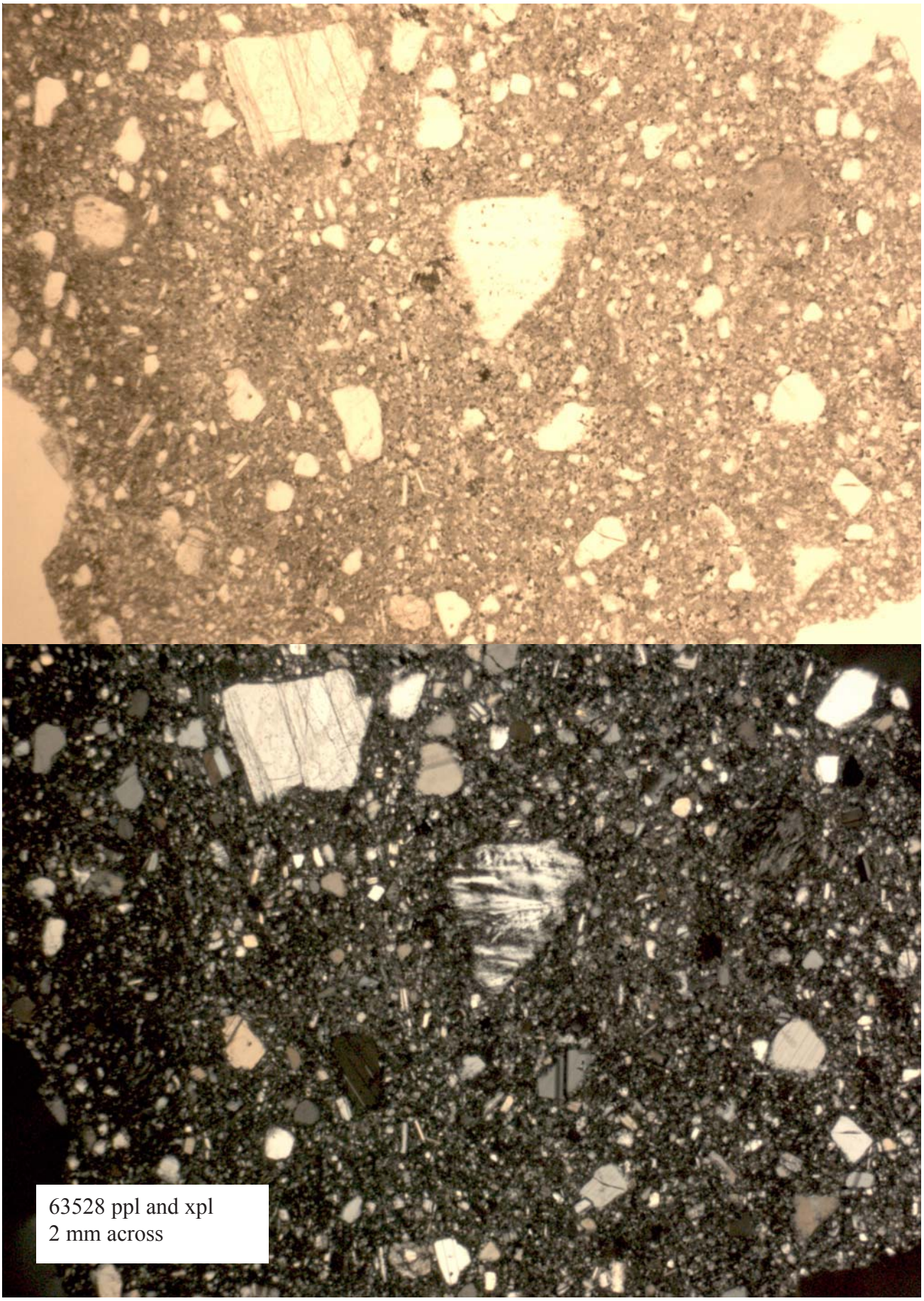
Norman et al. (2006) dated two splits of 63525 (figure 3).

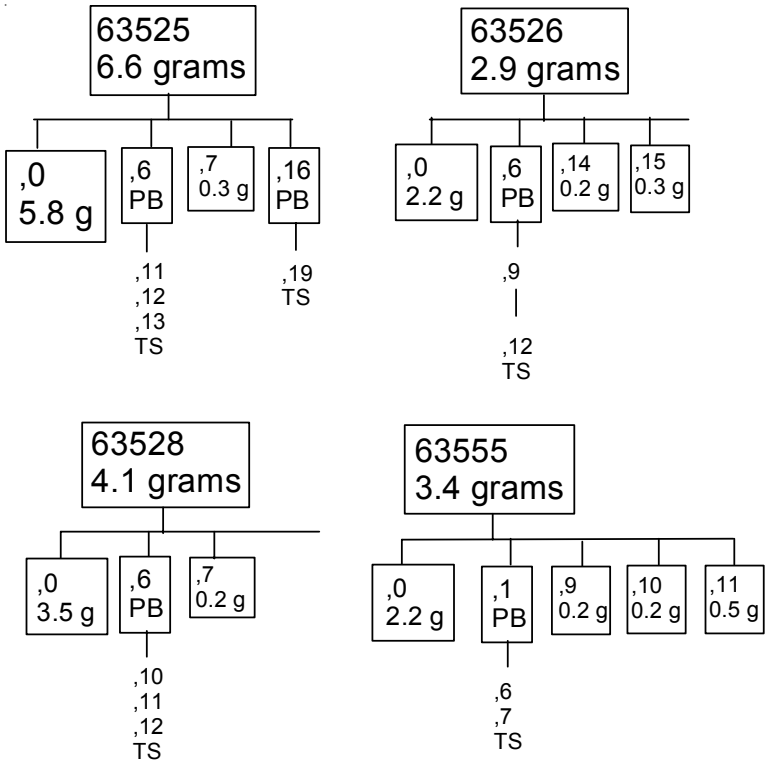
Table 1. Chemical composition of 63526 and 63528.

reference	Stoffler85		
weight			
SiO2 %	45.3	45.3	(a)
TiO2	0.34	0.26	(a)
Al2O3	31	29.7	(a)
FeO	2.79	3.4	(a)
MnO	0.03	0.03	(a)
MgO	2.64	3.3	(a)
CaO	17.2	17.5	(a)
Na2O	0.6	0.47	(a)
K2O	0.34	0.26	(a)
P2O5	0.03	0.03	(a)
S %			
sum			


63525 ppl and xpl
2 mm across


63526 ppl and xpl
2 mm acrosss


63528 ppl and xpl
2 mm across



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