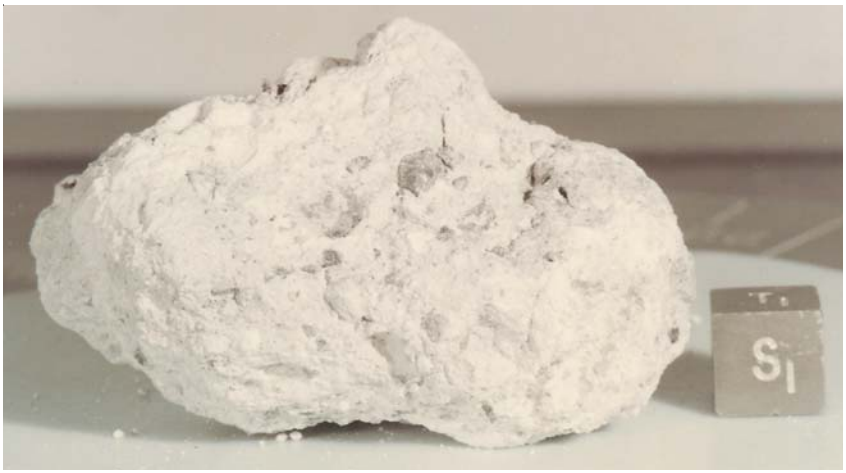


67515 – 60.8 grams
67516 – 14.4 grams
67517 – 9.65 grams
67518 – 3.74 grams
67519 – 2.04 grams
Anorthositic Breccia

Figure 1: Photo of 67515. Cube is 1 cm. S72-43481

Figure 2: Photo of 67516. Scale in mm. S72-51052

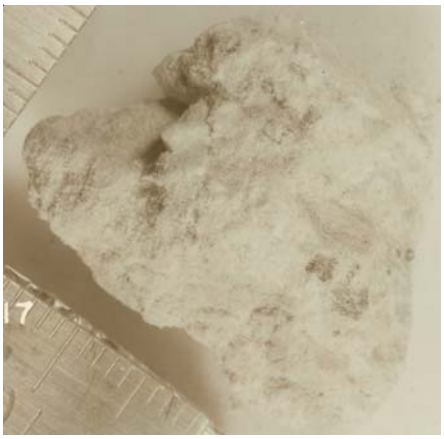


Figure 3: Photo of 67517. Scale in mm. S72-51281.

Figure 4: Photo of 67518. Scale in mm. S72-49577

Figure 5: Photo of 67519. Scale in mm. S72-51047.

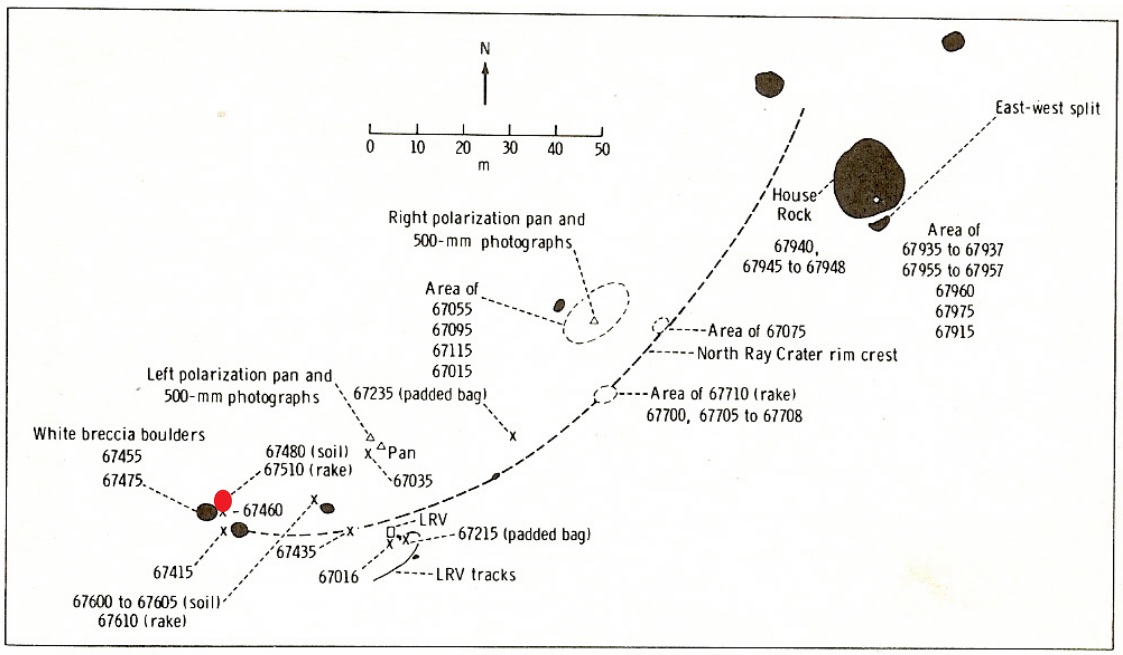


Figure 6: South Rim of North Ray Crater in East Central Moon.

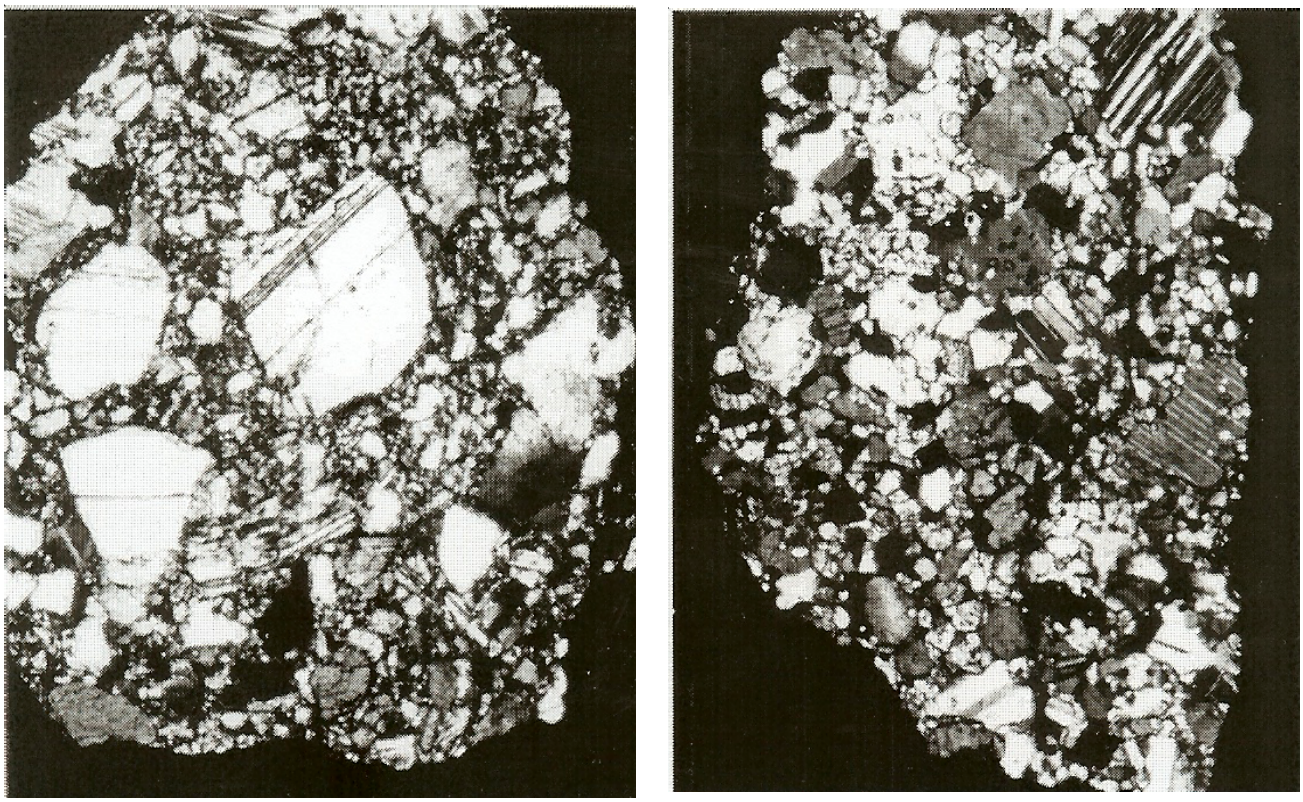
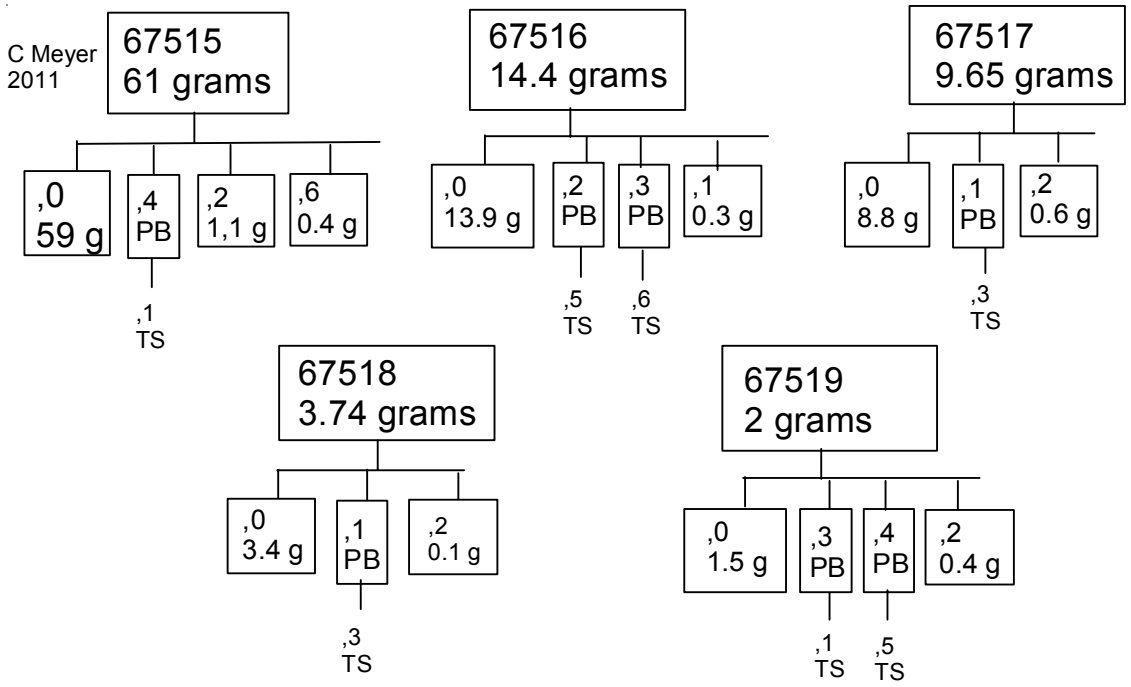


Figure 7 a, b: Photomicrographs of two areas of 67515. Crossed polarizers. From Ryder and Norman 1980.



Introduction

These chalky white rocks were returned in the same bag. They are from a rake sample taken near the White Boulder on the south rim of North Ray Crater - see section on 67481. They are friable, which is why they are rounded. They contain lithic fragments of cataclastic anorthosite and feldspathic granulite.

Petrography

Steele and Smith (1972) gave the original descriptions of these particles. Ryder and Norman (1980) and Stoffler et al. (1981) found that they were feldspathic granulite and contain areas of aphanitic impact melt. In thin section they appear to be pristine and monomict (figures 7 - 13). They are mostly plagioclase, with only minor mafic minerals. Textures of lithic fragments vary from cataclastic anorthosite to feldspathic granulite.

Although there are eight thin sections, there has been no petrographic description with resulting pyroxene diagrams. They await study - perhaps along with the White Boulder samples (67455 etc.)

Chemistry

None

Radiogenic age dating

None

References for 67515

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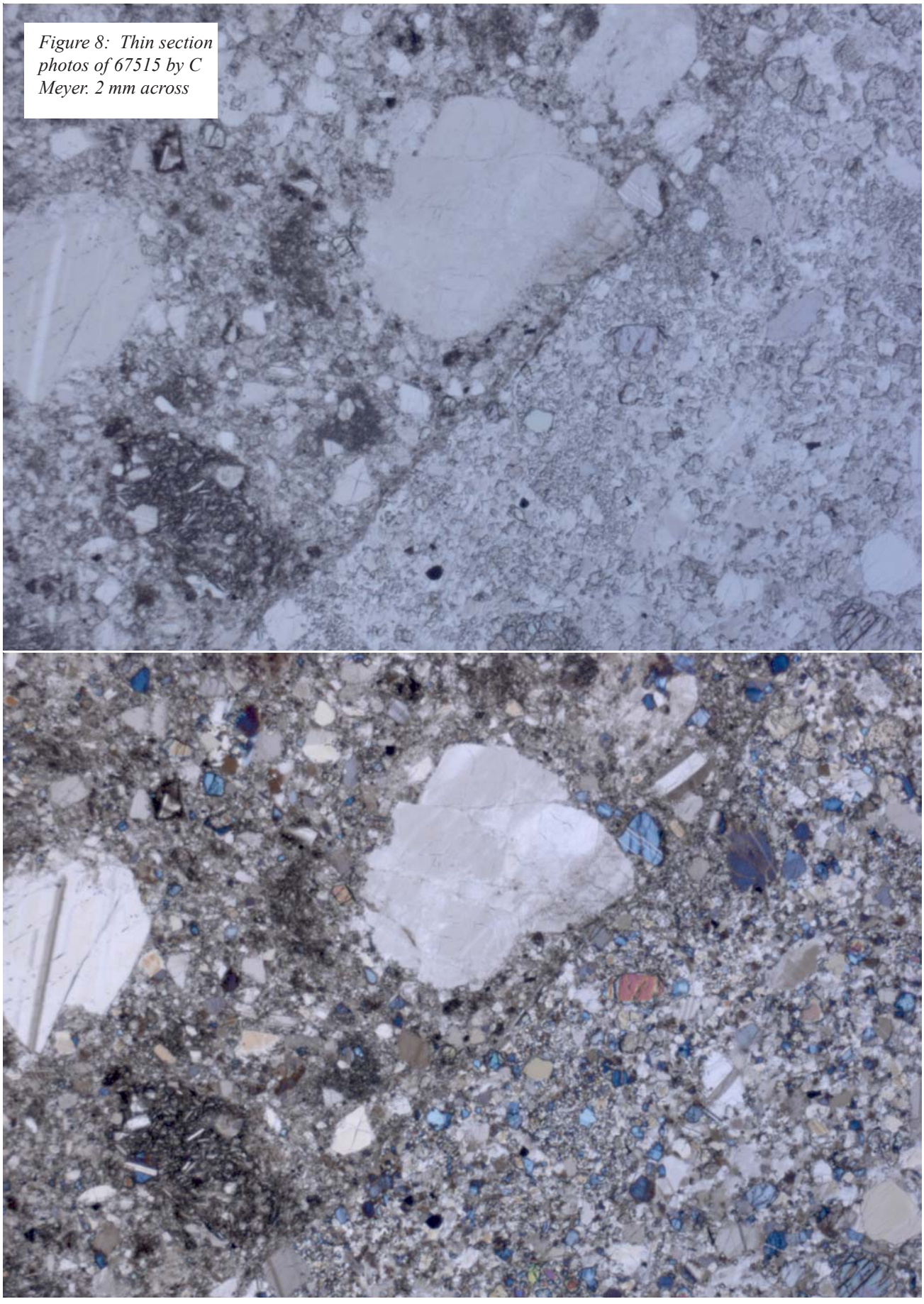
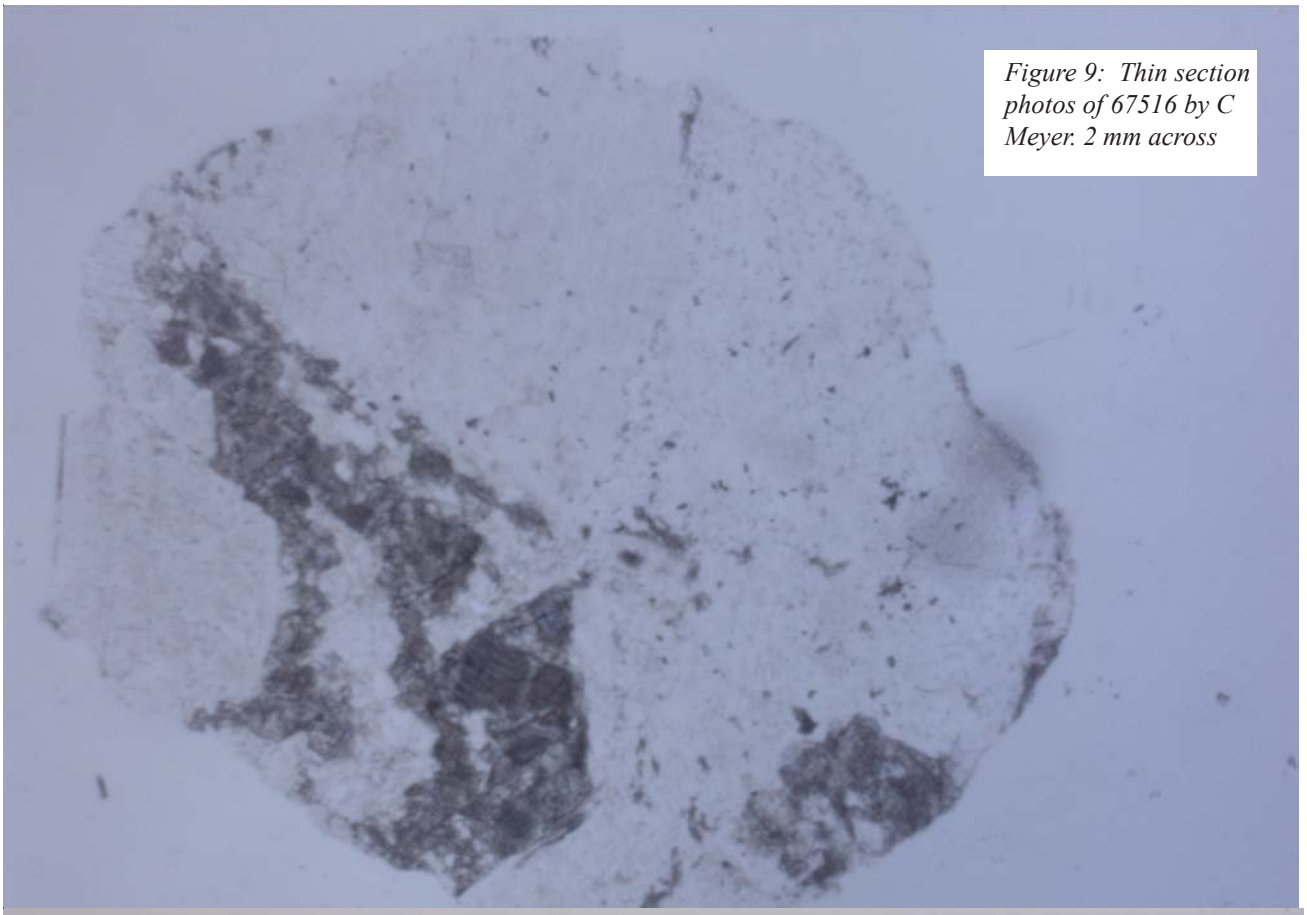


Figure 8: Thin section photos of 67515 by C Meyer. 2 mm across



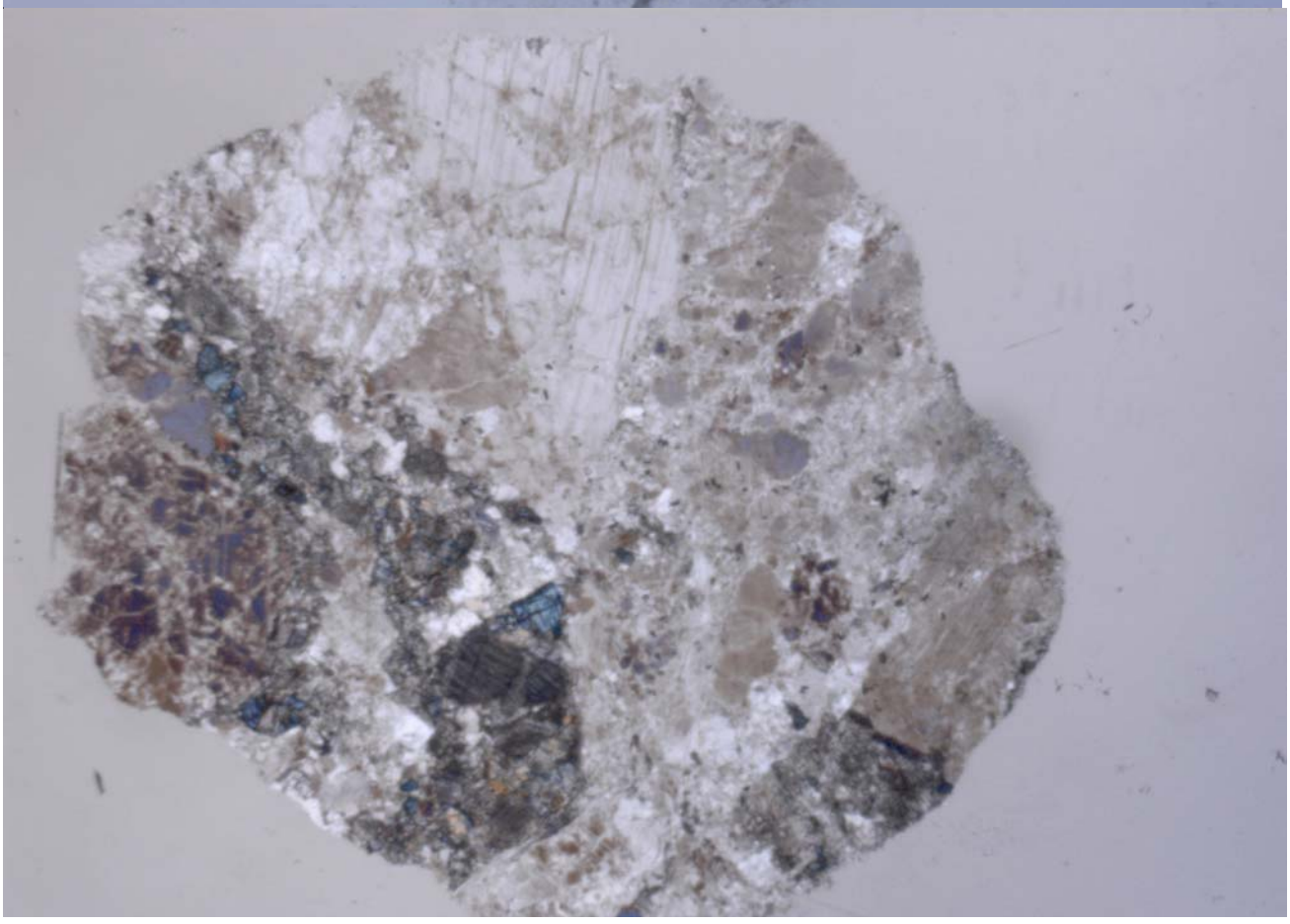


Figure 9: Thin section photos of 67516 by C Meyer. 2 mm across

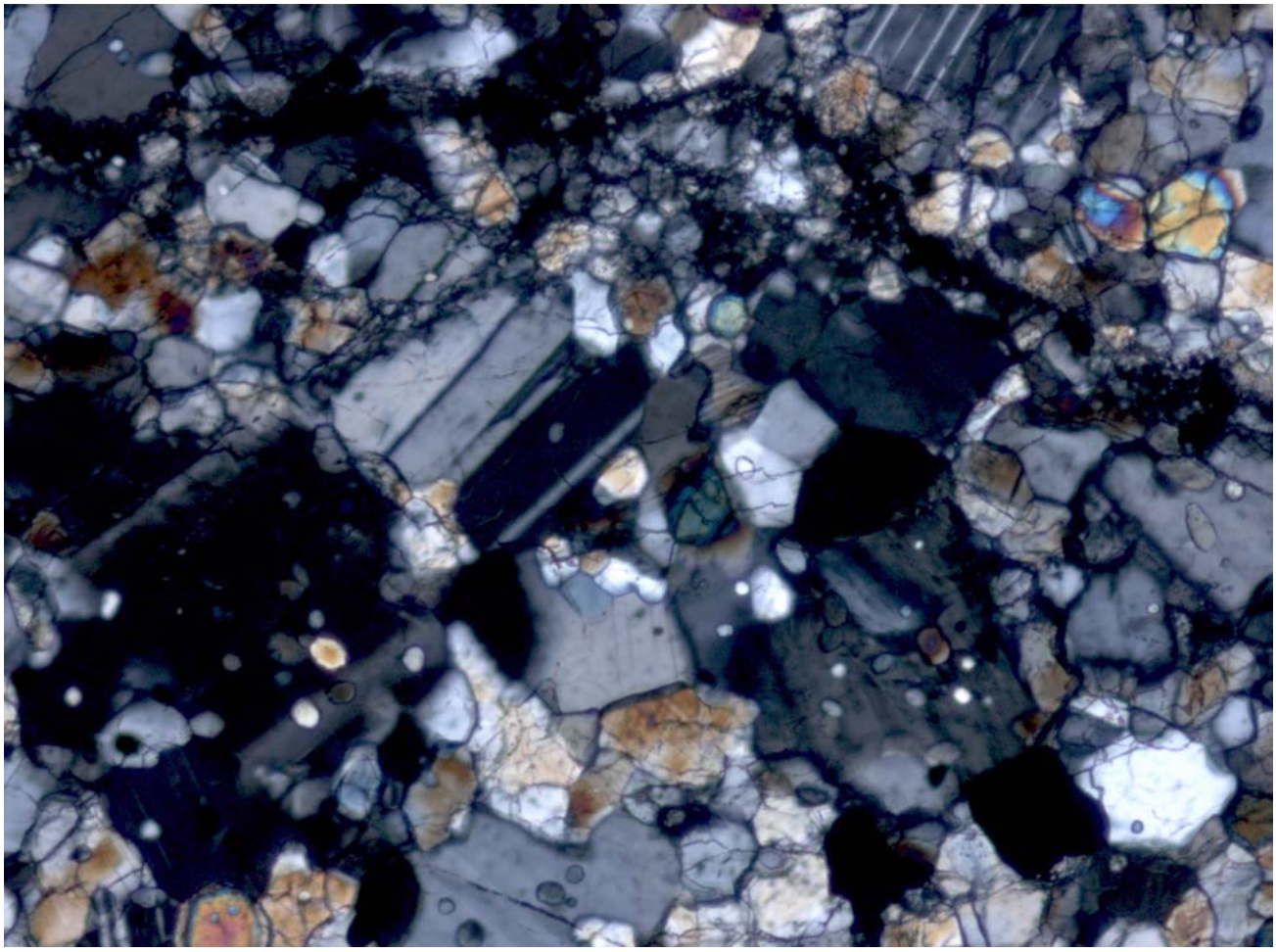
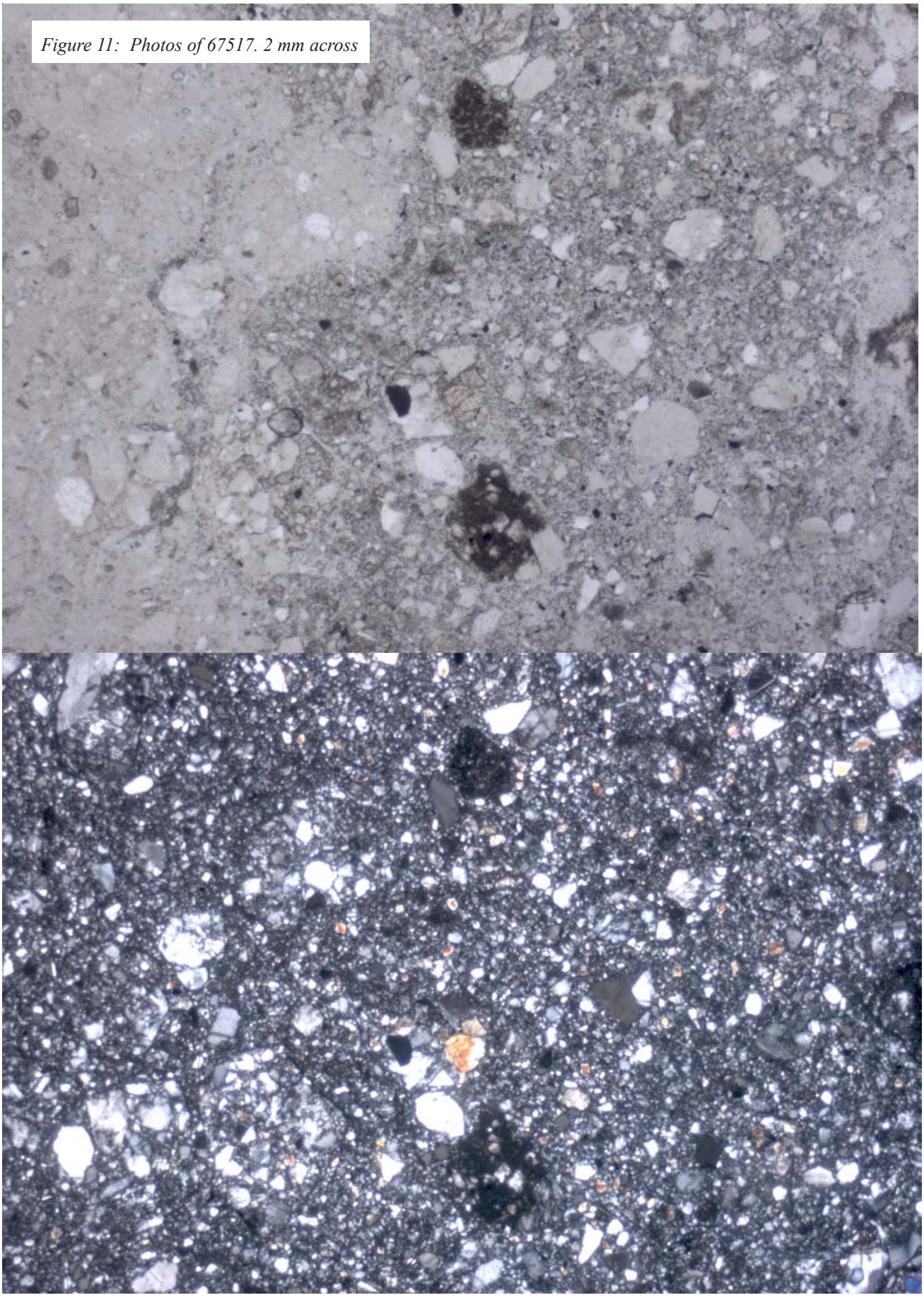


Figure 10: Photomicrograph of thin section of 67515 with crossed-nicols. C Meyer

Figure 11: Photos of 67517. 2 mm across



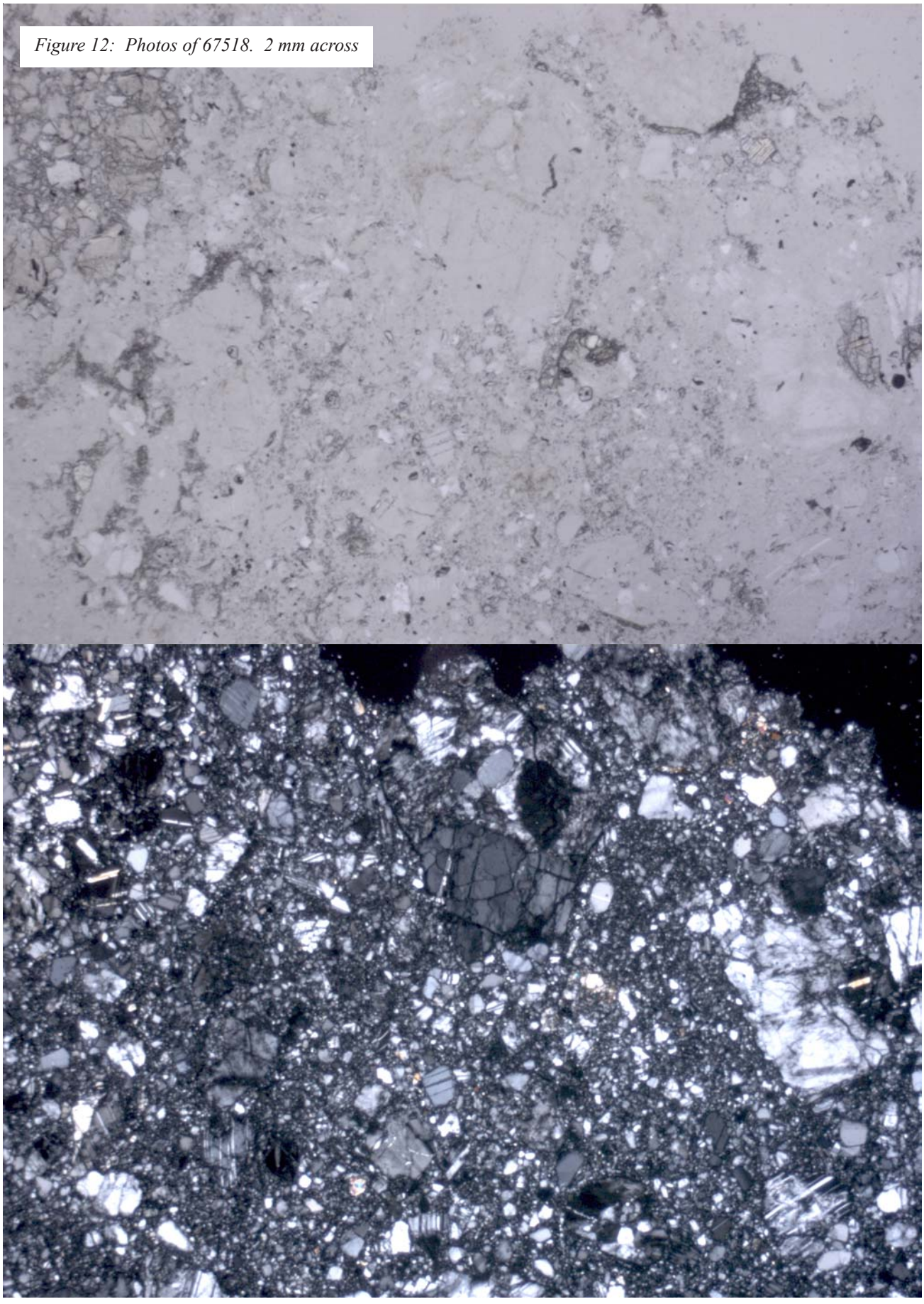


Figure 12: Photos of 67518. 2 mm across

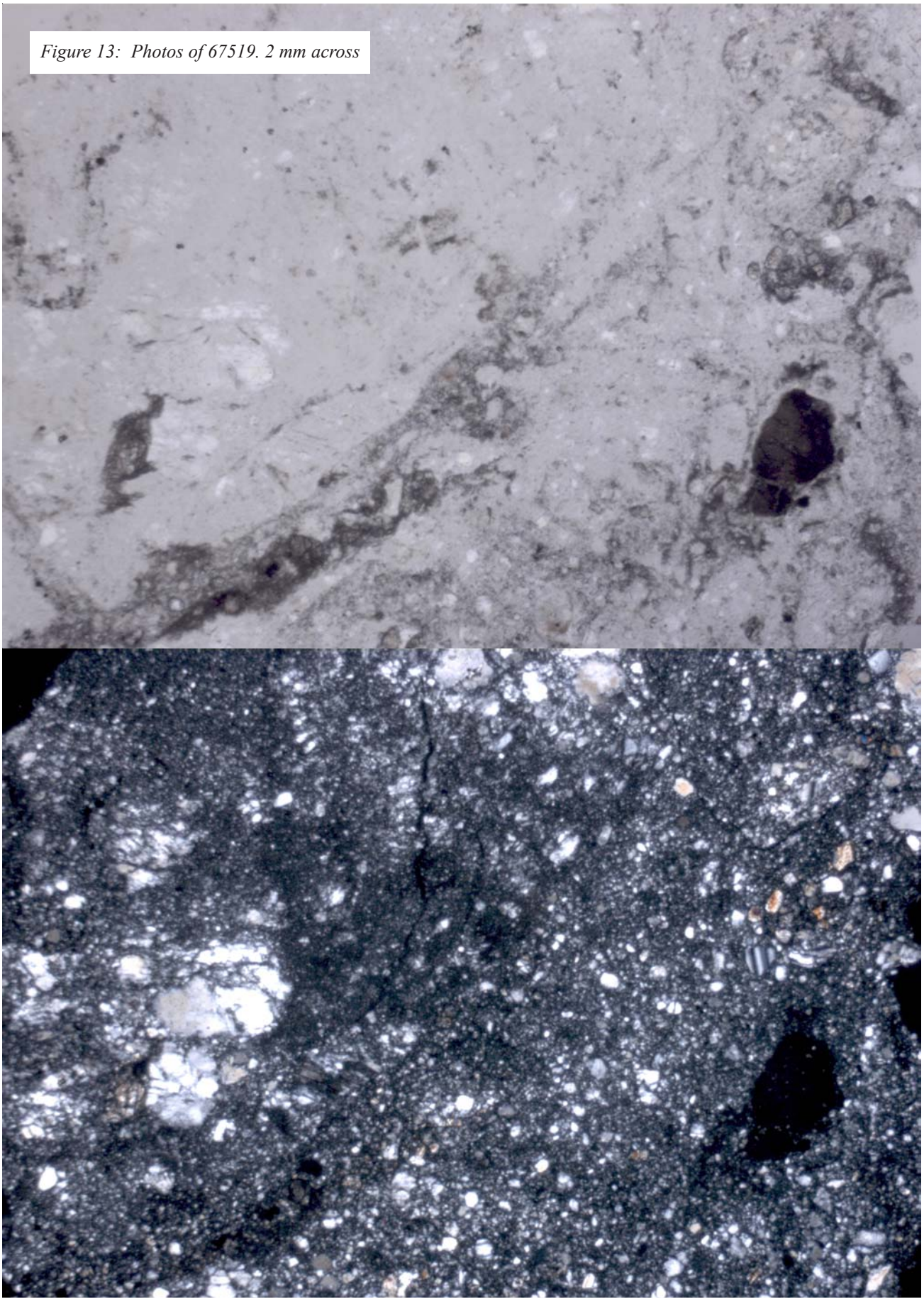


Figure 13: Photos of 67519. 2 mm across