Sample ID and provenance

Sample ID: SP34_PdA_a

Lithology: Chert

Collection: LusoLit

Outcrop: Ponta dos Altos

Unit/facies: Lower Jurassic

Thinsection: Yes

Macroscopic description

- COLOR

The color distribution is Mix diffuse. The colors are Light brownish gray (10YR 6/2) and Weak red (10R 4/2).

- FABRIC

The luster is Medium and the translucency is Opaque. The feel is Smooth and the grain is Fine. The distribution is Even and the patterns are Spots (1-49%), which are Speckling, with an Even distribution.

- INCLUSIONS AND FOSSIL CONTENT

-

- CORTEX

The cortex is from an Outcrop, with a Sharp transition. It shows the presence of recrystallized megacrystalline quartz in the dolomitic limestone or dolomite. When tested with dilute hydrochloric acid (HCL 10%), the reaction was Strong. The parent rock may be a Limestone. On the cortex there was no reaction, which means the cortex is not limestone.

- QUALITY

The fracture is Conchoidal and the surface is Homogeneous. The knapping quality is Good.

- OBSERVATION

-

Outcrop description

- OUTCROP CHARACTERISTICS

Type of outcrop: Primary

Visibility: Good

Accessibility: Easy

State of site: Bad

- CHERT NODULES/BEDS DESCRIPTION

Type of chert nodule: Nodule

Sample variability: Variable

Frequency: Abundant

Nodule description: Oval, between 4 to 8cm wide. The nodules have cortex and somewhat easy to remove from the parent rock. Smaller nodules broken from the parent rock are also spread on the floor.

- SHORT DESCRIPTION

The chert can be found embedded in the parent rock or in broken pieces on the floor. The small boulders are found along a sand path at the top of the cliff. The outcrop seems to be in dismantlement, with the chert breaking from the parent rock. The nodules are oval, between 4 to 8cm, with cortex and easy to remove from the parent rock.

Petrography analysis form

❖ TEXTURAL COMPOSITION

Texture: Packstone

Microstructure: Massive

❖ COMPOSITION

ORTHOCHEM	Type	%	Description
MiC quartz (gr)	SE	93	-
Dolomite	SE	1	-
MG quartz (gr)	SE	3	-
Chalcedony (gr)	SE	3	-

ALLOCHEM	Freq	Description
Oxides	Uncommon	-
Opaques	Common	-

BIOCLASTS	Freq	Description
Ghosts	Common	-
Bivalve shell	Rare	-

Echinoid spine	Uncommon	-
Bioclastic debris	Common	-

- OTHER TEXTURAL CHARACTERISTICS

Total porosity (%): 1

Porosity type: Vuggy, Moldic

Other sedimentary structures: -

Observations

- -

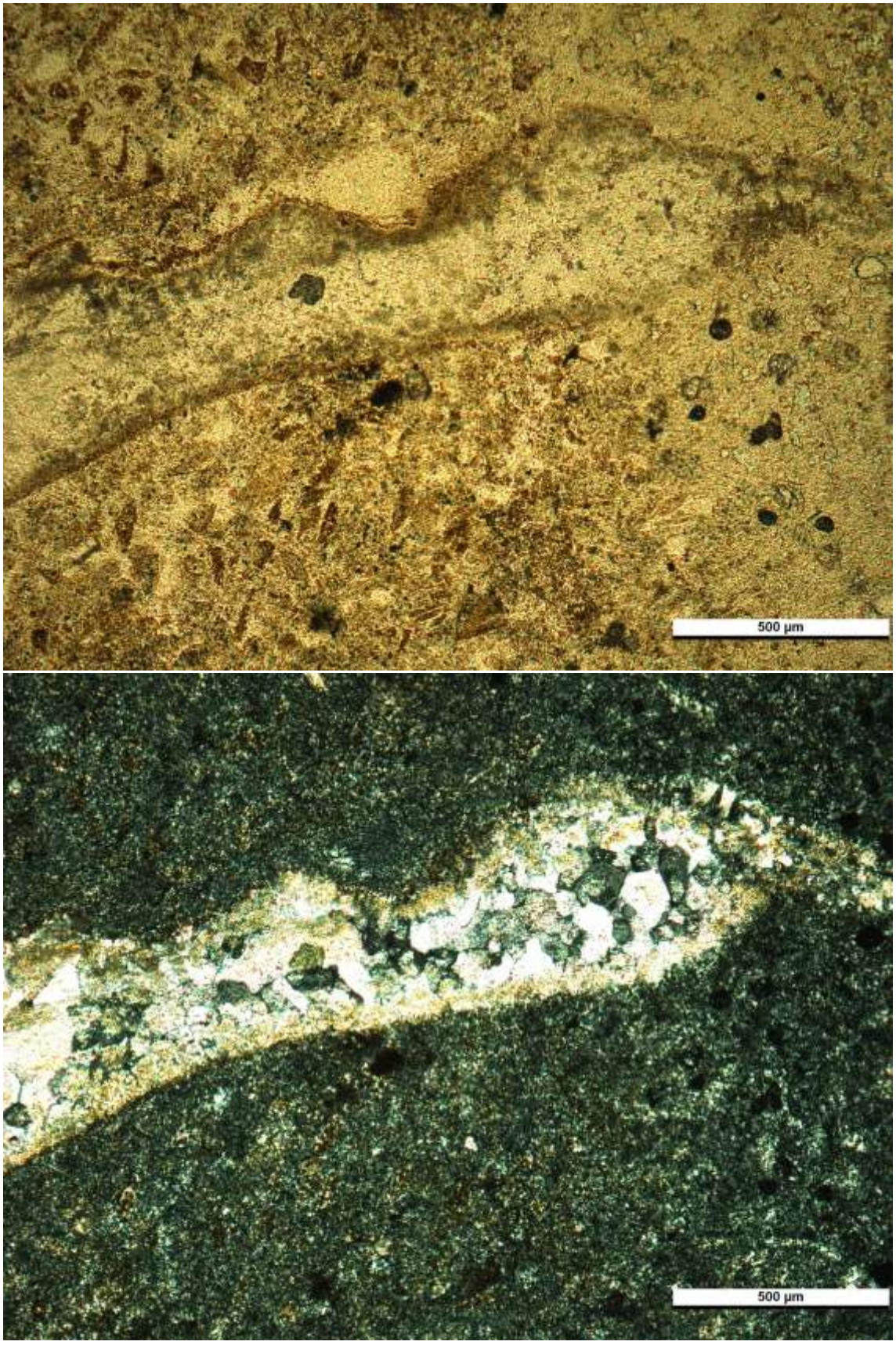
Analysis information

- ANALYST: JB
- DATE: 02.23.2022
- EQUIPMENT: Leica DM2500 P

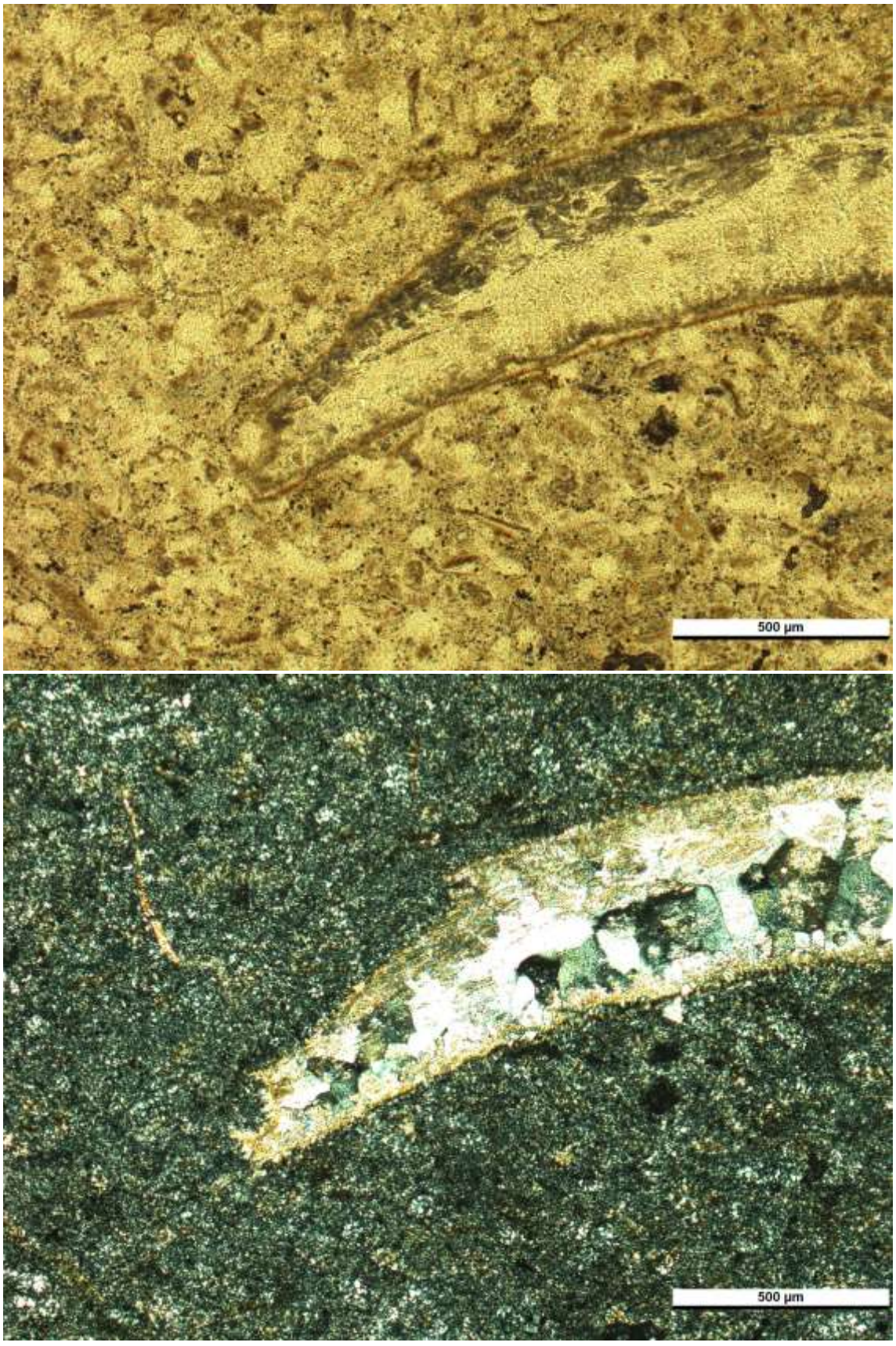
Photos

Photo ID	Aug.	Description
SP34_a_001	5x	Bivalve shell.
SP34_a_002	5x	Bivalve shell.
SP34_a_003	10x	Detail of a bivalve shell.
SP34_a_004	10x	Echinoid spine with somewhat preserved structure.

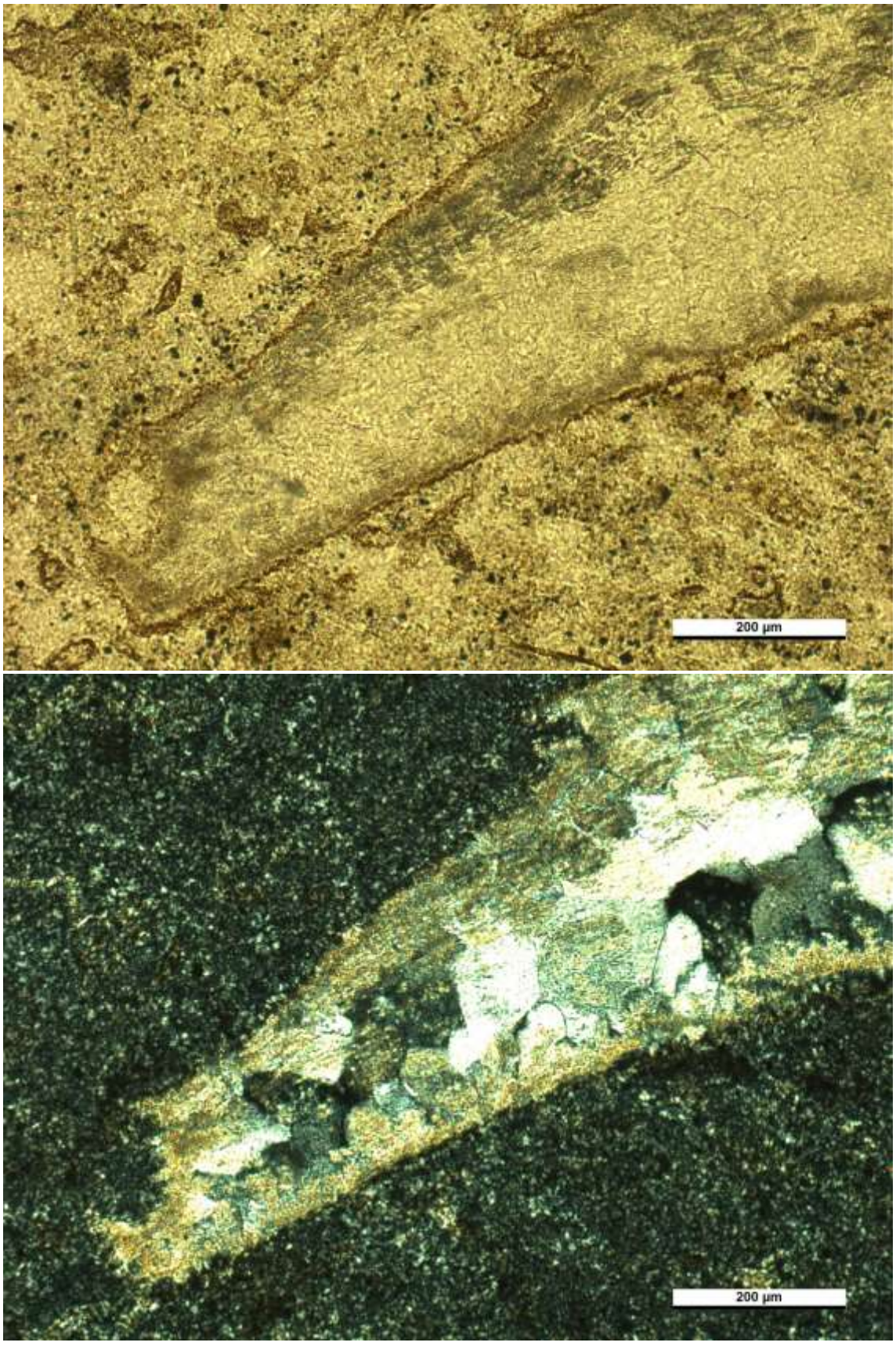
Petrography photos



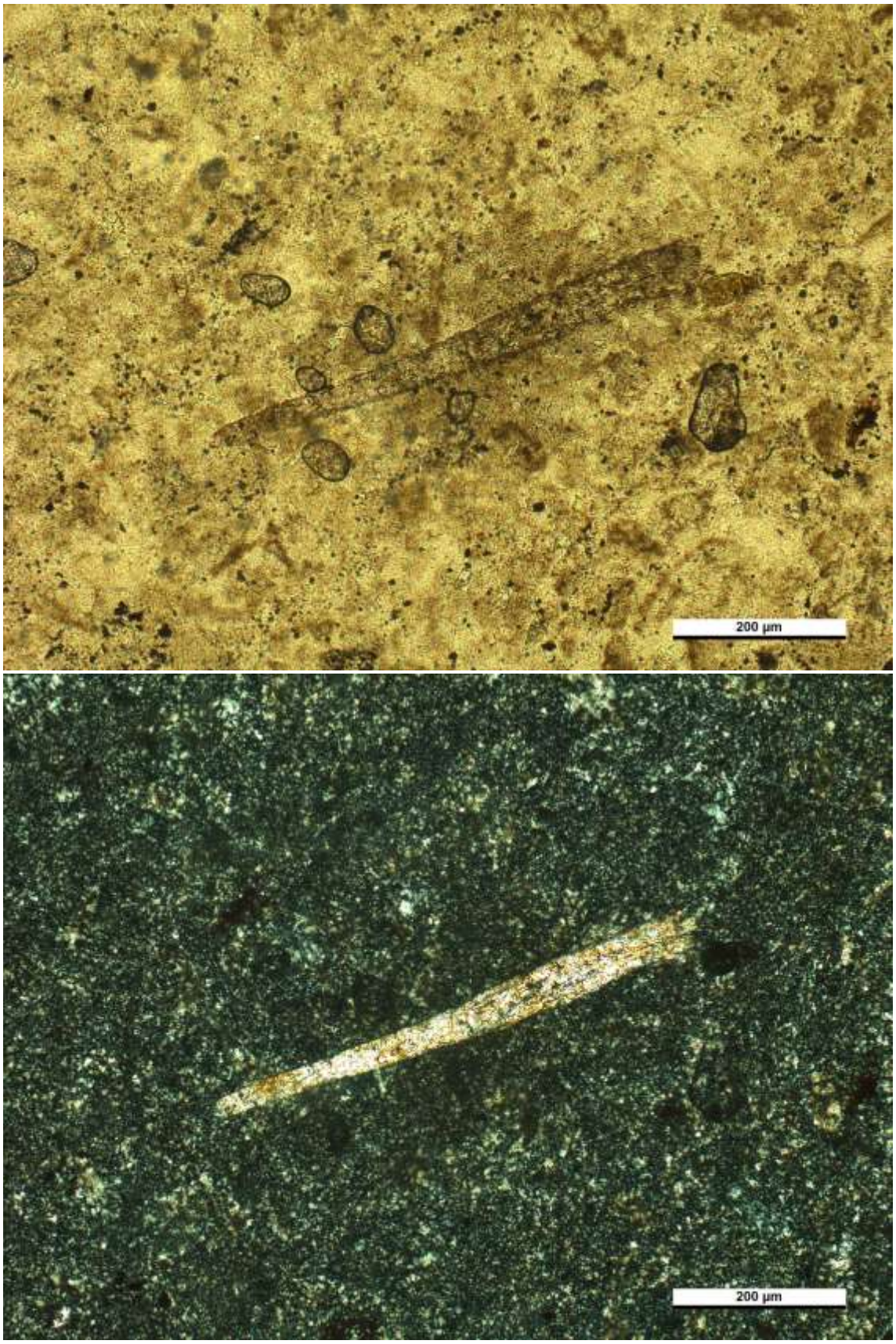
SP34_a_PtA_001 (PPL and XPL)



SP34_a_PtA_002 (PPL and XPL)

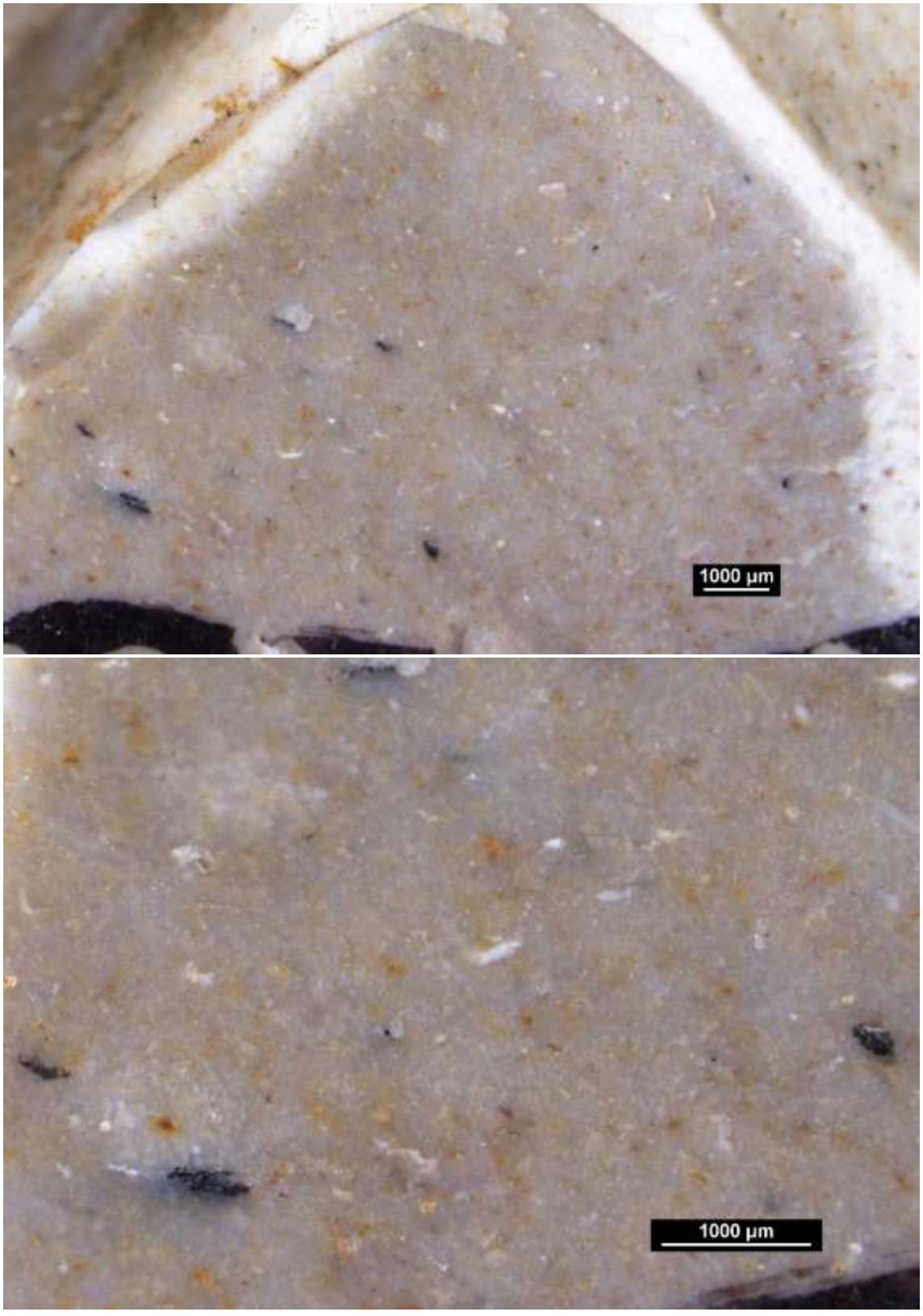


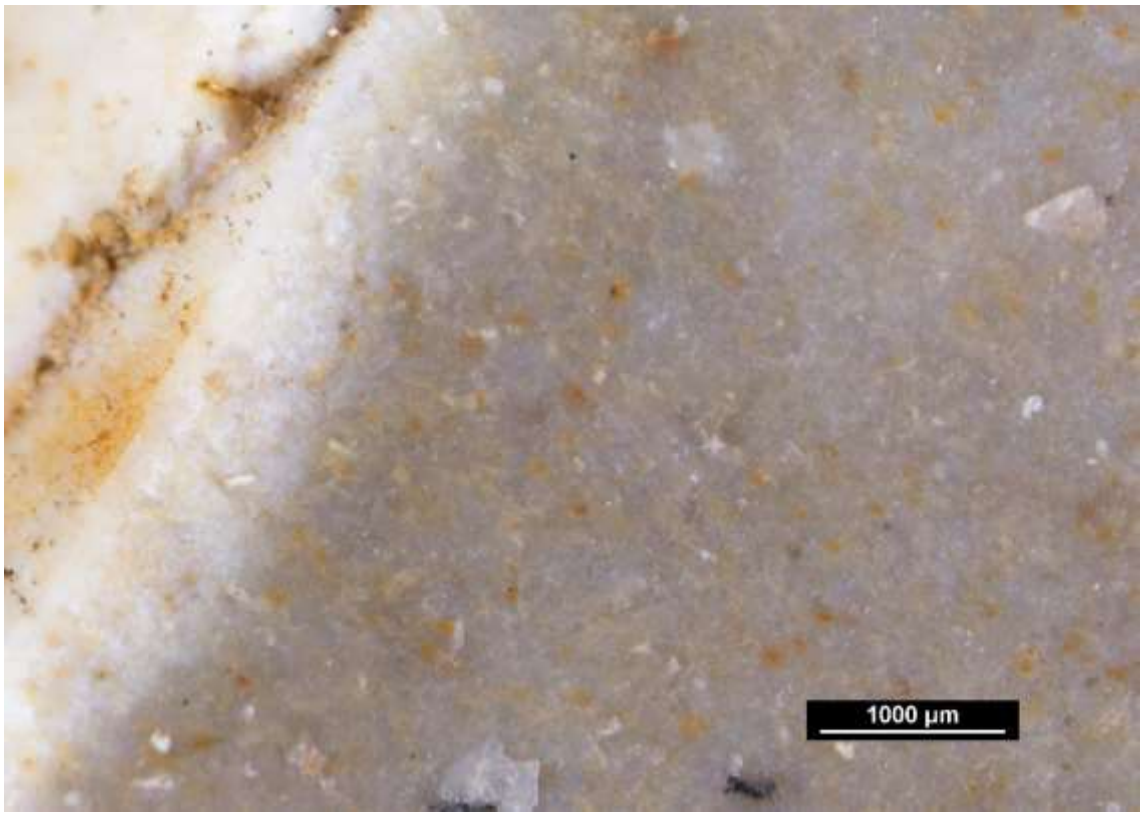
SP34_a_PtA_003 (PPL and XPL)

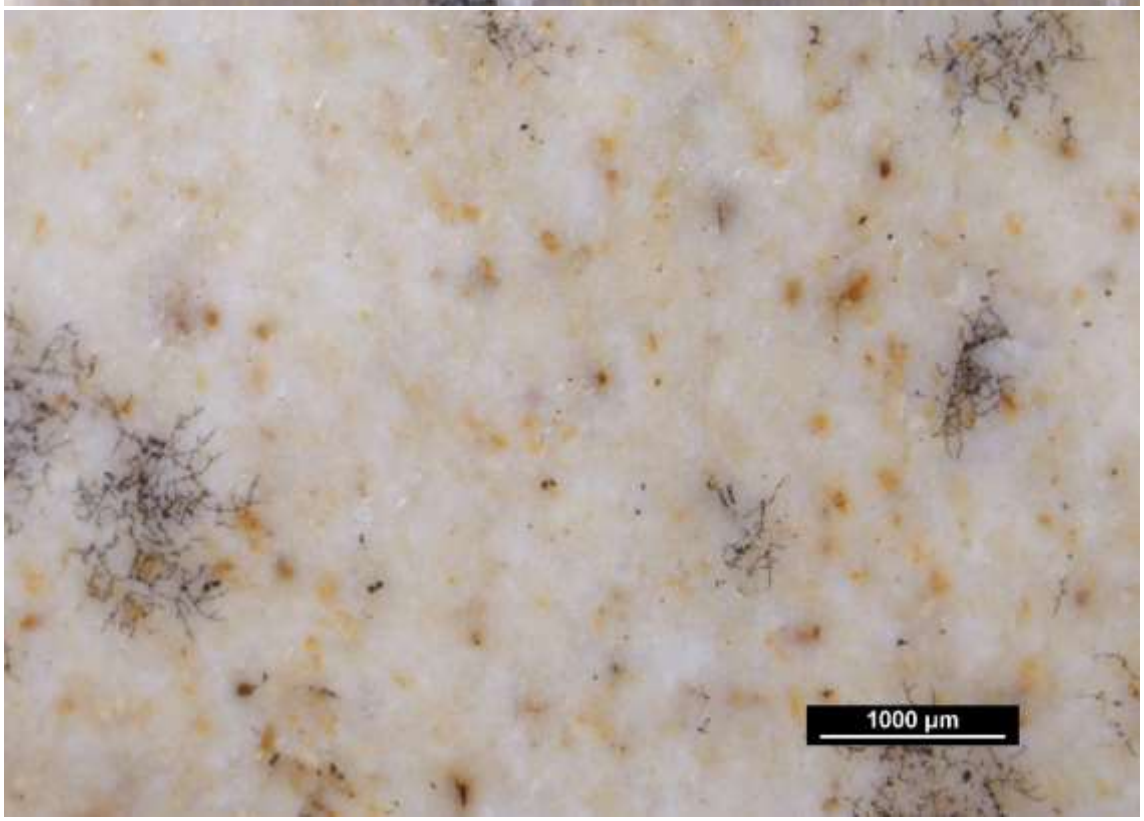


SP34_a_PtA_004 (PPL and XPL)

Macroscopic photos




1000 µm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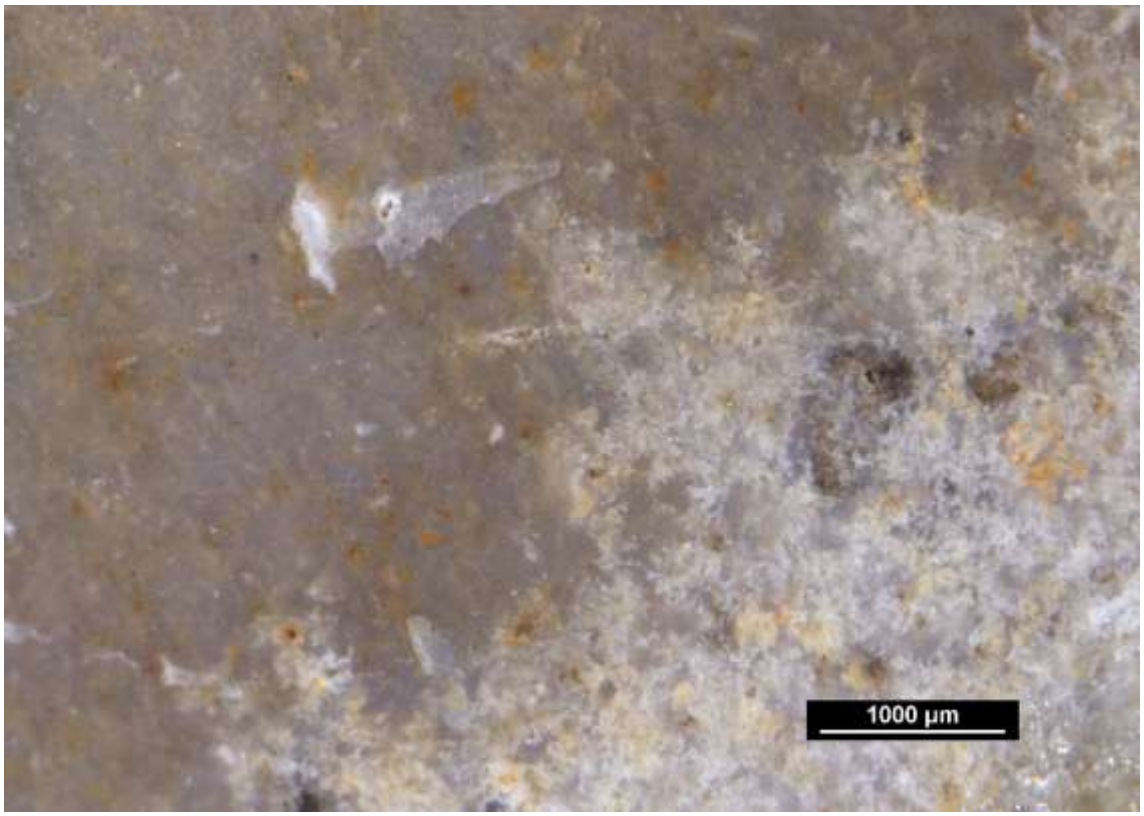
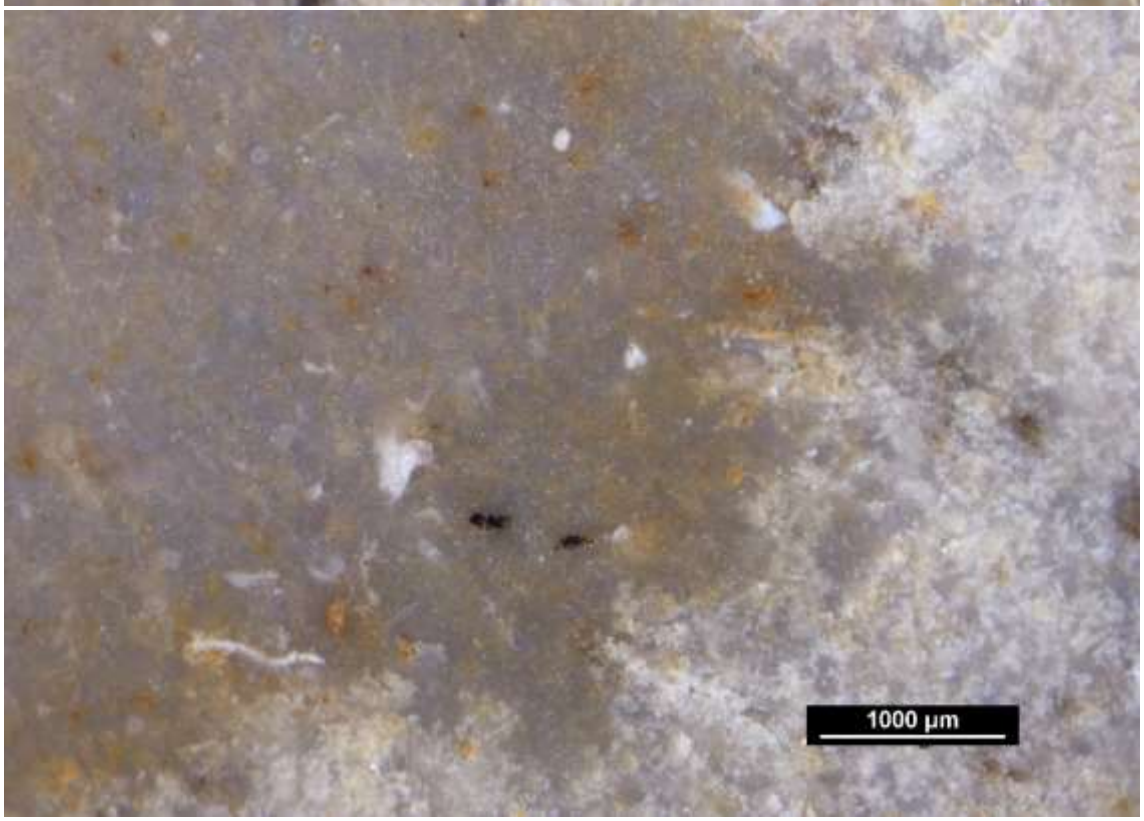

1000 µm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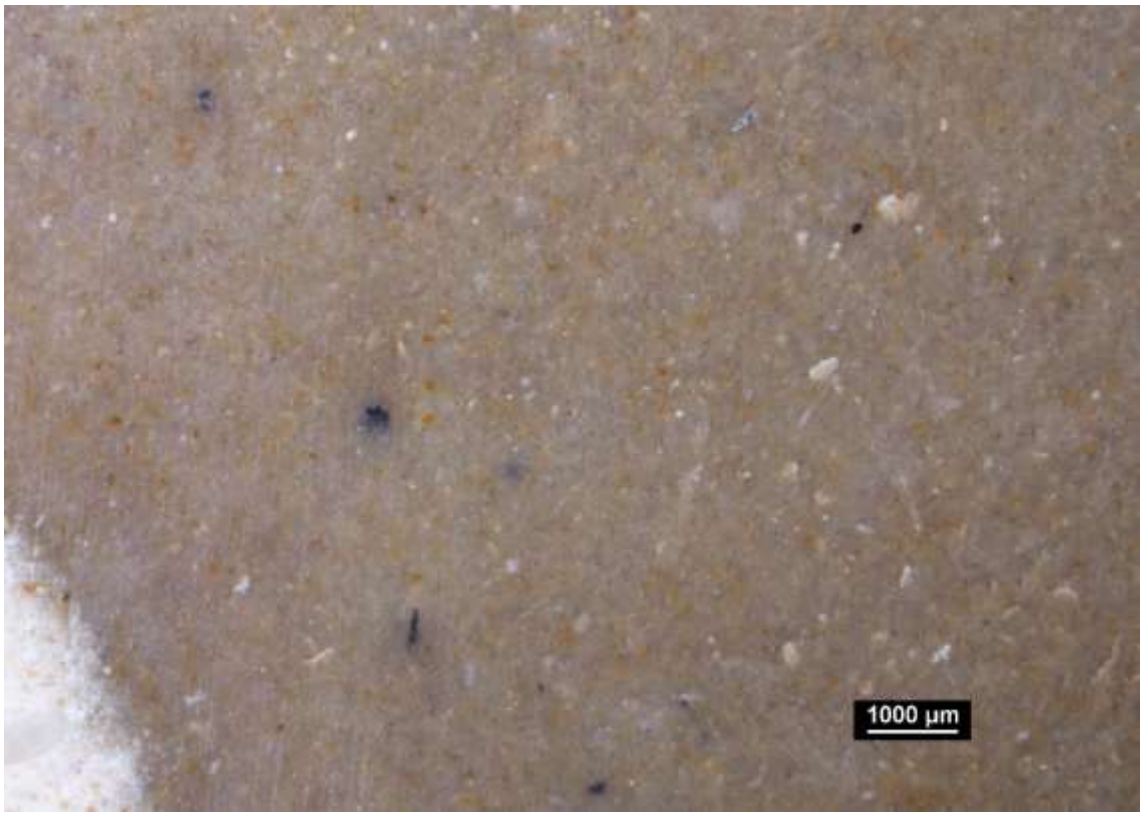
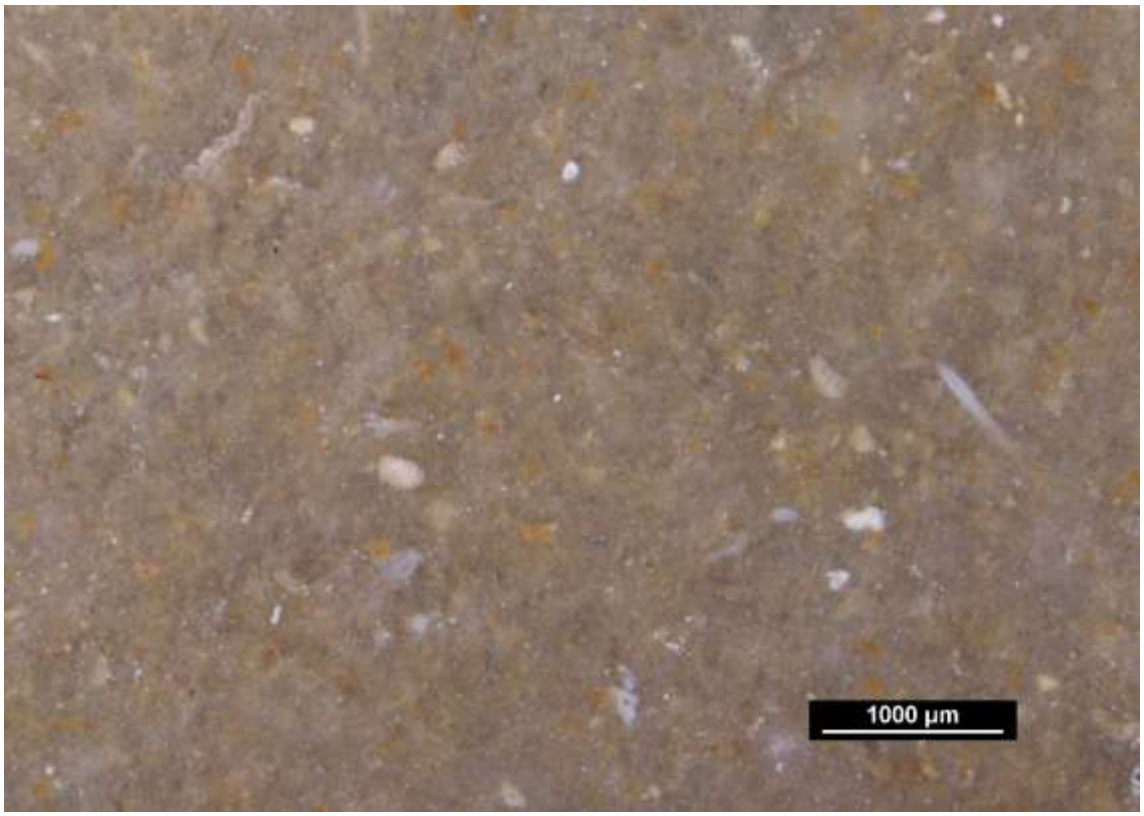

1000 µm


1000 µm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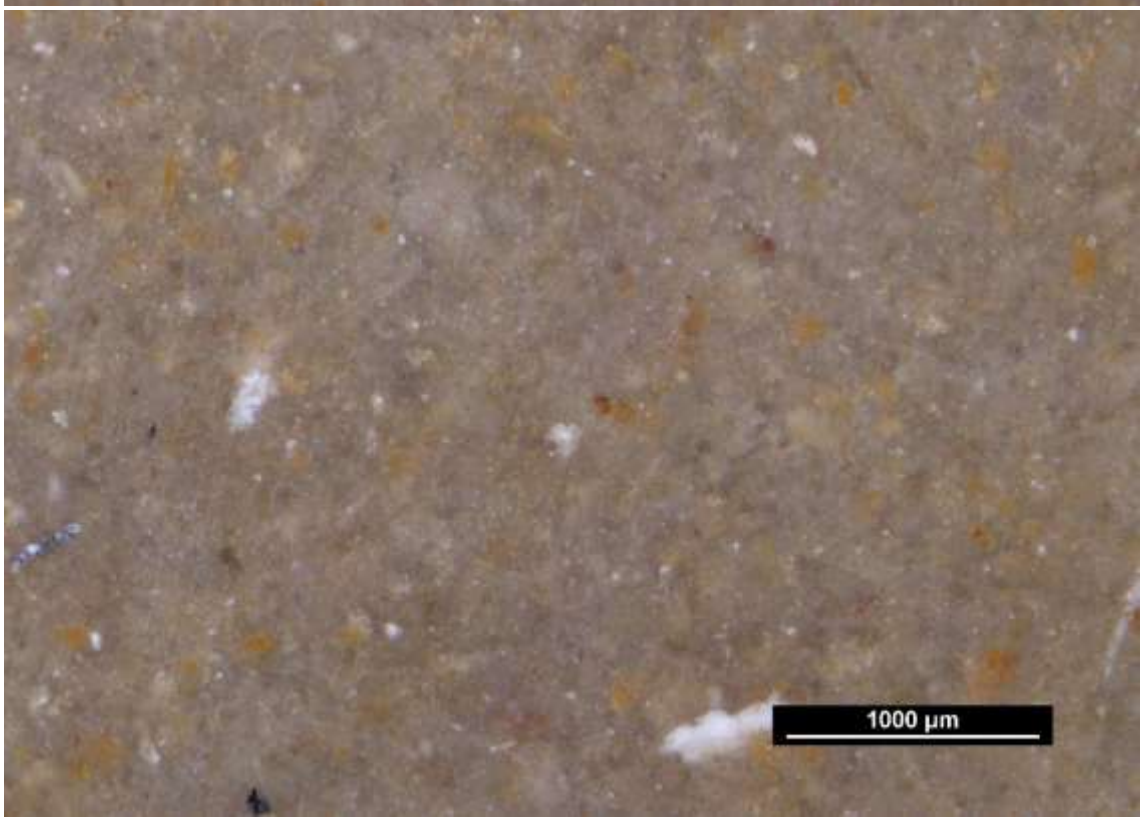
1000 µm


1000 µm