Sample ID and provenance

Sample ID: SP18_PBX

Lithology: Chert

Collection: LusoLit

Outcrop: Praia de Belixe

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 Pale brown (10YR 6/3).

- FABRIC

The luster is Dull and the translucency is Opaque to Sub-translucent depending on the areas. The feel is Rough to Semi-rough and the grain is Fine. The structure is Uneven with a Gradual variation. The patterns are Shaded and Spots (1-49%). The spots are Splotched and Speckling, with an Uneven distribution.

- INCLUSIONS AND FOSSIL CONTENT

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- CORTEX

The cortex is from an Outcrop, Thick and with a Gradual transition. When tested with dilute hydrochloric acid (HCL 10%), the reaction was weak. The parent rock may be a dolomite or a dolomitic limestone.

- QUALITY

The fracture is Conchoidal and the surfaces shows Cleavage plains. The knapping quality is Medium.

- OBSERVATION

Some surfaces of the sample are altered. These alterations are white patina but also potlids, which may be related to the proximity to the shoreline or the exposition to sun and heat.

Outcrop description

- OUTCROP CHARACTERISTICS

Type of outcrop: Primary

Visibility: Good

Accessibility: Easy

State of site: Good

- CHERT NODULES/BEDS DESCRIPTION

Type of chert nodule: Nodule/Bedded

Sample variability: Variable

Frequency: Abundant

Nodule description: Cherts are nodules or beds embedded in the parent rock. Nodules and bedded cherts are altered whenever exposed and the bedded cherts are brittle and difficult to remove without fracturing the chert into small pieces.

- SHORT DESCRIPTION

Chert can be found embedded in the cliffs, as nodules or as bedded cherts. They are abundant and available at different heights but are difficult to remove due to being brittle.

Petrography analysis form

❖ TEXTURAL COMPOSITION

Texture: Wackestone

Microstructure: Massive

❖ COMPOSITION

ORTHOCHEM	Type	%	Description
MiC quartz (gr)	SE	95	-
Dolomite	SE	4	-
Chalcedony (fb)	SE	1	-
Shale	AC	<1	Terrigenous detritic origin.

ALLOCHEM	Freq	Description
Oxides	Uncommon	-
Peloids	Common	-

BIOCLASTS	Freq	Description
Ghosts	Common	-
Sponge spicules	Common	Poorly preserved.

Radiolarians	Common	Poorly preserved.

- OTHER TEXTURAL CHARACTERISTICS

Total porosity (%): 5

Porosity type: Vuggy

Other sedimentary structures: -

Observations

- There is a fracture filled with dolomite.

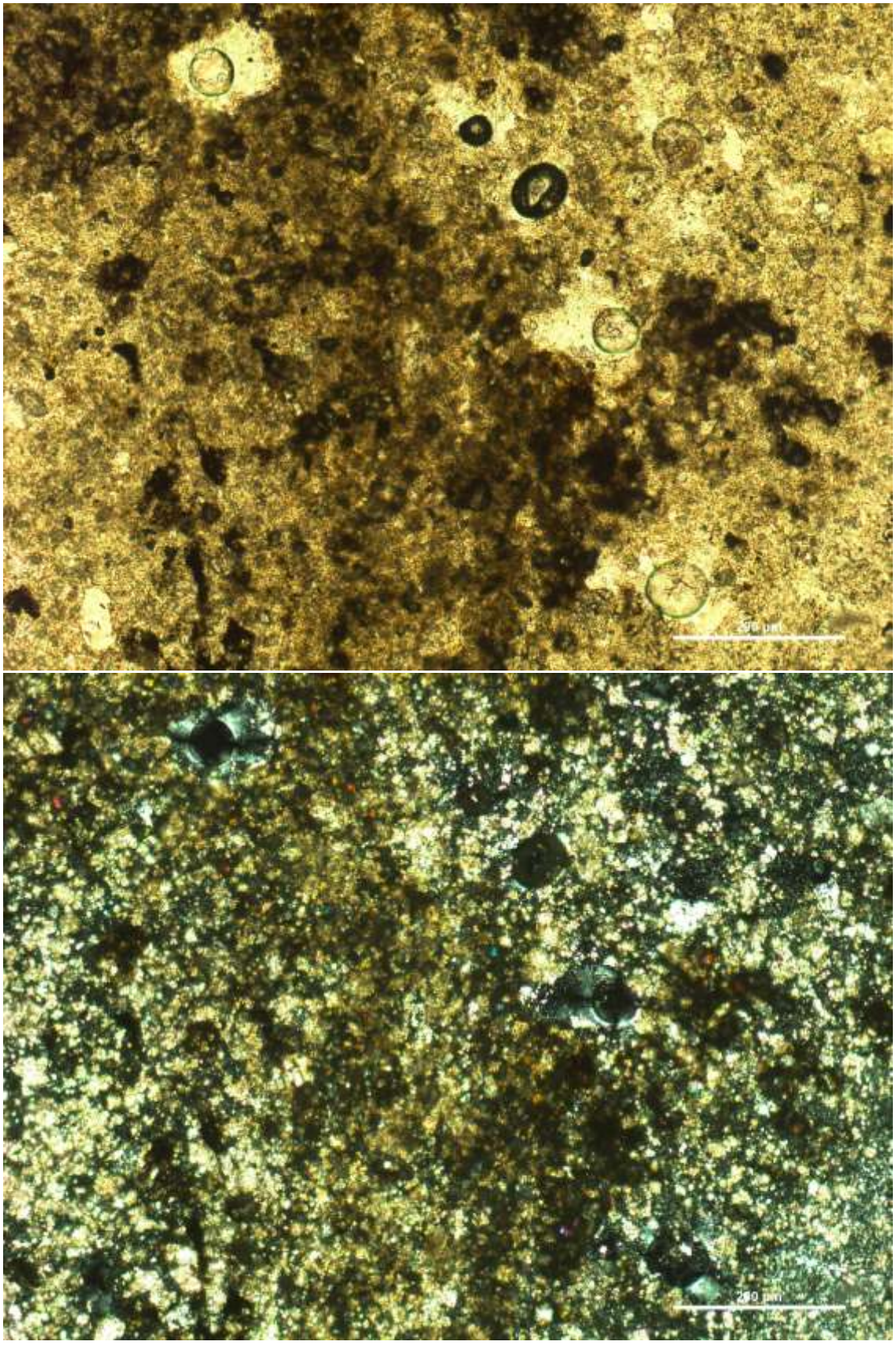
Analysis information

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

Photos

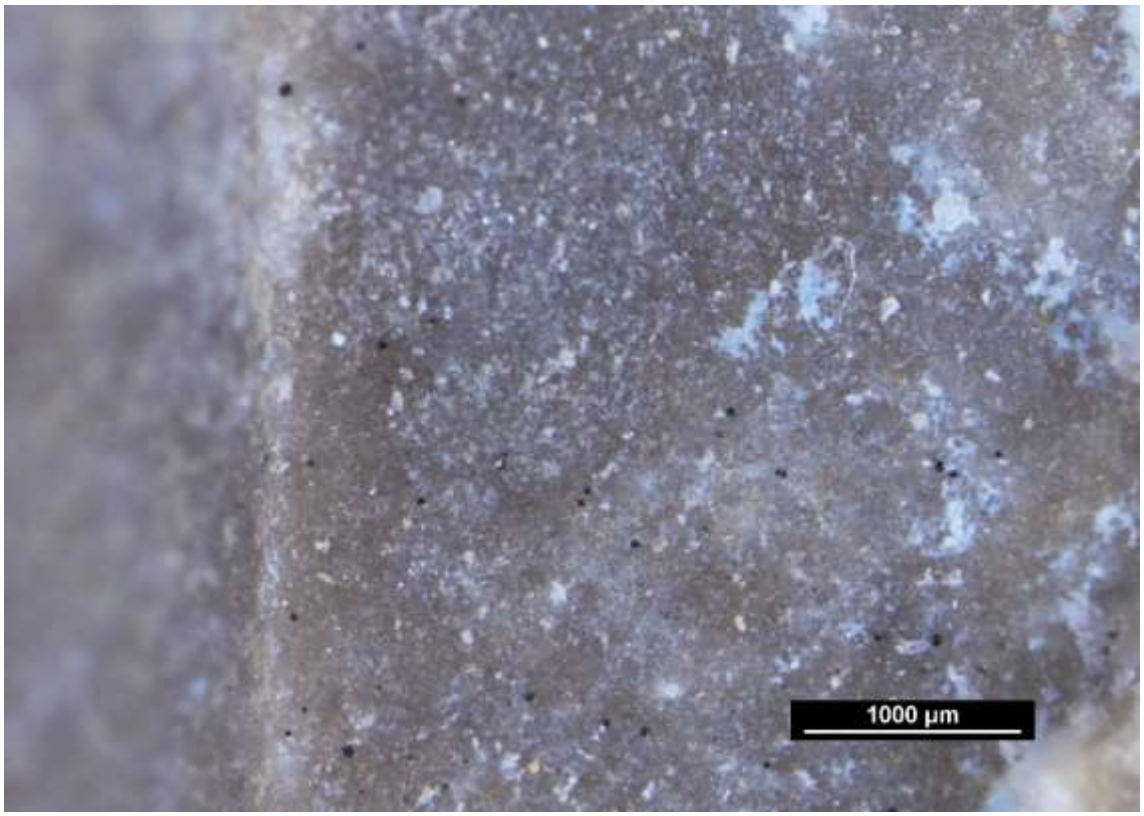
Photo ID	Aug.	Description
SP18_001	10x	Iron concentrations and peloids.

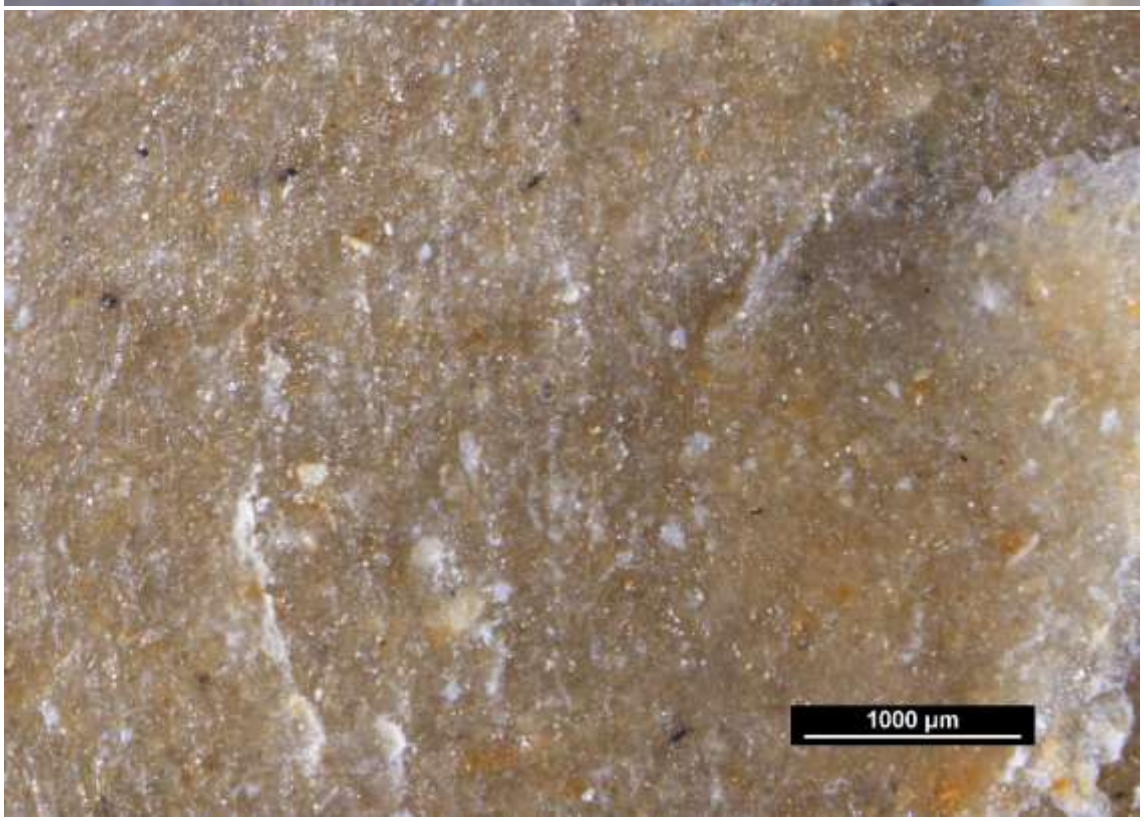
Petrography photos



SP18_PBX_001 (PPL and XPL)

Macroscopic photos


1000 µm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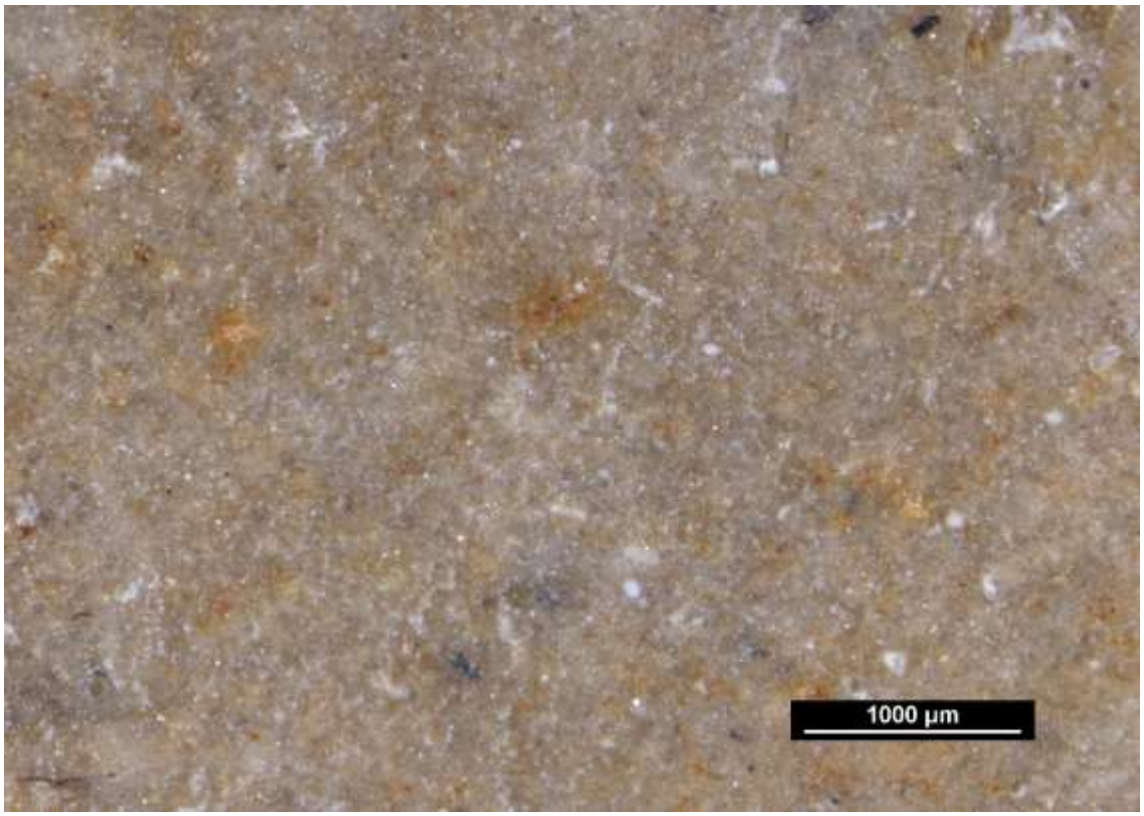
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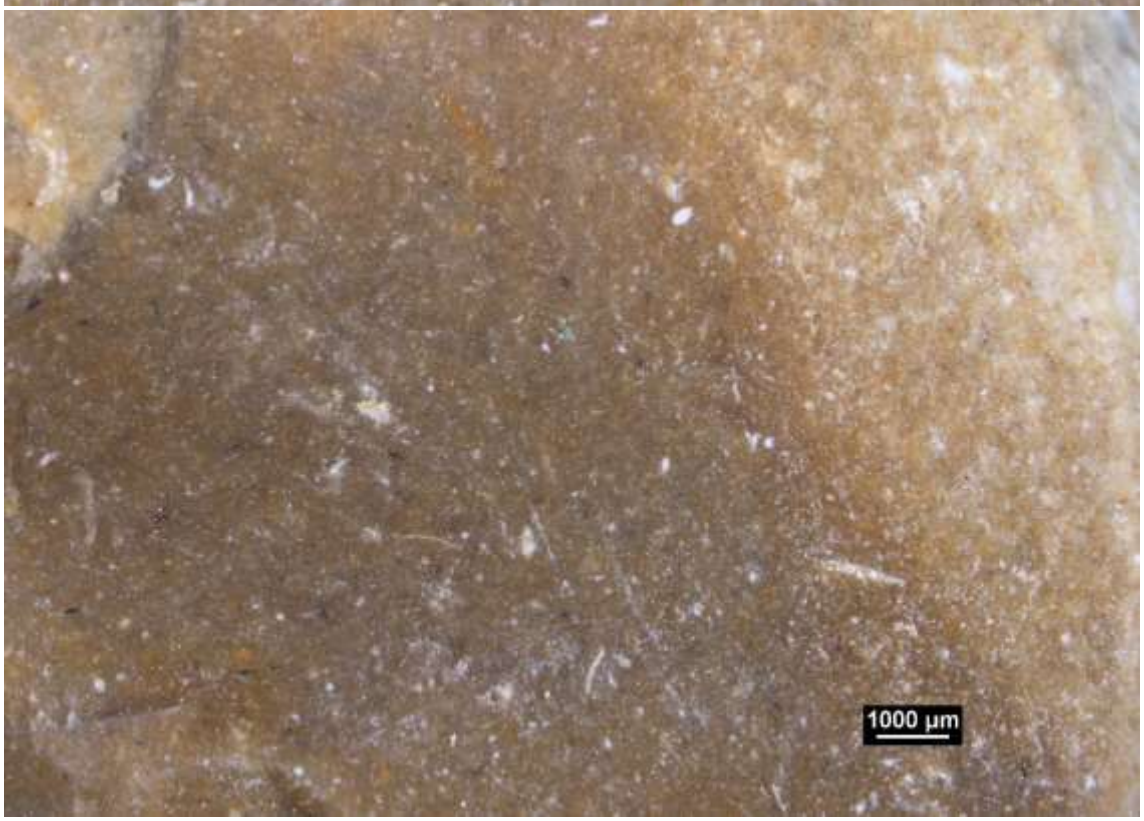
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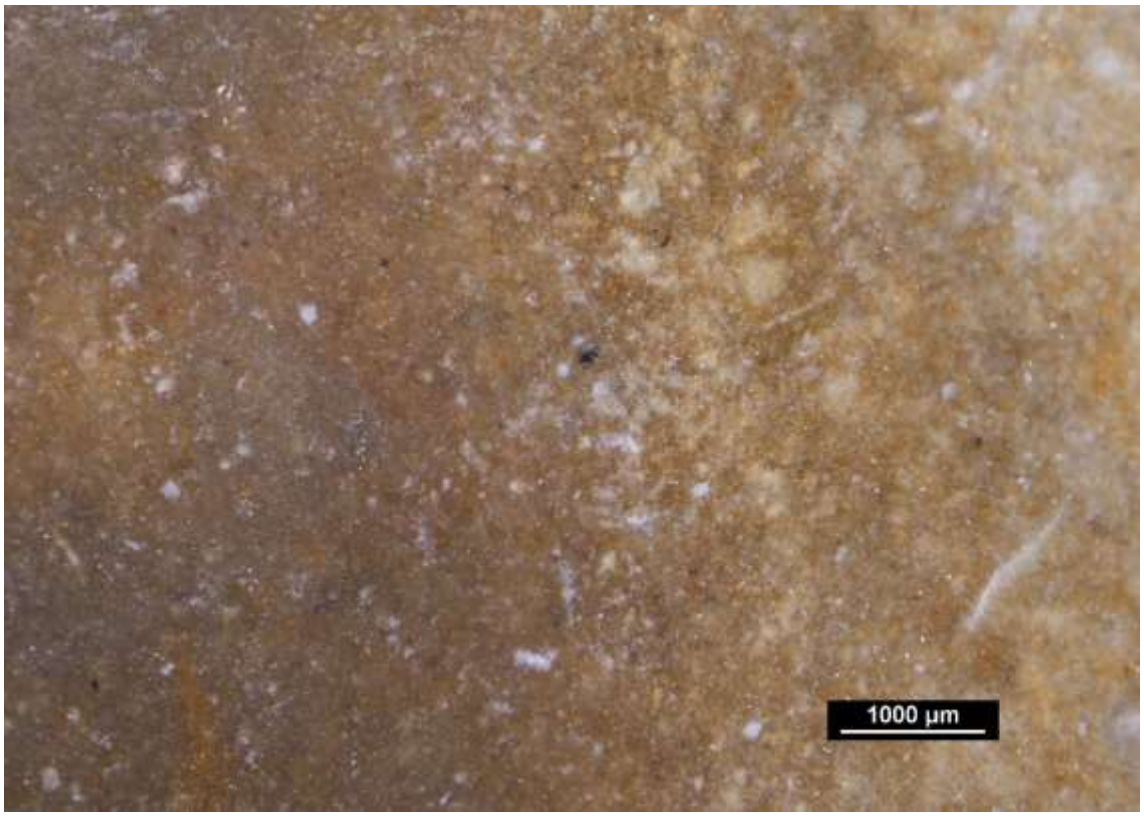
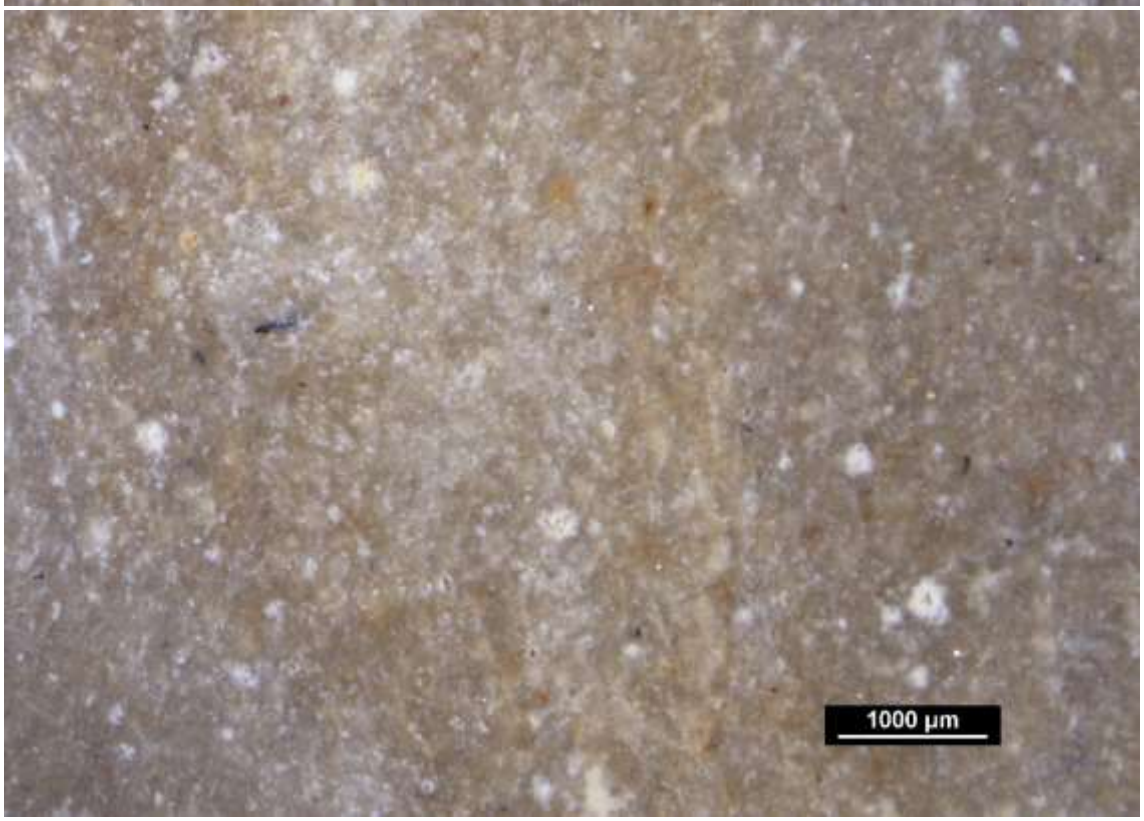

1000 µm


1000 µm


1000 µm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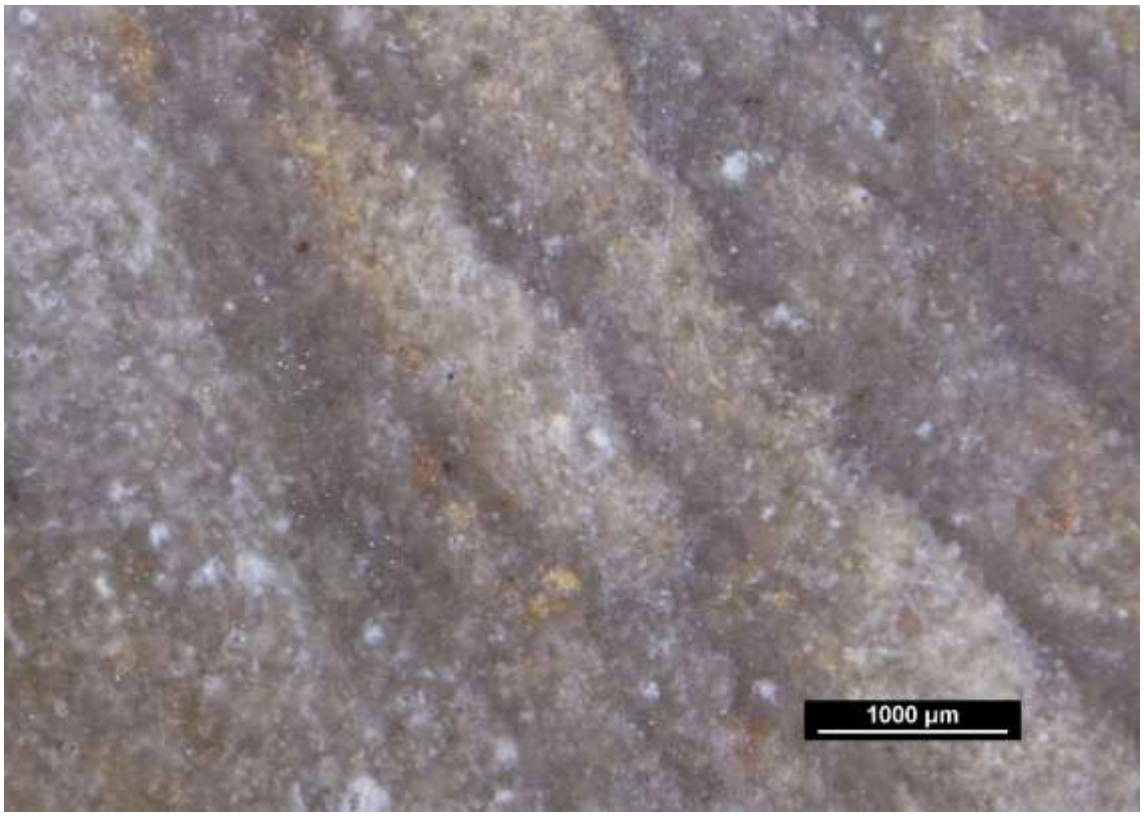
1000 µm