Sample ID and provenance

Sample ID: SP53_Gui

Lithology: Chert

Collection: LusoLit

Outcrop: Guilhim

Unit/facies: Middle Jurassic

Thinsection: Yes

Macroscopic description

- COLOR

The color distribution is Mix diffuse. The colors are Grayish pink (5R 8/2), Moderate pink (5R 7/4) and White.

- FABRIC

The luster is Dull to Medium and the translucency is Opaque. The feel is Semi-smooth and the grain is Fine. The structure is Uneven with a Gradual variation. Patterns are Shaded and Spots (50-99%). The spots are Speckling and Flecks with an Even distribution.

- INCLUSIONS AND FOSSIL CONTENT

-

- CORTEX

There is not real cortex present. Instead, there is an alteration surface due alterations to the chert. These alterations are at the fabric and color level.

- QUALITY

The fracture type is Unknown (possibly Conchoidal, but impossible to test due to the size of the sample) and the surface is apparently Homogeneous. The knapping quality is Unknown.

- OBSERVATION

-

Outcrop description

- OUTCROP CHARACTERISTICS

Type of outcrop: Secondary

Visibility: Good

Accessibility: Moderate

State of site: -

- CHERT NODULES/BEDS DESCRIPTION

Type of chert nodule: Nodule

Sample variability: Variable

Frequency: Sporadic

Nodule description: Angular and altered nodules, around 5cm width

- SHORT DESCRIPTION

The cherts can be found at the bottom of a slope, although very altered which seems to show these were transported possibly from the top of the hill by water.

Petrography analysis form

❖ TEXTURAL COMPOSITION

Texture: Wackestone

Microstructure: Massive

❖ COMPOSITION

ORTHOCHEM	Type	%	Description
MiC quartz (gr)	SE	95	-
Chalcedony (fb)	SE	5	Replacing fossils.

ALLOCHEM	Freq	Description
Oxide grains	Uncommon	-
Oxide patina	Uncommon	-

BIOCLASTS	Freq	Description
Unidentifiable fossils (ghosts)	Frequent	-
Echinoderm	Rare	Echinoderm spine (cross section) poorly preserved and replaced by chalcedony.

Echinoderm (longitudinal)	Uncommon	Echinoderm spines (longitudinal section) poorly preserved and replaced by chalcedony.

- OTHER TEXTURAL CHARACTERISTICS

Total porosity (%): 5

Porosity type: Vuggy

Other sedimentary structures: Other

Observations

- There may be a sedimentary structure within the chert which has not been properly identified. It is characterized by a first generation of microcrystalline quartz and oxides, and filled with chalcedony and microcrystalline quartz without concentration of oxides. It may also be a fossil which has been replaced by chalcedony and microcrystalline quartz.

Analysis information

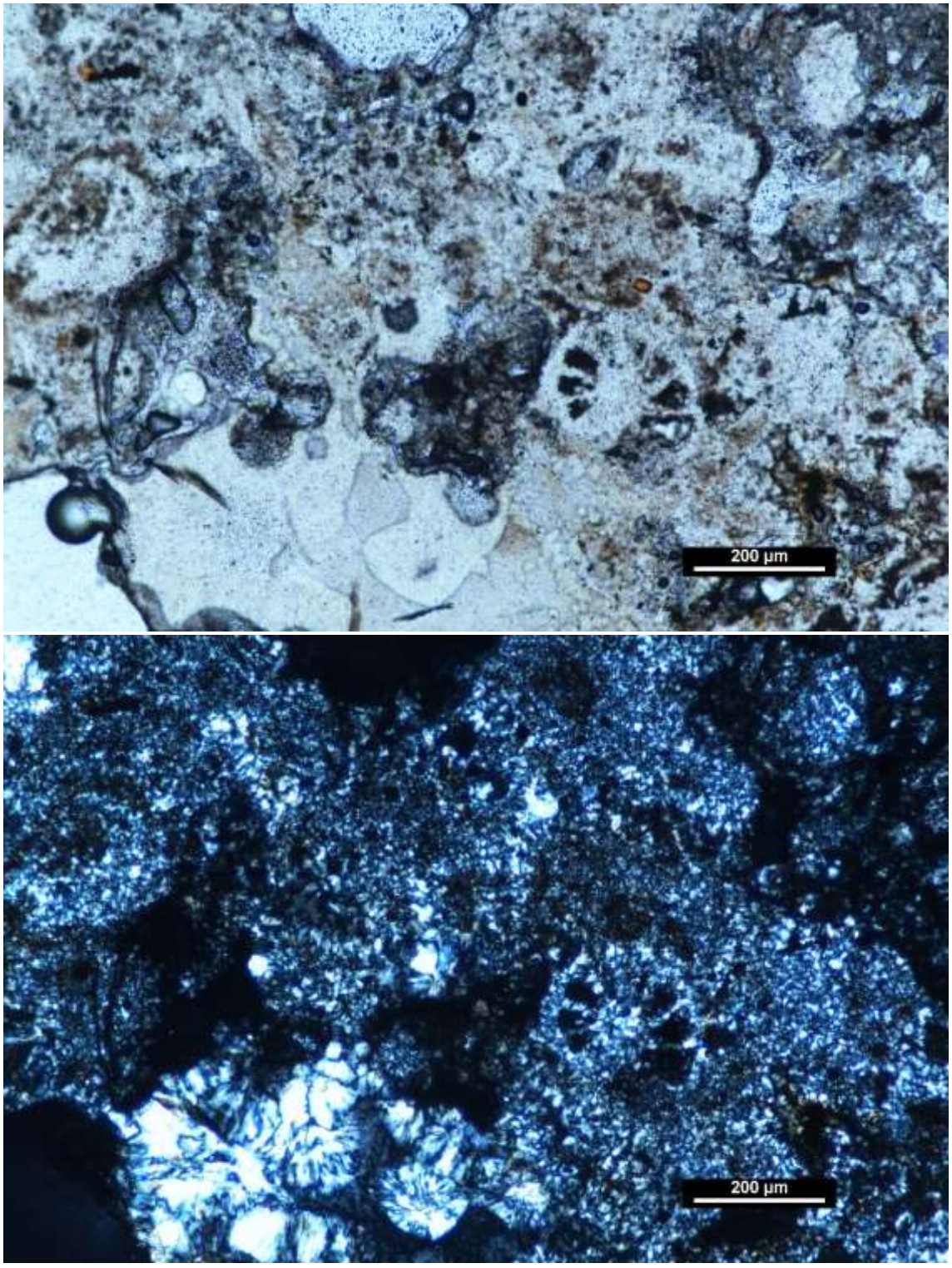
- ANALYST: JB
- DATE: 06.24.2022
- EQUIPMENT: Nikon DS-Ri2

Photos

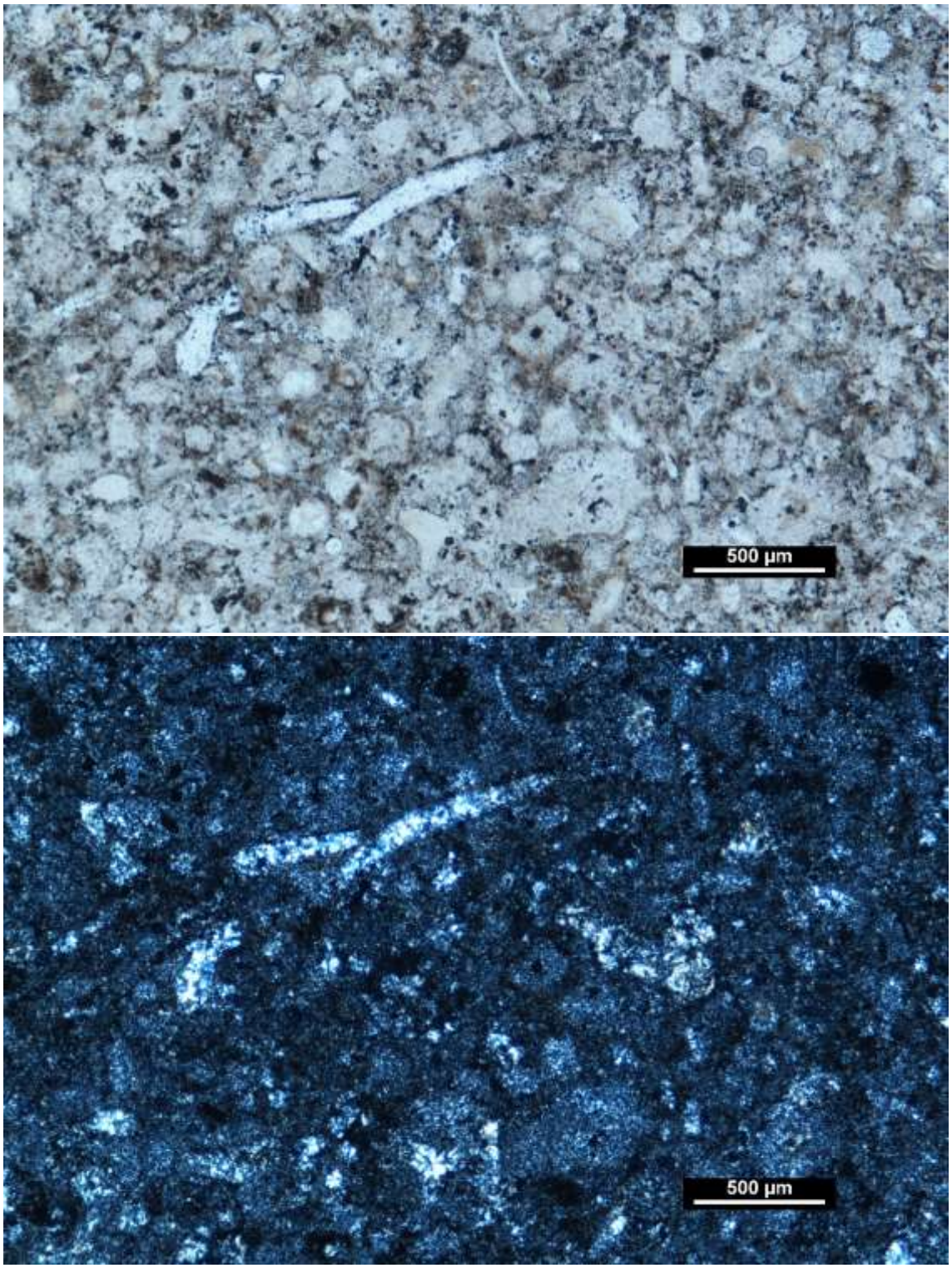
Photo ID	Aug.	Description
SP53_001	10x	Detail of a poorly preserved Echinoderm spine (cross section), replaced by chalcedony.
SP53_002	4x	General view of the thin section with unidentifiable fossils replaced by chalcedony.
SP53_003	4x	General view of the thin section with unidentifiable fossils replaced by chalcedony.

SP53_004	4x	General view of several unidentifiable fossils and concentration of oxides.
SP53_005	10x	Detailed view of a possible sedimentary structure within the chert.

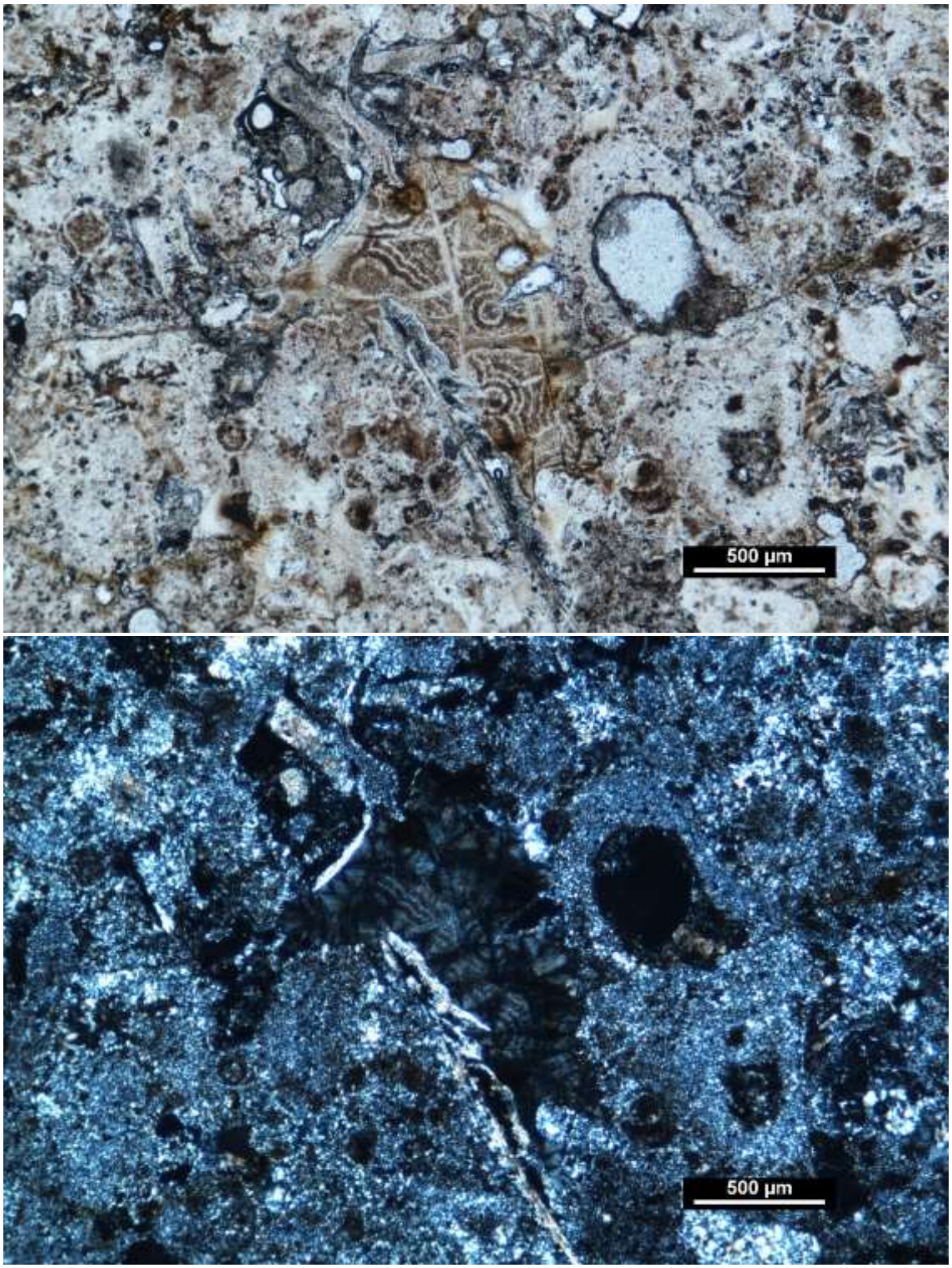
Petrography photos



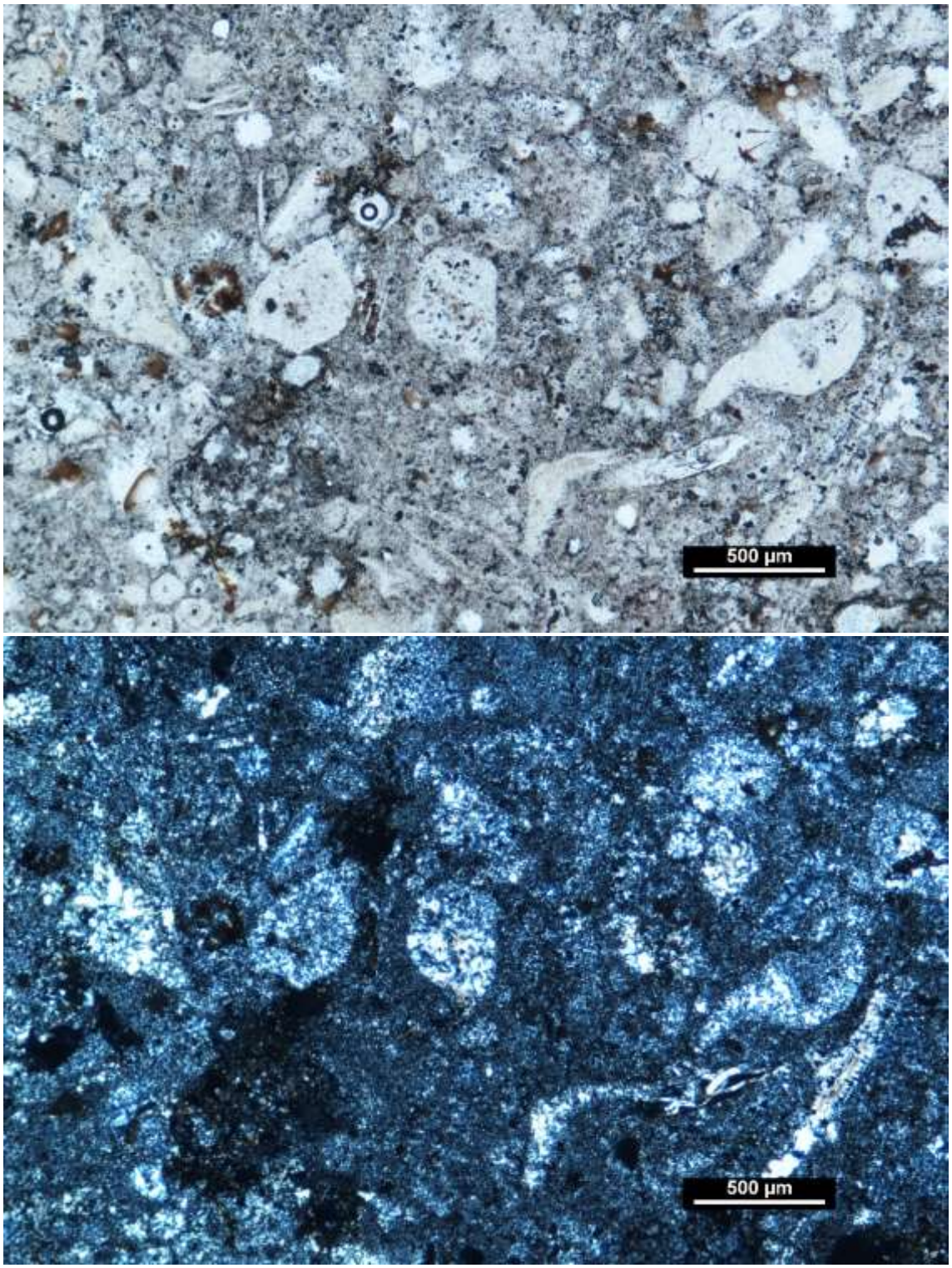
SP53_Gui_001 (PPL and XPL)



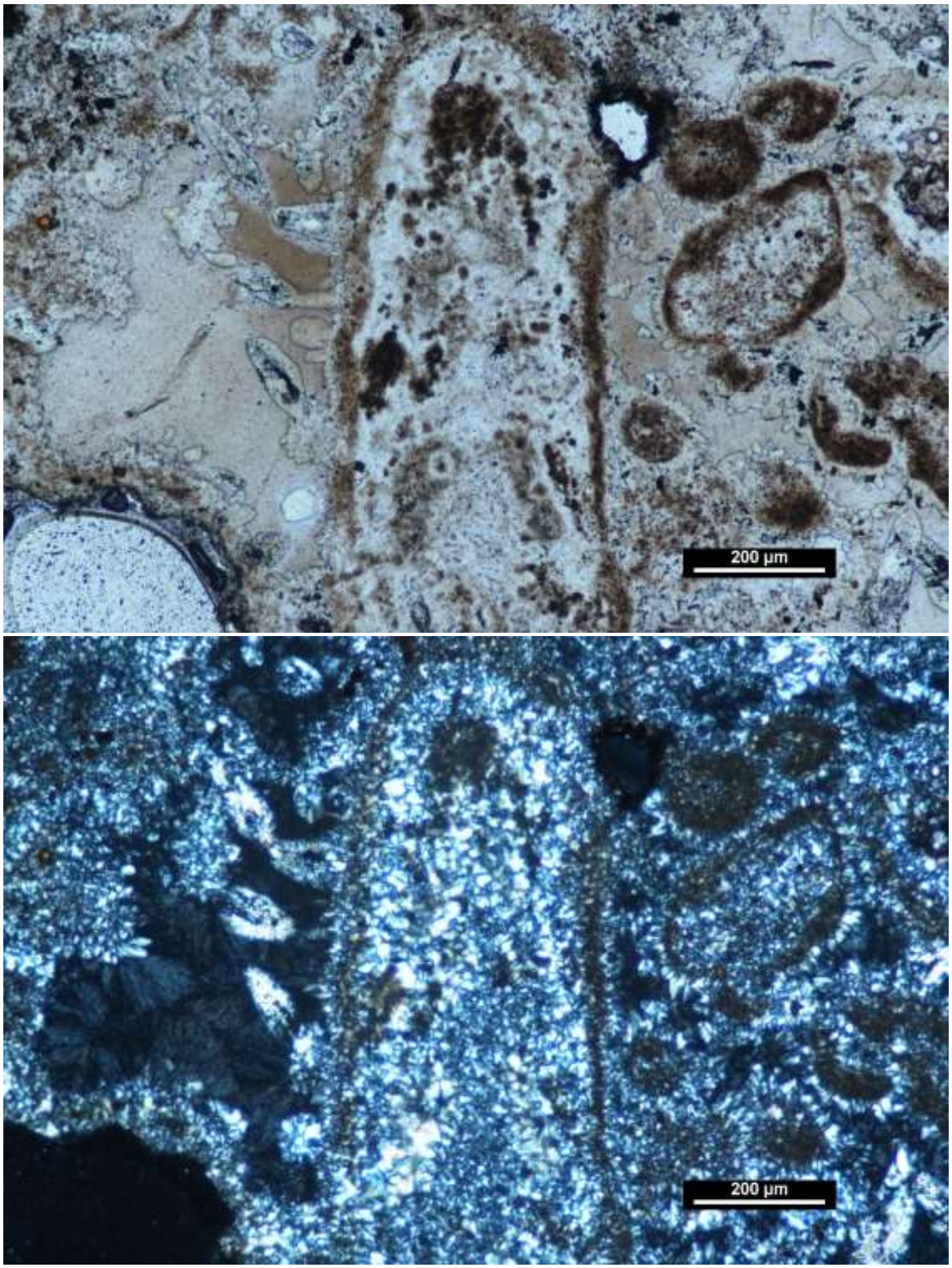
SP53_Gui_002 (PPL and XPL)



SP53_Gui_003 (PPL and XPL)

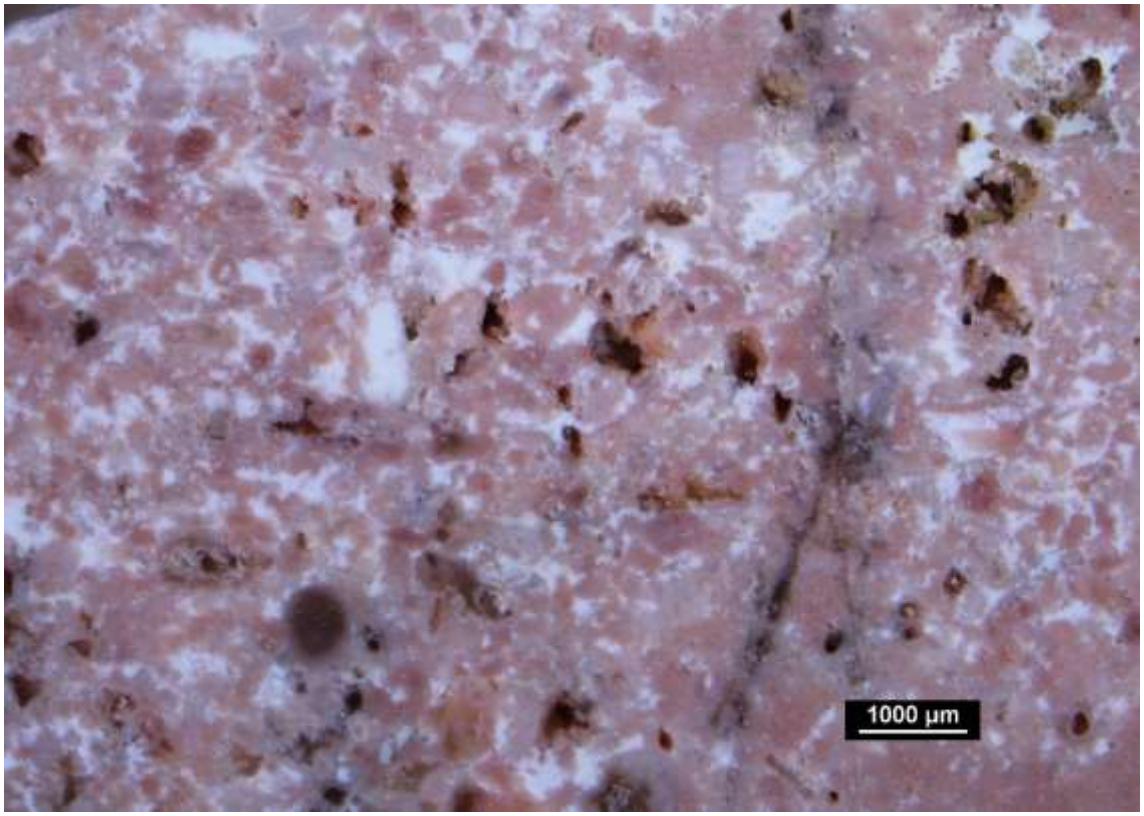


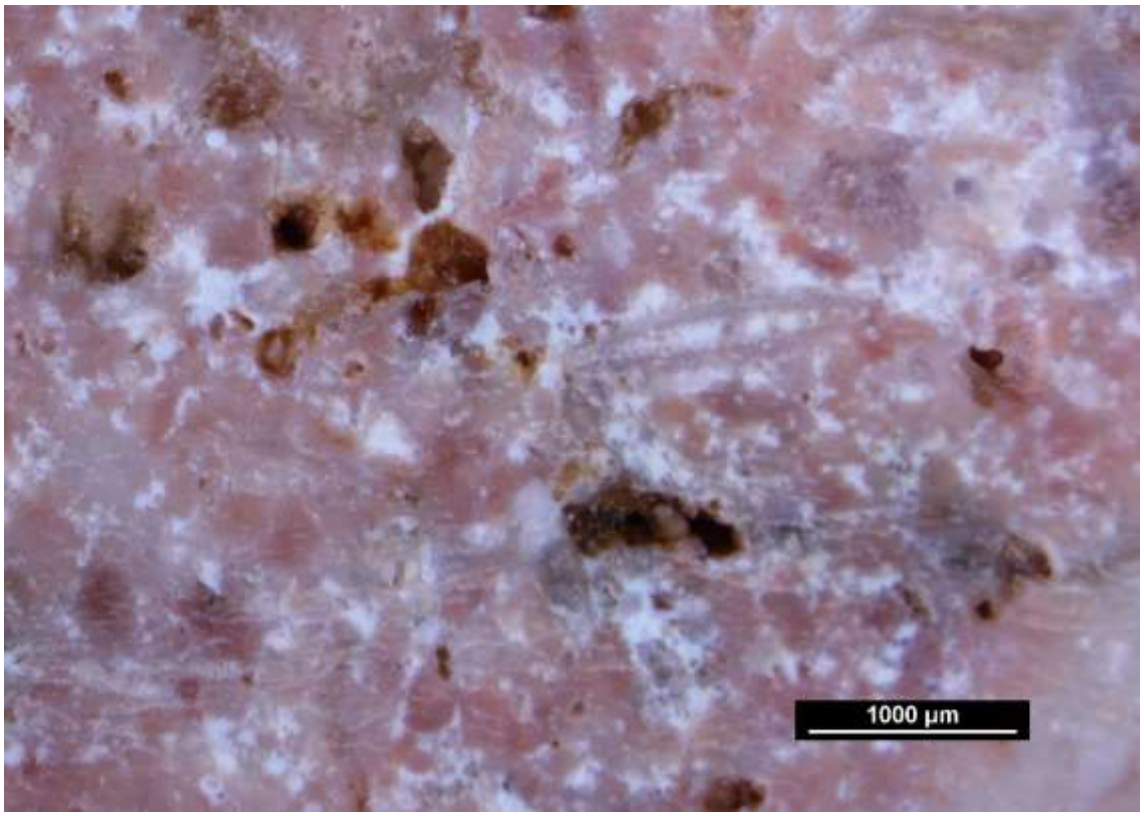
SP53_Gui_004 (PPL and XPL)

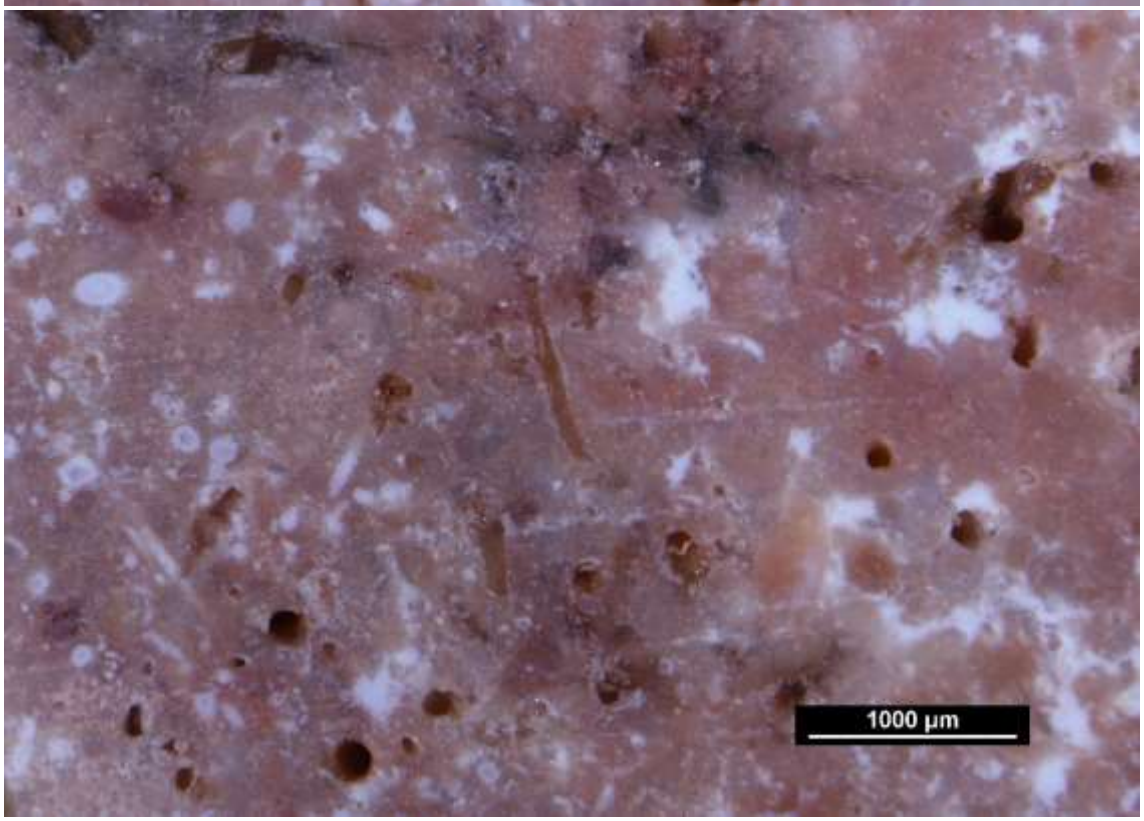


SP53_Gui_005 (PPL and XPL)

Macroscopic photos




1000 µm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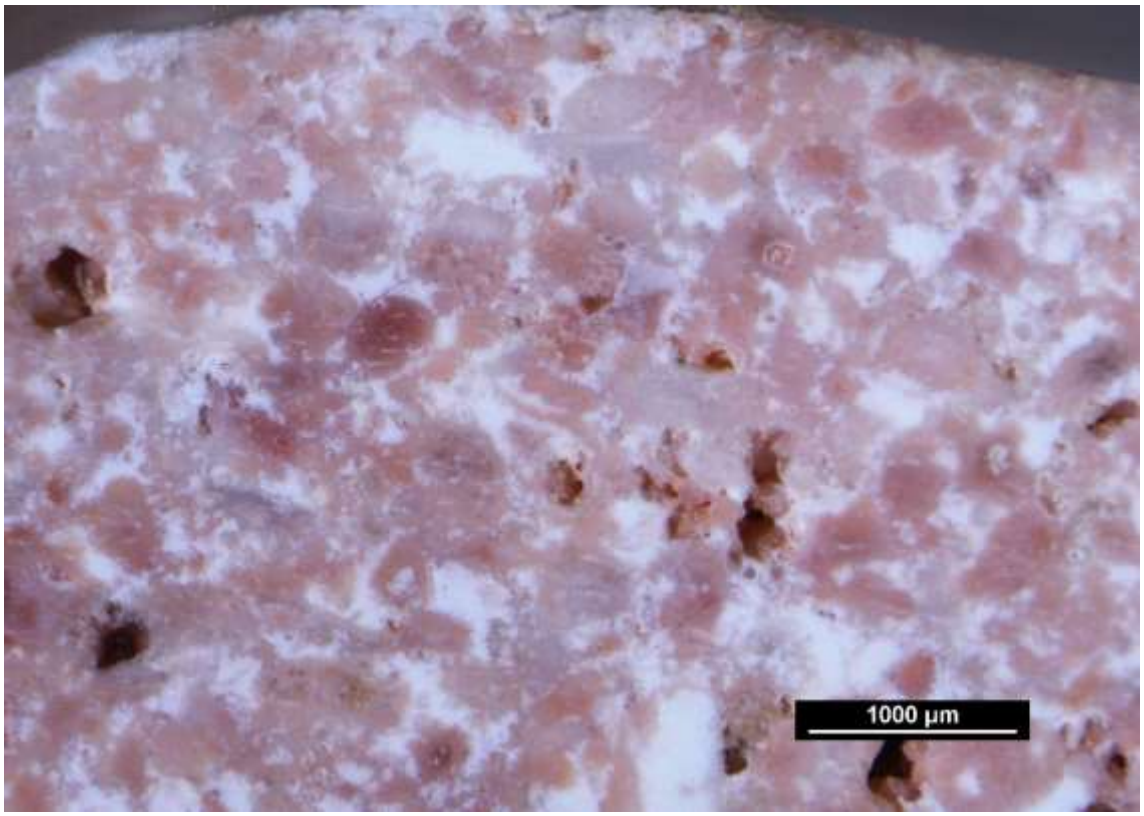
1000 µm


5 cm