

Sample ID and provenance

Sample ID: SP21_BLS

Lithology: Chert

Collection: LusoLit

Outcrop: Belixe sul

Unit/facies: Lower Jurassic

Thinsection: Yes

Macroscopic description

❖ COLOR

The color distribution is Mix diffuse. The colors are Purple (not Munsell), Pale yellow (2.5Y 7/3) and Very pale brown (10YR 7/4).

❖ FABRIC

The luster is Dull and the translucency is Opaque. The feel is Semi-smooth and the grain is Fine. The structure is Uneven with an Abrupt variation. The patterns are Shaded, Spots (50-99%) and Lines (1-49%). The spots are Marbled mottling and Speckling, with an Even distribution. The lines are Horizontal Banded and Concentric Laminated.

❖ INCLUSIONS AND FOSSIL CONTENT

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❖ CORTEX

Cortex is from an Outcrop, Thin to Thick, and with a Sharp transition. When tested with dilute hydrochloric acid (HCL 10%), there was no reaction. The parent rock may be a dolomite.

❖ QUALITY

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

❖ OBSERVATION

Some surfaces of the chert seem to be patinated, which alters the color of the sample. Where it is patinated, the sample has a Reddish/brown color, replacing completely the white appearance of the original cortex surface.

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 3 to 8cm

❖ SHORT DESCRIPTION

The nodules are embedded in the parent rock. They are oval, between 3 to 8cm, and with thick cortexes. The parent rocks are boulders loosely outcropping in a field near the cliffs. The outcrop seems to be dismantling. Due to this, the floor is filled with abundant broken chunks of chert, smaller than the nodules within the parent rock.

Petrography analysis form

❖ TEXTURAL COMPOSITION

Texture: Packstone

Microstructure: Massive

❖ COMPOSITION

| ORTHO-CHEM | Type | % | Description |
|-----------------|------|----|-------------|
| MiC quartz (gr) | SE | 95 | - |
| Dolomite | SE | 3 | - |
| Chalcedony (fb) | SE | 1 | - |
| Shale | AC | 1 | - |

| ALLO-CHEM | Freq | Description |
|-----------|----------|--|
| Oxides | Uncommon | Can be found scattered in the chert or concentrated within a fracture. |

| BIOCLASTS | Freq | Description |
|-------------------|--------|-------------|
| Ghosts | Common | - |
| Sponge spicule | Common | - |
| Bioclastic debris | Common | - |

❖ OTHER TEXTURAL CHARACTERISTICS

Total porosity (%): 1

Porosity type: Vuggy

Other sedimentary structures: -

Observations

❖ -

Analysis information

❖ ANALYST: JB

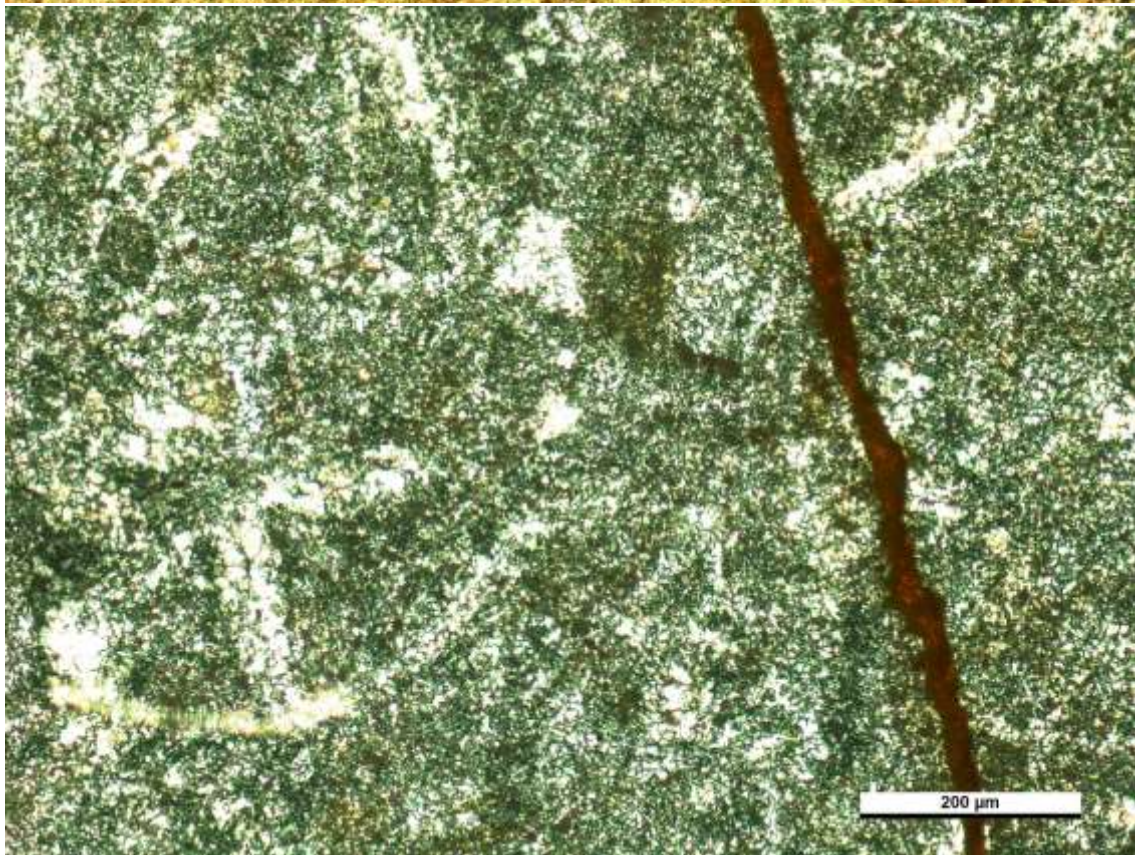
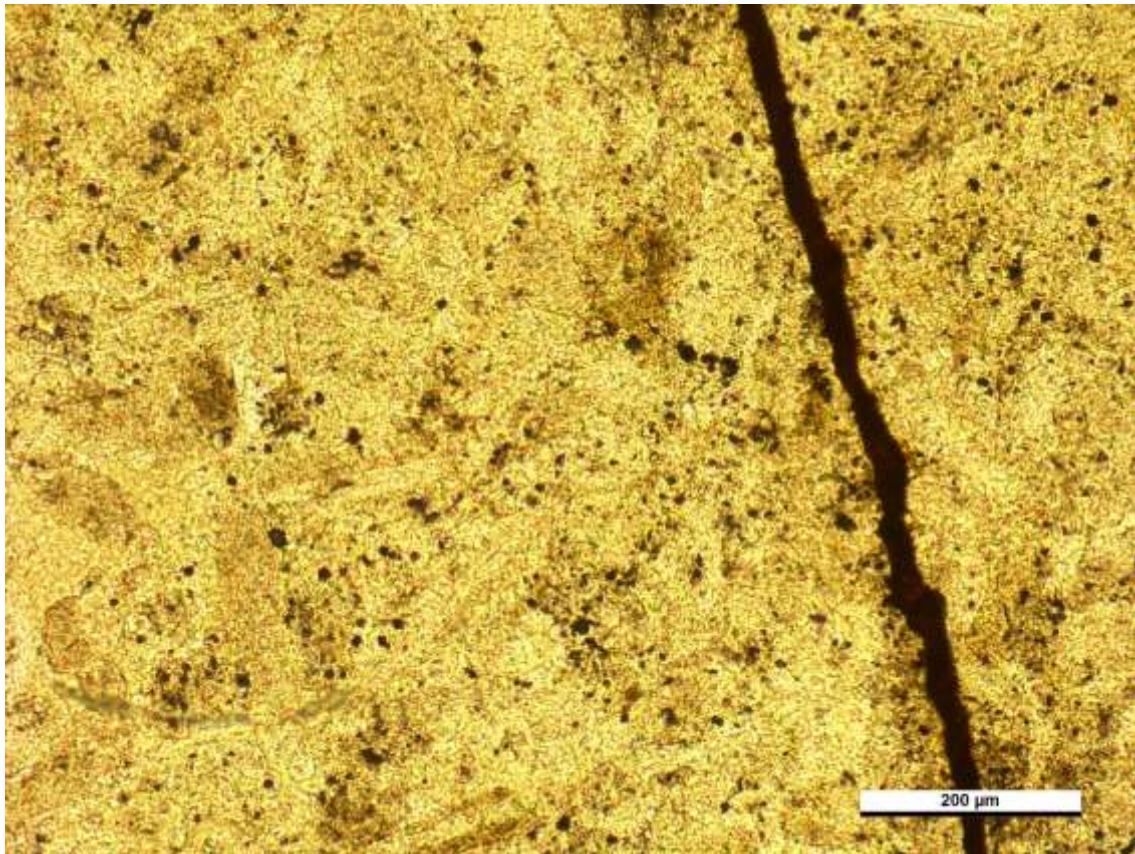
❖ DATE: 24.02.2022

❖ EQUIPMENT: Leica DM2500 P

Photos

| Photo ID | Aug. | Description |
|----------|------|---|
| SP21_001 | 10x | View of fossils, structure and flaw filled with oxides. |

Petrography photos



SP21_BLS_001 (PPL and XPL)

Macroscopic photos

