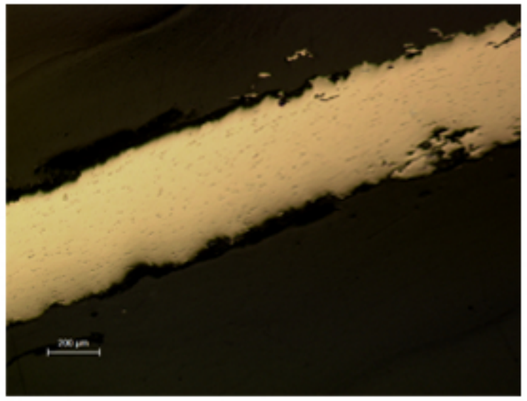
B42 - HELMET



B42.1

Identification

Sample: B42 (B43)
Card reference: S98
Origin: Blainville
Location: Collection AFL

Description

Very thin metal (about 0.4mm thick). Bronze with 8-10% Sn content. Very little corrosion. Inclusions are elongated in the direction of metal working, but the grains are regular, suggesting a final reheating.

Figure captions

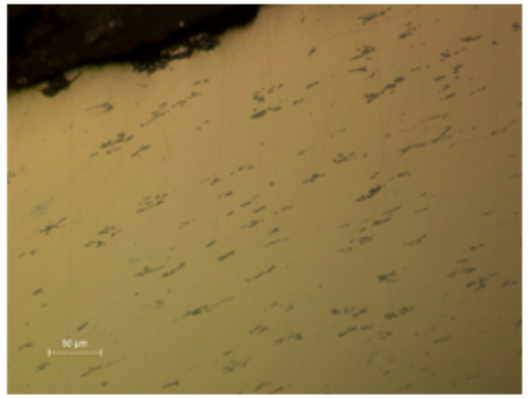
B42.1
General view: superficial corrosion and many inclusions.

B42.2
Detail showing inclusions (rich in S) elongated following the working direction.

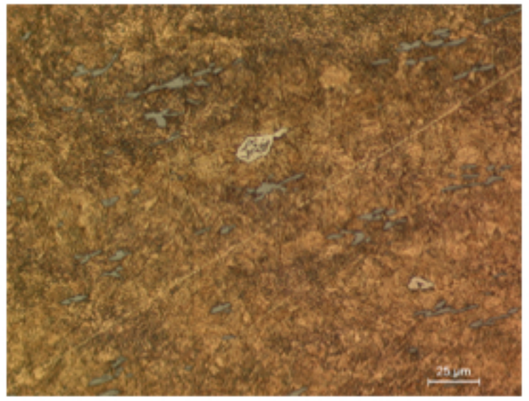
B42.3
Detail showing the metal structure which consists of small recrystallized grains with strain lines due to cold work after annealing; numerous elongated inclusions (blue grey) and some areas of eutectoid phase (white) (etchant: aqueous $FeCl_3$).

B42.4
General view of another area of the sample which is more corroded; corrosion follows the direction of working (longitudinal).

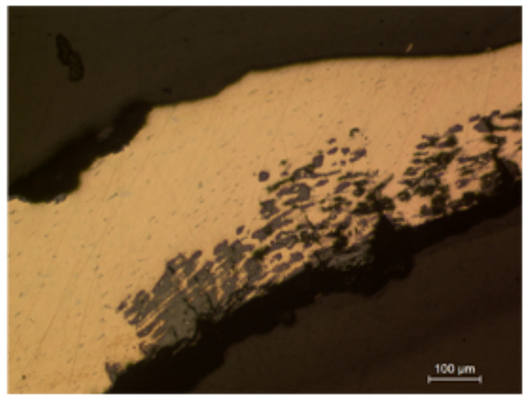
B42.5
Detail of the corroded part of B42.4, showing the eutectoid phase which remains intact in the middle of the corrosion products.



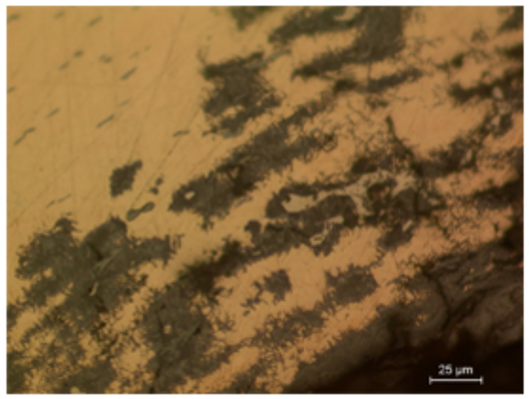
B42.2



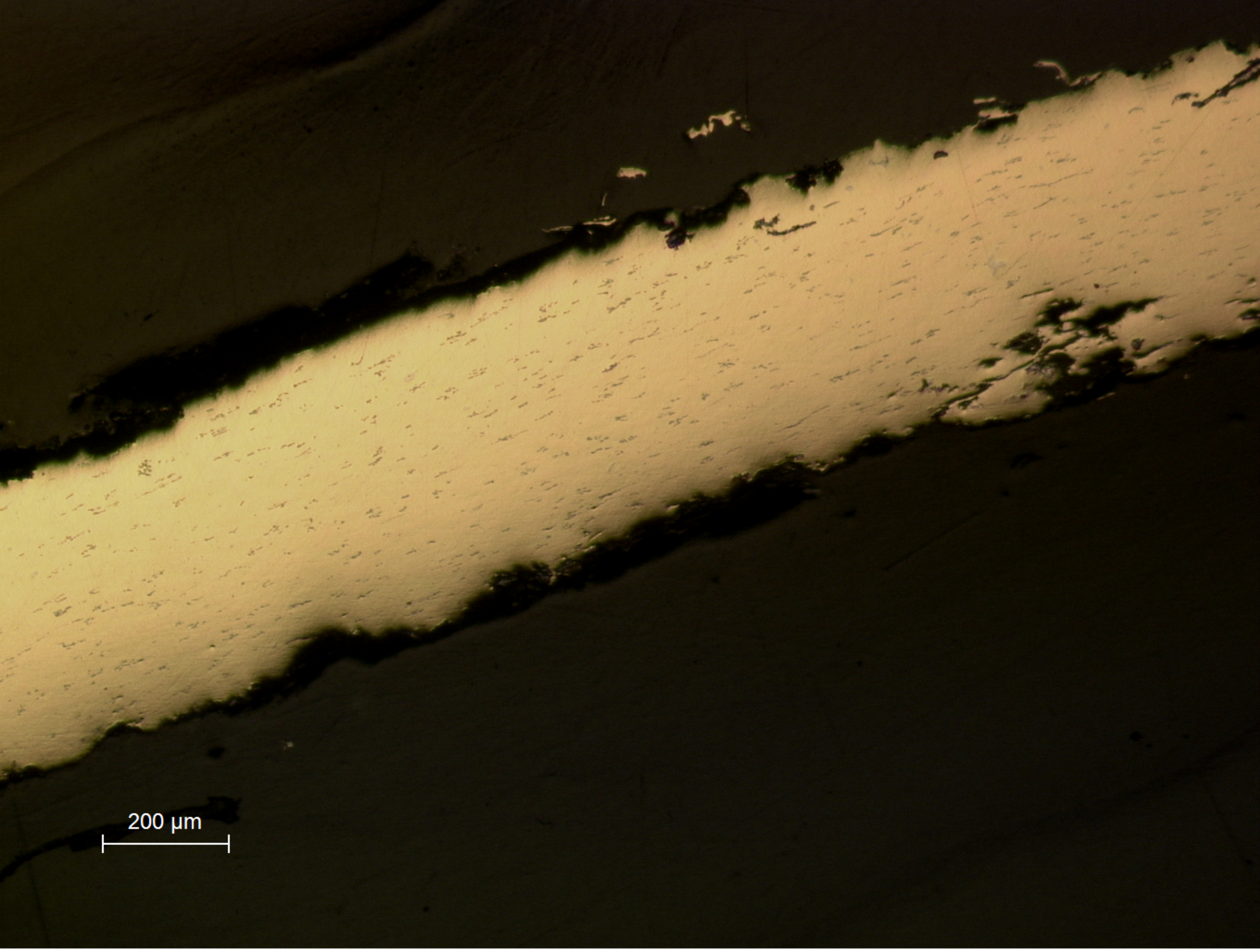
B42.3



B42.4



B42.5



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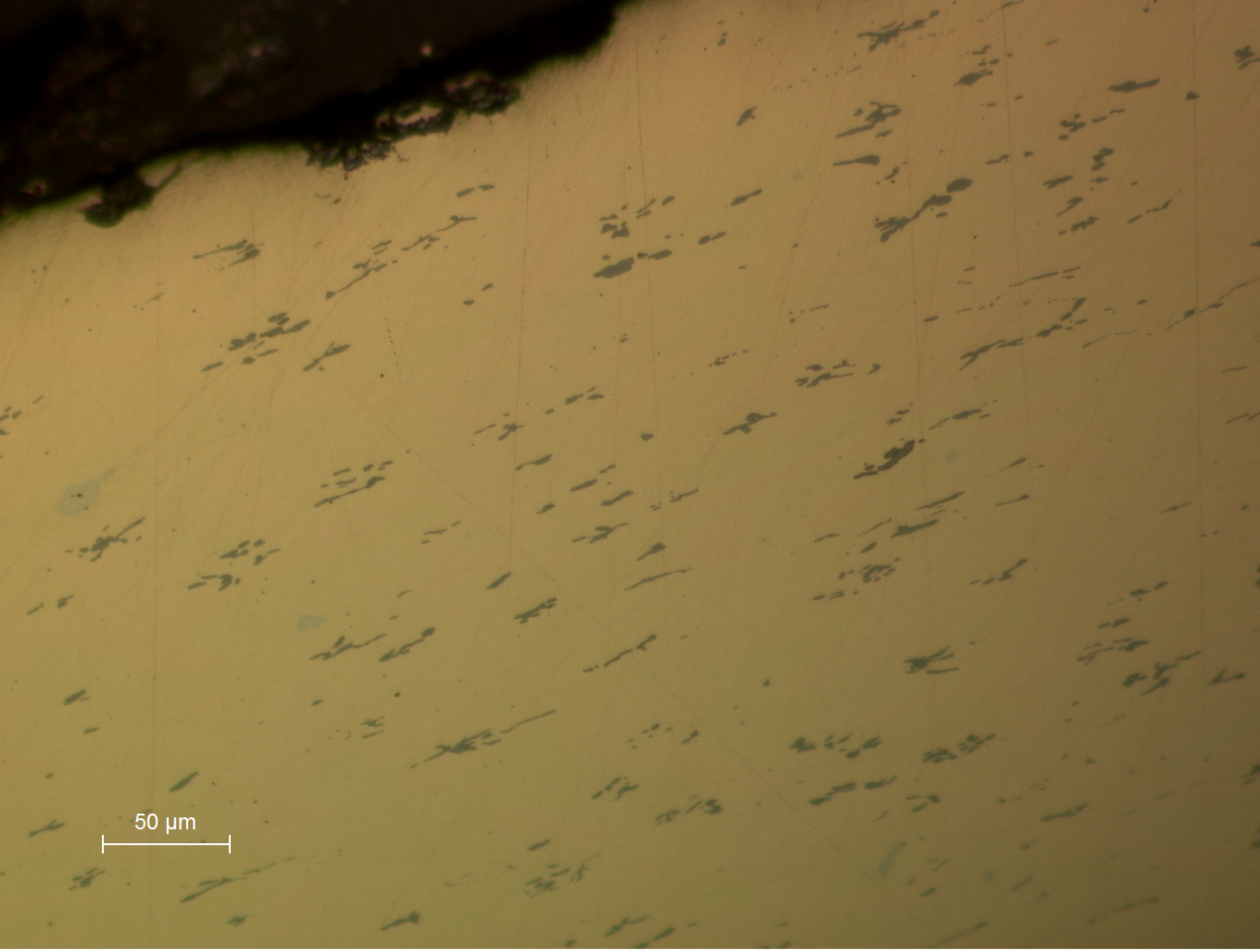
General view: superficial corrosion and many inclusions.



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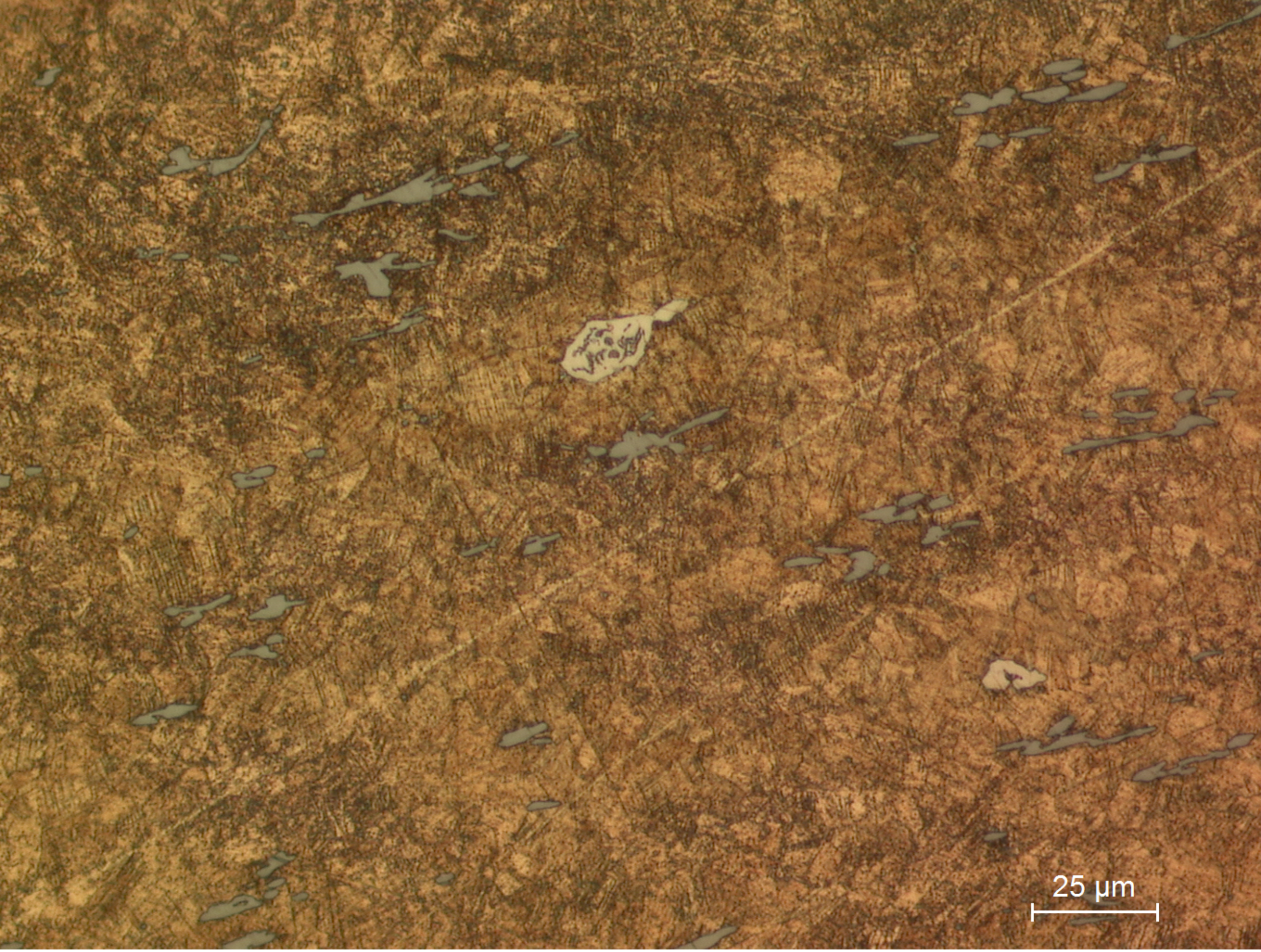
Detail showing inclusions (rich in S) elongated following the working direction.



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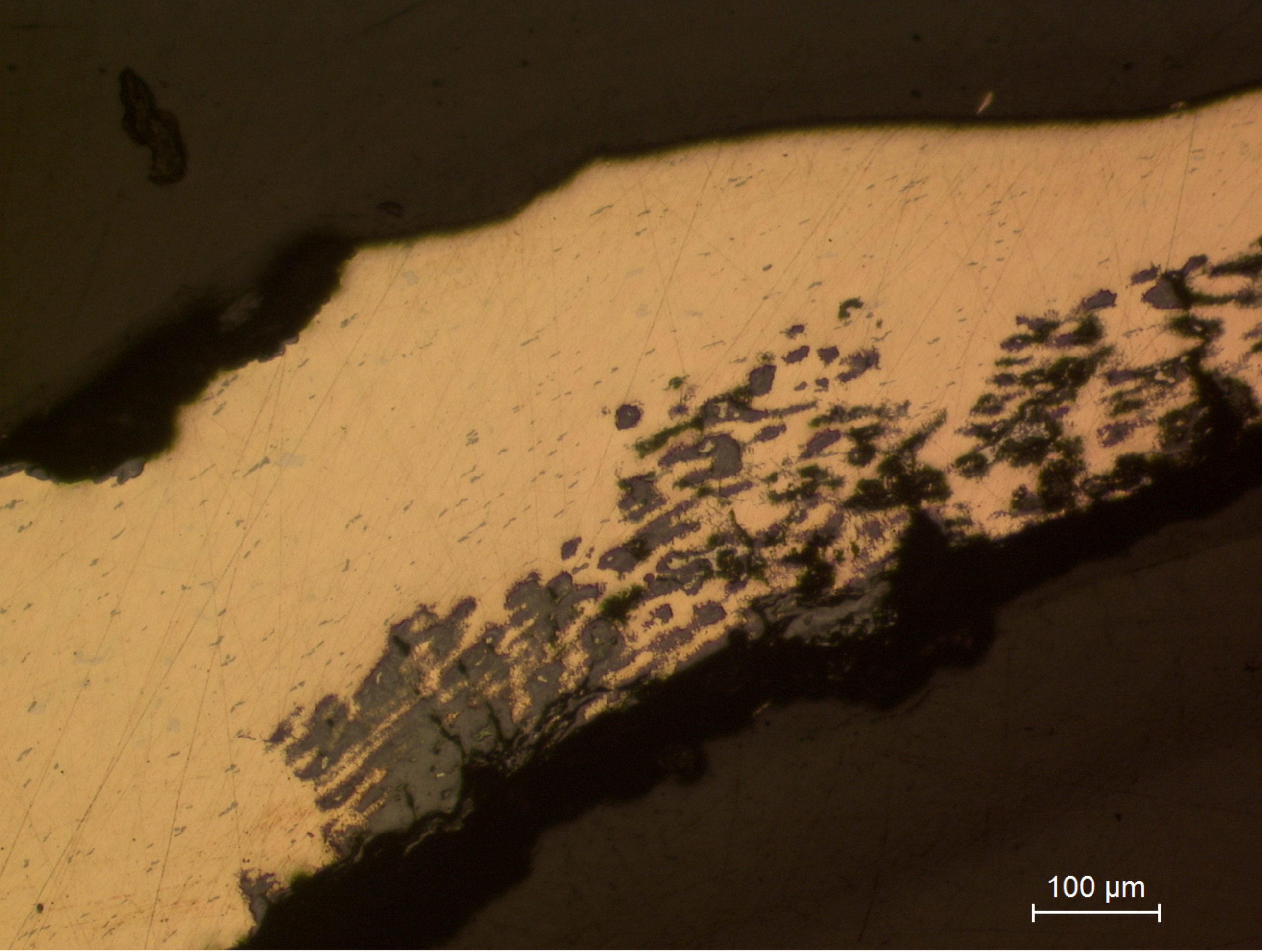

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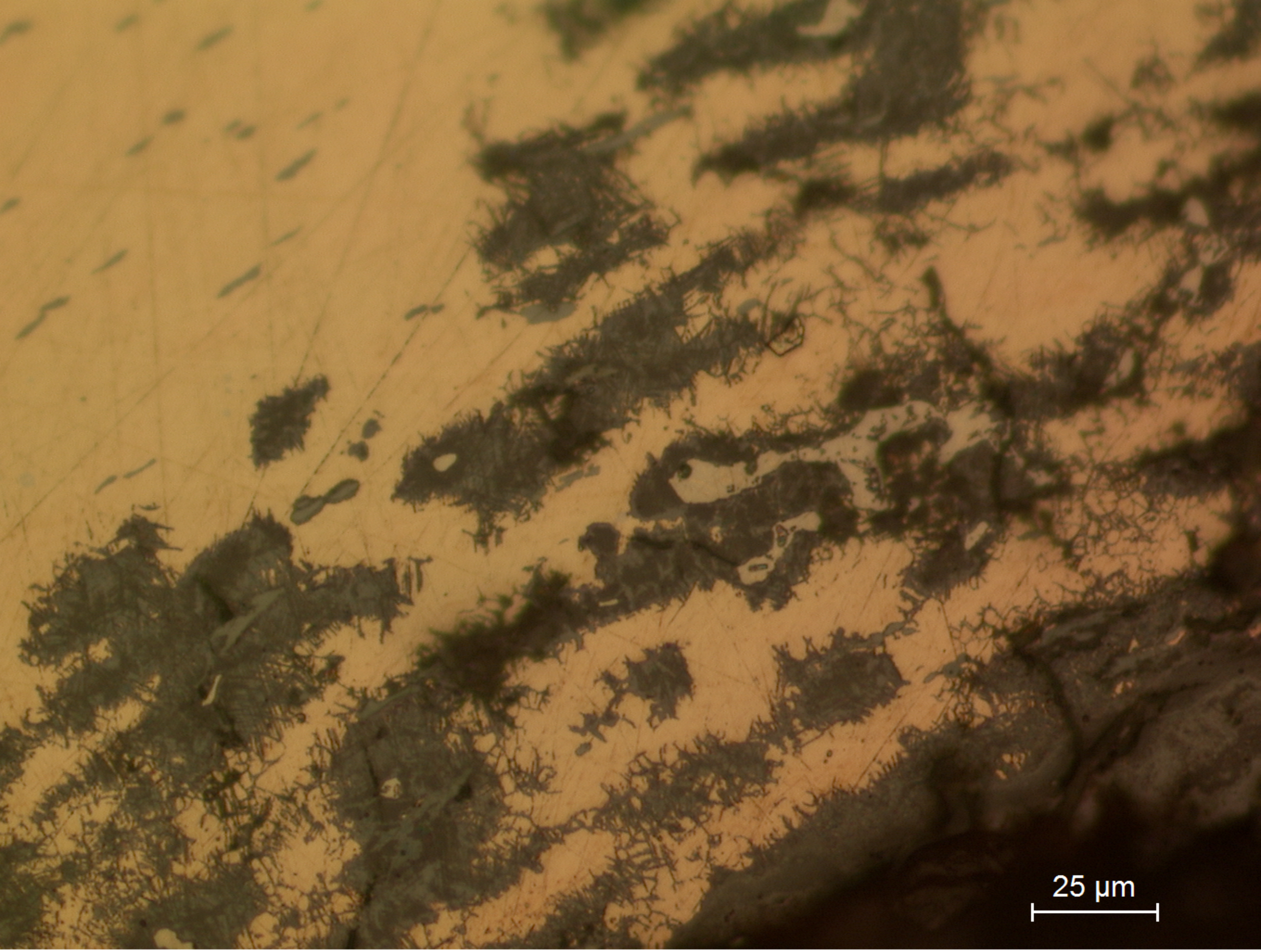

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Detail of the corroded part of B42.4, showing the eutectoid phase which remains intact in the middle of the corrosion products.