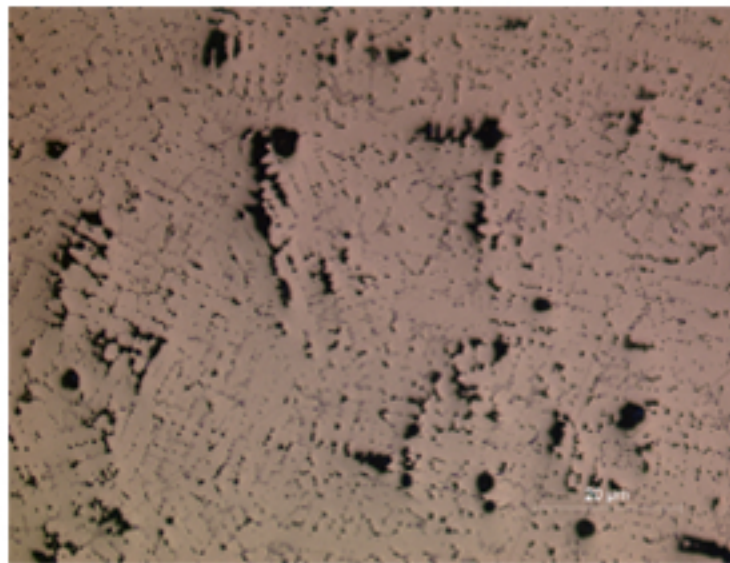


A167 - FRAGMENT OF A BRACELET



A167.1

Identification

Sample: A167
Card reference: C17
Origin: Halstatt Lorraine
Location: Collection AFL

Description

Cast bronze; dendritic structure; internal corrosion that has gained access via a flaw in the casting.

Figure captions

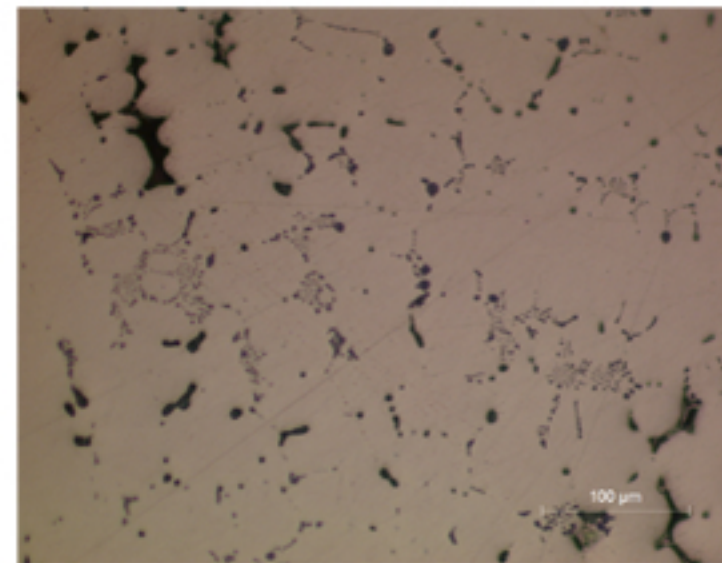
A167.1
General view: dendrites defined by shrinkage cavities (black), a second phase (light grey), and impurities.

A167.2
Detail showing pores, sulfide inclusions and the eutectoid phase (dotted areas).

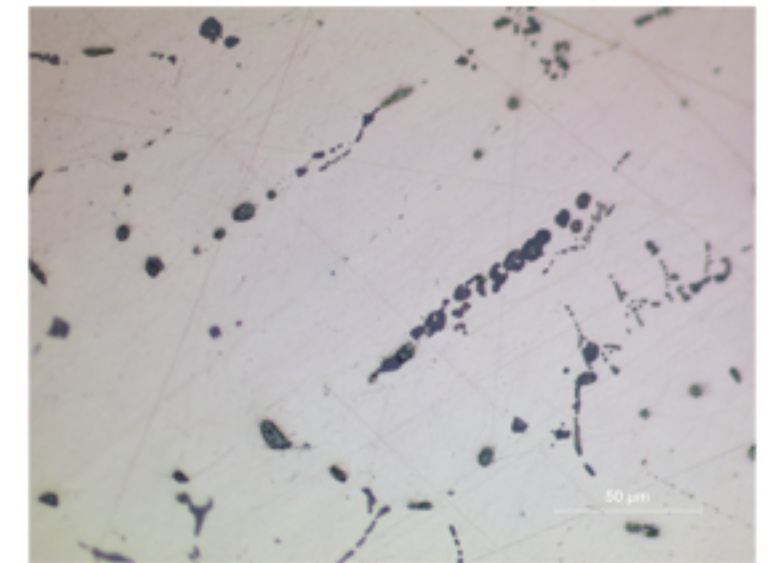
A167.3
Detail showing impurities, which are essentially composed of sulfides and lead globules.

A167.4
Detail of the surface region after etching showing microsegregation of dendrites (coring) and inclusions within the interdendritic space (etchant: aqueous FeCl_3)

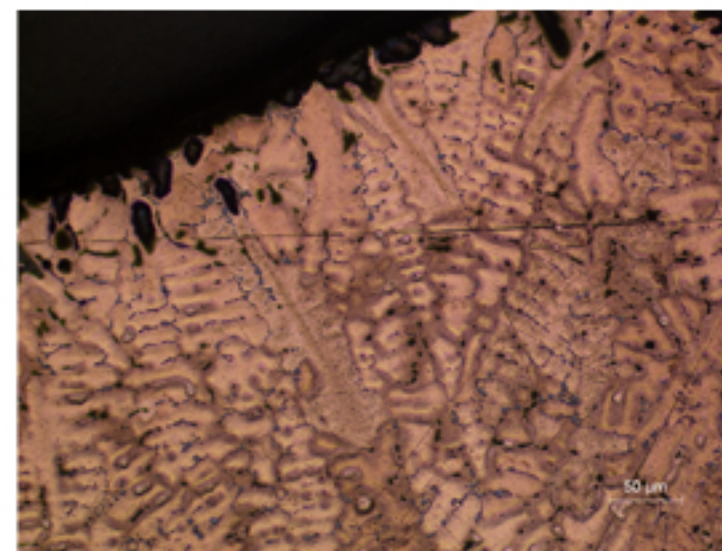
A167.5
SEM image showing lead particles in the interdendritic space; the dark grey areas are corrosion products rich in Cl.



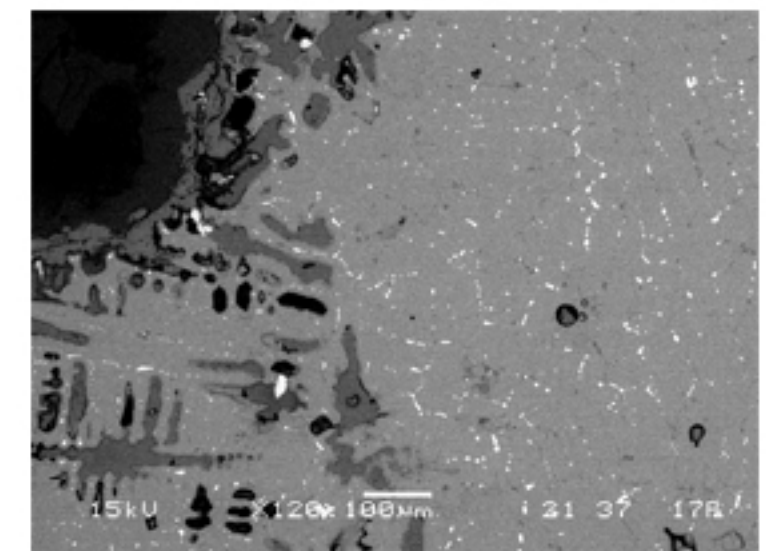
A167.2



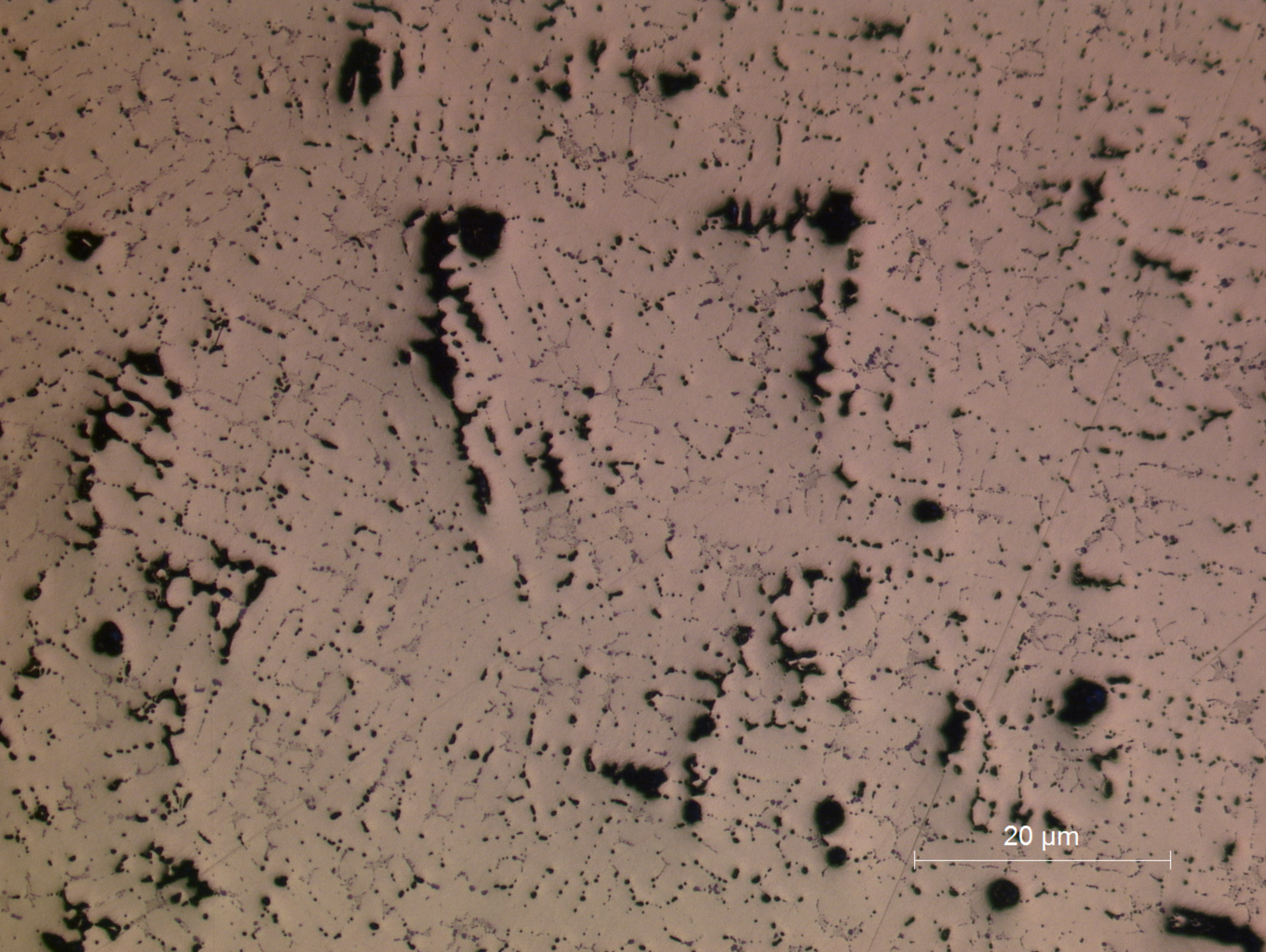
A167.3



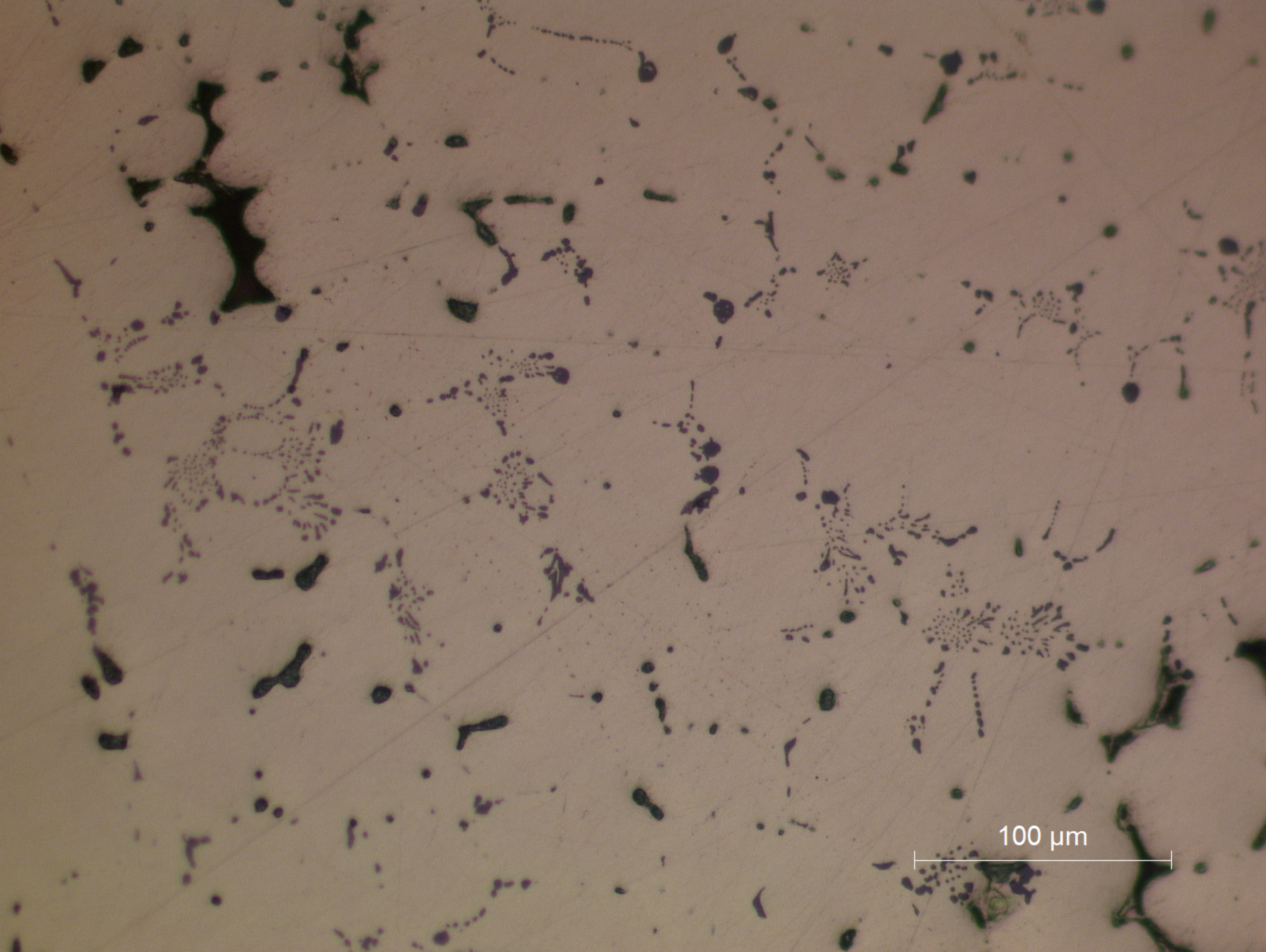
A167.4



A167.5

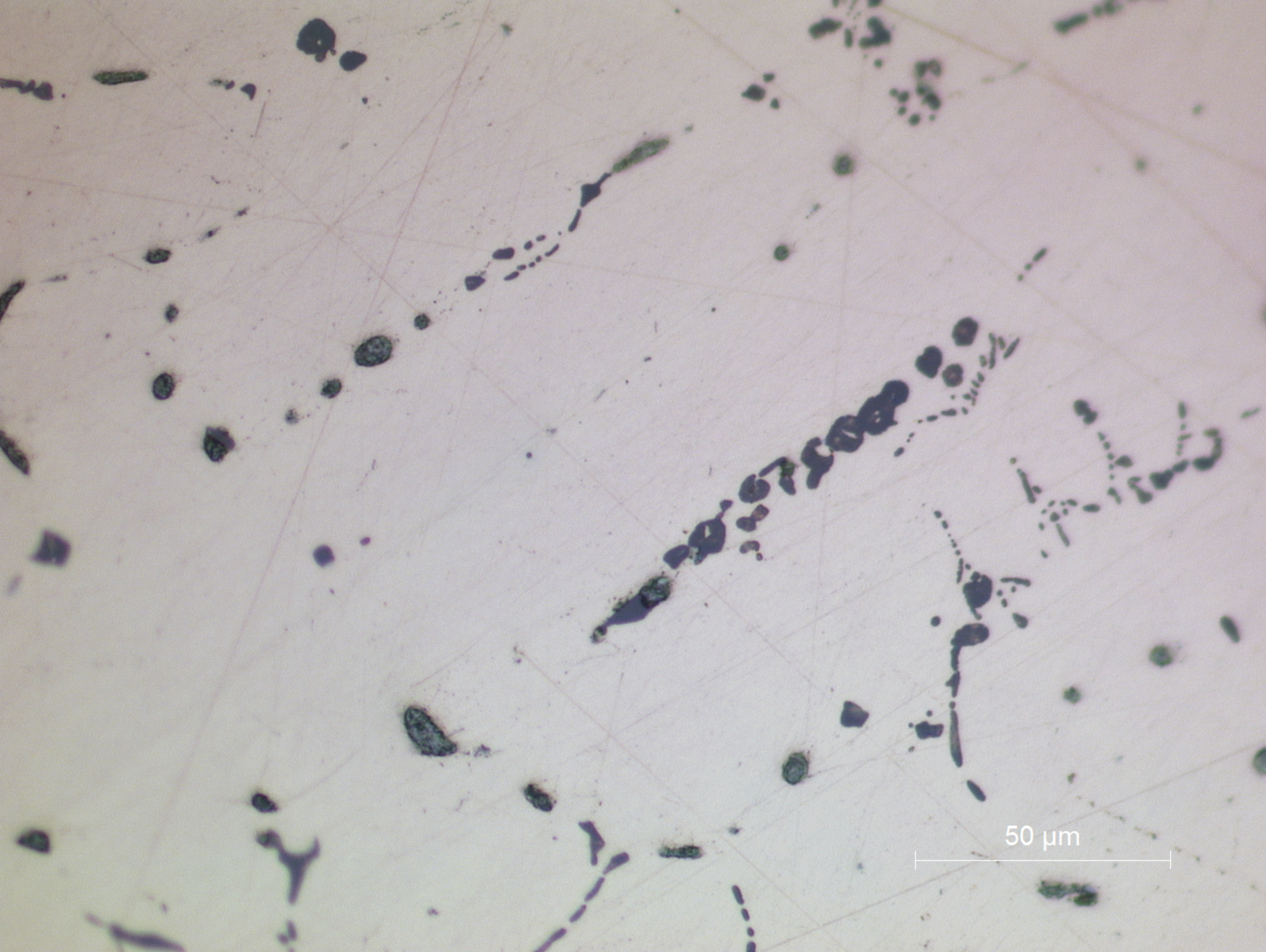


A167.1
General view: dendrites defined by shrinkage cavities (black), a second phase (light grey), and impurities.



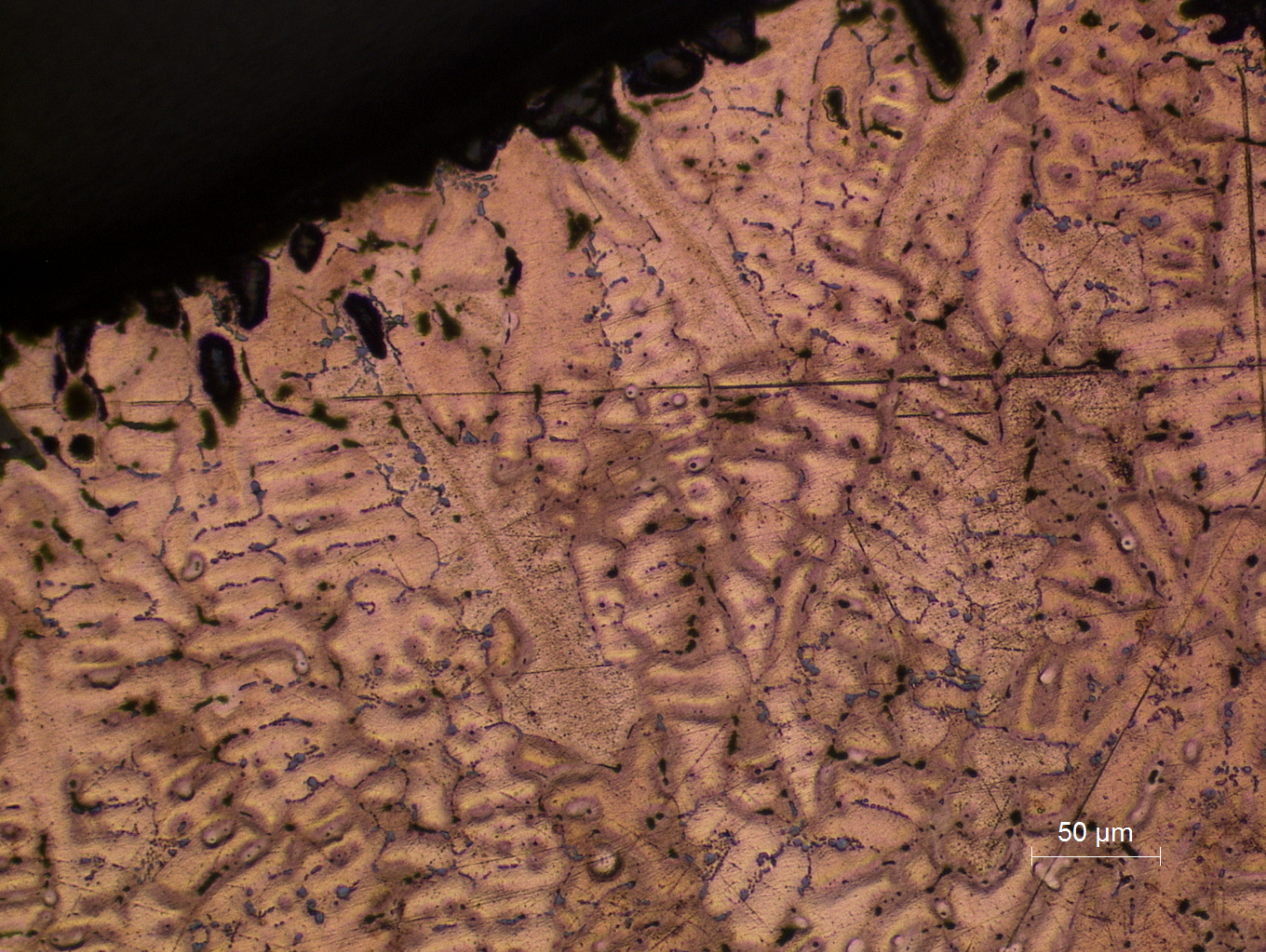
100 μm

A167.2
Detail showing pores, sulfide inclusions and the eutectoid phase (dotted areas).



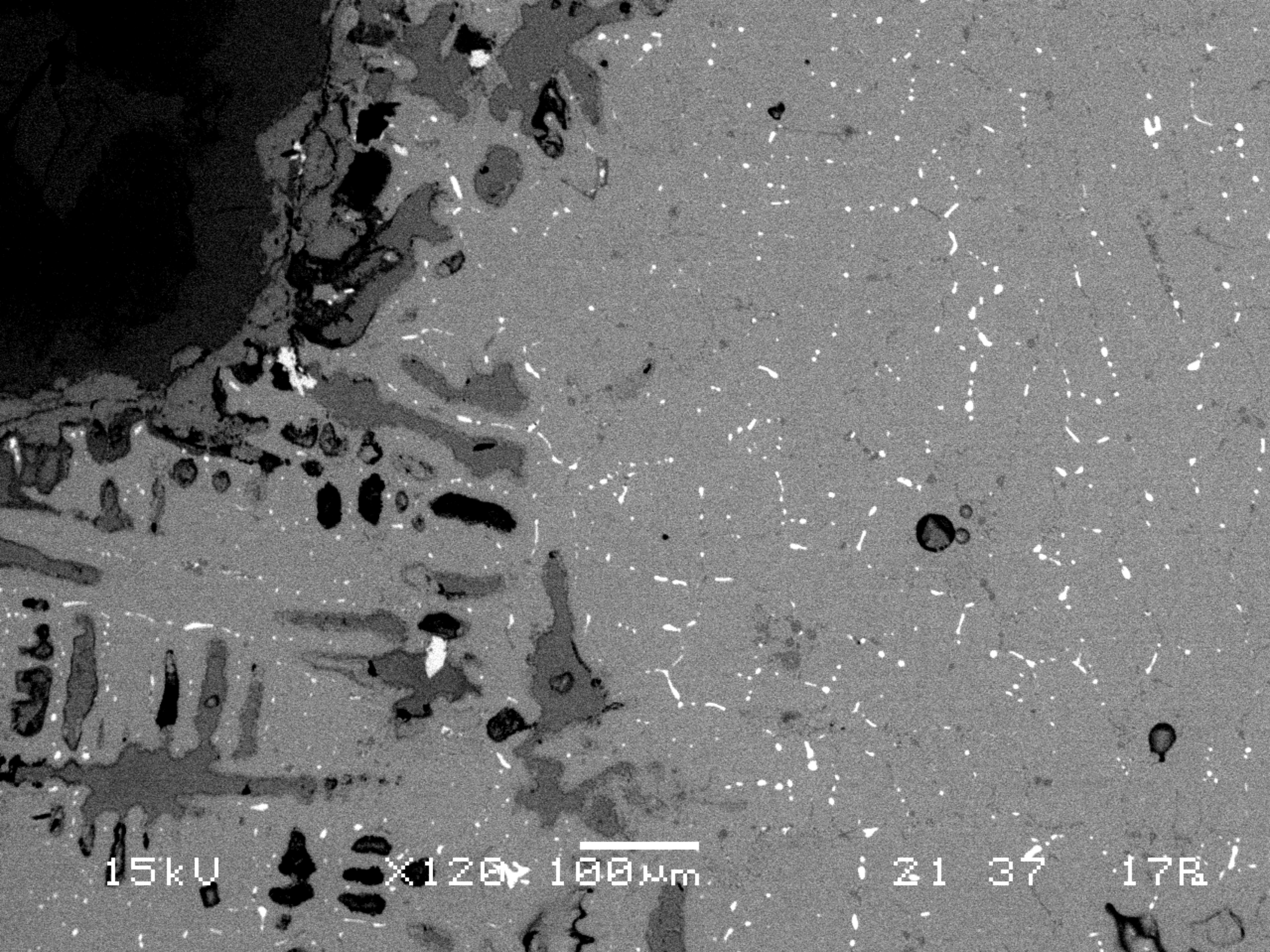
50 μm

A167.3
Detail showing impurities, which are essentially composed of sulfides and lead globules.



50 μm

A167.4
Detail of the surface region after etching showing microsegregation of dendrites (coring) and inclusions within the interdendritic space (etchant: aqueous FeCl₃)



15kV

X120 100µm

21

37

17R

A167.5

SEM image showing lead particles in the interdendritic space; the dark grey areas are corrosion products rich in Cl.