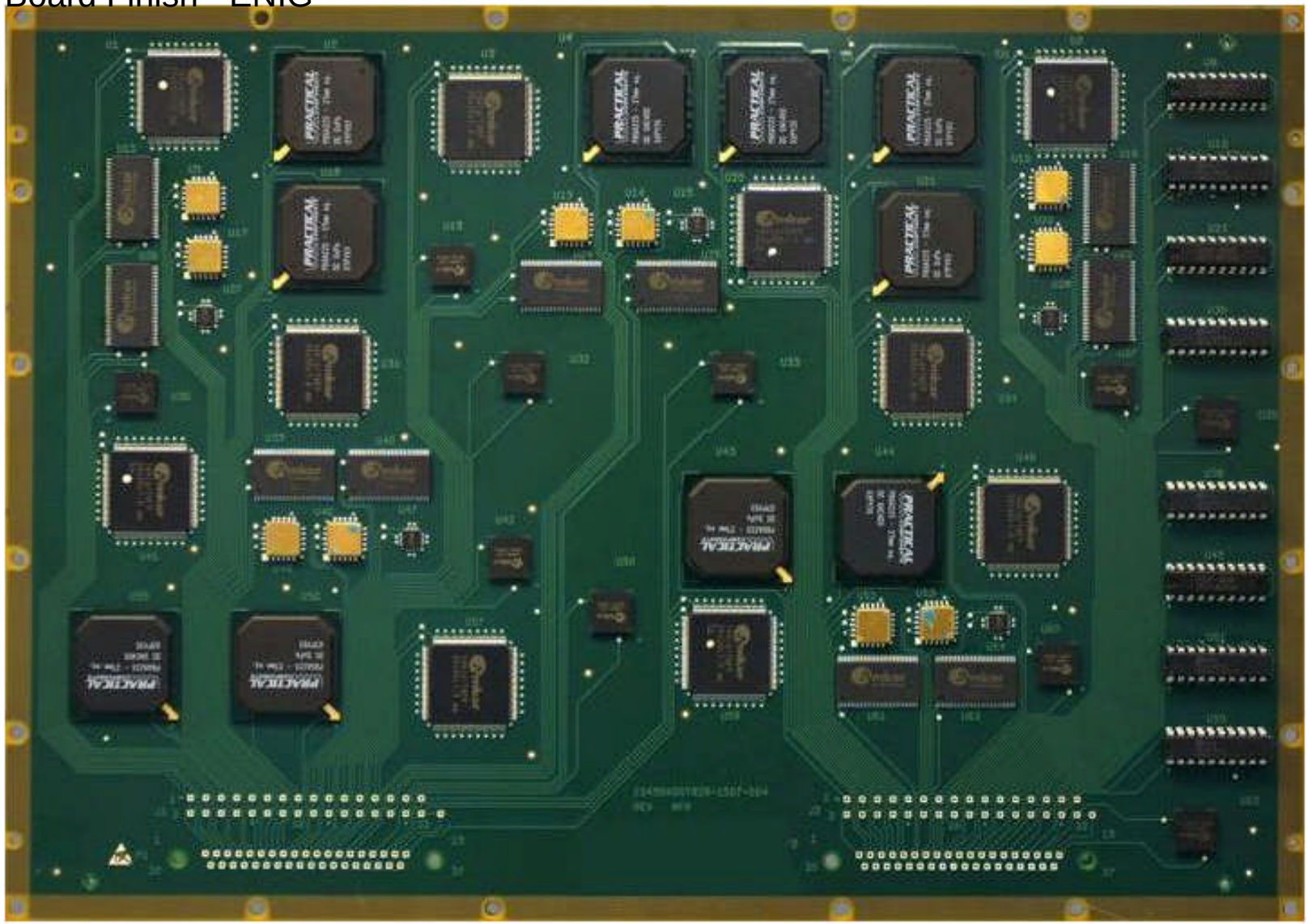
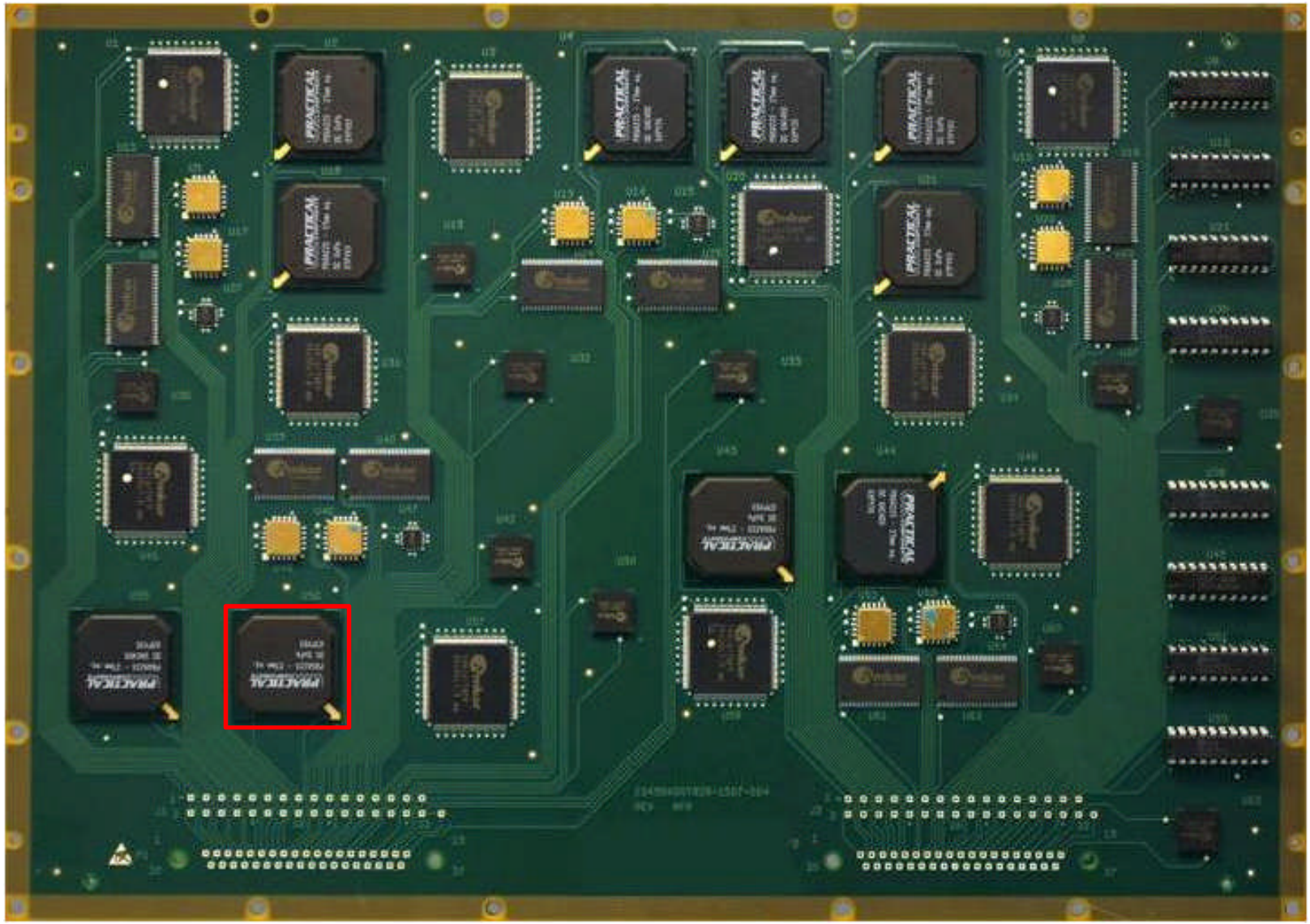
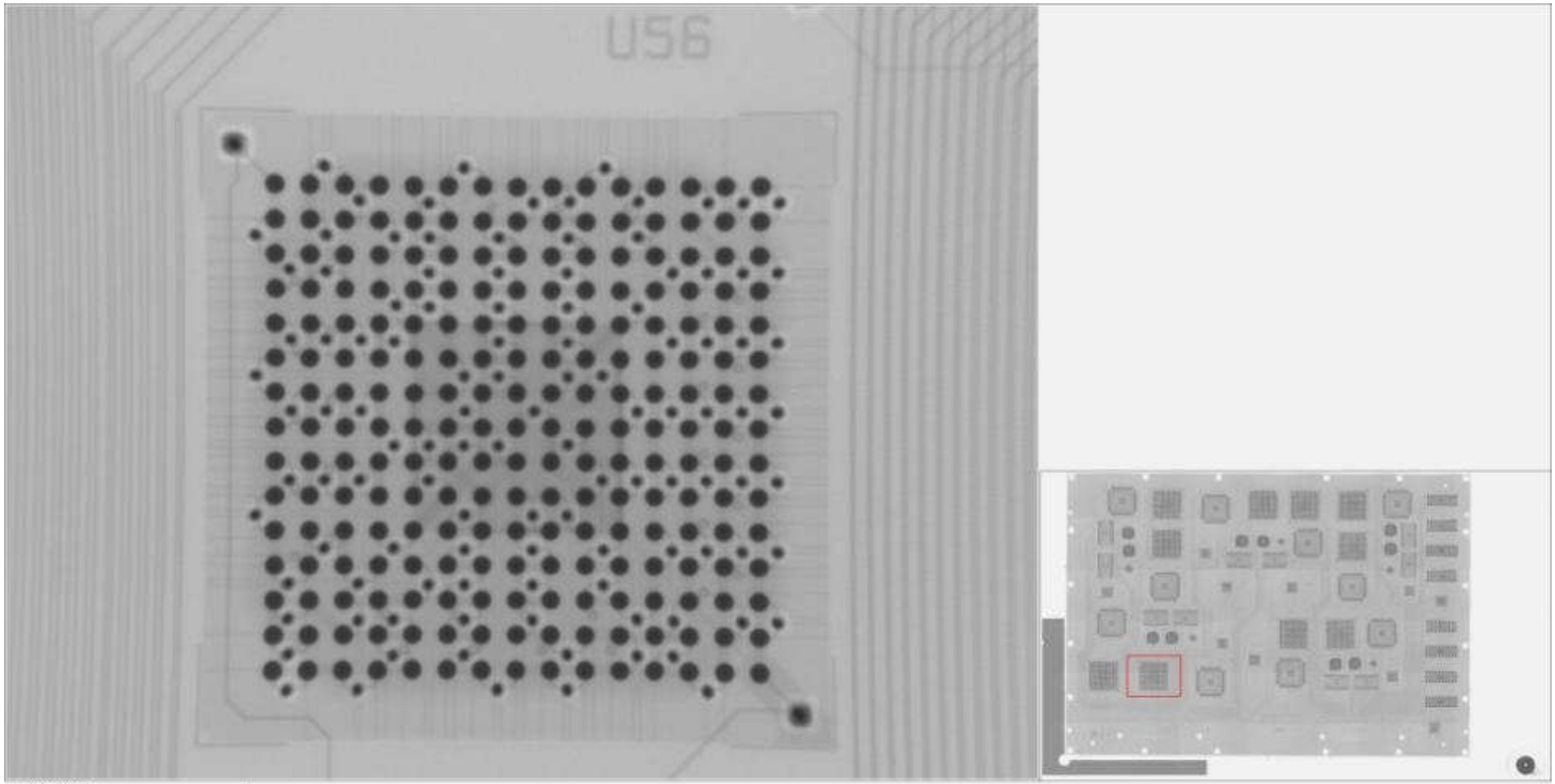
SN93 - Lead-Free Manufactured; Thermal Cycle and Combined Environments Test Vehicle

- Assembly Profile – Lead-Free
- Reflow Solder – SAC305
- Wave Solder – SN100C
- Board Finish - ENIG



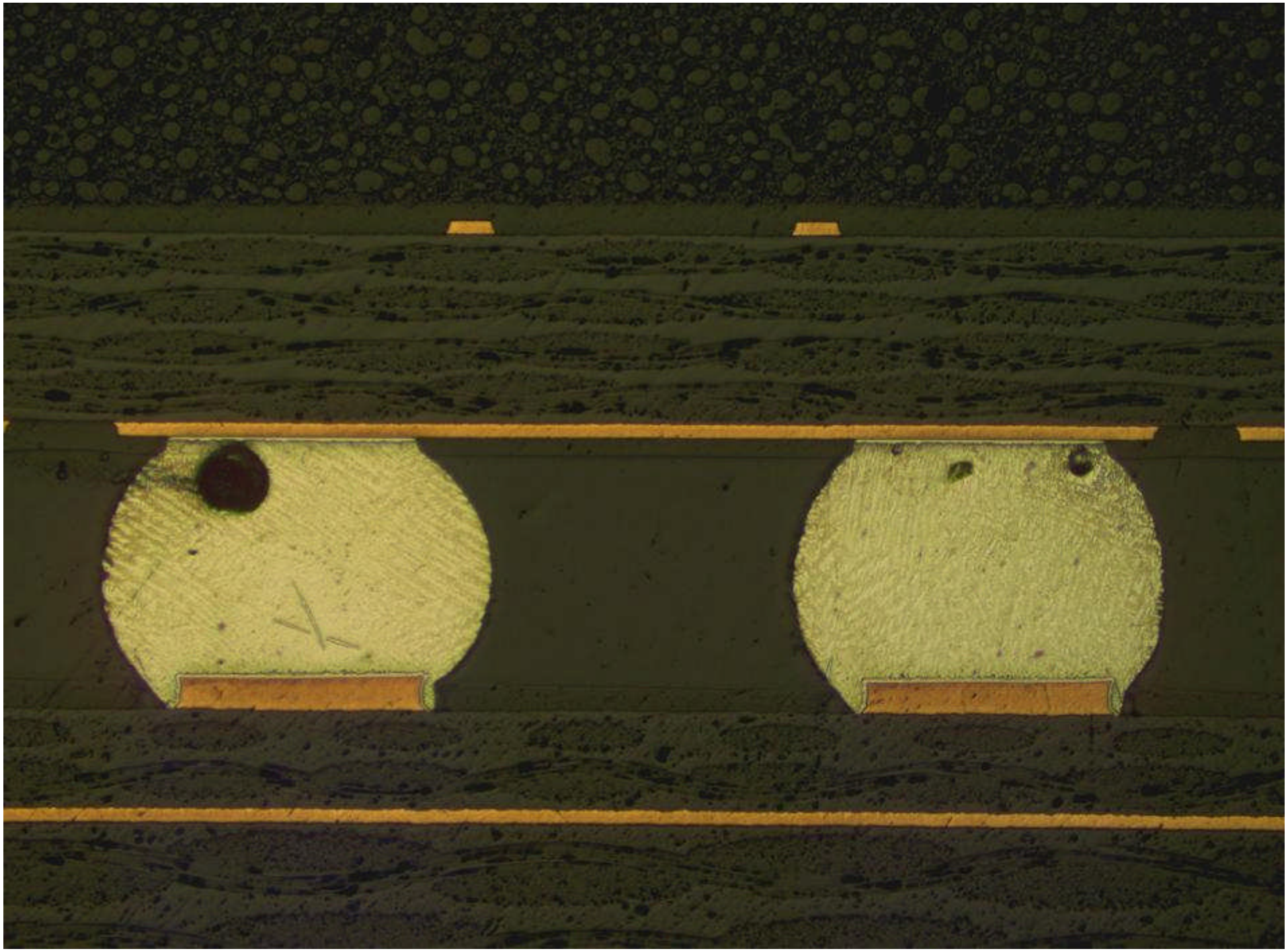
U56 – BGA-225
SAC405 Finish

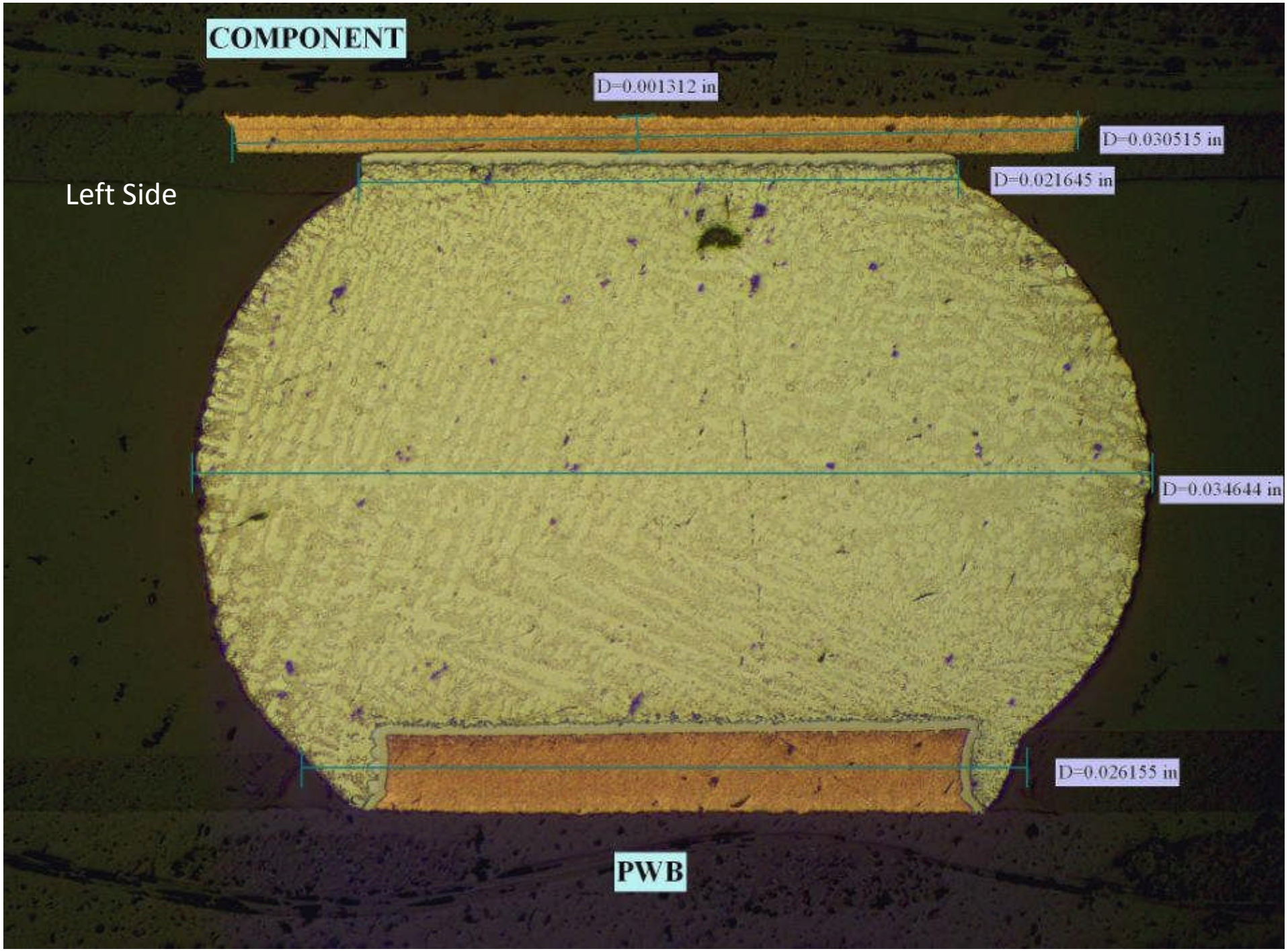


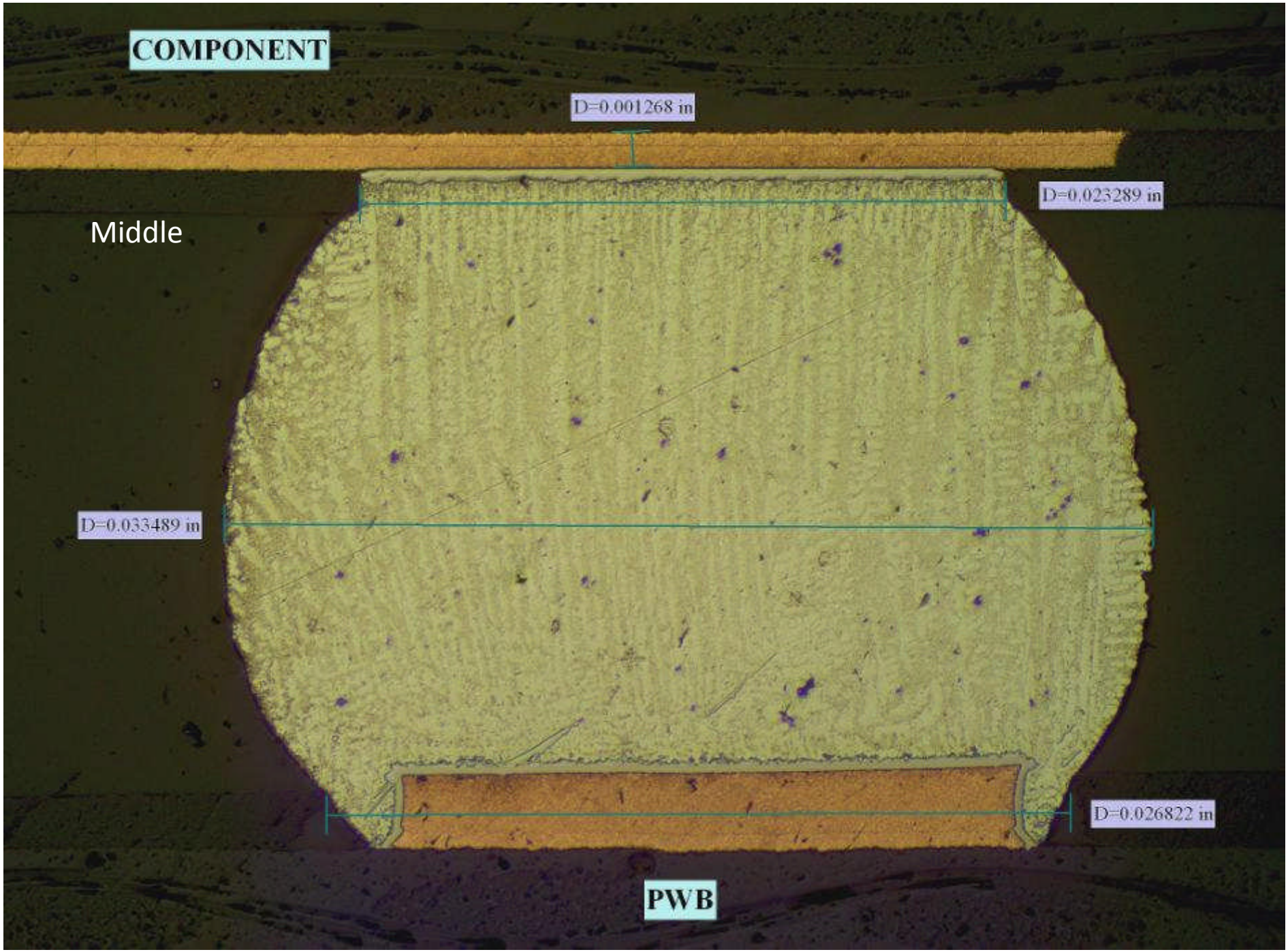


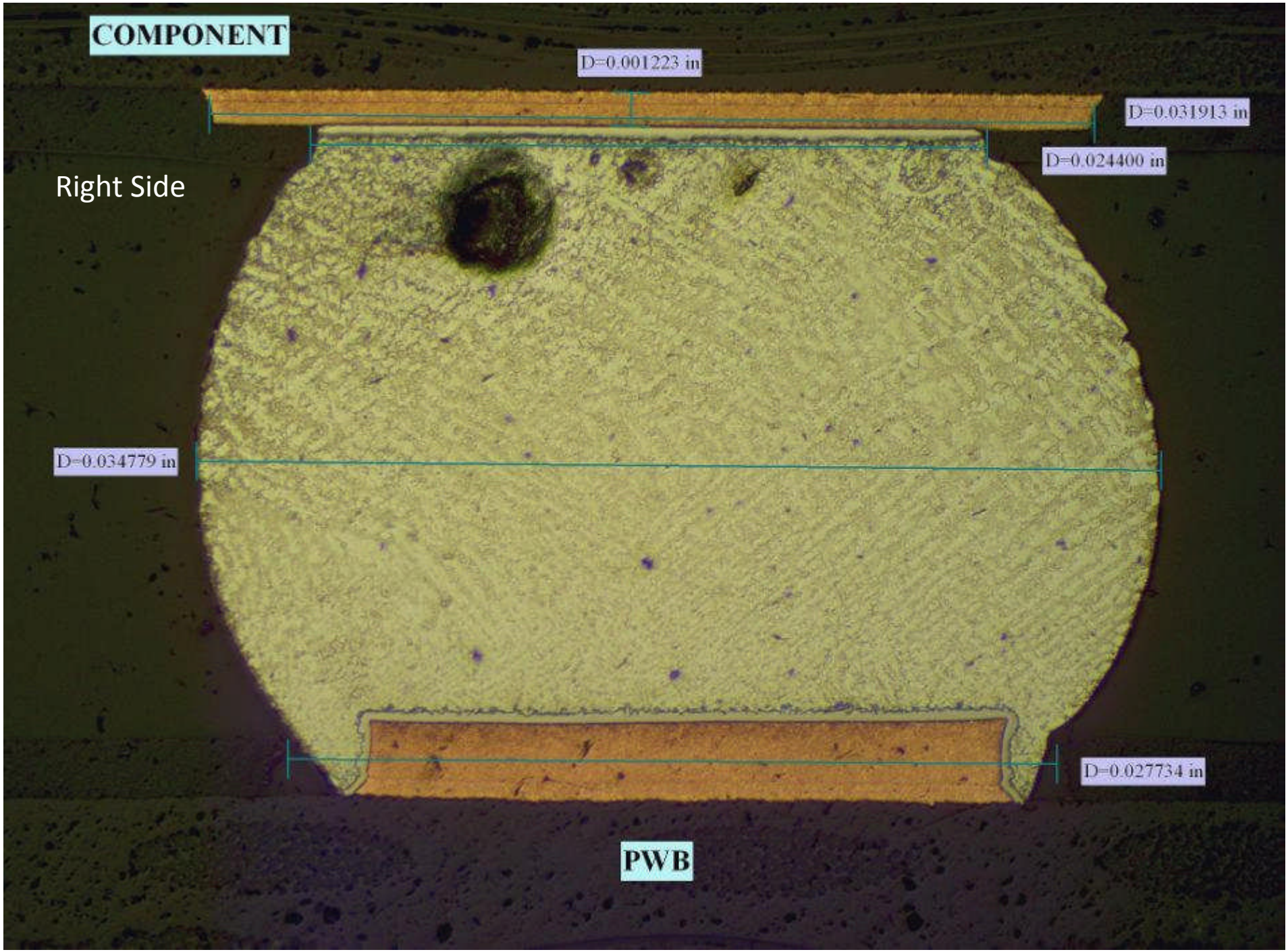
10.0mm

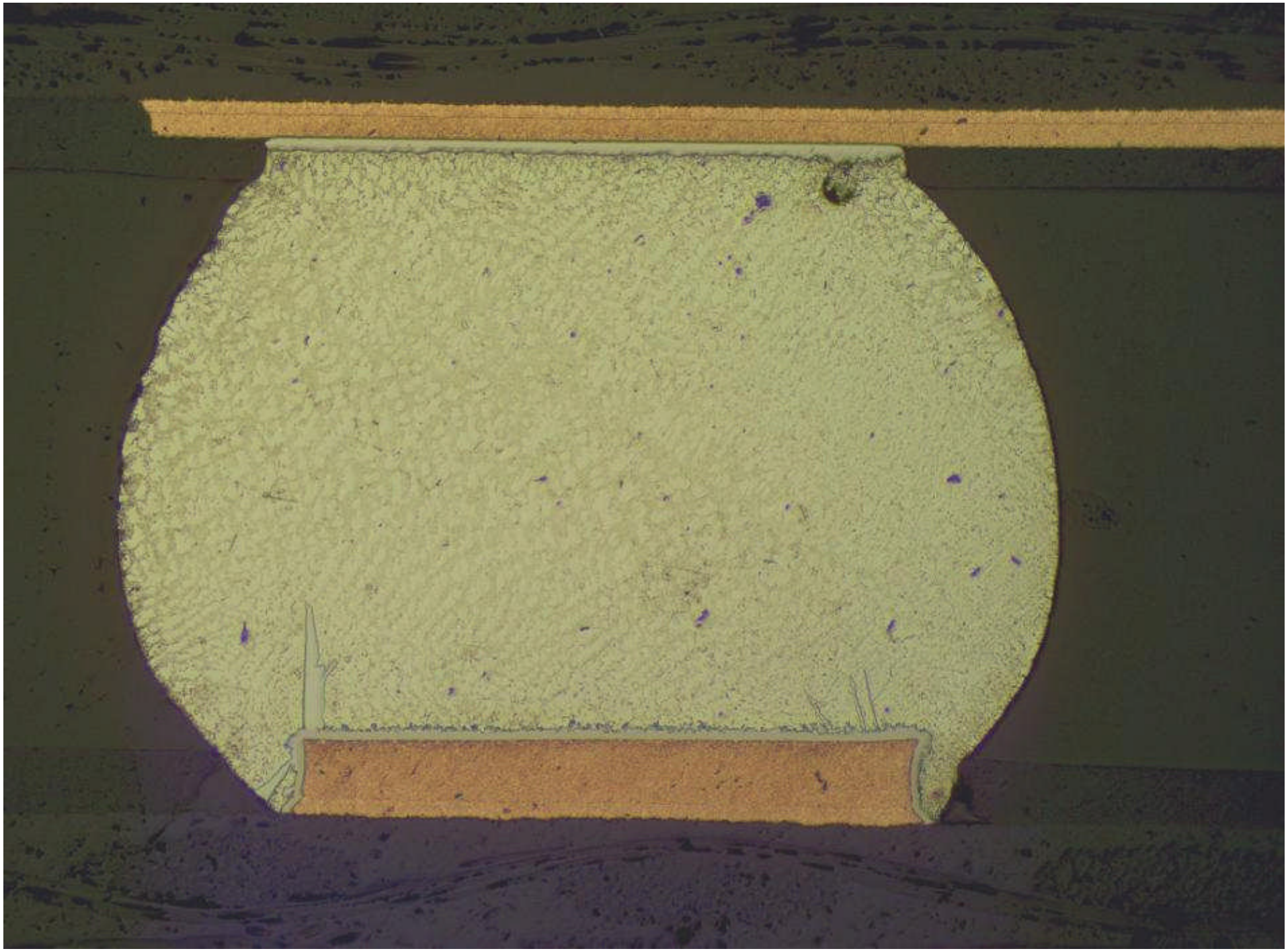
Tube voltage: 115 kV
Tube power: 1.67 W
Filter method used: None
Averaging: 256 frames

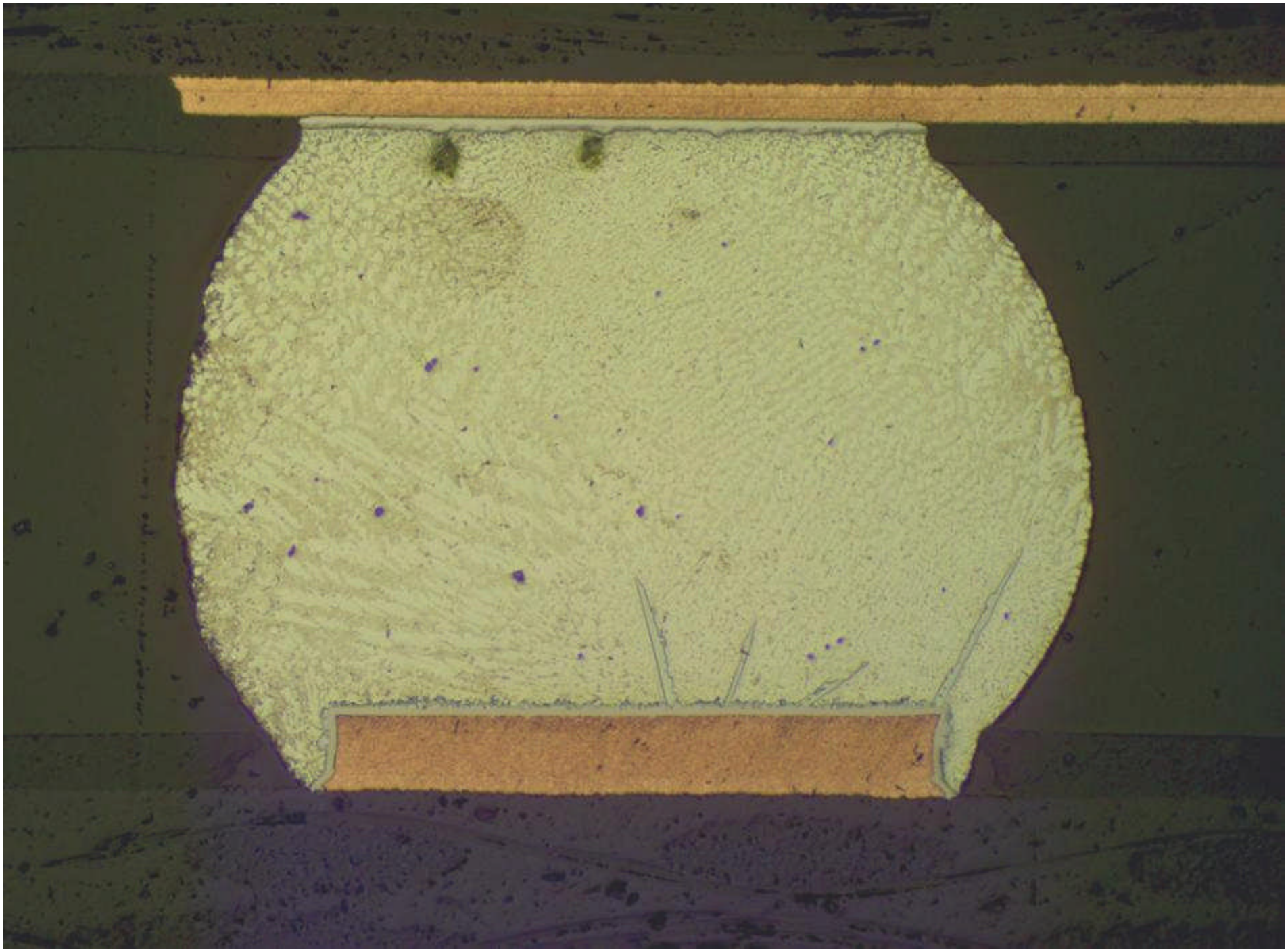


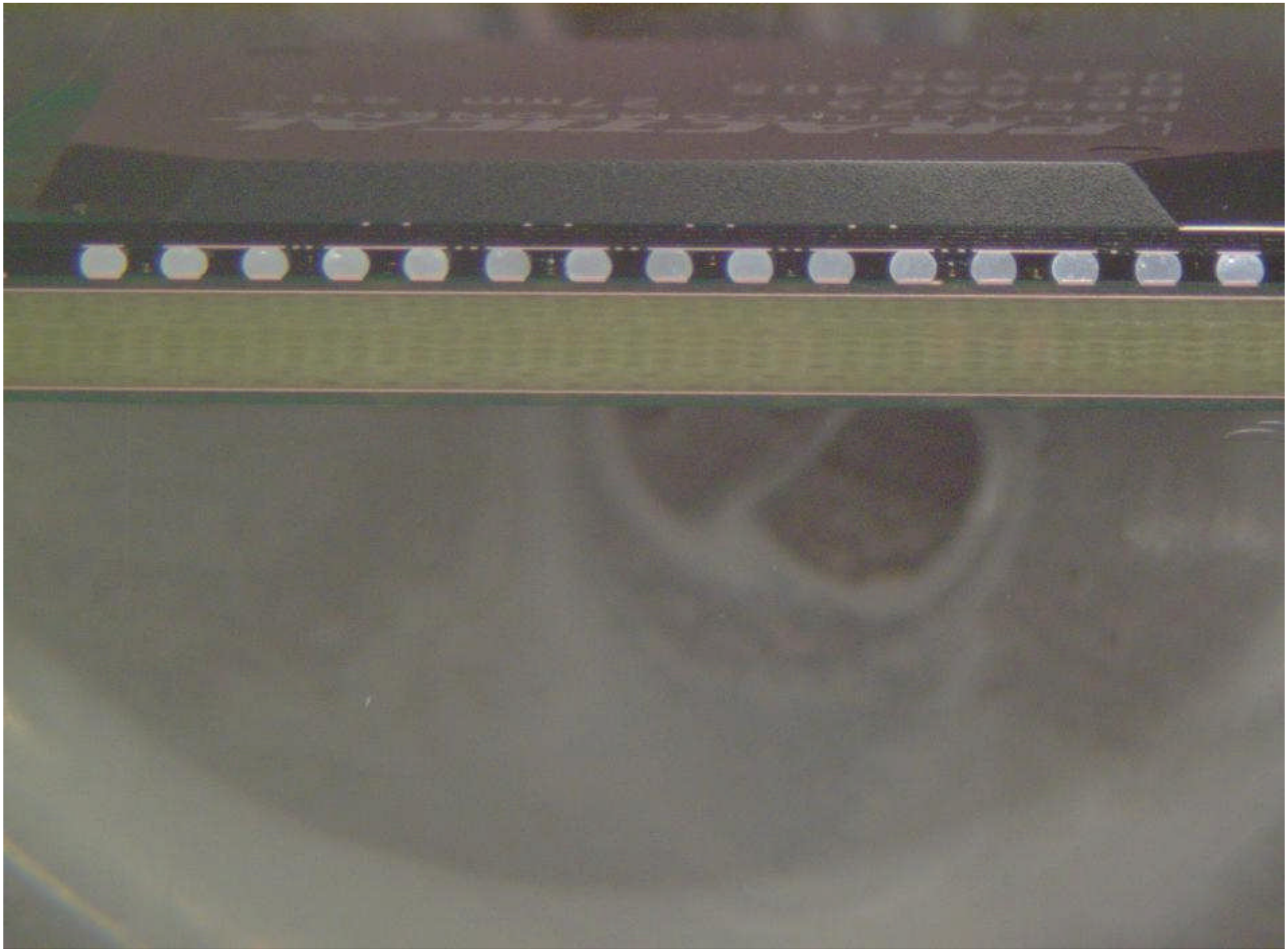

COMPONENT
D=0.001312 in
D=0.030515 in
D=0.021645 in
Left Side
D=0.034644 in
D=0.026155 in
PWB

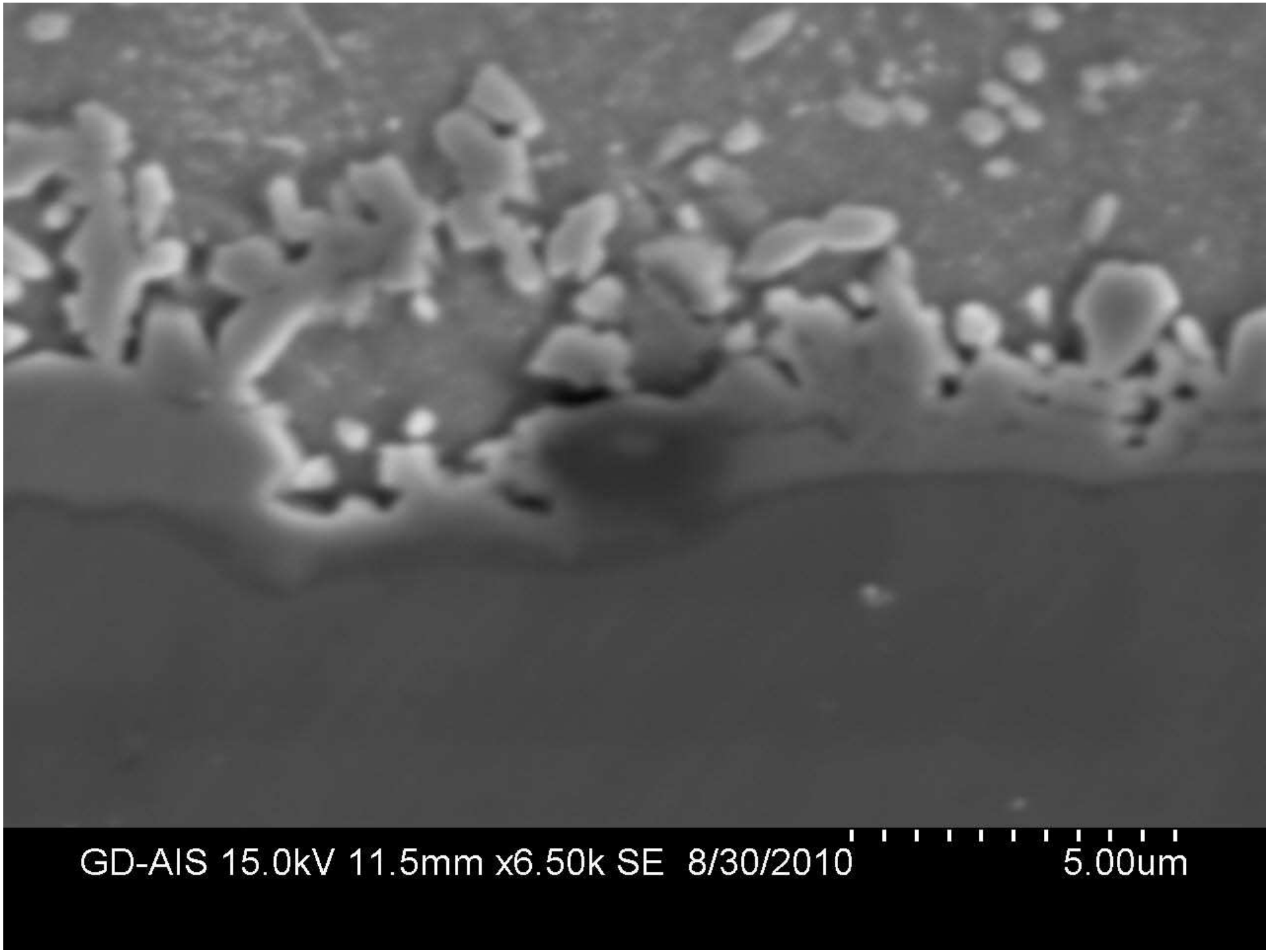

COMPONENT
D=0.001268 in
D=0.023289 in
Middle
D=0.033489 in
D=0.026822 in
PWB


COMPONENT
D=0.001223 in
D=0.031913 in
D=0.024400 in
Right Side
D=0.034779 in
D=0.027734 in
PWB

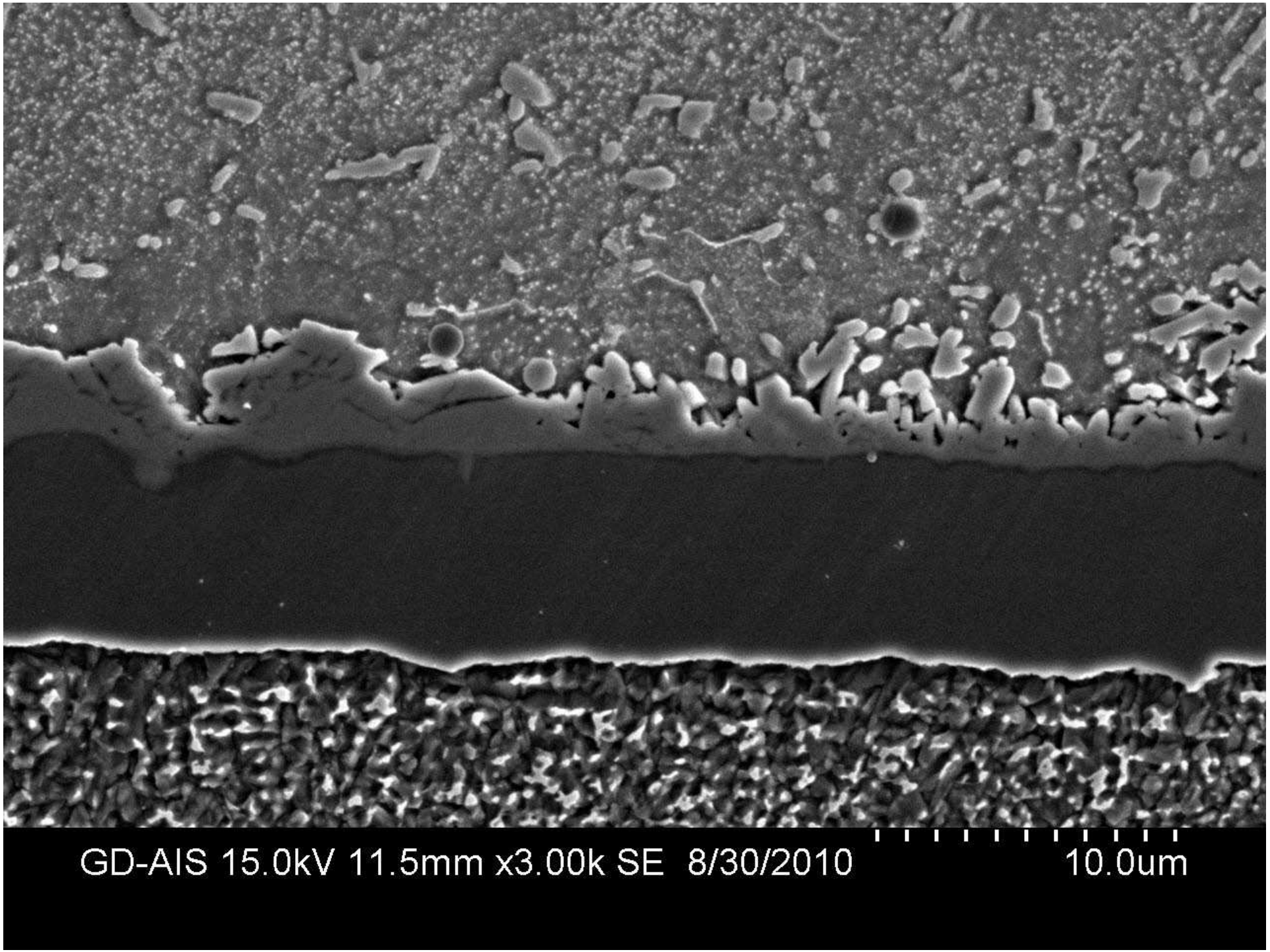


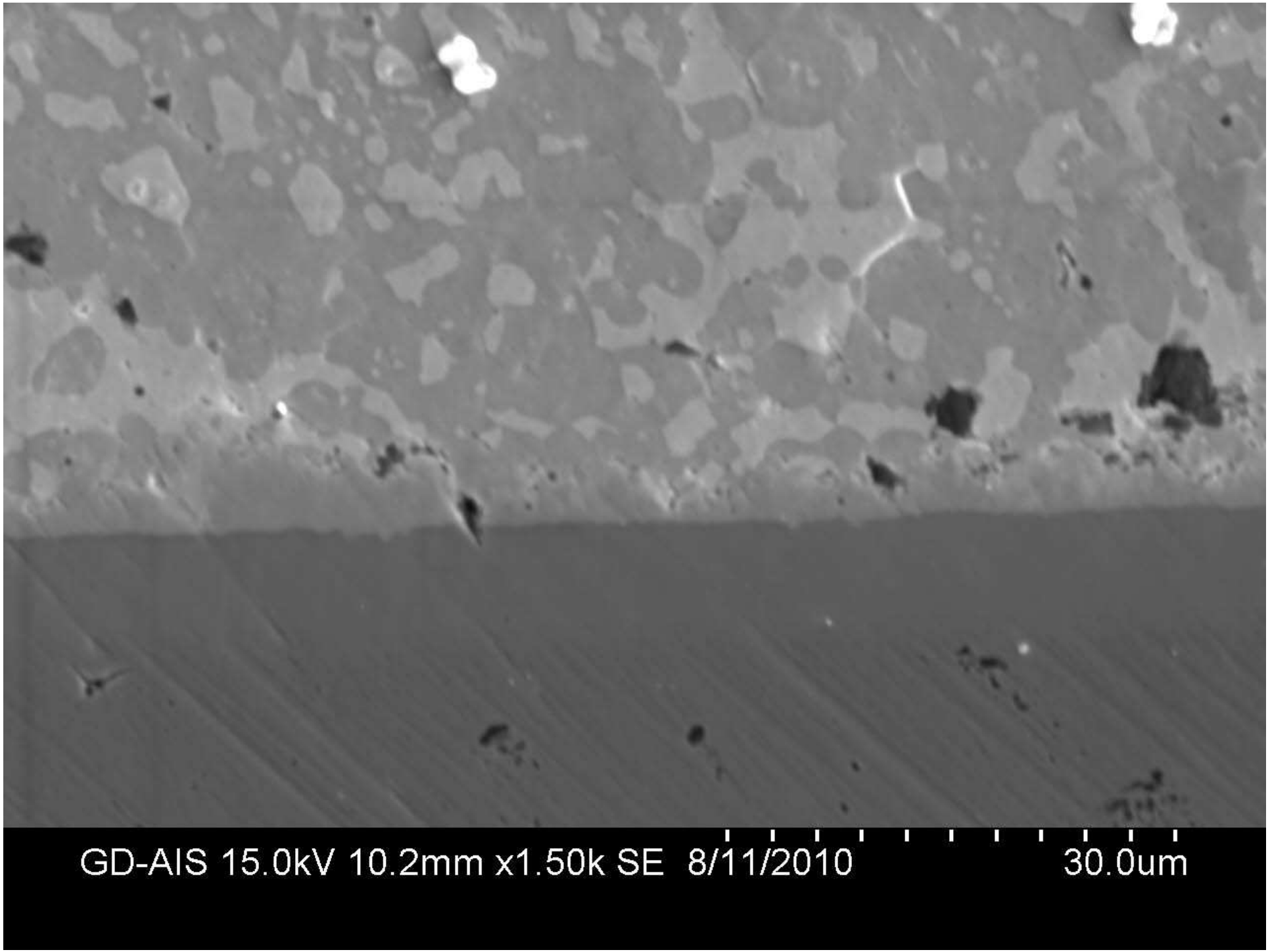


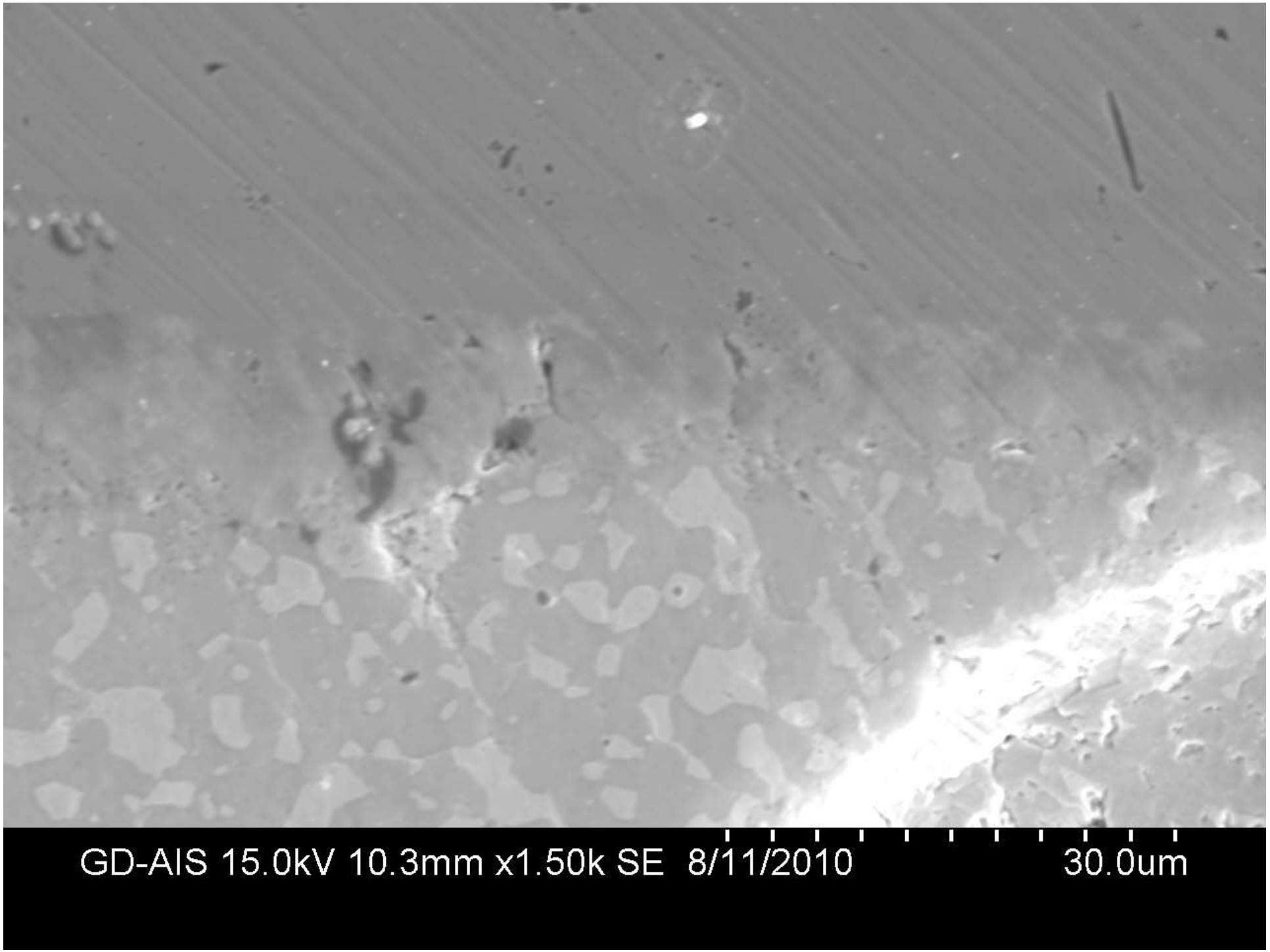


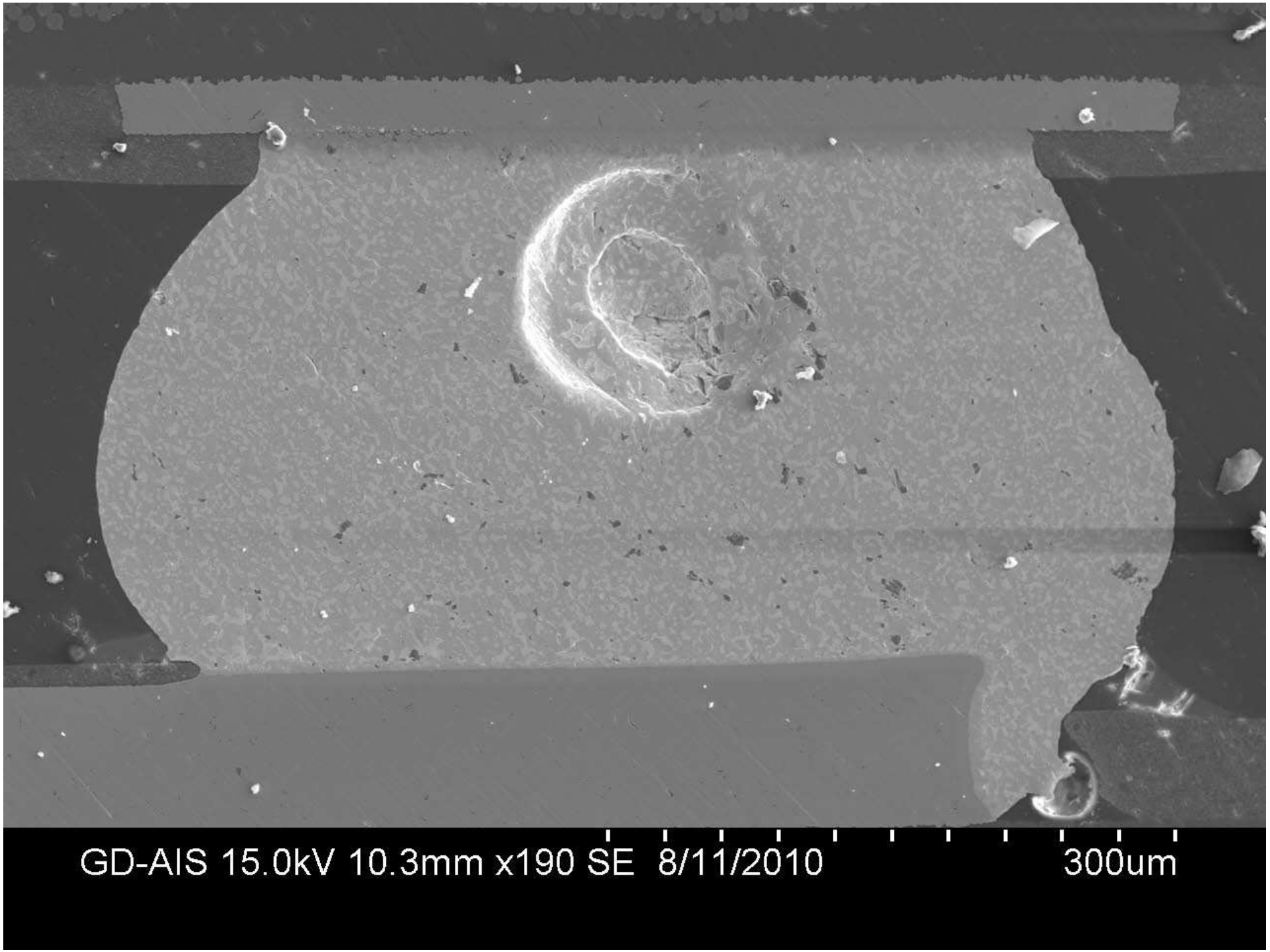

GD-AIS 15.0kV 11.5mm x6.50k SE 8/30/2010
5.00um

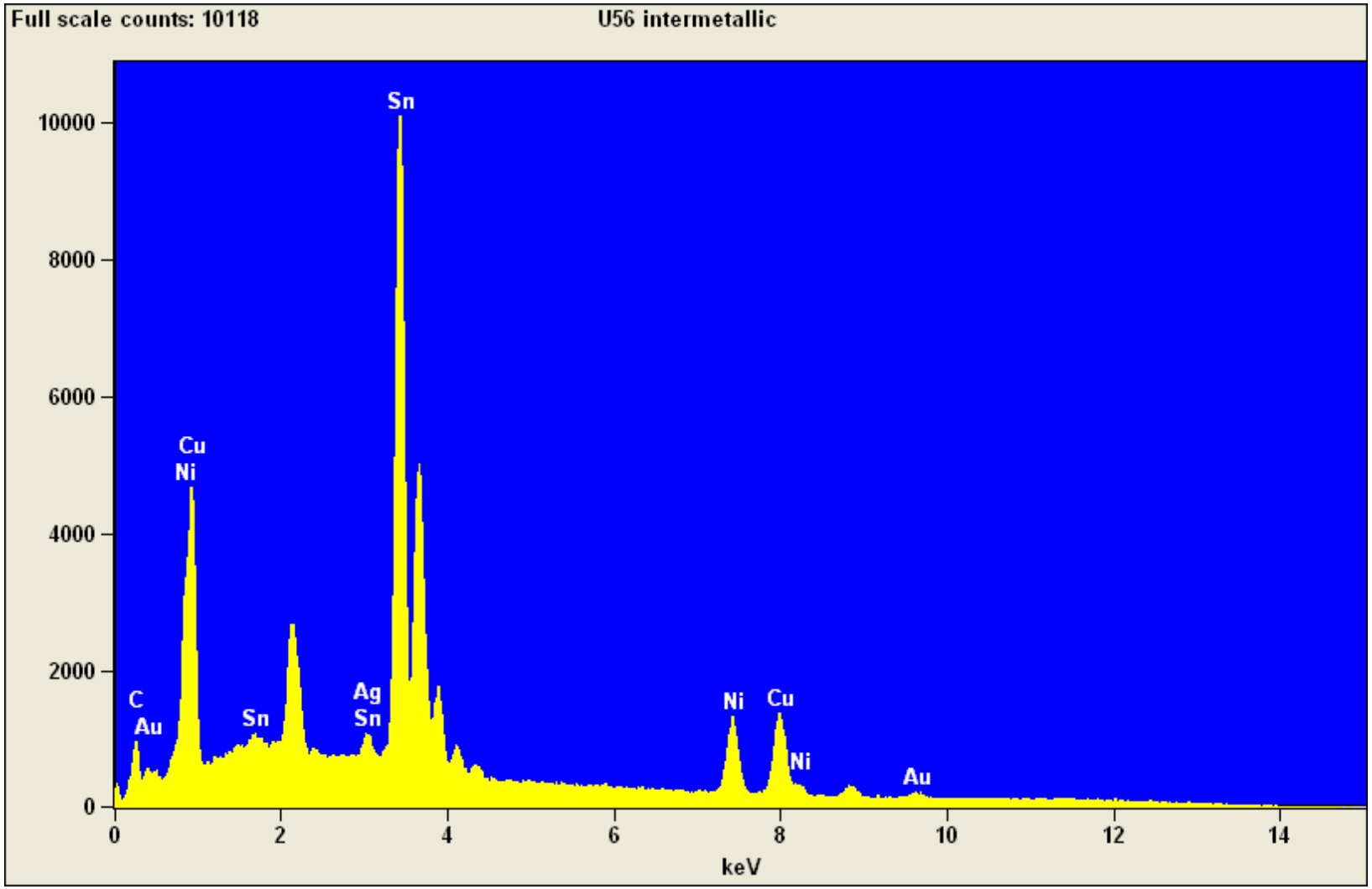
GD-AIS 15.0kV 11.5mm x900 SE 8/30/2010
50.0um


GD-AIS 15.0kV 11.5mm x3.00k SE 8/30/2010
10.0um


GD-AIS 15.0kV 10.2mm x1.50k SE 8/11/2010
30.0um

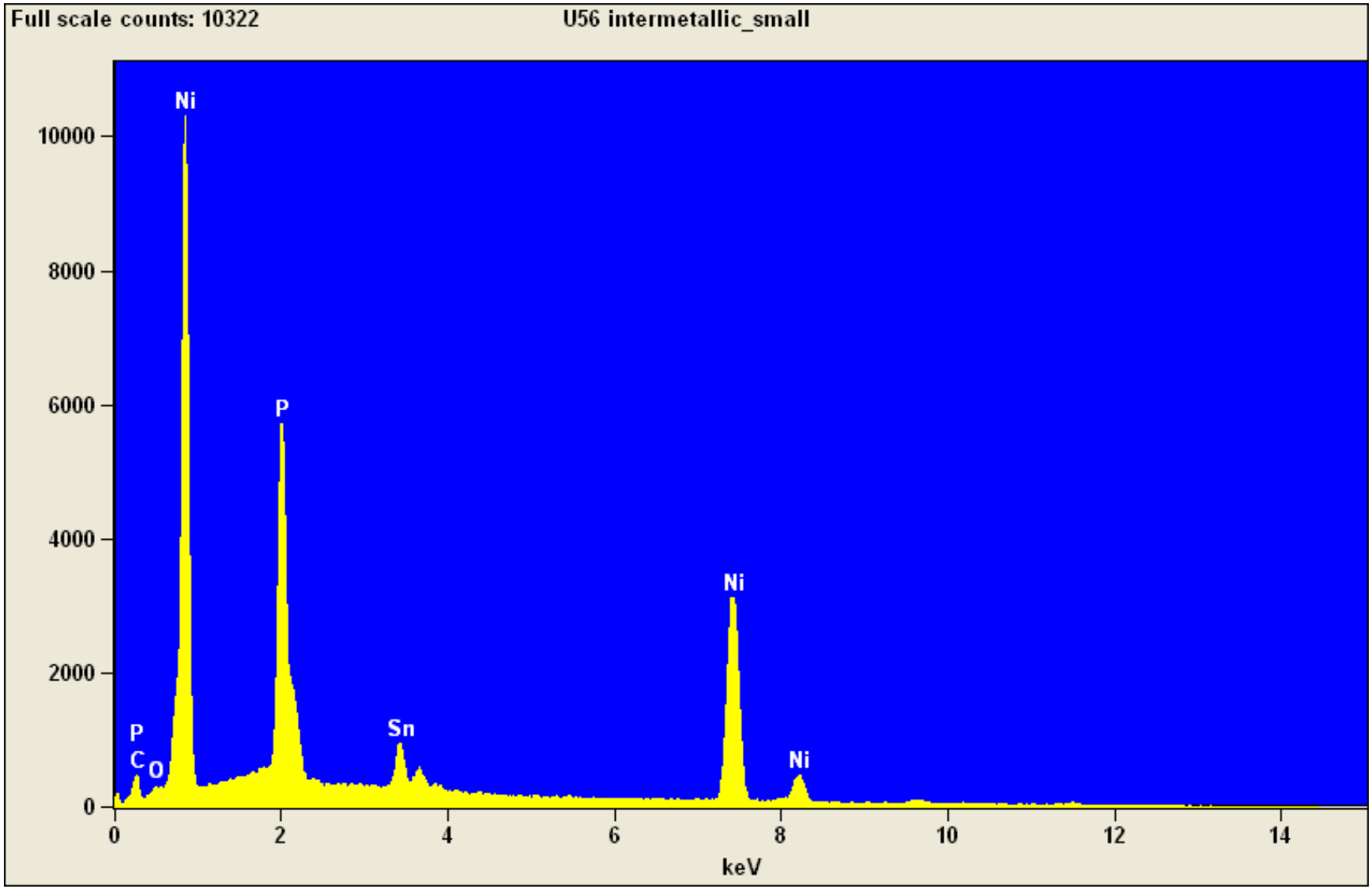

GD-AIS 15.0kV 10.3mm x1.50k SE 8/11/2010
30.0um


GD-AIS 15.0kV 10.3mm x190 SE 8/11/2010
300um



Quantitative Results for: U56 intermetallic

Element Line	Weight %	Atom %
Ni K	13.57	21.32
Cu K	20.78	30.16
Ag L	0.08	0.07
Sn L	57.48	44.67
Au M	8.09	3.79
Total	100.00	100.00



Quantitative Results for: U56 intermetallic_small

Element Line	Weight %	Atom %
P K	12.84	22.66
Ni K	79.06	73.61
Sn L	8.10	3.73
Total	100.00	100.00