Photomicrography of CL-3-45 metallographic cross-section Melvin J. Wachowiak

Commentary Aaron N. Shugar

Photographs taken with a Leica DMLM Magnification range: 50x-500x Illumination: transmitted light, bright field and dark field



CL-3-45 cross-section (embedded and polished), bright field illumination: detail showing gold-rich and copper-rich phases and thin gold surface layer



CL-3-45 cross-section (embedded and polished), bright field illumination: detail showing zone of flattened voids just below gold surface layer



CL-3-45 cross-section (embedded and polished), dark field illumination: thin gold surface layers and inclusions are visible



CL-3-45 cross-section (embedded and polished), dark field illumination: detail of inclusion



CL-3- cross-section (embedded, polished and etched): different alloy phases are visible, particularly in the zone adjacent to thin gold surface layers



CL-3-45 cross-section (embedded, polished and etched), bright field illumination: detail showing zone of flattened voids just beneath gold surface layer



CL-3-45 cross-section (embedded, polished and etched): detail of surface zone



CL-3-45 cross-section (embedded, polished and etched), bright field illumination: detail showing gold-rich and copper-rich phases