



Lab Test Results

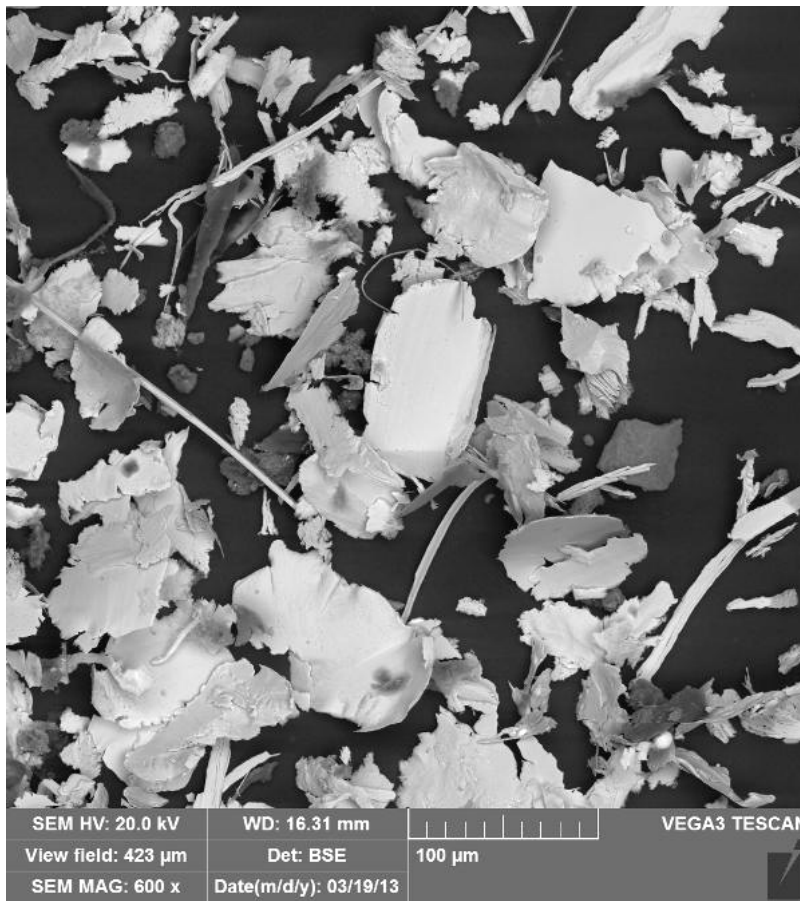
Summary: Acculube's customer needed to identify the composition of metallic flakes in ISO 150 hydraulic oil and determine their source. The Acculube test identified the source of the contamination, which led to replacement of a bronze component in their hydraulic system.

Product Identification: ISO 150 Hydraulic Oil with Metallic Contamination

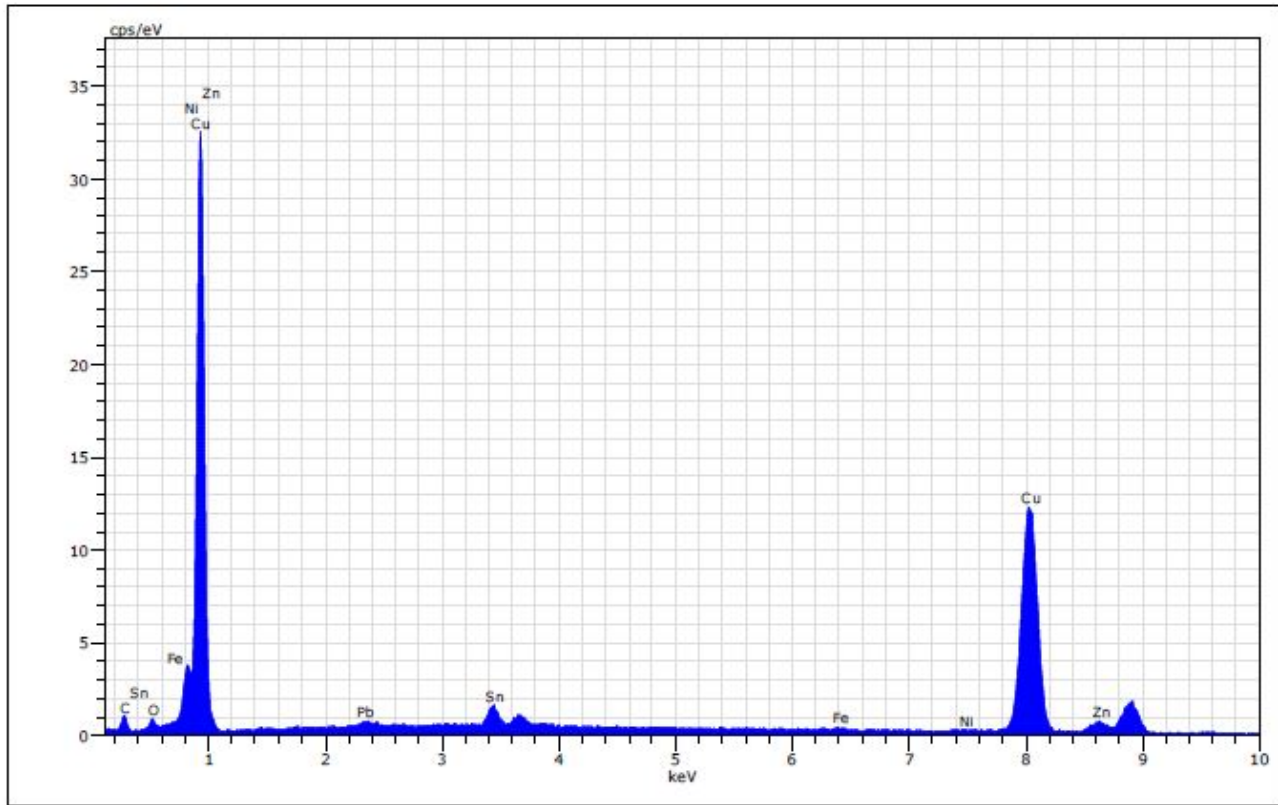
Purpose for Product Analyses: Identify composition of metallic components to pinpoint their source.

Test Method: The sample was filtered through 0.8 micron paper and rinsed with hexane to remove residual oil. Analysis of the filtered solids by Scanning Electron Microscopy (SEM) showed predominantly small metallic flakes. Energy Dispersive Spectrographic (EDS) analysis of a bulk portion of the flakes yielded data consistent with a bronze alloy. A semi-quantitative elemental analysis is included.

RESULTS:



Acculube – EDS semi-quant of filtered particles



Comments:

Based on their general shape and striations, it was determined that these were classic wear particles.

The Energy Dispersive Spectrographic analysis of a bulk portion of the flakes yielded data consistent with a bronze alloy.