

Fourier Transform Infrared Spectrometer (FTIR) Sample Case

In one case, leaks in a fire protection system were traced to certain rubber O-rings that were not sealing properly. The cause was found with the aid of MEA's FTIR. Grease applied to the O-rings - a necessary step during installation - was the wrong one. The figure shows three FTIR spectra of O-ring grease. On the top is the grease specified in the installation instructions, in the middle is grease found on some of the non-leaking O-rings, and on the bottom is grease found on some leaking O-rings. The difference in the bottom spectrum clearly shows the wrong grease was used on the O-rings that leaked.

