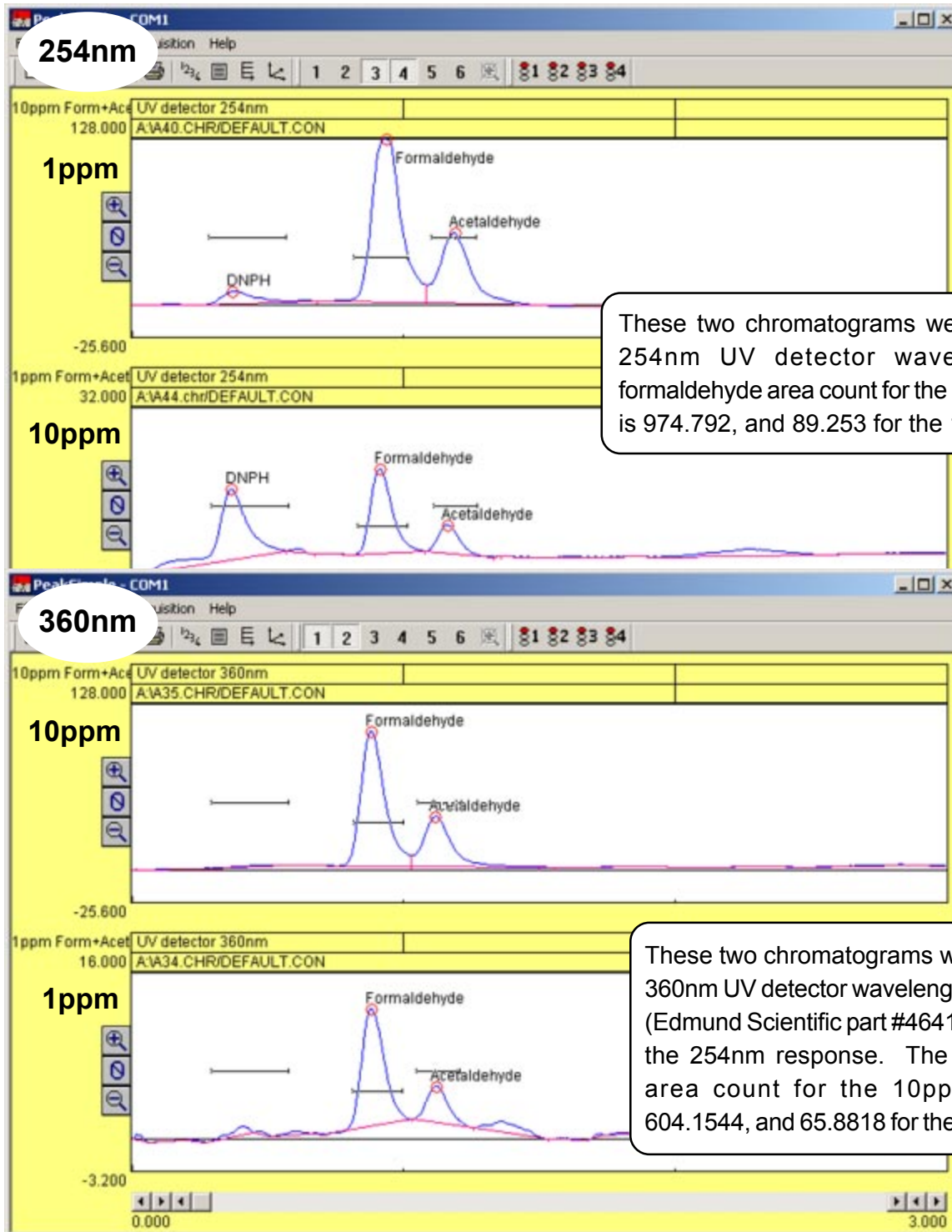




GC-LC Innovations

Formaldehyde in Air by HPLC UV

The SRI Model 210D HPLC system can detect formaldehyde and acetaldehyde in air samples down to 1ppm. The 210D uses a mercury lamp with two strong lines of emission: 254nm and 360nm. EPA method 8315 recommends using the 360nm wavelength for formaldehyde in air, but as shown in the chromatograms below, the 254nm wavelength on the 210D UV detector responds more sensitively than the 360nm.



These two chromatograms were run on the 254nm UV detector wavelength. The formaldehyde area count for the 10ppm sample is 974.792, and 89.253 for the 1ppm sample.

These two chromatograms were run on the 360nm UV detector wavelength, using a filter (Edmund Scientific part #46416) to select out the 254nm response. The formaldehyde area count for the 10ppm sample is 604.1544, and 65.8818 for the 1ppm sample.