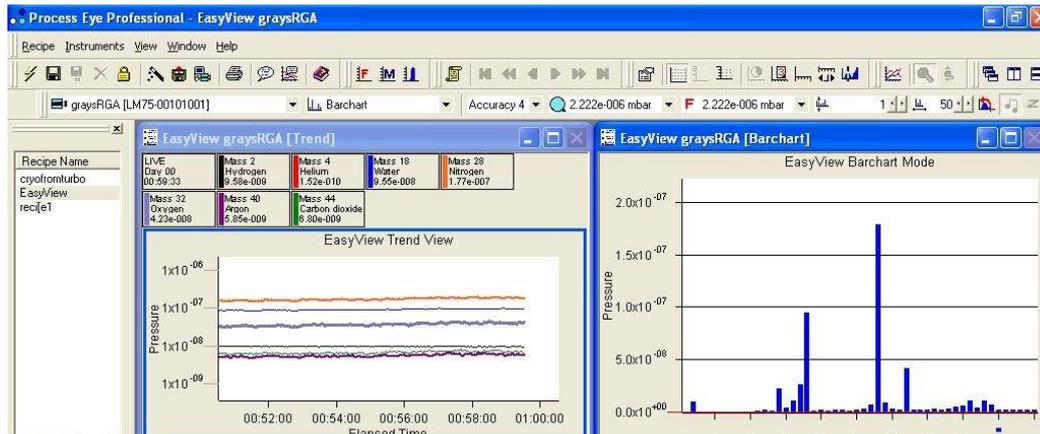


## System Report

Following reports of some wavelength problems with the films from this machine, an RGA ( *residual gas analysis* ) scan was performed in order to rule out any machine issues such as water and air leaks.

The first image is a snapshot of the system taken after an hour of pumping, system empty. The peaks at mass 28 (nitrogen) and mass 32 (oxygen) indicate that there is an air leak present.



During test of the dynamic seals, out technician noticed that the 28/32 peaks changed with the operation of the substrate rotation, so the system was vented and substrate carrier rotary drive seals were changed.

The second image, following the repair and a short pump down period, the scan shows a normal trace. Minimal peaks at 28/32, and the peak at mass 18 shows the normal background water vapour present in all systems.

The system performed a successful test run, and shortly afterwards was returned to normal production

