

## PRODUCT NOTE

The PeakWorks chromatography software for Windows can be used with any GC or LC. It has 32 bit processing and interfaces with the GC or LC via fast USB connection. The digital control for timed events is also through USB. (single connection). The standard package will handle two input signals (19 bit). Two temperature signals and provide three timed events.

### INTRODUCTION

The PeakWorks chromatography software for Windows can be used with any GC or LC. It has 32 bit processing and interfaces with the GC or LC via fast USB connection. The digital control for timed events is also through USB. (single connection). The relays for three timed events are included in the standard hardware package.

The hardware will handle two input signals (19 bit), two temperature signals (valve ovens...) and provide three timed events. The latter is ideal for setting up an automatic sample (valve) injection, column switching or other function. This is ideal for the pilot plant, process laboratory

The Peakworks<sup>™</sup> software program offers automatic data collection, integration, and storage within a personal computer, reintegration, peak overlays, scale expansion ...and many more features. All data and methods can be stored on disk and downloaded to spreadsheet or database programs for report generation or to a printer. Minimum computer requirements for Peakworks<sup>™</sup> include an IBM compatible Pentium PC with Windows<sup>®</sup> 95, 98 or NT operating system, 32MB RAM, and a color VGA monitor.

The screen for Peakworks can display two chromatograms, two tables as shown in Figure 1. These Detector outputs and time will be automatically scaled as the run progresses. The area % values will be blank until the run is completed.

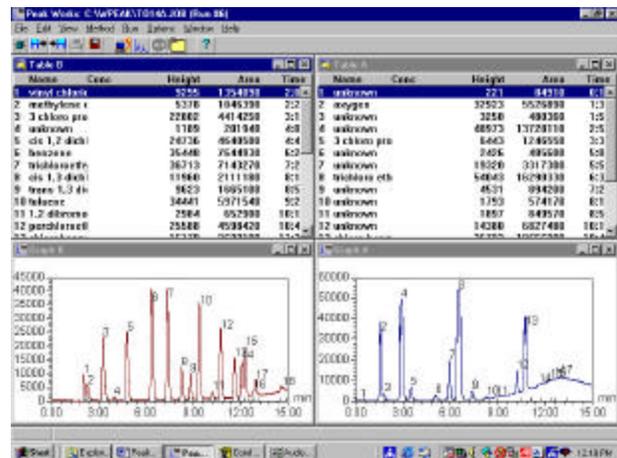
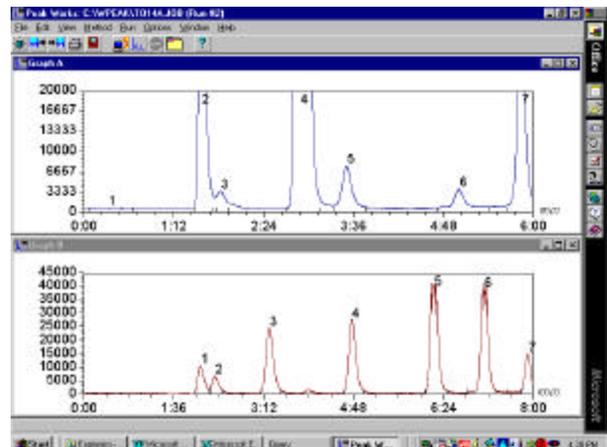


Fig. 1 Dual detector & Data format

The Dual Detector (PID/ECD) format is shown in fig. 2 below:



PeakWorks has an overlay function that allows peaks from two detectors to be overlaid in different colors that are selected by the user as shown in Fig. 3 below.

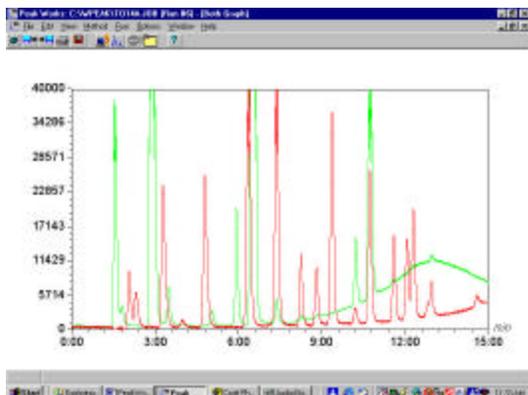


Fig. 3 Overlay of PID (red) and ECD (green) Peaks

Peaks that respond to both detectors (#7,8,9,11,12 on PID) are the di, tri, tetra chloro compounds. The PID has a much stronger response to ppb levels on the mono halogenated HC than the ECD.

Any areas of the chromatogram can be easily expanded to display very small peaks as shown in Figure 4 below.

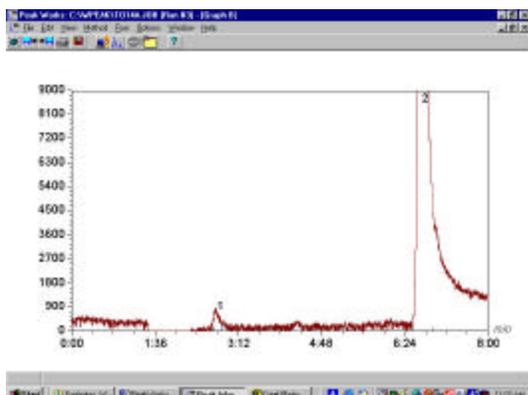


Fig. 4 Peak Expansion to Display Even Very Small Peaks

Peak #1 can also be seen in Fig. 1 Detector A.

As noted above, there are three timed events that can be used for valve switching, column switching so that gas or liquid samples can be gas or liquid samples can be automatically injected into the GC or LC

and this can be setup as a method that can be run manually or automatically. An automatic calibration (timed event) can be added for long term runs.

The screen for the automatic mode is shown in Figure 5 below:

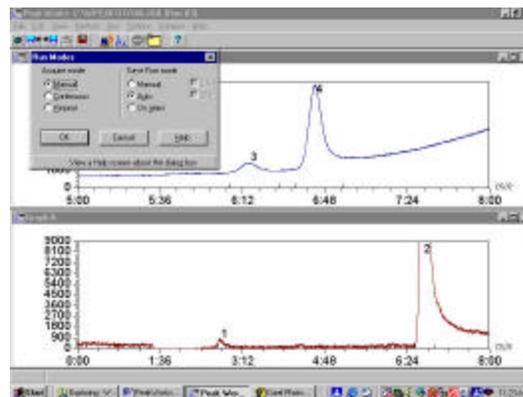


Figure 5 Automatic or Manual Run Model in PW software

The components to be analyzed are setup in the Method Window shown in Fig. 6 below:

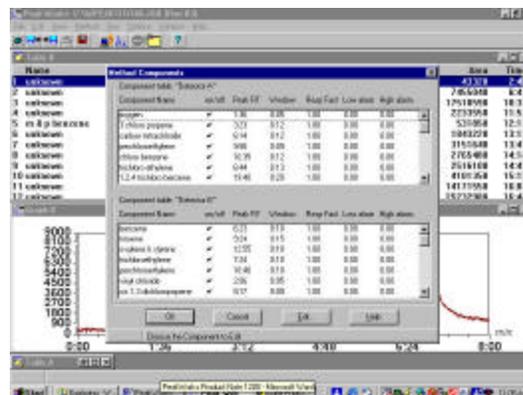


Fig. 6 Method Components Window

In this Window, the user can decide to detect (or not detect) a component, set the retention time, the Window for RT (component will not be detected outside the Window), the response factor and a low or high alarm.

A Standards Window is (Figure 7) incorporated in the Method file. Here, one sets the value for multiple standards and response factors.

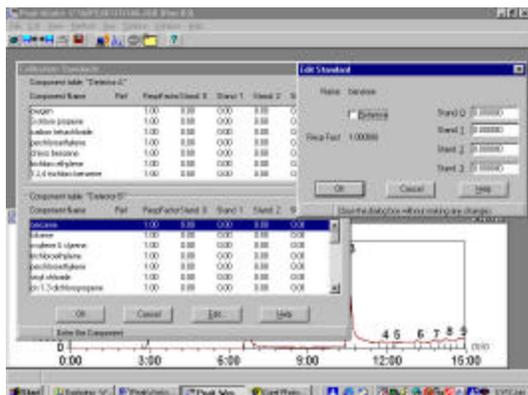


Figure 7 Standards Window

**SUMMARY**

The PeakWorks Chromatography Software is a 32 bit program that connects to the GC or LC via high speed USB connection. There are two detector and temperature inputs as well as three programmable timed events for automation on the GC or LC method. The software has reintegration capabilities, chromatogram overlays, multilevel calibration routine, peak expansion and reporting capabilities. It is a very easy to use and flexible package for chromatography data collection and automation.

**REPORTS**

Chromatograms can be easily incorporated into report by using the save report function that saves the report in a rich text format. This can then be imported into Word, Excel or other program.

If all the data is to be saved or printed, it will provide the information below:

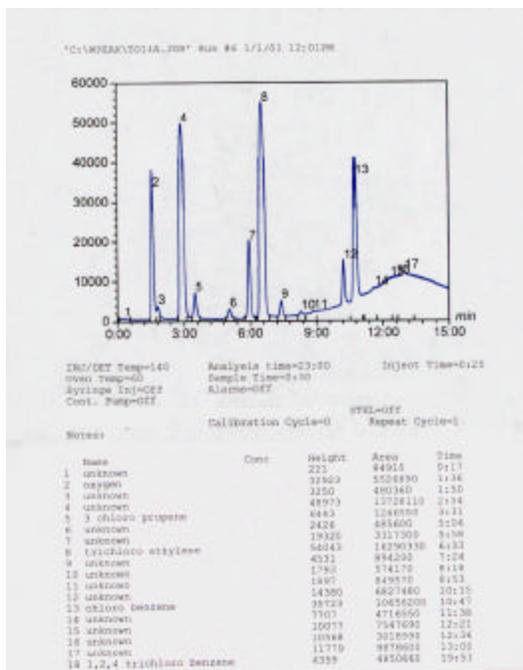


Figure 8 Typical Printed Report