DataApex
Clarity™
CHROMATOGRAPHY SOFTWARE

8.7 VS 8.6

Clarity (Lite) ENG

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Sections of the manual connected only to the **Clarity Full** version are marked with the Full version icon.

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Contents

To facilitate the orientation in the **8.7 vs 8.6** manual and **Clarity** chromatography station, different fonts are used throughout the manual. Meanings of these fonts are:

Instrument (blue text) marks the name of the window to which the text refers.

Open File (italics) describes the commands and names of fields in **Clarity**, parameters that can be entered into them or a window or dialog name (when you already are in the topic describing the window).

WORK1 (capitals) indicates the name of the file and/or directory.

ACTIVE (capital italics) marks the state of the station or its part.

The bold text is sometimes also used for important parts of the text and the name of the **Clarity** station. Moreover, some sections are written in format other than normal text. These sections are formatted as follows:

Note:	Notifies the reader of relevant information.
Caution:	Warns the user of possibly dangerous or very important information.

Marks the problem statement or trouble question.

Description: Presents more detailed information on the problem, describes its causes, etc.

Solution: Marks the response to the question, presents a procedure how to remove it.

1 Preamble

This document will guide you through the news and improvements in the **Clarity** Chromatography Station version **8.7** compared to version **8.6**.

The most interesting features of version 8.7 include:

- Compatibility with Windows 11
- Improvements in Open Dialog
- MS Extension improvements
- Export to new *.xlsx format
- Export All Signals Result table is possible
- Footer option in the Report Setup

The list of all changes is available in the What's New document accessible from the software.

2 Clarity

2.1 Windows 11

Clarity is now compatible with Windows 11. The Windows 11 operating system can only run on 64-bit CPUs, this can be incompatible with some control modules or hardware, for more information please refer to the Clarity compatibility table and List of supported instruments on www.dataapex.com or in the datasheets D016 - Clarity Compatibility Table and D004 - Clarity - List of Currently Controlled Instruments.

2.2 Open dialog

We have significantly improved the Open dialog, for browsing through larger sets of files. It is faster and when there is a lot of data to read in, it lets you do other things while reading in the background.

The Open Chromatogram dialog has new possibilities. When selecting multiple chromatograms, *Overlay* is intuitively the default opening option. It is also possible to choose whether you want to open the selected chromatograms in the *Overlay* or browse them one by one by clicking on the arrow in the *Open button*. The selection of signals to display is also more convenient as there is a new three-state *All signals* checkbox.

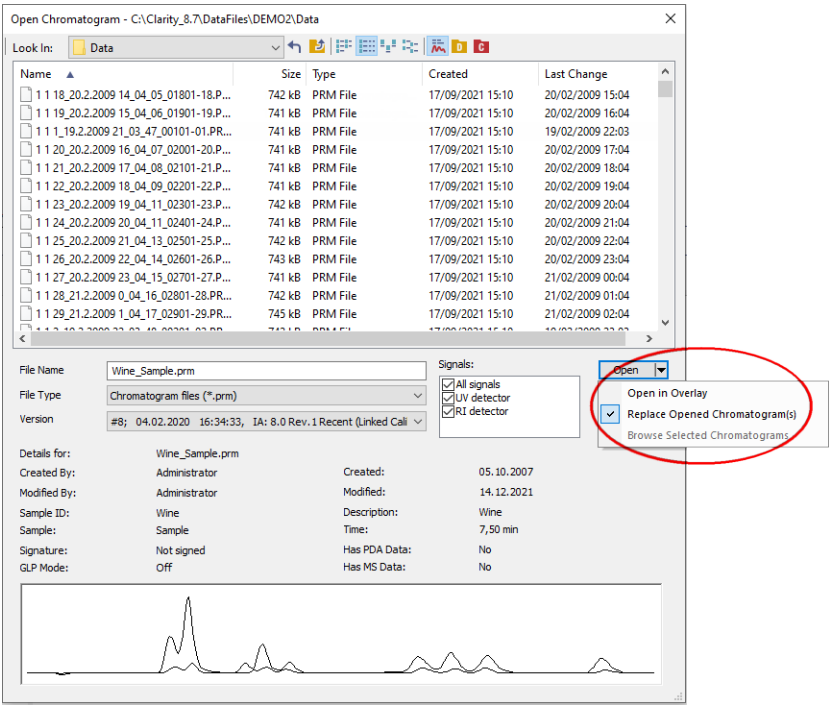


Fig 1: Open Chromatogram

Open in Overlay

Opens selected chromatogram(s) in the *Overlay*. If another chromatogram has been already opened, the selected ones will be added in *Overlay*. If the *OVERLAY MODE* is on it is the default option. It is also the default option for opening more than one chromatogram at once.

Replace Opened Chromatogram(s)

Closes all opened chromatograms and opens the one you selected. Selecting it will switch off the *OVERLAY MODE*.

Browse Selected Chromatograms

Closes all opened chromatograms and opens the first of the selected chromatograms. The remaining chromatograms are set to chromatogram browse list, which can be browsed using the *Browse Through Chromatograms* command or the icons in the Chromatogram window. Selecting it will switch off the *OVERLAY MODE*.

2.3 MS Extension

The MS Extension has been improved to address the situation when peaks are not very well separated or even not separated at all. If each of the

compounds has a specific m/z ion, they can be quantified even if they are not separated in the TIC.
Now quantification signal is constructed for every m/z used for quantification. It means that compounds:
- that have the same retention time,
- but which are quantified on different m/z,
are calculated independently.
Also, local Integration parameters are now specific for each quantification signal (instead of each compound), thus ensuring consistency of parameters for all peaks evaluated on the same m/z signal (for more details see chapter 5.4.1 MS Integration in MS Extension Manual).

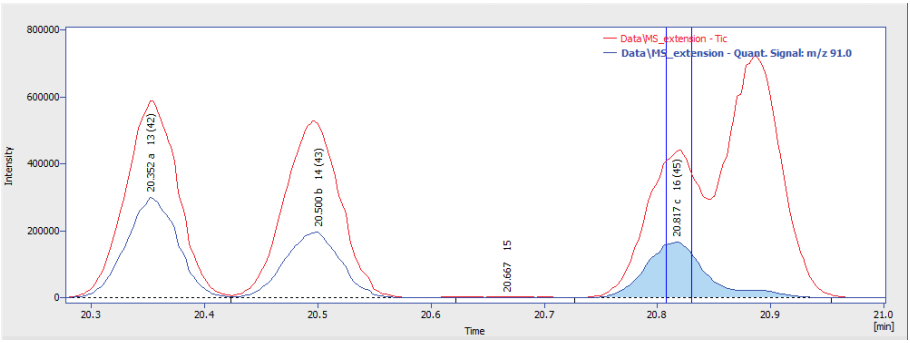
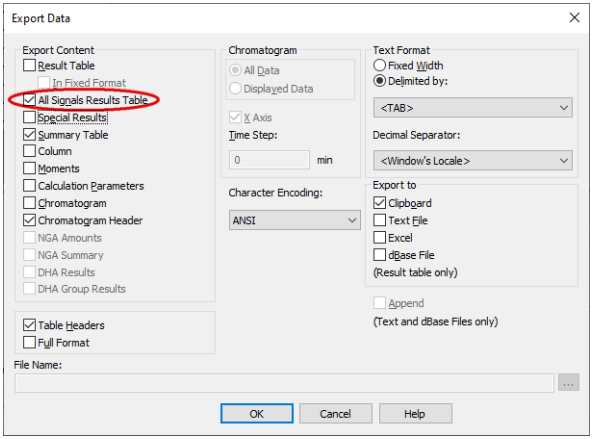


Fig 2: Chromatogram - quantification signal

In the picture, you can see the compounds on the same quantification signal - now you can conveniently see them all together and change the local integration parameters according to your needs.
Other minor changes were implemented to improve workflow with MS Extension such as Peak selection in MS method and calibration now supports *Best Match* option.

2.4 Export Data

Export Data dialog has been slightly reorganized to include new exporting options and better indicate which combinations of options are viable.



Export Data

2.4.1 Export to Excel

Clarity now exports to Excel in *.xslx format. For this export, it is now required to have Excel 2007 or later installed. Exporting to older versions of Excel has been discontinued.

2.4.2 All Signals Result Table

All Signals Result Table now can be exported. It will always be sorted by Retention Time.

2.5 Print

2.5.1 Footer

The *Footer* option has been added to Report Setup. It is great, for example, for adding a place for signature in your printed reports. We have used it ourselves to improve the OQ report style.

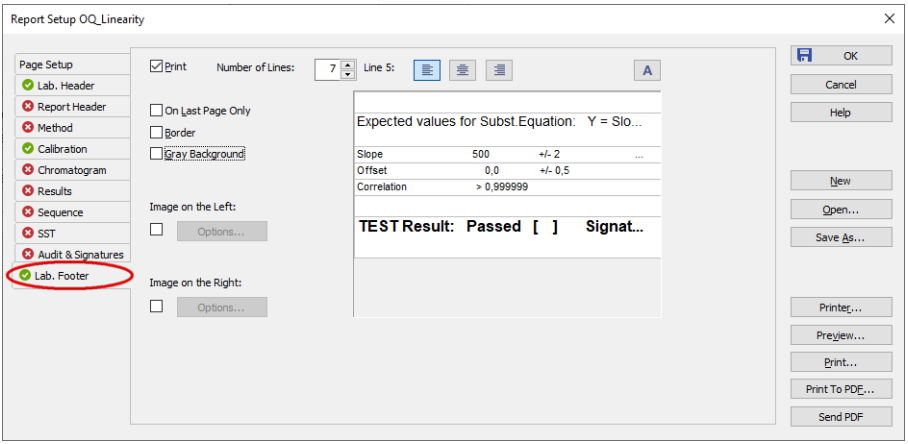


Fig 3: Lab. Footer

2.5.2 Single Analysis

In the Single Analysis window, all print settings are now easily accessible on the Post Run Settings tab, where you can check if you want to *Print Results* or *Print Results To PDF* with the selected Report Style.

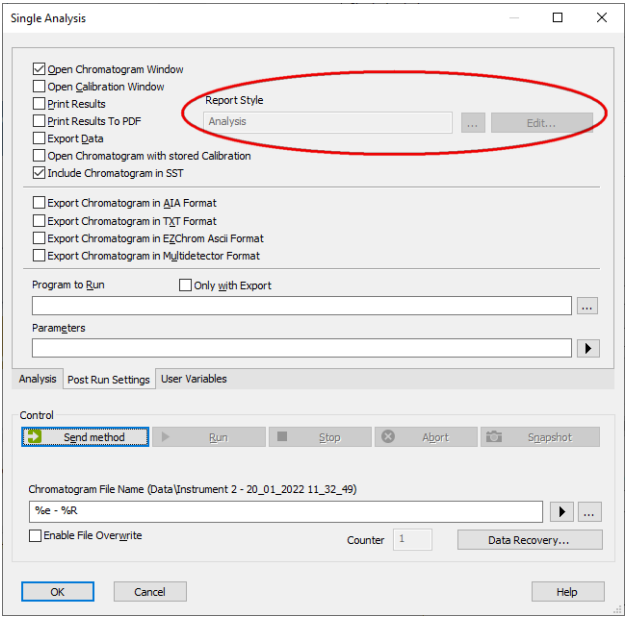


Fig 4: Single Analysis - Post Run Settings

2.6 Other changes

- In the Export Data dialog, the export of the summary table now follows the settings of the *Table headers* checkbox.
- In calibration, when adding peaks from a multi-signal chromatogram with the option *On Active Signal*, the default names of compounds or groups will be constructed as "Retention Time" + "Signal number".
- Improved memory handling of method versions history during chromatogram creation.
- SST extension now supports SST method versions.
- In the User Accounts is a new option to *Duplicate* existing user.
- A lot of fixed bugs. The list of all changes is available in the What's New document accessible from the software.

3 New and updated control modules

This section contains new and updated control modules introduced in Clarity **8.7**.
The control modules in:
- Testing state are already functional and its development is in the stage of external testing.
- Ready state have been already tested and verified.

3.1 Agilent

Updated:

- Agilent ICF control module updated to version A.03.01.U1.

3.2 Analytik Jena

New:

- Analytik Jena PQ LC HPLC Pump 1125, 1130, 1132 control module is now available in the Ready state.

3.3 Apix

Updated:

- Apix ChromPix2 control module updated to version 2.6.0.526.

3.4 CTC

Updated:

- CTC PAL3 control module updated to version 1.8.1.

3.5 ECOM

Updated:

- ECOM ECD2000 control module updated to version 3.6.0.0.
- ECOM ECDA2000 control module updated to version 3.0.0.0.
- ECOM ECF2000 control module updated to version 1.8.0.0.
- ECOM ECO2000 control module updated to version 3.0.0.0.
- ECOM ECP2000 control module updated to version 4.0.0.0.

3.6 Gilson

New:

- Gilson Verity 1920 control module is now available in the Ready state.

3.7 Gow-Mac

New:

- Gow-Mac 836 GC control module is now available in the Testing state.

3.8 Interlab

Updated:

- Interlab MAESTRO ELSD control module is now available in the Ready state.

3.9 Konik

New:

- Konik 560 Isocratic Pump control module is now available in the Ready state.
- Konik 560 Gradient Pump control module is now available in the Ready state.
- Konik 560/580 DAD control module is now available in the Ready state.
- Konik 560 UV/Vis control module is now available in the Ready state.
- Konik 560 Oven control module is now available in the Ready state.
- Konik AS 580 control module is now available in the Ready state.
- Konik 580 Pump control module is now available in the Ready state.
- Konik 580 UV/Vis control module is now available in the Ready state.
- Konik 580 Oven control module is now available in the Ready state.
- Konik 580 RI control module is now available in the Ready state.
- Konik Q4 LCMS control module is now available in the Ready state.

3.10 Sunchrom

New:

- Sunchrom SpectraFlow 2050 control module is now available in the Ready state.
- Sunchrom SunTherm 2070 control module is now available in the Ready state.

3.11 Sykam

Updated:

- Sykam S1130 control module updated to version 2.0.1.31.
- Sykam S5300 control module updated to version 2.0.0.31.

3.12 Watrex

New:

- Watrex StreamLine FC control module is now available in the Testing state.

3.13 Welch

Updated:

- Welch 5430 DAD control module updated to version 3.0.0.0.

3.14 Young In Chromass

New:

- Young In Chromass YCChroZen Binary Pump control module is now available in the Ready state.
- Young In Chromass YL9172 RI detector control module is now available in the Testing state.
- Young In Chromass ChroZen UHPLC RI detector control module is now available in the Testing state.

Updated:

- Young In Chromass YCChroZenAS control module updated to version 1.0.0.12.
- Young In Chromass YCChroZenColumn control module updated to version 1.0.0.8.
- Young In Chromass YCChroZenGC control module updated to version 1.0.1.26.
- Young In Chromass YCChroZenGCMS control module updated to version 1.0.1.12.
- Young In Chromass YCChroZenPump control module updated to version 1.0.0.15.
- Young In Chromass YCChroZenUVD control module updated to version 1.0.0.16.
- Young In Chromass YL9120 control module updated to version 4.0.4.24.