DataApex
Clarity™
CHROMATOGRAPHY SOFTWARE

7.2 VS 7.1

Clarity Software   ENG

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

Contents

To facilitate the orientation in the **7.2 vs 7.1** 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 **7.2**.

Note: Version **7.2** serves primarily as service pack, concerning stability and fixing of found bugs and thus number of new features is limited.

The most interesting features of version 7.2 include:

- New GLP option prohibits to perform analysis with unsaved method.
- Faster and smoother installation.
- Improved user comments for Single Analysis and Sequence.
- Improvements in the new experimental Integration Algorithm.
- Various **Clarity** improvements and bug fixes.
- New and updated control modules.

2 Clarity

2.1 Good Laboratory Practice (GLP) ✓Full version

Good Laboratory Practice is very important to our users, thus we always try to respond to GLP issues with the utmost importance.

2.1.1 New GLP option ✓Full version

In order to give our users stronger tools regarding GLP, we have introduced the option ① to prohibit the use of unsaved/modified method. Such method is not eligible to be sent to the instrument nor it can be used for measuring.

It is set in the GLP Options dialog, accessible from the main Clarity window in the menu *System - GLP Options...*.
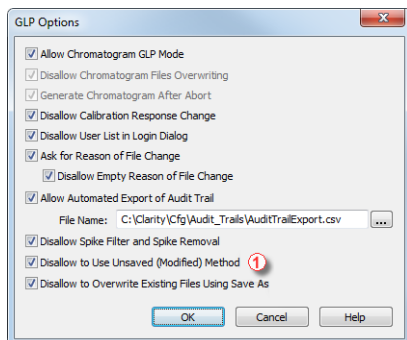

Fig 1: GLP Options

This options is among the settings necessary to comply with 21 CFR part 11 regulations. More information can be found in the M132 manual regarding Clarity in regulated environment.

2.2 Installation

- Clarity now requires Service Pack 1 (SP1) to be installed on Windows 7.
- The Sentinel HW key drivers installation was removed from Typical installation.

2.2.1 Faster Installation ✓Full version

Obligation for majority of drivers to be registered during installation is no longer required. What does it mean?
Twice as fast installation thanks to optimized handling of drivers.
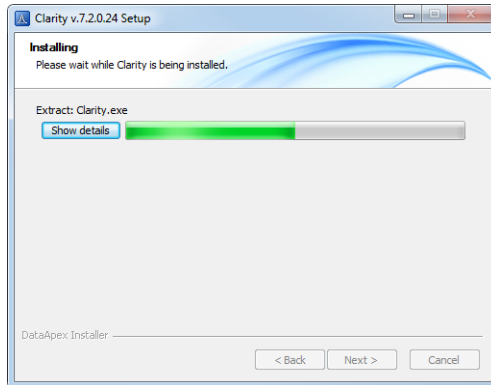

Fig 2: Installation

2.3 User comments in Single Analysis and Sequence

Improved user commentary was implemented in Single Analysis. Comments used to be hidden under the ⋯ and it was not clear whether the comments contained text or not. Now with the separate field it is clearly visible that it contains a commentary. Longer texts can be comfortably edited via the Rich Text Editor invoked by the ⋯ button.
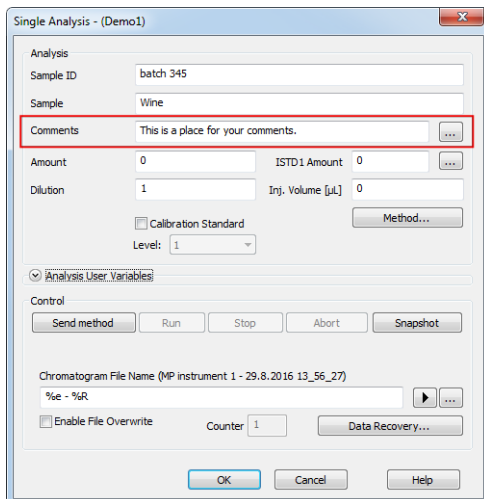

Fig 3: Single Analysis *- Comments*

Now you can add and review comments also from the Sequence . *Comments* column is hidden in the default view. To display it, right mouse click anywhere in the sequence table, choose *Setup Columns...* and in the dialog select to show *Comments* column. If the text in the *Comments* is longer than the width of the column, simply click the ⏬ button to open Rich Text Editor to edit the text.
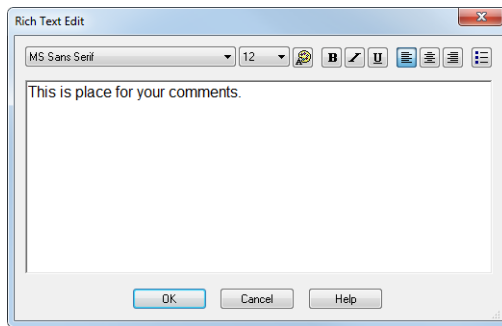

Fig 4: Sequence *- Comments*

Fig 5: Rich Text Edit *for longer comments*

Measured chromatograms will then contain comments copied from the Single Analysis or Sequence and can be edited later on in the Chromatogram window on the *Measurement Conditions* tab. Chromatogram *Comments* can also be printed in *Reports*.

2.4 Improvements in IA Experimental

New improvements regarding Experimental Integration Algorithm have been implemented. Below are two images - both chromatograms have the same integration parameters, however they have detected peaks differently.

- **Fig 6** on pg **6**. has Integration Algorithm set to **7.0** which is default.
- **Fig 7** on pg **7**. has Integration Algorithm set to **7.x Experimental** which is optional and must be selected to be used.
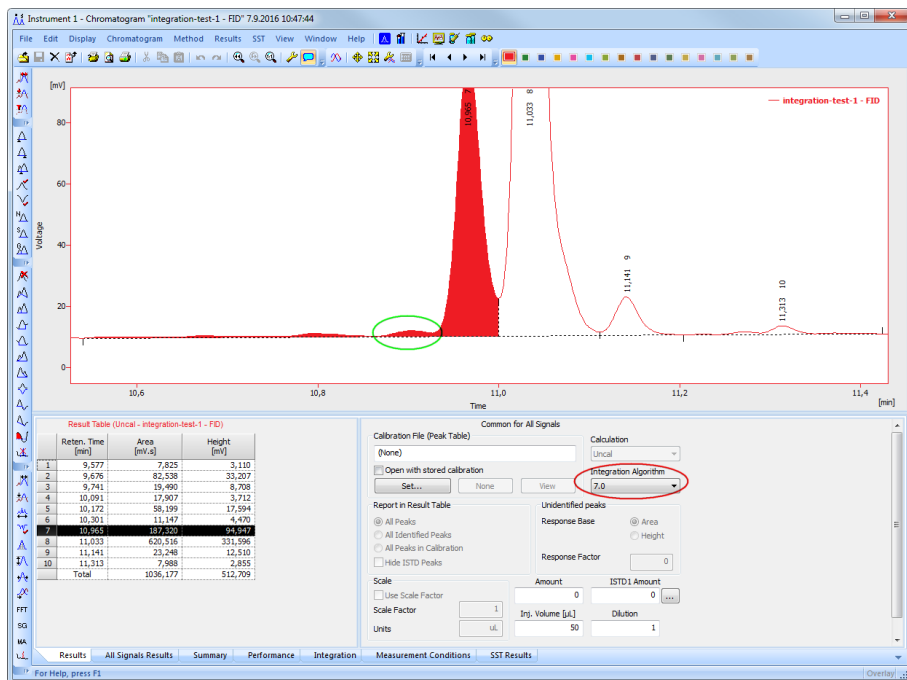

Fig 6: Integration Algorithm 7.0

Several peaks are considered as one single peak which inevitably changes the course of the baseline of the signal. The green oval marks the peak that is responsible for this behaviour.
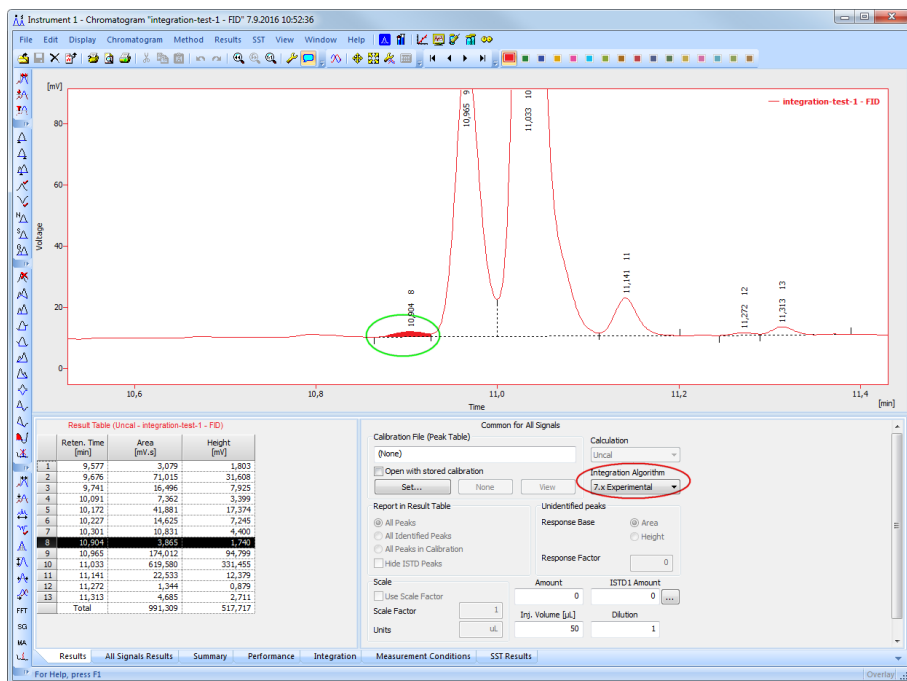
Fig 7: Integration Algorithm 7.0 Experimental

Even though peak 8, marked by the green oval, is lower then twice the value of the threshold, it is still integrated. The reason being is that it is part of a cluster. If it was removed from the cluster it would cause problem for the detection of the baseline. This used to be one of the reasons why the default integration failed to correctly integrate.

The difference between aforementioned figures is obvious and we would like to hear what you think about the improvements.

2.5 Report Setup

New sections in the Report Setup on the Report Header tab.

2.5.1 Sample Description and Sample Parameters

New sections *Sample Description* and *Sample Parameters* replace *Sample Info* option on the Report Header tab.
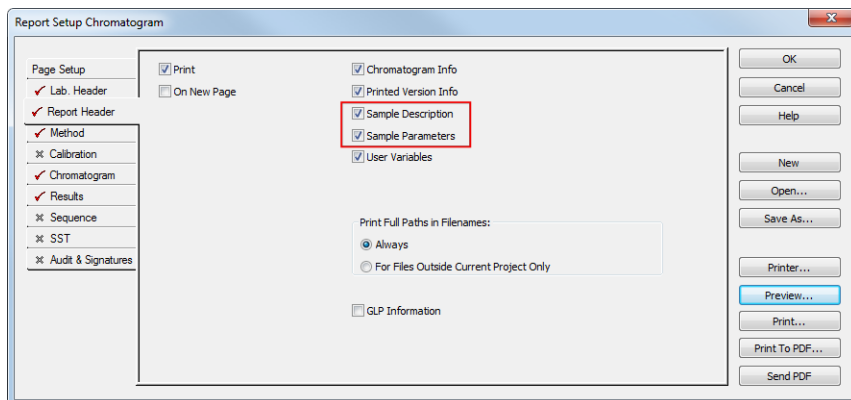

Fig 8: Report Setup - Report Header

The new sections offer a larger variability because *Sample Description* ① displays *Sample ID* and *Sample*. Whereas *Sample Parameters*② report *Amount*, *Inj. Volume*, *ISTD Amount* and *Dilution*. Users can decide what combination they want to show in the report.

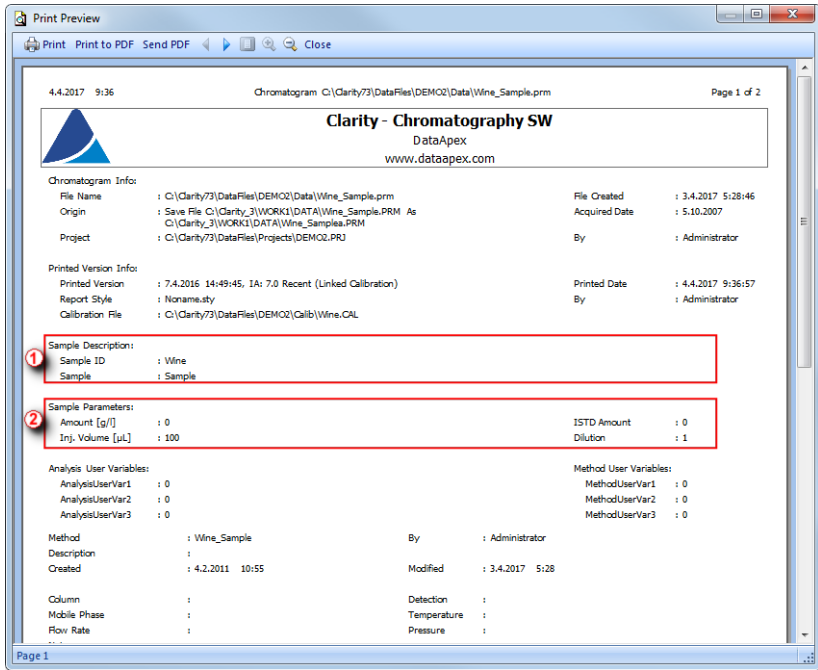*Fig 9:* Print Preview - Sample Description and Sample Parameters

2.5.2 GPC Parameters ✓Full version

GPC extension can now print *K* and *Alpha* values separately.
In the Report Setup on the Report Header tab there is a new *GPC Parameter* checkbox that either displays or hides this section in the report.
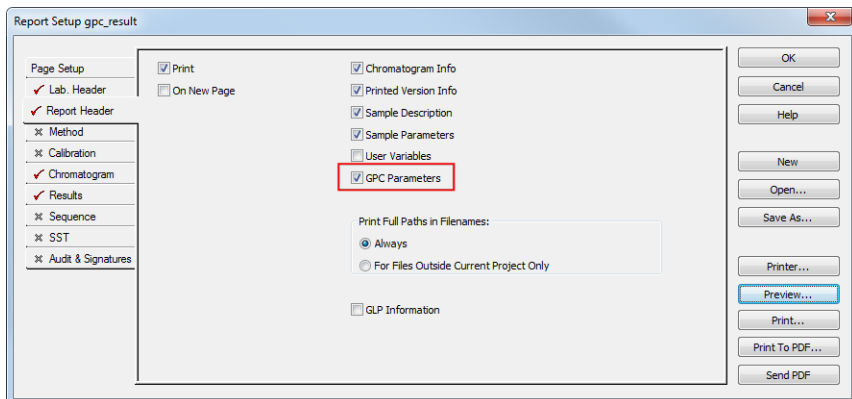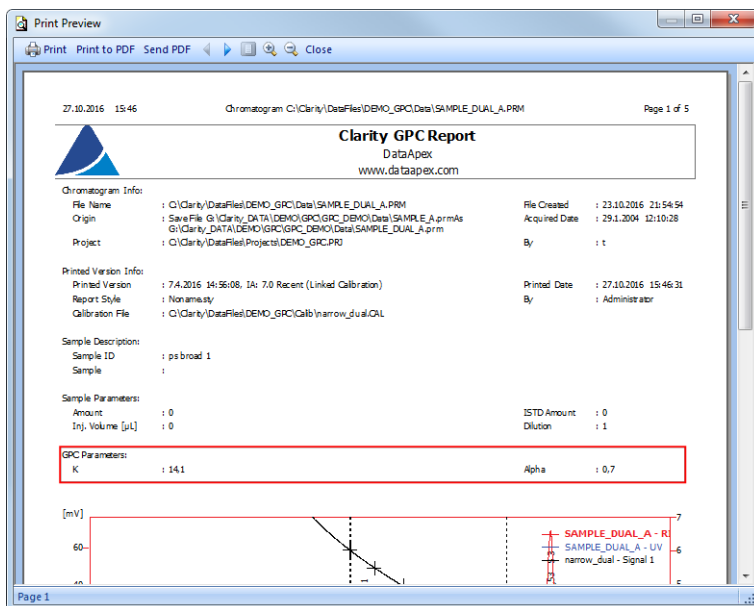

Fig 10: GPC - Report Setup - GPC Parameters

Fig 11: GPC - Print Preview - GPC Parameters

2.6 Various changes in Clarity 7.2

- Clarity faced issues while displayed on monitors with high DPI. The most critical issues, regarding main window, instrument window, tables, labels and font size, have been resolved. However in some areas, the resolution may still be distorted. More improvements are coming soon.
- Configuration file called CLARITY.INI was merged together with OTHERS.INI. It is located in Clarity installation directory (C:\CLARITY\CFG by default) and contains keys for in-depth tuning of your Clarity.
- Snapshot command was disabled outside run.
- Using the *New library* in the PDA window will now invoke the File Save dialog.
- Various known bugs have been fixed. See *What's new* in the About dialog of your **Clarity**.

3 New and updated control modules ✓Full version

This section contains new and updated control modules introduced to Clarity.

3.1 Dani

Updated:

- Master GC driver - updated to version 1.6.2.0.

3.2 Ecom

New:

- Ecom ECDA2000 PDA detector - control module is now in the Testing state.
- Ecom TOY UV/PDA detector - control module is now in the Testing state.

Updated:

- Flash06 DAD driver - updated to version 2.2.0.0
- Flash12 DAD driver - updated to version 2.2.0.0
- Iota driver - updated to version 2.1.0.0

3.3 Shodex

New:

- Shodex RI-501 detector - control module is now in the Testing state.

3.4 YL Instrument

New:

- YL6900 MS detector - control module is now in the Testing state.

Updated:

- YL2000H autosampler - control module is now in the Released state.
- YL2000HT autosampler - control module is now in the Released state.
- YL2100H autosampler - control module is now in the Released state.

3.5 Interlab

New:

- Interlab Omega FLD detector - control module is now in the Testing state.

3.6 Other control modules

No longer supported:

- PG instruments AS 600 and GC 600 modules