

Exporting and Quantitating Chromatography Data from the ACCQPrep HP125

Overview

The ACCQPrep can perform runs on an analytical scale (with injection volume as low as 10 µL) and records data that may be of interest for further quantification beyond the current scope of PeakTrak. PeakTrak is designed from a purely preparative purification standpoint. The recorded data run (.txt) file can be exported into any 3rd-party chromatography processing and analysis software that has an import function. These software packages allow the user to perform additional post run processing including peak picking and peak integration.

A software tool has been developed in order to facilitate the simple conversion of our run (.txt) files into .csv files. These .csv files are generally supported as a common import format into several 3rd-party chromatography processing and analysis programs.

Required Programs and Files

- Run files transferred as (.txt) files from ACCQPrep instrument to a computer
- Data extraction program (available for download from www.teledyneisco.com)
- A 3rd-party chromatography processing and analysis software.
- UniChrom (www.unichrom.com/)
- Clarity (<https://www.dataapex.com>)
- OpenChrom (<https://www.openchrom.net/>)
- Any other program that allows import of .csv files

Procedure

1. Using a USB drive or network access to the instrument, copy the pertinent run (.txt) file from the ACCQPrep.

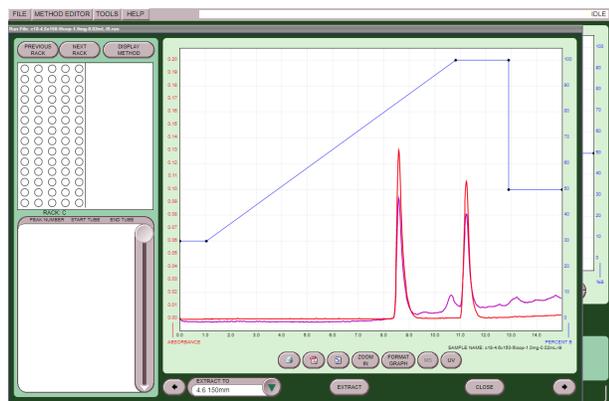


Figure 1: ACCQPrep screen

2. Open the DATA EXTRACTION PROGRAM and choose which detection technique to export and then select whether you would like the data displayed in terms of COLUMN VOLUME (CV) or TIME. Select Go.

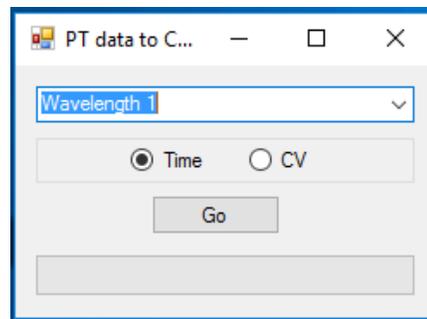


Figure 2: Export display

3. A menu will open allowing the selection of which run file or files to convert. Click OPEN to begin the conversion.

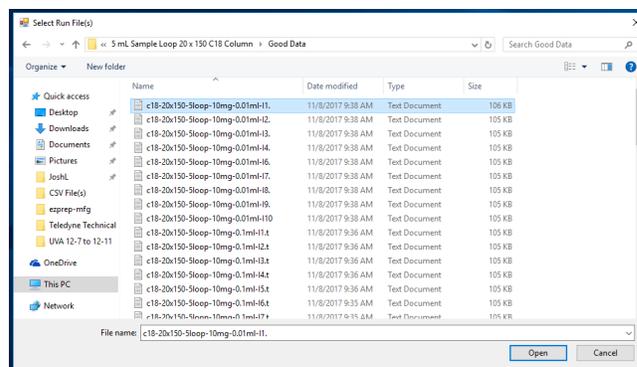


Figure 3: Select RUN FILE screen

4. The files will be imported into a CSV folder on the desktop.
5. Once imported, open the .csv file in the 3rd-party chromatography software program.

If Using UniChrom

1. Start UniChrom.
2. Select OPEN and change the file type to ASCII CSV (*.csv), then select the file you would like to open (Figure 4).

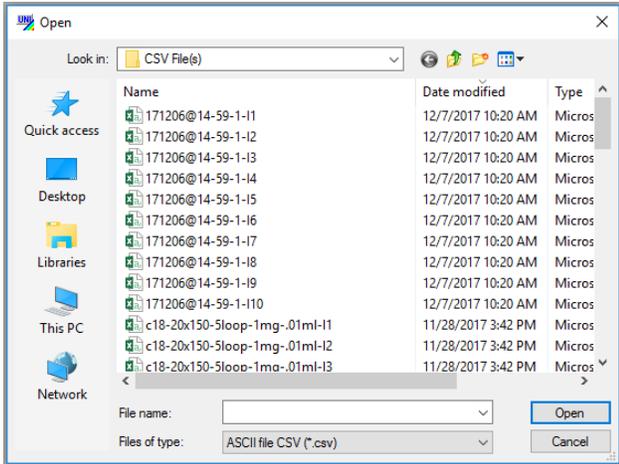


Figure 4: CSV File screen

- Another window opens with different variables to modify; however, these should not need to be changed but should match Figure 5.

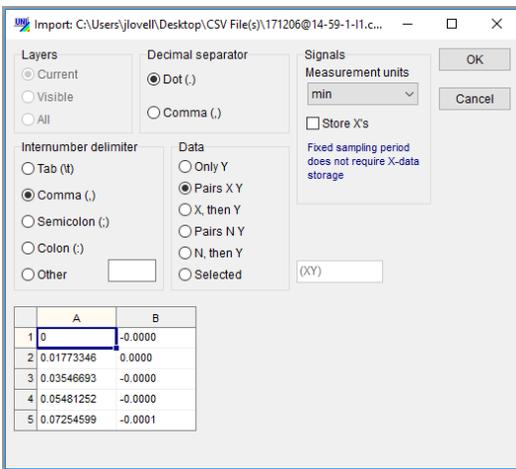


Figure 5: Modifiable variables

- Go to the VIEW menu and select DATA ANALYSIS.

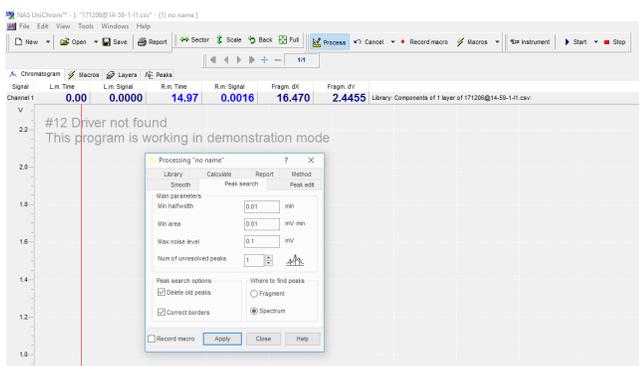


Figure 6: Data analysis screen

- Once the chromatogram is loaded, click on PROCESS and the menu in Figure 7 appears.
- Once your parameters are selected, click on the PEAKS tab (Figure 6) and the following table appears with various data to choose from (Figure 7).

| No | Name | t,min | A,mV·min | H,mV | C... |
|----|------|--------|----------|-----------|--------------------------|
| 1 | 0 | 9.406 | 2.68441 | 147.55000 | <input type="checkbox"/> |
| 2 | 1 | 11.644 | 3.18381 | 175.00000 | <input type="checkbox"/> |
| 3 | | | 5.86823 | 322.55000 | <input type="checkbox"/> |

Figure 7: Peak tab table

If Using Clarity

- Open Clarity and login.
- Open the CHROMATOGRAM window.

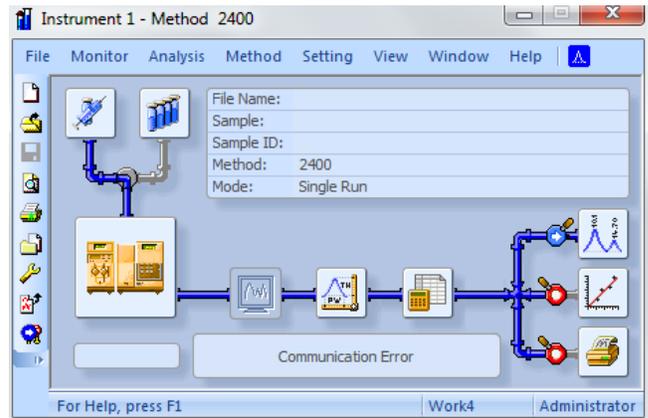


Figure 8: Chromatogram window

- Go to FILE and select IMPORT CHROMATOGRAM, then select the CSV (*.csv) file you would like to open (Figure 9).

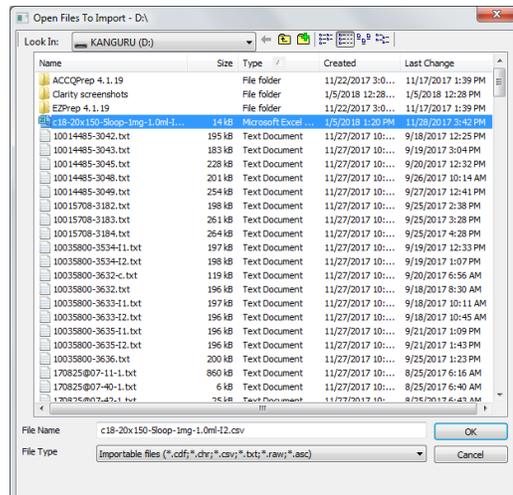


Figure 9: Modifiable variables

- Another window opens offering you different variables to modify, these should not need to be changed, and an example is shown in Figure 10.

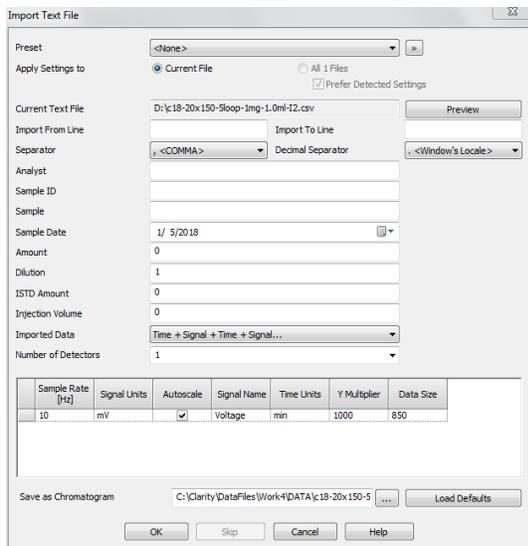


Figure 10:

- Once the chromatogram loads, the software should process and integrate your data, giving a data table in the lower left quadrant as shown in Figure 11.

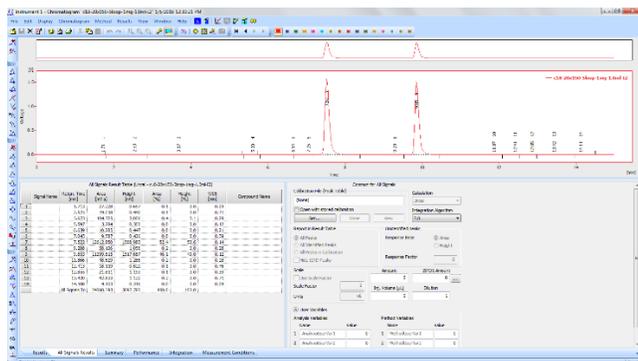


Figure 11:

- You can change your integration parameters by going to METHOD and selecting INTEGRATION, which brings up the options shown in Figure 12.

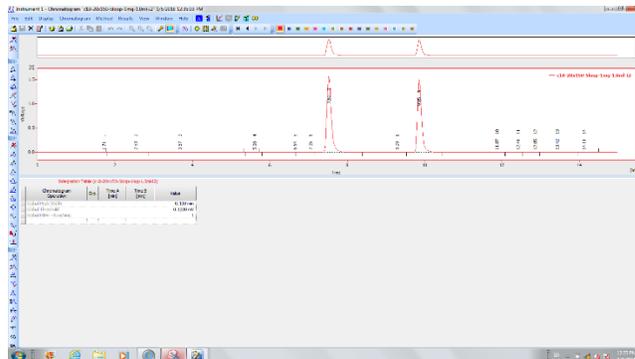


Figure 12: Integration screen

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