



## **Running the Element Analyzer Software: Clarity**

- 1. Open the Clarity Software
- 2. Open the data acquisition file which looks like two peaks. This monitors the baseline of the machine. Always keep your eye on this screen.
- 3. Inserting data in the sample table—open the sample table
  - a. In the first sample column put the position number of the sample in the zero-blank autosampler
  - b. In the second sample column put the sample ID
  - c. In the weight column put the sample weight
  - d. Sample type—Choose whether the sample is a bypass, unknown, standard or blank
  - e. If a STANDARD, you must choose the level and the standard type (PEACH). The lowest peach weight is LEVEL number '1', the second is '2' and so on. If the peaches are not in
- 4. Save the Table in the following format: Year, Month, Date, your last name and tray number (e.g. 10\_11\_12 Cardelus Tray 1). If you are working on more than one project, give the project name before tray (10\_11\_12 Cardelus Ethiopian Soils Tray 1)
- 5. On the upper right you will see a regression with a red linear line, this is the calibration file. Click on it. This will open up the calibration window. You will see many different elements on the window. Make sure your file name is on the top. Click on all elements except C and N, and Delete.
- 6. Now you need to change the RETENTION times of C and N. The retention times tell the machine where to look for the N and C peaks. You need to click on the retention window for N and change it to 1.87 and you can leave the left and right as 0.2. Then change the C retention time to 3.0 and the left and right windows to 0.4.
- 7. SAVE
- 8. When all the data are input and the baseline looks good, press run—it is the icon with the run away file.
- 9. You should hear a sound from the computer and the autosampler shift over and drop the sample. Watch the trace in the data acquisition screen.
- 10. When the sample is finished running, there will be another computer sound and the Chromatogram will come up and you will see the final peaks and the calculated %N and %C.
- 11. The Chromatogram file has multiple tabs. The RESULT of the last sample and the SUMMARY of all of the runs. You can only overlap your peaks from multiple runs if the OVERLAY feature is clicked on the left.
- 12. When you are finished with the run, click on the top, gray part of the summary sheet. Copy and Paste it into an excel file.
- 13. Save the file to you folder on the Desktop (if you don't have one, create it).
- 14. Send youself the file and POST-PROCESS the data within one week of running the data.