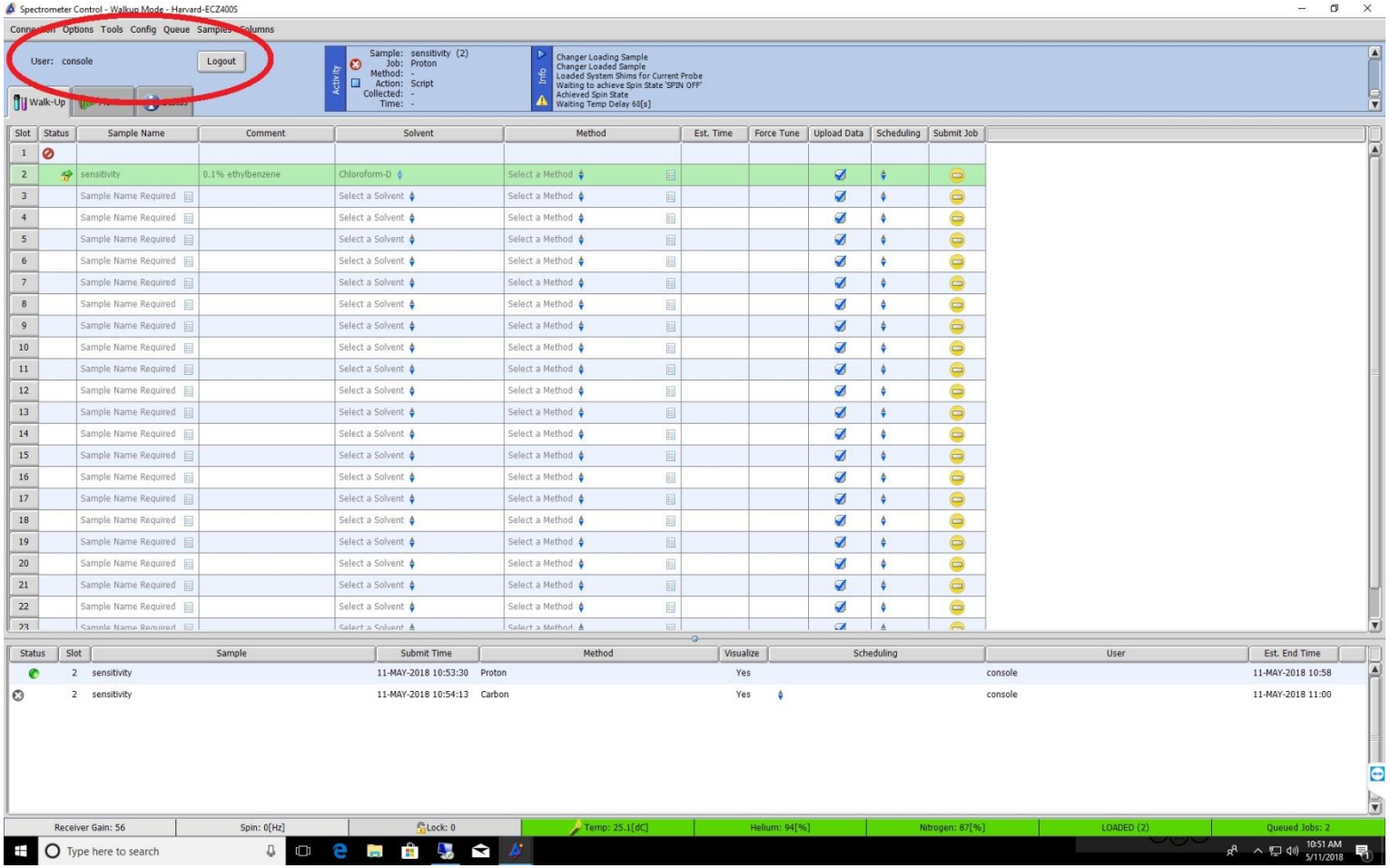
Brief Instruction On Using The JEOL J400 NMR Spectrometer

(2nd draft, 5/10/2018)

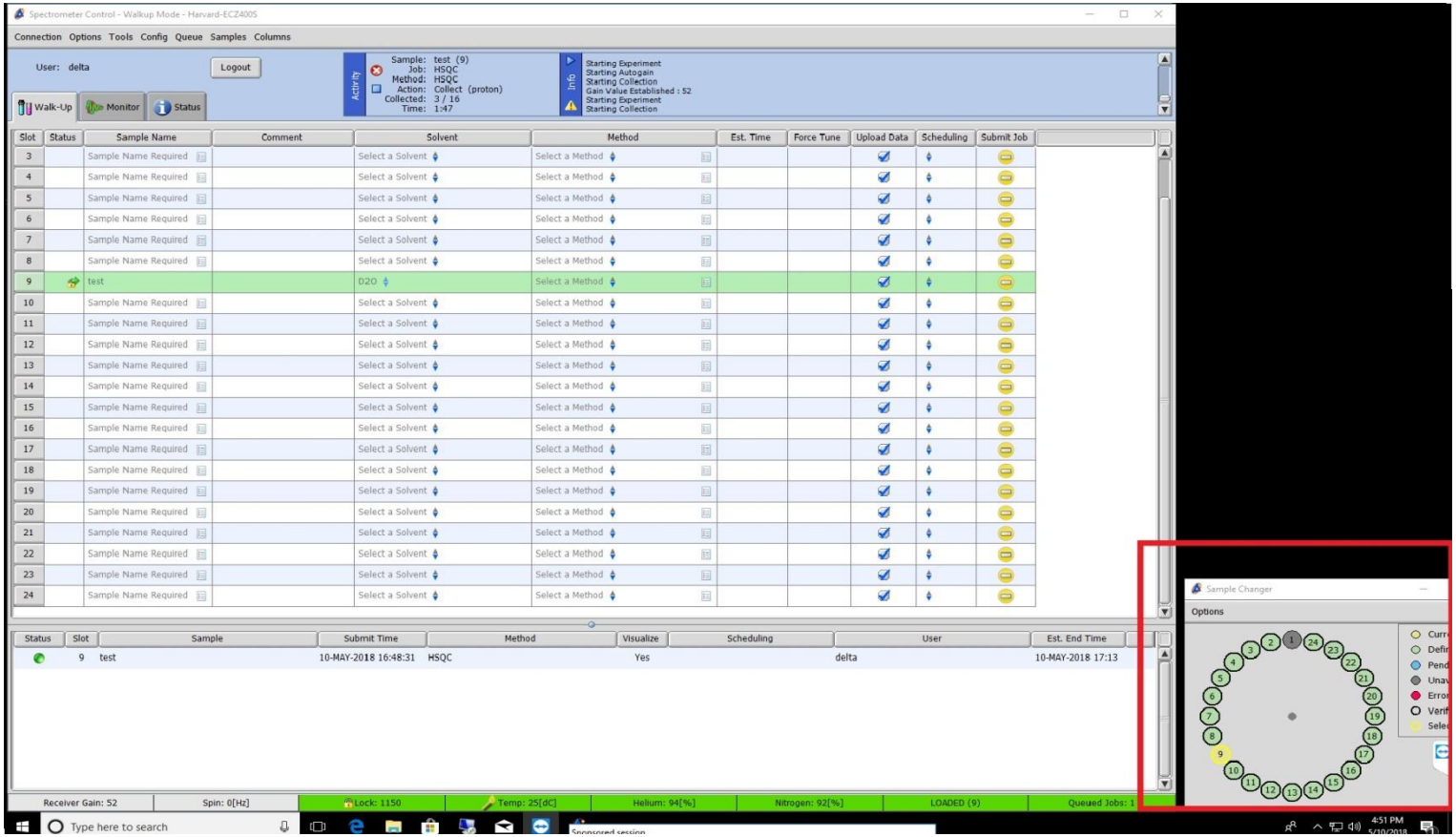
Sample Preparation

- Insert the NMR tube into the spinner and adjust the depth with the JEOL depth gauge. (Make sure the inner part of the spinner is fully extended.)
- Put the sample with the spinner into an empty slot of the carousel. Remember the slot number.

To change user, click on the Login tab in the Spectrometer Control window and enter your username and password.

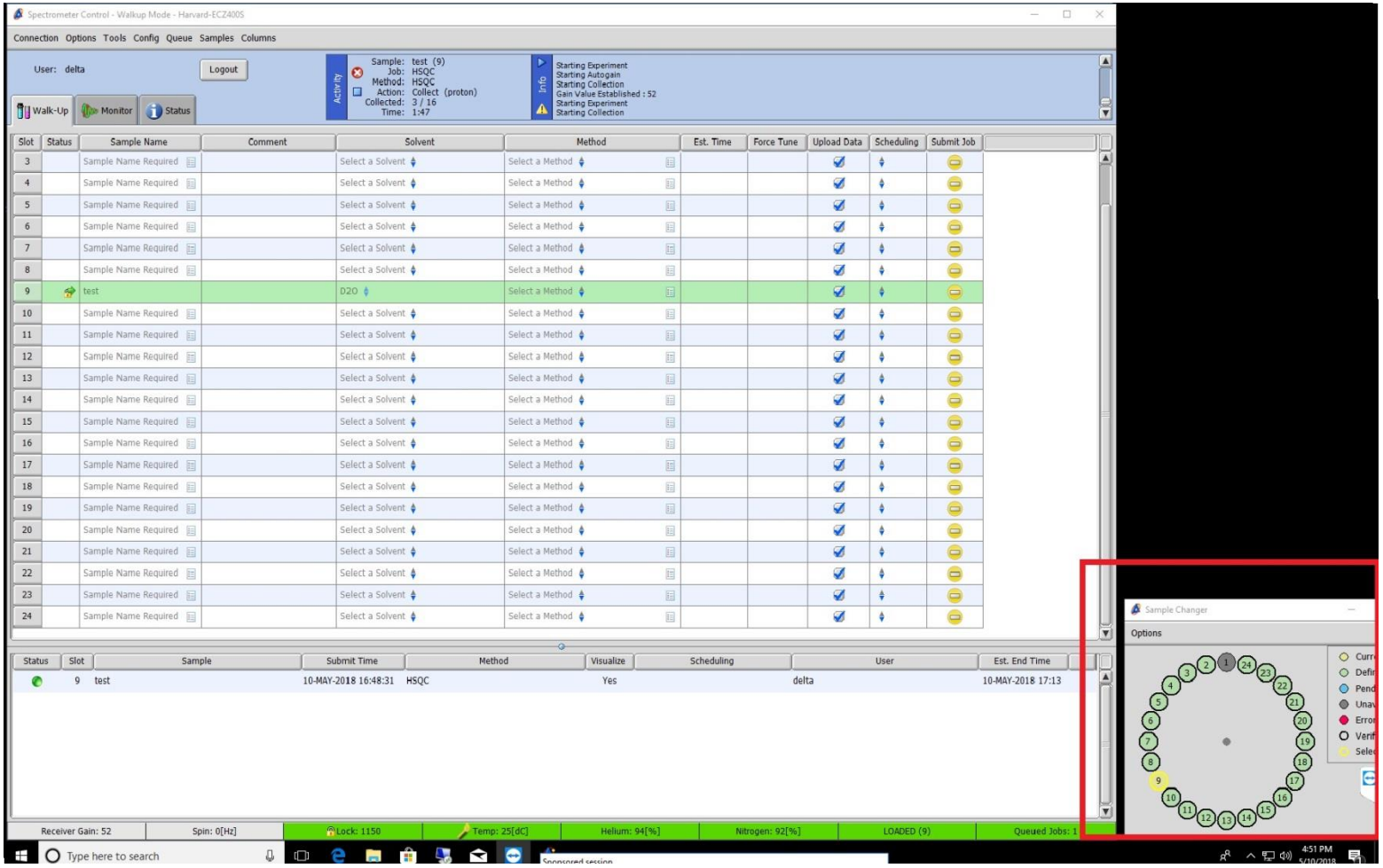


Please note that there is a 24 slot automatic sample changer installed. The sample diagram shows the current sample in the probe in yellow, those samples queued in blue. If the slot has been occupied with an idling sample, you can take the sample tube out and use the slot for your sample.

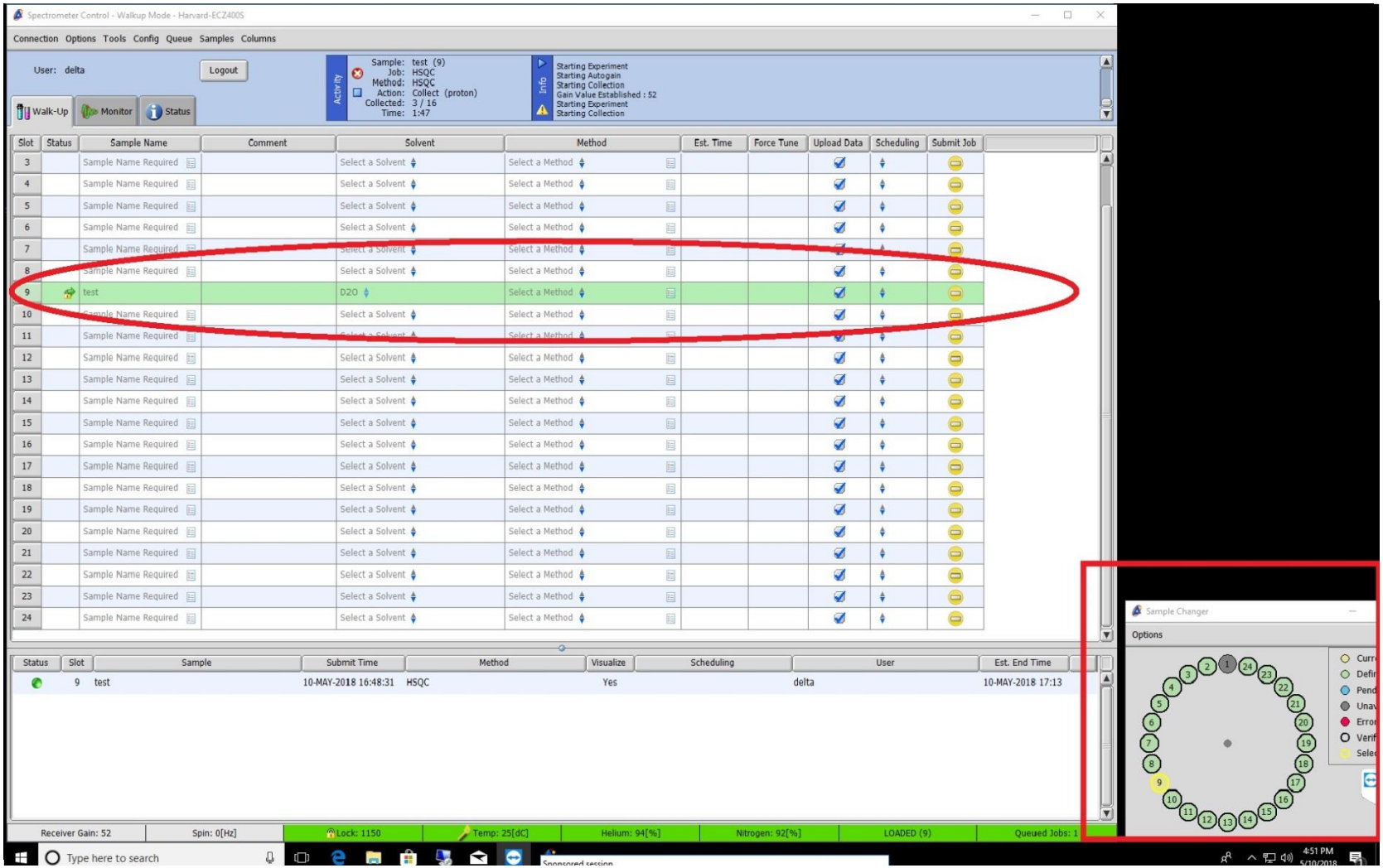


Setting up jobs for the sample

- Click on the line with the slot number of your sample or double-click on the circled number in the sample diagram to hi-light the line of the sample selected and enter all information needed.

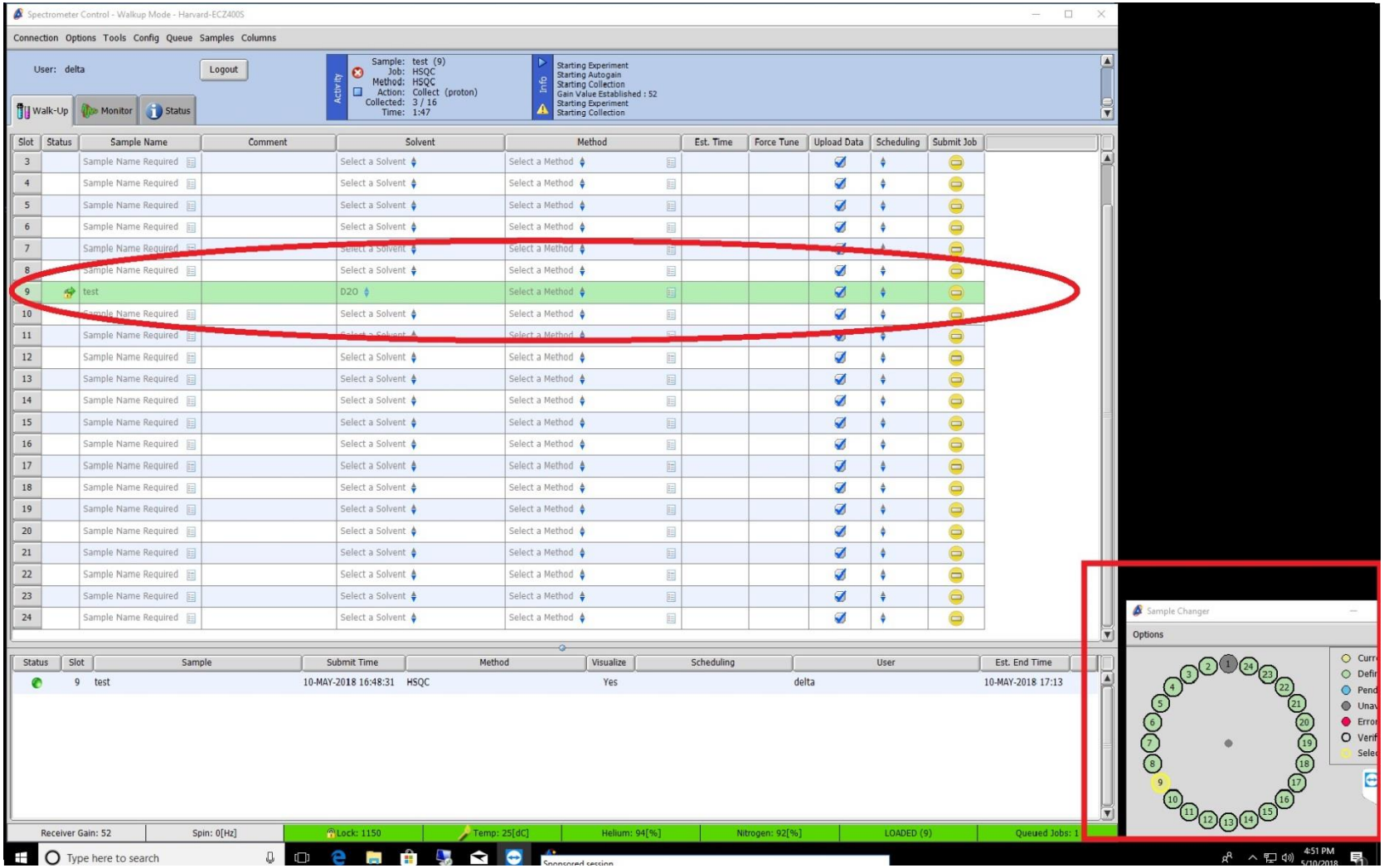


Enter sample info (name, comment, solvent) and select the experiment in the Method area. You can click the little square on the right of the Method to open a window where you can change any acquisition parameter such as the number of scans, the spectral range, the relaxation delay, etc.



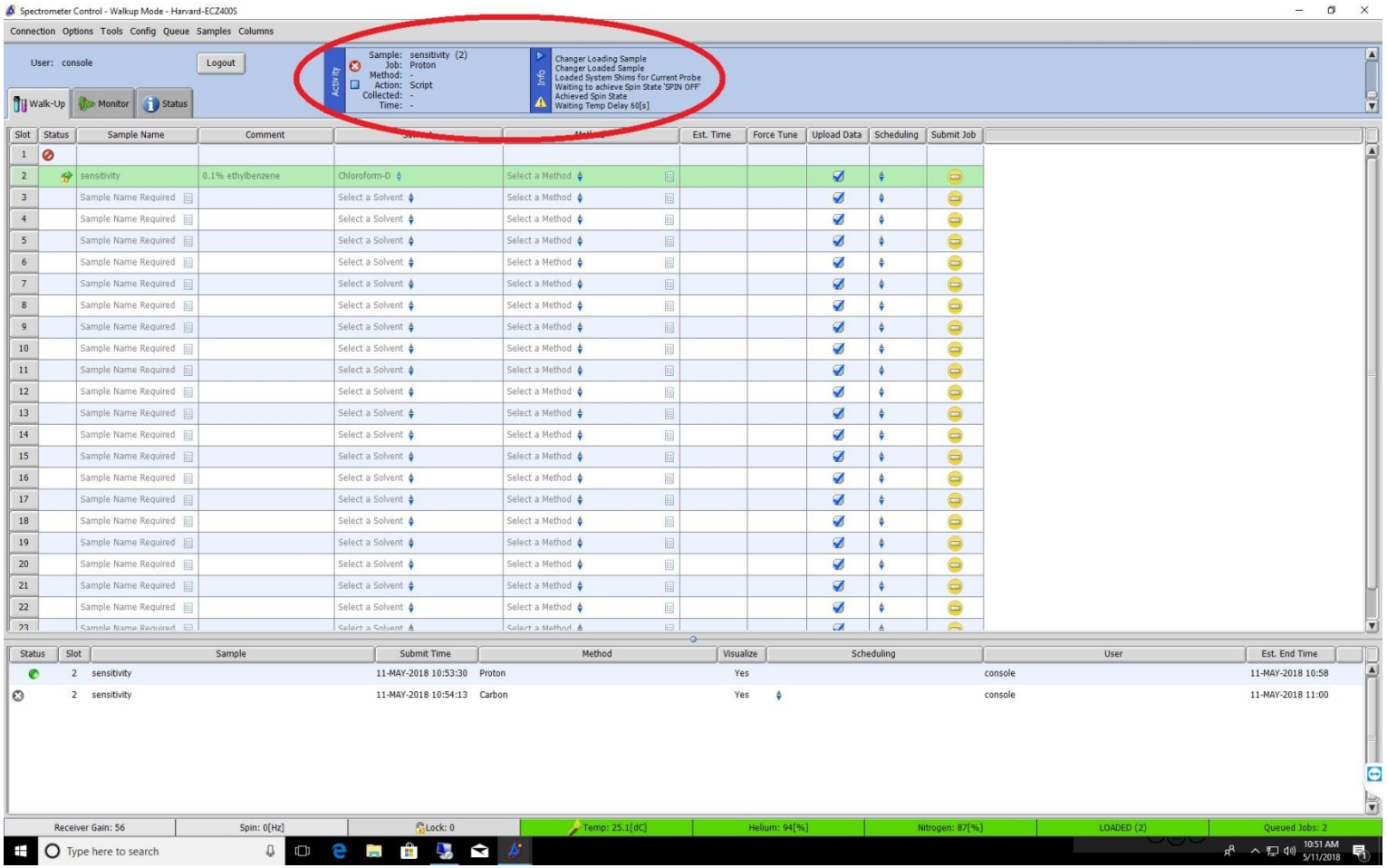
Starting the experiment

Click the blue triangle icon at the right end of the line to start the experiment.
(You can add more experiments to this sample by selecting the Method and click the blue triangle icon again.



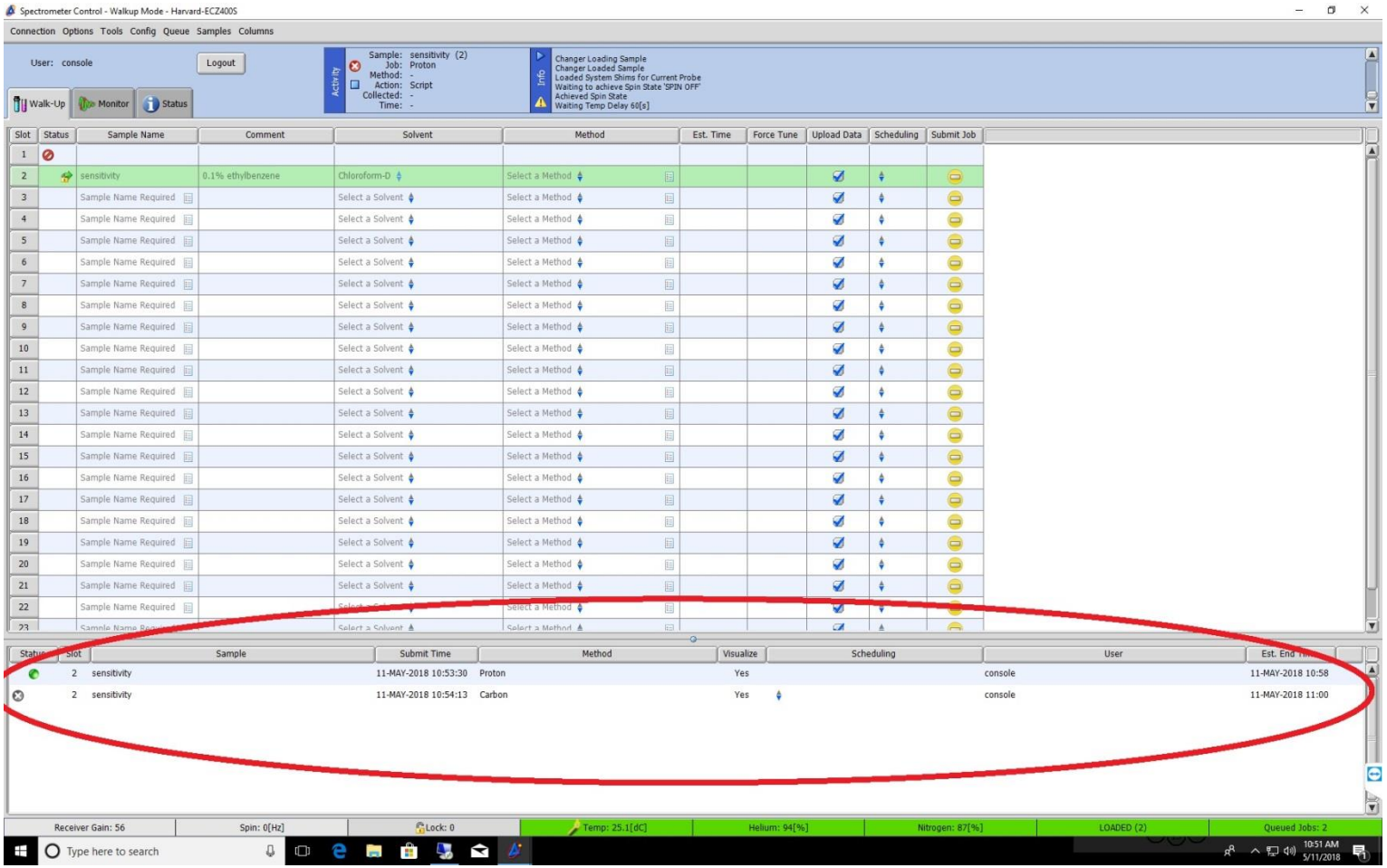
Stopping current experiment

To stop the current experiment, simply click the blue square icon, the data collected will be saved. Clicking on the red X icon will abort the current experiment without saving the data.



Aborting the queued job

You can delete the queued experiment by clicking on the X icon on the left side of the line (only the user who submitted this job can do this deletion).



Finishing up

You can log out after submitting all your samples and experiments. Other users can then log in to submit their samples. If there is no more job submission, the dummy spinner in slot #1 will be automatically loaded 60 seconds after the end of all experiments. The last user will also be automatically logged out.