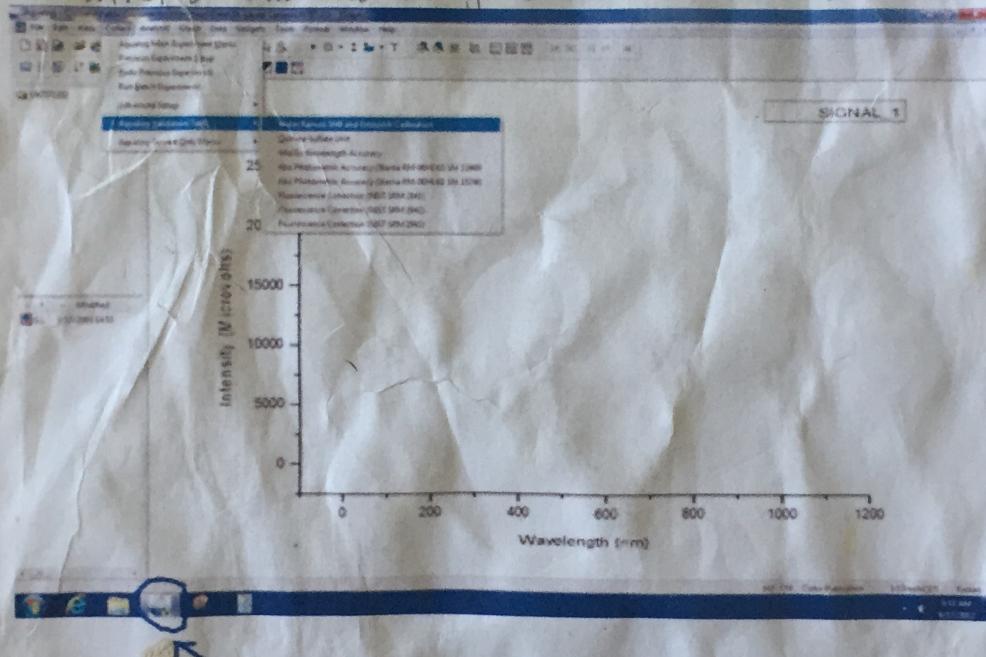


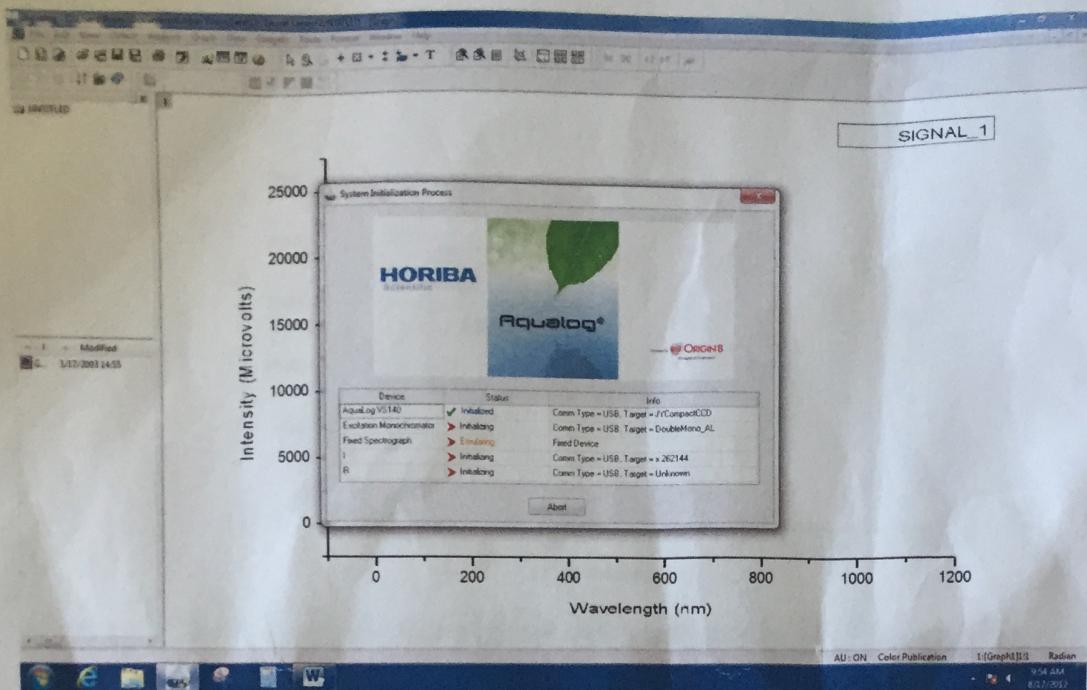
Aqualog SOP

- Turn on the computer, monitor and the Aqualog. The Aqualog switch is located on the left side of the machine towards the back. *~30-45*
- Let the light in the Aqualog warm up for ~~10 minutes~~. During this time prepare for operating use.
- If the cuvettes have been sitting in methanol, rinse them with DI water at least 10 times.
- Use fresh DI water each day!
- Open the Aqualog Program.
- Prepare a blank sample by drying the cuvette with a tech wipe and ~~filling it with DI water~~ (fill so that it is almost full, barely any space). Cap the top and wipe the cuvette with a tech wipe till it is dry and there is no streak marks.
- Place the cuvette into the Aqualog by lifting the top and putting it securely into the holding apparatus.
- Once inside the program click the **Collect** option from the top of the screen and scroll down to the **Aqualog Validation Test** option and select **Water Raman SNR and Emission Calibration**.

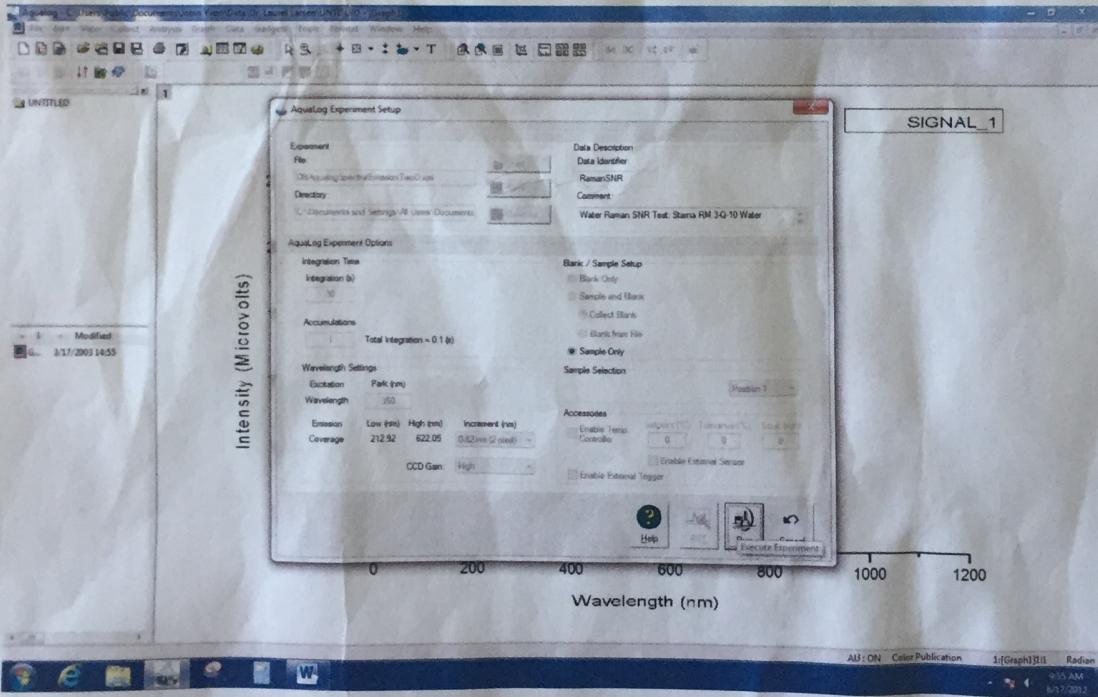
UPDATE: Do this test using the Starna water (in the sealed cuvette)

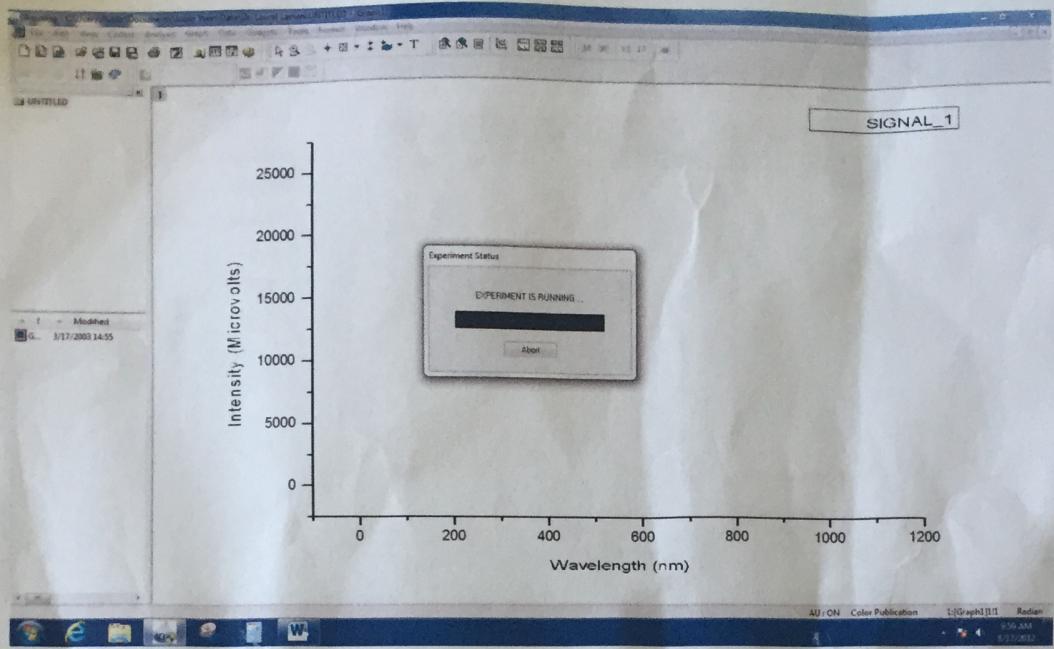


- Once selected the Horiba Aqualog system will run a diagnostics check (If any problems occur exit out of the program, reopen the main program, and run another **Water Raman SNR and Emission Calibration**).

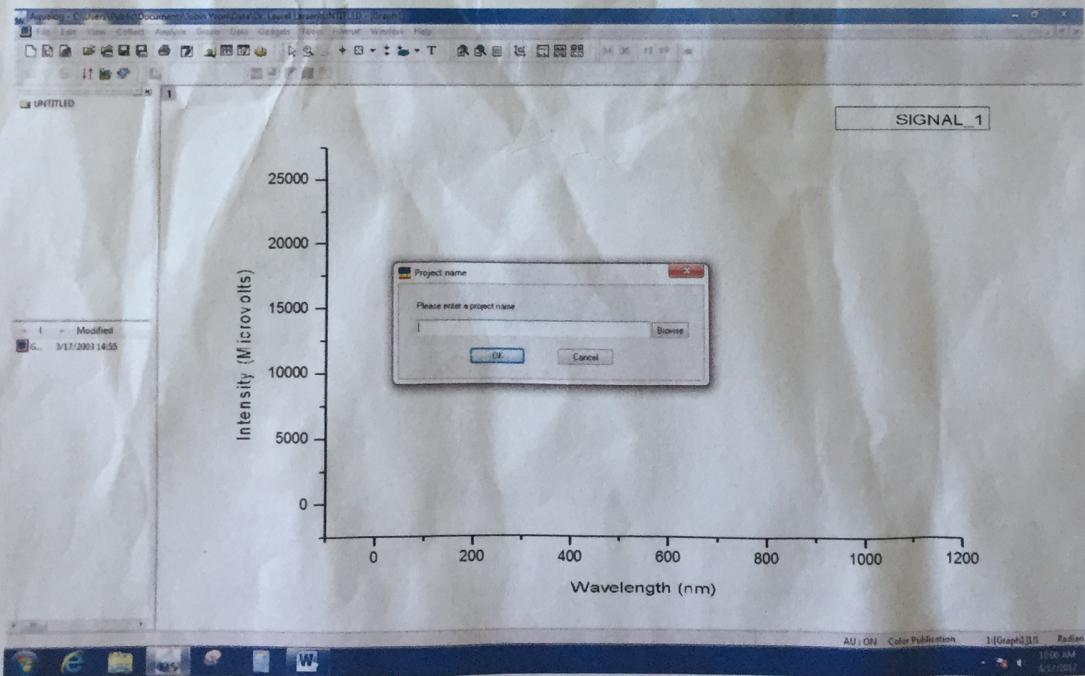


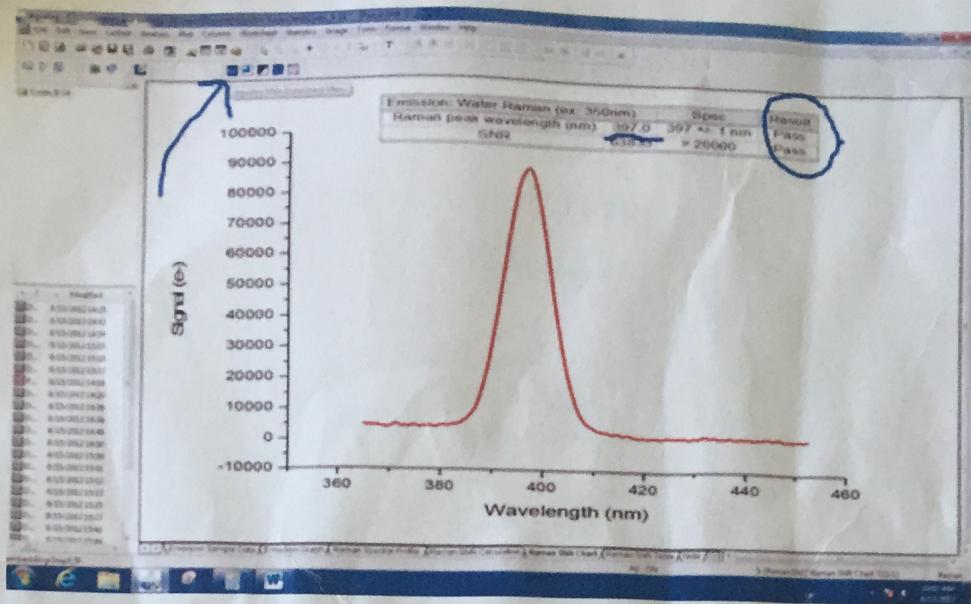
- Once completed the **Aqualog Experiment Setup** menu will appear. Click **Execute Experiment**.



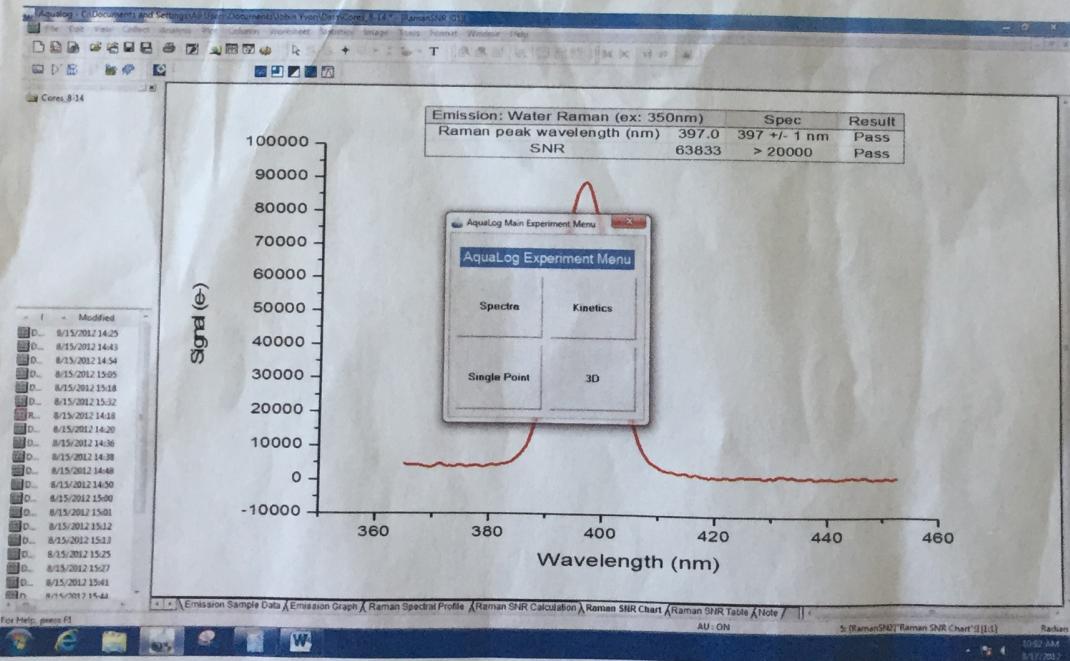


- The program will prompt you the experiment is running and wait patiently for the **Project name** box to appear. Enter a suitable file name and write the name on the **Aqualog Datasheet**. At this point fill out the remaining fields on the datasheet (such as: name, date, and time).

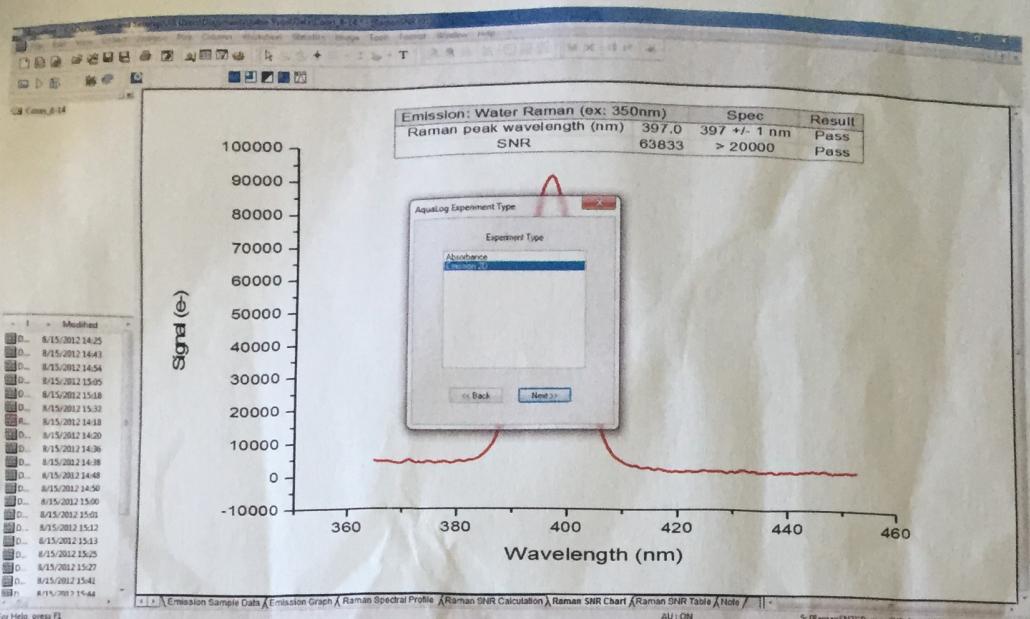




- The following graph will appear when the experiment is done running. Make sure that the blank has the word **Pass** stated in the column titled **Result**. Write down the Raman peak wavelength — and **SNR** (nm) on the data sheet (the acceptable range is 397 ± 1 nm). Then select the **Aqualog Main Experiment Menu** button from the command buttons.



- The menu has four options. Choose the **Spectra** button on the top left.



Insert blank (DI water) into aqualog

- Select the Spectra>Emission 2D option and an experiment menu will open. Change the **Integration Time (s)** to 10, **Excitation wavelength (nm)** to 350, the **Increment (nm)** to **1.64 nm (4 pixels)** and select the **Blank Only** option. Record the **Increment** and **gain** on the Datasheet. Then click the button to the right (little square with three dots). Create a folder containing the month date and year (ex: August 17 2012). Name the blank **2DInt** and press **open**. Click the **Run** button and the experiment will start.

