

Quantifying Density in Solutions with Mettler Toledo Density2Go Density Meter



Created by: Orlando Ruiz, Marcos Barreto, Edwin Caballero

Manager: Samuel Hernandez-Rivera

SOP-01	Orlando Ruiz Marcos Barreto Edwin Caballero		University of Puerto Rico at Mayagüez
Effectivity: June/11/2022	Quantifying Density in Solutions with Mettler Toledo Density2Go Density Meter		Revised by:
Revised:			Approved by:

DENSITY METER SETUP

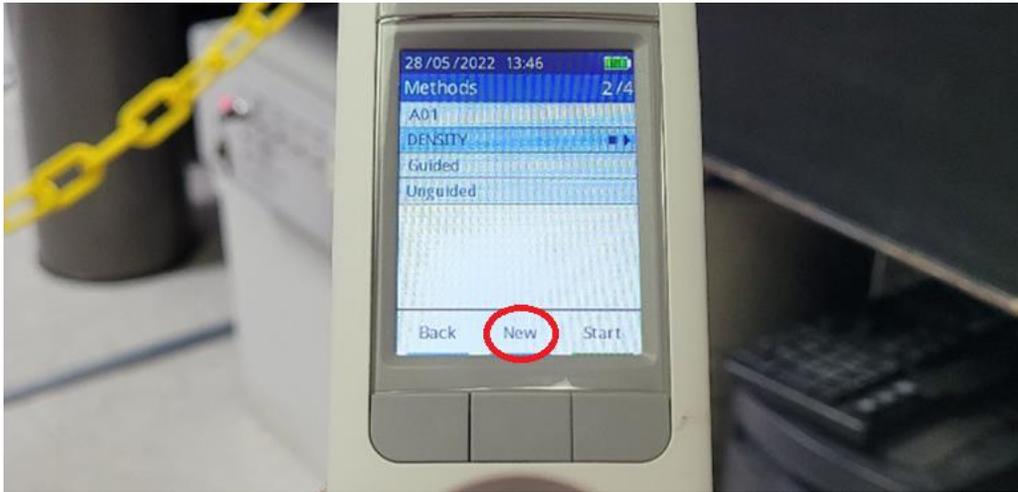
1. Turn on the density meter by pressing the green button below the screen.



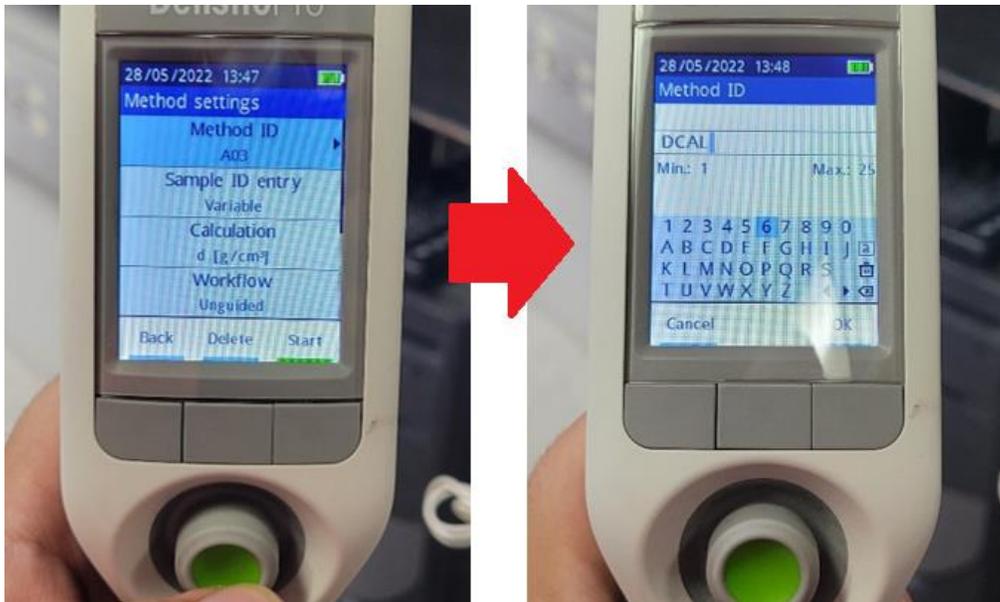
2. Go to methods by going to Menu > Methods



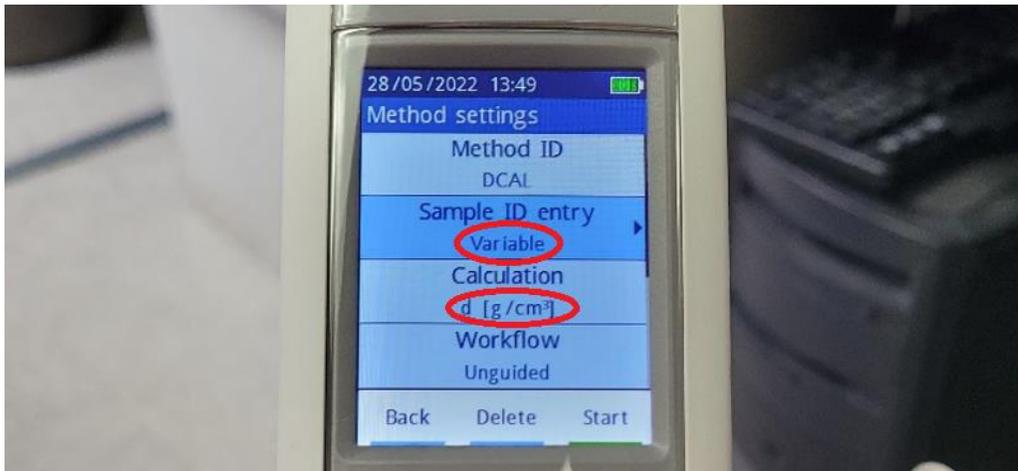
3. **Create** method by pressing the middle button.



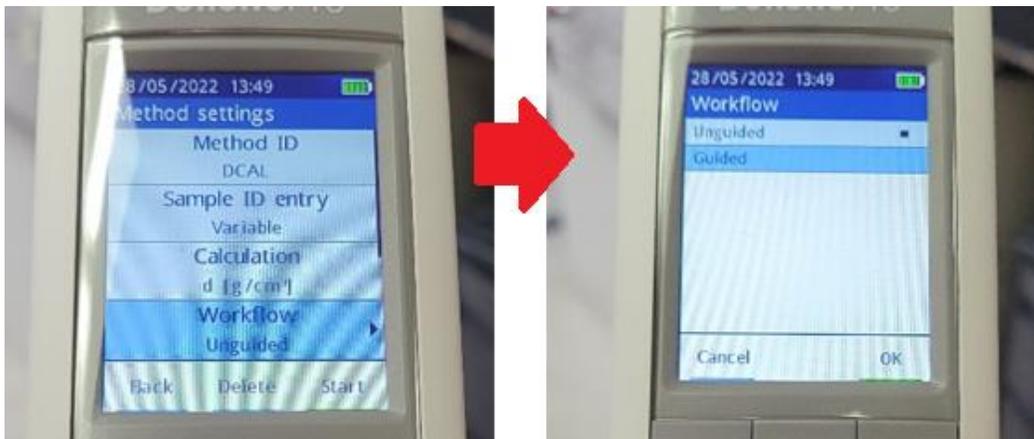
4. **Change method name** by going to "Method ID" and moving the green button to the right.



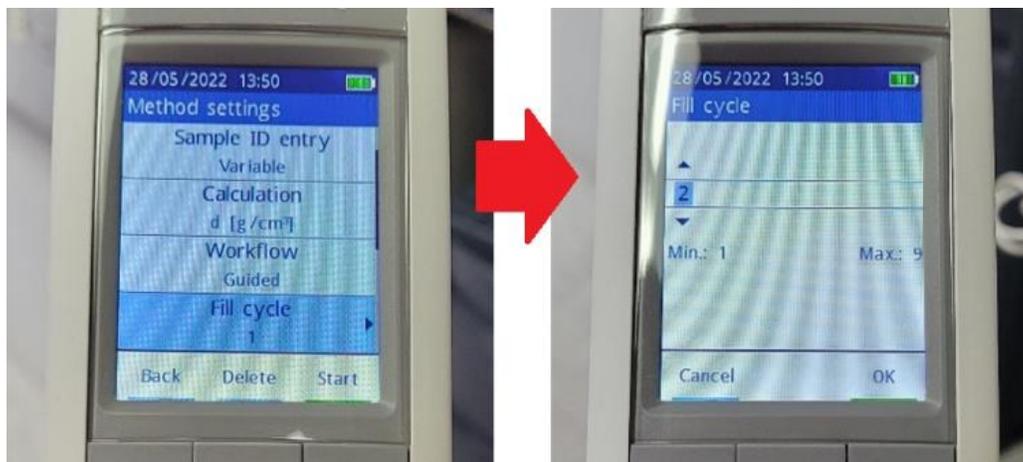
5. Set Sample ID entry to Variable and Calculation to d [g/cm³].



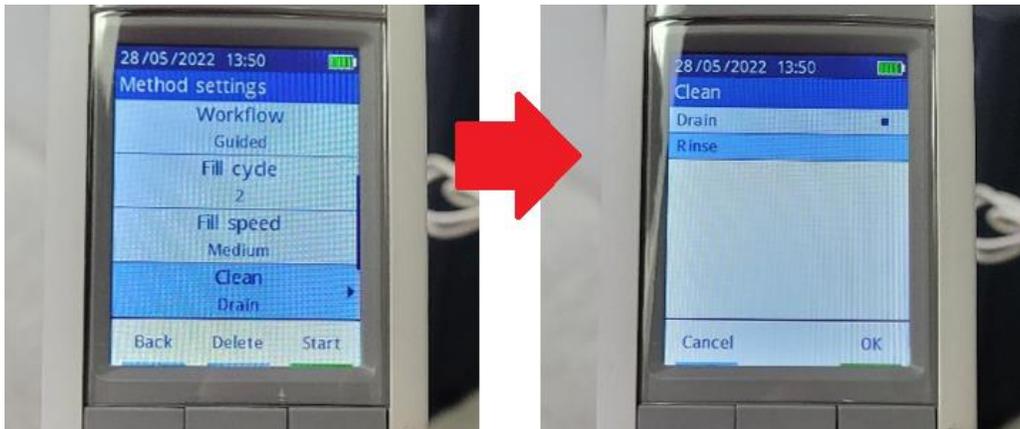
6. Change workflow to "Guided".



7. Change Fill Cycle to "2" minutes.



8. Change Clean to “Rinse”.



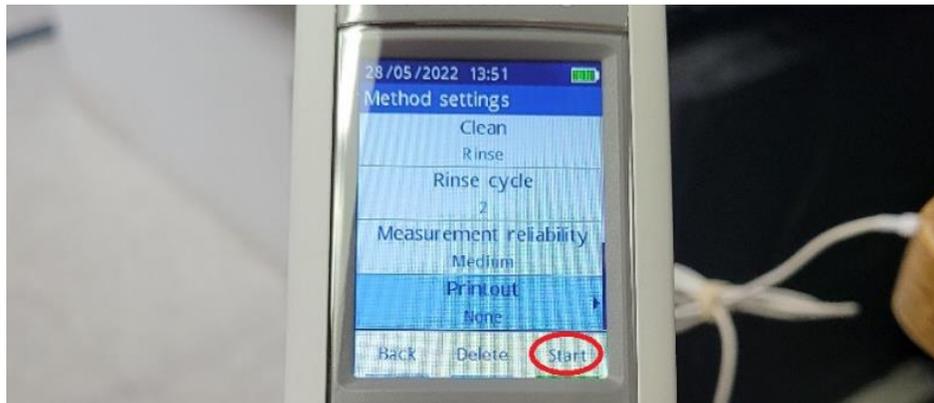
9. Change rinse cycle to “2” minutes.



10. Change Measurement reliability to “Medium” and Printout to “None”.



11. **Start** acquisition by selecting “Start” with the right button.

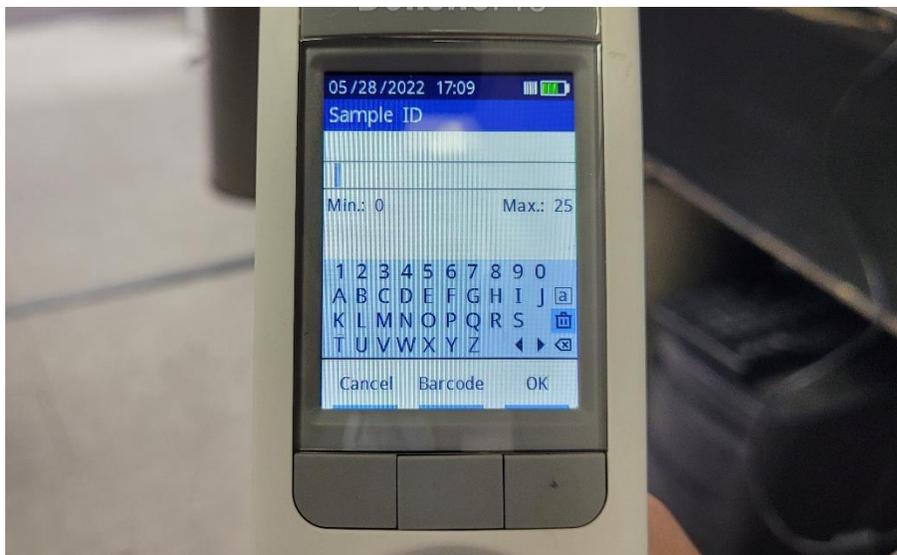


ACQUIRING SAMPLE SPECTRUM

1. Select "Start" by pressing the right button.



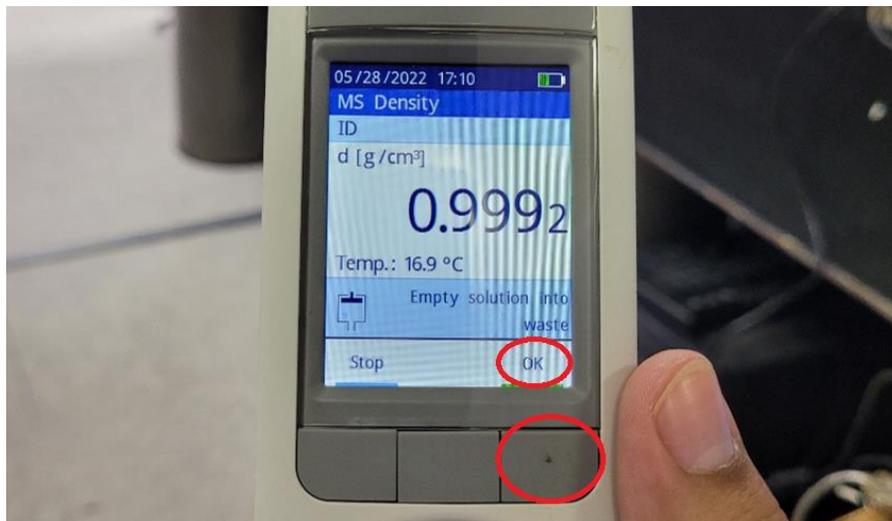
2. Write sample name and click "OK".



3. Insert plastic tube inside sample solution beaker and click "OK".



4. Empty solution inside the density meter in the "WASTE" beaker.

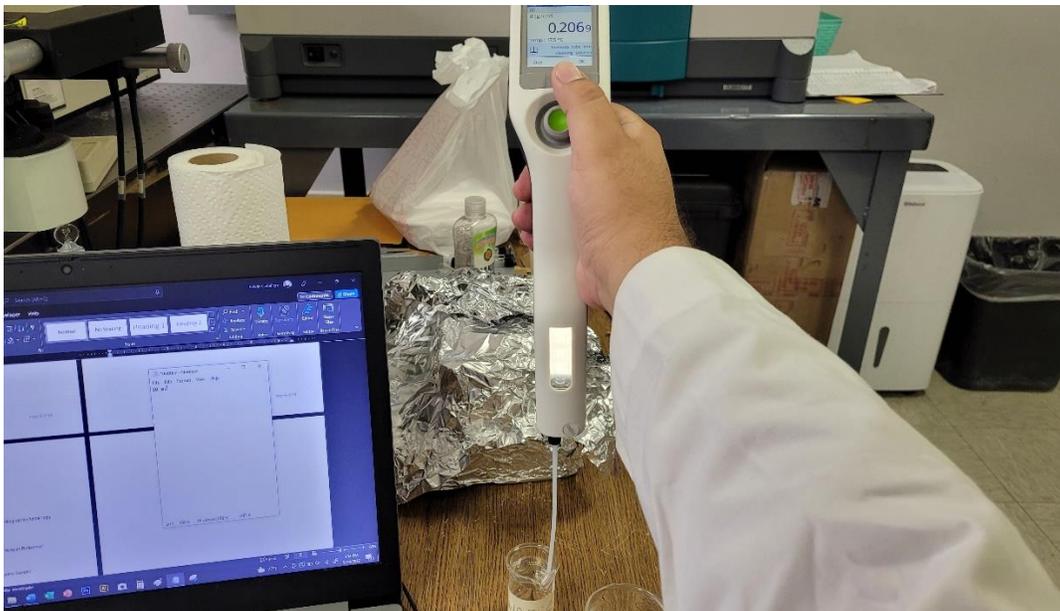


5. Repeat steps 3-4 to measure another replicate of the sample.

6. Document density of the sample and temperature.

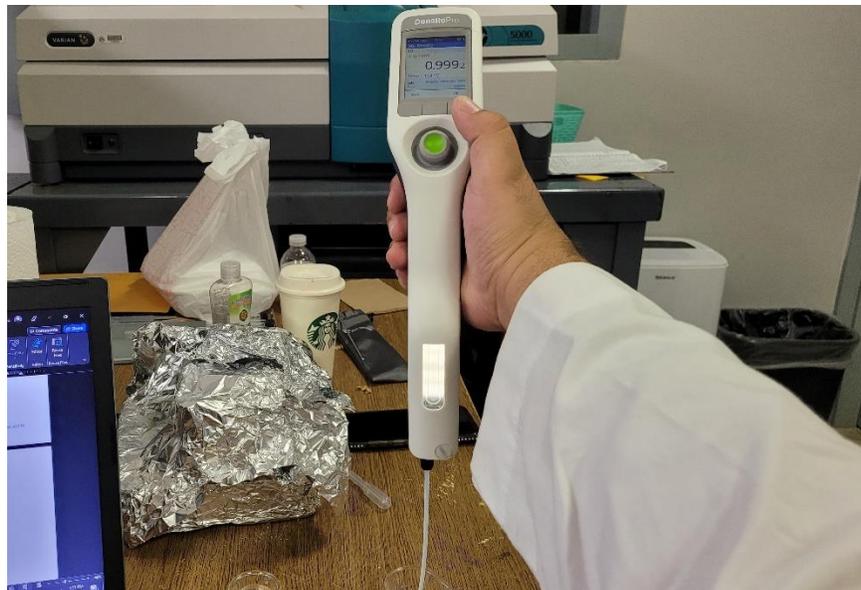


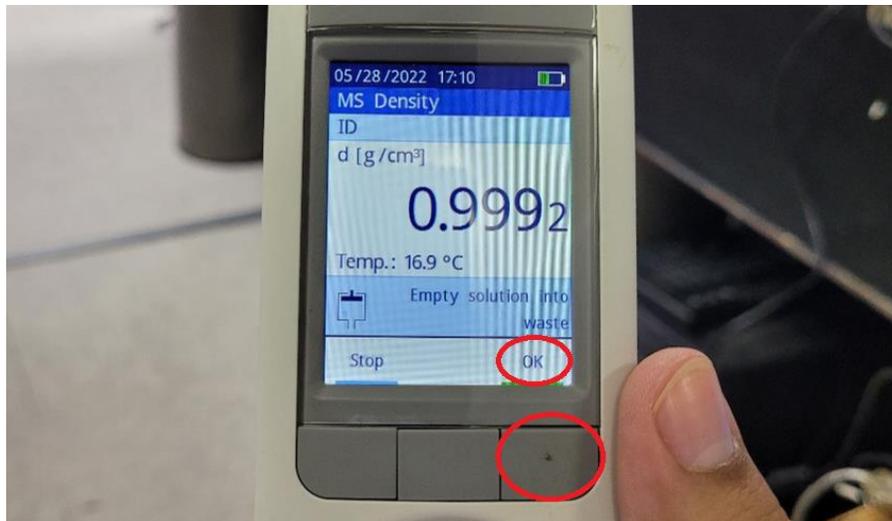
7. Insert plastic tube inside a beaker with water to clean the density meter.





8. **Insert** plastic tube in the waste beaker to remove water inside the density meter.

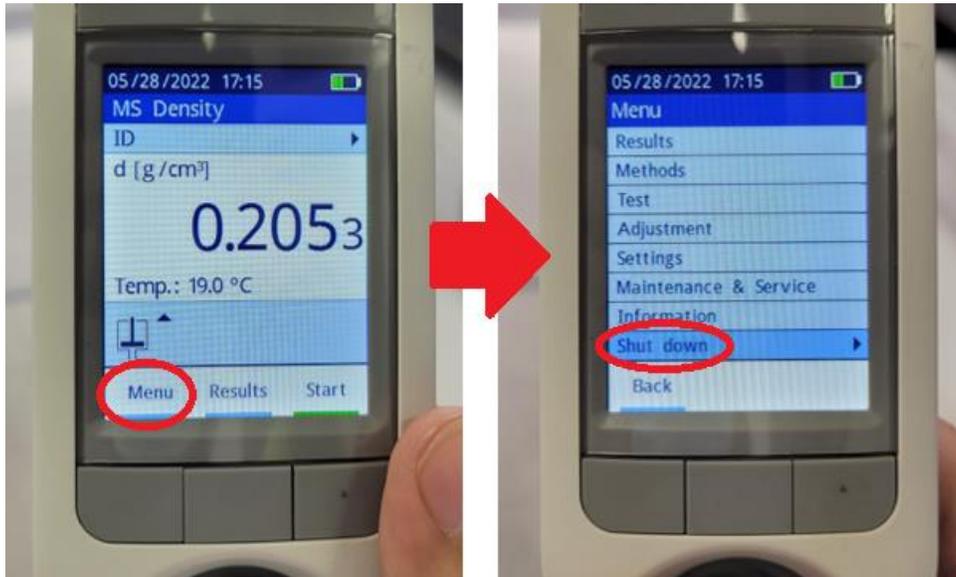




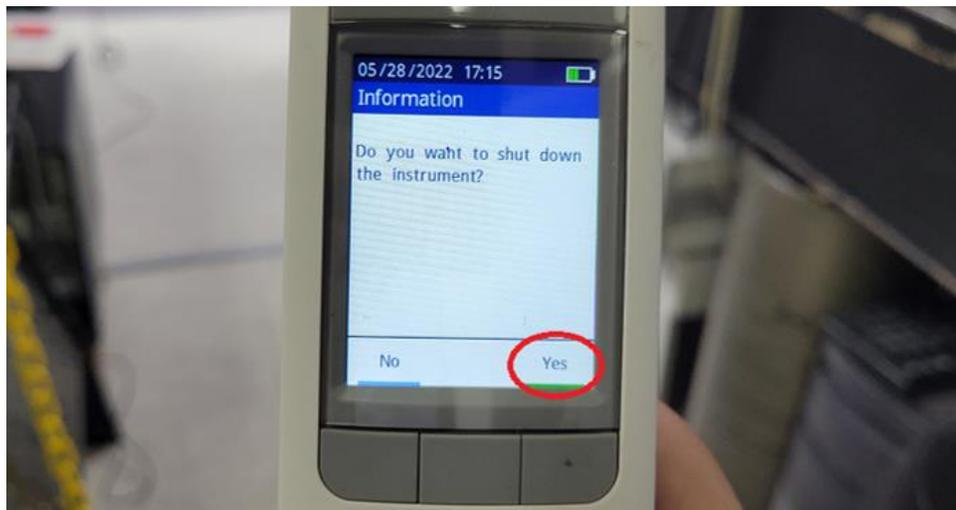
9. **Repeat** steps 7-8 to clean the density meter twice.

TURNING OFF THE DENSITY METER

1. Select "Menu" by clicking the left button then select "Shut Down".



2. Select "Yes" by clicking the right button.





Advisor Signature

Co-Advisor Signature
