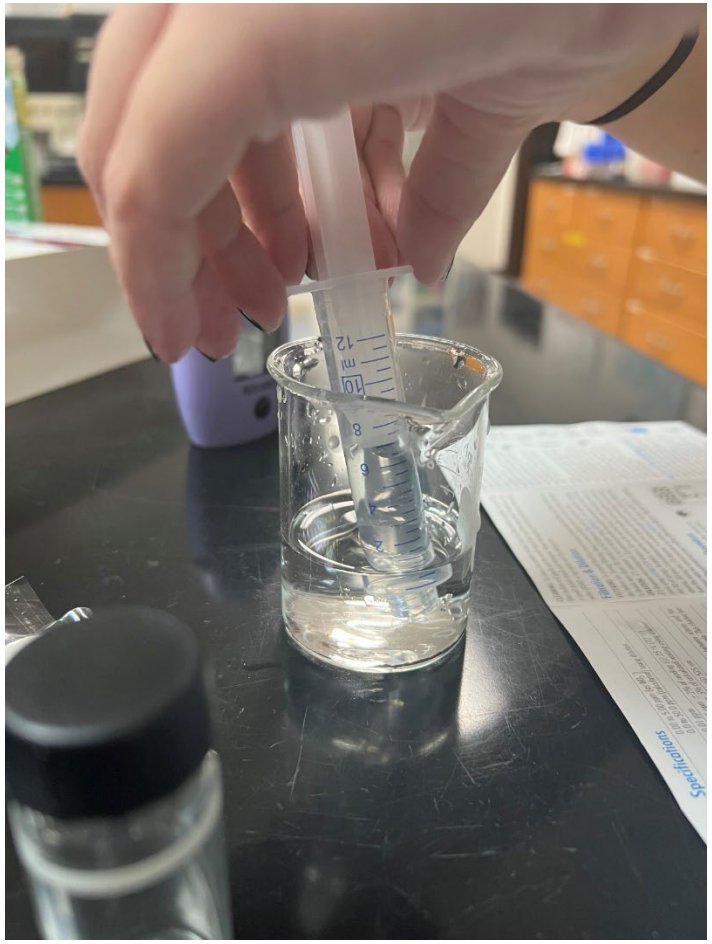
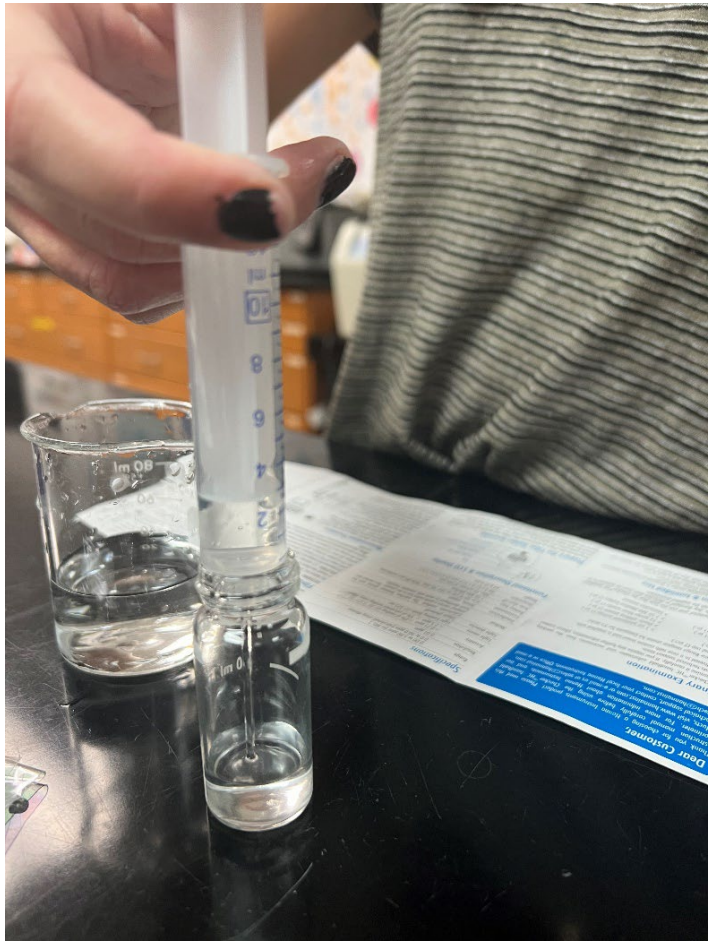
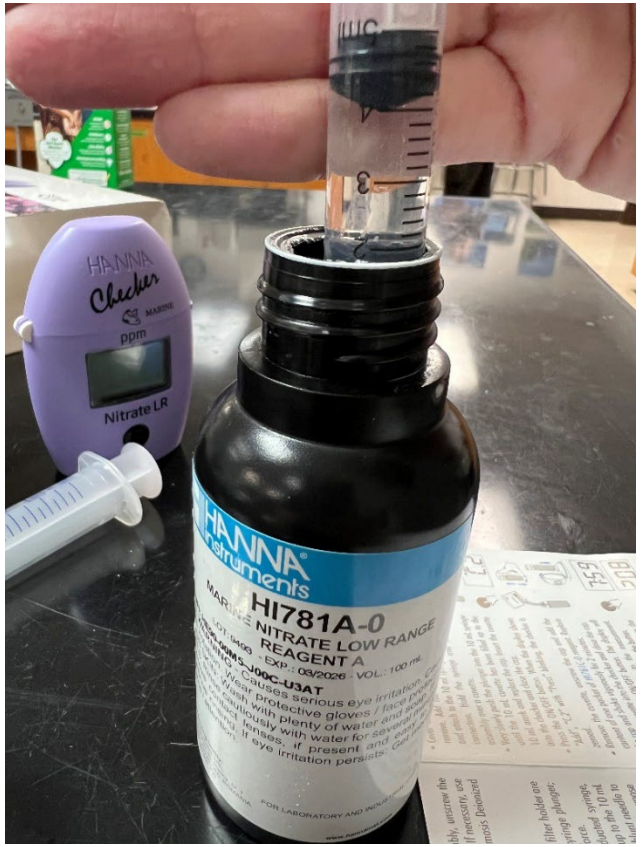
How to use the **Nitrate** Hanna meter

Step 1: Using the **10 ml syringe**, measure exactly **7ml** of water sample into the **large mixing vial**

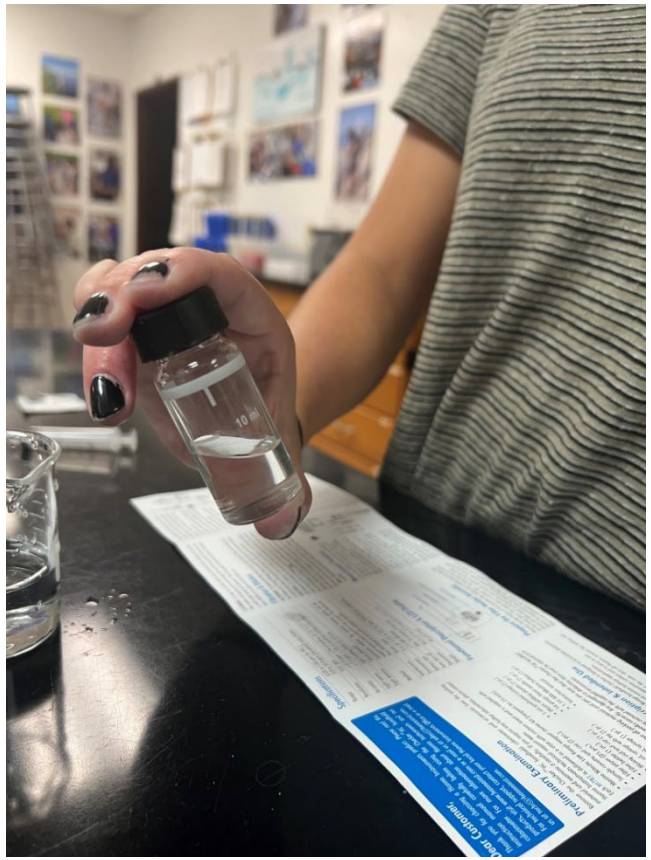




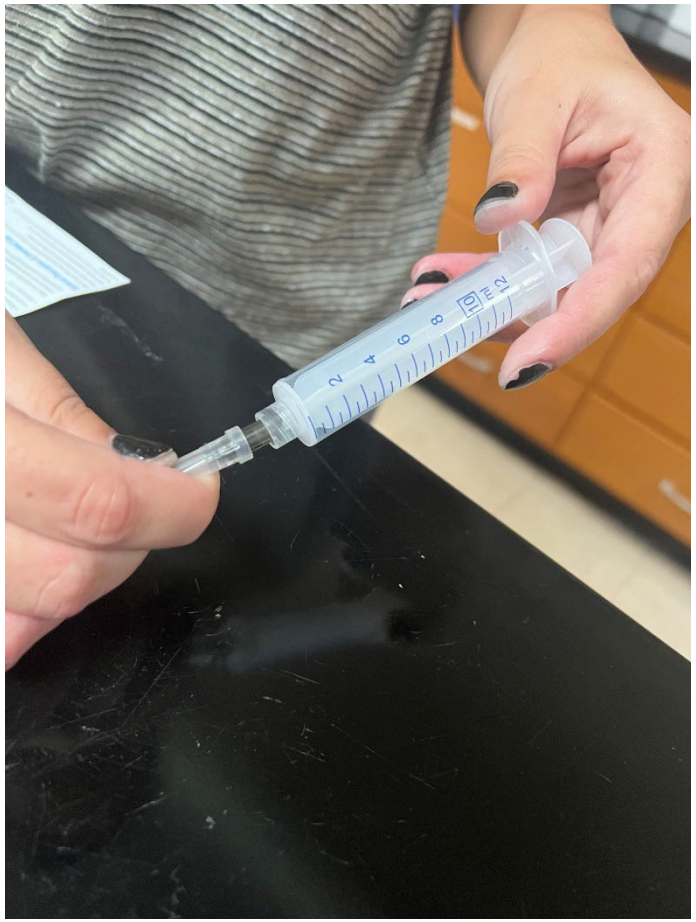
Step 2:Using **the 5 ml syringe**, add **4 ml of HI781A-0** (liquid) reagent into the **10 ml (large) mixing vial**



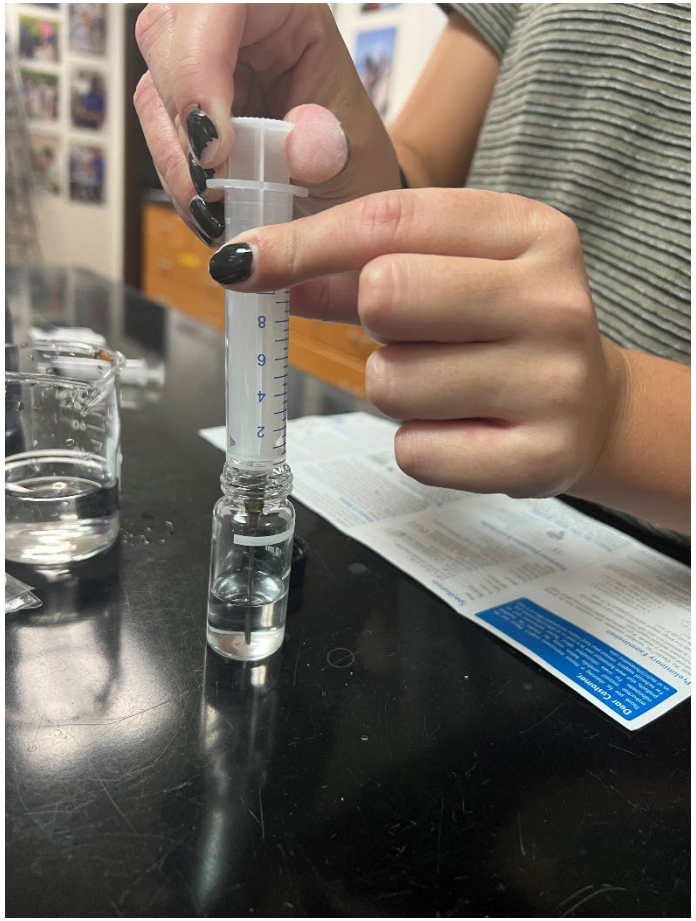
Step 3: Using the large mixing vial with the sample, add the contents of one packet of **HI781B-0 reagent**. Replace cap and shake vigorously for 1 minute



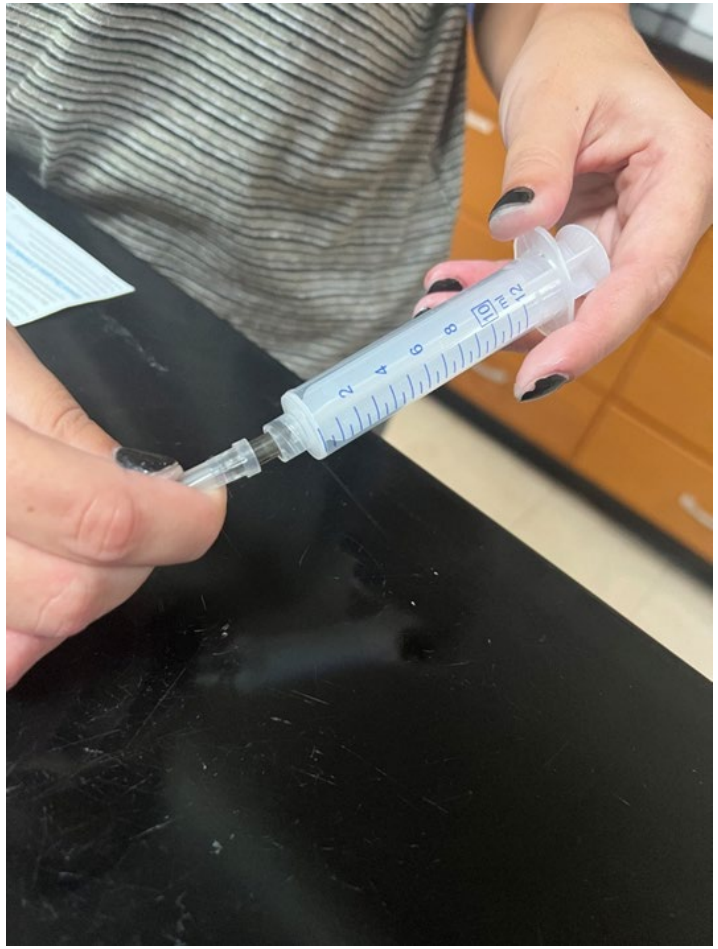
Step 4: After the mixing vial has been vigorously shaken for 1 minute, locate the **10 ml syringe** and thread the covered needle on the syringe



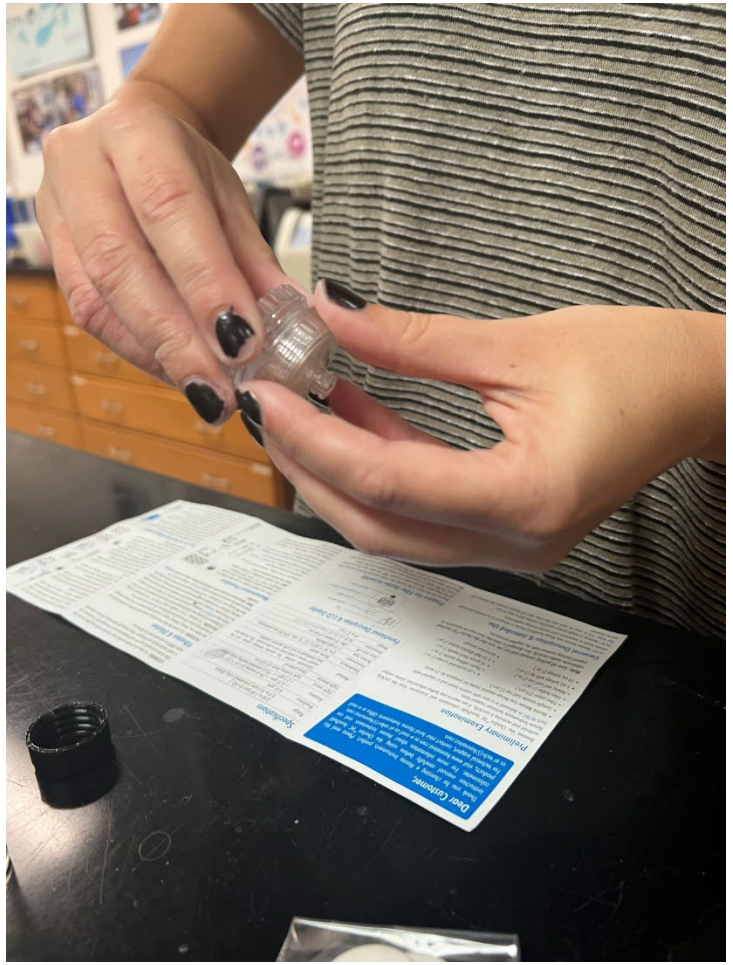
Step 5: Remove plastic cover and draw up all contents from the mixing vial



Step 6: Cover the needle and twist to remove the needle

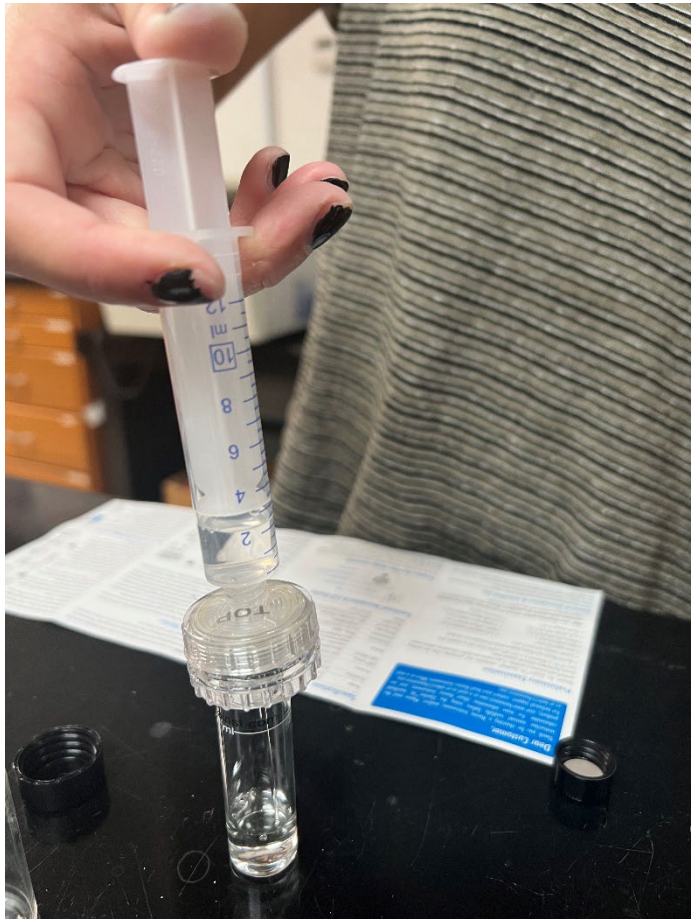


Step 7: With dry hands, place filter inside the filter holder and twist shut

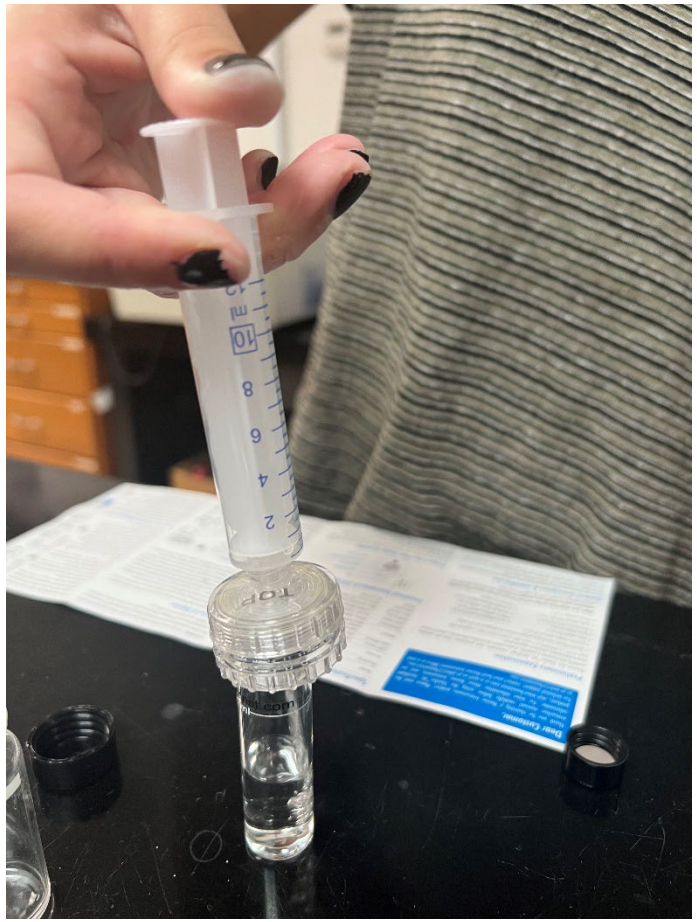


Step 8: Attach the filter holder assembly to the 10 ml syringe

Step 9: Hold the syringe and filter holder assembly over a cuvette



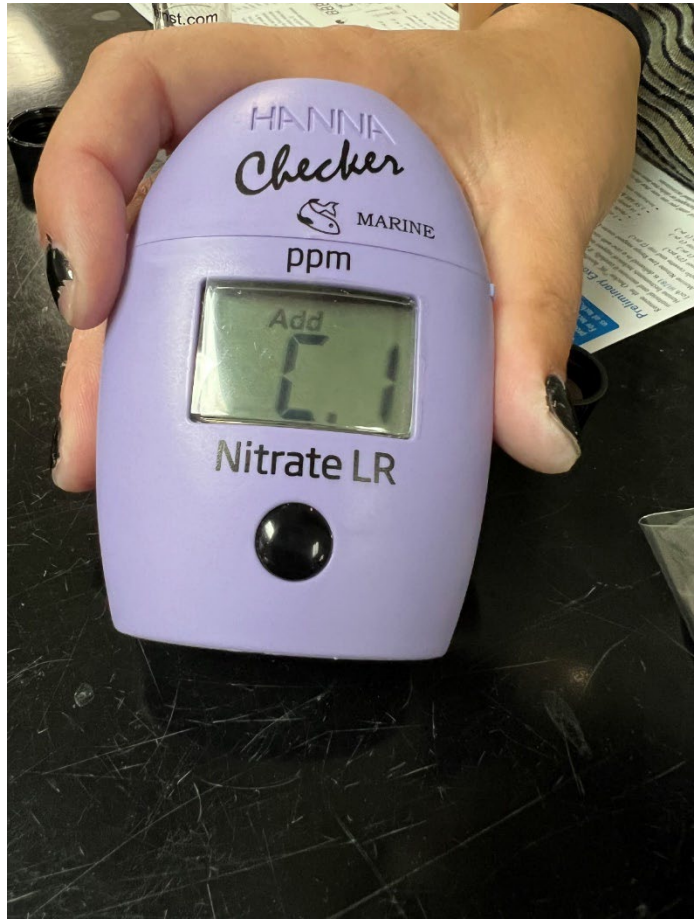
Step 10: Very slowly push the plunger into the 10ml cuvette until the 10 ml mark and cap it



Step 11: **Wipe off the cuvette.** Make sure there are no droplets on the outside of the cuvette

Step 12: **Press (tap)** the On/Off to turn on the checker on

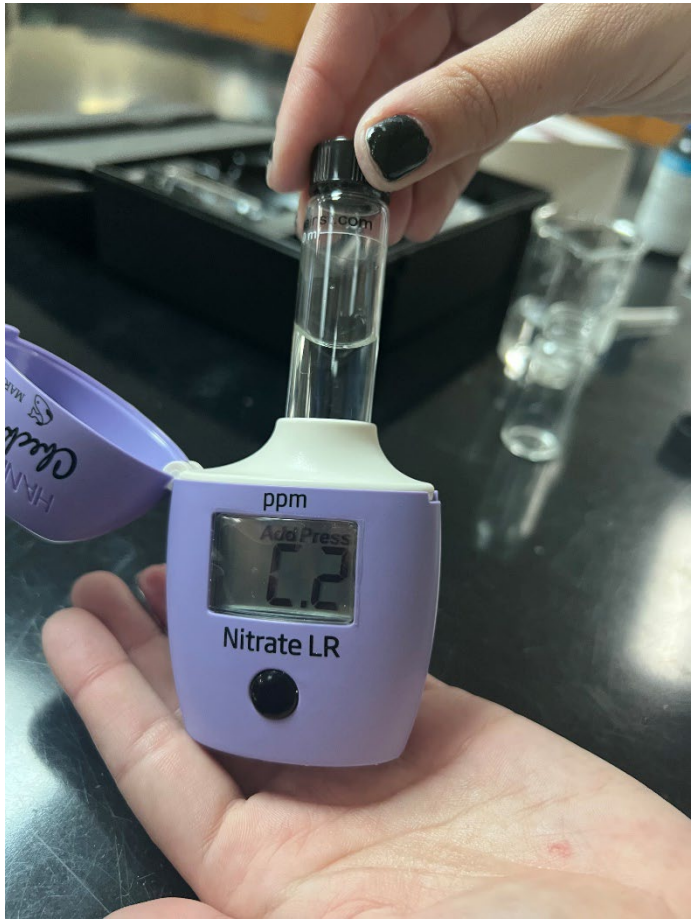
- All the segments will be displayed for a few seconds
- Followed by “ADD”, “C.1”, with “press” blinking

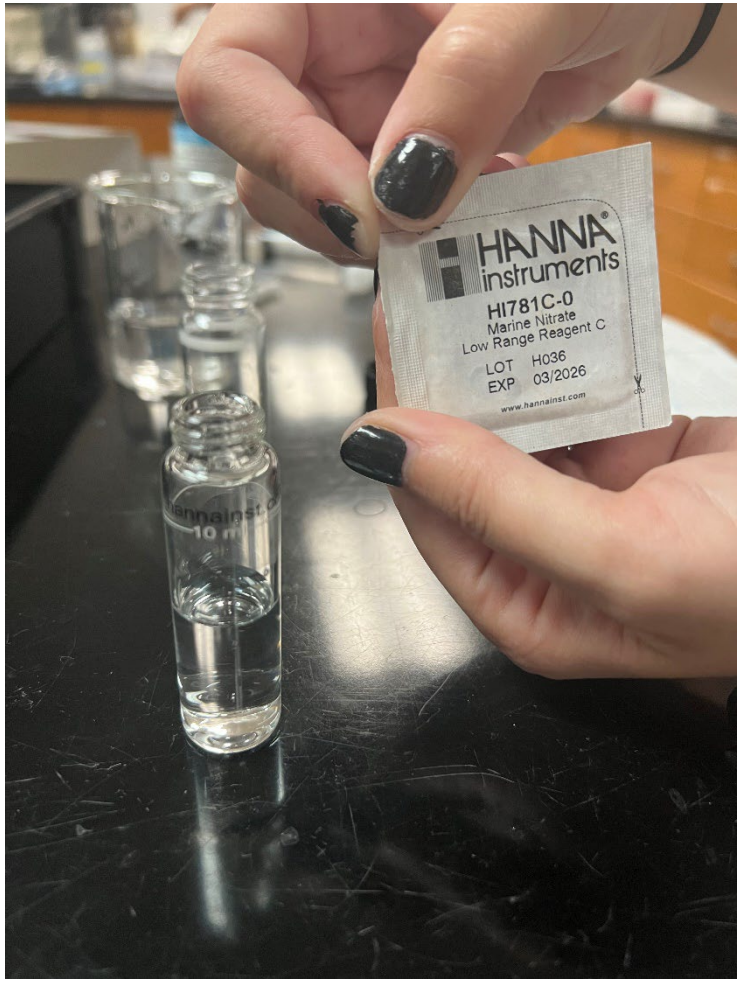


Step 13: Insert cuvette into the checker and close the cap

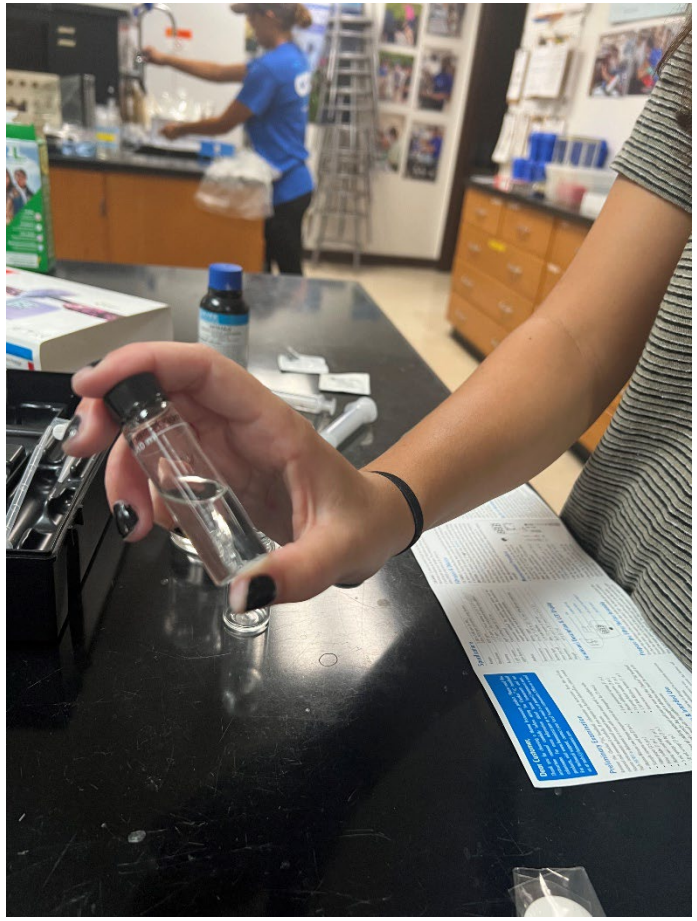
Step 14: **Press (tap)** the on/off button. When the display shows “ADD”, “C2”, with “Press” blinking the checker is zero

Step 15: Remove cuvette, unscrew the cap and add the contents of 1 packet if **HI781C-0 reagent**

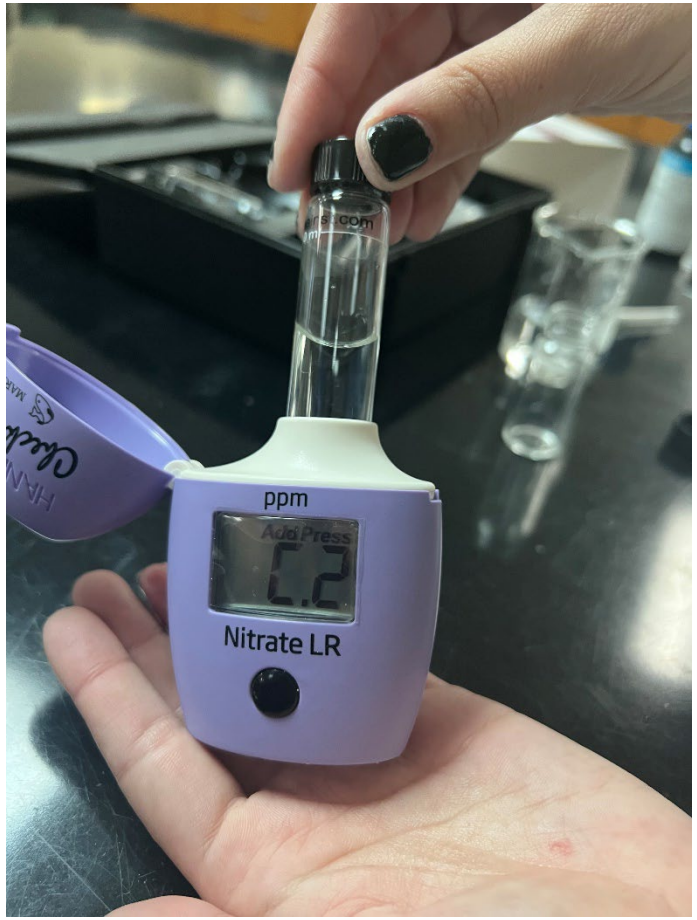




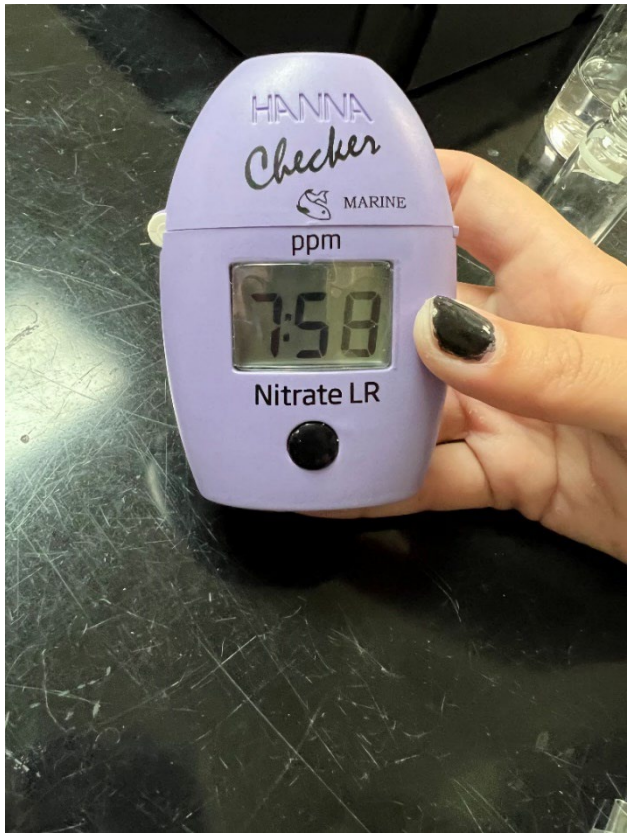
Step 16: Replace the cap and shake **vigorously** for 2 minutes



Step 17: After the 2 minutes, insert the cuvette back into the checker and close the cap



Step 18: **Press** and **HOLD** (for about 3 seconds) the on/off button. Release when the display shows a count down. This countdown represents the checker reading the sample.



Step 20: When the timer ends, the checker will perform the reading
NOTE: The checker will turn off after 2 minutes

- Nitrate is a form of nitrogen. Organic nitrates come mainly from septic systems, animal feedlots, fertilizers, manure, industrial wastewater, sanitary landfills, and garbage dumps. The primary inorganic nitrates are potassium nitrate and ammonium nitrate, both of which are widely used as fertilizers.
- Excess nitrogen in surface water, in combination with other nutrients such as phosphorus, can accelerate the growth of algae and other aquatic plants. This can decrease oxygen levels and harm aquatic life

Measured in mg/l

Percentile	Blackwater	Coastal	Estuary
10	0.02	0.00	0.00
20	0.02	0.00	0.01
30	0.02	0.01	0.01
40	0.02	0.01	0.01
50	0.05	0.01	0.01
60	0.05	0.02	0.03
70	0.05	0.03	0.05
80	0.05	0.04	0.10
90	0.06	0.06	0.40

Typical Values for Water Quality Parameters in the State of Florida

1mg/l = 1ppm: A reading of 0.01ppm is a median reading in a Florida estuary.