

Nitrate Low Range Test for HACH DR2800

Dimethylphenol Method (Method 10206, TNTplus 835)

PLEASE READ ALL INSTRUCTIONS BEFORE BEGINNING TESTS.

Wear gloves at this station.

1. Mark every vial with the sample number using a sharpie on the lid.
2. Using a clean pipet for each sample, pipet **1.0 mL (1000 μ L)** of sample into the reagent vial and place it in a test tube rack.

3. Using another clean pipet tip, pipet **0.2 mL (200 μ L)** of **Solution A** into the vial.

Caution: Vial gets warm upon adding Solution A, cap quickly and then hold vial by the lid!



4. After capping, **invert** the vial 2-3 times.
- Until no more streaks can be seen in the reaction tube solution.

Step 4.

5. After inversion, set the vial down and allow a **15-minute** reaction time.
- A timer on the lab table can be used as well.

6. While reaction is occurring, wipe down the reaction vials with an alcohol swab and then a Kimwipe to **remove finger prints and liquid**.

7. Turn on the spectrophotometer (DR2800) and press **Barcode Programs**. Place the **light shield** into the cell holder on the right.

FIND A LAB MANAGER for the first measurement or if the machine turns off.

8. After the 15-minute reaction is complete, place the reaction vial into the spectrophotometer (DR2800) cell holder on the left with vial barcode aligned with the arrow, and **immediately cover** tightly with the cap!

The sample will be read immediately. No zeroing is required.

Record this value on the data sheet.

IF the machine reads: **Over Range**, put sample aside to have it rerun in a High Range vial.

Results are in mg/L NO₃-N.



Step 8.

THIS TEST IS TIME SENSITIVE - READ RESULTS AS QUICKLY AFTER REACTION TIME AS POSSIBLE.

Testing has shown no difference in readings between 5 and 10 minutes after reaction time is completed.

9. When finished, throw pipet tips away.
Leave reaction vials capped and place in designated disposal bins.

Duties

- 1) Steps 2 & 3
- 2) Steps 4 & 5
- 3) Steps 6, 7, & 8