Nitrate-Nitrite Test Kit
Model NI-12
Cat. No. 14081-00

To ensure accurate results read carefully before proceeding:

A small portion of the NitraVer® 5 Nitrate Reagent will remain undissolved and fall to the bottom of the color viewing tube. This will not affect test results but should be rinsed from the tube between tests.

Samples containing more than 50 mg/L of nitrate nitrogen or 0.50 mg/L of nitrite nitrogen can be tested by diluting the sample before running the test. For example, a 1-to-5 dilution can be made by diluting 1 mL of water to 5 mL — using the calibrated dropper provided in this kit and demineralized water. The test results are then multiplied by 5.

WARNING: The chemicals in this kit may be hazardous to the health and safety of the user if inappropriately handled. Please read all warnings before performing the test and use appropriate safety equipment.

HACH COMPANY, P.O. BOX 389, LOVELAND, COLORADO 80359
TELEPHONE: WITHIN U.S. 800-227-4224, OUTSIDE U.S. 970-669-3050, TELEX: 160840

Nitrate Test
0-50 mg/L

1. Rinse a color viewing tube several times with the water to be tested. Fill to the 5-mL mark with the water sample.

2. Use the clippers to open one NitraVer 5 Nitrate Reagent Powder Pillow. Add the contents of the pillow to the sample, stopper the tube, and shake vigorously for exactly one minute. An amber color will develop if nitrate nitrogen is present in the sample. Allow the sample to stand undisturbed for one minute to complete color development.

3. Place the prepared sample in the right top opening of the color comparator (prepared sample position in Figure 1).

4. Fill the other viewing tube to the 5-mL mark with untreated water sample. Place this tube in the left top opening of the comparator (untreated sample position in Figure 1).

5. Hold the comparator up to a light source such as a window, the sky or a lamp and view through the openings in front. Rotate the disc to obtain a color match. Read the mg/L nitrate nitrogen (N) through the scale window.

6. To convert the test results to mg/L nitrate (NO_3) multiply the reading obtained in Step 5 by 4.4.

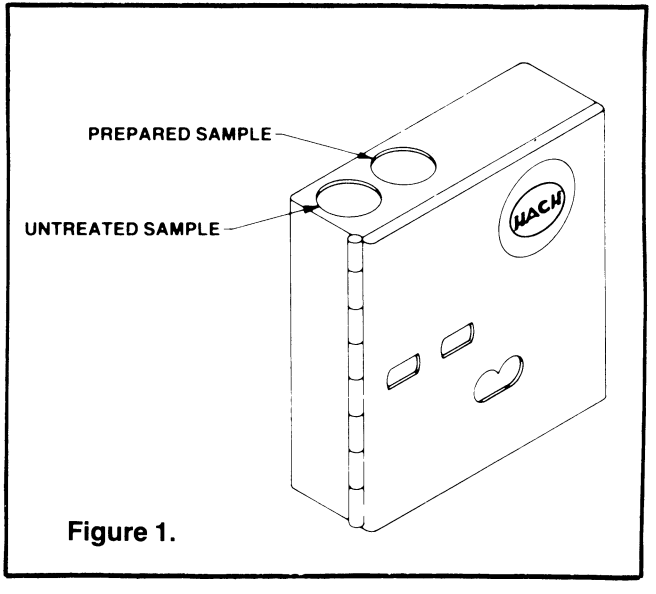

Figure 1.

Nitrite Test
0-0.5 mg/L

1. Rinse a color viewing tube several times with the water to be tested. Fill the tube to the 5-mL mark with the water sample.

2. Use the clippers to open one NitriVer® 3 Nitrite Reagent Powder Pillow. Add the contents of the pillow to the sample, stopper the tube, and shake vigorously for exactly one minute. A red color will develop if nitrite nitrogen is present in the sample. Allow the sample to stand undisturbed for 10 minutes to complete color development.

3. Place the tube of prepared sample in the right top opening of the color comparator (Figure 1 prepared sample position).

4. Fill the other viewing tube to the 5-mL mark with untreated water sample. Place this tube in the left top opening of the comparator (untreated sample position in Figure 1).

5. Hold the comparator up to a light source such as the sky, a window or lamp and view through the two openings in front. Rotate the disc to obtain a color match. Read the mg/L nitrite nitrogen (N) through the scale window.

6. To convert the test results to mg/L nitrite (NO_2) multiply the reading obtained in Step 5 by 3.3.

REPLACEMENTS

Cat. No.	Description	Unit
14035-99	NitraVer 5 Nitrate Reagent Powder Pillows for 5-mL Sample	pkg/100
14078-99	NitriVer 3 Nitrite Reagent Powder Pillows for 5-mL Sample	pkg/100
936-00	Clippers	each
1732-00	Color Comparator	each
1730-00	Color Viewing Tube	each
14197-00	Dropper, plastic	each
2118-02	Stopper for viewing tubes	pkg/12
14038-00	Nitrate, NitraVer 5 Color Disc	each
14084-00	Nitrite, NitriVer 3 Color Disc	each
1947-11	Nitrogen, Nitrate, Standard Solution 100 mg/L as N (not included in kit)	each

Periodically check reagent accuracy, using a reliable standard such as Nitrogen, Nitrate, Standard Solution 100 mg/L as N, Cat. No. 1947-11. This solution is not included in this kit but may be ordered from Hach Company. *See Replacements.* To check the reagent prepare and use the standard as described in the Hach *Handbook of Water Analysis.*

7/85

MADE IN U.S.A.