NOTE: It is important to read the instruction manual before attempting to perform the tests with the short form instructions provided below.

*WARNING: Reagents marked with a * are considered hazardous substances. Material Safety Data Sheets (MSDS) are supplied for these reagents. For your safety, read label and accompanying MSDS before using.

To order individual reagents or test kit components, use the specified code number.

### AMMONIA NITROGEN
1. Fill test tube (0106) to 5 mL line with sample water.
4. Insert test tube into Octa-Slide Viewer (1100) with Nitrite Nitrogen Octa-Slide Bar (3437) inserted.
5. Record as ppm Nitrite Nitrogen (NH$_3$N).

### NITRITE NITROGEN
1. Fill test tube (0106) to 2.5 mL line with sample water.
2. Dilute to 5 mL line with *Mixed Acid Reagent (V-6278).
3. Use 0.1g spoon (0699) to add 0.1g of *Color Developing Reagent (V-6281). Cap and mix for 1 minute. Wait 5 minutes.
4. Insert test tube into Octa-Slide Viewer (1100) with Nitrite Nitrogen Octa-Slide Bar (3437) inserted.
5. Record as ppm Nitrite Nitrogen (NO$_2$–N).

### ALKALINITY
1. Fill titration tube (0726) to 5 mL line with sample water.
3. Fill Direct Reading Titrator (0382) with *Alkalinity Titration Reagent B (4493DR).
4. Titrate sample until blue-green color changes to pink.
5. Record as ppm Alkalinity (CaCO$_3$).

### CARBON DIOXIDE
1. Fill titration tube (0726) to 20 mL line with sample water.
2. Add 2 drops *Phenolphthalein Indicator, 1% (2246). If sample turns red, no free carbon dioxide is present. If colorless, proceed to Step 3.
3. Fill Direct Reading Titrator (0380) with *Carbon Dioxide Reagent B (4253DR).
4. Titrate sample until faint pink color persists for 30 seconds.
5. Record as ppm Carbon Dioxide (CO$_2$).

### CHLORIDE
1. Fill titration tube (0726) to 15 mL line with sample water.
2. Add 1 drop *Phenolphthalein Indicator, 1% (2246). If sample is colorless, proceed to Step 3. If sample turns pink, add *Sulfuric Acid, 0.5N (6090) one drop at a time until pink color disappears.
3. Add 3 drops *Chloride Reagent #1 (4504). Cap and mix. Sample will turn yellow.
4. Fill Direct Reading Titrator (0382) with *Chloride Reagent #2 (4505DR).
5. Titrate sample until yellow color first changes to orange or orange-red.
6. Record as ppm Chloride (Cl).

### HARDNESS
1. Fill titration tube (0726) to 12.9 mL line with sample water.
2. Add 5 drops of *Hardness Reagent #5 (4483). Cap and mix.
3. Add 5 drops of Hardness Reagent #6 (4485). Cap and mix. Sample will turn red.
4. Fill Direct Reading Titrator (0382) with Hardness Reagent #7 (4487DR).
5. Titrate sample until red color changes to clear blue.
6. Record as ppm Total Hardness (CaCO$_3$).