**AMMONIA NITROGEN**

1. Insert Ammonia Nitrogen Octa-Slide 2 Bar (3441-01-FW or 3441-01-SW) into Octa-Slide 2 Viewer (1101).
2. Fill test tube (0106) to 5 mL line with sample water.
3. Add 10 drops *Salicylate Ammonia #1 (3978WT). Cap and mix.
4. Add 7 drops of *Salicylate Ammonia #2 (3979WT). Cap and mix. Wait 1 minute.
5. Add 7 drops of Salicylate Ammonia #3 (3982WT). Cap and mix. Wait 20 minutes.
6. Insert test tube into Octa-Slide 2 Viewer.

**FERROUS IRON**

1. Insert Iron Octa-Slide 2 Bar (4448-01) into Octa-Slide 2 Viewer (1101).
2. Rinse test tube (0106) with sample water. Fill to 5 mL line.
4. Use the 0.05g spoon (0696) to add one level measure of *Iron Reagent #2 Powder (4451). Cap and shake until powder dissolves. Wait 3 minutes.
5. Insert test tube into Octa-Slide 2 Viewer.

**FERROUS IRON**

1. Insert Iron Octa-Slide 2 Bar (4448-01) into Octa-Slide 2 Viewer (1101).
2. Rinse test tube (0106) with sample water. Fill to 5 mL line.
4. Use the 0.05g spoon (0696) to add one level measure of *Iron Reagent #2 Powder (4451). Cap and shake until powder dissolves.
5. Insert test tube into Octa-Slide 2 Viewer.

**PH**

1. Insert Wide Range pH Octa-Slide 2 Bar (3483-01) into Octa-Slide 2 Viewer (1101).
2. Fill test tube (0106) to 10 mL line with sample water.
4. Insert test tube into Octa-Slide 2 Viewer.
5. Match color. Record as pH.

**TITRATION**

1. Fill test tube (0608) to 20 mL line with “fixed” sample. Cap.
2. Fill Direct Reading Titrator (0377) with Sodium Thiosulfate, 0.025N (4169). Titrate sample, swirling between each addition until color is a very faint yellow.
4. Titrate sample until blue color just disappears.
5. Read result from scale. Record as ppm Dissolved Oxygen (O₂).

**ALKALINITY**

1. Fill test tube (0608) to 5 mL line with sample water.
2. Add 1 BCG/MR Indicator Tablet (2311A). Swirl until tablet dissolves. Solution will turn blue-green.
3. Fill Direct Reading Titrator (0382) with *Alkalinity Titration Reagent B (4493DR).
4. Titrate sample until blue-green color changes to purple. Consult color chart (4491-CC).
5. Read result from scale. Record as ppm Alkalinity (CaCO₃).

**DISSOLVED OXYGEN**

1. Rinse sampling bottle (0668-DO). Replace cap.
2. Submerge bottle, then remove cap.
3. Tap sides of bottle to release air bubbles.
4. While bottle is submerged replace cap and retrieve from water.
5. If air bubbles are present repeat sampling method.