## DROP TEST CHLORIDE (1 drop = 10 ppm)

## COMPONENTS:

1 x 5212 Instruction

1 x 9198 Sample Tube, Graduated (25 mL) w/ cap, plastic

1 x R-0630-C Chromate Indicator, 2 oz. DB

1 x R-0638G-C Phenolphthalein Indicator, 2 oz w/ green cap, DB

\*1 x R-0687G-C Sulfuric Acid .12N, 2 oz w/ green cap, DB

1 x R-0706-C Silver Nitrate Reagent, 2 oz, DB

\*1 x R-0706-C Silver Nitrate Heagent, 2 oz, DE

\*1 x R-0736-C Sulfuric Acid .6N, 2 oz, DB

TO ORDER REPLACEMENT PARTS AND REAGENTS CALL TOLL-FREE 800-TEST KIT (800-837-8548).

## PROCEDURE:

CAREFULLY READ AND FOLLOW PRECAUTIONS ON REAGENT LABELS.
KEEP REAGENTS AWAY FROM CHILDREN.

NOTE: When dispensing reagents from dropper bottles, **always** hold bottle in a vertical position.

## **Chloride Test**

NOTE: When sulfite content of sample water to be tested exceeds 10 ppm, the sulfite should be oxidized to prevent interference in test. A 25 mL sample is first adjusted to the appropriate pH, then 1 mL (or 25 drops) of R-0649 Hydrogen Peroxide Solution (sold separately) is added and thoroughly mixed. Continue with the rest of the procedure.

1. Rinse and fill 25 mL sample tube (#9198) to 25 mL mark with water to be tested.

NOTE: For results in grains per gallon (gpg), fill to 14.6 mL mark.

- Add 2 drops R-0638G Phenolphthalein Indicator. If colorless, proceed to Step 3.
   If pink (Fig. 1), add R-0687G Sulfuric Acid .12N or R-0736 Sulfuric Acid .6N dropwise, swirling after each drop, until color changes from pink to colorless.
- 3. Add 5 drops R-0630 Chromate Indicator. Swirl to mix. Sample will turn yellow (Fig. 2).
- 4. Add R-0706 Silver Nitrate Reagent dropwise, swirling and counting after each drop, until color changes from yellow to a milky salmon (brick red) (Fig. 3).

NOTE: A white precipitate will form as R-0706 Silver Nitrate Reagent is added to the sample. Do not add enough R-0706 Silver Nitrate Reagent to give a brown color. First change from yellow to a milky salmon (brick red) is the endpoint.

5. Multiply drops of R-0706 Silver Nitrate Reagent by 10. Record as parts per million (ppm) chloride (Cl<sup>-</sup>).

NOTE: For 14.6 mL sample, record drops of R-0706 Silver Nitrate Reagent as grains per gallon (gpg) chloride (Cl<sup>-</sup>).



Fig. 1



Fig. 2



Fig. 3

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<sup>\*</sup>Kit may include only one of these reagents.