DROP TEST CHLORIDE (1 drop = 10, 25, 50, 100, or 500 ppm)

COMPONENTS:

1 x 5006 Instruction 1 x 6045 Syringe, 3 mL

2 x 91980 Sample Tube, Graduated (25 mL) w/ cap & orange dot, plastic

1 x R-0630-C Chromate Indicator, 2 oz, DB 1 x R-0706-C Silver Nitrate Reagent, 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.

For 1 drop = 10 or 25 ppm or 1 qpq Chloride

1. Select sample size.

NOTE: For 1 drop = 10 ppm, use 25 mL sample. For 1 drop = 25 ppm, use 10 mL sample. For 1 drop = 1 qpq, use 14.6 mL sample.

- 2. Rinse and fill sample tube (#91980) to desired mark with water to be tested.
- 3. Add 5 drops R-0630 Chromate Indicator. Swirl to mix. Sample will turn yellow (Fig. 1).
- 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. 2).

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 desired equivalence factor. Record as parts per million (ppm) or grains per gallon (gpg) chloride (Cl⁻).

NOTE: For results as sodium chloride, multiply chloride concentration (Step 5) by 1.65.

For 1 drop = 50, 100, or 500 ppm Chloride

1. Select sample size.

NOTE: For 1 drop = 50 ppm, use 5 mL (2×2.5 mL) sample.

For 1 drop = 100 ppm, use 2.5 mL sample. For 1 drop = 500 ppm, use 0.5 mL sample.

- 2. Rinse and fill sample tube (#91980) to desired mark with water to be tested.
- 3. Add 5 drops R-0630 Chromate Indicator. Swirl to mix. Sample will turn yellow (Fig. 1).



Fig. 1



Fig. 2

DROP TEST CHLORIDE (1 drop = 10, 25, 50, 100, or 500 ppm)

- 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. 2).
- 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.
- Multiply drops of R-0706 Silver Nitrate Reagent by desired equivalence factor. Record as parts per million (ppm) chloride (Cl⁻).

NOTE: For results as sodium chloride (NaCl), multiply chloride (Cl⁻) concentration (Step 5) by 1.65.



Fig. 1



Fig. 2