## COLOR COMPARISON TEST TOTAL IRON (0-10 ppm)

COMPONENTS:

Cap, Test Cell (11.5 mL), plastic
Test Cell, Calibrated (11.5 mL), plastic
Pipet, Calibrated (0.5 & 1.0 mL), plastic
Pipet, Calibrated (0.5 & 1.0 mL) w/ cap, plastic
Instruction
Brush, Test Cell
Base, Slide Comparator, Enslow (for test cells)
Sample Tube, Graduated (25 mL) w/ cap, plastic
Slide Comparator, Iron (total), Phenanthroline, 0-10 ppm
High Iron Reagent #1*, 2 oz
High Iron Reagent #2, 2 oz

## 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.

## **Total Iron Test**

- 1. Rinse and fill two 11.5 mL test cells (#4024) to 11.5 mL mark with water to be tested.
- 2. Wipe dry and place in two slots adjacent to center slot of comparator base (#9189) WITH FROSTED SIDE FACING OPERATOR.
- 3. Rinse and fill 25 mL sample tube (#9198) to 10 mL mark with water to be tested.
- 4. Using 1.0 mL pipet (#4029), add 0.5 mL R-0673 High Iron Reagent #1. Swirl to mix.

- NOTE: If suspended iron is difficult to dissolve: Transfer to small beaker or flask. Heat and boil gently. Remove from heat. Cool to room temperature. Transfer to sample tube. Dilute to 10 mL mark with distilled, deionized, or iron-free water. Proceed to Step 5.
- 5. Using a separate 1.0 mL pipet (#4030), add R-0674 High Iron Reagent #2 to 14.6 mL mark. Swirl to mix. Transfer to third test cell to 11.5 mL mark.
- 6. Wipe dry and place in center slot of comparator base. WAIT 15 MINUTES.
- 7. Place Slide on comparator base. Match color in center test cell with a color standard. The Slide is in proper alignment for a color match when a white line on the Slide is directly above the white line on the comparator base. Record as parts per million (ppm) total iron (Fe).
- NOTE: If sample color matches or is deeper than highest color standard: Dilute sample with distilled, deionized, or iron-free water. Repeat test. For sample diluted with 1 part water, multiply reading by 2; for 2 parts, multiply by 3, etc.
- \*WARNING: High Iron Reagent #1 (R-0673) contains 35-45% w/w hydrochloric acid, a corrosive acid.



Instr. #5371