## COLOR COMPARISON TEST SILICIA (5-50, 25-250, or 50-500 ppm)

#### COMPONENTS:

4 ~ 22	27	Con Toot Call (F ml ) plactic
1 x 326	3/	Cap, Test Cell (5 mL), plastic

1 x 4005 Cylinder, Graduated (50 mL w/ 1.0 mL div), glass

1 x 4025 Test Cell, Calibrated (5 mL), plastic

1 x 4026 Dipper Spoon, 2 g, plastic, white 3 x 4030 Pipet, Calibrated (0.5 & 1.0 mL) w/ cap, plastic

1 x 5321 Instruction

1 x 6002 Brush, Test Cell

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

1 x 9257 Midget Comparator, Silica, Heterotrophy Blue, 5-50 ppm

1 x R-1305Q-II Silica Reagent #4, 50 g

1 x R-1305U-C Silica Reagent #3\*, 2 oz 1 x R-1306T-C Silica Reagent #1\*\*, 2 oz

1 x R-1306U-C Silica 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.

#### Silica Test

## For 5-50 ppm Silica

- 1. Rinse and fill 25 mL sample tube (#9198) to 25 mL mark with water to be tested.
- 2. Using a 1.0 mL pipet (#4030), add 1.0 mL R-1306T Silica Reagent #1. Swirl to mix.
- 3. Using a separate 1.0 mL pipet, add 1.0 mL R-1306U Silica Reagent #2. Swirl to mix. WAIT 5 MINUTES.

- 4. Using a separate 1.0 mL pipet, add 1.0 mL R-1305U Silica Reagent #3. Swirl to mix.
- 5. Using 2 g dipper spoon (#4026), add 1 level dipper R-1305Q Silica Reagent #4. Swirl until dissolved. WAIT 1 MINUTE. Transfer to 5 mL test cell (#4025) to 5 mL mark.
- 6. Wipe dry and place in comparator WITH FROSTED SIDE FACING OPERATOR.
- 7. Match color in test cell with a color standard. Record as parts per million (ppm) silica (SiO<sub>2</sub>).

### For 5-250 ppm Silica

- 1. Rinse and fill 50 mL graduated cylinder (#4005) to 10 mL mark with water to be tested.
- 2. Dilute to 50 mL mark with distilled, deionized, or silica-free water. Pour back and forth into 25 mL sample tube (#9198) to mix. Transfer to 25 mL sample tube to 25 mL mark.
- 3. Using a 1.0 mL pipet (#4030), add 1.0 mL R-1306T Silica Reagent #1. Swirl to mix.
- 4. Using a separate 1.0 mL pipet, add 1.0 mL R-1306U Silica Reagent #2. Swirl to mix. WAIT 5 MINUTES.
- 5. Using a separate 1.0 mL pipet, add 1.0 mL R-1305U Silica Reagent #3. Swirl to mix.
- 6. Using 2 g dipper spoon (#4026), add 1 level dipper R-1305Q Silica Reagent #4. Swirl until dissolved. WAIT 1 MINUTE. Transfer to 5 mL test cell (#4025) to 5 mL mark.

(OVER)

## COLOR COMPARISON TEST SILICIA (5-50, 25-250, or 50-500 ppm)

- 7. Wipe dry and place in comparator WITH FROSTED SIDE FACING OPERATOR.
- 8. Match color in test cell with a color standard. Multiply reading by 5. Record as parts per million (ppm) silica (SiO<sub>a</sub>).

### For 5-500 ppm Silica

- 1. Rinse and fill 50 mL graduated cylinder (#4005) to 5 mL mark with water to be tested.
- Dilute to 50 mL mark with distilled, deionized, or silica-free water. Pour back and forth into 25 mL sample tube (#9198) to mix. Transfer to 25 mL sample tube to 25 mL mark.
- 3. Using a 1.0 mL pipet (#4030), add 1.0 mL R-1306T Silica Reagent #1. Swirl to mix.
- 4. Using a separate 1.0 mL pipet, add 1.0 mL R-1306U Silica Reagent #2. Swirl to mix. WAIT 5 MINUTES.
- 5. Using a separate 1.0 mL pipet, add 1.0 mL R-1305U Silica Reagent #3. Swirl to mix.
- 6. Using 2 g dipper spoon (#4026), add 1 level dipper R-1305Q Silica Reagent #4. Swirl until dissolved. WAIT 1 MINUTE. Transfer to 5 mL test cell (#4025) to 5 mL mark.
- 7. Wipe dry and place in comparator WITH FROSTED SIDE FACING OPERATOR.
- 8. Match color in test cell with a color standard. Multiply reading by 10. Record as parts per million (ppm) silica ( $SiO_2$ ).

\*WARNING: Silica Reagent #3 (R-1305U) contains 5-15% w/w oxalic acid, a poison.

\*\*WARNING: Silica Reagent #1 (R-1306T) contains 10-20% w/w hydrochloric acid, a corrosive acid.

