DROP TEST
HYDROXYL ALKALINITY (1 drop = 10 or 50 ppm)

COMPONENTS:

1 x 5086	Instruction
1 x 9011	Pipet, Calibrated (0.5 & 1.0 mL) w/ green cap, plastic
1 x 9198G	Sample Tube, Graduated (25 mL) w/ cap & green dot, plastic
1 x R-0638G-C	Phenolphthalein Indicator, 2 oz w/ green cap, DB
1 x R-0711-C	Barium Chloride Solution 20%, 2 oz
1 x R-0724-C	Hydrochloric Acid .12N, 2 oz, DB
1 x R-0735G-C	Hydrochloric Acid .6N, 2 oz w/ green cap, 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.

Hydroxyl Alkalinity Test

For 1 drop = 10 ppm Calcium Carbonate

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

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

2. Using 1.0 mL pipet (#9011), add 1 dropperful (as much as can be drawn up by means of bulb) R-0711 Barium Chloride Solution 20%. Swirl to mix.
3. Add 2 drops R-0638G Phenolphthalein Indicator. Swirl to mix. Sample will turn pink (Fig. 1) if hydroxyl alkalinity is present.
4. Add R-0724 Hydrochloric Acid .12N dropwise, swirling and counting after each drop, until color changes from pink to colorless.

NOTE: Disregard any reappearance of pink color.

5. Multiply drops of R-0724 Hydrochloric Acid .12N by 10. Record as parts per million (ppm) hydroxyl alkalinity as calcium carbonate ($CaCO_3$).

NOTE: For 14.6 mL sample, record drops of R-0724 Hydrochloric Acid .12N as grains per gallon (gpg) hydroxyl alkalinity as calcium carbonate ($CaCO_3$).

For 1 drop = 50 ppm Calcium Carbonate

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

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

2. Using 1.0 mL pipet (#9011), add 1 dropperful (as much as can be drawn up by means of bulb) R-0711 Barium Chloride Solution 20%. Swirl to mix.
3. Add 2 drops R-0638G Phenolphthalein Indicator. Swirl to mix. Sample will turn pink (Fig. 1) if hydroxyl alkalinity is present.
4. Add R-0735G Hydrochloric Acid .6N dropwise, swirling and counting after each drop, until color changes from pink to colorless.

NOTE: Disregard any reappearance of red color.

5. Multiply drops of R-0735G Hydrochloric Acid .6N by 50. Record as parts per million (ppm) hydroxyl alkalinity as calcium carbonate ($CaCO_3$).

NOTE: For 14.6 mL sample, multiply drops of R-0735G Hydrochloric Acid .6N by 5. Record as grains per gallon (gpg) hydroxyl alkalinity as calcium carbonate ($CaCO_3$).

Fig. 1

taylor
31 Loveton Circle, Sparks, MD 21152 USA
800-TEST KIT (837-8548) • 410-472-4340

5/17