# Pichard hourigan, inc.

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### Instructions

**Instruction Number: 5084** 

DROP TEST

P/M OR P/T ALKALINITY (1 drop = 10 or 50 ppm)

#### COMPONENTS:

1	х	5084	Instruction
1	x	9198G	Sample Tube, Graduated, 25 mL, plastic w/cap
			and green dot
*1	х	R-0637-C	Methyl Orange Indicator, 2 oz, DB
1	х	R-0638G-C	Phenolphthalein Indicator (green cap), 2 oz, DB
*1	х	R-0645-C	Total Alkalinity Indicator, 2 oz, DB
1	х	R-0687G-C	Sulfuric Acid .12N (green cap), 2 oz, DB
1	x	R-0736G-C	Sulfuric Acid .6N (green cap), 2 oz, DB

<sup>\*</sup>Kit contains only one of these indicators.

TO ORDER REPLACEMENT PARTS AND REAGENTS CALL TOLL-FREE 877-7WATER6 (877-792-8376) or email us with your requirements.

#### PROCEDURE:

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

#### P/M Alkalinity

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NOTE: For 1 drop = 10 ppm, use R-0687G Sulfuric Acid .12N.
For 1 drop = 50 ppm, use R-0736G Sulfuric Acid .6N.
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 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.

- Add 3 drops R-0638G Phenolphthalein Indicator. Swirl to mix. Sample will turn pink if P alkalinity is present--proceed to Step 3. If no pink color, go to Step 4.
- 3. If pink, add R-0687G Sulfuric Acid .12N or R-0736G Sulfuric Acid .6N dropwise, swirling and counting after each drop, until color just changes from pink to colorless. Record drops as P reading. Always hold bottle in vertical position.

- 4. Add 3 drops R-0637 Methyl Orange Indicator. Swirl to mix. Sample should turn yellow.
- 5. Continue adding R-0687G Sulfuric Acid .12N or R-0736G Sulfuric Acid .6N dropwise, swirling and counting after each drop, until color just changes from yellow to orange (salmon pink). Record total drops (Steps 3 and 5) as M reading. Always hold bottle in vertical position.
- 6. If R-0687G Sulfuric Acid .12N was used, multiply P reading by 10. Record as parts per million (ppm) P alkalinity as calcium carbonate. Multiply M reading by 10. Record as ppm M alkalinity as calcium carbonate. For 14.6 mL sample, record P reading as grains per gallon (gpg) P alkalinity as calcium carbonate. Record M reading as gpg M alkalinity as calcium carbonate.

If R-0736G Sulfuric Acid .6N was used, multiply P reading by 50. Record as parts per million (ppm) P alkalinity as calcium carbonate. Multiply M reading by 50. Record as ppm M alkalinity as calcium carbonate. For 14.6 mL sample, multiply P reading by 5. Record as grains per gallon (gpg) P alkalinity as calcium carbonate. Multiply M reading by 5. Record as gpg M alkalinity as calcium carbonate.

#### P/T Alkalinity

NOTE: For 1 drop = 10 ppm, use R-0687G Sulfuric Acid .12N. For 1 drop = 50 ppm, use R-0736G Sulfuric Acid .6N.

 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  $14.6\ \mathrm{mL}\ \mathrm{mark}$ .

- 2. Add 3 drops R-0638G Phenolphthalein Indicator. Swirl to mix. Sample will turn pink if P alkalinity is present--proceed to Step 3. If no pink color, go to Step 4.
- 3. If pink, add R-0687G Sulfuric Acid .12N or R-0736G Sulfuric Acid .6N dropwise, swirling and counting after each drop, until color just changes from pink to colorless. Record drops as P reading. Always hold bottle in vertical position.
- 4. Add 5 drops R-0645 Total Alkalinity Indicator. Swirl to mix. Sample should turn green.
- 5. Continue adding R-0687G Sulfuric Acid .12N or R-0736G Sulfuric Acid .6N dropwise, swirling and counting

- after each drop, until color changes from green to red. Record total drops (Steps 3 and 5) as T reading. Always hold bottle in vertical position.
- 6. If R-0687G Sulfuric Acid .12N was used, multiply P reading by 10. Record as parts per million (ppm) P alkalinity as calcium carbonate. Multiply T reading by 10. Record as ppm T alkalinity as calcium carbonate. For 14.6 mL sample, record P reading as grains per gallon (gpg) P alkalinity as calcium carbonate. Record T reading as gpg T alkalinity as calcium carbonate.

If R-0736G Sulfuric Acid .6N was used, multiply P reading by 50. Record as parts per million (ppm) P alkalinity as calcium carbonate. Multiply T reading by 50. Record as ppm T alkalinity as calcium carbonate. For 14.6 mL sample, multiply P reading by 5. Record as grains per gallon (gpg) P alkalinity as calcium carbonate. Multiply T reading by 5. Record as gpg T alkalinity as calcium carbonate.

03/09