

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.

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. 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.

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