

## PAC-620 TESTING PROCEDURE - QUAT

### TEST KIT: PTK9000-Z, Item #50215

Follow TK9000Z Quat test kit, 1 drop = 50ppm / 1mL.

1. Rinse vial 3 times with solution to be tested.
2. Add 1mL of sample to vial and fill to 10 mL line with water.
3. Add 2 drops Complexing Reagent (CO3300) and swirl to mix.
4. Add 3 drops of Phenolphthalein Indicator (PH1605) and swirl to mix. If the sample remains colorless, go to step 6. If the sample turns pink red, go to step 5.
5. Add Sulfuric Acid 0.5N (SA1590) one drop at a time, swirling after each drop, until the sample turns colorless.
6. Add 2 drops of Toluidine Blue O Indicator (TB3800) and swirl to mix. The sample will turn blue.
7. Add QAC DT (QA3500) one drop at a time while swirling. Count the number of drops until the sample color changes from blue to purple pink.

Each drop QAC DT = 50ppm quat.

1 drop = 50 ppm method (1mL size)	ppm of Quat	oz/gal
2	100	0.11
4	200	0.24
6	300	0.37
8	400	0.50
10	500	0.63
12	600	0.76
14	700	0.88
16	800	1.01
18	900	1.14
20	1000	1.27
22	1100	1.40
24	1200	1.53
40	2000	2.57
60	3000	3.86
80	4000	5.15

## PAC-620 TESTING PROCEDURE - ACID

### TEST KIT: PKTK1010-Z, Item #50211

1. Rinse vial 3 times with solution to be tested.
2. Fill vial to 20ml line with sample. Use the included 12 cc syringe to acquire the sample.
3. Add 3 drops of Phenolphthalein Indicator (PH1605) and swirl to mix. The sample should remain colorless.
4. Add 10.0N Sodium Hydroxide (SH6325) dropwise, while swirling, until the sample turns pink. Record the number of drops.
5. Multiply the number of drops by the factor below to obtain the % acidity.

1 drop = 0.1% as phosphoric acid.

Drops of Titrant	% as Phosphoric Acid	oz/gal
2	0.2	1
4	0.4	1
6	0.6	2
8	0.8	3
10	1	3
12	1.2	4
14	1.4	4
16	1.6	5
18	1.8	6
20	2	6
22	2.2	7
24	2.4	8
26	2.6	8
28	2.8	9
30	3	10
32	3.2	10
34	3.4	11
36	3.6	12
38	3.8	12